

2016 STATE OF THE BASIN

Snapshot Report

A region-wide check-up on life in the Columbia Basin-Boundary Region



COLUMBIA BASIN
RDI
RURAL DEVELOPMENT INSTITUTE

Christine Campbell photo



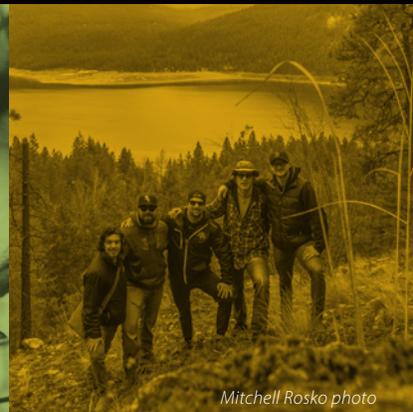
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The Columbia Basin Rural Development Institute, at Selkirk College, is a regional research centre with a mandate to support informed decision-making by Columbia Basin-Boundary communities through the provision of information, applied research and related outreach and extension support. Visit www.cbrdi.ca for more information.

Welcome

Since 2012 the Columbia Basin Rural Development Institute has been producing the State of the Basin (SOTB) Report, designed to monitor and report on information relating to well-being in the Columbia Basin-Boundary region. This year the SOTB has had a face-lift, exploring a growing number of indicators and presenting these indicators in a [full report](#) and a series of [Trends Analysis Briefs](#).

USING RESEARCH TO IMPROVE REGIONAL WELL-BEING

Every day, organizations make decisions that influence our region's future. In order to ensure these decisions are sound, research on conditions and trends is required. The primary goal of the SOTB is to provide access to the data communities need to make decisions that lead to greater regional well-being.

In this snapshot, indicators are broken out to different themes that relate to one or more of the four core pillars:

- The Economy pillar considers levels of activity and diversity in our region's economic sectors and workforce, as well as the built environment (e.g., infrastructure).
- The Society pillar includes demographic characteristics, education and learning, early childhood development, civic engagement, and health & wellness.
- The Culture pillar includes arts, culture, heritage, and recreation.
- The Environment pillar includes biodiversity, species at risk, threatened ecosystems, health and management of natural resources, and wildfire.



INDICATORS & DATA SOURCES

SOTB research draws on data from a variety of sources including federal, provincial, and local governments, non-profit initiatives, and other organizations. The indicators we use have a consistent data source – meaning we can access the same information, collected in the same way, every year. As a result, indicators are largely quantitative. It is important to remember that these indicators only tell part of the story. To further inform our understanding of well-being, a statistically significant sample of residents (n=400) were asked a series of questions designed to better understand subjective well-being. Select findings are presented in this report.

Due to data release cycles, not all indicators are updated every year, which is why some of the indicators are reporting on data from previous years. Previous [SOTB reports](#) and [Trends Analysis Briefs](#) are available online at cbrdi.ca/state-of-the-basin.

THE COLUMBIA BASIN-BOUNDARY REGION

The Columbia Basin-Boundary region encompasses more than 8.6 million hectares of land in southeastern British Columbia. It includes 28 communities within the Regional Districts of Kootenay Boundary, Central Kootenay, and East Kootenay, as well as the Village of Valemount (Regional District of Fraser-Fort George), and a portion of the Columbia Shuswap Regional District. Three development regions are also included in whole or in part. The region is home to 162,900 people.¹



¹ State of the Basin Snapshot Report 2016

A Village of 100

If the Columbia Basin-Boundary was made up of *100 people*, there would be approximately.



50 women + 50 men



75
people exercise regularly



28
people attend arts or cultural events

54
people are between ages 25 and 64



21
people are over age 65

25
people are between ages 50 and 64

24
people are under the age 25

13
people have a university level education (bachelor, master, PhD)



7
people are unemployed



97
speak English most often at home

89
people are satisfied with the quality of the local environment

57
people have a post-secondary certificate or diploma or a university degree

6
people identify as Aboriginal

84
people donate to charity

75
people are satisfied with their jobs

61
people feel the people who make decisions in their community represent the community as a whole



