

Local Action, Collective Impact... 2020-2025 Labour Market Strategy for the Cariboo Chilcotin Region

Technical Report - FINAL

March 2020







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1. Introduction

This technical report has been formulated as a support document for the *Cariboo Chilcotin Regional Labour Market Strategy*. This project incorporated multiple inputs that validated the strategic directions and recommendations that are shared in the Strategic Plan, *Local Action, Collective Impact: A Labour Market Strategy for the Cariboo Chilcotin Region*.

Various scales of analysis have been used to assess the Region's existing labour market, demand projections, and anticipated labour market needs. Input has been gathered through data collection and engagement activities, specifically:

- Regional employer survey
- Jobseeker survey
- National Perceptions Survey of the Cariboo Chilcotin Region
- Education Roundtables
- Workforce planning ecosystem assessment
- Regional asset inventory and value proposition
- Supply and Demand Labour Projections
- Labour market supply/demand labour market intelligence
- Background document review and common themes matrix
- Regional Demographic profile
- Education pipeline and graduation rates

Key findings of these analyses have been highlighted in the strategy document and are integrated into its recommendations. This format supports readability and better serves to highlight key findings while offering greater analysis for those choosing to dig deeper in these appendices.



2. Input Summary Findings

2.1 Regional Employer Survey Results

A business survey was used to gather the insight and perspectives of local businesses across the Region. Targeted participation included urban and rural businesses and Indigenous businesses. Surveys were completed between July and October 2019, resulting in a total response of n=220. The survey was directed at private businesses and did not include non-profits, government offices, and school districts.

The methodology for survey completion utilized a multi-mode approach, including direct telephone outreach, on-line survey access, and in-person business interviews. This section presents the results and analysis of the survey's findings.

2.1.1 Employer Survey Results

Figure 1 shows that approximately two-thirds of the respondents represent locally owned, and operated businesses, 21% of businesses were externally owned and operated, and 15% were self-employed.

Figure 1: Which of the following best describes your business?

	Businesses	Percent
Self-Employed Business	34	15%
Locally Owned and Operated	140	64%
Externally Owned and Operated	46	21%
Total	220	100%

The urban municipalities of the Cariboo Chilcotin Region are highly represented in the business survey, with 87% of the respondents identifying their location as 100 Mile House, Williams Lake, and Quesnel (Figure 2). Twelve businesses were in rural areas of the Cariboo Chilcotin Region (including the District of Wells), five were self-identified as a part of a First Nations Community, and 11 responded *Other* to their location. For regional analysis of the business survey, we group the communities outside of 100 Mile House, Williams Lake, and Quesnel. We reference the grouped areas as the Non-Urban communities of the Cariboo Chilcotin Region. The business survey had 28 responses from businesses in the Non-Urban communities of the Region.



Figure 2: In what community is your business located?

		Busin esses	Percent
100 Mile House		60	27%
Williams Lake		62	28%
Quesnel		70	32%
	The rural area of the Region (Wells, Alexis Creek, Horsefly, Likely, etc.)	12	5%
Non-Urban	First Nations Community	5	2%
	Other	11	5%
	Non-Urban Total	28	12%
Total	Total	220	100%

In Figure 3, the respondents' self-classification of their industries is listed and sorted by proportion. In the Cariboo Chilcotin Region, *Retail trade* was the most common response (17%) followed by *Food Services* (9%), *Construction* (8%), *Forestry* (7%), and *Manufacturing* (7%). Figure 3 shows the distribution of businesses by industry and area within the Cariboo Chilcotin Region. Some businesses listed their industry as *Other* and described their industry in a text field — common self-descriptions in the *Other* category related to *waste disposal*, *automotive*, and *hospitality* businesses.

Figure 3: Which of the following best describes your (respondent) company's industry?

	100 Mile	Williams		Non-		
Response	House	Lake	Quesnel	Urban	Total	Percent
Total	60	62	70	28	220	100%
Retail Trade	14	7	10	6	37	17%
Food Services	8	7	4	0	19	9%
Construction	4	6	6	2	18	8%
Forestry	4	3	6	3	16	7%
Manufacturing	2	7	3	3	15	7%
Professional, Scientific, and Technical Services	3	1	5	2	11	5%
Health Care and Social Assistance	5	2	4	0	11	5%
Tourism, arts, culture and recreation	1	3	4	2	10	5%
Finance and Insurance	6	1	0	0	7	3%
Information/Technology	1	2	2	1	6	3%
Educational Services	1	2	2	1	6	3%
Transportation and Warehousing	1	2	3	0	6	3%
Real Estate and Rental and Leasing	1	2	2	0	5	2%
Other	9	14	14	7	44	20%



Respondents tended to rate highly the importance of skilled labour to their operations (Figure 4) with 79% selecting *Very Important* or *Important*, and 4% indicating *Not Important at All*. While a high proportion of the businesses in the Non-Urban communities of the Cariboo Chilcotin Region rated the importance of skilled workforce as *Very Important* at 46%, this proportion was relatively lower compared to 100 Mile House, Williams Lake, and Quesnel.

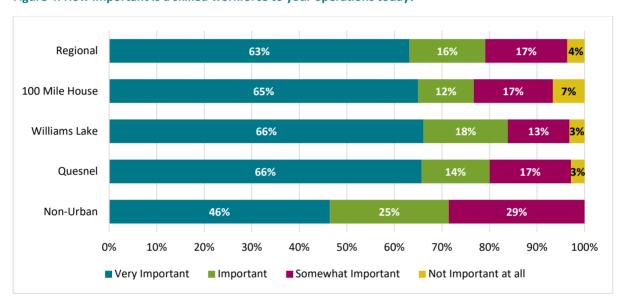


Figure 4: How important is a skilled workforce to your operations today?¹

Approximately 60% of businesses indicated skilled labour as being *Very Important* or *Somewhat Important* to their decision to locate, expand, and remain in the area (Figure 5). The lowest response frequency was *Not Important at All* (14%), indicating that access to skilled labour was an influencing factor to business location and retention. An unusually high proportion (40%) of businesses in 100 Mile House rated the importance of access to skilled labour as *Very Important* in their decision to locate, expand, or remain in the area. While a smaller proportion of the businesses in the Non-Urban areas of Cariboo Chilcotin Region rated this question as *Very Important*, a large proportion of these businesses listed the importance of access to skilled labour as at least *Somewhat Important* in their decision to locate, expand or remain in the area.

¹ Note: For the analysis of the business survey, 'Regional' refers to the full Cariboo Chilcotin Region.



Regional 30% 28% 14% 100 Mile House 40% 23% 15% Williams Lake 31% 31% 11% Quesnel 27% 17% Non-Urban 18% 43% 32% 0% 10% 20% 30% 50% 60% 70% 80% 100% 40% 90% ■ Very Important ■ Somewhat Important ■ Not very Important ■ Not Important at all

Figure 5: How important has access to available skilled labour in the Cariboo Chilcotin Region been to your decision to locate, expand, or remain in the area?

A Lack of Qualified Candidates was the most commonly cited barrier to recruitment, hiring, and retaining employees (Figure 6), with 74% of businesses selecting this response in the Cariboo Chilcotin Region. The businesses commonly cited this barrier across all areas of the Region. Drug and Alcohol Issues was another frequently listed difficulty in the Cariboo Chilcotin Region (33%), followed by Aging Workforce/Retirement (28%), Lack of Transportation (24%), and Lack of Childcare (23%). Comparatively, a smaller proportion of businesses in Quesnel and a higher proportion of businesses in the Non-Urban areas rated Lack of Transportation as a barrier. Drug and Alcohol Issues were also a less-cited barrier by Quesnel businesses, and businesses more often cited this barrier in the Non-Urban communities of the Region.



Figure 6: What barriers do you encounter in recruiting, hiring, and retaining employees?



Businesses in the Cariboo Chilcotin Region predominantly listed workers with *High School Education* or *College Diplomas* as the most integral to the need and ultimate success of their business with a response rate of 84% (Figure 7). Individuals with a *Bachelor's, Master's, Professional, or Doctoral Degree* were most integral, with 7% of respondents. In comparison, 9% responded that individuals with *Less Than a High School Education* were the most integral to their operations. In the Region, a relatively higher proportion of businesses in Quesnel responded that workers with a *College Diploma* were best suited to the needs and ultimate success of their business (40%). In the Non-Urban areas of the Cariboo Chilcotin Region, a high proportion of businesses responded that a *High School Diploma* was the level of education best suited to their businesses.

Figure 7: Which level of education is best suited to the needs and ultimate success of your business?

Response	100 Mile House	Williams Lake	Quesnel	Non- Urban	Regional
Less than High School	8%	8%	10%	11%	9%
High School Education	58%	55%	43%	61%	53%
College (including Apprenticeship/Vocational training)	27%	29%	40%	25%	31%
Bachelor's Degree	2%	5%	1%	4%	3%
Master's Degree	2%	0%	0%	0%	0%
Professional Degree	2%	2%	3%	0%	2%
Doctoral Degree	2%	2%	3%	0%	2%
Total	100%	100%	100%	100%	100%

In the Cariboo Chilcotin Region, 65% of businesses responded that they were planning to hire new employees in the next 12 months. A relatively high proportion of businesses in 100 Mile House and Williams Lake indicated that they were planning on hiring in the next 12 months, at 70% and 68%, respectively.



