

## 2020 COMMUNITY PROFILE REPORT

# Sparwood



Photo: Jayme Jones

APPLIED RESEARCH  
& INNOVATION

Selkirk  College

COLUMBIA BASIN  
**RDI**  
RURAL DEVELOPMENT INSTITUTE  
Selkirk  College

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# Introduction

As part of the State of the Basin program, the Columbia Basin Rural Development Institute (RDI) at Selkirk College has developed Community Profiles for municipalities and electoral areas within the Columbia Basin-Boundary region. The Columbia Basin-Boundary region is located in the southeast corner of British Columbia (BC) and includes the entire Regional Districts of East Kootenay (RDEK), Central Kootenay (RDCK), Kootenay Boundary (RDKB), as well as Golden, Revelstoke, Valemount, Columbia Shuswap Regional District (CSRD) Areas A and B, and a portion of Regional District of Fraser-Fort George (RDFFG) Area H (see map, below). This report covers the District of Sparwood.

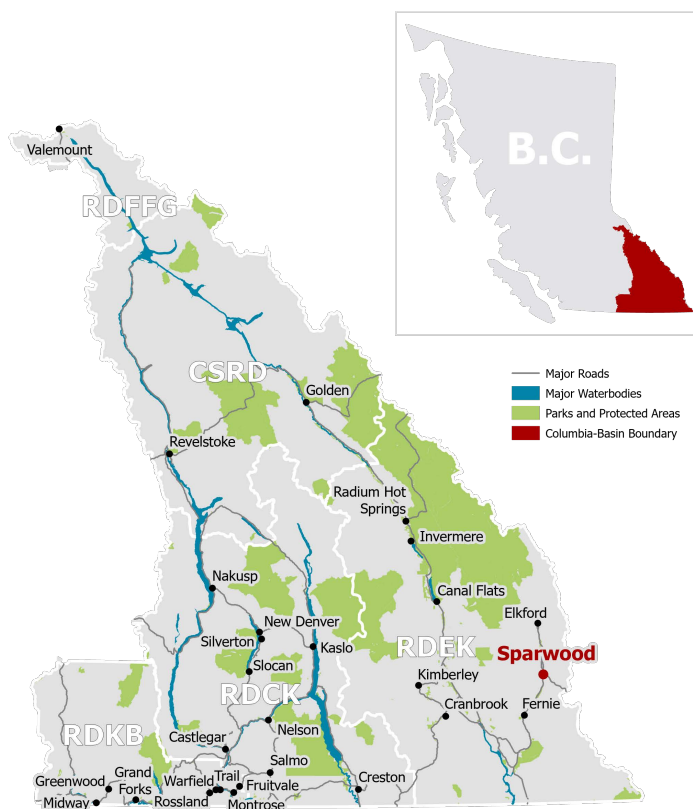
The primary goal of the State of the Basin reporting is to provide easily accessible and relevant data to help inform decisions that lead to greater community and regional well-being. State of the Basin research draws on available data from a variety of sources including federal, provincial, and local governments, crown corporations, and non-profit initiatives. Both open access sources and custom data requests are used.

Community profiles are intended to share area-specific data with local governments and other organizations to help build a better understanding of local conditions and trends and assist in making evidence-based planning and management decisions. These reports may also be useful for supporting communications with current residents, prospective residents, and for business and workforce attraction.

Indicators in this report are quantitative, and while quantitative indicators help establish foundational knowledge of well-being, they only tell part of the story. Qualitative information, including the RDI's subjective well-being research, can further contribute to the understanding of our communities and region. In order to describe geographic trends in indicators, this report compares community data with regional, provincial, and national data where appropriate. The geographic divisions used vary by indicator and depend on the topic being measured and the available data. **For additional community and regional comparisons for indicators in this report, please see the [State of the Basin website](#).** Further community profiles (including electoral area profiles) can be found [here](#).

Statistics Canada also offers a suite of data sets through their [Census Program](#), where it is possible to search by place name and topic, and [Census Mapper](#) provides these data in mapped format. Interior Health has also developed [Community Health Profiles](#) for municipalities across BC. The [Columbia Basin Climate Source](#) website has area-specific climate data, including projections. [BC Stats](#) and [Local Government Statistics](#) are other online sources of community- and area-specific statistics.

If you have questions or feedback on this Community Profile, please [contact the RDI](#).





## Location

Sparwood<sup>1</sup> is the home of the Terex Titan – the world’s largest tandem axle dump truck. One of the highest-elevation towns in Canada, the District of Sparwood’s history and economy is supported by the coal mining that takes place on a vast scale on the east side of the Elk Valley. A proud coal mining community, Sparwood has a vision to retain business, attract diversification, and increase visitation. It is strong in community spirit, with a lot of opportunities for outdoor recreation, such as skiing, hiking, fishing, and hunting. See [www.sparwood.ca](http://www.sparwood.ca) for more information.

Sparwood	
<b>Regional District</b>	East Kootenay
<b>Coordinates</b>	Longitude is 114°53'34"W Latitude is 49°44'01"N
<b>Elevation</b>	1140 meters
<b>Area (km<sup>2</sup>)</b>	191.6 km <sup>2</sup>

## Demographics

Population characteristics help planners and local decision makers to evaluate current and future community needs, particularly with respect to service delivery and potential impacts to the local economy.<sup>i,ii,iii</sup>

### TOTAL POPULATION

Population (Census) <sup>3,4</sup>	2006	2011	2016	Percent change 2006 to 2016
<b>Sparwood</b>	3,618	3,667	3,784	4.6%
<b>Regional District of East Kootenay</b>	55,485	56,685	60,439	8.9%
<b>British Columbia</b>	4,113,487	4,400,057	4,648,055	13.0%

Population Estimate <sup>5</sup>	2018	2019	2020
<b>Sparwood</b>	4,035	4,078	4,137

<sup>i</sup> Please see **Appendix A-1** for an important note regarding the use of random rounding in population and other demographic data sourced from Statistics Canada.

<sup>ii</sup> The RDI recognizes that gender identity is not a binary of male and female and that some transgender, non-binary, two spirit, and intersex populations may not be correctly represented by the data in this report. Databases that this report draws from, such as the 2016 census, limit responses to male or female. Canada's 2021 census will include more nuanced questions on sex, sexual orientation, and gender identity to better represent LGBTQ2IA+ populations.

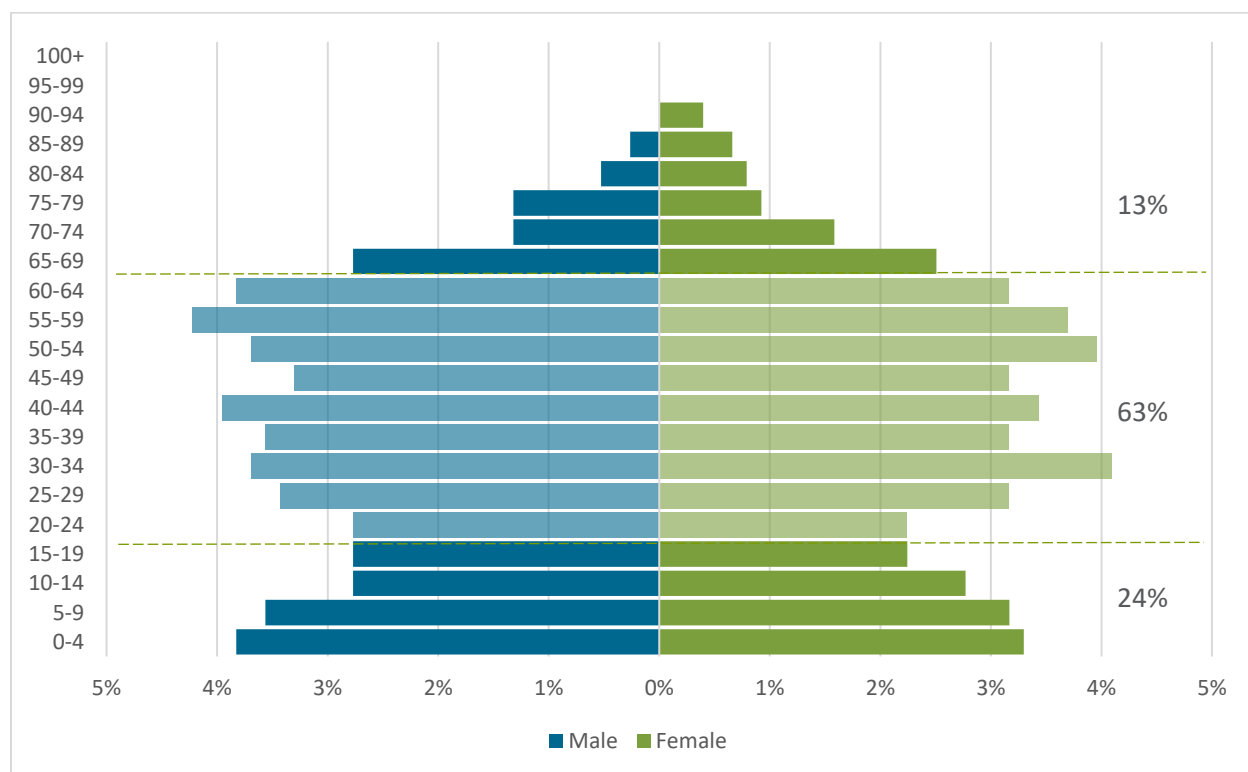
<sup>iii</sup> Population estimates are usually higher than Census counts for the same year. This is due to adjustments made to reflect those who were missed in the Census. In 2016 in BC, the population estimate was 4.1% higher than the Census count.<sup>2</sup>

## POPULATION DENSITY

	Sparwood (2016) <sup>3</sup>	East Kootenay (2016) <sup>3</sup>	British Columbia (2016) <sup>3</sup>
People per square-kilometer	19.7	2.2	5.0

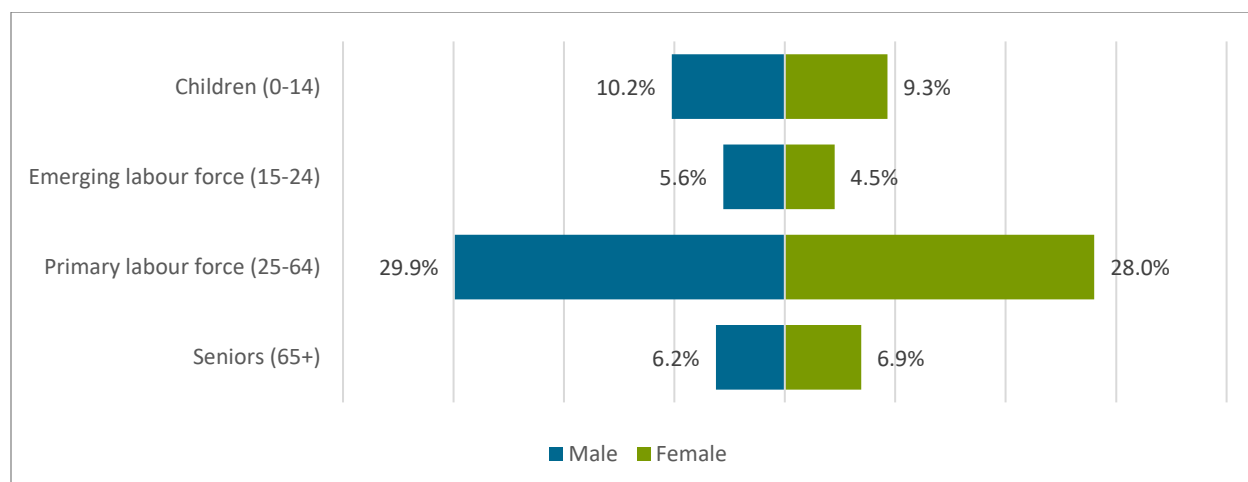
## POPULATION PYRAMID

Population pyramids illustrate the age and sex structure of a population. As of 2016, 13% of the population in Sparwood was 65 or above, and 24% of the population was 19 or younger.<sup>3</sup>