Health & Wellness



90%
of residents polled are satisfied with their standard of living

PHYSICAL HEALTH

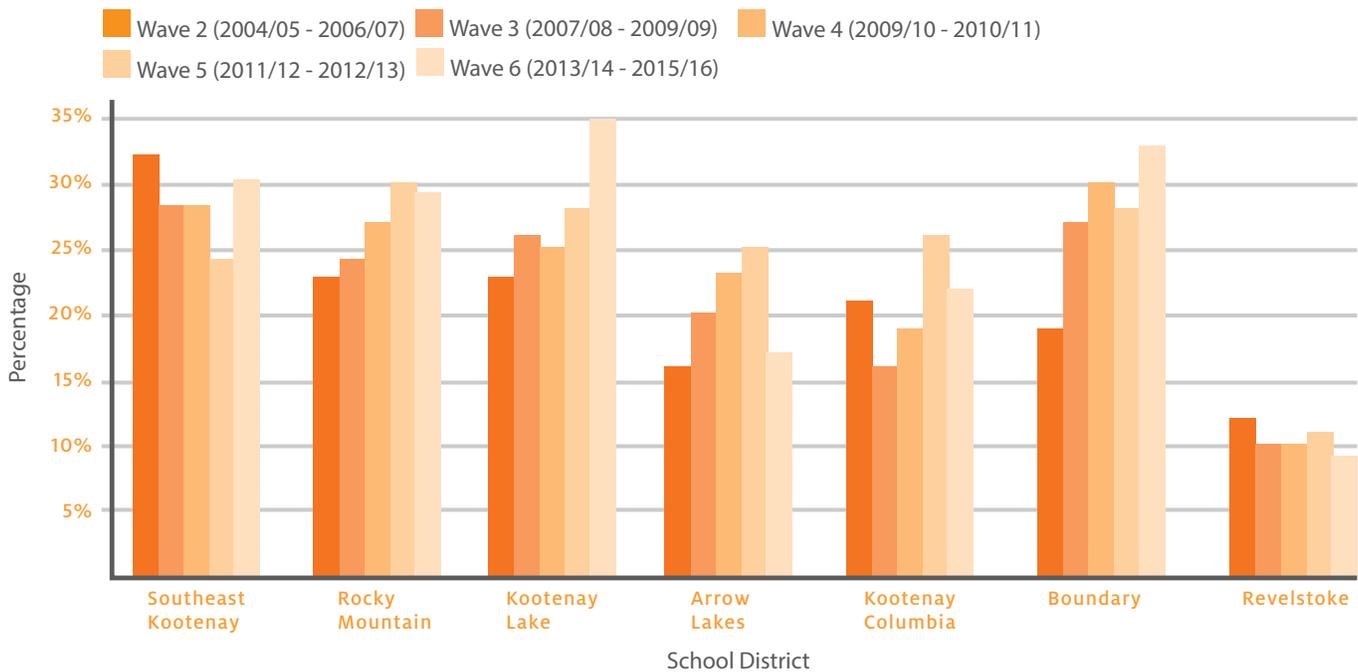
When asked to **rate general health services** (e.g., Doctor or Pharmacist) 64% of residents polled rated these services as good or very good. However, only 35% of residents polled felt their **access to mental health services** (e.g., psychologist or psychiatrist) could be considered good or very good.

CHILDREN & YOUTH

Low Birth Weight (LBW) is an important determinant of mortality, morbidity, and disability in infancy and childhood, and can have long-term impacts on health outcomes in adult life.² The average incidence of LBW for the Columbia Basin-Boundary is 53.6 low weight births per 1,000 live births, slightly better than the provincial average of 55.6.³

The Early Development Instrument (EDI) assesses the developmental readiness of a group of children and can help identify vulnerabilities. Vulnerability is most often reported by the proportion of children who are vulnerable on one or more scales of the EDI, including physical, social, language, emotional, and communication scales. The percentage of children vulnerable in one or more domain for the 2004/05 to 2015/16 school years are shown on the graph.

PERCENTAGE OF CHILDREN VULNERABLE IN ONE OR MORE DOMAIN, 2004/05 TO 2015/16⁴



RECREATION FACILITIES

64% of residents polled rated their access to recreational **facilities** as good or very good.

74% of residents polled rated their access to **recreational experiences** and opportunities as good or very good.



