



2017 STATE OF THE BASIN

Snapshot Report

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



Welcome

The State of the Basin Initiative monitors and reports on indicators of well-being in the Columbia Basin-Boundary region. This Snapshot report provides an overview of current State of the Basin research, while the Full Report provides analysis on all economic, social, environmental and cultural indicators. All State of the Basin reports and resources are available on the State of the Basin [webpage](#)¹.

USING RESEARCH TO IMPROVE REGIONAL WELL-BEING

Every day, Columbia Basin-Boundary residents and organizations make decisions that influence the region's future. Basing these decisions on a comprehensive understanding of related conditions and trends helps ensure they are sound. The primary goal of the State of the Basin initiative is to provide access to the data communities need to make decisions that lead to greater regional well-being. Four objectives support this goal:

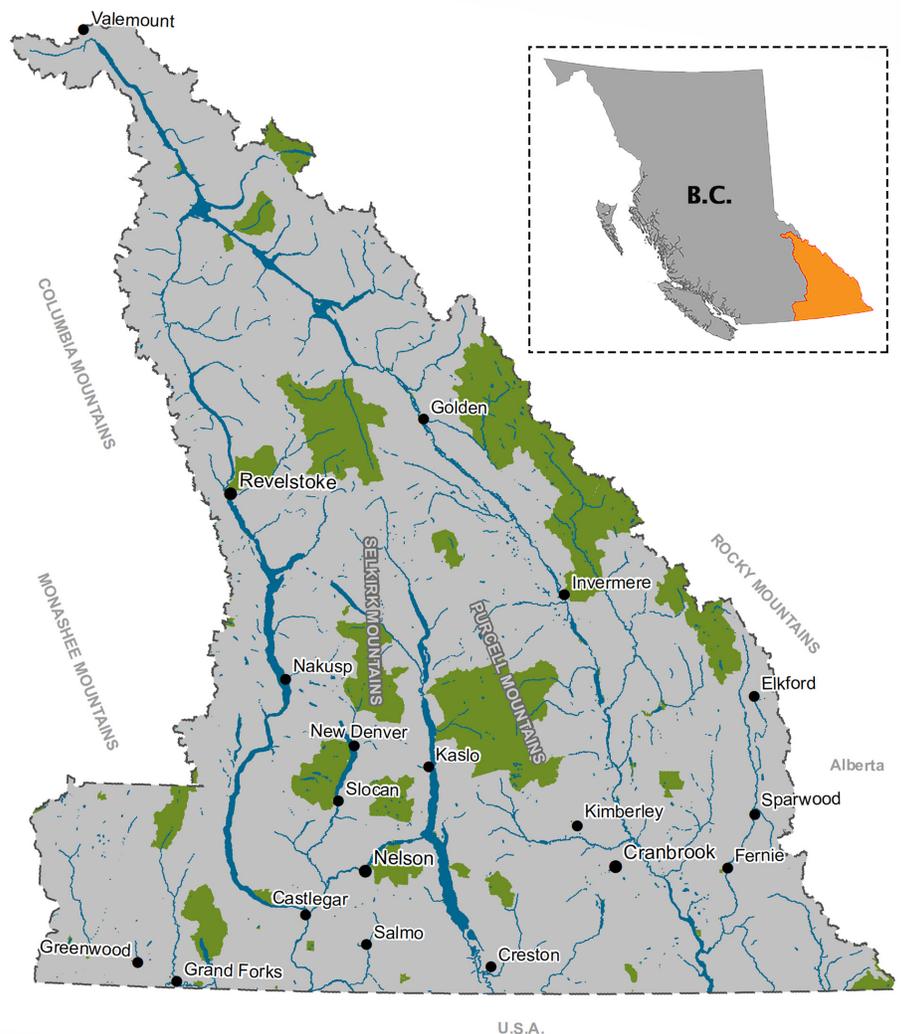
- **Inform** citizens and organizations about the people, natural environment, communities, and economy of the region by providing access to accurate, credible, and timely information;
- **Encourage** understanding of complex issues and trends over time, including into the future when possible;
- **Signal** whether conditions are similar or different within the region, and in comparison to other areas to highlight and celebrate areas of achievement, and to identify significant issues, ideally before they become critical; and
- **Motivate** discussion, information sharing, strategic evidence-based decisions, and collective action.

