



Columbia Basin Broadband Corporation Strategic Plan

2016

Introduction

Working with Basin communities and rural areas to improve connectivity

High-speed Internet[†] connects citizens, enables businesses to remain competitive in a global economy, supports education, helps attract and retain youth and augments the delivery of health and government services. It can improve the quality of life, well-being and prosperity of Columbia Basin residents as well as the sustainability of smaller and rural/remote communities.

Columbia Basin Trust recognizes that, in order to be successful, our region needs better high speed connectivity[†]. Yet in many areas, there isn't adequate telecommunications infrastructure or services available. To some extent, this reflects that our region has a low population and a challenging geography for infrastructure development, meaning that there isn't necessarily a business case for a traditional telecommunications provider to make appropriate levels of service available.

To meet the needs of residents and communities, Columbia Basin Trust has made broadband one of its strategic priorities. It created a wholly owned subsidiary, the Columbia Basin Broadband Corporation (CBBC), to work toward providing

connectivity to a broadband network[†] across the region and fostering the development of services over that network.

The Trust provides funding support for CBBC's ongoing operating costs, and the costs of activating CBBC's fibre optic network[†] in the region. See map on page 7.

A significant portion of CBBC's initial goal has been achieved: to light up the regional network. We are now working with communities and rural areas to interconnect them to the network, while exploring and pursuing opportunities to expand the network where appropriate.

As the telecommunications industry is constantly evolving and the needs of communities and rural areas continue to change, this plan is intended to be short term, and guide CBBC's activities for the next six to twelve months. CBBC expects that its roles, objectives and tactics will need to be revisited and adjusted. In the long term, the Trust is committed to helping residents take part in the digital world.

[†]Symbol denotes term defined in the glossary.





CBBC Roles

1. **Network operator and manager:** CBBC will maintain its fibre network and infrastructure.
2. **Network developer and marketer:** CBBC will ensure the network evolves as needed to meet the region's needs, and ensure awareness about it amongst those who could benefit. This may include developing services over the network that Internet service providers can in turn resell to their end customers.
3. **Service provider resource:** CBBC will explore opportunities to support service providers[†] in the region in bringing better high speed connectivity to communities and rural areas.
4. **Service provider:** CBBC is a direct service provider to local government customers. More generally, CBBC works with Internet service providers, making the network available for their use. With an ultimate goal of bringing high speed connectivity to our region, there may be circumstances where it is appropriate for CBBC to directly serve end customers to ensure connectivity is available to those who desire it.

CBBC's mission is to provide connectivity to a world class open access broadband network across the Basin.

Objectives

Objective 1: Maintain a robust, reliable network and efficient, effective operations.

Tactics

1. Secure and maintain network management and support services.
2. Develop technical and business processes related to network operation.
3. Document key practices, policies and processes.

Indicators

- No loss of customers due to service interruption.
- 99.99 per cent service level objective achieved, meaning that the network is down less than 53 minutes a year.

Objective 2: Explore and pursue economic development opportunities created by the network.

Tactics

1. Map commercial/business “zones” close to the network and interconnect those areas.
2. Develop a marketing strategy for the CBBC regional network and last-mile[†] networks.
3. Increase the service offerings available to service providers/on-net services[†]. Other “on-net” services could enrich offering to end customers.
4. Fibre up[†] more community “business cores.”

Indicators

- Minimum of 30 per cent uptake by businesses in last-mile build footprints: e.g. Trail and Rossland.
- More commercial and industrial entities are interconnected to the network.
- Growth in numbers of business/high-end packages sold and users supported by connected Internet service providers.

Objective 3: Explore and pursue opportunities to address community and regional needs with the network.

Tactics

1. Interconnect post-secondary sites with high speeds at affordable prices.
2. Interconnect school districts with high speeds at affordable prices.
3. Assist local governments in exploring shared services opportunities.
4. Assist the health sector in exploring connectivity needs.

Indicators

- School districts/post-secondary sites connected: connectivity benefits realized for their purposes.
- Reduce funding required from Trust for CBBC operating costs.