Education & Learning



Education is a key social determinant of health.⁵ Education increases overall literacy and understanding of how an individual can promote their own health and well-being, and provides the knowledge and skills needed to actively participate and contribute to society.

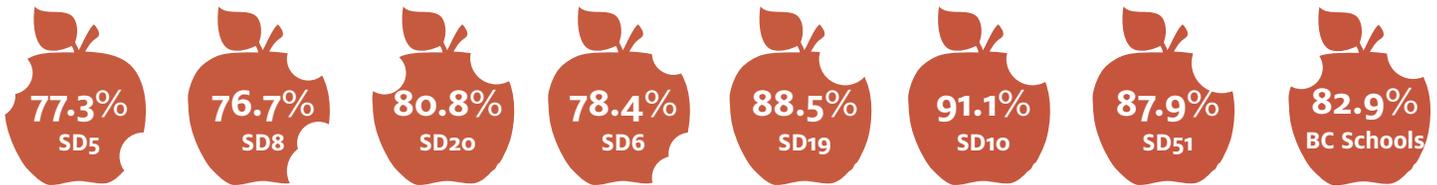
Our region is fortunate to have formal education opportunities such as [public schools](#)⁶ and [post-secondary institutions](#)⁷, as well as an array of non-formal education and learning opportunities through regional and community-based organizations, including 22 [public libraries](#)⁸ and 39 [Strong Start locations](#)⁹.

The average [high school completion rate](#) over the last five school years is above the provincial average for three of the seven school districts in our region. These three districts show completion rates of 90% and higher – for two of the school years for Revelstoke and Boundary, and four of the years for Arrow Lakes. Kootenay Lake and Southeast Kootenay show completion rates lower than the provincial average, along with Kootenay-Columbia, other than for the 2012/13 school year.

HIGH SCHOOL COMPLETION RATES AND AVERAGE FROM 2010/11 TO 2015/16 SCHOOL YEARS BY SCHOOL DISTRICT^{10,11}

Districts	2010/11	2011/12	2012/13	2013/14	2014/15
SD5 (Southeast Kootenay)	75.0	76.9	79.4	77.7	77.4
SD8 (Kootenay Lake)	76.0	78.5	75	76.6	77.6
SD20 (Kootenay-Columbia)	80.1	77.4	83.9	80.5	81.9
SD6 (Rocky Mountain)	81.3	78.8	76.5	79.2	76.3
SD19 (Revelstoke)	87.4	88.4	90.1	86.1	90.5
SD10 (Arrow Lakes)	93.7	92.2	82.6	90.3	96.8
SD51 (Boundary)	94.2	93.7	82.1	85.2	84.4
All Public Schools in BC	81.0	81.8	83.6	84.2	83.9

AVERAGE 2010/11 TO 2014/15 RATE OF HIGH SCHOOL COMPLETION^{10,11}



65%
of residents polled
rate access to
education as good or
very good



In the Columbia Basin-Boundary the majority of [class sizes](#) are smaller than the provincial average

The downward trend in public school student enrollment continues, consistent with the provincial trend. Looking at the five-year trend, Southeast Kootenay is one of the 10 school districts in the province, that shows a slight increase in enrolment at 1.2%.