INDICATORS & DATA SOURCES

State of the Basin research draws on available data from a variety of sources including federal, provincial, and local governments, crown corporations and non-profit initiatives. The RDI collects this data from open access sources and through custom requests. While quantitative State of the Basin indicators help establish foundational knowledge of regional well-being, they only tell part of the story. Qualitative information, including the RDI's subjective well-being research, can further contribute to understanding the well-being of our communities and region.

THE COLUMBIA BASIN-BOUNDARY

The Columbia Basin-Boundary region encompasses more than 8.6 million hectares of land in southeastern British Columbia. It includes the Regional Districts of Kootenay Boundary, Central Kootenay, and East Kootenay, as well as a portion of the Columbia Shuswap Regional District and the Village of Valemount. Three Development Regions also intersect the borders of the region. Basin-Boundary communities are home to approximately 167,000 people.^{2,3}

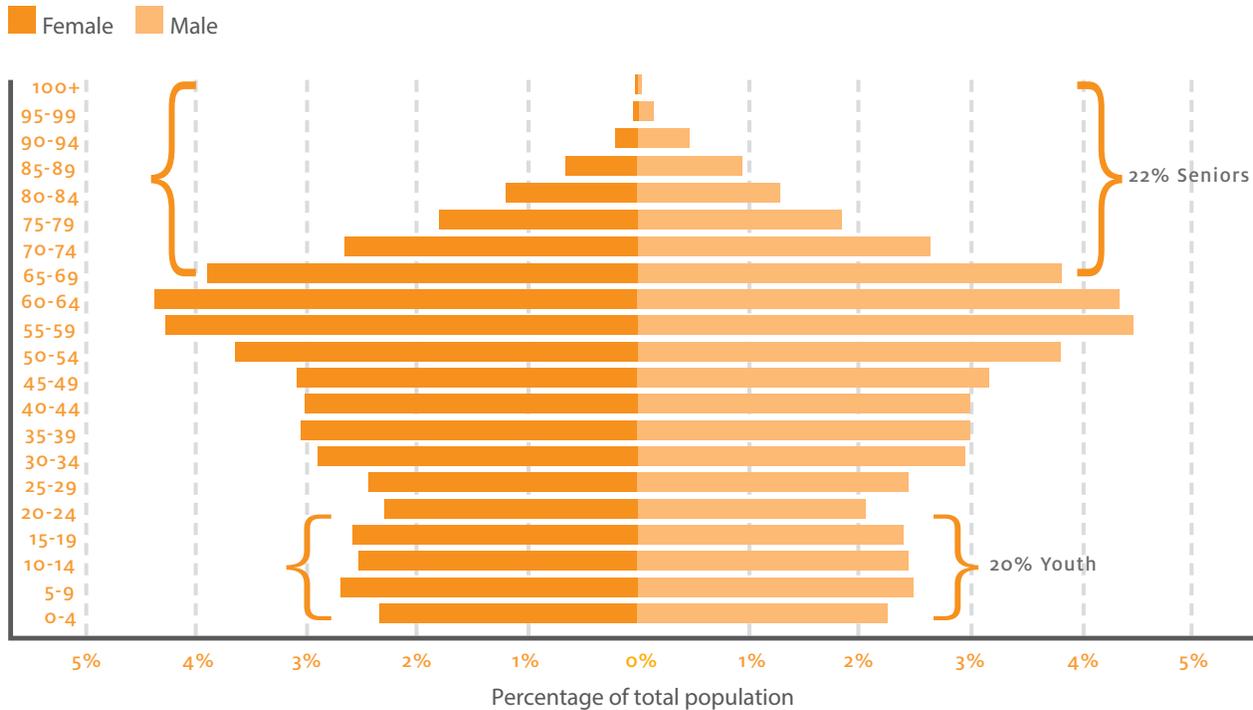


Demographics

Demographic data provides information on the population structures that underlay our society. Demographic shifts have important consequences for communities, with different population groups having different needs related to housing, education, employment, infrastructure and services.

COLUMBIA BASIN-BOUNDARY POPULATION AGE STRUCTURE BY 5-YEAR COHORT AND GENDER

Fundamental changes in the population structure driven by low birthrates, longer life expectancies, and most notably, the aging baby boomers, are gaining momentum. Seniors now make up a bigger portion of our population than do youth.



