

TO: HONORABLE CITY COUNCIL



FROM: CITY MANAGER

DEPARTMENT: ADMINISTRATIVE SERVICES

DATE: OCTOBER 24, 2005

CMR: 398:05

SUBJECT: REQUEST FOR COUNCIL DIRECTION ON LEGAL, FINANCIAL, OPERATIONAL, AND OTHER ISSUES REGARDING ISSUANCE OF A FIBER TO THE HOME REQUEST FOR PROPOSALS

RECOMMENDATION

Staff requests that the Council, given its review of the discussion of the legal, financial, operational, policy, and other issues outlined below, provide direction on:

1. Whether to proceed with a Request for Proposal (RFP).
2. What level of risk to the General Fund—in a range estimated to run from \$0.4 million to over \$16 million—would be acceptable.
3. Whether or not Council is willing to entertain proposals using wireless technology.
4. What business model or relationship with a provider (Model 1 or 2) is preferred by Council.

BACKGROUND

At its July 25, 2005 meeting, Council passed two motions. The first motion was to terminate the current FTTH trial. This motion passed on a 6-0 vote. The second motion, which passed on a 5-1 vote, requested that staff report back to Council on:

“Legal and financial issues regarding the issuance of [an] RFP that solicits the construction and operation of a minimum 100 megabit per second [Mbps] citywide infrastructure providing access and service to all residents and businesses by one or more service providers.” Furthermore, this “ultra-high broadband” service would provide “data, video, and telephony services with the physical infrastructure owned by the City and limited capital risk exposure to the City.”

Prior to passing this motion, Council discussed a Colleagues Memorandum (Memo) on a “Revised Approach for Fiber to the Home” (July 21, 2005). In addition to requesting clarification of critical FTTH issues raised in prior staff reports, the Memo requested issuing an RFP that envisions “some type of public/private partnership structure [that] could meet all requirements of the City.” The “requirements” are succinctly stated in Council’s motion.

The Memo also raised an issue that is somewhat at odds with the final motion passed by Council. This issue, which requires discussion and resolution before an RFP can be drafted, is presented in the Discussion section below. The Memo also alludes to the history of the City's FTTH effort. To provide a broader context for public input and Council discussion, a brief history of that effort ensues.

The City first embarked upon its exploration of a Fiber to the Home (FTTH) project in 1999, when it issued an RFP for high-speed Universal Telecommunications Services. When the RFP period closed on January 18, 2000, five responses had been received. The responses were then reviewed by a broad cross-departmental team, and three were rejected as non-responsive. The remaining two bidders were interviewed: one was rejected base upon his responses to the questions, and the final bidder withdrew his proposal before an award could be made.

Later that year, on November 13, Council approved and agreed to fund a FTTH trial for one year. The purpose of the trial was to test the concept of a fiber business in Palo Alto by offering the service to 66 homes in the Community Center neighborhood for one year. Council authorized \$680,000 for the build-out needed for the trial, and in May, 2001, construction began. Service to trial participants began in October, 2001. Once the trial got underway, the Utilities Department formed an FTTH team to advise staff and review data and plans regarding the project.

The trial proved successful, in that participants were very happy with the service. However, when initial investment and overhead expenditures were included in the calculation, it was not profitable for the City.

In May, 2002, Uptown Services was hired to complete a business case study to determine whether a full-scale FTTH business would be viable for the City. In September, 2002, the business case was completed, and staff recommended to the UAC and to Council that it fund the development of a business plan and authorize the continuation of the fiber trial for one more year. Council agreed to both recommendations.

In August, 2003, Uptown Services completed the business plan, including twenty-year pro forma financial statements, monthly budgets, and sales, marketing, and operational plans for building out, launching and operating the fiber business. In its business plan, Uptown demonstrated that a FTTH utility could be economically viable over the 20-year construction bond period, assuming the Electric Fund would issue revenue bonds to fund the fiber build-out. In March 2004, after some discussions between the UAC, Council and staff regarding revisions to the business plan, the final version of the business plan was presented to Council.

In the following weeks, additional legal analysis showed that in fact, the Electric Utility could not (continue to) fund the FTTH project. Therefore, no Electric or other Enterprise utility revenue bonds could be issued, and financing costs would be greater than those assumed in the business plan.