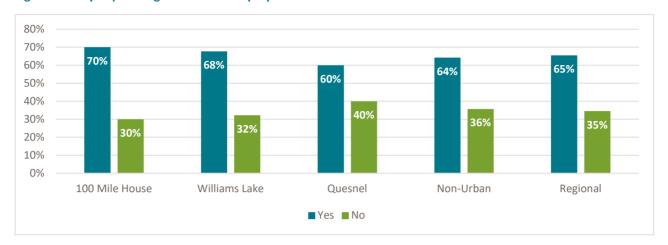
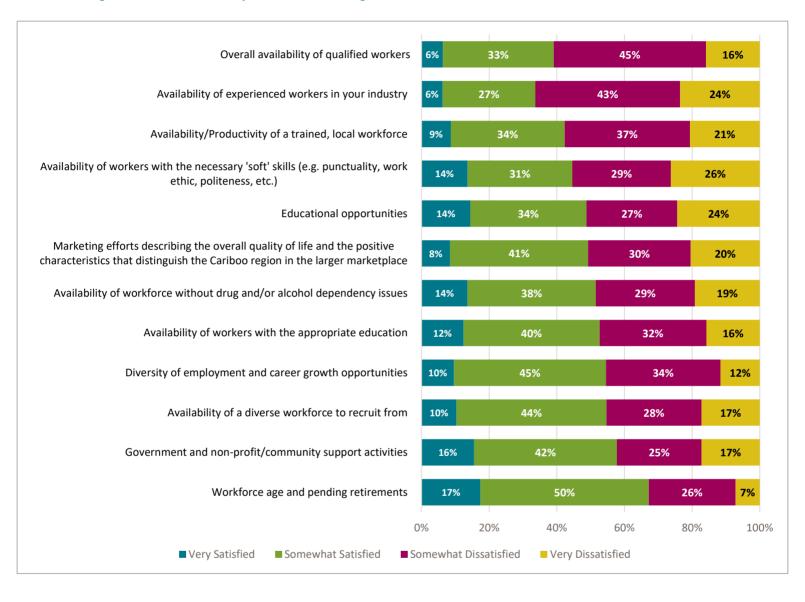


Figure 8: Are you planning to hire new employees in the next 12 months

Figure 9 reflects the respondents' level of satisfaction with various workforce characteristics in the Cariboo Chilcotin Region. *The Availability of Experienced Workers in Your Industry* and *Availability/Productivity of Trained, Local Workforce*, were the two areas that showed the most significant room for improvement among businesses' ratings, in terms of the percentage of respondents that replied with these answers. They were somewhat or very dissatisfied with these labour force attributes. The *Availability of Workers with the Necessary Soft Skills* was the questionnaire item with the highest proportion of individuals *Very Dissatisfied*. Respondents had a relatively high ranking of satisfaction on *Workforce Age and Pending Retirements* and *Government and Non-Profit/Community Support Activities*.



Figure 9: How Satisfied are you with the following?





In a ranking of the most commonly-used methods to recruit talent, *Word of Mouth* was the most frequent response by businesses, with 80% choosing this option (Figure 10). *Online Job Boards, Social Media,* and *Staff Referrals* were also commonly chosen options, all at around 60% of businesses.

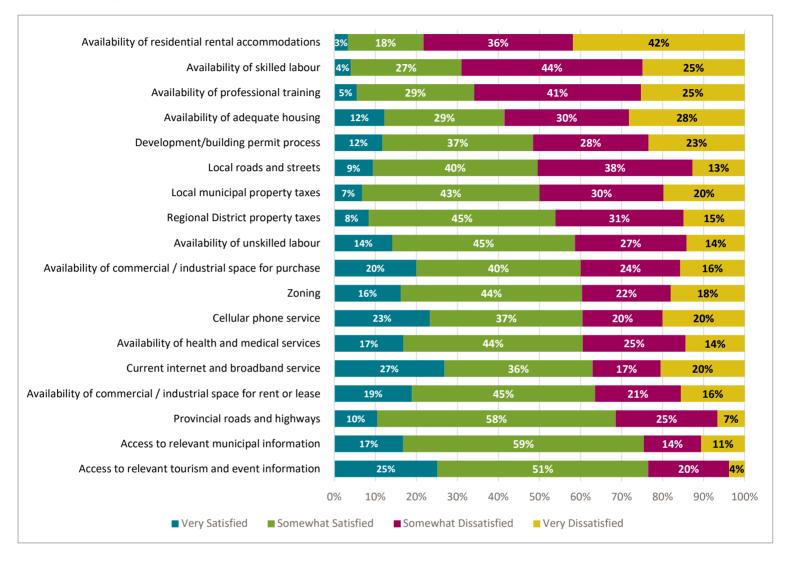
Figure 10: What methods do you use to recruit talent?

Responses	Percent
Word of Mouth	80%
Online Job Boards (Indeed, etc.)	60%
Social media (website, Facebook)	60%
Staff Referrals	59%
Newspaper/print	34%
Recruitment service	21%
Job fairs	15%
LinkedIn	13%

In their ratings of satisfaction with various policy or planning areas, businesses gave Access to Relevant Tourism and Event Information, Provincial Roads and Highways, and Access to Relevant Municipal Information relatively high ratings (Figure 11). The areas with the most room for improvement were Availability of Residential Rental Accommodations, Availability of Skilled Labour, and Availability of Professional Training.



Figure 11: How satisfied are you with the following policy or planning areas as they pertain to the health of your business?

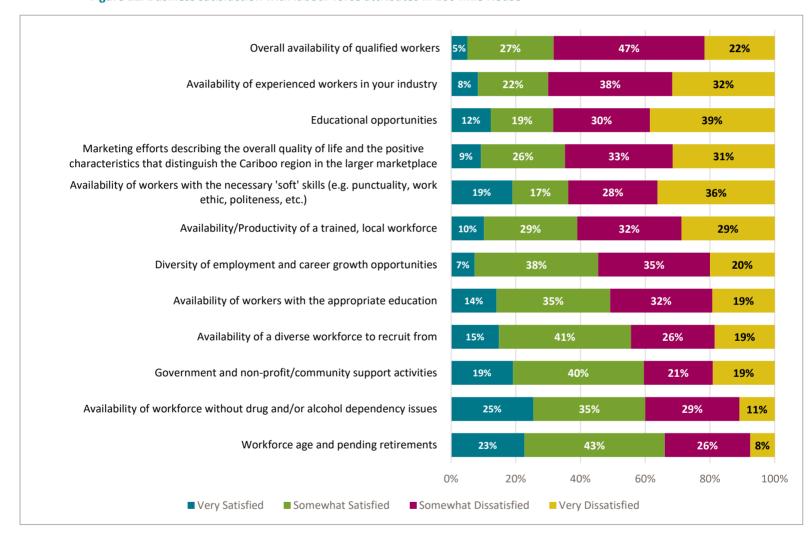




2.1.2 100 Mile House Business Survey Responses

In 100 Mile House, 60 businesses completed the survey, and the lowest-ranked levels of satisfaction among the labour force attributes were the *Availability of Experienced Workers in Your Industry* and the *Educational Opportunities* (Figure 12). Businesses in 100 Mile House responded with relatively high levels of satisfaction with the *Availability of Workforce Without Drug and Alcohol Dependency Issues* and the *Workforce Age and Pending Retirements*.

Figure 12: Business satisfaction with labour force attributes in 100 Mile House



The responses from businesses in 100 Mile House to nine open-ended questions about the labour force are grouped into key themes in Figure 13. Businesses mentioned a wide array of skilled trades as challenging to hire and retain, as well as drivers and machine operators. Healthcare professionals and hospitality staff were also listed both as highly relevant to businesses/operations and difficult to recruit and retain. In 100 Mile House and across most of the Cariboo Chilcotin Region, there was a standard business perception that it is difficult to find highly engaged workers in the area. Businesses mentioned a diverse list of solutions they had used to overcome recruitment and retention difficulties, including



increased training internally, recruiting from outside the area, and using remote/virtual help where possible. Similar to businesses in the other communities of the Cariboo Chilcotin Region, 100 Mile House businesses identified language as a barrier to recruiting and retaining immigrant talent, as well as immigration logistics and the availability of opportunities for recruits' families. Businesses hoped that this strategy would result in increased education and training programs in the area, a higher level of skilled and engaged workers in the area, and a solution to the lower labour supply caused by the ageing workforce.

Figure 13: Business perceptions of the labour force in 100 Mile House

Question	Key Themes
Are there any specific skills, knowledge, and/or abilities that you find difficult to hire or retain?	 Skilled Trades Health care professionals Prior experience and workplace engagement Drivers and machine operators
Which occupations/positions do you expect you will most likely require in the next two years?	 Skilled trades Cashiers/receptionists/cleaners/servers Health care professionals Drivers Forest technicians/log builders
Which occupations have traditionally been the most critical to your operations?	 Health care professionals Administrative/financial staff Hospitality staff Labourers and machine operators
Which occupations have been the most difficult to fill or retain?	 Housekeepers Skilled trades (building, plumbing, electrical) Labourers Health care professionals Machine operators and drivers
What solutions has your business created or identified to overcome any recruitment and retention barriers?	 Recruit from outside the Region Employment incentives (benefits, flexible work hours, etc.) Train internally Remote/virtual help
What, if any, specific educational or certification programs or training would you like to see be made available in the Cariboo Chilcotin Region to support the future growth of your business?	 Culinary/food handling/hospitality Soft skills Trades programs Driver training



Question	Key Themes
If you recruit immigrant talent, what are the	Rural living barriers
top three challenges or barriers to retaining	 Opportunities for families
them in the Region?	 Immigration logistics
	Language
What is the most important labour force	Lack of skilled workers
issue that must be addressed through this	 Lack of post-secondary training
strategy?	 Workplace engagement and soft skills
	Ageing workforce
What changes would you most want to see	Stabilize forestry industry
that would help improve the success of your	 Expand voting borders
business?	 Reduce tax/ business burdens
	 Support for training costs
	Rural living allowances
	Promote a more diverse industry
	 Infrastructure

Businesses in 100 Mile House highly rated their levels of satisfaction with *Access to Tourism and Event Information*, *Provincial Roads and Highways*, and *Access to Municipal Information* (Figure 14). A high proportion of businesses felt that there was room for improvement in 100 Mile House in the *Availability of Residential Rental Accommodations*, the *Availability of Professional Training*, and the *Availability of Skilled Labour*.