167,425

people live in the Columbia Basin-Boundary region
- 3.6% of BC's total population³

816

people live on reserves in the Columbia Basin-Boundary region³

17 of 28

municipalities experienced population growth from 2011 to 2016³

Average age varies across our communities with Indigenous communities having the youngest populations. Overall, our region is aging faster than BC and Canada.³

Median household size is 2.2³

There are 49,675 families in our region - 33% are couple families with children, 54% are couple families without children, and 13% are lone-parent families.³

More people have been moving out of the Kootenay Development Region than moving in for over a decade. Those who are moving in are primarily from other provinces and countries rather than from within BC.

Economy & Workforce

The economy is a hot topic in discussions focused on well-being. A healthy economy is a foundation for community vibrancy and resilience. A skilled and engaged workforce is critical to the success of the economy.

The **number of businesses** across our region increased between 2015 and 2016. Similar to previous years, the real estate industry accounts for the largest portion of businesses in all three Kootenay regional districts, which is reflective of the province as a whole.⁵

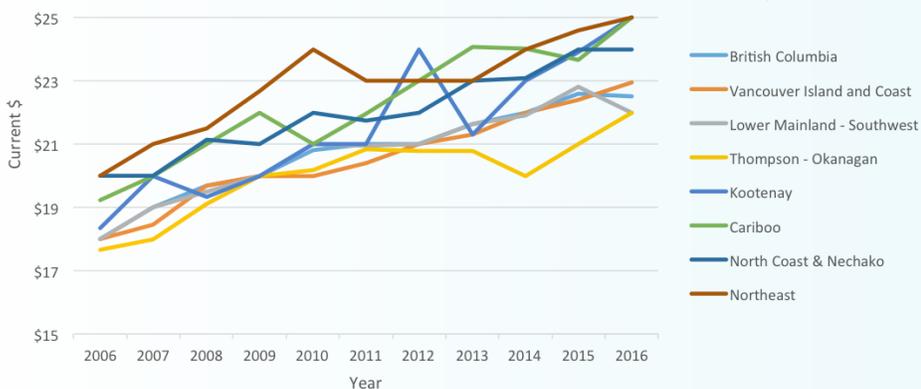
Compared to elsewhere in BC, our region generally has fewer businesses in the Professional, Scientific & Technical Services sector, and more in the Agriculture, Forestry, Fishing & Hunting sector.⁵

BUSINESS STARTS IN THE COLUMBIA BASIN-BOUNDARY (2006-2016)⁶

	RDCK	RDEK	RDKB	Golden	Revelstoke	Valemount	Region
2007	212	390	128	52	67	5	854
2008	198	348	98	37	68	7	756
2009	171	229	90	41	39	2	572
2010	168	266	70	29	56	2	591
2011	176	231	68	25	46	1	547
2012	157	233	89	31	38	7	555
2013	159	221	77	34	55	2	548
2014	165	252	70	24	52	4	567
2015	186	236	58	24	42	7	553
2016	196	262	99	40	46	10	653

Business starts and closures are an indicator of the overall business climate in a region. This indicator gives a sense of whether the business climate is supporting the development of an expanding or contracting economy.

MEDIAN HOURLY WAGES (IN CURRENT \$) FOR ALL EMPLOYEES AGED 15+, 2006-2016⁸



A decent income is fundamental to personal well-being, allowing individuals and families to participate fully in society. Based on taxfiler data, the average **income for all families** across the Basin-Boundary region was \$69,603 in 2015 – below the provincial average of \$76,878. Family income varies considerably across communities.⁹

Nine communities have above provincial average rates of **poverty** as shown by the **Low Income Measure**. Lone-parent families have the highest incidence of low income, with up to 40% of all lone-parent families living at or below the Low Income Measure in the Central Kootenay and more than 30% in the Kootenay Boundary and East Kootenay.¹⁰



Building activity in our region has yet to fully recover following the sharp decline that followed the 2008/2009 recession. The RDEK continues to see the most building activity, with almost \$130 million of building permits issued in 2016.⁷

Two businesses filed for bankruptcy in the Kootenay Development Region in 2016. All regions in BC are seeing a downward trend in business bankruptcies.⁶



The Labour Force Survey shows overall **job loss** in the Kootenay Development Region over the last five years (-4.5%) while the province as a whole has seen a 6.8% increase in employment.⁸

In 2016, the median hourly **wage** was higher in the Kootenay and Cariboo Development Regions (\$25.00) than the provincial (\$22.50) or national (\$22.00) median.

