

**TO: HONORABLE CITY COUNCIL**

**FROM: CITY MANAGER**

**DEPARTMENT: UTILITIES**

**DATE: JANUARY 25, 2010**

**CMR: 119:10**

**REPORT TYPE: INFORMATIONAL**

**SUBJECT: Status Update on Citywide Ultra High-Speed Broadband System Project**

**RECOMMENDATION**

This is an informational report and no Council action is required. The purpose of this report is to provide the Council with an update regarding the following activities related to the Citywide Ultra-High Speed Broadband System Project: (1) transition of project management from the Administrative Services Department to the Utilities Department; and (2) an update on the City's pursuit of federal economic stimulus funding for the Broadband System.

**BACKGROUND**

In 2006, the City issued a Request for Proposals (RFP) for a company to build and operate a Citywide Ultra-High Speed Broadband System in Palo Alto. In 2007, the Council directed staff to enter into negotiations with a consortium of firms that would partner with the City to develop the Broadband System. Staff negotiated at length in an attempt to reach agreement on the terms of a public-private partnership. Unfortunately, the economic downturn restricted the consortium's ability to obtain financing for the Network. On March 9, 2009, the consortium withdrew from its participation in the project.

Since the consortium withdrew, seventeen (17) new dark fiber projects were started in the City. Seven of these projects are for new customers. The additional dark fiber license fees will generate approximately \$200,000 in annual gross revenues.

On April 13, 2009, the Council directed staff to pursue economic stimulus funds for the Broadband System project (CMR:143:09). The American Recovery and Reinvestment Act of 2009 (ARRA) offers \$7.2 billion in grants for qualified broadband projects. Palo Alto's project would be awarded by the Commerce Department's National Telecommunications and Information Administration (NTIA) through the Broadband Technology Opportunities Program (BTOP). In Round One, the BTOP program offered \$4.7 billion in grants to fund broadband projects in suburban and urban areas of the country and requires a 20 percent local match. The Rural Utilities Service (RUS) of the Department of Agriculture offers \$2.5 billion in grants, loans and loan guarantees for broadband projects in rural areas of the country.

The NTIA then announced it planned to offer three opportunities for submission of BTOP grant applications (summer 2009, fall 2009, and spring 2010). In presenting its BTOP program, NTIA stressed five key purposes:

- Access for end users in “unserved” areas;
- Access for end users in “underserved” areas;
- Support community anchor institutions;
- Improve access to public safety agencies; and
- Stimulate demand, economic growth, and employment.

On July 1, 2009, the NTIA released a Notice of Funds Availability (NFOA) for the first round of grant applications under BTOP. In the first round, “underserved” is defined in such a way as to preclude communities with DSL and /or cable modem service from receiving any BTOP grant support. Palo Alto was therefore ineligible to apply for first round grant assistance.

On July 13, 2009, staff held a study session with Council to review the federal economic stimulus funding proposal being developed by staff and the criteria by which the project would be evaluated by the NTIA. The staff proposal included a 25-mile extension of the current dark fiber network into all neighborhoods and business districts within the City. Fiber would be extended from the existing backbone ring to nodes strategically placed to connect to commercial and public facilities and to provide a launching point for deployment of a fiber-to-the-premise (FTTP) network. The backbone fiber count would be increased to provide sufficient fiber for commercial users and, at each node, support an easy migration path if a FTTP network was built-out. In addition, the proposal included a citywide wireless component meant to address one of the five “key purposes” for grant funding established by the NTIA.

During the study session, the Council provided numerous comments on the staff proposal which primarily emphasized moving forward with an expansion of the City’s existing fiber network into commercial areas to generate new revenues that could be used to support a build-out of the network to all City premises. The Council inquired about potential partnerships with private entities who would participate in building and operating the network. The Council deemphasized the wireless component of the proposal in light of the primary goal of reaching all premises with a 100 Mbps, synchronous, open access system.

## **DISCUSSION**

Following the study session, the Utilities Department hired a full-time project manager (on a temporary basis) to manage the Citywide Ultra-High Speed Broadband System Project and further the City’s vision of an open access FTTP network capable of delivering multiple telecommunications services. The new project manager will focus exclusively on this effort adding new momentum to this important initiative. On November 12, 2009, the Administrative Services Department formally transitioned responsibility for the Citywide Ultra-High Speed Broadband System Project to the Utilities Department.

Staff continues to work with Columbia Telecommunications Corporation (CTC) to develop a Broadband System implementation plan that is responsive to the Council feedback received during the July 13, 2009 study session. This includes expanding the current dark fiber network

to commercial business areas to enhance revenues, in addition to expanding into contiguous residential neighborhoods as a future platform for the FTTP vision.

Staff is also pursuing the feasibility of placing nodes on Palo Alto Unified School District (PAUSD) properties in exchange for broadband connections that would serve Palo Alto schools. This option is being considered because the City's franchise agreement with Comcast ends in July 2010. After this date, Comcast is no longer obligated to provide PAUSD with a broadband institutional network (I-Net), except as to certain origination points. Connecting PAUSD to the fiber network in exchange for placement of nodes on PAUSD properties would be beneficial in an application for BTOP stimulus funds (addresses the "key purpose" regarding support to community anchor institutions) and would further the goal of FTTP in the community.