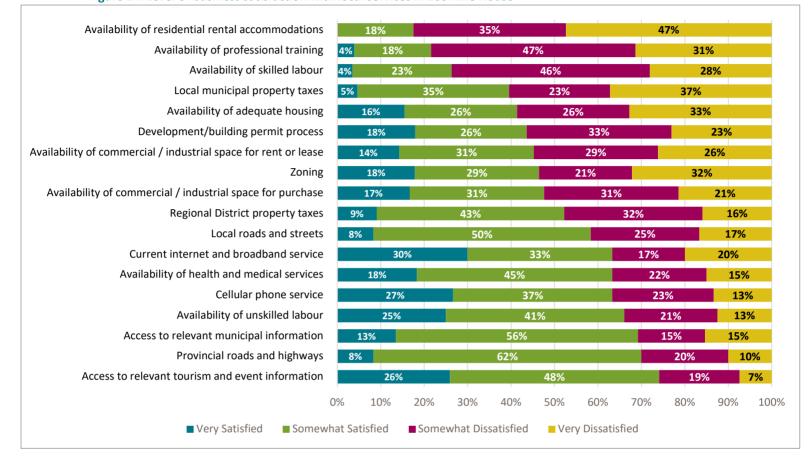


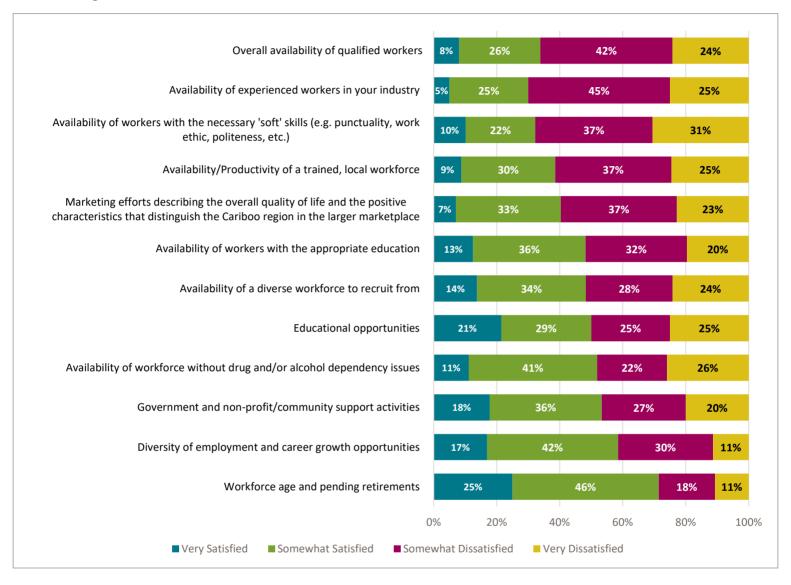
Figure 14: Level of business satisfaction with local services in 100 Mile House

2.1.3 Williams Lake Business Survey Responses

In Williams Lake, 62 businesses completed the survey, and these businesses highly rated their level of satisfaction with the Workforce Age and Pending Retirements, Diversity of Employment and Career Growth Opportunities, and Government and Non-Profit Support Activities (Figure 15). A high proportion of businesses in Williams Lake responded that there was room for improvement in the Availability of Experienced Workers in [Their] Industry, the Availability of Workers with the Necessary Soft Skills, and the Availability/Productivity of a Trained, Local Workforce.



Figure 15: Business satisfaction with labour force attributes in Williams Lake



In the critical themes identified in businesses' perceptions of the labour force (Figure 16), similar to other areas, a diverse array of skilled trades, as well as drivers and labourers, were identified as both highly required and difficult to hire and retain in the area. Williams Lake businesses also identified workers with computer skills as challenging to hire and retain. In their descriptions of the occupations and positions that they will most likely require in the next two years, bookkeepers/administrative staff and hospitality workers were mentioned by many Williams Lake businesses. Logging/woodworkers, truck drivers, and journeymen/electricians/welders were often cited as traditionally most important to Williams Lake businesses' operations. Similar to businesses in the other areas of the Cariboo Chilcotin Region, Williams Lake businesses mentioned that they have been offering increased employee benefits, internal training, and recruiting from outside of the Region as solutions to their recruitment and retention barriers. Some



Williams Lake businesses also mentioned that they offer relocation incentives for the external workers they recruit. Businesses in this area stated that trades, hospitality, driver, and soft skills training opportunities could be potentially beneficial to the area. For the future of the area, Williams Lake businesses would like to see the introduction of government-led relocation incentives, more education options, the diversification of the economy in the area, and a strategy to deal with local drug and alcohol problems.

Figure 16: Business perceptions about the labour force in Williams Lake

Question	Themes
Are there any specific skills, knowledge, and/or abilities that you find difficult to hire or retain?	 Skilled trades Workplace engagement and soft skills Education Computer skills Drivers
Which occupations/positions do you expect you will most likely require?	 Labourers Drivers/operators Bookkeepers/administration Hospitality workers Skilled trades
Which occupations have traditionally been the most critical to your operations?	 Chefs/ kitchen staff Supervisors/managers Truck drivers Journeymen/electricians/welders Logging/woodworkers
Which occupations have been the most difficult to fill or retain?	Journeymen/mechanics/carpentersElectriciansCooks/kitchen staff
What solutions has your business created or identified to overcome any recruitment and retention barriers?	 Employment incentives (flexibility, benefits, profit sharing, etc.) External sourcing of employees Relocation allowances In-house training
What, if any, specific educational or certification programs or training would you like to see be made available in the Cariboo Chilcotin Region to support the future growth of your business?	 Soft skills training Trades training Driver training Cook and food handling

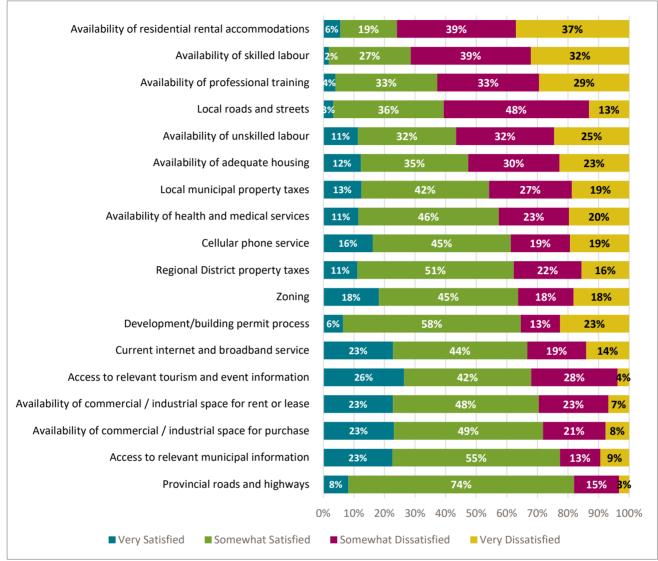


Question	Themes
If you recruit immigrant talent, what are the top three challenges or barriers to retaining them in the Region?	 Rural living challenges Language Lack of educational advancement opportunities Living accommodations
What is the most important labour force issue that must be addressed through this strategy?	 Relocation incentives Better educational opportunities Soft skills and workplace engagement Drugs and alcohol
What changes would you most want to see that would help improve the success of your business?	 Further educational opportunities Diversify industry Transportation infrastructure Construction subsidies

Williams Lake businesses had high levels of satisfaction with the *Provincial Roads and Highways*, *Access to Relevant Municipal Information* and the *Availability of Commercial/Industrial Space for Rent, Lease or Purchase*. A high proportion of businesses in Williams Lake indicated that there was room for improvement in their level of satisfaction with the *Availability of Residential Rental Accommodations*, the *Availability of Skilled Labour*, and the *Availability of Professional Training Opportunities*.



Figure 17: Level of business satisfaction with local services in Williams Lake

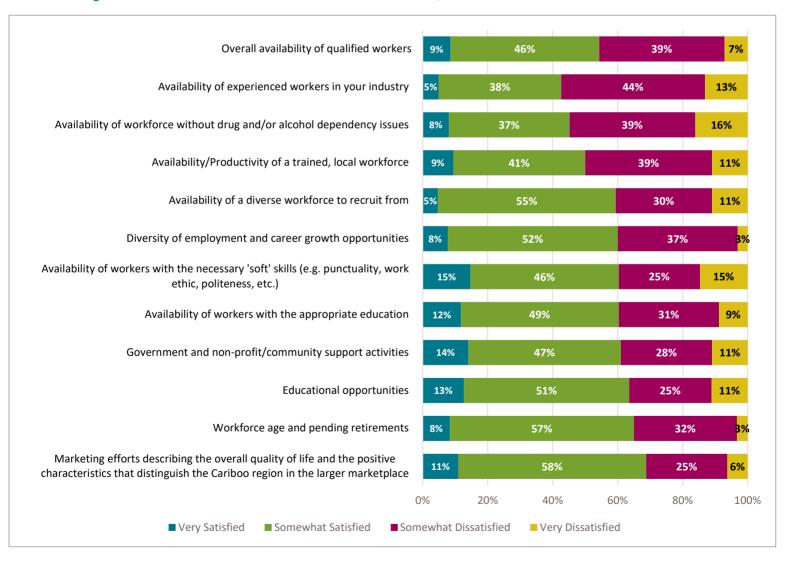




2.1.4 Quesnel Business Survey Responses

The 70 businesses in Quesnel who completed the survey had high levels of satisfaction with most labour force characteristics compared to the other communities of the Cariboo Chilcotin Region (Figure 18). Businesses had particularly high levels of satisfaction with the *Marketing Efforts Describing the Quality of Life* and *Positive Characteristics that Distinguish the Cariboo Chilcotin Region*, the *Workforce Age, and Pending Retirements*, and the *Educational Opportunities* in the area. In Quesnel, businesses had the lowest levels of satisfaction with the *Availability of Experienced Workers in [Their] Industry, the Availability of Workforce Without Drug and Alcohol Dependency Issues*, and the *Availability/Productivity of a Trained, Local Workforce*.

Figure 18: Business satisfaction with labour force attributes in Quesnel





Quesnel businesses discussed many similar themes in their responses to the open-ended questions about their perceptions of the labour force as the businesses in the other parts of the Cariboo Chilcotin Region (Figure 19). Skilled tradespeople, drivers, and hospitality workers were all listed as highly required positions and also as difficult positions to recruit and retain. Businesses in Quesnel also mentioned that Sales workers, Mechanical/Automotive technicians, and Administrative staff were challenging to hire and retain in the area. Similar to other parts of the Region, Forestry and Agricultural professions were listed as occupations that have been traditionally most critical to businesses' operations. Some techniques that businesses in Quesnel have been using to address their recruiting and retention difficulties include increased job advertising, increased training/benefits, internal training, and partnerships with educational institutions. The businesses in the area responded that they would like to see more trades programs in the area as well as business/administrative/marketing programs, educator training, forestry/agricultural programs. They listed similar challenges to immigrant talent recruiting to the other communities in the Cariboo Chilcotin Region. These include language, remoteness/culture shock, and administrative difficulties for immigrants. When asked about the most crucial labour force issues, businesses listed a higher availability of educational programs, more recruitment of medical professionals, and lowering the drug and alcohol problems in the area. Businesses were hopeful to see more economic diversification, fewer government barriers for business, and new incentives for workers to locate in the area as a product of this strategy.