The **unemployment rate** for the Kootenay Development Region was 7.4% - higher than most other BC development regions and Canada.⁸

6 communities have calculated what a Living Wage would be for their area – all of which are higher than the provincial minimum wage.¹¹



Infrastructure

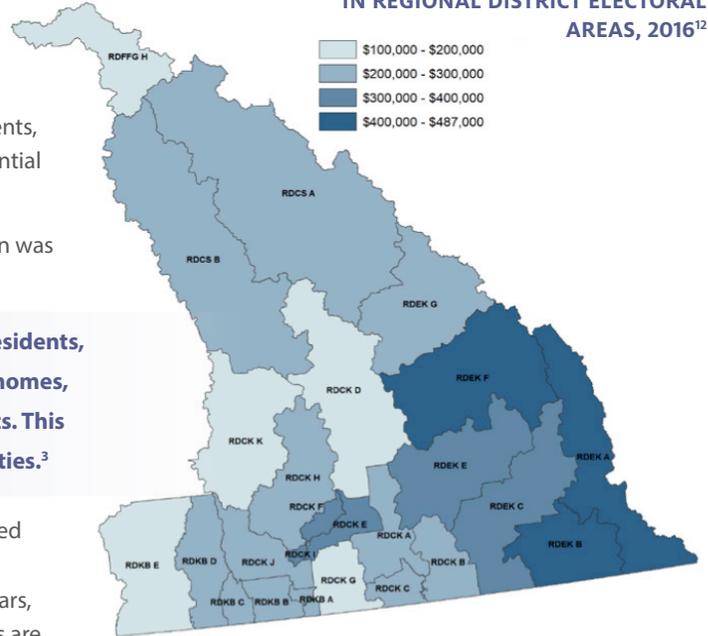
Adequate and affordable housing is fundamental to the well-being of residents, and infrastructure such as roads, water systems, and waste disposal are essential community assets and services.

The 2016 median **property value** of all single family residences in our region was \$273,000 – up from \$260,100 in 2015¹²

81% of dwellings are occupied by permanent residents, meaning that roughly a fifth are vacation homes, vacant, or occupied by temporary residents. This value varies considerably across communities.³

Several municipalities have **vacancy rates** below the recommended balanced rate of 3%, with Nelson, Golden, and Revelstoke having 0% vacancy in 2017. Vacancy rates in Cranbrook have consistently decreased over the last five years, along with Kimberley, Fernie, Grand Forks, and Trail & Area. The highest rents are in Revelstoke, Fernie, Creston, and Nelson.¹³

MEDIAN RESIDENTIAL PROPERTY VALUE IN REGIONAL DISTRICT ELECTORAL AREAS, 2016¹²



2015 PER CAPITA WASTE DISPOSAL RATE



497 kg/person
British Columbia



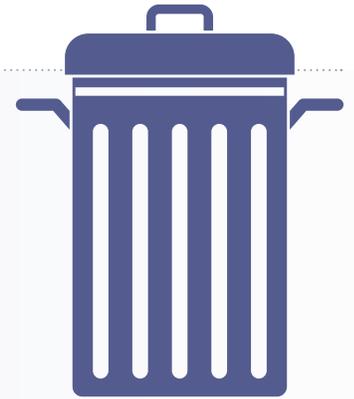
483 kg/person
Central Kootenay



562 kg/person
East Kootenay



573 kg/person
Kootenay Boundary



833 kg/person
Fraser Fort George

When more than 30% of a household's income is spent on shelter costs,

the housing is considered unaffordable.

Five communities in our region have a higher percentage than the BC average (28%) of households spending more than 30% of their income on shelter costs. **Renters are far more likely than owners to be in an unaffordable housing situation.**³

The average Basin-Boundary resident has a shorter **commute** than the average BC resident with commute times ranging from 17.1 minutes in the RDKB to 20.2 minutes in the RDEK, and the BC average being 25.9 minutes.³



Across the region, 68% of developed residential properties are within one kilometre of a fixed **transit** route, but some communities have no service at all.¹⁶ Only 2% of Basin-Boundary commuters use public transit to travel to work.¹⁷

Traffic has increased across all monitoring stations in our region, with Rock Creek and Yahk seeing the greatest increases. Most stations are considered seasonal and see much higher traffic volumes in the summer months.¹⁵

Environment

The unique, diverse natural landscapes and resources of the Basin-Boundary region are the foundation for many aspects of well-being. These ecosystems provide habitat for a multitude of species, land to grow food, clean air and water, and the backdrop for economic, social and cultural pursuits.

