

## Initial Investigation of Factors to Consider in Establishment of a Regional Home Insurance Provider

# RESEARCH BRIEF



### INTRODUCTION

Changes to the insurance system in British Columbia over the past five years have resulted in many rural properties being classified under a lower level of fire protection as compared to previous years. The result has been a considerable increase in insurance premiums for these properties. A potential response to this challenge involves development of a regionally-based home insurance provider to better meet the specific needs of Columbia Basin homeowners and increase competition in the insurance industry, with the overall objective of reducing insurance premiums for homeowners. The Regional District of Central Kootenay (RDCK) requested research services from the Columbia Basin Rural Development Institute (RDI) to help with an initial assessment of the feasibility of establishing such an insurance provider. The objectives of this research were to:

- describe the insurance system in rural BC with a focus on fire,
- evaluate trends in fire risk and insurance costs, and
- identify and describe examples of existing small-scale or regionally-based home insurance providers.

Information in this report includes a review of available literature and statistics, as well as conversations with key sources involved in regional fire protection services and the Canadian insurance industry.

### BACKGROUND

In Canada, the Fire Underwriters Survey (FUS) provides guidelines to insurance underwriters related to the classification of properties for fire risk. This guides the premiums set by the property and casualty (P&C) insurance industry. The FUS assigns Dwelling Protection Grades (DPGs) of 1 through 5, based on access to fire protection services, quality of infrastructure, and other considerations. DPG 5 indicates little or no fire protection available and applies in circumstance where the maximum recognized response distance criterion of 8 kilometres (by

continuous public road) is not met<sup>1</sup>. Stringent application of these guidelines to some RDCK communities has resulted, or may result, in a considerable increase in home insurance rates<sup>i</sup>. Conversations between the RDCK and FUS have revealed that FUS intends to implement additional policies that may further increase premiums for personal lines of insurance. These anticipated changes, combined with the overall loss of competition in the insurance market following a general trend toward amalgamation of insurance companies, indicates a potential role for a regionally-based insurance company that serves the interests of local residents and reflects the specific nature of the rural context.

## FIRES IN CANADA & THE BASIN

### Trends in home fire occurrence and related losses

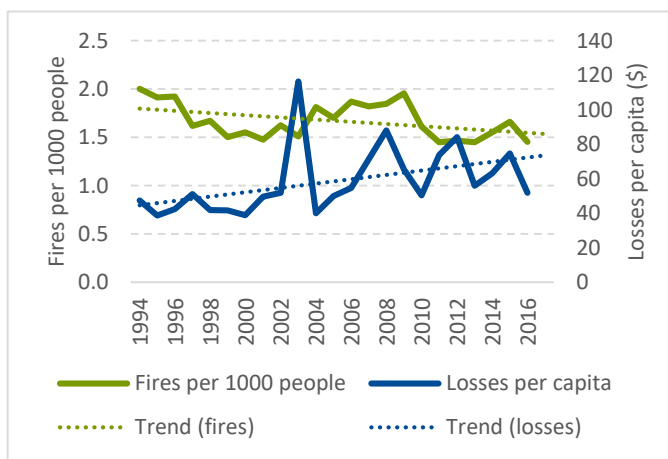
Table 1 describes fire incidents on physical structures, such as homes, sheds, dumpsters, and vehicles. Over the period 2010-2016, the Kootenay<sup>ii</sup> region recorded the lowest number of incidents across all regions in BC. See Appendix A for a breakdown of these statistics for each fire station in the Basin.

	Number of Incidents	Total Loss	Injuries	Fatalities
<b>Region 4: Interior</b>	5,706	\$268,835,936	78	33
<b>Region 5: Northern</b>	4,267	\$325,284,524	133	26
<b>Region 3: Kootenay</b>	1,221	\$85,347,316	50	4
<b>Region 2: Lower Mainland &amp; Coast</b>	28,704	\$1,089,490,947	1,054	93
<b>Region 1: Vancouver Island</b>	7,657	\$239,213,764	219	41
<b>Provincial Totals</b>	47,555	\$2,008,171,587	1,534	197

**Table 1: Fire incidents by region for period 2010/01/01 to 2016/12/31<sup>2</sup>**

More detailed data (including fire types, annual numbers, and communities) can be obtained from the BC Fire Commissioner’s office and is recommended if this project moves to a feasibility study phase.