Figure 19: Business perceptions about the labour force in Quesnel

Question	Themes
Are there any specific skills, knowledge, and/or abilities that you find difficult to hire or retain?	 Skilled trades Sales Mechanical/automotive Driver training
Which occupations/positions do you expect you will most likely require?	HousekeepingSales associatesAdministrative staffHospitality
Which occupations have traditionally been the most critical to your operations?	 Skilled trades Bookkeeper/administrative Sales staff Agricultural/forestry
Which occupations have been the most difficult to fill or retain?	MechanicsEducational staffCooks/brewmastersAdministration
What solutions has your business created or identified to overcome any recruitment and retention barriers?	 Increased advertising Increasing employee benefits Internal training Education partnerships

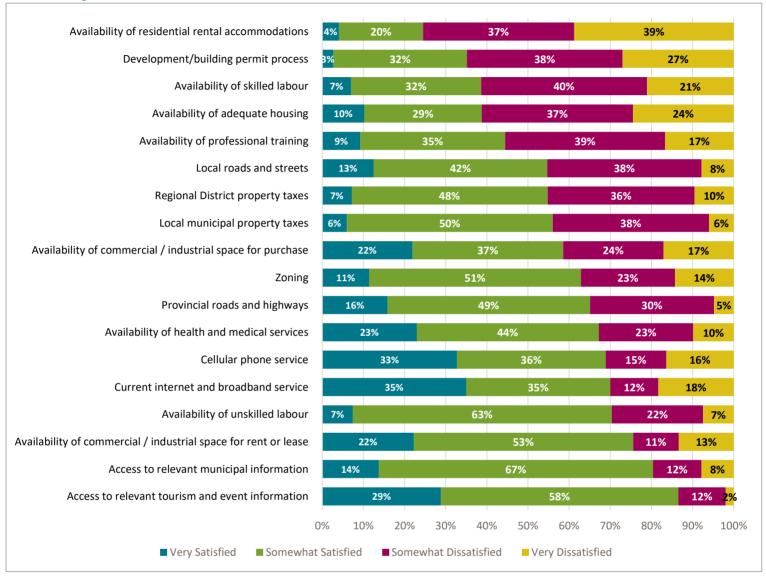


Question Themes	
What, if any, specific educational or certification programs or training would you like to see be made available in the Cariboo Chilcotin Region to support the future growth of your business?	 Trades training Marketing/sales Business administrative Educator training Agricultural and forestry courses
If you recruit immigrant talent, what are the top three challenges or barriers to retaining them in the Region?	Language barriersRural challengesHousingLicensing
What is the most important labour force issue that must be addressed through this strategy?	 Recruiting medical professionals Training soft/business skills Drug and alcohol problems in the workforce Better training programs
What changes would you most want to see that would help improve the success of your business?	 Relocation incentives More local educational training Better housing availability Fewer government barriers for business Economic diversification

Similar to the other communities of the Cariboo Chilcotin Region, Quesnel businesses had the highest levels of satisfaction with *Access to Relevant Tourism and Event Information*, *Access to Relevant Municipal Information*, and the *Availability of Commercial/Industrial Space for Rent or Lease*. Quesnel businesses gave a relatively low rating of their satisfaction with the *Availability of Residential Rental Accommodations*, the *Development/Building Permit Process*, and the *Availability of Skilled Labour*.



Figure 20: Level of business satisfaction with local services in Quesnel





2.1.5 Non-Urban Business Survey Responses

The 28 businesses that responded to the survey in the Non-Urban communities of the Cariboo Chilcotin Region had the highest levels of satisfaction with the *Workforce Age and Pending Retirements, Availability of a Diverse Workforce to Recruit From,* and *Government and Non-Profit/Community Supports* (Figure 21). Businesses in the Non-Urban communities expressed relatively lower levels of satisfaction with the *Availability of Experienced Workers in Your Industry,* the *Availability/Productivity of a Trained, Local Workforce,* and local *Educational Opportunities.*

Overall availability of qualified workers 29% 64% Availability of experienced workers in your industry 22% 26% Availability/Productivity of a trained, local workforce 36% 43% 18% **Educational opportunities** 8% 40% 28% 24% Availability of workforce without drug and/or alcohol dependency 41% 22% 30% issues Marketing efforts describing the overall quality of life and the 46% 23% 27% positive characteristics that distinguish the Cariboo region in the... Availability of workers with the necessary 'soft' skills (e.g. punctuality, 25% 25% work ethic, politeness, etc.) Availability of workers with the appropriate education 39% 32% 18% Diversity of employment and career growth opportunities 48% 32% 16% Government and non-profit/community support activities 46% 21% 25% Availability of a diverse workforce to recruit from 48% 30% 15% Workforce age and pending retirements 12% 54% 27% 8% 50% 60% 70% 80% 90% 100% 10% 20% 30% 40% ■ Verv Satisfied ■ Somewhat Satisfied ■ Somewhat Dissatisfied Very Dissatisfied

Figure 21: Business satisfaction with labour force attributes in the Non-Urban communities

In the Non-Urban communities of the Cariboo Chilcotin Region, drivers/operators, labourers and housekeepers/hospitality workers were listed as essential occupations for businesses' operations that are hard to recruit and retain. Businesses in these communities also listed telecommunications skills, computer skills, and administration/receptionist skills as challenging to hire and/or retain. A high proportion of businesses in the Non-Urban areas listed logging/silviculture/agricultural occupations as essential and challenging to retain as well. Businesses in these communities listed increased work flexibility, internal marketing, and on-the-job training as ways they were adapting to their recruitment and retention difficulties. The businesses in the Non-Urban communities responded that they would like



to see educational programs around forestry, computer skills, driver/machine operator training, and trades courses. Similar to the other communities in Cariboo Chilcotin Region, language barriers, culture shock, and government processes were commonly mentioned as challenges to recruiting immigrant talent. When asked about future priorities, businesses in the Non-Urban communities were hopeful to see more economic diversification, a stabilizing of the forestry industry, improvement in local educational opportunities, better transportation, and a better supply of skilled labour.

Figure 22: Business perception about the labour force in the Non-Urban communities

Question	Themes
Are there any specific skills, knowledge, and/or abilities that you find difficult to hire or retain?	 Drivers/operators General office skills Telecommunications skills Computer skills Labourers/physical fitness
Which occupations/positions do you expect you will most likely require?	 Labourers Drivers/operators Sales Reception Housekeeping
Which occupations have traditionally been the most critical to your operations?	 Labourers Bakers/cooks Drivers/operators Health care professionals Log builders
Which occupations have been the most difficult to fill or retain?	 Forestry workers/log builders/silviculture expertise Tradespeople Drivers/equipment operators Managers
What solutions has your business created or identified to overcome any recruitment and retention barriers?	 Work flexibility/employee benefits Internal marketing On-the-job training
What, if any, specific educational or certification programs or training would you like to see be made available in the Cariboo Chilcotin Region to support the future growth of your business?	 Forest technician/log building Trades courses Computer skills Driving certification/machine operator licenses
If you recruit immigrant talent, what are the top three challenges or barriers to retaining them in the Region?	Language barriersCultural shock/rural living barriersGovernment processes

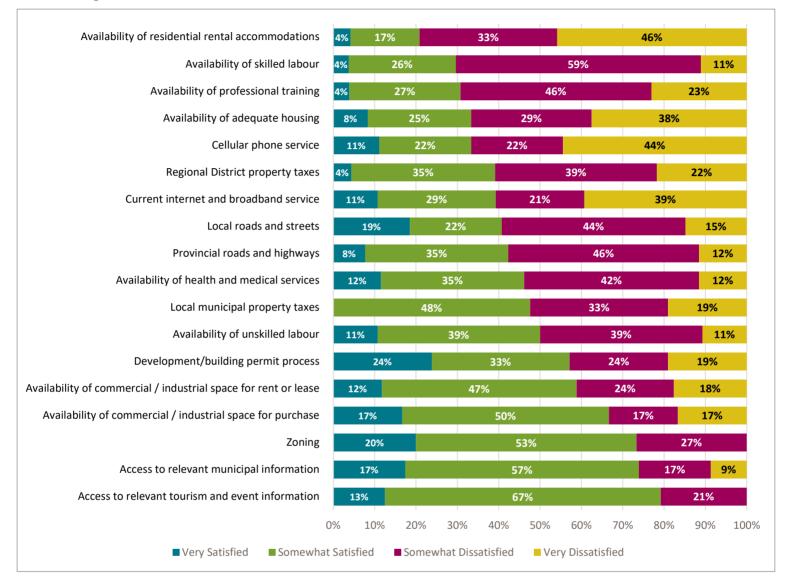


Question	Themes
What is the most important labour force issue that must be addressed through this strategy?	 Lack of post-secondary/ training options in rural areas Workforce health Marketing the area Better supply of skilled labour
What changes would you most want to see that would help improve the success of your business?	 Stabilize forestry industry Better educational and training options Improved transportation and road maintenance Economic diversification

Similar to other communities in the Cariboo Chilcotin Region, businesses in the Non-Urban communities rated their level of satisfaction with *Access to Relevant Tourism and Event Information* and *Access to Relevant Municipal Information* highly. Businesses in the Non-Urban communities were also relatively highly satisfied with *Local Zoning*. In the Non-Urban communities, Businesses had lower levels of satisfaction with the *Availability of Residential Rental Accommodations*, the *Availability of Skilled Labour*, and the *Availability of Professional Training*.



