



# **Draft** Wasco County & the Q-Life Network Broadband Strategic Plan

## Overview

Broadband is transforming and expanding our ability to communicate, participate, create, educate, inform and compete. Because of this transformation access to adequate broadband resources, rate of broadband adoption and ability to fully utilize broadband-associated tools are determining factors in the economic and civic vitality and of our communities and to citizen access to healthcare and education services and options.

Wasco County/Q-Life is one of eight Oregon communities participating in a broadband planning project funded under a grant from the National Telecommunications and Information Agency's Broadband Telecommunications Opportunity Program (BTOP)<sup>1</sup>. Wasco County has formed four "community sector" groups (Economic Development, Community Development, Education and Health and Utilization of Resources) which have met in planning forums to develop the goals and strategies of this broadband adoption and utilization plan. This draft plan summarizes the preliminary goals and strategies these sector groups have developed, and will be reviewed by the planning participants and revised. A final draft will be completed in May, 2013.

## The Strategic Planning Process in Wasco County

In January 2013 Wasco County and Q-Life brought individuals from key sectors in the community together to explore the following questions:

- Why are broadband inclusion, adoption and utilization important in our communities? What's at stake for the economic, social, educational and healthcare future of our communities?
- What parts of our communities are most affected by lack of broadband access, awareness, adoption, and utilization capabilities?
- What barriers prevent broadband access, awareness, adoption and utilization?
- What community assets and opportunities can be leveraged to overcome barriers?

## **Findings**

Discussion of the above questions by community members led to the following findings.

#### Inequities in broadband access, adoption and utilization

- Broadband and technology fluency are essential to a skilled and productive workforce, a connected citizenry, and equitable opportunity for all.
- Income, age, and lack of availability of broadband service contribute to inequities in broadband adoption and utilization.
- Technology can be an asset, but too often is a barrier for underserved communities that are without broadband access or economically disadvantaged populations who are without devices or the coaching they need to use technology.

<sup>&</sup>lt;sup>1</sup> The grant is administered by the Oregon Business Development Department



- Closing these divides is essential to developing connected and productive citizens and a skilled, digitally-fluent workforce.
- There is a lack of awareness among many in the community of the impact or relevance of broadband in their lives. These may be people with the access and means to adopt broadband but are not motivated now to do so.

## Opportunities for Innovation and Improved Healthcare and Education Outcomes

- New health care and education innovations and opportunities made possible by broadband are emerging in the county. These innovations can improve healthcare and education outcomes and reduce cost.
- All emerging healthcare opportunities are dependent on consumers' awareness and adoption of broadband.
- Lack of technology fluency will inhibit the entry of in-home healthcare programs and to patient access to health information.
- The connection between health and education is an important issue for planners now. New thinking about the healthcare/education nexus is putting the needs of the individual ahead of systems concerns. There is a new understanding of the child health requirements to support learning. As a result, education/healthcare silos (and silos between school districts and between Pre-K-12 and higher education) are beginning to dismantle.

## Role of Broadband in Economic Development and Community Vitality

- Broadband is an essential for 21<sup>st</sup> century economic development, including small businesses, the developing technology sector, the agriculture sector, teleworkers and the overall vitality of rural communities.
- Utilization skills among small businesses need to increase in order to have access to global markets.
- In order to keep and attract young people to our rural communities we must be able to offer technology-based economic opportunity.
- High capacity broadband service like that envisioned through the publicly funded Q-Life network can enable Wasco County to remain competitive. The fiber optic network established by Q-Life provides a strong foundation for the expansion of broadband access in our community. It has already made it possible to attract major new employers, such as Google.
- There is more to do to meet the goal of bringing robust, high capacity bandwidth to the region. Broadband service is lacking in most areas outside The Dalles, frustrating opportunities to make telework, health care, social services, and extended education opportunities more immediately and readily available.
- It may be possible to leverage existing fiber and other infrastructure resources, including Q-Life, to eliminate the broadband service inequities that plague the rural areas of the County.



## Five Broadband Strategic Goals

The planning process produced five strategic goals that address economic development, community development, education and health, and utilization of resources in the community. The goals and associated strategies are discussed below and arrayed on the summary "Conceptual Broadband Strategic Plan" attachment.

Goal One: The number of new businesses entering the county and existing business retention and expansion is increased due to the broadband capacity and technically fluent workforce in the county.

Adequate, high capacity broadband is essential to businesses large and small, to teleworkers and to the county's important agricultural sector. High quality, high capacity broadband service will enable small businesses to flourish, and attract skilled workers and entrepreneurs to the County.

Quality of life is why people choose to live in Wasco County communities but many are prevented from building home businesses or telecommuting due to lack of broadband service. Broadband needs to be ubiquitously available to optimize economic development.

Wireless broadband sufficient for agriculture applications is unavailable. Agricultural uses require a "big/fast mobile pipe" that is "a threshold above the norm."