Despite efforts to address the decline of the Mountain caribou population, herds in the region remain in peril and now number fewer than 200 animals.¹⁹⁻²²

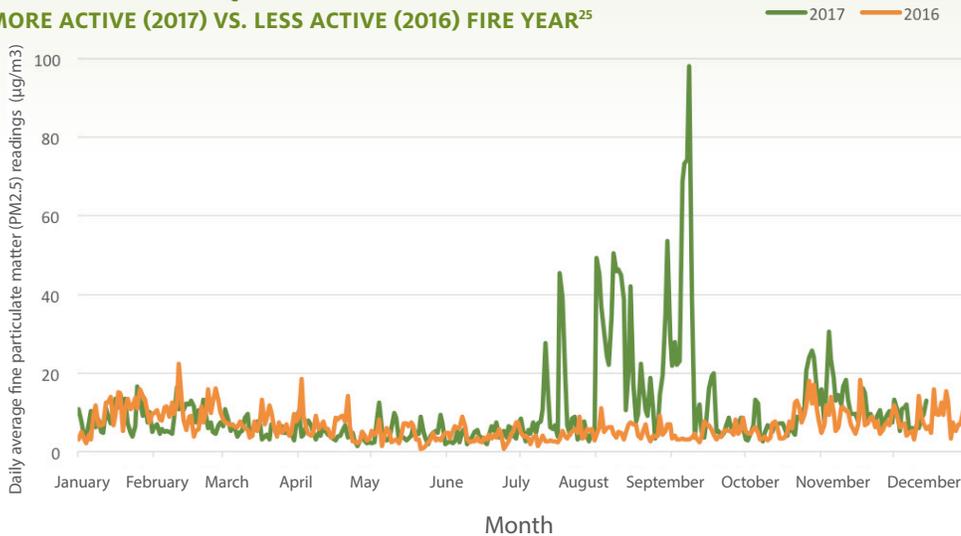
ECOSYSTEMS AND SPECIES AT RISK

There are **152 red listed species** (meaning they are extirpated, endangered, or threatened) in the region, including 38 animals, 108 plants, and 6 fungi. Higher numbers of red listed species are found in the lowest elevation biogeoclimatic zones, where the level of protection by federal or provincial parks is the lowest.¹⁸

There are **15 unique threatened ecosystems** and collectively these account for more than 30% of all land in the region.¹⁸

150 bears were destroyed in 2016. Garbage is consistently associated with the largest percentage of incidents.²³

COMPARISON OF AIR QUALITY READINGS IN CASTLEGAR FOR A MORE ACTIVE (2017) VS. LESS ACTIVE (2016) FIRE YEAR²⁵



FOREST FIRES

2017 was a record breaking year for forest fires in BC, with over 900,000 hectares of land burned, tens of thousands of people evacuated, homes and businesses destroyed, and timber and other natural resources lost. Within the Basin-Boundary region, 2017 saw the most area burned since 1940.²⁴ The active fire year negatively affected air quality.