Figure 23: Level of business satisfaction with local services in the Non-Urban areas





2.2 Job Seeker Survey Results

The Job Seeker survey received 191 responses from individuals across the Region using an online survey format. The respondents were from diverse economic, demographic, and occupational backgrounds. Figure 24 shows that respondents worked in fields such as *Cashiers/Helpers/Labourers*, *Professionals*, and *Skilled Trades*, among others. Figure 24 included the listed occupations and allowed for an open-ended *other* response, to which subjects noted occupations like social services workers, drivers, and self-employed. Approximately half of the respondents had lived in the Cariboo Chilcotin Region for more than 20 years. Still, there is also a relatively high proportion that had moved to the Region in the previous five years (Figure 25). A large proportion of the respondents were above the age of 35, indicating that middle-aged workers were the most likely to fill out the survey (Figure 26). However, there is still a good representation of young adults in the sample.

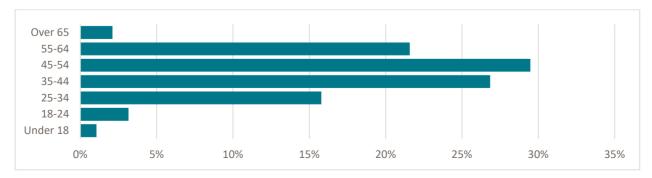
Figure 24: How would you classify your current/ most recent job?

Field	Percent
Cashier/ Helper/ Labourer	19%
Professional	15%
Skilled Trade	15%
Management	8%
Sales/ Service	7%
Clerical/ Administrative	7%
Machine Operator/ Assembly	5%
Technical	5%
Other*	19%

Figure 25: How long have you lived in the Cariboo Chilcotin Region?

	Percent
Fewer than five years	23%
5-9 years	8%
10-14 years	15%
15-19 years	6%
Over 20 years	48%

Figure 26: Age demographics





The individuals in the survey had varying levels of education (Figure 27). While the highest proportion of individuals had either a high school diploma or some college, most education levels were represented in the sample.

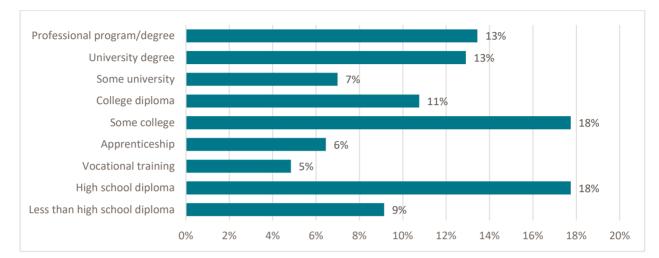


Figure 27: What level of educational attainment do you have?

Figure 28 shows that over 29% of the respondents earned greater than \$30 per hour, while the remaining respondents were somewhat evenly split between the lower wage categories. A relatively small proportion of individuals (7%) reported hourly wages of less than \$12.70 per hour. This likely represents those in the food and beverage/server occupations.

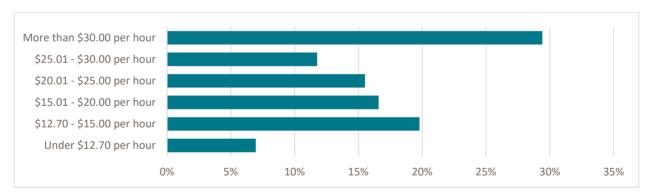
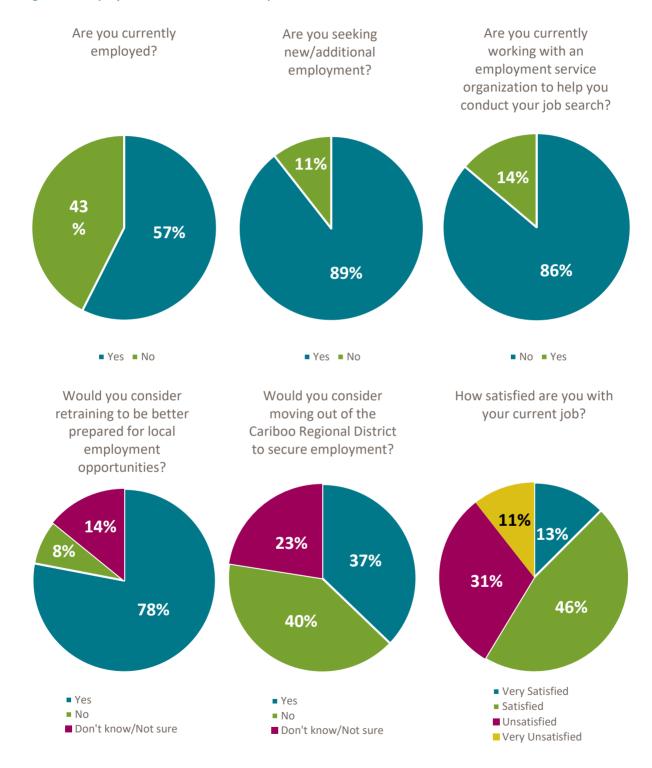


Figure 28: What is the average hourly wage you earn in your current/ most recent job?

Figure 29 paints a picture of the employment status and preferences of the job seekers in the Cariboo Chilcotin Region. Approximately 57% reported being employed at the time of the survey. 89% of all respondents noted that they are currently seeking new/additional employment. 42% of respondents were either *Unsatisfied* or *Very Unsatisfied* with their current job. 78% of respondents acknowledged that they would consider retraining to be better prepared for local opportunities; 14% responded that they are currently working with an employment service organization to help them conduct their search. Finally, the majority of respondents were unsure or stated *No* to reflect their willingness to relocate out of the Cariboo Chilcotin Region to secure employment.



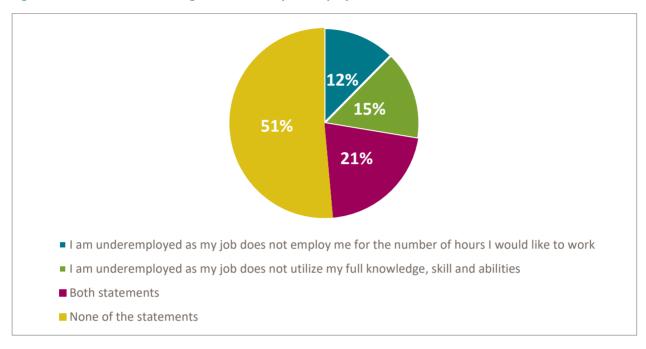
Figure 29: Employment circumstances of respondents





Nearly half of the respondents indicated that their current job either did not give them enough hours, did not fully utilize their knowledge/skills/abilities, or both (Figure 30).

Figure 30: Which of the following best describes your employment?



Majority of respondents indicated that they were job-ready (76%), while approximately 10% stated they either needed to upgrade their skills/knowledge or experience.

Figure 31: Do you consider yourself 'job-ready'? In other words, do you feel that you could currently 'step-in' to a job and be productive?

	Percent
Yes	76%
I'm not sure	11%
No, need to upgrade my current skills and knowledge	7%
No, need to gain more experience	3%
No, have other commitments to attend to at this time	2%



Respondents also rated various job-related services and qualities in the Cariboo Chilcotin Region. Figure 32 reflects that 61% of respondents identified a need for improvement in employment assistance services, while 73% identified the availability of educational programming as being *Poor* to *Fair*. Additionally, 76% rated high-quality jobs in their field as being *Poor* to *Fair*.

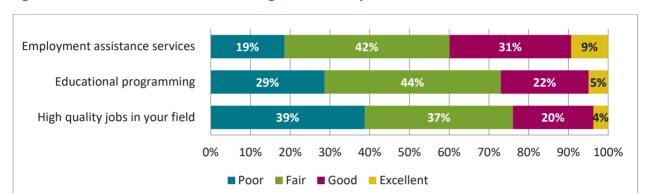


Figure 32: Please rate the Cariboo Chilcotin Region's availability...

When asked to identify factors hindering them from getting a job/ better job in the Cariboo Chilcotin Region, respondents rated A Lack of Suitable Job Opportunities as the most significant factor (Figure 33). A Lack of Adequately Paying Jobs followed closely, as 76% of respondents rated this as a significant factor affecting their ability to find employment. Respondents were divided on A Lack of Accessibility to Relevant Training/Education, with 41% rating this as a significant factor or somewhat of a factor and 40% rating this as not a factor at all. The lower negative ratings of My Gender Identity, Cultural/Language Issues, and A Lack of Literacy Skills suggested that these could be considered strengths of the education and inclusiveness of the Cariboo Chilcotin Region.

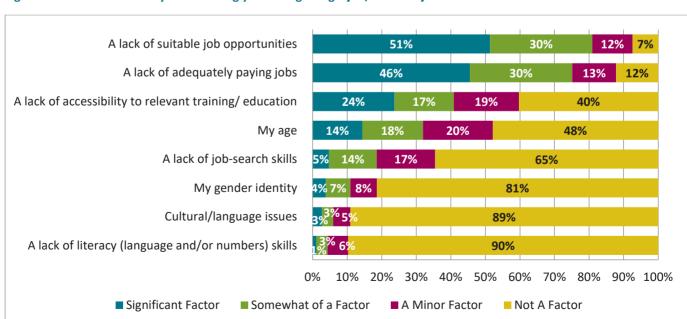


Figure 33: Which factors may be hindering you from getting a job/ a better job?



Respondents provided insight regarding the information sources they used to find employment opportunities. While individuals used a wide array of sources to search for jobs, *Word-of-Mouth* and *Online Job Boards* were the most commonly selected options (Figure 34).

Figure 34: Which of the following methods have you used when looking for a job?

	Percent
Word of mouth	81%
On-line job boards (Indeed, Workopolis, etc.)	80%
Employer websites	68%
Social media (Facebook Twitter, LinkedIn, Kijiji, etc.)	67%
Local employment agencies	63%
Advertising - newspaper	53%
Job fairs/career fairs	35%
Head-hunters, professional recruiters	17%

To make decisions about the types of jobs they were seeking, the most frequent options selected by the respondents were *Job Description Information*, *Wage Rates/Benefits*, and *Employer Websites* (Figure 35).

Figure 35: What kinds of information, tools, or services do you typically use in making decisions about the type of job you are seeking?