Since the mid-1990s in BC, there has been a downward trend in fire occurrences and an upward trend in fire losses (Figure 1)<sup>3</sup>. According to fire personnel from the Regional District of East Kootenay, updated fire codes and building construction are driving the number of dwelling fires down but this is offset with newer homes burning faster due to materials used in finishing products (such as



**Figure 1: Rates of fire incidence and related losses in BC, 1994-2016**

<sup>i</sup> DPG ratings for RDCK communities were not available to the RDI. A membership with FUS is required to access this information.

<sup>ii</sup> The boundaries of *Region 3: Kootenay* roughly follow those of the Columbia Basin, but Valemount and Revelstoke are omitted and the western boundary extends to Boundary country.

furniture). This rapid burn increases intensity and contributes to larger fire losses. In rural areas – especially in the Columbia Basin – other prevalent factors contributing to fire loss include older and poorly maintained structures, wood heating appliances, and unpermitted renovations which result in sub-standard work<sup>4</sup>.

### Trends in wildfire occurrence and related losses

Forest fires are an important consideration in the evaluation of fire risk in rural BC communities. British Columbia is “home to the greatest variability in weather found in Canada”<sup>5</sup> and home to the third costliest fire in Canadian history: the 2003 Okanagan Mountain Park fire (Table 2). This was the first catastrophic event by wildfire in Canada<sup>6</sup> and the costliest loss in British Columbia history<sup>5</sup>. The 2016 Fort McMurray fire resulted in \$3.7 billion in losses and was the largest insured wildfire loss in world insurance history<sup>7</sup>. As of September 2017, estimates have the BC summer wildfire season causing over \$127 million in insured damages<sup>8</sup>.

Name	Year	Cost
<b>Fort McMurray</b>	2016	\$3.7 billion
<b>Slave Lake</b>	2011	\$760.2 million
<b>Okanagan Park</b>	2003	\$226.7 million
<b>Williams Lake</b>	2017	\$100 million*
<b>Elephant Hill</b>	2017	\$27 million*

\*unconfirmed

**Table 2: Costliest fires in Canadian history by insured losses (current dollars)<sup>5,6,8,9</sup>**

With the largest warming trend in Canada and the US expected to be centred in the western US and extending north into south-western Canada, it is anticipated that there will be a 25% increase in wildfire activity by 2030<sup>5</sup>. In the Columbia Basin-Boundary region, 24 of 28 municipalities have experienced wildfires of at least 5 hectares coming within 2 kilometres of their boundaries since 1919<sup>10</sup>. Of the remaining 4 communities, Invermere and Radium Hot Springs have both had fires come within 5 kilometers of municipal boundaries and both Silverton and New Denver have been identified as having a high probability and high consequence potential of wildfire activity<sup>10</sup>.

## OVERVIEW OF P&C INSURANCE INDUSTRY IN CANADA

### History

The concept of insurance was developed as a result of fire incidents in England as far back as the 1600s. In Canada, the Insurance Company Act was passed in 1868 to regulate financial practices and the Canadian Fire Underwriters Association was created in 1883<sup>11</sup>. In Canada, it is mandated that all P&C companies provide fire protection in their base services (as opposed to optional catastrophes, such as flood or earthquake)<sup>12</sup>. Globally, Canada is considered to be an “ultracompetitive”<sup>13</sup> market in regards to insurance options. Across the country, many companies offer a variety of services that include agricultural protection, fishing (both equipment and life), automobile, and health.

Despite local concern, fire is not a top concern in the insurance industry<sup>5,14</sup> nor is it a priority for catastrophe planning. Of the Top 10 costliest disasters in Canadian history<sup>9</sup>, only two are due to fire: Fort McMurray (#1) at \$3.7 billion and Slave Lake (#5) at \$760.2 million. Catastrophic events are more commonly due to flooding, hail or major storms. Despite the industry’s current focus on other forms of disaster, there is recognition that climate change will influence future claims with industry studies projecting more incidents of extreme heat, drought, and wildfire<sup>15</sup>.

