TO: Mayor Marchione and City Council

FROM: Mike Bailey, Director, Finance and Information Services, 425-556-2160

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DATE: September 7, 2010

SUBJECT: STAFF REPORT: FIBER CONSORTIUM

At the August 18, 2010, Public Admin Finance Committee meeting, the Regional Fiber Consortium was introduced to the committee members. The purpose of this staff report is to further inform the Council about the Fiber Consortium, explain the benefits that Redmond would achieve as a member, and answer any questions prior to requesting Council approval of an interlocal agreement that would allow Redmond to become a member.

BACKGROUND

The Fiber Consortium is a regional organization made up of municipalities, public safety agencies, universities, colleges, school districts, and hospitals. Its purpose is to develop and build a shared, regional fiber optic network that will connect all of the participating organizations across jurisdictional and organizational boundaries as the need and opportunities arise.

The Fiber Consortium began in 2003 when the Lake Washington School District had funding to build fiber connections to schools but no conduit in which to place the fiber and the City of Kirkland had conduit and a need to connect city buildings but weren't funded to build out the fiber they needed. They were each able to achieve their goals as a result of creating this partnership.

Over the last seven years, the Fiber Consortium has grown to include 11 cities, three school districts, Bellevue College (formerly BCC), Evergreen Hospital, the University of Washington, and Valley Communications Center. Over 35 miles of fiber optic cable has been built with more to come in the near future.

BENEFITS TO REDMOND

While there are several ways Redmond can benefit from participating in the Consortium, listed below are options we can realize very quickly, or can consider, as the network expands:

Establishing fiber connections to neighboring jurisdictions builds resiliency and redundancy for all partners in the Consortium.

Redmond will gain alternatives for data center capacity by having high-speed connections to other municipalities that have more physical space than we do currently.

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As the lead agency for ALS, Redmond will have high speed connections to area hospitals and medical centers. Medical facilities will have greater reach to one another enhancing health care.

An expanded fiber network will allow Redmond to better serve the public with wireless or broadband access and provide our mobile City employees with high-speed access to data and applications within our data center once that project moves forward.

In addition to the City's direct connection to NORCOM, Redmond's Dispatch Center will also have direct inter-connectivity to Valley Communications Center, the King County Regional Communications and the Emergency Coordination Center and, when complete, LESA (Law Enforcement Support Agency – Pierce County's Emergency 911 center) among others.

As a member of the C-7 New Energy Partnership, this consortium is working with commercial entities for deploying charging stations throughout the C-7 region. The broadband infrastructure could be used to augment in-vehicle navigation systems with real-time traffic and road conditions, information on one-way and round trip range based on the current battery charge, location of EV charging stations, etc.

There have been recent discussions among cities and counties about creating a government "cloud" that could prove to be far more cost-effective than private cloud computing options. A multi-regional fiber infrastructure could make that a reality over time.

JOINING THE CONSORTIUM

Membership in the Consortium is through an interlocal agreement and there is no cost for membership. Participation in any individual project is voluntary. Each participant in a project brings to the table the resources they have available whether that's conduit, fiber strands, money, or good old-fashioned sweat equity. The Consortium also actively pursues grant funding to help build the network.

NEXT STEPS

The City Council will be asked to authorize the Mayor to sign the interlocal agreement that would allow the City of Redmond to become a participant in the Fiber Consortium.