	Percent
Job description information/occupational and skill profiles	77%
Wage rates and benefits	71%
Employer websites	68%
Job/résumé banks	54%
Licensing/credential requirements	34%
Employer databases/links	28%
Training institutions for specific occupations	20%
Occupational shortages and surpluses	19%
Employer recruiting practices	16%
Legal requirements/labour code information	14%
Hiring special employee groups (e.g., employment equity groups, foreign workers)	7%



Figure 36 shows that Local Employment Support Organizations and *Federal/Provincial Government Websites/Publications* were the most common places to find the job-related information being sought.

Figure 36: Where did you find the information you were looking for?

	Percent
Local employment support organizations	42%
Federal government website/publication, such as Business Service Centres, JobFutures, HRDC, Industry Canada, Service Can	40%
Provincial government website/publication	36%
Colleagues	33%
Professional association/union/employee association	27%
Educational institution	20%
Local business associations	16%
Sector council/industry association	13%
Equipment suppliers	6%
Private consulting firm	4%

Figure 37 reflects that *Occupational Shortages and Surpluses* were the most common source of information that individuals were not able to find in the Cariboo Chilcotin Region, which speaks to the need for good labour market information and data. *Wages and Benefits* were the second most common source of information that individuals were challenged to find.

Figure 37: What type of information, tools, or services were you looking for that you couldn't find?

	Percent
Occupational shortages and surpluses in the Cariboo Chilcotin Region	35%
Wage rates and benefits	32%
Job/résumé banks targeting the Cariboo Chilcotin Region	27%
Training institutions for specific occupations	22%
Employer recruiting practices	19%
Job description information/occupational and skill profiles	17%
Availability of workers	13%
Employer websites	13%
Licensing and credential requirements	12%
Employer databases/links	9%
Hiring special employee groups (e.g., employment equity groups, foreign workers)	8%
Legal requirements/labour code information	8%



When considering the assistance that individuals would need to achieve their full employment potential, *Access to Opportunities* was listed by 60% of respondents (Figure 38). *Retraining Programs* and *Career/Employment Counselling* were also listed frequently at 51% and 30%, respectively. These services represent potential avenues for policies and programs to support job seekers in the Cariboo Chilcotin Region.

Figure 38: What assistance do you need to achieve your full employment potential?

	Percent
Access to opportunities	60%
Retraining programs	51%
Career/employment counseling	30%
Jobseeker assistance	22%
Access to labour market information	18%

2.3 Education Roundtable Key Findings

Education roundtable sessions were held in Quesnel and Williams Lake in October 2019 to gather the perspectives of the education and training sector representatives on the labour market situation in the Region, and to brainstorm opportunities for solutions to strengthen labour market alignment and talent development. The key themes that emerged from those sessions were as follows:

There is a need for better Labour Market Information & intelligence: Throughout discussions, the need for better labour market information was identified. It was noted that post-secondary institutions review program offerings and reassess needs based on labour market data. Despite these efforts, it was recognized that it is challenging to be responsive in a timely manner, and the necessary data is not easily accessible.

Lifestyle assets & effective marketing: Participants noted that the Region's major selling points were its rural lifestyle and low cost of living. It was noted that housing was inexpensive in the Region and that people moving from more costly regions were well-positioned to purchase a home. These lifestyle factors are part of the sales pitch to potential recruits who may find remuneration packages to be lower. There was mention that marketing efforts, digital and otherwise, by the Region's municipalities were critical influencing factors in attracting talent and selling the Region, with the recognition that talent has many options of where to live. Effective marketing to entice those residents is essential. It was recommended that marketing efforts should target those publications and channels that reflect the lifestyle, such as winter sports, fishing, and snowmobile magazines. Marketing the Region as a unified voice and telling local stories was also suggested. The Red-Carpet Program was explicitly identified as something of value, and which could potentially be expanded to assist other sectors beyond health care and physician recruitment.

Talent recruitment challenges: It was generally noted that SMEs in the Region would benefit from increased knowledge and the tools to support talent attraction.



The talent shortage in the education sector: It was recognized that teachers and other professionals in the education sector were challenging to recruit. Wages influenced this. For the first time in 20 years, there were not enough teachers to fill the jobs available or serve as substitutes. There was also an apparent shortage of bus drivers and administrative staff. Student numbers, on the other hand, were increasing because people are relocating to the Region and bringing remote work with them. Efforts that were underway included recruitment events around the country and increased web presence; however, a 'connection issue' was identified, namely that the messaging to promote the area seemed to be lacking influence over the decision to move to the area.

Uncompetitive wages: The theme of wage expectations and reality emerged in relation to new graduate expectations. For small businesses, respondents explained and noted that with the economic downturn, small businesses were struggling to remain open, making it more difficult to offer competitive wages to employees. It was noted that WorkBC has employer grant opportunities to assist.

Transition to post-secondary: By fall 2017, 66% of Cariboo Chilcotin K-12 graduates transitioned to BC post-secondary from the district's tracked cohort in 2006/07.² In Quesnel (School district 28), that percentage was 66% of graduates by 2017.³ Those numbers may not include those that took advantage of apprenticeship opportunities. It is essential to determine how to support the transition to post-secondary education moving forward and increase the visibility to students of post-secondary linkages. One idea was hosting graduate transition information events at post-secondary locations to expose students to the environment and increase awareness.

Of those aged 25-54, 50.2% are without post-secondary credentials, versus 35.2% in the rest of the province². This suggests that it is likely that parents of the current student population did not attend post-secondary, further fueling the lack of exposure and the fear that often accompanies the transition from secondary school to post-secondary. The need to work with parents and guardians of students to communicate future employment prospects and career pathways was identified as one crucial factor to ensure successful outcomes for students.

Reskilling forestry workers: It was noted that individuals who had experienced the effects of the forestry sector downturn in the Region were accessing reskilling programs. Education providers expressed that offering appropriate programs locally to those displaced workers was a challenge, as some students sought specialized occupations that rural education providers struggle to get the necessary registrations to offer. The risk of those displaced forestry workers leaving the area to seek education and employment was identified.

Soft skills: Employment support workers said that they had seen an increase in multi-barrier clients who lack work readiness skills.

Retention of workers: Teachers and seasonal construction workers were two occupations that respondents identified as having retention issues. Teachers would gain their first few years' experience in the Region and leave because of lifestyle factors such as lack of social opportunities and

² https://studentsuccess.gov.bc.ca/school-district/027/report/transition-to-post-secondary

³ https://studentsuccess.gov.bc.ca/school-district/028/report/transition-to-post-secondary



amenities. Seasonal construction employers were not proactively retaining workers from season to season. The poaching of employees was also identified as a retention issue.

Remote workers & the digital economy: An economic opportunity related to the global digital economy was identified as a means of attracting and retaining those workers seeking the lifestyle offered in the Region while being able to work remotely. Advanced technology may influence jobs and employment for the future. Participants were aware of its potential impacts and felt it crucial to prepare the workforce for advances in tech and Al. It was also recognized that growing a digital economy sector required a targeted economic development approach. While broadband connectivity is viewed as robust in some urban areas, other parts of the Region are consistently dogged by poor broadband access.

Jobs of the future: Respondents noted that 78% of jobs of the future would require post-secondary education, and many would require skills in applied design and technology, entrepreneurship, and STEM (science, technology, engineering, math). Questions surrounding how to make these skill needs apparent to students were raised. A speaker's bureau where influential leaders and local speakers could share their stories with students was suggested.

Experiential learning: The need for more experiential learning opportunities and improved collaboration between education at the secondary and post-secondary levels with employers was identified. A useful action identified here was a shared website between all education institutions that would offer experiential learning opportunities between educators and employers. It was noted that apprenticeship programs are very successful at present.

Career mentorship & Career Ambassadors: An opportunity discussed was the need for career mentors and inspiring leaders for students. It is essential that students can relate to local role models and see themselves in local career paths.

Access to education: Access to affordable housing was a barrier for students, as was the cost of tuition and the inability to work while attending school. An idea to improve access to education was using high school labs for delivery of post-secondary courses to bring programming to local communities, instead of students having to travel to urban centres to access education opportunities.

2.4 Key Informant Interview Findings

Fifteen stakeholders throughout the Region were interviewed individually for this strategy during September, October, and November 2019. These were individuals that represented economic and community development organizations, chambers of commerce, business owners, and literacy organizations. The key themes that emerged from these interviews were the following:

Barriers to employment: Discussions with some key informants revealed that access to childcare and transportation were significant barriers to workforce participation for some job seekers. Those that lived in more remote locations who do not have access to a car also struggled with getting to work. Creative solutions to this were encouraging employers to provide bus transportation to workers.

Retention challenges: Key informants identified that uncompetitive wages were at the core of retention



challenges. Lower skilled jobs like retail had been filled since the mill closures, which was beneficial to the retail sector in the short term. However, employers suspected that those workers would be seeking higher-paying opportunities in the long term.

Wage expectations: Employers were often desperate to find talent but unable to meet wage expectations, especially for displaced forestry workers.

Soft skills and workforce readiness: Some key informants expressed that things like work ethic, attitude, and even substance usage on the job had been issues in their experience with younger workers. They expressed that teaching these in secondary school may be an opportunity.

Shortage of suitable candidates: Those that were interested in hiring highly skilled or specialized labour found it extremely difficult to find appropriate people.

Lack of suitable opportunities: Key informants reported that highly skilled talent often struggled to find suitable employment opportunities in the Region. Based on their observations, educated and experienced talent would apply to whatever opportunities they could find, and once employed would keep an eye out for better suited or better-paying opportunities.

Push/pull factors: Key informants discussed the Region's rural lifestyle as its main draw for some people, but its main drawback for others. Informants noted that people moved to the Region for its slow lifestyle, especially in more rural parts of the Region. Still, those young people were difficult to retain as they desired to live in more urban settings. Williams Lake and Quesnel were both noted as having reasonable lifestyle assets that were more appealing to talent. Still, on the whole, informants felt the Region's remoteness and was a challenge to keeping talent.

Perceptions of workforce efforts in the Region: When asked what action was being taken to address the workforce challenges, informants pointed to education initiatives by Thompson Rivers University, like Youth in Trades programs and TRU Start, and Community Futures program offerings in Quesnel.