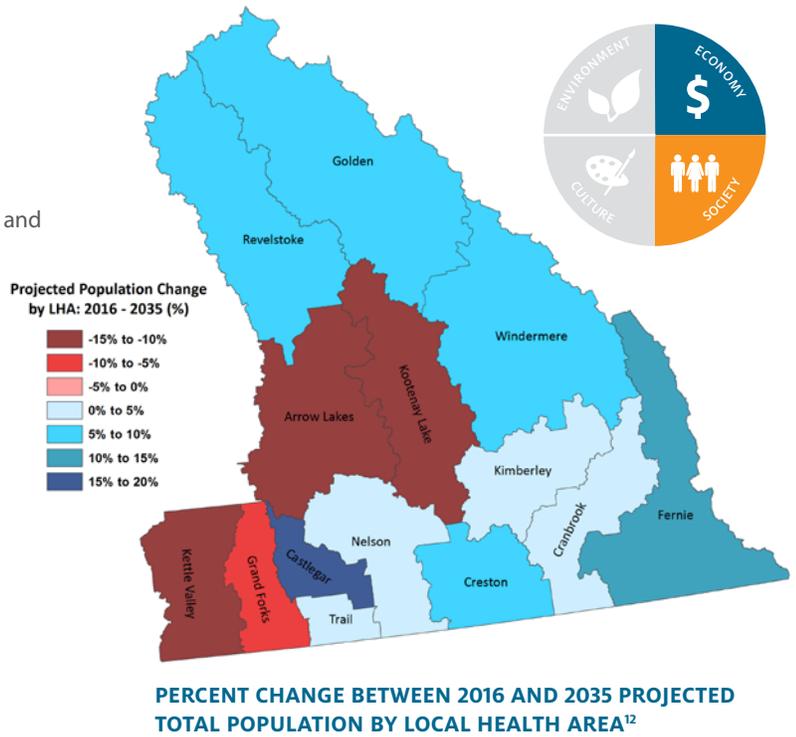
Economic

A healthy economy is one part of resilience and well-being. Economic indicators can help us better understand the economies of our region and individual communities, providing insight as to what is going well and what is in need of assistance.

[Population changes](#) impact our economy. One example of change are projected population changes, shown here (2016-2035) by Local Health Area.¹²



The Kootenay Development Region has an unemployment rate of 7.4, higher than the provincial (6.2) and national (6.9) rates.¹³



Comparing business formations between 1995 and 2015, the trends for all Regional Districts in the region are lower than the provincial average of +59.1%.¹⁴

The 5 year percent change in employment rate for the Kootenay Development Region is +3.5%¹³

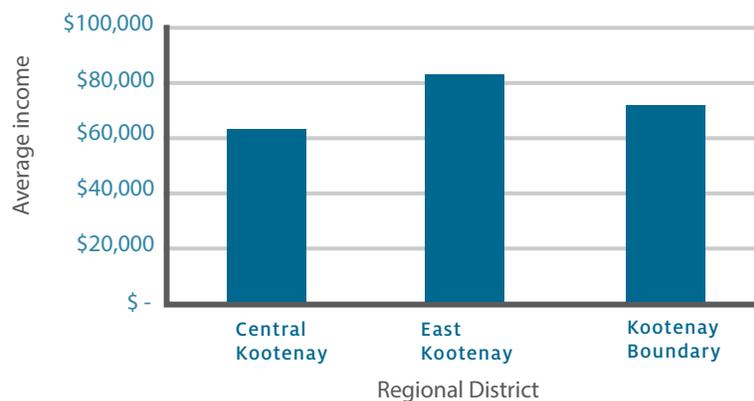
	Kootenay Development Region			British Columbia		
	2014	2015	1 Year change	2014	2015	1 Year change
Total, All Industries	67.5	69.0	2.2%	2278.4	2306.2	1.2%
Goods-producing sector	18.3	22.3	21.9%	449.9	459.1	2.0%
Services-producing sector	49.3	46.8	-5.1%	1828.5	1847.2	1.0%

EMPLOYMENT: TOTAL, GOODS-PRODUCING SECTOR, SERVICES PRODUCING SECTOR (IN THOUSANDS), 2014-2015¹³

In the 2016 SOTB, two sector specific analyses were done, looking at the [Tourism](#) and the [Agricultural](#) sectors.

Our aging demographic is exemplified by the **labour replacement ratios** that range between 0.51 and 0.76.¹ A ratio of 1.0 would mean the youth and retiree populations are the same, any number less than 1.0 means an area is unable to maintain the current labour force with local replacement workers.

68%
of Columbia Basin-Boundary residents polled felt that their families were the same off financially as they were 6 months ago.