CTC has been directed to complete its scope of work under its current contract. This work includes a preliminary assessment of action steps related to providing telecommunications engineering services in support of an economic stimulus grant application(s) for the Broadband Project. There are sufficient funds available under the contract for CTC to provide these preliminary engineering services. Staff is currently preparing a scope of work for additional contract telecommunications engineering services that will be necessary to support a comprehensive business plan, which would include the documents that would serve as the essential components of the City's grant application.

The first round of these grant and loan programs produced almost 2,200 applications requesting nearly \$28 billion in funding - almost seven times the amount of funding available in that round - for proposed broadband projects reaching all fifty states, five territories, and the District of Columbia. The NTIA and RUS are currently reviewing these applications and expect to award up to \$4 billion in loans, grants, and loan/grant combinations in this round. The agencies began announcing funding awards on December 17, 2009.

The NTIA and RUS have acknowledged that the initial application was overly burdensome (38 pages of detailed questions, numerous certifications, and approximately 10 attachments) and have tentatively concluded that the application process should be streamlined.

On October 28, 2009, Mayor Drekmeier sent letters to U.S. Senators Barbara Boxer and Dianne Feinstein asking them to co-sign a letter from Senator John Kerry to Assistant Secretary Lawrence Strickland, the Administrator of the NTIA, urging the NTIA to make the application process more accessible to community anchor institutions, as this is the intent of the American Recovery and Reinvestment Act that created the Broadband Technology Opportunities Program. Senator Kerry's letter pointed out to Mr. Strickland that big broadband networks to community anchor institutions can be open to interconnection so that they may be used as "jumping off" points for the distribution of additional broadband services to individual homes and businesses in the community.

On November 10, 2009, the NTIA announced that there would be only one more round of funding, which will begin early in 2010. Although NTIA and RUS initially planned to hold three rounds of funding, the experience in the first round led the NTIA and RUS to opt for only two funding rounds.

On November 16, 2009, the NTIA issued a Request for Information (RFI) for the purpose of gathering information that will help them improve the application process and make targeted revisions to the first NOFA, if necessary. If the rules governing BTOP applications are significantly relaxed in the second-round and the definition of “underserved” is modified, it is possible the City would be eligible to apply for stimulus funding.

On November 30, 2009, the City filed comments with the NTIA and RUS in response to the RFI. The City urged NTIA to consider changes to the rules governing submission of NTIA grant applications to allow greater participation by communities in critical high-technology corridors like Palo Alto.

It should be noted that throughout the country, local and state plans to improve high-speed Internet access with federal stimulus dollars have met strong opposition from incumbent carriers such as AT&T and Comcast, in addition to other Internet service providers. The incumbents assert that plans funded with stimulus dollars are essentially “overbuilds” and federal broadband stimulus grants should be prioritized for projects in unserved or underserved areas with little or no access to broadband. The NTIA and RUS broadband stimulus grant rules include a challenge clause that allows the incumbent carriers to challenge applications if they believe broadband service is already available in their operating territory.

On January 15, 2010, the NTIA announced the second round NOFA. This round allocates approximately \$2.6 billion to the BTOP program, of which approximately \$2.35 billion will be made available for comprehensive community infrastructure projects. Grant applications must be submitted to the NTIA by March 15, 2010.

In the second round of funding, the NTIA is adopting a “comprehensive communities” approach as its top priority in awarding infrastructure grants, focusing on middle-mile broadband projects that connect key community anchor institutions – such as libraries, hospitals, community colleges, universities, and public safety institutions. According to the NTIA, comprehensive community infrastructure projects maximize the benefits of BTOP by leveraging resources, promoting sustainable community growth, and ultimately laying the foundation for reasonably priced broadband service to consumers and businesses. This means that last mile projects are not favored, unless there is a substantial middle mile component to that project. The NOFA also states that last mile projects will be considered only after all middle mile projects are first considered.

The NTIA is removing the requirement that infrastructure projects connecting community anchor institutions, including community colleges, must be located in unserved or underserved areas, though projects in unserved and underserved areas will receive additional favorable consideration.

In addition, NTIA plans to award at least \$150 million of the funding for Public Computer Center projects, which will expand access to broadband service and enhance broadband capacity at public libraries, community colleges, and other institutions that service the general public. NTIA also plans to award at least \$100 million for Sustainable Broadband Adoption projects,

which include projects to provide broadband education, training, and equipment, particularly to vulnerable population groups where broadband technology has traditionally been underutilized.

Staff is currently reviewing the NTIA NOFA and revised governing rules to determine the feasibility of the City submitting a grant application for an anchor institution network in view of the NTIA's "comprehensive communities" approach, as this type of infrastructure project best meets the goals of the City's citywide fiber to the premises project.