Perceptions of the skills of the labour market over the last ten years: Nearly all informants expressed no notable change. They noted that the skills of the workforce had remained roughly the same as far as they had observed.

Impact of labour market challenges on the Regional economy: Key informants expressed that without action to address the Region's labour market challenges and some of the underlying factors that exacerbated talent retention, the Regional economy would stagnate, talent would continue to leave the Region.

Priorities for this strategy: Informants identified priorities for consideration to include collaboration across education and employment, increased accessibility for job seekers (childcare and transportation access were two barriers they felt needed addressing), development of incentives to attract and retain skilled professionals, soft skills development for youth, and economic/community development.



Question	Answers Summary
1. How would you describe the availability of local, skilled talent in the Cariboo Chilcotin Region?	 "Extremely poor." This was an answer that echoed sentiments about highly skilled talent in the Region. Finding suitable talent for highly skilled or specialized positions was difficult.
	 Finding lower-skilled talent was easier for those seeking to fill retail positions, especially since forestry layoffs. That said, those informants noted that retaining those workers was top of mind as they were always looking for a higher wage.
1. a) In what ways have you noticed the skills of the local workforce change over the past ten years?	 Many informants that were concerned with hiring highly and specialized skilled talent felt that these labour market conditions were consistent with their experience over the past ten years
	 Some informants noted that they had seen a depletion in work ethic among younger workers over the past ten years
	 Multiple informants discussed the phenomenon of the ageing workforce, and the need to replace those skillsets as baby boomers retire. These were mostly about skilled trades
2. What are the biggest workforce issues/challenges that employers face in the Region?	 Wage expectations: employers are desperate to find workers, but cannot pay expected wages to recruit or retain talent
	 Access to talent: there is a shortage of skilled and unskilled talent in the Region
	 Frustration with the work ethic and work readiness. Cannabis usage was referenced multiple times by key informants as a persistent issue with some workers
2. a) What do you think the impact of these challenges has been or will be on the economic success of the Region?	 Inability to retain workers will keep the economy stagnant Operating with limited employees makes it difficult for employers and businesses to scale up and grow
2. b) What action is being taken to address these challenges and who is leading the action?	"There is a lot of work being done in the transition area. The local and provincial governments have been working to help people who have experienced difficulties to be retrained or to find alternative work. Work BC is also an incredible resource that is highly underutilized."



3. What are the biggest workforce issues/challenges that Job Seekers face in the Region?	 Finding suitable employment Finding employment at a reasonable wage Childcare and transportation can be major barriers to some job seekers
3. a) What do you think the impact of these challenges has been or will be on the economic success of the Region?	Talent moving away from the Region, economic stagnation
3. b) What action is being taken to address these challenges and who is leading the action?	 Education providers – the TRU dual credit program was noted numerous times in response to this question
	 Community Futures programs – they are not accredited, but Community Futures offers useful courses
	 Employment assistance coordinators in First Nations communities, CCATEC
4. When thinking about attracting, developing, and retaining talented	Difficult to find employment with no experience
youth, what are you hearing from	No opportunities
university and college graduates about the quality of employment opportunities in Cariboo Chilcotin?	 Wages are too low
4. a) Beyond employment	Retention factors:
opportunities, what do you hear about the factors that keep them	Rural lifestyle
living in Cariboo Chilcotin or the	Outdoor recreation
factors that drive them away?	 Affordability
	Stable employment, if available
	Push factors:
	 Inability to find or keep suitable employment
	Wages
	 Young people wanting to be in larger cities – lack of culture
	"There is concern about the remote area, lack of access to resources such as good health care, mental health supports, less expensive costs of living like fuel, hydro, being away from family who live in the lower mainland, etc."



- 5. When thinking about the current state and future directions of education and training in Cariboo Chilcotin, what gaps and opportunities do you see that would improve the Region's positioning to ensure it always has a strong pipeline of talent?
- An answer that reflected common input: "We need to ensure we are finding ways to build strong skills and education in our homegrown people. The true measure of success of a remote or rural area can grow the people who already live here into the workforce that you need. Anyone who moves in for a job is as likely to move out for a job. We need to find ways to encourage local people to want to build on their life and community here in their hometown."
- Some informants felt that competencies and skills such as work ethic and soft skills should be taught earlier at the secondary school level. Their experience with youth and young employees had suggested that these skills needed to be taught at a younger age.
- 5. a) Are there specific training programs that would help prepare the labour force?
- b) In what ways are training/education institutions collaborating currently? Think about how this span from elementary/secondary through to post-secondary.
- c) Are there new opportunities for businesses and training/education institutions to collaborate?
- Williams Lake and Quesnel both have post-secondary education institutions locally, and there are efforts to align local labour forces. One example was the TRU Trades program that emerged consistently throughout interviews. It was lamented that many had to leave their rural communities to attain education.
- Some informants felt that the trades and apprenticeship programs should be expanded further and available to more students, as the TRU Trades program was frequently at its limits.
- Some employers that were interviewed explained they had direct partnerships with post-secondary institutions, which provided them with a direct pipeline of talent.
- "I don't see much collaboration between the schools or school districts"



6. If you were writing this Strategy, what two key priorities would you include strengthening the success of talent attraction, retention, and readiness?

- Stronger economic development to diversify the Region and develop the Region's communities. Need for more cultural amenities to attract young people.
- Increase awareness of programs and resources that are available.
- Make apprenticeships and experiential learning more available throughout the Region.
- Collaboration between education providers, postsecondaries, and employers.
- Professional development and education opportunities available locally.
- Grow local talent.
- Make this Region less of a stopping point for early careers.



3. National Perceptions of the Cariboo Chilcotin Region

Understanding external perceptions of the Cariboo Chilcotin Region is an important insight that can influence decisions about where to focus recruitment strategies to attract talent, residents, and tourists to the area. With these objectives in mind, the study of national perceptions sampled individuals from provinces across Canada to probe their willingness to relocate as well as their perceptions of the Cariboo Chilcotin Region.

Overall, the level of familiarity with the Cariboo Chilcotin Region among individuals in other parts of Canada was relatively low compared to other National Perceptions studies. Noting this, the respondents tended to have many positive perceptions of the Region. Many respondents rated the Region as safer than their current locations, and often perceived there to be more natural beauty. A significant number noted that the Cariboo Chilcotin Region had more/better job opportunities than their current area. However, respondents also saw the Cariboo Chilcotin Region as more isolated and have less access to healthcare resources. Overall, while the level of awareness of the Cariboo Chilcotin Region was relatively low, the general perceptions of the area were predominantly positive.

There were 800 respondents in total from all 10 Canadian provinces⁴. Figure 39 shows the number of respondents in each province.

Figure 39: Number of respondents in each province

Province/Territory	Respondents
PE	11
NL	12
NS	35
NB	21
QC	135
ON	236
MB	22
SK	16
AB	78
ВС	233
YT	0
NT	1
NU	0
Total	800

⁴ The Canadian territories were included in the survey area, but the response rates were not high enough to include in the analysis.



Across all responses, British Columbia and Ontario were rated as the most preferred provinces to live in (with 29% and 30% of the sample choosing these options, respectively). Ontario and Saskatchewan had the highest ratios (36% and 33%) of respondents who were highly willing to relocate to another city in Canada. Figure 40 shows the factors which individuals in the survey had rated as highly important to their decisions to locate in an area.

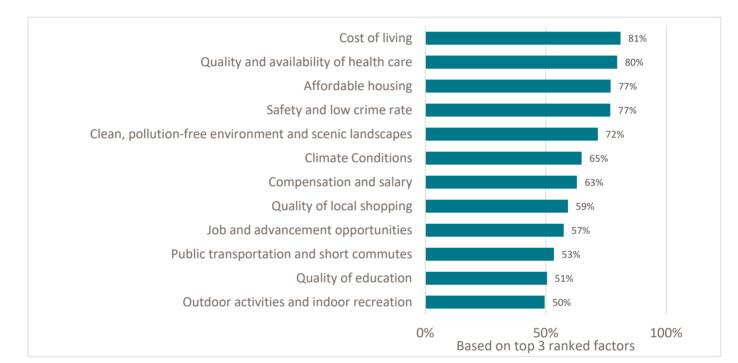


Figure 40: Percentage of individuals rating various factors as highly important when considering a place to live

When considering the Cariboo Chilcotin Region, specifically, respondents in British Columbia had the highest level of familiarity with the area followed by Alberta and Quebec. Overall ratings of awareness of the Region on a 10-point scale in the whole sample were 2.9. This is on the low end of what is commonly observed in national perceptions studies. For example, in a 2017 National Perceptions study for Prince George, the respondents across the country had rated their awareness of Prince George as 5.2 on a 10-point scale⁵.

Perceptions of the Cariboo Chilcotin Region were not uniform across jurisdictions. Respondents in New Brunswick and Quebec were substantially more likely than other provinces to perceive their chances of finding a suitable or better job in the Cariboo Chilcotin Region as high. These provinces both have operational forestry industries, which may contribute to their citizens' favourable perception of employment opportunities in the Cariboo Chilcotin Region. Individuals in Ontario, Saskatchewan, and Quebec were the most likely to highly agree that they would be willing to move to the Cariboo Chilcotin Region for the same (Figure 41) or greater rate of compensation. These three provinces were also more

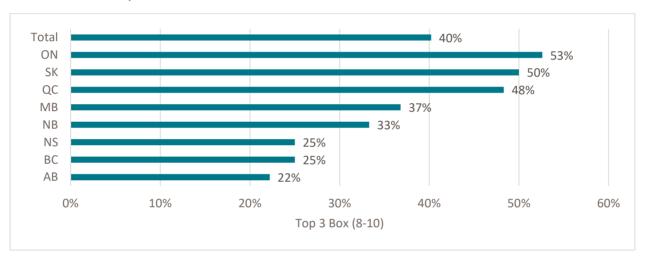
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⁵ https://edac.ca/wp-content/uploads/gravity_forms/13-c679d41cedee6e04e8b1e9ec6fe2b743/2017/07/2017-Perceptions-Of-Prince-George-Survey.pdf



likely than most to rate Cariboo Chilcotin Region as safer and friendlier than where they currently live (respondents from New Brunswick also rated the Region particularly high on friendliness compared to their own region). Ontario, Quebec, and Alberta tended to rate the Cariboo Chilcotin Region as isolated, but also more affordable than where they currently reside, compared to other provinces. Individuals in Ontario, Quebec, Alberta, and Saskatchewan were relatively likely to respond that their current location had better healthcare than the Cariboo Chilcotin Region. Quebec, Saskatchewan, and Ontario consistently rated Cariboo Chilcotin Region higher than remaining provinces on measures of being unique/different, employer friendliness, demand for skilled labour, and retention rates of skilled labour.