## LABOUR FORCE POPULATION PYRAMID

The chart below shows the age range distribution of children, emerging labour force, primary labour force, and seniors within the Sparwood population.<sup>3</sup>



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## POPULATION PROJECTIONS

Population projections are available for each Local Health Area within the Columbia Basin-Boundary.<sup>6</sup> Sparwood is covered by the Fernie Local Health Area.<sup>iv</sup>

	Fernie Local Health Area	British Columbia
<b>Percent change in population projected 2020 to 2040</b>	11%	23%

## AVERAGE AGE

	Sparwood (2016) <sup>3</sup>			British Columbia (2016) <sup>3</sup>		
	Total	Male	Female	Total	Male	Female
<b>Total population</b>	3,785	1,950	1,835	4,648,055	2,278,245	2,369,815
<b>Average age of population (yrs)</b>	39.2	38.7	39.7	42.3	41.5	43.1

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<sup>iv</sup> The Fernie Local Health Area covers Elford, Fernie, Sparwood and the RDEK-A and B.



# Families & Households

Family characteristics such as size and composition of families can help inform social, economic, health, and education programming, as well as planning and development around infrastructure needs.<sup>3</sup>

## FAMILY CHARACTERISTICS

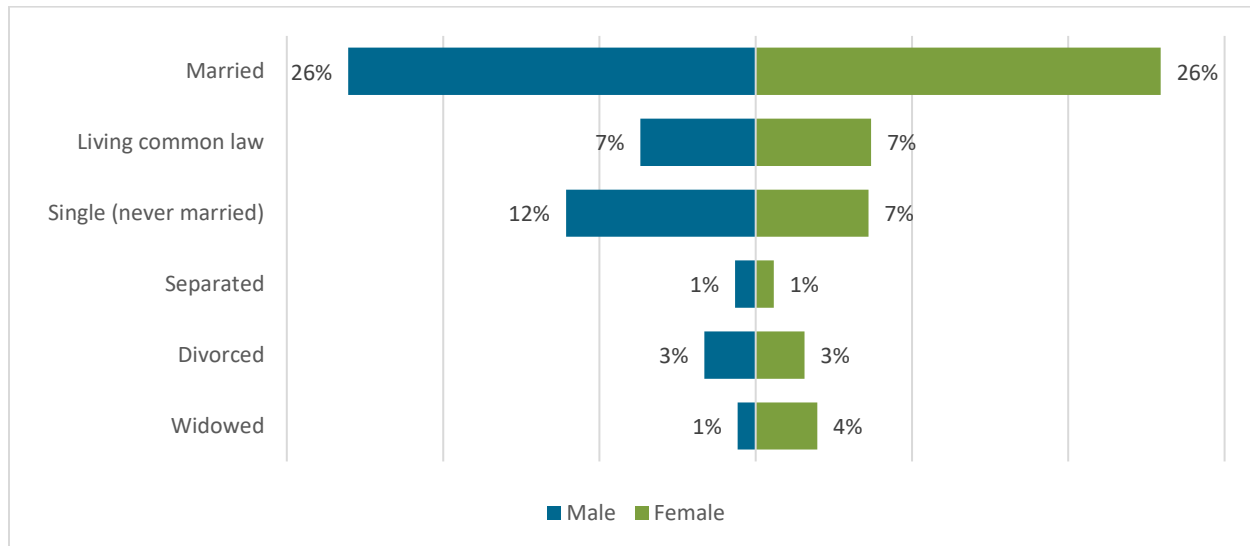
	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Average household size</b>	2.3	2.3	2.4
<b>Total number of families in private households</b>	1,130	18,195	1,311,345
<b>Total couple families</b>	1,010	15,990	1,113,405
<b>Couples without children</b>	515	9,600	577,790
<b>Couples with children</b>	490	6,390	535,610
<b>One child</b>	210	2,570	221,065
<b>Two children</b>	215	2,775	230,705
<b>Three or more children</b>	65	1,045	83,840
<b>Total lone-parent families</b>	120	2,210	197,940
<b>Female parent</b>	85	1,640	155,670
<b>Male parent</b>	30	575	42,265
<b>One child</b>	90	1,385	125,890
<b>Two children</b>	30	625	54,900
<b>Three or more children</b>	10	205	17,145
<b>Total persons not in census families<sup>v</sup> in private households (singles)</b>	610	10,185	882,895

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<sup>v</sup> A “census family” is a married or common law couple (regardless of sex) and the children of either/both spouse (if any), or a lone parent with a minimum of one child living in the same household. All members of a census family must live in the same dwelling to be considered a census family. Children are not limited by age so long as they are living in the same household and do not themselves have a spouse, common-law partner, or child in the same dwelling.<sup>7</sup>

## MARITAL STATUS

The chart below shows males and females who are married, living common law, single, separated, divorced or widowed as a percent of the total Sparwood population aged 15 years and older.<sup>3</sup>



## Mobility

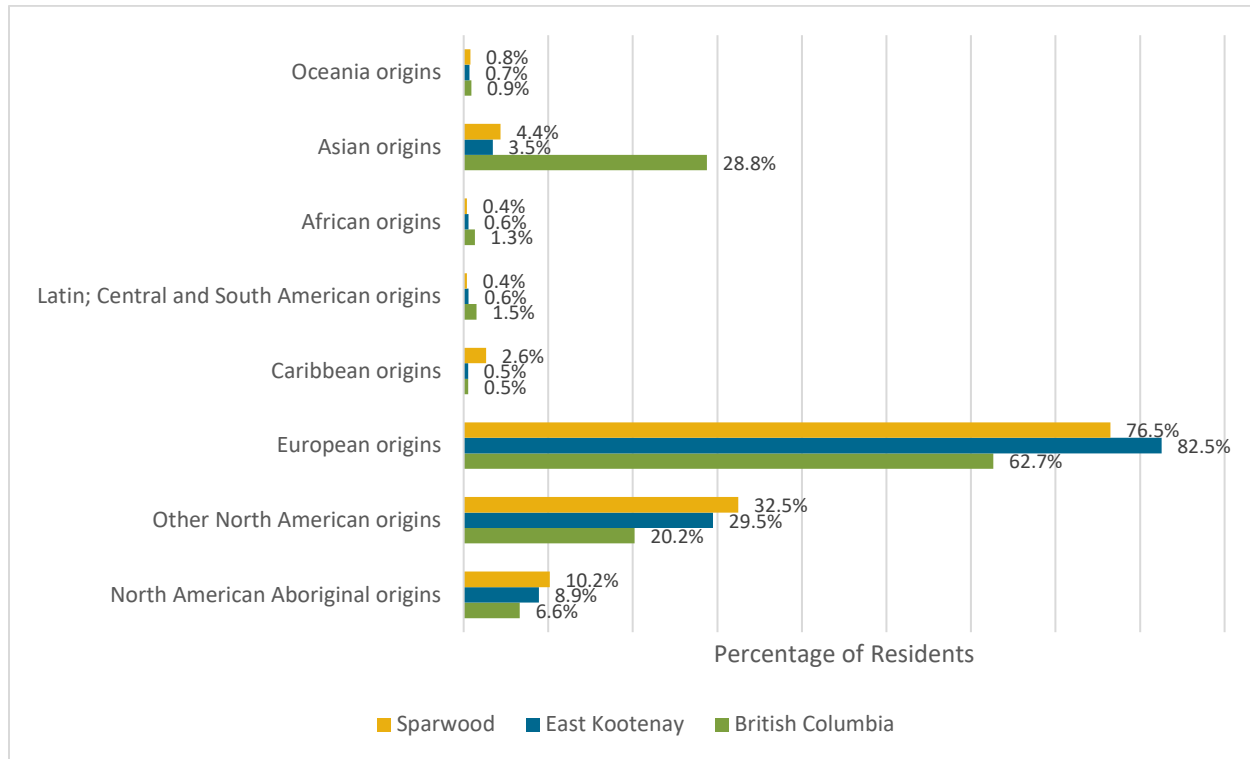
This indicator measures the movement of people into and out of the community with respect to where they lived five years prior. Non-movers are those who have not moved. Non-migrants are people who have moved within the same region. Migrants include those who moved within the province (intra-provincial), those who moved to or from another province (inter-provincial), and those who moved to Canada from another country (external migrants).<sup>3</sup>

	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Non-movers</b>	60.8%	62.4%	57.4%
<b>Movers non-migrants</b>	16.4%	17.7%	21.7%
<b>Intra-provincial migrants</b>	12.5%	9.3%	11.6%
<b>Inter-provincial migrants</b>	7.0%	8.6%	3.9%
<b>External migrants</b>	3.3%	2.0%	5.4%

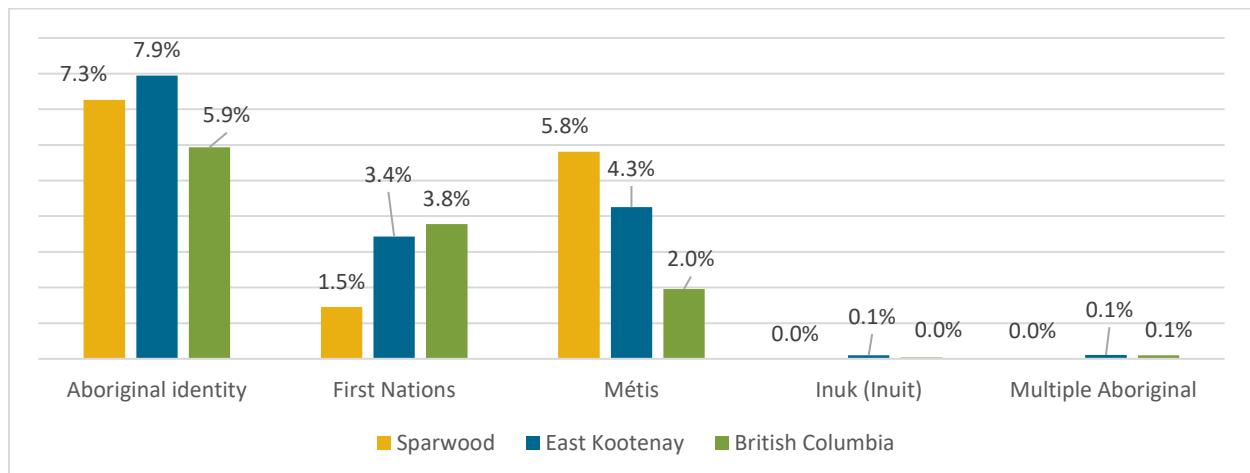
# Cultural Characteristics

Cultural characteristics can enhance our understanding of a community and provide important context for other indicators. Language, ethnic origin, and Aboriginal identity<sup>vi</sup> are a few indicators that provide insight into a region's cultural diversity.<sup>3</sup>

## ETHNIC ORIGIN



## ABORIGINAL IDENTITY



<sup>vi</sup> Calculations performed using the published estimated total population. The sum of the ethnic groups is greater than the total because a person may report more than one ethnic origin in the census. For additional information, refer to [Ethnic Origin Reference Guide, Census of Population, 2016](#)

## LANGUAGE SPOKEN MOST OFTEN AT HOME

	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>English</b>	98.7%	97.8%	83.2%
<b>French</b>	0.3%	0.6%	0.4%
<b>Non-official languages</b>	1.1%	1.6%	16.4%

## Infrastructure

Infrastructure is the physical foundation for community well-being. Water, sewer, utilities, roads, and waste management are all critical for a functioning healthy municipality.