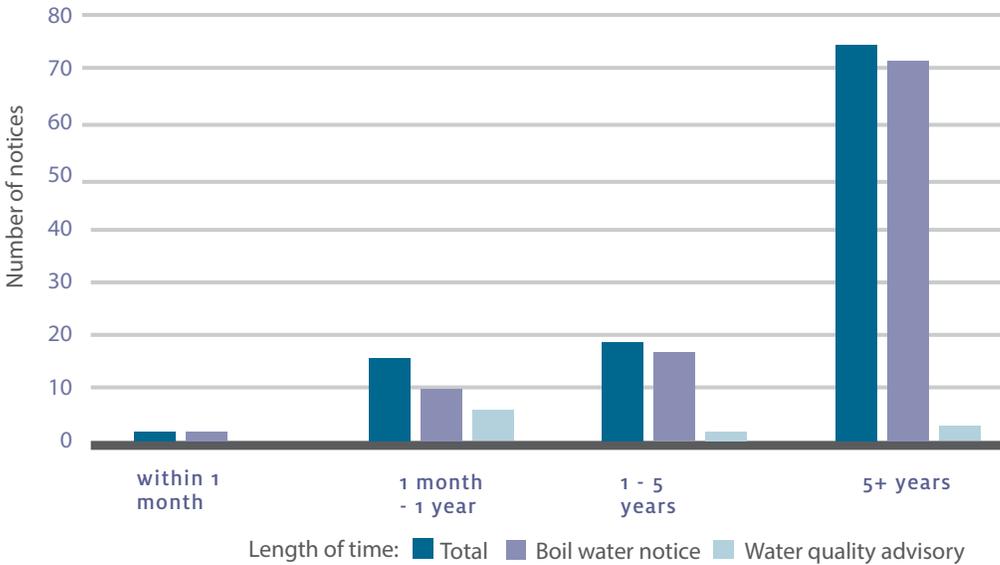


Infrastructure

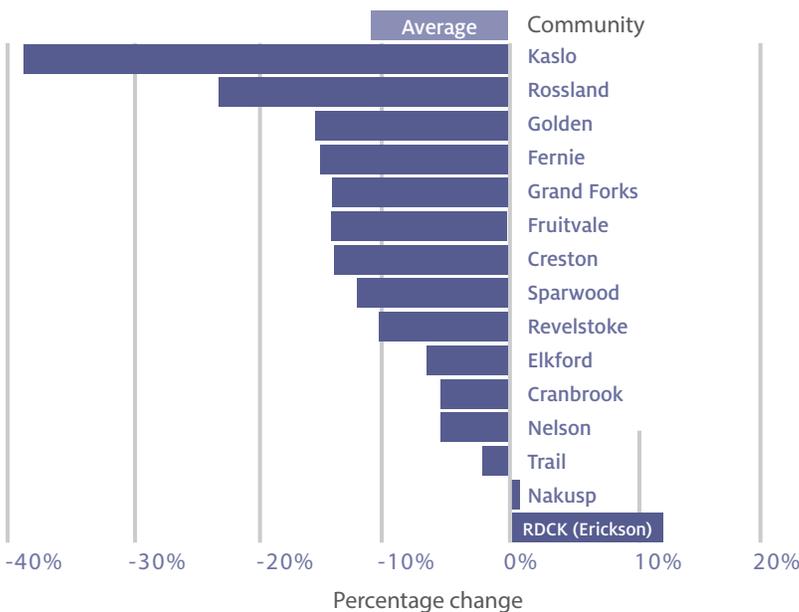
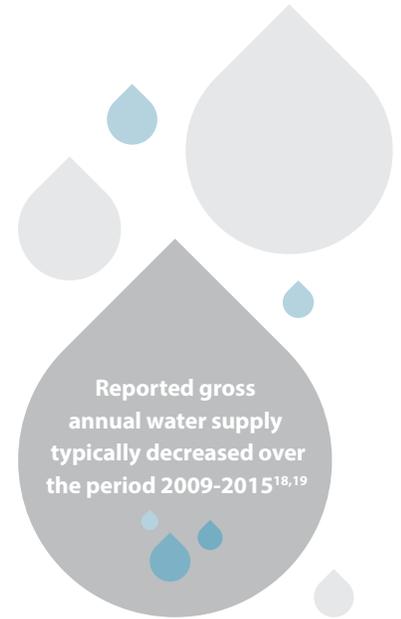


Infrastructure and basic services are an important part of every community across the region. Local governments are responsible for nearly 60% of public infrastructure in Canada and any investments in infrastructure and services contribute to our economy, as well as enhance quality of life.¹⁶

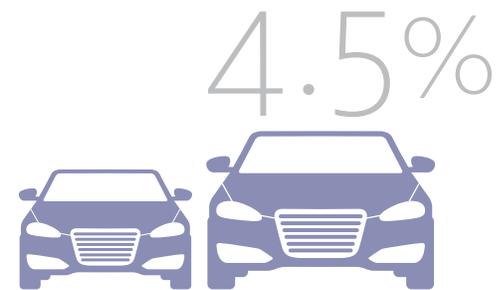
As of June 10, 2016, the Interior Health Authority (IHA) reported that public water notifications were issued for 112 water systems.¹⁷ For the same date no water notifications were active for the portion of our region served by Northern Health. The number of notifications for 2016 is down from the 153 issued in 2015, however many notifications have been in place for over 5 years.