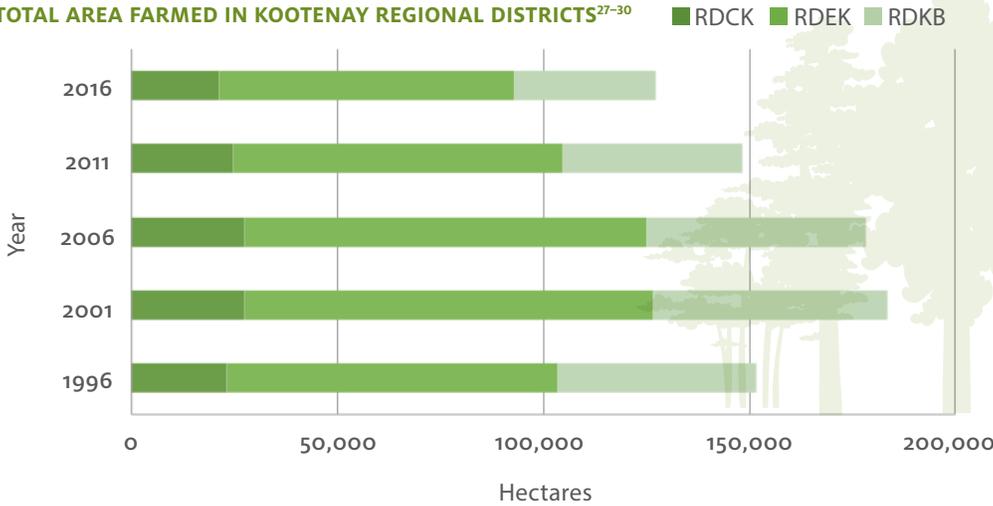
SNOWPACK

Snowpack data for 2017 shows a lower than average snowpack from January to March, but a higher than average snowpack in the spring (April – June).²⁶ Snow accumulation is an important determinant of the volume and timing of stream flow.



Environment

TOTAL AREA FARMED IN KOOTENAY REGIONAL DISTRICTS²⁷⁻³⁰



The 2016 Census of Agriculture confirmed that the area of land farmed in our region continues its 15-year decline.

NUMBER OF FARMS:³¹



In 2016, almost 13,884 hectares were **logged** in the region, down from 17,665 in 2015. Whether the harvesting trend is increasing, remaining stable, or decreasing depends on the time frame considered. Logging increased from 1960 until present, while an analysis beginning in the 1980s, 1990s, or 2000s indicates a stable or slightly downward trend. There is also variation from year to year due to variables such as lumber prices and forest fires.^{32,33}

More than 13,000 km² of land in the Basin-Boundary region is **protected** under a variety of management regimes including parks, wildlife management areas, and areas under management by non-governmental organizations. The distribution of ecosystems protected is unevenly weighted toward those found at higher elevations, but conservation groups are working to balance this disparity.³⁴

INVASIVE PLANTS

In 2017, 132 species of invasive plants were recorded in the region³¹

1) Hawk Weed 2) Blueweed 3) Spotted Knapweed
Images from : bcinvasives.ca



Education & Learning

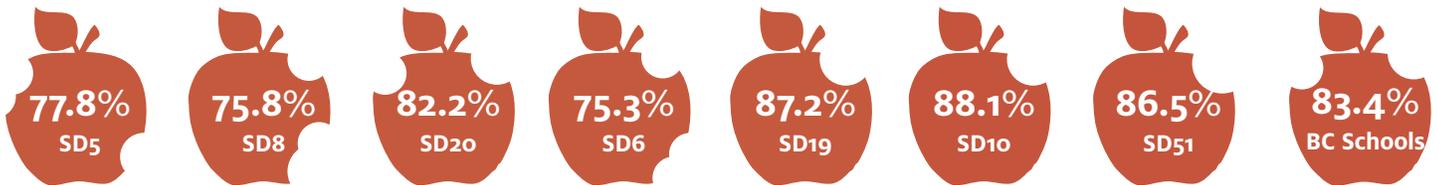
Education is a key social determinant of health. Education increases overall literacy and understanding of how an individual can promote their own health and well-being, and provides the knowledge and skills needed to actively participate and contribute to society.

Over the last five school years, most school districts in our region have seen a downward trend in **student enrollment**. However, when comparing the last two school years, five of the seven districts show an increase in enrollment, consistent with the slight increase overall for the province.³⁵

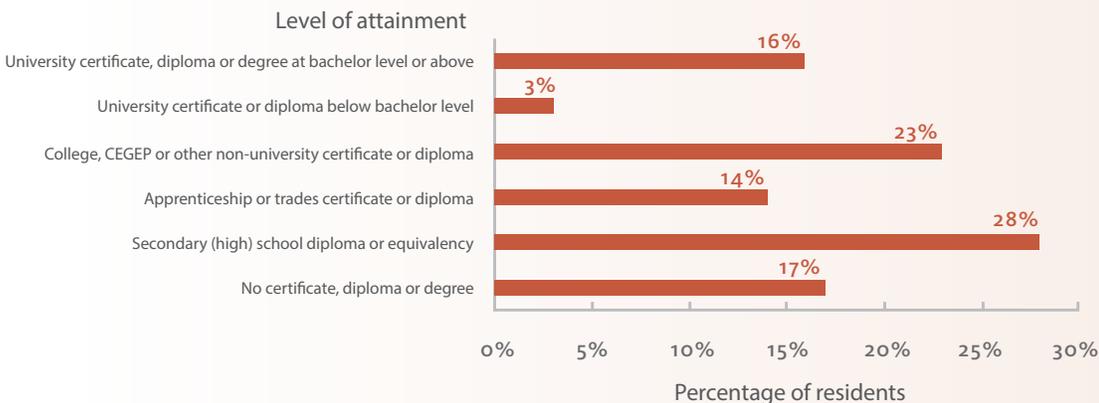


Most school districts in our region have a lower percentage of vulnerable children than the provincial average.³⁶