#### Strategies proposed by participants for achieving Goal #1

- Develop partnerships to increase business awareness of broadband-linked opportunities, to assist with adoption and utilization skills, and to make technology more accessible to small business. The most likely partnerships are between the City of The Dalles and Klickitat County because they are already partnering on major assets such as a regional airport. The Dalles and Hood River can possibly partner to seek grants. The Gorge Technology Alliance and agriculture associations are excellent potential partners as well. Also partnership with the SBDC at Columbia Gorge Community College, our extension offices, County Library.
- Pilot projects can demonstrate the effectiveness of broadband partnerships. A suggested pilot between Q-Life and Polehn Farms could demonstrate the potential of global marketing.
- "Hubs" single locations that have high speed broadband connections and that are open to the public - can extend broadband to rural communities. A "one hub per year" strategy was proposed to create hubs in Maupin, Dufur, and Tygh Valley.

## Goal Two: Affordable broadband is accessible to everyone residing in Wasco County.

There is a very real broadband opportunity divide between The Dalles and adjacent rural areas. Some rural areas have substandard service while others have no broadband access at all. Broadband affordability is also a problem, in both rural and more urban Wasco County communities.



### Strategies proposed by participants for advancing Goal #2

- Establish a "broadband access for all" principle, which will guide policy and determine
  actions that might provide both affordability programs and initiatives to incentivize or
  subsidize development of rural broadband infrastructure.
- Make low cost computers or tablets, training and mentoring available through partnering with non-profit organizations.
- Establish networked neighborhood "Wi-Fi-hubs" throughout the county where Wi-Fi is made available at sites such as coffee shops, fire stations, retail stores, and public buildings.

# Goal Three: Broadband adoption and utilization rates exceed state and national averages.

Affordability and availability are significant issues, especially for economically disadvantaged individuals and families. But participants in this broadband planning process recognized that low adoption rates also indicate lack of public awareness of the benefits of broadband and its growing necessity. Barriers to adoption may include fear of technology, lack of familiarity with computers, concern about security and privacy, non-English speaking, and doubt about the relevance of the Internet. Even those who own computers may lack the skills to use the Internet to find a job, to pay bills, or find a product or service at a low price.

### Strategies proposed by participants to address Goal #3

- Conduct an assessment of why individuals and businesses are not adopting, and their perception of services available.
- Create an outreach ("marketing") program about broadband utility for the community, designed to help late- or-non-adopters find the resources they need to become a broadband user. This outreach can draw on many sources for content, including the community colleges, universities and the Small Business Development Center (SBDC).
- Develop agreements with service providers, device retailers, computer support service providers, coffee shops and others to distribute the outreach materials. These materials should include specific information (how to set a password, how to check e-mail, how to use a browser, etc.).
- "There is no substitute for one-on-one coaching" to enable the uninitiated to navigate broadband-enabled technologies. "Neighbor to neighbor" coaching is the best means of supporting broadband utilization skills. Coaching can occur via teens to seniors, business-owner-to-business-owner, middle-schoolers to parents, and through after-school programs, library efforts or other formally or informally sponsored programs.
- Broadband literacy is cultivated by exposure to devices and fast networks. Develop skills centers within libraries, coffee shops, computer labs in schools, "after school"



programs, and at other locations to offer access to devices and support for use of broadband technologies.

## Goal Four: Healthcare and education providers are able to serve county residents' needs via broadband, improving health and education outcomes.

Broadband is ushering in new modalities of education and health services. Health care services, including monitoring of vital signs, medication management, and face-to-face consultations between patients and doctors will be possible over a broadband link. Seniors won't have to travel to a doctor's office to be monitored. Consultations with major medical centers in other cities will be possible without leaving the local community.

On the education front, students will be able to take courses from educational institutions anywhere in the world over broadband. Virtual schools are developing and educating students today in Oregon, and throughout the country. Distance education is a significant part of the state's "40-40-20" educational goals, and Oregon State University wants to provide courses in partnership with Columbia Gorge Community College.

### Strategies proposed by participants to address Goal #4

- Involve health care providers, educational institutions and state agencies to work together to address the policy/protocol issues holding back service delivery over broadband. These issues include federal privacy standards, lack of affordable broadband services and user devices, and lack of organizational skills and programs to offer on-line services.
- Establish a cross-sector pilot project to demonstrate the health and education benefits of broadband adoption and to advance demand for these services in the County.

## Goal Five: Availability of high capacity broadband service in ALL Wasco County communities - urban AND rural.

As a result of the presence of Q-Life in The Dalles Google constructed a major data center here, bringing new employees to a community that had suffered the loss of well-paying jobs in the aluminum industry. Q-Life now has a revenue stream that could create a portion of the funding to extend broadband to other parts of our community.

### Strategies proposed by participants to address Goal #5

- There is strategic value in revisiting the Q-Life business plan to assess opportunities to build additional partnerships that focus on rural connectivity, and to involve more partners in improving last mile service in The Dalles.
- Leverage other infrastructure, such as fiber assets owned by local power companies, telecommunications carriers, and state and federal government, to reduce cost of deployment through smart partnering and incentives.
- The rural access problem is not limited to Wasco County, but exists in all rural areas of Oregon and in many rural areas across the nation. Develop a statewide policy to





address rural broadband inequity, and engage with the Oregon Broadband Advisory Council, Oregon Public Broadcasting and Oregon Business Development Department to formulate a statewide strategy to overcome rural broadband disparities.