LENGTH OF TERM FOR DRINKING WATER NOTIFICATIONS, COLUMBIA BASIN-BOUNDARY WATER SYSTEMS, 2016¹⁷



CHANGE IN GROSS ANNUAL WATER SUPPLY, 2009 COMPARED TO 2015^{18,19}



When it comes to traffic, the 2015 data show that, compared to 2014, **average daily traffic counts increased in the region by an average of 4.5%**. Findings vary by community. Yahk saw the largest increase at 8.7%, while Oasis saw the largest decrease at -1.1%.²⁰



Infrastructure continued

According to the BC Major Projects Inventory, which tracks projects with an estimated cost of \$15 million or greater, the capital costs of all major projects under construction by the end of June 2016 was \$77.9 billion for the province, of which 4.6%, **or \$3.6 billion**, is in the Kootenay Development Region.²¹

Of the 28 projects listed for the Kootenay Development Region, the largest sector, with 10 projects, is Residential Commercial. Among the Development Regions in the province the Kootenay Development Region is shown to have the third lowest total number of projects.

The Canada Mortgage and Housing Corporation (CMHC) conducts the Rental Market Survey (RMS) twice a year (April and October) to estimate vacancy and availability within the rental market. However, the survey only includes urban areas with populations of 10,000 or more.

Community	Cranbrook	Nelson
Vacancy rate % (total)		
April 2014	5.7%	2.6%
October 2014	1.8%	0.6%
April 2015	1.8%	1.6%
October 2015	2.1%	0.4%
Availability rates % (total)		
April 2014	5.7%	2.6%
October 2014	2.3%	0.6%
April 2015	2.1%	1.6%
October 2015	2.1%	0.4%
Average rent \$ (total)		
April 2014	\$692	\$737
October 2014	\$698	\$742
April 2015	\$700	\$751
October 2015	\$711	\$739

33%

of residents polled believe their access to high speed Internet is 'very good'