AVERAGE HIGH SCHOOL COMPLETION RATES FROM 2011/12 TO 2015/16^{35,38}



PERCENTAGE OF BASIN-BOUNDARY RESIDENTS OVER THE AGE OF 15 BY HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT³



56%
of Basin-Boundary residents aged 15 and older have some post-secondary education, which is similar to BC and Canada³



Roughly 1/5 of working people in our region have a university degree. This indicator is showing an upward trend over time.⁸

The region's colleges show dramatic increases in international student enrollment. Domestic student enrollment varies with some institutions seeing an increase and others a substantial decrease.³⁷

Community & Society

A sense of safety, belonging, and connection to community are fundamental aspects of social well-being, and community vitality is often associated with the nature and level of engagement by its residents.

PUBLIC SAFETY

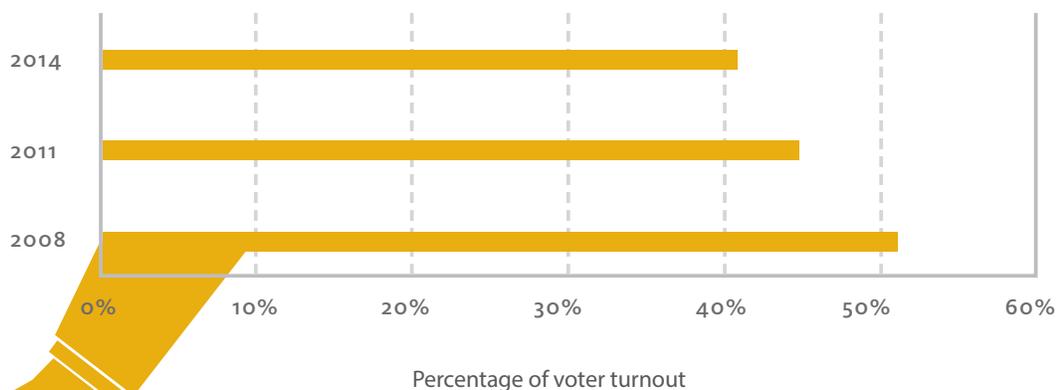
Crime rates are an indicator of public safety. They can help measure the effectiveness of law enforcement and community engagement initiatives and inform decision-making about law enforcement policies and practices. The Crime Severity Index shows that most Basin-Boundary communities experienced a decrease in the volume and severity of crime from 2015 to 2016.⁴²



About **20%** of Basin-Boundary residents make donations to registered charities according to taxfiler data.⁴³

AVERAGE VOTER TURNOUT FOR LOCAL GOVERNMENT ELECTIONS IN THE BASIN-BOUNDARY REGION⁴³

2018 **What will voter turnout be in October this year?**



Voter turnout is an indicator of the health of a democracy, and can be seen as a reflection of the level of 'civic mindedness'. Voter turnout in our region is considerably higher than the provincial average for local government elections.³⁹

Voter turnout in our region for the last federal election (2015) was higher than the national average and higher than turnout in the previous election (2011).⁴⁰ For provincial elections, turnout has remained steady or slightly increased over the last three cycles.⁴¹

A baby's weight at birth is a strong indicator of maternal and newborn health and nutrition. Low birth weight babies accounted for 5% of live births in our region in 2015/16—higher than the average for BC (4.1%).^{45,46}

Life expectancy in our region has increased to 80.8 years. At the sub-regional scale, only the Windermere Local Health Area has a higher life expectancy than the provincial average (82.6 years).⁴⁴



Arts, Heritage, Culture & Recreation

Culture is multi-faceted and dynamic, embracing a diversity of aspects that describe and shape our way of life and quality of life. The RDI supports a broad and inclusive definition of culture, and recognizes cultural well-being as both the vitality that individuals and communities enjoy through participation in recreation and creative and cultural activities, and the freedom to retain, interpret, and express their arts, history, heritage, and traditions.