In April and May 2004, staff presented revised financing options to the UAC and to the Council reflecting the additional legal information. Staff recommended against issuing Utility revenue bonds, General Fund Certificates of Participation, or an Enterprise Tax backed by a

special tax. The only legally and politically feasible options seemed to be Assessment Districts or finding a private investor. The former option seemed prohibitive given the slow pace of implementation and the potential for property owners having to pay the assessment fee even when they do not benefit from the service. The latter option seemed too expensive, adding between \$2 and \$15 million in estimated interest costs over the first five years. In addition, this option would not provide all the capital necessary for the project build-out, since the project could not support the debt service on the full \$32 million required for the complete build-out. Moreover, no funding source for ongoing operational costs, estimated at \$8 to \$10 million, had been identified.

The UAC urged staff to explore alternative financing options and to monitor progress in other jurisdictions while continuing the fiber trial. The Council amended this recommendation and asked staff to monitor other jurisdictions only and to continue the trial for one more year. In July 2005, staff reported back to Council on progress in other California jurisdictions. Based on the uneven and sometimes turbulent progress of other California municipal efforts, staff recommended ceasing work on the FTTH program, and therefore discontinuing the trial.

On July 25, 2005 Council approved the discontinuation of the trial, but requested that staff report back on “legal and financial issues” to lay the groundwork for issuing an RFP for a private-sector partner to construct and operate a 100 Mbps or comparable high-speed broadband service. The following discussion outlines the legal, financial, operational and other issues and questions for Council consideration.

DISCUSSION

The City’s Risk Oversight Committee, which consists of the Assistant City Manager and the Directors of the Administrative Services and Utilities Departments with advice from the City Attorney’s Office, took the lead in responding to the issues raised in Council’s FTTH motion of July 25, 2005. The issues must be viewed in the dynamic context of existing and proposed laws and regulations, current and emerging technologies, existing City fiber infrastructure and business initiatives, private sector telecommunication investments and interests in the City, and the demands from the community for a new public service. Toward this end, staff has outlined the central issues that must be addressed if the City is to take the first steps in making broadband services available to the community.

Legal Issues

In deciding whether to move forward with an RFP, Council should be aware of the following legal issues:

1. **Federal and State regulatory uncertainties.** The deployment of broadband nationwide and statewide has spawned, among other things, legislation that potentially could injure (or aid) local governments bent on advancing broadband services in their communities. Collectively, they have compelled local governments to very carefully consider the pros and cons of proceeding with plans to build high-speed broadband systems and offer broadband services.

The large telephone companies have been actively supporting recent federal legislation. At one end of the spectrum is S. 1504 (Ensign), which attempts to rewrite

the 1996 Telecommunications Act. The Ensign bill would, among other things, eliminate local cable franchising authority and preempt existing cable franchises, except to the extent consistent with this bill, local authorities would be prohibited from enforcing cable customer service standards, and cities and municipal utilities would be prohibited from offering communications services without giving the private sector a right of first refusal to offer these services.

Other telephone company-supported legislation include the nationwide franchising legislation [H.R. 3146 (Blackburn/Wynn) and S. 1349 (Rockefeller/Smith)], which effectively would permit the telephone companies to provide video services over their networks without obtaining local cable franchises.

H.R. 2726 (Sessions) would prohibit cities and municipal utilities from providing telecommunications, cable and information services where the private sector is offering substantially similar services. But, it does grandfather existing municipal telecomm systems. In contrast, S. 1294 (Lautenberg/McCain) protects the right of cities to provide broadband service, but cities would be required to apply regulations to the private sector's broadband service in a manner that does not discriminate in favor of the cities' broadband service.

2. Open and Closed Provider Networks. The City authorized the construction of the dark fiber backbone in 1996 on an "open service provider network" basis. The purpose of the backbone was to accelerate the deployment of high-speed broadband services to the City's residents through third party providers. So far, the City's licensee base consists primarily of internet service providers. The continued vitality of this business model could be challenged in light of recent legal and regulatory developments which characterize broadband services as "information services" free from state and local regulation.

The future trend suggests the FCC favors "closed network" systems as a policy matter; the large telephone companies and the cable companies may provide information services and pretty much limit who can gain access to their networks. How effectively an "open" system could compete head-to-head with the "closed" networks of Comcast and SBC is not clear. The current thinking of broadband business experts is that advertising dollars will fund the content offerings that are made available primarily on closed networks owned and operated by the large industry participants, the cable companies and the regional Bell Operating Companies, for example, SBC and Verizon. Their unique offerings in video, data and voice are projected to attract more customers, leaving a smaller customer base to the industry participants that don't own their own facilities but nevertheless need access to them. The facilities available to them over the long term will be the open systems.