Objective 4: Improve/expand availability of high-speed Internet and broadband services in rural Basin areas.

Tactics

1. Facilitate collaboration opportunities amongst rural Internet service providers.
Bulk purchase of equipment, shared services such as bookkeeping, helpdesk, etc.
2. Where there is interest from and potential benefit to Internet service providers[†], support aggregation[†] of Internet service providers operations.
Smaller Internet service providers face sustainability challenges.
3. Increase the service offerings available to service providers/on-net services.
Other "on-net" services could enrich offering to end customers (e.g. VOIP).
4. Coordinate the Basin-Boundary project to improve service to rural households.
Project is receiving federal, provincial (through NDIT), regional district and Trust funding.
5. Ensure pricing to Internet service providers for CBBC interconnection is reasonable given market size.

Indicators

- The majority of rural Internet service providers in the Basin are interconnected to the CBBC network.
- Services are improved/expanded to 11,000 rural households.
- No rural residents are worse off; that is, no longer receiving service because of an Internet service provider sustainability challenge.

Objective 5: Link all CBBC strategies to broader industry context and emerging opportunities.

Tactics

1. Discuss asset-sharing, expansion and partnership opportunities with telecommunications companies.
2. Maintain the relationship with Network BC.
3. Discuss asset-sharing and partnership opportunities with entities with potentially aligned interests.
4. Maintain awareness of telecommunications regulatory issues and participate as appropriate in regulatory proceedings.
5. Develop relationships/apply lessons learned from networks comparable to CBBC.

Indicators

- Not applicable.

Objective 6: Expand the network, within communities and between communities, where appropriate.

Tactics

1. Explore partnerships and opportunities to leverage funds for network expansion.
2. Investigate new construction and feasibility of new construction.

Indicators

- Not applicable

Objective 7: Reduce the need for ongoing financial support required from the Trust for regular CBBC operations.*

Tactics

1. Explore partnerships and opportunities to leverage funds.
2. Strive for lean operations to minimize the Trust funding required.
3. Explore and pursue opportunities to increase revenue generation from the network.

Indicators

- Limited negative variances in operating expenses.
- Revenue increases.

** This objective does not prevent the Trust from providing additional funds to CBBC for new endeavours that could further improve high speed connectivity in our region.*

Glossary

Activate/light up: To complete work on a section of fibre optic network so that signals can pass through it.

Aggregation: The act of collecting all of the need/demand and supply of data/bandwidth, services and support required for high-speed connectivity by Basin communities, and placing it on a shared network to achieve economies of scale.

Broadband: A way of transferring many digital signals at once using any combination of fibre optic or other cable and wireless signals.

Broadband network: Interconnected fibre optic, other cable and wireless links as well as networking equipment and other related infrastructure that enables and supports a high-speed connection between devices.

Connectivity: The state of being connected to high-speed Internet.

Fibre optic network: A linked series of equipment and fibre optic cables made up of many glass strands, each about the thickness of a human hair; the fibre is located underground and above ground across the Basin and can transmit very large amounts of data by converting it to light signals that move at high speed and high volume.

Fibre up: To build a fibre optic network in a certain area.

High-speed Internet: Access to the Internet at a data transfer rate of at least 5 megabits per second for downloads and 1 megabit per second for uploads, which is much faster than those provided by the standard dial-up connection of only 56 kilobits per second.

Internet service providers: Organizations that provide Internet services to customers.

Last mile: The extension of the network into a community or rural area, and particularly the infrastructure needed to reach individual households and businesses, as compared to CBBC's Basin-wide network, which may be viewed as the "first mile."

Network uptime: The time during which the broadband network is operational; this can be affected by factors like scheduled or emergency maintenance and upgrades.

On-net services: Services that are available on the CBBC network itself, and do not require connection to the Internet beyond or require bandwidth from external carriers/providers.

Service providers: Organizations that provide a wide range of Internet and non-Internet services: e.g. data backup, videoconferencing, financial systems, GIS, telephone and television.

Columbia Basin-Boundary Fibre Optic Network Map