As it is currently laid out, the focus of the BTOP process is satisfying the broadband needs of "unserved" and "underserved" areas of the country. As a result, obtaining federal funding in a community such as Palo Alto may be a significant challenge (see letter from CTC in Attachment A). Moreover, the BTOP grant application process requires the preparation of a detailed business plan (e.g., multi-year financial forecast, marketing plan describing service offerings and price points, system design, etc.), but that will be required at a later due diligence phase of the review process.

To prepare a comprehensive business plan consulting services will be required to meet the deadline for submission of a grant application. A contract amendment will be required to retain the services of CTC to complete the preparation of a comprehensive business plan, which would include the documents that would serve as the essential components of the City's grant application. Due to the short timetable to submit a grant application, staff plans to return to Council on February 1, 2010, with an amendment to extend the CTC contract and provide for additional funds to prepare a business plan.

### **RESOURCE IMPACT**

On October 19, 2009, the City hired a full-time project manager for the Citywide Ultra High-Speed Broadband System Project. Funds are available in the 2009-10 Fiber Optics Fund operating budget to support this expense.

Staff plans to return to Council with an amendment to the CTC contract to provide additional funds for their assistance in preparing a comprehensive business plan. This business plan would include the documents that would serve as the essential components of the City's grant application. Funds are available in the 2009-2010 Fiber Optics Fund operating budget to support this expense.

If the City submits a broadband grant application to the NTIA, the Fiber Optics Fund reserves (approximately \$7 million) will be used to meet the 20 percent local matching requirement. Commercial dark fiber revenues should grow as fiber is located closer to businesses.

### **POLICY IMPLICATIONS**

This report is consistent with the Council's policy and program direction provided to staff.

### **ENVIRONMENTAL REVIEW**

The actions requested in this report do not constitute a project for the purposes of the California Environmental Quality Act. Build-out of the Broadband System is subject to the requirements of the California Environmental Quality Act due to the installation, construction and maintenance

of facilities in the public rights-of-way. Necessary environmental review will occur when appropriate.

**ATTACHMENT**

Attachment A: CTC Letter

**PREPARED BY:**

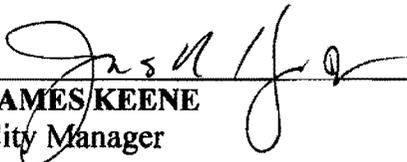
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**CITY MANAGER APPROVAL:**

  
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City Manager



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December 18, 2009

Via Electronic Mail

Ms. Valerie Fong  
Director of Utilities  
City of Palo Alto Utilities Department  
250 Hamilton Avenue  
Palo Alto, CA 94301

Dear Ms. Fong:

This letter is written as a follow-up to our discussions regarding the likelihood of the City of Palo Alto securing funding under the American Recovery and Reinvestment Act of 2009 (ARRA) to construct a so-called “last mile” fiber network to serve business and residential users.

As you are aware, ARRA provides a total of \$7.2 billion in grants and loans to support qualified projects. Of this total, \$2.5 billion is allocated to rural areas under the Rural Utilities Service (RUS) of the Department of Agriculture. The remaining \$4.7 billion is to be administered by the National Telecommunications and Information Administration (NTIA) of the Department of Commerce.<sup>1</sup>

The guidelines established for the first round of NTIA grant funding focused on bringing service to unserved and underserved areas. NTIA set 40 percent broadband penetration as the threshold for being underserved—a level at which Palo Alto does not qualify. And in terms of defining “unserved” communities, NTIA set an extremely low threshold for the presence of “Broadband Services”—defining it as two-way data transmission with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream. This threshold level is substantially lower than the transmission rates provided to end users in Palo Alto by existing service providers. Based on the advertised claims of existing service providers (e.g., AT&T and Comcast) operating in Palo Alto, it can be reasonably assumed that all residents have access, if desired, to adequate broadband services as defined by the NTIA. Thus, the City cannot be deemed unserved.

To get around these thresholds, some grant applicants have attempted to make the case that while broadband service that meets the NTIA requirements is available in their communities, the high cost of the service (which might range from \$50 to \$ 100 per month) makes it prohibitively expensive for low-income residents. The end result, they argue, is that the community is effectively un-served. However, this approach would not pass muster for Palo Alto.

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<sup>1</sup> Federal Register, Volume 74, Number 130, July 9, 2009.

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Additionally, we have noted that in the first round of applications filed by communities that have existing commercial broadband services, many incumbent carriers (CATV, wireline and fiber optic) have filed formal objections to the individual grant applications—often claiming that the proposed service areas are fully served and hence not in compliance with NTIA policies.

In view of the forgoing, we recommend that CPAU consider re-channeling its planning efforts to focus on applications that are more consistent with the prevailing NTIA policies such as collaborative efforts with neighboring communities to construct “middle mile” networks linking cities and public-sector institutions in the Bay Area.

Very truly yours,

A handwritten signature in cursive script that reads "Lee Afflerbach".

Lee Afflerbach