3. Cable franchise requirements. Under federal, California and local laws and the City's cable franchise agreement, any entity offering residents of Palo Alto multi-channel video services over wire-line facilities located in the public right-of-way must obtain a cable television franchise on terms and conditions comparable to those imposed upon the incumbent cable franchisee, Comcast. It should be noted that Comcast has

publicly stated the City cannot properly act as both cable regulator and a cable competitor under applicable laws. Comcast might test the validity of its legal position by challenging the City's right to embark upon the Project.

4. Voter approval. If the purpose of the 100 Mbps or comparable high-speed broadband project ("Project") is to deploy broadband communications facilities on a citywide basis and render broadband service as indispensable as water service and electric service, then any Project infrastructure base charge levied on all of the City's utilities customers could be construed as a property-related fee and thus would require voter approval, either a majority vote of property owners affected, if the charge is considered a special assessment, or a two-thirds vote of the electorate, if the charge is considered a special tax.

In contrast, service and installation charges levied only on those to whom the Project's broadband service is made available would not present an issue for voter approval, if those charges are levied on those requesting and using the broadband service, the charge does not exceed the reasonable cost of providing the service, and the charge is collected by means of a utility bill, not on the property tax roll.

5. Establishment of a Broadband Utility. The City's dark fiber backbone and the FTTH trial project have been funded by the Telecommunications Subfund of the Electric Utility as incidents of electric utility operations. The continuation of this approach might well be questioned, because the characteristics of electric service and broadband service are separate and distinct. The propriety of using Electric Utility revenues to defray non-electric high-speed broadband services is an issue that could be resolved simply by establishing a new and separate Broadband Utility.

Implicit in the establishment of the Broadband Utility is an obligation to repay to the Electric Utility the monies it loaned the Telecommunications Subfund to defray the dark fiber backbone and the FTTH trial capital expenditures. The Electric Fund has invested \$2.5 million in the dark fiber operation. The principal plus a reasonable rate of interest should be paid upon the establishment of the Project.

Finally, it is also implicit that interfund loans and subsidies by the other Enterprise Funds to the Broadband Utility could garner close scrutiny from those who believe Proposition 218 would apply to such funding mechanisms. The City must stand ready, willing and able to fund any revenue shortfalls and excess expenses with the General Fund.

6. Amendment of City Charter. The Charter only allows the Council to appoint an independent board for cable television matters, including matters relating to the selection of content, but not communications matters. Federal law prohibits the Council, as the franchising authority, from exercising control over cable television content. If the Project under either a public-private partnership model (see Model 1 below) or a private operator overbuild model (see Model 2 below) would effectively require the integration of the operational decision-making process and the selection of

content, then the Charter should be amended to establish an independent board or commission to deal with communications matters.

7. Management of existing dark fiber agreements. The City has embarked on an active dark fiber backbone licensing program. There are in excess of 30 dark fiber license agreements, and the rights of the licenses must be respected and honored if the management and control of the backbone will be delegated to the private operator. The City might be required to assign the license agreements if this is the arrangement with the private operator. Alternatively, sufficient capacity to satisfy the requirements of the City's current dark fiber licensees would have to be excluded from the portion of the backbone capacity over which the private operator was given management or control.
8. Amendments of the Palo Alto Municipal Code. If the City establishes a Broadband Utility or Telecommunications Utility to effectuate the Project, then appropriate amendments to several sections of the Municipal Code will be required. The Director of Utilities or other department level manager must be authorized by Section 2.08.200 to provide broadband service to the community. To the extent authority to charge assessments against real property for the construction of the Project will be sought, Section 13.12.040 must be amended to provide that a broadband [fiber optic network] facility is an improvement that may be constructed and for which assessments may be charged. Finally, if these assessments are used to secure revenue bonds used to pay for the Project's construction costs, then Section 12.28.010(b) must be amended to authorize the City to construct and operate a broadband [fiber optic network] utility system as an "enterprise."
9. City bidding laws. If the City will own any part of the Project to be constructed under Model 1 or Model 2, then the successful bidder must be required to comply with the City's bidding requirements for a public works project. This means that, at a minimum, the successful bidder must competitively select the construction contractor for the Project.
10. California labor laws. If the City will delegate to the successful bidder the effective management and control of the City's dark fiber backbone operations, then the City must first comply with the "meet-and-confer" requirements of State law if such delegation would result in a change in terms of employment.
11. Regulatory permits and authorizations. If traditional telephone service will be offered as part of the Project services, then all appropriate regulatory approvals must be obtained. The California Public Utilities Commission regulates telephone corporations in the provision of POTS [plain old telephone service], and a certificate of public convenience and necessity must be obtained. It is more likely that the Project will facilitate the provision of voice over internet protocol (VoIP), and consequently neither federal nor state regulatory approvals would be required. A system providing VoIP would, however, be subject to federal and state law requirements relating to 911 and E911 capability, and to the federal Communications Assistance for Law Enforcement Act, which would require the system to be designed

to be capable of eavesdropping and tapping on request of federal, state or local law enforcement authorities.