VACANCY RATE, AVAILABILITY RATE, AND AVERAGE RENT FOR APRIL AND OCTOBER 2014 AND 2015 FOR CRANBROOK AND NELSON²²



Environment

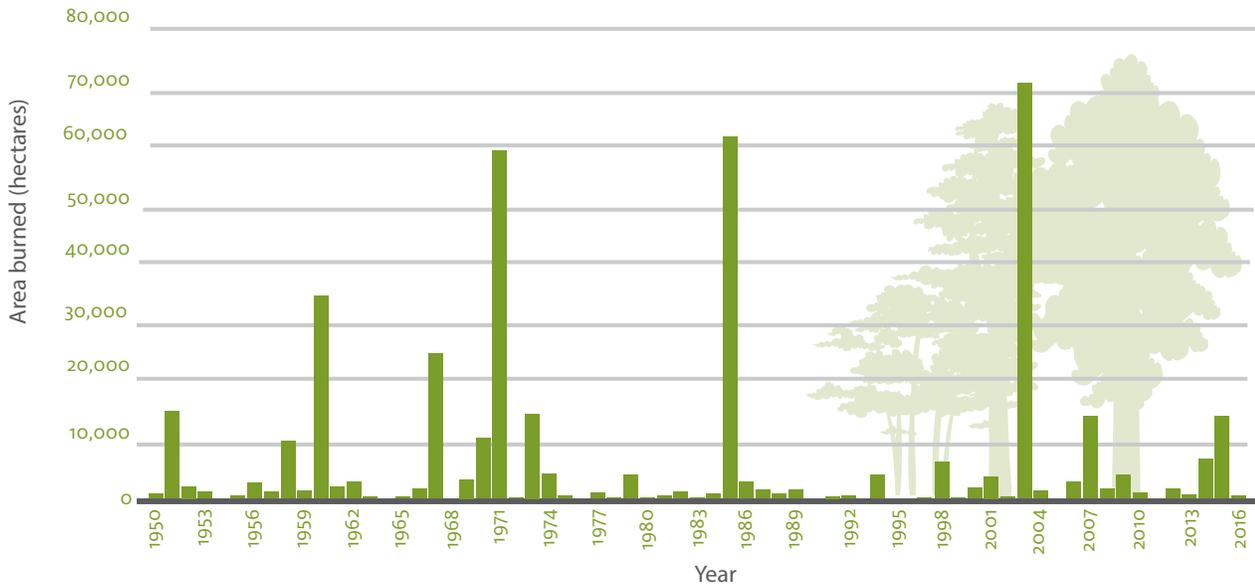


GLACIERS

On average, the **extent of glaciers in our region dropped** 14% over the period from 1985 to 2005. The trend for this region is more pronounced than the average for Western Canada—11% over the entire study period, or 0.6% per year.^{23,24}

WILDFIRES

Looking at the data collected for 2016 there has been a **dramatic decrease in wildfires** in comparison to the previous two years.



AREA BURNED BY WILDFIRES IN THE COLUMBIA BASIN-BOUNDARY REGION 1950-2016²⁶

SNOW

Snow accumulation is an important contributor to the volume and timing of stream flow in the Columbia Basin-Boundary. The majority of surface runoff in the region comes from snowmelt. The amount of snowfall is determined by weather conditions, and with the continued progression of climate change, snowfall patterns are expected to change.²⁵

RESIDENT POLL RESPONSES RELATED TO ENVIRONMENTAL FEATURES INCLUDE:

	Not a problem (6 or 7)	In between (3-5)	Big problem (1 or 2)	Don't know
Lakes, streams and ground water	67%	28%	4%	1%
Drinking water	71%	23%	5%	1%
Soil erosion	32%	47%	5%	16%
Wildlife	57%	35%	8%	0%
Invasive weeds	16%	53%	15%	16%
Forests and natural vegetation	74%	23%	2%	2%
Air pollution	59%	35%	5%	1%
Extreme weather events	41%	52%	5%	3%



Community & Society



A sense of belonging and connection to community are fundamental aspects of social well-being.²⁷ The vitality of a community is associated with the overall health and well-being of its residents, including the level of citizen engagement and the organizations that nurture and support building an engaged community.²⁸

86%

of residents polled say they "love where they live", and most predict they will stay.

82%

say they see themselves living in the region in the next five years.

31% of residents polled say they meet socially with friends or relatives once a week and 45% say more than once a week, while 7% meet less than once a month. Our region is similar to provincial and national level percentages.

The Columbia Basin-Boundary is generally a **safe place to live**, with five of the Local Health Areas in our region having **crime indices that are among the 10 lowest in the province**. Eleven rank among the lowest 20 in the province.

93%

of residents polled agree or strongly agree that their community is a great place to live. The majority also believe their community has a bright future.

Volunteering & Charitable Giving

Many programs and services offered in our communities only exist because people are willing to volunteer their time. According to a recent RDI study of the [non-profit social sector](#), most social service organizations surveyed rely on volunteers, with one in five having 50 or more program volunteers.



30,000,000

donated to registered charities

Over the last five years, the percentage of tax filers in our region who make charitable donations has remained relatively stable, with almost 30-million dollars donated to registered charities. The average donation (about \$253) has remained relatively stable as well, with a slight increase in the last two years.

77%

of residents polled report that they volunteer in their community.

LIBRARIES

[Visits to our region's libraries have increased over the last five years](#), and to a large extent in several communities with respect to children and young adult program attendance. Key to library success, local government support has increased over the last five years, and some libraries have received considerable donations and project grants.