### WATER SERVICES

<b>Provider</b>	District of Sparwood
<b>Average per capita demand (2015)<sup>8</sup></b>	934 L/capita/day *
<b>Annual residential water rate (2021)<sup>9</sup></b>	\$258.48

\* For comparison, the average per capita daily demand for BC is 503 liters (2017)<sup>10</sup>

### SEWER SERVICES

<b>Provider</b>	District of Sparwood
<b>Type of treatment</b>	Secondary
<b>Annual sewer flat rate (2021) (residential)<sup>9</sup></b>	\$347.52
<b>Annual sewer flat rate (2019) (industrial/commercial/institutional)<sup>9</sup></b>	<a href="#">varies by type</a>

### SERVICE PROVIDERS

<b>Electric power<sup>11</sup></b>	BC Hydro
<b>Natural gas<sup>12</sup></b>	FortisBC
<b>Telecommunications<sup>13</sup></b>	Telus, Shaw, Xplornet, Bell, Rogers, Columbia Basin Broadband Corporation, Tough Country Communications

### LANDFILL & WASTE MANAGEMENT

<b>Landfill location(s)<sup>14</sup></b>	Sparwood Transfer Station
<b>Regional District municipal solid waste disposal rate (2018)<sup>15</sup></b>	667 kg/person/year*
<b>Type of service<sup>16</sup></b>	Curbside garbage pick-up, recycling drop-off

\* For comparison, average per capita waste disposal rate for BC is 505 kg/person/year (2018)<sup>17</sup>

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## TRAFFIC VOLUMES

Traffic volume data are taken from traffic count stations within, or routes that directly enter, the municipality. Permanent count stations are reported when available. When permanent count stations are not available, numbers from short count stations are reported.<sup>vii,18</sup>

Station location	Annual Average	Monthly Average	Monthly Average
	Daily Traffic	Daily Traffic	Daily Traffic
	(2019)	(2019)	(2019)
	(number of vehicles)	January	July
<b>Route 3, 2.0 km West of the BC/Alberta Border, Crowsnest Pass (P-36-1EW) (Permanent)</b>	4,964	3,842	7,463

## BC TRANSIT

Sparwood is serviced by BC Transit's Elk Valley Transit System. This system includes one fixed-route which extends from Elkford in the north to Fernie in the south. One Health Connection route connects Elkford, Fernie, and Sparwood with Cranbrook to provide transportation to non-emergency medical appointments. For more information on how Sparwood is serviced by the BC transit system, visit <https://www.bctransit.com/elk-valley/home>.

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<sup>vii</sup> Traffic volumes are monitored continuously at permanent count stations, and over a minimum of 48-hour period every three years at short count stations.

# Housing

Housing stock, diversity, availability, and costs are an important basic foundation of functioning and affordable communities. Several indicators related to housing are included in this community profile.

## DWELLING CHARACTERISTICS

Dwellings by Structure <sup>3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Total number of occupied private dwellings</b>	1655	25,860	1,881,970
<b>Single-detached house</b>	845	17,700	830,660
<b>Apartment in a building that has 5 or more storeys</b>	0	5	177,830
<b>Other attached dwelling</b>	440	5,630	824,190
Semi-detached house	110	1,040	57,395
Row house	100	1,135	147,830
<b>Apartment or flat in duplex</b>	0	465	230,075
<b>Apartment in a building that has fewer than 5 storeys</b>	225	2,865	385,140
<b>Other single-attached house</b>	5	120	3,755
<b>Movable dwelling</b>	365	2,530	49,290

Dwellings by Period of Construction <sup>3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Total number of occupied private dwellings</b>	1,655	25,860	1,881,970
<b>1960 or before</b>	140	4,550	267,560
<b>1961 to 1980</b>	825	9,615	559,485
<b>1981 to 1990</b>	285	3,315	289,565
<b>1991 to 2000</b>	100	3,635	331,865
<b>2001 to 2005</b>	55	1,420	125,335
<b>2006 to 2010</b>	115	2,175	171,945
<b>2011 to 2016</b>	130	1,145	136,210
<b>Private dwellings in need of major repairs</b>	5.1%	7.2%	6.3%

## RESIDENTIAL PROPERTY VALUES

Sparwood Single-Family Residential Property Value <sup>19</sup>	2020	2021	% Change	Columbia Basin-Boundary (2021)
<b>Median assessed value<sup>viii</sup></b>	\$294,450	\$327,300	11%	\$352,100
% of Single-Family Residential Dwellings in Different Value Categories		Sparwood (2021)	Columbia Basin-Boundary (2021)	
<b>Number of single-family dwellings</b>		1,148	57,830	
<b>\$0 to \$99,999</b>		0.3%	4.1%	
<b>\$100,000 to \$199,999</b>		17.4%	11.3%	
<b>\$200,000 to \$299,999</b>		17.9%	21.1%	
<b>\$300,000 to \$399,999</b>		44.4%	23.7%	
<b>\$400,000 to \$499,999</b>		15.8%	16.3%	
<b>\$500,000 to \$599,999</b>		3.5%	9.8%	
<b>\$600,000 and over</b>		0.6%	13.7%	

## HOUSEHOLD CHARACTERISTICS

Household Occupation <sup>3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Total private dwellings</b>	2,130	34,197	2,063,417
<b>Private dwellings occupied by usual residents</b>	77.6%	75.6%	91.2%

\*"Private dwelling occupied by usual residents" refers to a private dwelling in which a person or a group of persons is permanently residing.

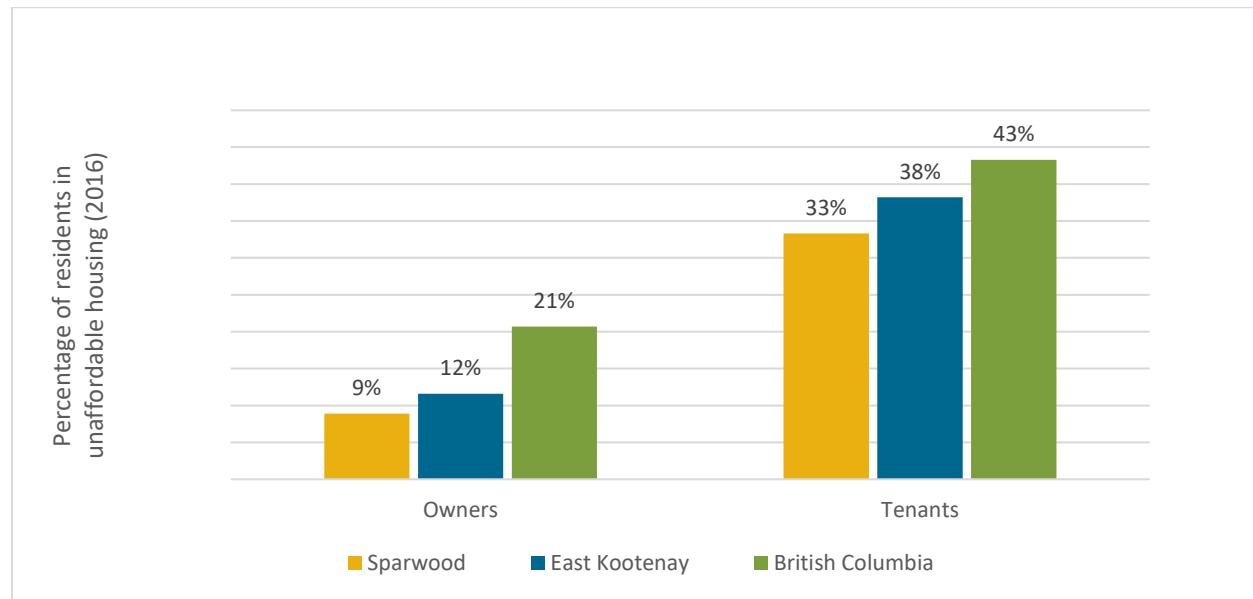
Private Households by Tenure <sup>3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Private households who are owners</b>	74.8%	78.0%	68.0%
<b>Private households who are renters</b>	25.2%	21.9%	31.8%
<b>Private households in band housing</b>	0.0%	0.0%	0.2%

<sup>viii</sup> Assessed value as of the July 1 of the previous year. Ex: 2020 assessed value as of July 1, 2019.



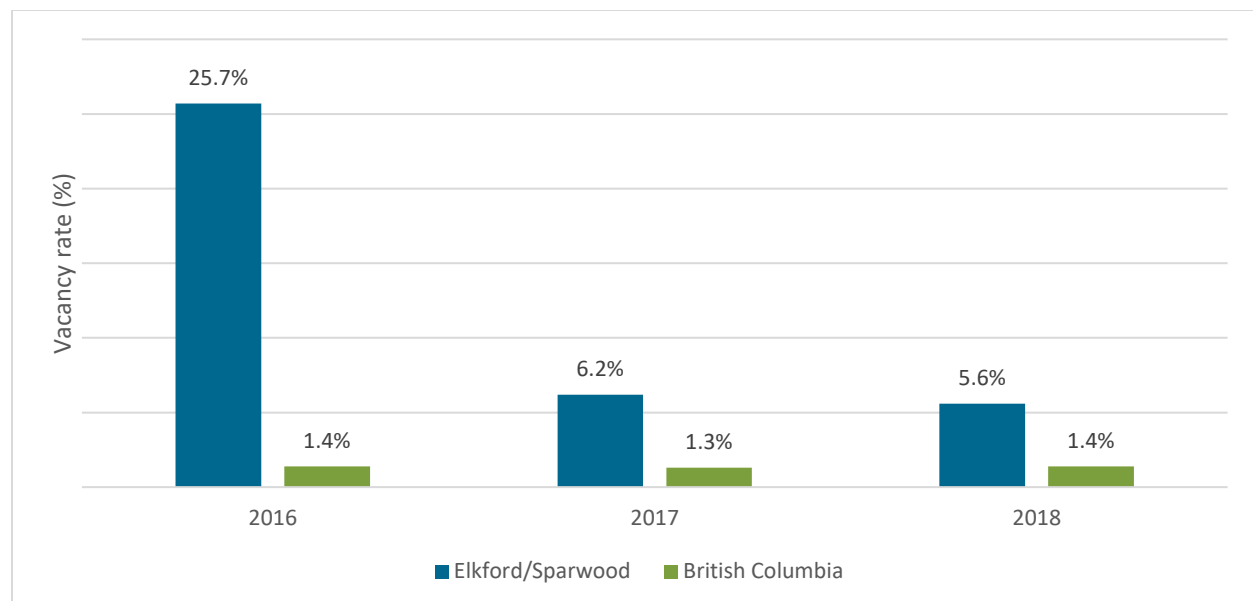
## HOUSING AFFORDABILITY

Housing is considered unaffordable when more than 30% of a household's income is spent on shelter costs. Shelter costs include electricity, oil, gas, wood, or other fuels, water and other municipal services, mortgage payments, property taxes, condominium fees, and rent.<sup>ix, 3</sup>



## VACANCY RATES

Vacancy rates are an important indicator of the availability of affordable housing. A balanced vacancy rate is 3%.<sup>20, x</sup>



<sup>ix</sup> Please see **Appendix A-2** for limitations of Statistics Canada's shelter-cost-to-income ratio calculations.