### Premiums and Claims

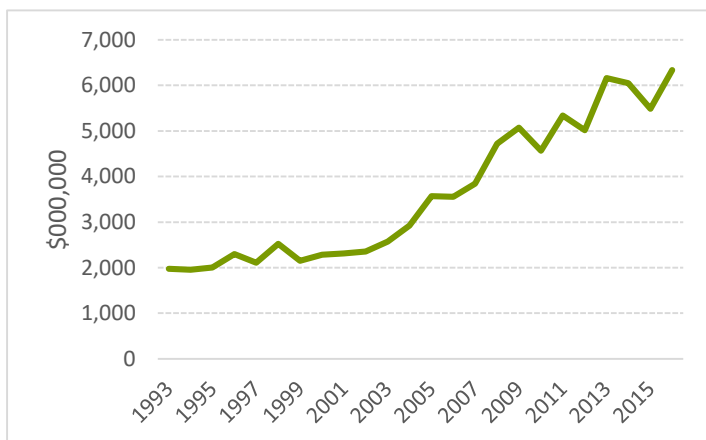
Statistics Canada’s annual Survey of Household Spending provides information on average household expenditures on home insurance. Rates in BC are generally slightly lower than those across Canada as a whole. However, rates in rural areas are higher than both the provincial and national average and have also increased at a higher rate over the past 5 years (Table 3).

Geography	2012	2013	2014	2015	2016	2012-2016 Change (%)
Canada	589	625	671	685	707	20%
BC	586	635	663	699	673	14.8%
Rural Areas	828	851	863	921	1,003	21.13%

**Table 3: Average homeowners’ insurance premiums for owned living quarters (\$) <sup>16,17</sup>**

Rising insurance premiums reflect a concurrent rise in P&C claims (Figure 2). An upward trend in catastrophic losses (those with over \$25 million in associated claims) is partially responsible for the steep increase in claims since the mid-2000s.

However, despite having the worst year on record for catastrophic losses in 2016 of \$5.03 billion<sup>6</sup>, the P&C industry still recorded a “modest profit”<sup>7</sup>, reflecting the overall stability of the P&C industry. Looking forward, the industry is well positioned to respond to a disaster causing up to \$25 billion in claims (more than 6 times the total claim associated with the Fort McMurray fire), with only smaller, less secure companies falling to insolvency<sup>18</sup>.



**Figure 2: Net personal property claims incurred, all Canadian P&C insurers, 1993-2016<sup>6</sup>**

### Governance and Regulation

Table 4 provides a current overview of Canadian P&C insurance companies, including important considerations for the Basin context.

Type	# of Companies	Considerations	Population best served
Private	154 (Includes merged and subsidiary companies; Canadian and foreign)	<ul style="list-style-type: none"> <li>• Strong financial base reduces risk</li> <li>• Lower operational costs (average 20%)</li> <li>• Profit driven</li> <li>• Large client base necessitates less flexibility in service and policies</li> </ul>	Urban
Crown	3	n/a	Auto insurance
Mutual	85	<ul style="list-style-type: none"> <li>• 1 member = 1 vote</li> <li>• Higher knowledge of local conditions allows for more balanced view of risk</li> </ul>	Rural

		<ul style="list-style-type: none"> <li>• Smaller client base results in higher client care and service</li> <li>• Smaller financial base increases risk</li> <li>• Higher operational costs (average 30%-40%)</li> </ul>	
Cooperative	2-3	<ul style="list-style-type: none"> <li>• Stronger financial base reduces risk</li> <li>• 2<sup>nd</sup> tier co-op (voters are co-ops as opposed to individuals)</li> </ul>	Either urban or rural

**Table 4: Overview of insurance companies in Canada**

The Federal Insurance Companies Act and provincial Insurance Acts create rigorous regulations to both enter and exit the market. The Property and Casualty Insurance Compensation Corporation exists as a means to protect policyholders in the (rare) case a corporation becomes insolvent. From 1996-2015, 161 insurers exited the market, predominantly through voluntary or merger processes. Only 6 companies have left involuntarily which is defined as the regulators losing confidence in the company’s ability to pay future claims, based on a ratio of the cost of settling claims to the premiums charged<sup>19</sup>.

**SMALL & REGIONAL INSURANCE MODELS**

The small or regional insurance companies that exist in Canada are mutual companies. Table 5 provides an overview of mutual insurance companies operating in a similar context to the Basin.

	Age & Region	Job Creation	Gross premiums written (2016)	Other
PEI Mutual Insurance	1885 PEI	28 office employees + 16 agents across province	\$23 million	See spotlight (below)
Mutual Fire Insurance Company of British Columbia	1902 Fraser Valley with policies available in BC, AB, SK, MB, ON	59 employees	\$83 million	One of the largest mutual companies in Canada and one of few that serve policyholders outside of the originating province.
Clare Mutual Insurance	1937 Nova Scotia	14 employees	\$3 million	4,000 policies
Germania Mutual Insurance	1909 Langenburg, SK	3 permanent staff	\$3.9 million	
Fundy Mutual Insurance	1930s Sussex, NB	n/a	\$2 million	Amalgamating to reduce operational costs with Carleton Mutual in NB.