Parks, Recreation, & Culture

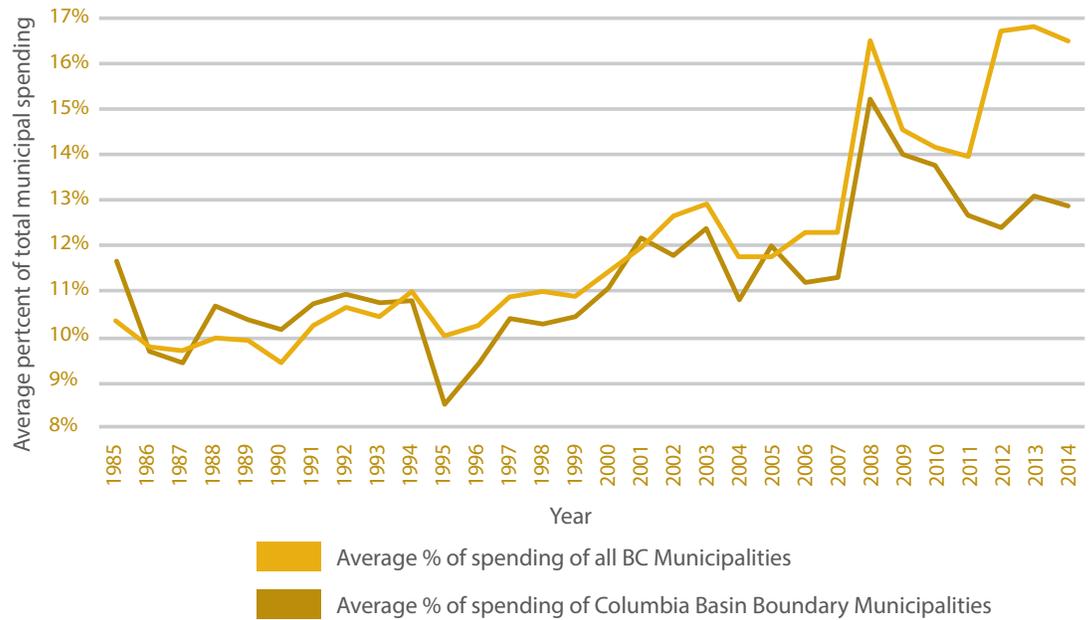


Several communities in our region show above average spending on parks, recreation, and culture. The trend over the last 30 years in our region is similar to all municipalities in BC.

74%

of Columbia Basin-Boundary residents polled say their access to arts and cultural experiences and opportunities are good or very good.

Over the last 12 months 42% of residents polled said they had expressed themselves through an arts or cultural activity.



AVERAGE PERCENT OF SPENDING BY COLUMBIA BASIN-BOUNDARY MUNICIPALITIES AND BC AVERAGE ON PARKS, RECREATION AND CULTURE FROM 1985 TO 2014²⁹

Learn More

State of the Basin indicators provide an overview of our region's well-being and point to issues that may be cause for celebration or concern. To learn more about the many indicators of well being, explore our topical Trends Analysis Briefs:

- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_WorkForce_2016.pdf Trends Analysis: Workforce (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Tourism_2016.pdf Trends Analysis: Tourism (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Society_2016.pdf Trends Analysis: Community & Society (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Poverty_2016.pdf Trends Analysis: Poverty (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Environment_2016.pdf Trends Analysis: Environment (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Education_2016.pdf Trends Analysis: Education (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Economy_2016.pdf Trends Analysis: Economy (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Demographics_2016.pdf Trends Analysis: Demographics (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_BasicServices_2016.pdf Trends Analysis: Basic Services (2016)
- http://datacat.cbrdi.ca/sites/default/files/attachments/TA_Agriculture_2016.pdf Trends Analysis: Agriculture (2016)

Beyond State of the Basin, each year the RDI undertakes several research initiatives related to topics our advisors identify as regional priorities, in part drawing on findings from State of the Basin research. These projects generate new knowledge that can help us form a deeper understanding of certain issues affecting our well-being. Below is an overview of ongoing applied research projects at the RDI.

- [Asset-Based Rural Development](#)
- [Climate Change Adaptation](#)
- [Economic Development Performance Indicators](#)
- [Poverty Reduction](#)

Visit www.cbrdi.ca to know more.

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State of the Basin findings have been developed by a team of qualified researchers. A variety of data sets were used to develop indicator findings and as such community groupings may vary from indicator to indicator. In some cases community-specific data is not available. State of the Basin research should not be considered to be a complete analysis and we make no warranty as to the quality, accuracy or completeness of the data. The Columbia Basin Rural Development Institute, Selkirk College and Columbia Basin Trust will not be liable for any direct or indirect loss resulting from the use of or reliance on this data.