<sup>x</sup> CMHC is no longer collecting data for small municipalities; current data are only available for Nelson and Cranbrook.

# Income

Income is a substantial determinant of personal well-being and income levels reflect economic opportunity.

## INDIVIDUAL INCOME

After-tax individual income <sup>21,22</sup>	Sparwood (2018) <sup>xi</sup>		East Kootenay (2018)		British Columbia (2018)	
	Number	Percent	Number	Percent	Number	Percent
<b>Under \$5,000</b>	180	5.6%	2,590	5.2%	273,160	7.2%
<b>\$5,000 to \$9,999</b>	170	5.2%	2,420	4.9%	210,040	5.5%
<b>\$10,000 to \$14,999</b>	190	5.9%	3,490	7.1%	300,860	7.9%
<b>\$15,000 to \$19,999</b>	230	7.1%	4,030	8.2%	342,760	9.0%
<b>\$20,000 to \$24,999</b>	260	8.0%	4,430	9.0%	333,430	8.8%
<b>\$25,000 to \$34,999</b>	340	10.5%	7,500	15.2%	541,660	14.2%
<b>\$35,000 to \$49,999</b>	430	13.3%	8,920	18.1%	680,440	17.9%
<b>\$50,000 to \$74,999</b>	440	13.6%	8,150	16.5%	647,200	17.0%
<b>\$75,000 to \$99,999</b>	540	16.7%	4,680	9.5%	274,600	7.2%
<b>\$100,000 to \$149,999</b>	400	12.3%	2,530	5.1%	142,420	3.7%
<b>\$150,000 to \$199,000</b>	30	0.9%	360	0.7%	32,590	0.9%
<b>\$200,000 to \$249,999</b>	x	x	110	0.2%	11,480	0.3%
<b>\$250,000 and over</b>	x	x	120	0.2%	15,680	0.4%
<b>Median</b>	\$48,020		\$38,760		\$36,100	
<b>Average</b>	\$51,763		\$49,648		\$50,016	

<sup>xi</sup>Note: 'x' designates that for reliability or confidentiality purposes, data is not published

## SOURCE OF INCOME

Source of income data can provide insight into the general income structure of a population.<sup>23</sup>

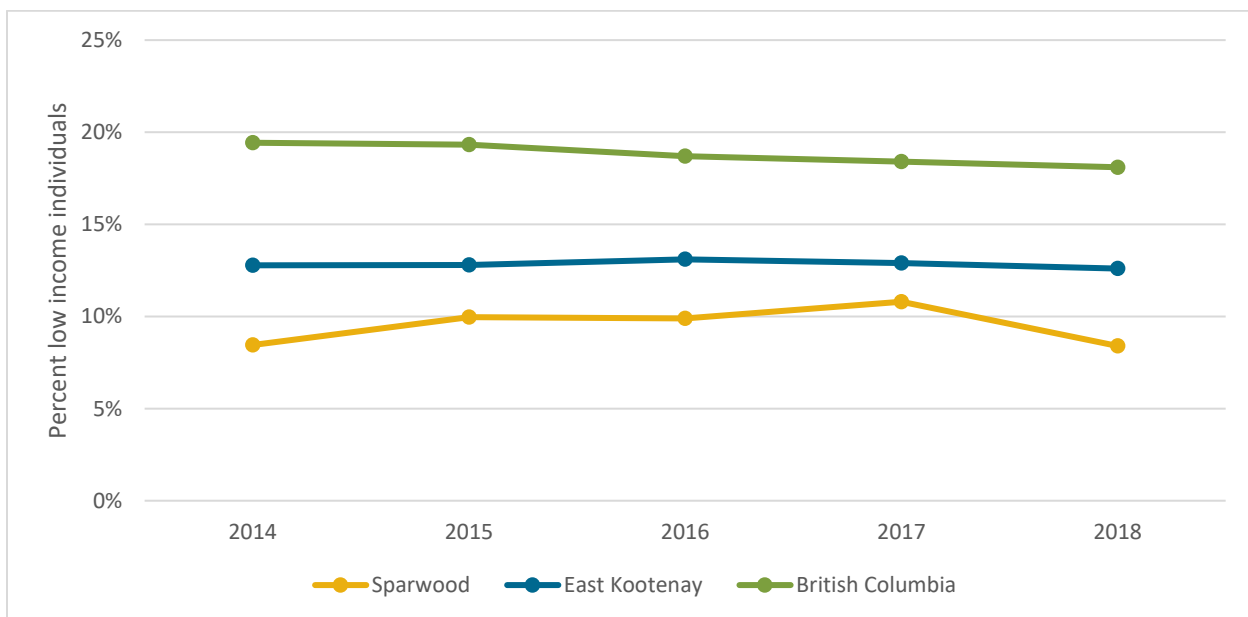
Source of Income (2018)	Sparwood (% tax filers)	East Kootenay (% tax filers)	British Columbia (% tax filers)
Employment income	78.6%	76.1%	73.6%
Self-employment income	6.8%	11.3%	12.7%
Investment income	31.3%	32.6%	34.2%
Employment insurance	7.1%	8.5%	6.5%
Old Age Security / Net Federal Supplement	18.0%	24.6%	22.1%
Canada Pension Plan/Quebec Pension Plan	24.8%	32.0%	26.7%
Canada Child Tax Benefit	14.6%	12.2%	11.8%
GST/HST credit	21.1%	28.7%	34.3%
Workers compensation	3.1%	3.3%	2.6%
Social assistance	2.5%	3.2%	5.1%
Provincial Refundable Tax Credits/Family Benefits	25.4%	32.0%	37.2%
Other Government Transfers	3.7%	5.7%	6.3%
Private pensions	15.2%	20.9%	16.9%
RRSP	1.5%	2.2%	1.7%
Other income	17.6%	20.3%	22.3%

## LOW INCOME MEASURE

The Low Income Measure (LIM) is a commonly used, internationally comparable measure of low income. The LIM threshold is 50% of median national adjusted after tax-income, where 'adjusted' means household size is taken into account. A person is considered to be in low income when their after-tax income is below the [LIM threshold](#) for their household size.<sup>xii,24</sup>

The table and chart below provide a comparison by age bracket and year-to-year total population of persons with low income in Sparwood, regional district, and BC.<sup>25,26,27,28,29</sup>

Percent of Individuals with Low Income	Sparwood (2018)	East Kootenay (2018)	British Columbia (2018)
<b>0-17 years old</b>	8.8%	14.3%	18.5%
<b>18-64 years old</b>	7.1%	12.8%	18.0%
<b>65+ years old</b>	13.1%	10.4%	18.2%
<b>All Ages</b>	8.4%	12.6%	18.1%

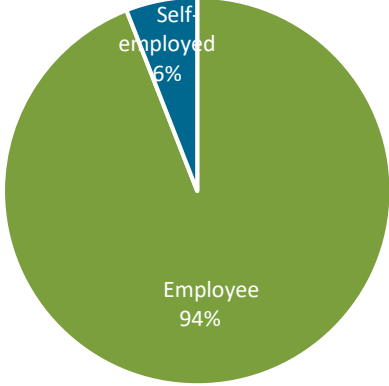


<sup>xii</sup> In 2018, Statistics Canada introduced a new methodology for calculating the LIM threshold, which allows for individual economic well-being to be analyzed (in comparison, previous calculations considered the entire household as a single unit with the assumption of an equitable distribution of resources).<sup>24</sup> Data represented here uses the new methodology, and for that reason, cannot be compared with previous State of the Basin analyses of Low Income Measure.

# Labour Force

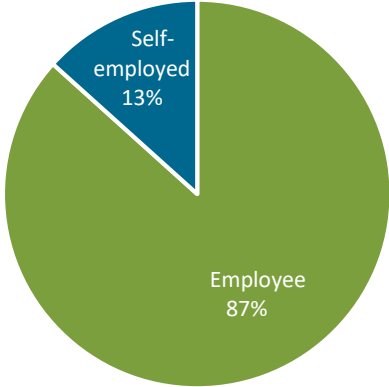
## CLASS OF WORKER & OCCUPATIONS

This indicator gives an overview of the make-up of the local workforce and industries.<sup>3</sup> The pie charts show the percentage of the employed labour force who are self-employed versus those who are employed by others. The tables provide numbers and percentages of the labour force in specific occupations for Sparwood, the regional district, and BC.<sup>xiii</sup>

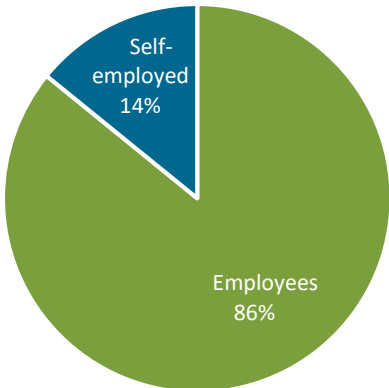
Sparwood (2016)			
% Self-employed v. % Employees	Occupation	Number of persons	Percent
	Sales and services	385	18.2%
	Trades, transport and equipment operators and related	685	32.4%
	Business, finance and admin	245	11.6%
	Management	175	8.3%
	Education, law and social, community and government	140	6.6%
	Health	100	4.7%
	Natural and applied sciences	110	5.2%
	Natural resources, agriculture and related production	180	8.5%
	Manufacturing and utilities	60	2.8%
	Art, culture, recreation and sport	25	1.2%

<sup>xiii</sup> The labour force includes persons aged 15 and older, employed or unemployed.<sup>30</sup> Occupation is determined by the kind of work done and descriptions of the main activities in the job.<sup>31</sup>

### East Kootenay (2016)

% Self-employed v. % Employees	Occupation	Number of persons	Percent
 <p>A pie chart illustrating the labor market composition in East Kootenay in 2016. The chart is divided into two segments: a large green segment representing 'Employee' at 87%, and a smaller blue segment representing 'Self-employed' at 13%.</p>	Sales and services	7,475	23.3%
	Trades, transport and equipment operators and related	7,155	22.3%
	Business, finance and admin	3,685	11.5%
	Management	3,510	10.9%
	Education, law and social, community and government	2,895	9.0%
	Health	2,085	6.5%
	Natural and applied sciences	1,480	4.6%
	Natural resources, agriculture and related production	1,700	5.3%
	Manufacturing and utilities	950	3.0%
	Art, culture, recreation and sport	720	2.2%