**Table 5: Overview of select regional mutual insurance companies in Canada**

Most mutual insurance companies were formed under similar circumstances as those the RDCK is concerned about for constituent homeowners; namely, a lack of competitively priced premiums or an inability to access services. Mutual companies began in agricultural and farming regions and were spurred into development often after a neighbour’s experience with hardship where

the community came together to assist. The youngest mutual insurance company in Canada is over 90 years old<sup>20</sup>, which speaks to the difficulties in both starting up and maintaining a mutual. A representative of the Canadian Association for Mutual Insurance Companies stressed that the primary start-up hurdle for any insurance company, rather than considerations related to operations or premiums, is accessing adequate reserve capital (generally between \$3 and \$5 million) to begin offering services<sup>20</sup>. This reserve, which is heavily regulated, is accessed for claims and developed based on ratios of potential claims and catastrophic loss scenarios<sup>19</sup>.

#### Spotlight: PEI Mutual

Serving an area with a total population of approximately 143,000, the PEI Mutual Insurance company may be a useful case study should the RDCK decide to further evaluate the feasibility of establishing a regional insurance provider. Frustrated by high premiums, Islanders established PEI Agricultural Mutual Fire Insurance in 1885. In 1899, non-farmers created a related company and in 1941, the two companies merged. PEI Mutual Insurance's portfolio includes policies for residential, tenant and seasonal clients, as well as farms, fishing boats and commercial properties. The company offers competitive rates and policy holders receive rebates which are applied to the next year's premiums. Average PEI home owners' insurance premiums in 2016 were \$462 compared to BC's \$673, a 47% difference.

A selection of indicators comparing PEI and the Kootenay Economic Region (which includes the Regional Districts of East Kootenay, Central Kootenay, and Kootenay Boundary) is provided in Table 6.

Indicator	PEI	Kootenay Economic Region
<b>Total population (2016)<sup>21</sup></b>	142,907	151,403
<b>Number of private dwellings (2016)<sup>21</sup></b>	71,119	83,244
<b>Median value of owned dwellings (2016)<sup>21</sup></b>	\$170,651	\$300,194
<b>Median household income (2015)<sup>21</sup></b>	\$61,163	\$63,721
<b>Value of building permits (\$M) (2016)</b>	\$219.2 <sup>22</sup>	\$284.8 <sup>23</sup>

**Table 6: Demographic and economic indicators for PEI and the Kootenay Economic Region**

### SUMMARY & RECOMMENDATIONS FOR ADDITIONAL RESEARCH

Changes in the insurance landscape specific to fires and rural areas have raised concerns over the affordability of P&C insurance for homeowners in the RDCK. The option to access affordable home insurance is a critical rural development issue, especially given the increasing risk of fire for populations living in the wildland-urban interface. Small Canadian regions have looked to the mutual insurance model in the past to overcome challenges related to insurance affordability and access. Overall, the P&C insurance industry displays strong economic stability as evidenced by its capacity to respond to significant catastrophic disasters. However, there are important barriers to entry for the insurance market—foremost being a need to raise significant reserve capital prior to start-up.

Due to limitations in scope, the following areas of research have not been addressed in this report, but could be valuable should the RDCK decide to further evaluate the feasibility of establishing a regional insurance provider:

- A review of key legislation and regulatory bodies,
- A review of alternative funding models (e.g., relief/subsidy funding)
- A GIS analysis of properties potentially affected by a shift in application of FUS policies (to help with determination of market size)
- A detailed analysis of data from the BC Fire Commissioner.