Financial and Operational Issues

As Council considers whether to direct staff to proceed with issuing an RFP for the build-out and operation of a broadband service to Palo Alto residents, it should consider a number of financial and operational issues.

1. Financial Risk. Moving forward with an FTTH project will increase financial risk to the General Fund. The premise of legal issue number 5 is that the Electric and other Enterprise funds are separate entities that cannot fund a future telecommunications effort. Any and all financial support and risk on the City's part would therefore default to the General Fund. The City faces real and potential legal costs in moving forward with the project. These include outside counsel fees of between \$75,000 to \$150,000 for advisory work as well as legal challenges by Comcast, SBC or a disappointed bidder that could cost the City an estimated \$250,000 to \$750,000. A protracted legal battle would cost significantly more.

It is likely that in a public-private partnership (see Model 1 below), the City will be asked to pledge an asset or share in the capital improvement costs. Based upon estimated capital improvement costs of \$32 million for a fiber optic Project build-out, a partner may request additional City investment. What share of the capital improvement costs is the City willing to bear and what sources of funding will the City utilize? A 5 to 50 percent share of capital improvement costs ranges from \$1.6 to \$16 million. These amounts represent 7.6 and 75.8 percent, respectively, of the City's projected General Fund Budget Stabilization Reserve for FY 2005-06. It is important to note that this discussion assumes that the partner will bear the costs of operating and maintaining an FTTH system.

The costs of an FTTH program should be weighed in the context of other General Fund revenue and expense challenges as outlined in the City's Long Range Financial Plan. These include, for example: existing infrastructure requirements, major new facility needs, rising employee benefit costs and retiree medical liabilities. Moreover, the City faces a variety of challenges on the revenue side with key sales tax sources threatening to leave, stiff competition in the retail and hotel sectors, and a changing regulatory and technological environment that may endanger existing revenue sources such as franchise fees and the telephone utility users tax.

2. Staffing Priorities and Costs. Issuing an FTTH RFP will require a substantial reallocation of current staff efforts and priorities by the City Manager's and Attorney's offices as well as the Administrative Services and Utilities departments. Major initiatives underway include, for example, Golf Course realignment, building a new police building, locating an auto row at the MSC and relocating City utility and public works functions, airport discussions with the county, economic development activities, and efforts to find new sources of revenue such as a Business License Tax. One or more of these assignments would need to be delayed, and staff would look to Council for reprioritization.

Another “cost” of conducting an FTTH RFP process would come from the redirected efforts of Telecommunications staff who are currently working on generating additional business from the dark fiber ring. Staff estimates, based on current initiatives, that it could procure an additional \$0.54 million in revenue (See Resource Impact Section for a more complete discussion). Work on a new RFP would place these efforts at risk.

Depending upon the eventual relationship with a provider, the City may need additional staff for customer service, construction monitoring, maintenance and other functions resulting from the broadband project. Based on the “level playing field” concept addressed in the Legal Issues section number 3, the City may need to hire an additional staff person to administer miscellaneous contracts and franchise agreements with the incumbent franchisee as well as with a new cable provider. As mentioned, these costs would be borne by the General Fund. Specific cost estimates of the required staffing may be found in the table in the “Two Models” section below.

3. Operational Risk. The Utilities Department must maintain control over the dark fiber ring. Critical system relaying functions for the electric system, such as remote system controls for all the utilities and the City’s LAN, use the current dark fiber ring. Utilities staff does not recommend allowing third parties access to key splice points for the connection and management of the fiber system. Therefore, a potential bidder may need to overbuild the system or lease lines from from the City as represented by the Department of Utilities. In addition, if the private partner opted to place facilities in the Electric Utility’s pole space, utilities staff would have to monitor and inspect completed construction to ensure compliance with General Order 95 adopted by the California Public Utilities Commission. A third-party operator would have to retain qualified line personnel to work in close proximity to energized electric conductors and equipment.

Wireless System Option

In comparing the Colleague Memorandum of July 21 to Council’s final motions, one issue arises that necessarily will require the Council’s clarification. The Memorandum states:

The City “...would welcome proposals using one or more various technologies, including but not limited to optical fiber, copper, wire, wireless, or AC power lines.”