### British Columbia (2016)

% Self-employed v. % Employees	Occupation	Number of persons	Percent
 <p>A pie chart illustrating the labor market composition in British Columbia in 2016. The chart is divided into two segments: a large green segment representing 'Employees' at 86%, and a smaller blue segment representing 'Self-employed' at 14%.</p>	Sales and services	595,225	24.1%
	Trades, transport and equipment operators and related	360,970	14.6%
	Business, finance and admin	368,940	14.9%
	Management	275,000	11.1%
	Education, law and social, community and government	269,255	10.9%
	Health	162,865	6.6%
	Natural and applied sciences	161,520	6.5%
	Natural resources, agriculture and related production	64,235	2.6%
	Manufacturing and utilities	76,745	3.1%
	Art, culture, recreation and sport	93,100	3.8%

## LABOUR FORCE BY INDUSTRY

Industry <sup>3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
Mining; quarrying; and oil and gas extraction	33.8%	10.6%	1.0%
Retail trade	8.7%	12.6%	11.5%
Health care and social assistance	7.6%	10.6%	11.0%
Accommodation and food services	7.6%	10.0%	8.4%
Construction	7.1%	8.5%	8.1%
Wholesale trade	5.9%	2.6%	3.3%
Educational services	4.5%	6.1%	7.0%
Other services (except public administration)	4.3%	4.4%	4.5%
Public administration	3.8%	4.3%	5.1%
Manufacturing	3.1%	5.4%	6.4%
Administrative and support; waste management and remediation services	3.1%	3.7%	4.4%
Transportation and warehousing	2.8%	3.7%	5.2%
Arts; entertainment and recreation	2.1%	3.9%	2.3%
Finance and insurance	1.9%	2.0%	3.8%
Real estate and rental and leasing	1.4%	1.6%	2.2%
Agriculture; forestry; fishing and hunting	1.2%	3.3%	2.6%
Professional; scientific and technical services	0.9%	3.9%	8.0%
Utilities	0.5%	0.5%	0.5%
Information and cultural industries	0.5%	1.1%	2.7%
Management of companies and enterprises	0.0%	0.1%	0.2%



## PLACE OF WORK

Place <sup>3</sup>	Sparwood (2016)		East Kootenay (2016)		British Columbia (2016)	
	Number	Percent	Number	Percent	Number	Percent
<b>Worked at home</b>	25	1.3%	1,955	6.6%	196,510	8.5%
<b>Worked outside Canada</b>	0	0.0%	70	0.2%	16,040	0.7%
<b>No fixed workplace address</b>	160	8.1%	4,105	13.8%	326,180	14.1%
<b>Worked at usual place<sup>xiv</sup></b>	1,800	90.9%	23,555	79.3%	1,766,965	76.6%

## COMMUTE TO WORK

Commute Duration <sup>xv,3</sup>	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Less than 15 minutes</b>	50.8%	55.2%	28.8%
<b>15 to 29 minutes</b>	18.1%	21.5%	32.9%
<b>30 to 44 minutes</b>	16.1%	12.1%	20.3%
<b>45 to 59 minutes</b>	7.1%	4.1%	8.8%
<b>60 minutes or more</b>	7.7%	7.2%	9.1%

## UNEMPLOYMENT

Unemployment rates are a strong indicator of economic health. Unemployment rates based on the 2016 Census are shown.<sup>3</sup> [Labour Force Survey](#) data at the economic development region level are updated more frequently and can be found in the State of the Basin [Unemployment indicator](#).

Unemployment Rate	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Total</b>	6.4%	7.6%	6.7%
<b>Male</b>	6.5%	9.1%	7.1%
<b>Female</b>	5.6%	5.8%	6.3%

<sup>xiv</sup> "Usual place" means working at a specific address and reporting to the same workplace location at the beginning of each shift.<sup>32</sup>

<sup>xv</sup> Total used in calculations is the employed labour force aged 15 years and over in private households with a usual place of work or no fixed workplace.<sup>33</sup>

## LABOUR FORCE REPLACEMENT RATE

The Labour Force Replacement Rate is a measure of the number of people who will be entering vs. leaving the workforce in the next 15 years. For the purpose of this measurement, those considered to be entering the workforce are members of the population aged 0-14, and those leaving are those aged 50-64. A rate of 1.0 means the child and retiree populations are the same. A rate of less than 1.0 means an area is likely unable to maintain the current labour force with local replacement workers.<sup>3</sup>

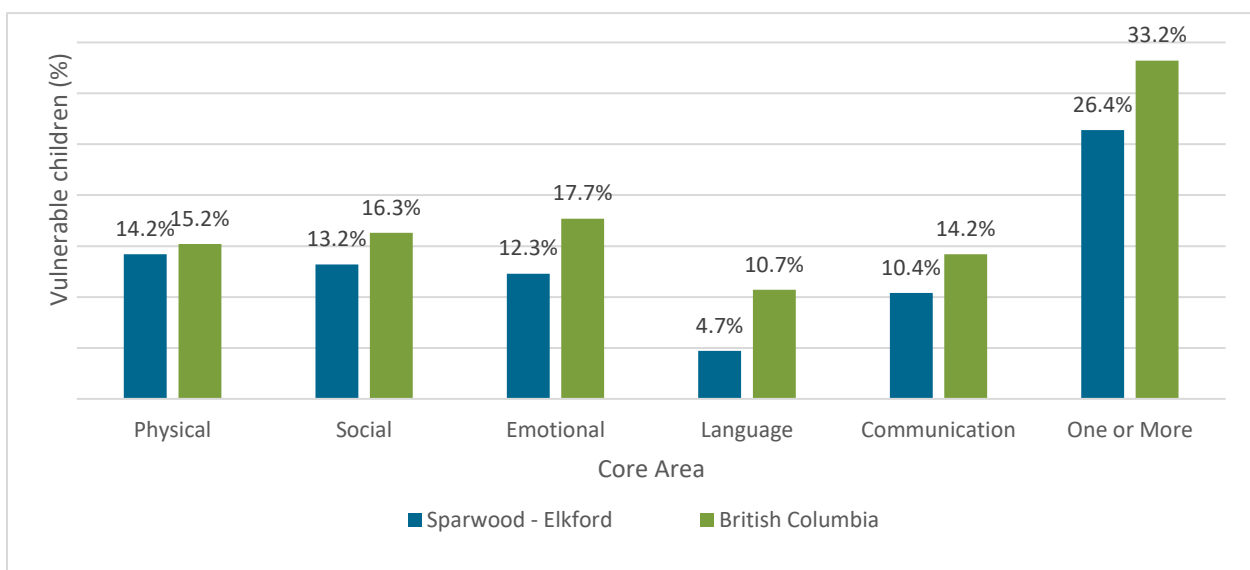
	Sparwood (2016)	East Kootenay (2016)	British Columbia (2016)
<b>Labour Force Replacement Rate</b>	0.84	0.66	0.67

## Education

### EARLY DEVELOPMENT INSTRUMENT

The early years are crucial in influencing a range of health and social outcomes. Research shows that many challenges in adults, including mental health and criminality, have their roots in early childhood. The Early Development Instrument (EDI) assesses the developmental readiness of children in five core areas. These are: physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills and general knowledge.<sup>xvi</sup> The EDI is used to assess the percentages of vulnerable children in each core area. Children are categorized as “vulnerable” when it is believed that they will need additional support in order to avoid future challenges in school and society. Data are available at the school district or neighbourhood level.

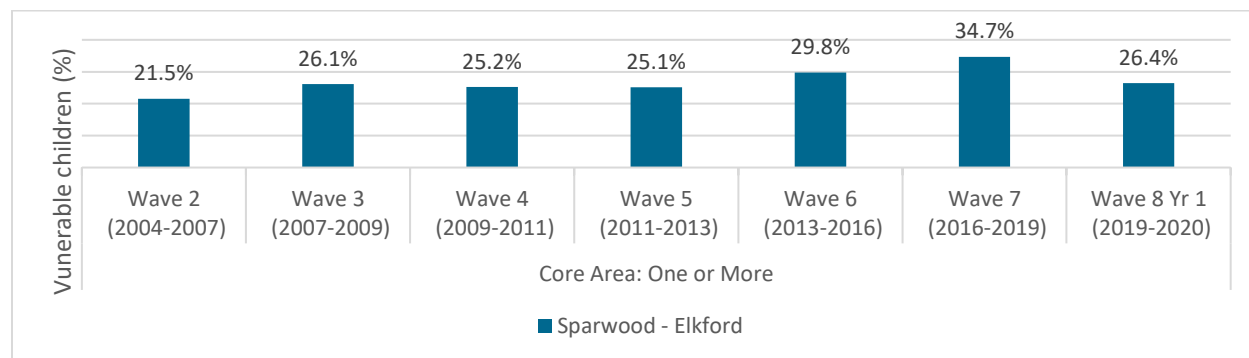
The chart below shows the percentage of children vulnerable in each core area, as well as the percentage of children vulnerable in one or more core areas, for the Sparwood - Elkford neighbourhood.<sup>xvii</sup> Percentages for the province as a whole are shown for comparison. These data are from the most recent wave (Wave 8) of data collection, which took place in 2019/20.<sup>34</sup>



<sup>xvi</sup> For more information on what is measured within each core area, see **Appendix A-3**.

<sup>xvii</sup> The Sparwood - Elkford neighbourhood covers the District of Sparwood.

The chart below shows the trend over EDI collection periods for the Sparwood - Elkford neighbourhood.



## PUBLIC SCHOOL ENROLLMENT

Sparwood falls within the Southeast Kootenay School District (#5).<sup>xviii</sup> Student enrollment measures the number of all school-age persons and adults who are enrolled in public schools and working towards high school graduation. Enrollment trends provide information about changes in the school-age population and is valuable for forecasting and planning.<sup>xix 35</sup>

Southeast Kootenay (SD 5)	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Total student enrollment</b>	5581	5625	5691	5772	5650
<b>Elementary student enrollment</b>	3242	3315	3373	3443	3375
<b>Secondary school enrollment</b>	2321	2286	2297	2290	2245
<b>Indigenous students</b>	1196	1141	1128	1154	1096
<b>English language learners</b>	Mask	60	77	Mask	70
<b>French immersion</b>	524	560	589	589	593
<b>Non-residents</b>	Mask	75	79	60	19

\* Differences between total and elementary and secondary enrollments are due to a small number of enrolled adults

## HIGH SCHOOL COMPLETION

High school completion rates indicate how successful our families, schools, and communities are in supporting youth in achieving graduation. This indicator measures the proportion of students who graduate high school within six years of the first time they enroll in grade 8.<sup>36</sup> High school graduation is generally a minimum education level for most employment and a foundation for positive workplace conditions and future employment success.