## APPENDIX A: FIRE INCIDENTS BY COLUMBIA BASIN STATION, 2010-2016

Station	Incidents	Total Loss	Injuries	Fatalities
BALFOUR/HARROP (NBH)	1	\$350,000	0	0
BAYNES LAKE (NBY)	5	\$114,000	0	0
BLEWETT (NLW)	1	\$0	0	0
CANYON LISTER (NCN)	2	\$414,913	0	0
CASTLEGAR (CCA)	82	\$3,666,703	6	0
CRANBROOK (CCR)	88	\$4,733,683	0	0
CRANBROOK (NCR) (Non Municipal w/ Fire Protection)	16	\$3,207,229	0	1
CRESCENT VALLEY (NCJ)	2	\$243,555	0	0
CRESTON (NCE)	53	\$867,324	3	1
CRESTON (TCR)	93	\$1,433,663	1	0
EDGEWATER (NED)	5	\$496,700	0	0
ELKFORD (DEL)	40	\$3,355,916	0	0
FAIRMONT HOT SPRINGS (NFH)	11	\$2,751,315	0	0
FAUQUIER (NFU)	1	\$1,360	0	0
FERNIE (CFE)	33	\$4,739,981	7	0
FERNIE (NFE) (Non Municipal w/ Fire Protection)	4	\$22,576	0	0
FIELD (NFI)	3	\$75,001	0	0
FRUITVALE (VFR)	10	\$221,309	3	0
GENELLE (NGE)	5	\$347,500	0	0
GOLDEN (TGO)	46	\$4,507,595	1	0
HOSMER (NHR)	1	\$35,000	0	0
INVERMERE (VIN)	24	\$17,228,400	1	0
JAFFRAY (NJY)	19	\$1,248,500	3	0
KASLO (NKS) (Non Municipal w/ Fire Protection)	1	\$70,668	0	0
KASLO (VKA)	3	\$318,496	1	0
KIMBERLEY (CKI)	41	\$3,195,920	0	1
KOOTENAY BOUNDARY (NKB)	26	\$4,673,150	0	0
MONTROSE (VMO)	6	\$255,000	1	0
NAKUSP (VNA)	32	\$289,800	0	0
NAKUSP RURAL (NNK)	15	\$496,250	0	0
NELSON (CNE)	142	\$2,908,398	4	0
NELSON (NND)	11	\$307,498	0	0
NEW DENVER (VND)	1	\$13,000	0	0
NICHOLSON (NNI)	16	\$1,443,450	1	0
OOTISHENIA (NOT)	2	\$6,300	0	0
PANORAMA (NPN)	3	\$37,431	0	0
PASSMORE (NPA)	4	\$57,053	0	0
RADIUM HOT SPRINGS (NRH) (Non Municipal w/ Fire Protection)	11	\$56,306	0	0
RADIUM HOT SPRINGS (VRS)	18	\$866,551	0	0

<b>ROSSLAND (CRO)</b>	21	\$1,671,500	5	0
<b>SALMO (NAM) (Non Municipal w/ Fire Protection)</b>	5	\$316,450	0	0
<b>SALMO (VSA)</b>	2	\$28,684	0	0
<b>SILVERTON (VSI)</b>	1	\$12,483	0	0
<b>SLOCAN (VSL)</b>	2	\$13,200	0	0
<b>SPARWOOD (DSD)</b>	19	\$402,013	0	0
<b>TARRY'S (NTY)</b>	3	\$115,000	0	0
<b>TRAIL (CTR)</b>	60	\$4,457,600	3	0
<b>WARFIELD (VWA)</b>	3	\$248,200	0	0
<b>WINDERMERE (NWI)</b>	16	\$2,143,221	0	0
<b>YMIR (NYM)</b>	4	\$200,000	0	0
<b>VALEMOUNT (VVA)</b>	4	\$11,557	0	0
<b>PROVINCIAL TOTAL</b>	47,555	\$2,008,171,587	1,534	197