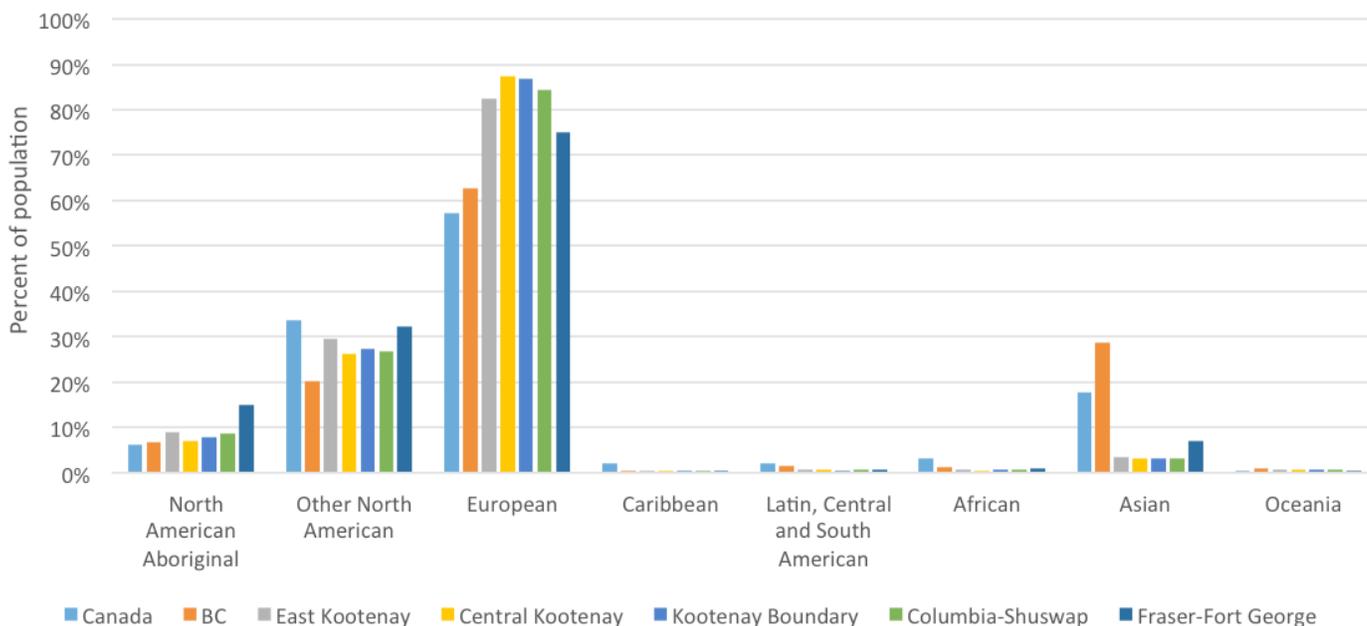
Total local government financial support for libraries in our region increased by 8.4% between 2011 and 2015, to \$5.1 million in 2015.⁴⁸



Language data from the 2016 Census shows that the vast majority (96.3%) of residents in our region speak English most often at home, higher than BC (79%) and Canada (63.7%). Over 60 different languages are spoken in Basin-Boundary households.³

While most people in our region are from European origin, **7% identify as Aboriginal.³**

PERCENT OF 2016 POPULATION BY ETHNIC ORIGIN³



Spending on parks, recreation, and culture

by our region's municipalities has been gradually increasing over time and is now at an average of 13.7% of total spending.⁴⁷

Visitation to provincial parks in our region has increased over time, with a 17.4% increase over the last five years.⁴⁹



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 other indicators and for further details including community-level data, please see the Full Report and other State of the Basin resources¹. For access to datasets, [contact us](mailto:cbrdi@selkirk.ca) at cbrdi@selkirk.ca and to learn how the RDI could assist your organization's research project, see the [FAQ section](#) of our website⁵⁰.

Beyond the State of the Basin, the RDI has engaged in research initiatives in partnership with communities and organizations across the region. These [projects](#)⁵¹ generate new knowledge that can help us form a deeper understanding of issues affecting our well-being. Recent research has focused on climate adaptation, regional workforce development, indicators of poverty, and asset-based rural development.

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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.

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.