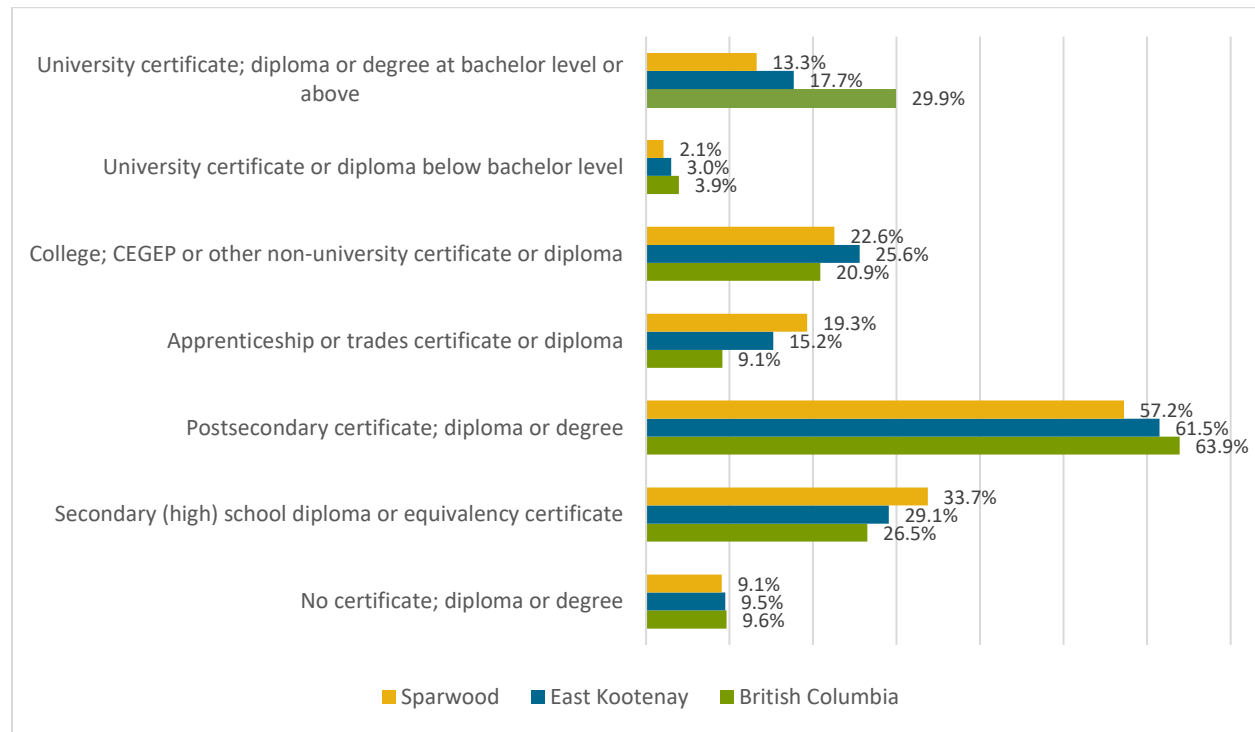
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
<b>Southeast Kootenay (SD 5)</b>	88.6%	82.3%	93.6%	87.2%	91.1%
<b>All BC Public Schools</b>	86.8%	87.3%	88.5%	88.8%	89.6%

<sup>xviii</sup> The Southeast Kootenay school district covers multiple municipalities and electoral areas, therefore numbers reported reflect the full school district and are not limited to Sparwood.

<sup>xix</sup> Due to revisions in 2020 to the Ministry of Education's Protection of Personal Information when Reporting on Small Populations policy, data masking occurs when any cells have fewer than 10 observations, even if the summed total for a category exceeds 10. This impacts reporting enrollment past the 2019/20 school year on categories with lower numbers such as French immersion.

## EDUCATIONAL ATTAINMENT

Education levels are highly correlated with social determinants of health such as income, employment security, and socio-economic opportunity. This indicator measures the highest level of attainment of people aged 25 to 64 years (2016).<sup>3</sup>



## Quality of Life & Civic Engagement

### LIFE EXPECTANCY

Life expectancy is a widely used indicator of population health. This indicator reports on the number of years a person is expected to live based on mortality statistics for a Local Health Area (LHA).<sup>37</sup> Sparwood is covered by the Fernie Local Health Area.

	Life Expectancy 2015-2019 Average
<b>Fernie Local Health Area</b>	80.3
<b>British Columbia</b>	82.7

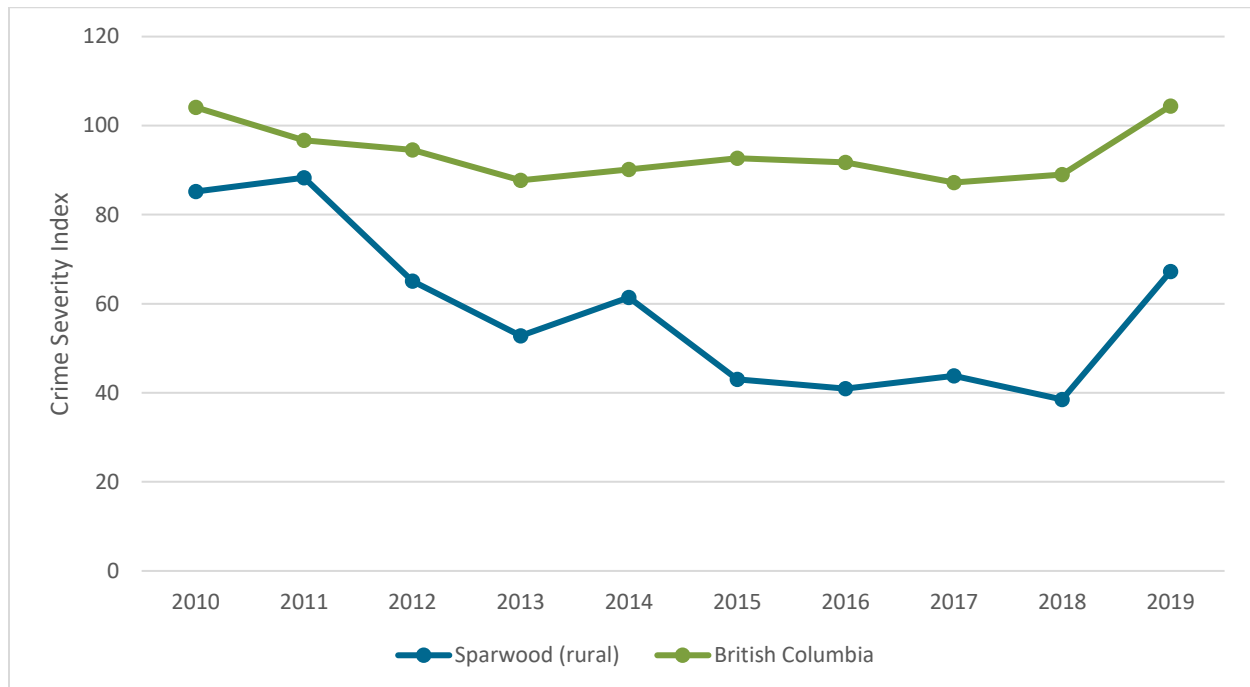
### VOTER TURNOUT

Voter turnout is an indicator of resident involvement in politics and can be seen as a reflection of civic mindedness and citizen engagement. This indicator measures the percentage of eligible voters who voted in local elections.<sup>38</sup>

	2008	2011	2014	2018
<b>Sparwood</b>	26.1%	34.6%	36.2%	41.6%
<b>Columbia Basin-Boundary average</b>	41.5%	36.7%	44.5%	44.0%

## CRIME SEVERITY INDEX

Crime rates are a common indicator of public safety. The police reported Crime Severity Index (CSI)<sup>39</sup> includes all Criminal Code violations including traffic, as well as drug violations and all Federal Statutes. It measures the volume and severity of police-reported crime.<sup>xx</sup>



## CHARITABLE DONATIONS

Charitable donations play a role in improving well-being by providing support to a variety of initiatives. Charitable giving reflects a capacity to give, and is tied to the economy, in that people may give more or less depending on their financial situation and the state of the economy.<sup>40</sup>

	Sparwood (2018)	East Kootenay (2018)	British Columbia (2018)	Canada (2018)
<b>Total # of tax-filers</b>	3,160	48,020	3,702,970	27,394,970
<b>Total charitable donors</b>	800	9,660	683,150	5,324,280
<b>Percent charitable donors</b>	25.3%	20.1%	18.4%	19.4%
<b>Total charitable donations (\$'000)</b>	\$755	\$13,575	\$1,758,810	\$9,952,505
<b>Median donation</b>	\$100	\$250	\$470	\$310
<b>Median income</b>	\$111,200	\$66,190	\$62,360	\$61,940

<sup>xx</sup> Due to the small population in rural communities, the CSI can change dramatically from year to year due to a small amount of crime. Data for police services with populations less than 5,000 should be used with caution.

## PUBLIC LIBRARY USAGE

Libraries play an important role in the vibrancy of a community, as libraries are often a gathering place for residents where a diversity of programs and services are offered. Library statistics are useful for providing an indication of the health and capacity of these facilities in serving community needs and interests.<sup>41</sup>

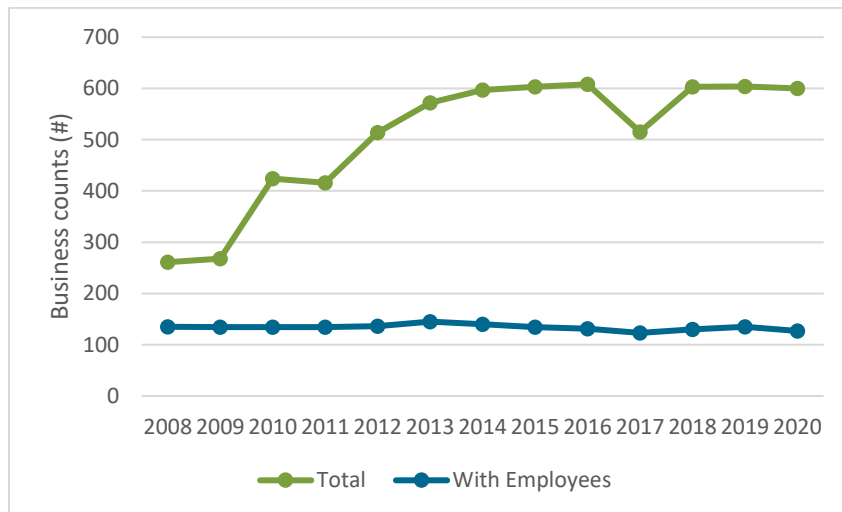
	Sparwood Public Library (2019)	Average all libraries in Columbia Basin-Boundary (2019)*
<b>Population served</b>	4,756	7,489
<b>Total active cardholders as % of population served</b>	20.3%	35.9%
<b>Attendance at children's and young adult programs</b>	1,564	3,004
<b>Total full-time equivalent employees (FTE)</b>	3.1	3.8
<b>Volunteer hours worked</b>	250	1144.2
<b>Number of in-person visits</b>	17,000	47,324
<b>Total visits per capita</b>	5.2	9.9
<b>Average hours open per week</b>	44.0	40.3
<b>Total local government support</b>	221,097	265,314
<b>Local government support per capita</b>	46.5	36.4
<b>Total other revenue</b>	33,595	48,960

\*Columbia Basin-Boundary averages do not include the Golden or Revelstoke libraries, as these branches are part of the Okanagan Regional Library and comprehensive data by branch are not available.

# Business

## BUSINESS COUNTS

Trends in the number of businesses within a region is an indicator of economic health.<sup>42</sup> In the chart below, “total” refers to total number of businesses both with and without employees, and “with employees” refers only to those businesses that have employees other than the owner.