---

## REFERENCES & RESOURCES

- <sup>1</sup> Fire Underwriters Survey. Dwelling Protection Grade. (n.d.). Available at: <http://www.fireunderwriters.ca/dwelling-protection-grade.html>
- <sup>2</sup> Office of the Fire Commissioner. Custom data. (2017).
- <sup>3</sup> Office of the Fire Commissioner. Annual Reports. (2017). Available at: <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/fire-safety/fire-reporting/annual-reports>
- <sup>4</sup> Boreen, D. Personal Communication. (2018). Regional District of East Kootenay. Elk Valley South Country Fire & Rescue Services.
- <sup>5</sup> The Institute for Catastrophic Loss Reduction. Telling the Weather Story. (2012). Available at: [http://assets.ibr.ca/Documents/Studies/McBean\\_Report.pdf](http://assets.ibr.ca/Documents/Studies/McBean_Report.pdf)
- <sup>6</sup> Insurance Bureau of Canada. Facts of the Property and Casualty Insurance Industry in Canada. (2017). Available at: [http://assets.ibr.ca/Documents/Facts%20Book/Facts\\_Book/2017/Fact-Book-2017.pdf](http://assets.ibr.ca/Documents/Facts%20Book/Facts_Book/2017/Fact-Book-2017.pdf)
- <sup>7</sup> McGillivray, G. 2016 Statistical Issue: Waiting to Exhale. (2016). Available at: <http://www.canadianunderwriter.ca/wp-content/uploads/2016/07/CU-DE-20160730-Statistical-Issue.pdf>
- <sup>8</sup> Insurance Bureau of Canada. British Columbia wildfires cause more than \$127 million in insured damage. (2017). Available at: <http://www.ibr.ca/bc/resources/media-centre/media-releases/british-columbia-wildfires-cause-more-than-127-million-in-insured-damage>
- <sup>9</sup> Mertz, E. Top 10 most costly disasters in Canadian history for insurers. (2016). Available at: <https://globalnews.ca/news/2810070/top-10-most-costly-disasters-in-canadian-history-for-insurers/> (Accessed: 13 December 2017)
- <sup>10</sup> MacDonald, T. State of the Basin 2016: Full Report. (2016). Available at: [http://www.cbrdi.ca/wp-content/uploads/SOTB\\_FullReport\\_Final\\_18Oct2017.pdf](http://www.cbrdi.ca/wp-content/uploads/SOTB_FullReport_Final_18Oct2017.pdf).
- <sup>11</sup> Currie, M.R. Fire insurance grading in Canada: A brief history of fire insurance and fire insurance grades. (n.d.). Available at: <http://www.fireunderwriters.ca/docs/articles/FFIC-2010-Feb-Making.The.Grade.pdf>
- <sup>12</sup> McGillivray, G. Personal communication (2017). The Institute for Catastrophic Loss Reduction.
- <sup>13</sup> McGillivray, G. Surviving the coming storm: Insurers using mitigation, adaptation tools to deal with climate change. (2016). Available at: [https://www.iclr.org/images/Coming\\_storm\\_Lawyers\\_Weekly\\_June\\_2016.pdf](https://www.iclr.org/images/Coming_storm_Lawyers_Weekly_June_2016.pdf) (Accessed 13 December 2017)
- <sup>14</sup> Baker, M. Natural Hazards and the Canadian Insurance Industry. (2002). Available at: [https://www.iclr.org/images/Natural\\_Hazards\\_and\\_the\\_Canadian\\_Insurance\\_Industry.pdf](https://www.iclr.org/images/Natural_Hazards_and_the_Canadian_Insurance_Industry.pdf)
- <sup>15</sup> Insurance Bureau of Canada. New study estimates future costs of climate change – Study builds case for infrastructure investment. (2015). Available at: <http://www.ibr.ca/nb/resources/media-centre/media-releases/new-study-estimates-future-costs-of-climate-change> (Accessed: 13 December 2017).

- 
- <sup>16</sup> Statistics Canada. Survey of Household Spending - Table 203-0025. (2017).
- <sup>17</sup> Statistics Canada. Survey of Household Spending – Table 203-0021. (2017).
- <sup>18</sup> Kelly, G. Why Insurers Fail: Natural Disasters and Catastrophes. (2016).  
<http://www.pacicc.ca/wp-content/uploads/2017/11/WIF-2016-Natural-Disasters-2016-Update.pdf>
- <sup>19</sup> Kelly, G. Why Insurers Fail: Exit strategies of P&C insurers in Canada. (2017). Available at:  
<http://www.pacicc.ca/wp-content/uploads/2017/11/WIF-2017-Exit-Strategies.pdf>
- <sup>20</sup> Lafreniere, N. Personal communication. (2017). Canadian Association for Mutual Insurance Companies.
- <sup>21</sup> Statistics Canada. Census Profile, 2016 Census. (2017).
- <sup>22</sup> Statistics Canada. Value of building permits, by province and territory (All permits). (2018)
- <sup>23</sup> BC Stats. British Columbia Building Permits: For Development Regions, Regional Districts and Communities By Type 2007-2017. (2017). Available at:  
<http://www.bcstats.gov.bc.ca/Files/d34b6809-451e-43f3-81b5-8cd9b8521b0c/BuildingPermitsbyRegionalDistrict.pdf>.

*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](http://www.cbrdi.ca) for more information.*