

Agenda Report

May 17, 2010

TO: Honorable Mayor and City Council
FROM: Department of Information Technology
SUBJECT: CITY COUNCIL WORKSHOP ON BROADBAND AND FIBER OPTICS

RECOMMENDATION:

This report is submitted for information only.

BACKGROUND:

In December, 2009, the City Council identified a number of three-year strategic plan goals, as well as six month strategic objectives to support those goals. One of the three-year goals is to "Support and promote the quality of life and the local economy". Among the six month strategic objectives related to that goal is "Present to City Council for direction the use of fiberoptic and broadband deployment opportunities" by May 17, 2010.

This workshop of the City Council is designed to provide an opportunity for discussion regarding broadband (defined as Internet access via a connection of at least 768 kilobits per second or Kbps) and fiber optics and to present recommendations regarding next steps the City can take to promote broadband and expand its fiber optic resources.

Specifically, this workshop will provide an overview of:

- Broadband trends
- The City's fiber resources and broadband initiatives
- Broadband services that are commercially available in Pasadena
- How other cities foster broadband
- What the City can do to advance broadband and expand its fiber optic resources

The topic of broadband and how to promote it is very timely. The Federal Communications Commission (FCC) issued a National Broadband Plan in March, 2010, focusing on policies to support broadband across the country. The Plan found that broadband is available to about 95% of the US population, but that the US is lagging behind other countries in broadband speed, availability in rural areas, and affordability.

Historically, broadband deployment in the US has been left in the hands of the private sector, supplemented in places by local government initiatives. Pasadena has embarked on a number of projects over the years to develop its own broadband capabilities and promote broadband deployment locally. Among the most significant of these efforts was installation of a fiber optic backbone in 1998 and 1999. Goals of the fiber backbone project included: encouraging availability of competitively priced telecommunications services to local businesses and institutions; meeting Pasadena Water & Power and general City telecommunications requirements; generating revenue; and fostering economic development. Beginning in 2000, the City also initiated installation of a fiber network specific to transportation management needs. These two fiber networks are shown in Attachment A.

Other City broadband initiatives have included a 2001 Telecommunications Market Assessment to identify and address gaps between local needs and available services, and a 2006 effort to partner with EarthLink to deploy WiFi services citywide (the company ultimately decided to exit the muni-wireless market prior to deploying its network in Pasadena and several other cities). More recently, the City responded to Google's Request for Information from communities interested in hosting one of the company's planned fiber-to-the-home deployments.

Based on data collected by the State Public Utilities Commission, broadband Internet access is widely available to residential consumers across most of Pasadena (see broadband subscription map – Attachment B). In addition, a variety of competitive service providers offer advanced telecommunications services to local businesses. Over the next 12 to 24 months, additional wired and wireless services will also become available locally, as AT&T continues its U-verse roll-out and Clearwire/Sprint install next generation wireless (4G) capabilities. However, service affordability and choice of providers may continue to be issues for both residents and businesses.

Staff has evaluated steps that other cities have taken to promote broadband in their communities. Approaches vary widely -- from partnering with the private sector to offering services directly. Other cities have focused on creating their own fiber infrastructure, often piggybacking on projects that involve street openings and links into commercial buildings for future fiber expansion.

Based on that evaluation of other cities' approaches, as well as a review of applicable opportunities in Pasadena, staff would suggest the following next steps, which will be further elaborated as part of the workshop discussion:

- Adopt a set of strategies for promoting broadband as part of a new General Plan element regarding technology and telecommunications
- Expand City fiber resources and infrastructure through:
 - Regular review of City and private sector projects involving trenching in City streets to identify opportunities to install conduit and fiber for City network expansion

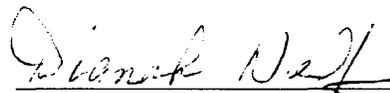
- Amendment to the Building Code or plan review guidelines to require a spare conduit in commercial buildings for future fiber connections
- Facilitate expanded competition in the business services market
 - Make spare conduit capacity available in certain situations to provide less expensive and disruptive access to commercial customers
 - Streamline right-of-way use and pole attachment processes for companies deploying broadband services
- Explore joint use of City and Transportation fiber networks to meet City needs for connectivity

Following this workshop, staff will identify specific implementation requirements for each of these items, and will return to City Council for guidance and direction when appropriate.

COUNCIL POLICY CONSIDERATION:

This workshop supports to the City Council's strategic goal of supporting and promoting the quality of life and the local economy.

Respectfully submitted,



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Attachment A: Map of City Fiber Networks
Attachment B: Map of Local Broadband Subscription Rates