2010-2020 Change	
<b>Total</b>	29.3%
<b>With employees</b>	-5.5%

2015-2020 Change	
<b>Total</b>	-0.5%
<b>With employees</b>	-5.5%

2019-2020 Change	
<b>Total</b>	-0.7%
<b>With employees</b>	-6.3%

## BUSINESS FORMATIONS

The number of business incorporations is an indicator of the overall business climate, providing a sense of an expanding or contracting economy.<sup>43</sup>

Year	Sparwood	East Kootenay	British Columbia
<b>2016</b>	2	262	43,556
<b>2017</b>	7	247	46,247
<b>2018</b>	8	277	46,245
<b>2019</b>	4	309	44,657
<b>2020</b>	4	354	47,789



## BUILDING PERMITS

This indicator measures the building permit construction value issued annually by a defined region. Building permits are a well-accepted indicator of economic performance. Values below are reported in thousands.<sup>xxi</sup>

Year	Sparwood <sup>44</sup> (\$'000)	East Kootenay <sup>45</sup> (\$'000)	British Columbia <sup>44</sup> (\$'000)
2015	\$6,243	\$54,983	\$12,971,649
2016	\$3,102	\$48,847	\$12,492,196
2017	\$4,131	\$64,034	\$14,668,692
2018	\$5,642	\$73,392	\$18,361,550
2019	\$38,926	\$72,439	\$23,044,653

## VISITOR CENTRE STATISTICS

Visitor Centre Statistics are a common indicator of tourism, an economic sector for many regions. Numbers for the Sparwood Visitor Center have been provided below.<sup>46</sup>

Year	Total Visitors Sparwood Visitor Centre	Change from previous year Sparwood	Change for all visitor centres in BC
2016	54,319	11.8%	0.6%
2017	63,203	16.4%	-2.6%
2018	58,386	-7.6%	-8.2%
2019	61,440	5.2%	10.6%
2020	49,768	-19.0%	-70.1%

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<sup>xxi</sup> Building permit data source has shifted from [BC Stats](#) to [Local Government Statistics](#) based on data availability, so caution should be used when comparing results from this community profile to previous profiles. Regional district totals do not include municipalities with their own building inspection services. For the Regional District of East Kootenay, these municipalities are: Canal Flats, Cranbrook, Elkford, Fernie, Invermere, Kimberley, Radium Hot Springs, and Sparwood.

# Local Government

Local governments are required to submit data annually to the BC Ministry of Municipal Affairs and Housing, including annual reports and financial statements. Municipal revenues and expenses and taxes on a representative house<sup>xxii</sup> provide an indication of a local government's capacity, financial needs and priorities, and costs to residents.

## MUNICIPAL REVENUE AND EXPENSES

Municipal Revenue <sup>47</sup>	Sparwood (2019)	Percent of Total Revenue
<b>Total Own Purpose Taxation and Grants in Lieu</b>	\$7,695,125	46.3%
<b>Sale of Services</b>	\$3,042,872	18.3%
<b>Transfers from Federal Governments</b>	\$0	0.0%
<b>Transfers from Provincial Governments</b>	\$996,821	6.0%
<b>Transfers from Regional and Other Governments</b>	\$104,522	0.6%
<b>Investment Income</b>	\$507,199	3.1%
<b>Income from Government Business Enterprise</b>	\$0	0.0%
<b>Developer Contributions</b>	\$0	0.0%
<b>Disposition of Assets</b>	\$0	0.0%
<b>Other Revenue</b>	\$4,281,756	25.7%
<b>Total Revenue</b>	<b>\$16,628,295</b>	

Municipal Expenses <sup>48</sup>	Sparwood (2019)	Percent of Total Expenses
<b>General Government</b>	\$1,490,393	12.5%
<b>Protective Services</b>	\$909,893	7.6%
<b>Solid Waste Management and Recycling</b>	\$317,365	2.7%
<b>Health, Social Services and Housing</b>	\$68,503	0.6%
<b>Development Services</b>	\$788,710	6.6%
<b>Transportation and Transit</b>	\$1,926,773	16.1%
<b>Parks, Recreation and Culture</b>	\$2,667,656	22.3%
<b>Water Services</b>	\$615,515	5.2%
<b>Sewer Services</b>	\$753,956	6.3%
<b>Other Services</b>	\$0	0.0%
<b>Amortization</b>	\$2,382,080	19.9%
<b>Other Adjustments</b>	\$0	0.0%
<b>Total Expenses</b>	<b>\$11,943,816</b>	

<sup>xxii</sup> A representative house is based on the assessment and occurrence of single-family residential properties, and does not include vacant properties, multi-family, strata, etc.

## TAXES & CHARGES ON A REPRESENTATIVE HOUSE

Representative House <sup>49</sup>	Sparwood (2020)
House value	\$245,483
School	\$516
General Municipal Total	\$1,011
Regional District	\$171
Hospital	\$58
BCA, MFA, and other	\$81
Total Residential Variable Rate Taxes	\$1,837
Total Residential Parcel Taxes	\$89
Total Residential User Fees	\$771
Total Residential Property Taxes and Charges	\$2,697

# Environment

The environment is a foundation for many aspects of well-being. Parks and protected areas help to safeguard wild spaces and species and provide opportunity for residents and visitors to recreate and connect with nature. Weather and climate conditions and trends help us understand the context in which a community operates, and climate projections can help with forecasting and adaptive planning.

## PARKS & PROTECTED AREAS

Sparwood has 3 provincial parks and protected areas within a 40-kilometer radius of the municipality. It also has at least 5 local parks and greenspaces which intersect its boundaries.<sup>50</sup>

Sparwood		
<b>Provincial parks and protected areas</b>	Crowsnest Park Elk Valley Park Morrissey Park	Mount Fernie Park Top of the World Park
<b>Local greenspaces</b>	Central Park Cypress Park Juniper Park	Lions and Heritage Park Green Space (unnamed)

## WEATHER & CLIMATE

Weather and climate data are based on the Government of Canada's 1981-2010 Climate Normals and Averages.<sup>xxiii</sup> The numbers presented below are from the Sparwood weather station.<sup>52</sup>

	January (Year of Occurrence)	July (Year of Occurrence)
<b>Daily average (°C)</b>	-6.5	15.8
<b>Daily maximum (°C)</b>	-2.2	23.8
<b>Daily minimum (°C)</b>	-10.7	7.7
<b>Extreme maximum (°C)</b>	11.9 (2005)	34.9 (2002)
<b>Extreme minimum (°C)</b>	-37.9 (1998)	0 (1982)
<b>Rainfall monthly average (mm)</b>	17.3	46.8
<b>Snowfall monthly average (cm)</b>	50.4	0
<b>Extreme daily rainfall (mm)</b>	27.8 (1984)	27.2 (1990)
<b>Extreme daily snowfall (cm)</b>	24 (2004)	0
<b>Extreme snow depth (cm)</b>	56 (1997)	0

<sup>xxiii</sup> The terms "climate normals" and "climate averages" are interchangeable, and refer to numbers based on observed climate values for a specific location over a specific time frame.<sup>51</sup>

## FROST-FREE DATES

Frost-free dates are based on data from Sparwood weather station.<sup>52xxiv</sup>

	Average Date of Last Spring Frost	Average Date of First Fall Frost	Average Length of Frost-Free Period
<b>Frost-free dates</b>	June 4	September 2	89 Days

## MODELED CLIMATE DATA – HISTORY & PROJECTIONS

Climate data were modeled across the Columbia Basin-Boundary on a scale consisting of a 10x10 km grid. The figures below show median values from the results of 12 climate models for each time period and for low carbon and high carbon emission scenarios for the grid closest to Sparwood.<sup>54</sup> Low carbon scenarios assume global greenhouse gas emissions will be drastically reduced from current levels, while high carbon scenarios assume greenhouse gas emissions will continue increasing at current rates. For more area-specific climate data, visit the [Columbia Basin Climate Source](#) website.

Variable	Recent Past	Near Future		Far Future	
	(1951 - 1980)	(2021 - 2050)		(2051 - 2080)	
		Low Carbon	High Carbon	Low Carbon	High Carbon
<b>Annual mean temperature</b>	3.0 °C	4.8 °C	5.2 °C	5.9 °C	7.1 °C
<b>Annual total precipitation</b>	611 mm	639 mm	621 mm	639 mm	659 mm

<sup>xxiv</sup> Caution should be used when comparing frost free dates between community profiles. Cranbrook, Radium Hot Springs, Invermere, Fernie, Revelstoke, and Valemount data is taken from Climate Atlas of Canada<sup>53</sup> which calculates frost free dates based on data from 1976-2005. All other profiles use data from The Government of Canada climate normals and averages<sup>52</sup> which calculate frost free dates based on data from 1981-2010.

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## Gaps and Further Research

During the compilation of data for these community profiles, a number of gaps and opportunities for further research were identified. These are discussed below.

### VACANCY RATES

These results come from the Canada Mortgage and Housing Corporation's (CMHC) annual Rental Market Surveys. As some communities have very small rental markets, information for some municipalities is suppressed for confidentiality reasons. CMHC is no longer collecting data for small municipalities; therefore, current data are only available for Nelson and Cranbrook.

### 2021 CENSUS

The 2021 Census of Population occurs in May 2021. The information collected during the census is vital for rural community development and planning. Data is collected about demographics, and well as social and economic well-being.<sup>55</sup> Beginning May 3, 2021, Canadians can complete the census questionnaire online, and doing so follows COVID-19 restrictions while fulfilling the obligation of completing the census.

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## References

1. District of Sparwood. (n.d.). *Home*. <https://www.sparwood.ca/#gsc.tab=0>
2. BC Ministry of Citizens' Services. (2020). *About population estimates*. <https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-estimates/about-population-estimates>
3. Statistics Canada. (2020). *Census Profile, 2016 Census*. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
4. Statistics Canada. (2016). *Census Profile, 2006 Census*. <https://www12.statcan.gc.ca/census-recensement/2006/dp-pd/index-eng.cfm>
5. BC Ministry of Citizens' Services. (n.d.). *Population estimates*. <https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-estimates>
6. BC Ministry of Citizens' Services. (n.d.). *Population projections*. <https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-projections>
7. Statistics Canada. (2019). *Census Family*. <https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=Unit&Id=32746>
8. Columbia Basin Water Smart Program. (2016). *Water Smart 2015 [custom data request]*.
9. District of Sparwood. (2021). *Utility and Solid Waste Management Bylaw 1014, 2009*. [https://sparwood.civicweb.net/filepro/document/27544/Utility%20and%20Solid%20Waste%20Management%20Bylaw%201014%20\(Consolidated%20Version\).pdf](https://sparwood.civicweb.net/filepro/document/27544/Utility%20and%20Solid%20Waste%20Management%20Bylaw%201014%20(Consolidated%20Version).pdf)
10. Statistics Canada. (2021). *Potable water use by sector and average daily use*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810027101>
11. BC Hydro. (n.d.). *Our Service Areas*. <https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/safety/bchydro-service-area-map.pdf>
12. FortisBC. (n.d.). *Our service areas*. <https://www.fortisbc.com/about-us/corporate-information/our-service-areas>
13. Government of Canada. (2021). *National broadband internet service availability map*. <https://www.ic.gc.ca/app/sitt/bbmap/hm.html>
14. Regional District of East Kootenay. (n.d.). *Garbage & Recycling*. [https://www.rdek.bc.ca/departments/environmentalservices/garbage\\_recycling/](https://www.rdek.bc.ca/departments/environmentalservices/garbage_recycling/)
15. BC Ministry of Environment and Climate Change Strategy. (2020). *BC municipal solid waste disposal rates [data set]*. <https://catalogue.data.gov.bc.ca/dataset/bc-municipal-solid-waste-disposal-rates>
16. District of Sparwood. (n.d.). *Garbage & Recycling*. <https://www.sparwood.ca/garbage-and-recycling#gsc.tab=0>
17. BC Ministry of Environment and Climate Change Strategy. (2020). *Municipal solid waste disposal in B.C. (1990-2018)*. <http://www.env.gov.bc.ca/soe/indicators/sustainability/municipal-solid-waste.html>
18. BC Ministry of Transportation and Infrastructure. (2016). *Traffic data program*. <https://prdoas6.pub-apps.th.gov.bc.ca/tsg/>
19. BC Assessment. (2021). *Columbia Basin-Boundary assessed property values [custom data set]*.
20. Canadian Mortgage and Housing Corporation. (n.d.). *Vacancy Rates [custom data request]*. (2020).