The approved Council motion and the Memorandum both appeared to set a minimum bandwidth requirement of 100 Mbps. Current mainstream wireless standards (IEEE standards 802.11a/802.11g), however, establish a 54 Mbps bandwidth. This is well below the minimum cited in the Council’s motion. Is the Council willing to consider a citywide wireless system (WiFi and/or WiMax) proposal that is currently unable to offer at least 100 Mbps service but nevertheless meets the current industry standard for wireless transmission service? If so, it will have to clarify its second motion accordingly.

Staff would like to note that dozens of cities around the country, most recently Philadelphia, Sacramento, and San Francisco, have moved towards establishing full-scale, citywide wireless

systems. A precedent has been set in Philadelphia and is under consideration in San Francisco in which the vendor builds the system at no cost to the City. In light of these developments, wireless technology and the universal internet access it would provide at relatively low cost do seem worthy of consideration.

Two Models

There are, undoubtedly, a variety of possible business models or relationships for the broadband project, but given the issues outlined above, staff suggests the following two models as the most viable for structuring the RFP and the ensuing project:

Model #1 – Project is a public-private partnership between the City and a private operator. The City retains ownership of the dark fiber ring, but the operator licenses the City’s dark fiber ring, building out and owning any additional required infrastructure. Product offerings may include high-speed data and video services. If video services are offered, they would be offered by the operator. Otherwise, a new board selected but not directly overseen by the Council, must be formed. In either case, the private partner must obtain from the City a cable franchise on terms and conditions that are comparable to those in Comcast’s franchise.

Model #2 – The Project is entirely built and owned by the operator. If the operator chooses to offer video services, it needs to apply for and receive a franchise from the City on terms and conditions that are comparable to those in Comcast’s franchise.

The following table summarizes the implications of each model:

Issue:	Model #1	Model #2
What would the City contribute to the project?	Discounted Dark Fiber licensing fees, right-of-way to Utility poles. Possible other expenditures required by private partner	Accelerated approval processes across City departments. Possible other expenditures required by private partner
What would City own?	Dark Fiber Ring	Dark Fiber Ring, but no part of broadband-to-the-home infrastructure
Does project require voter approval?	Approval not necessarily required, but advisable	Approval not necessarily required, but advisable
Additional staffing required?	YES. Utilities staff would have to inspect completed construction; additional customer service staff may be required. These costs are estimated at \$50,000 to \$200,000 per year, depending on the system design.	YES. Additional staff time would be needed to oversee and regulate 2 cable franchisees rather than one. These costs are estimated at \$100,000 per year, including staff costs and outside legal and technical expertise.
Other costs to City	Additional dark fiber maintenance and repair costs	Unspecified

In conclusion, staff requests that Council discuss and provide direction on all of the issues identified in this discussion and the relationship it envisions with a private provider.

RESOURCE IMPACT

Resources expended on proceeding with the RFP would include staff time, outside legal costs, and foregone revenues for an enhanced Dark Fiber business initiative. Please note that any incremental legal or other non-staff outlays would require a new appropriation in the General Fund 05-06 budget.

Staff Time and Outside Legal Costs

Staff estimates that approximately 1,170 of staff and outside legal counsel hours, at a cost of \$159,000-\$234,000, would be expended to develop and issue the RFP, review responses to the RFP, and select the most responsible bidder. The estimated staff time breaks out as follows:

- Utilities: \$39,000
- Attorney's Office (including outside counsel but not litigation costs): \$105,000-\$180,000
- ASD: \$15,000

If the RFP issuance spurs a legal challenge, those costs are estimated at \$250,000 to \$750,000, or more if the challenge becomes protracted.

Lost Revenues

The Telecomm Division is currently in the midst of overhauling the dark fiber business, including a new rates proposal, revising the standard contract, meeting an increasing customer project demand (therefore increasing sales), getting ready for a Phase 2 Business Plan which will target the best areas for business development, training a new staff person, and setting up an infrastructure database. If staff were asked to proceed with an RFP, these activities would be delayed or would not receive adequate attention, possibly resulting in a decline in revenue. Staff estimates that the permanent revenue loss would be in the neighborhood of \$540,000.

POLICY IMPLICATIONS

Policy implications of this report are discussed above.

ENVIRONMENTAL REVIEW

The actions requested in this report do not constitute a project for the purposes of the California Environmental Quality Act.

PREPARED BY: Grant Kolling, Sr. Assistant Attorney, City Attorney's Office
Joe Saccio, Deputy Director, Administrative Services
Nancy Nagel, Senior Financial Analyst, Administrative Services
Blake Heitzman, Manager, Utility Telecommunications

DEPARTMENT HEAD APPROVAL: _____
CARL YEATS
Director, Administrative Services

CITY MANAGER APPROVAL: _____
EMILY HARRISON
Assistant City Manager