- 
21. Statistics Canada. (2020). *I-07: Tax filers and dependants with income by after-tax income, sex and age groups, 2018 [data set]*. <https://communitydata.ca/content/i-07-tax-filers-and-dependants-income-after-tax-income-sex-and-age-groups-2018>
  22. Statistics Canada. (2020). *I-10: Labour income profile of individuals, 2018 [data set]*. <https://communitydata.ca/content/i-10-labour-income-profile-individuals-2018>
  23. Statistics Canada. (2020). *I-04: Tax filers and dependants with income by source of income, 2018 [data set]*. <https://communitydata.ca/content/i-04-tax-filers-and-dependants-income-source-income-2018>
  24. Pinard, D. (2018). *Methodology changes: Census Family Low Income Measure based on the T1 Family File*. <https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2018001-eng.htm>
  25. Statistics Canada. (2018). *F-20: After-tax low income status of census families (census family low income measures, CFLIM-AT) by family type and family composition, adjusted, 2014 [data set]*. <https://communitydata.ca/content/f-20-after-tax-low-income-status-census-families-census-family-low-income-measures-cflim>
  26. Statistics Canada. (2019). *F-20: After-tax low income status of census families (census family low income measures, CFLIM-AT) by family type and family composition, adjusted, 2015 [dataset]*. <https://communitydata.ca/content/f-20-after-tax-low-income-status-census-families-census-family-low-income-measures-cflim-9>
  27. Statistics Canada. (2019). *F-20: After-tax low income status of census families (census family low income measures, CFLIM-AT) by family type and family composition, adjusted, 2016 [data set]*. <https://communitydata.ca/content/f-20-after-tax-low-income-status-census-families-census-family-low-income-measures-cflim-10>
  28. Statistics Canada. (2020). *F-20: After-tax low income status of census families based on Census Family Low Income Measure (CFLIM-AT), by family type and family composition, 2017 [data set]*. <https://communitydata.ca/content/f-20-after-tax-low-income-status-census-families-based-census-family-low-income-measure>
  29. Statistics Canada. (2020). *F-20: After-tax low income status of census families based on Census Family Low Income Measure (CFLIM-AT), by family type and family composition, 2018 [dataset]*. <https://communitydata.ca/content/f-20-after-tax-low-income-status-census-families-based-census-family-low-income-measure-0>
  30. Statistics Canada. (2017). *Dictionary, Census of Population, 2016 labour force status*. <https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/pop057-eng.cfm>
  31. Statistics Canada. (2017). *Dictionary, Census of Population, 2016 occupation (based on the National Occupational Classification [NOC] 2016)*. <https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/pop157-eng.cfm>
  32. Statistics Canada. (2016). *Classification of place of work status*. <https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=244087&CVD=244087&CLV=0&MLV=1&D=1>
  33. Statistics Canada. (2017). *Dictionary, Census of Population, 2016 commuting duration*. <https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/pop152-eng.cfm>
  34. Human Early Learning Partnership. (2020). *EDI Waves 2-8 (Year 1) (SD,LHA,NH,BC) [data set]*. <http://earlylearning.ubc.ca/maps/data/>
  35. BC Ministry of Education - Education Analytics. (2021). *BC schools—Student enrolment and FTE by grade [data set]*. <https://catalogue.data.gov.bc.ca/dataset/bc-schools-student-enrolment-and-fte-by-grade>

- 
36. BC Ministry of Education - Education Analytics. (2021). *BC schools—Six year completion rate [data set]*. <https://catalogue.data.gov.bc.ca/dataset/bc-schools-six-year-completion-rate>
  37. BC Ministry of Citizens' Services. (2020). *Life expectancy at birth by health area, 1986-2019 [custom data set]*.
  38. CivicInfo BC. (n.d.). *Election results [data set]*. <http://www.civicinfo.bc.ca/election>
  39. Statistics Canada. (2021). *Crime severity index and weighted clearance rates, police services in British Columbia [data set]*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510006301>
  40. Statistics Canada. (2020). *Charitable donations, 2018 [data set]*. <https://communitydata.ca/content/charitable-donations-2018>
  41. BC Ministry of Education - Libraries. (2021). *BC public libraries statistics 2002-present [data set]*. <https://catalogue.data.gov.bc.ca/dataset/bc-public-libraries-statistics-2002-present>
  42. BC Stats. (2019). *Number of businesses and employment by industry, location counts (XLSX) [data set]*. <https://www2.gov.bc.ca/gov/content/data/statistics/business-industry-trade/number-of-businesses-and-employment-by-industry>
  43. BC Ministry of Citizens' Services. (2021). *Business formations & failures, incorporations 1990 to 2020 (XLSX) [data set]*. <https://www2.gov.bc.ca/gov/content/data/statistics/economy/business-formations-failures>
  44. BC Ministry of Municipal Affairs. (2021). *Municipal general & financial statistics, DCCs and building permit information—Schedule 305 [data set]*. Province of British Columbia. <https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/statistics>
  45. BC Ministry of Municipal Affairs. (2021). *Regional district general & financial statistics, DCCs and building permit information—Schedule 805 [data set]*. <https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/regional-district-general-financial-statistics>
  46. Destination British Columbia. (2020). *Visitor services network statistics program year over year reports, 2016 to 2020 [data set]*. <https://www.networkstats.tourismbc.com/ReportDefinition.aspx>
  47. BC Ministry of Municipal Affairs. (2021). *Municipal general & financial statistics, revenue—Schedule 401 [data set]*. <https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/statistics>
  48. BC Ministry of Municipal Affairs. (2021). *Municipal general & financial statistics, expenses- Schedule 402 [data set]*. <https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/statistics>
  49. BC Ministry of Municipal Affairs. (2021). *Municipal tax rates & tax burden, taxes & charges on a representative house—Schedule 704*. <https://www2.gov.bc.ca/gov/content/governments/local-governments/facts-framework/statistics/tax-rates-tax-burden>
  50. BC Ministry of Environment and Climate Change Strategy - BC Parks - Provincial Services. (2021). *BC parks, ecological reserves, and protected areas [data set]*. <https://catalogue.data.gov.bc.ca/dataset/bc-parks-ecological-reserves-and-protected-areas>
  51. Environment and Climate Change Canada. (2020). *Canadian Climate Normals 1981-2010 calculation information*. [https://climate.weather.gc.ca/doc/Canadian\\_Climate\\_Normals\\_1981\\_2010\\_Calculation\\_Information.pdf](https://climate.weather.gc.ca/doc/Canadian_Climate_Normals_1981_2010_Calculation_Information.pdf)
  52. Environment and Climate Change Canada. (2020). *Canadian Climate Normals, 1981-2010 Climate Normals & Averages [data set]*. [https://climate.weather.gc.ca/climate\\_normals/](https://climate.weather.gc.ca/climate_normals/)
  53. Climate Atlas of Canada. (n.d.). *1976-2005 Frost-Free Season*. [https://climateatlas.ca/map/canada/ffp\\_baseline#z=3&lat=69.16&lng=-82.97](https://climateatlas.ca/map/canada/ffp_baseline#z=3&lat=69.16&lng=-82.97)

- 
54. Columbia Basin Climate Source. (2021). *Community climate change profile*.  
<https://basinclimatesource.ca/communities>
55. Statistics Canada. (2021). *The 2021 Census*. <https://census.gc.ca/about-apropos/2021-census-recensement-2021-eng.htm?MM=2>
56. Statistics Canada. (2017). *About the data, Census Profile, 2016 Census, random rounding*.  
<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/about-apropos/about-apropos.cfm?Lang=E&wbdisable=true#aa9>
57. Statistics Canada. (2017). *Dictionary, Census of Population, 2016, Shelter-cost-to-income ratio*.  
<https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/households-menage028-eng.cfm>
58. Human Early Learning Partnership. (n.d.). *Early Development Instrument*. <http://earlylearning.ubc.ca/edi/>

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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 are 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 these data.

# Appendix A: Data Notes

## 1. RANDOM ROUNDING IN CENSUS DATA

Statistics Canada uses random rounding in census data to ensure that the confidentiality of census respondents is protected. Values within census datasets (including the 2016 census profiles, which are used frequently as a data source within this report) are rounded up or down to a multiple of 5 or 10. Each individual value is rounded, and therefore the total value for the category may not add up to the sum of the individual values. Random rounding occurs each time data are pulled from the Statistics Canada website. Values in the same data set accessed at different times may therefore differ slightly.<sup>56</sup>

## 2. SHELTER-COST-TO-INCOME RATIO CALCULATION

Data gathered by Statistics Canada for the shelter-cost-to-income ratio are subject to the following limitations:

- Some households are excluded from the calculation (e.g. those living in band housing, on an agricultural operation operated by a household-member, and households with negative or zero household income)
- Differences in the reference periods for shelter cost and income data may result in relatively high shelter-cost-to-income-ratios for some households. This is because shelter cost data were gathered in 2016, while the reference period for income data is from 2015. Furthermore, reported 2015 household income may only represent income for part of the year for some households.<sup>57</sup>

## 3. EARLY DEVELOPMENT INSTRUMENT SCALES

The Early Development Instrument (EDI) is based on questionnaires filled out by kindergarten teachers. The questionnaires measure five core areas that have been identified as predictors of “adult health, education and social outcomes.” See the table below for example questions from the questionnaire.<sup>58</sup> For more information on how these data are collected, visit <http://earlylearning.ubc.ca/edi/>.

Core Area	Example Questions
Physical health and well-being	“Can the child hold a pencil, pen or crayons? Is the child on time for school each day?”
Language and cognitive development	“Is the child interested in reading and writing? Can the child count and recognize numbers?”
Social competence	“Does the child share with others? Is the child self-confident? Will he/she invite bystanders to join in a game?”
Emotional maturity	“Is the child able to concentrate? Is the child aggressive or angry? Is the child impulsive (does he/she act without thinking)?”
Communication skills and general knowledge	“Can the child tell a short story? Can the child communicate with adults and children?”