Figure 41: Percentage of respondents rating highly their willingness to relocate to the Cariboo Chilcotin Region for the same rate of compensation



The generally favourable ratings of Cariboo Chilcotin Region in Ontario, Saskatchewan, Quebec, and New Brunswick make these provinces potential target areas for talent recruitment. The finding that most of these provinces perceive the Cariboo Chilcotin Region to be more isolated and to have fewer healthcare amenities presents some possible factors preventing these individuals from moving to the Region. Making changes to these factors, or to the ways these factors are portrayed in marketing strategies could help attract further individuals who are otherwise interested in the Region.

Figure 42 shows the words commonly used to describe the Cariboo Chilcotin Region by respondents. Many of the positive words represent the natural beauty and serenity of the area. Some of the negative words used represent the alternative view of the same observations, with isolated/remote the second most frequent theme. Strategies to attract individuals could promote natural beauty while being cautious about perceptions among some potential target audiences about remoteness and isolation. As an example, promoting Cariboo Chilcotin Region as a place with a strong sense of community in a pristine natural backdrop with regional airports and connection highways could perhaps quell fears of isolation while promoting the aspects that individuals find appealing about the area.



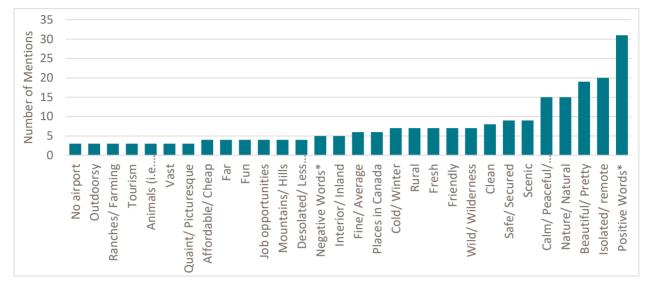


Figure 42: Common words used to describe the Cariboo Chilcotin Region

The national perceptions survey also inquired about the effectiveness of the Cariboo Chilcotin Region's current advertising efforts. Saskatchewan and Quebec had highest percentage of individuals who had seen advertising about the Cariboo Chilcotin Region – 10% in each. 9% of individuals in British Columbia and 8% of individuals in Ontario had seen advertisements. While this may partially explain why there are higher measures of awareness in these areas, it also shows there is an opportunity for improvement in marketing reach in these geographies. The Internet was by far the leading source of information regarding new cities for respondents (85%) followed by word of mouth (46%) and television (46%).

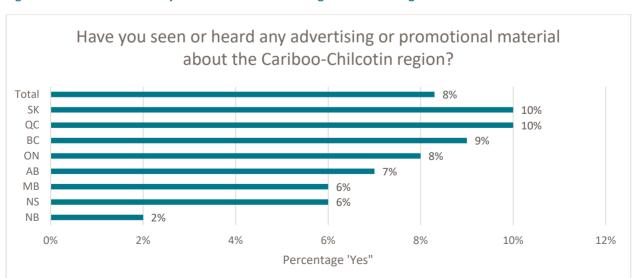


Figure 43 Provincial familiarity with Cariboo Chilcotin Region's advertising efforts

^{*}Positive words such as good, great, awesome, amazing, cool, like it, etc.

^{*}Negative words such as bad, boo, etc.



4. Background Review & Common Themes Matrix

The Common Themes Matrix is the result of a process whereby emergent themes are identified and assessed for commonalities across the literature. The documents provided to MDB Insight at the outset of a project are important because they provide a baseline for existing policy and planning. This process is especially important to a regional project such as this, as it integrates reports and strategies across many different partners. It finds common priorities and introduces any possible duplication of efforts. It assists with positioning this strategy among existing priorities, builds positively off existing themes, while also addressing gaps that may have been identified.

Relevant background documents were reviewed to gather common themes among regional organizations and government strategies in the workforce development space. The following listed documents were made available by partners in the Cariboo Chilcotin Region for this process:

- 100 Mile House Description for External Job Postings
- 100 Mile House Economic Development Plan (2018)
- City of Quesnel Economic Development Transition Strategy (2018)
- Entrepreneur Immigration Regional Profiles
- Williams Lake Economic Development Strategy Report (2018)
- Love Williams Lake Website
- Downtown Williams Lake Website
- Divisions of Family Practice Campaign British Columbia Website (2019)
- City of Quesnel Brand Strategy
- Sector Diversification by Data Design Supporting Economic Development Quesnel Case Study (2018)
- Cariboo Chilcotin Log Building Sector Strategy (2006)
- Quesnel Relocation Guide (2019)

Literature and resources from each community participating in this regional labour market strategy were reviewed for common themes. What was most salient were the commonalities among each community's economic strengths and value propositions, which supported the need for a regionally coordinated effort such as this Labour Market Study.

The economy of the Cariboo Chilcotin Region is characterized by natural resource industries, agriculture, and tourism. Each community's economic development strategy touched on these economic strengths. The economic transition was also a key theme in the literature, acknowledging that some of the Region's key sectors – namely, forestry and manufacturing – would be declining due to broader economic forces, and the transition to a more knowledge-based economy was a priority. Innovation was another theme that complimented those transition efforts. Economic development strategies often aspired to foster a sense of innovation in each respective community's business sector.



Each community also listed its outdoor recreational opportunities as key assets to drive tourism and labour market attraction. A balanced quality of life was listed throughout the literature as a key strength that was often leveraged in these efforts. Contributing to that quality of life is the Region's housing affordability, which is especially a strength in the province of B.C, where housing is prohibitively expensive in the Lower Mainland.

Environmental sustainability was a shared value across the literature. This theme emerged in many areas, and it was notable that each community shared this value as a key component of its character and values.



Figure 44 Common Themes Matrix

Common Themes	Total # of Occurrences	100 Mile House Job Description	100 Mile House Economic Development Plan (2018)	City of Quesnel Economic Development Transition Strategy (2018)	Entrepreneur Immigration Regional Profiles	Williams Lake EcDev Strategy Report (2018)	Love Williams Lake Website	Downtown Williams Lake Website	Divisions of Family Practice Campaign	City of Quesnel Brand Strategy	Sector Diversification by Data Design EcDev – Quesnel (2018)	Cariboo Chilcotin Log Building Sector Strategy (2006)	Quesnel Relocation Guide (2019)
Natural Resource Industries/Agriculture	7		✓	√	✓	✓				√	✓	✓	
Economic Development & Transition, Tourism	9			√	✓	√	✓	✓	√	✓	✓	✓	✓
Quality of Life & Recreation	7	✓	✓	✓	✓		✓	✓		✓			√
Labour Retention & Attraction	3			✓					√		✓		
Entrepreneurship	5			✓	✓	✓	✓					✓	
Senior Residents/Retirees	6		✓		✓	√			✓	√	√		
Health	3			✓		✓			✓		✓		✓
Education	4			✓	✓	✓			✓		✓		✓
Housing Availability & Affordability	7	✓	✓	✓	✓	✓				✓		✓	✓
Partnerships	3			✓	✓	✓							
Sustainability	4		✓	✓		✓				✓			✓
Innovation	3			✓		✓				✓			✓



5. Community Profile

This analysis provides an overview of relevant socioeconomic, labour force, and industry statistics in the Cariboo Chilcotin Region of British Columbia, Canada (hereafter throughout this section, Cariboo Chilcotin Region, or Region). The data used to create the findings in this analysis were obtained from Statistics Canada using the following tables:

- Census Community Profiles, 2016
- Census Community Profiles, 2011
- National Household Survey Community Profiles, 2011
- Commuting Flows, 2016
- Canadian Business Counts, December 2018

Notably, key economic events that have occurred in 2019, such as large closures or announcements of layoffs, are not included here because they are not yet captured in Census or Canadian Business Counts data.

For the purpose of this analysis, the Cariboo Chilcotin Region was divided into four sub-regions, portrayed in Figure 45. Each sub-region is comprised of census sub-divisions and was constructed based on similarities in economic characteristics. The metrics were aggregated from sub-divisions by summing headcounts and taking the average of means, medians, and percentages. Throughout this analysis, these four regions are compared to the trends in the Region and British Columbia. The North Cariboo Region represents the Quesnel census agglomeration, and Central Urban represents the Williams Lake census agglomeration. The South Cariboo division is a collection of census subdivisions similar due to their location between Williams Lake to the north and Kamloops to the east, and Central Rural Cariboo represents the rural census sub-divisions to the east and west of the Central Urban division.



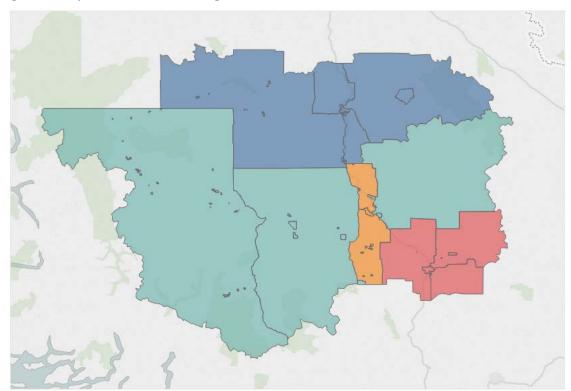


Figure 45: Map of Cariboo Chilcotin Regions

Region

- North Cariboo Division
- Central Cariboo Division Urban
- South Cariboo Division
- Central Cariboo Division Rural

*Note: The Northern Cariboo Division is divided into the 'Quesnel Division' and 'Northern Cariboo Division' to represent the common experiences within these regions. Quesnel Division consists of Quesnel City and the two census subdivisions immediately North and South of the city. North Cariboo Division consists of all other subdivisions within the original North Cariboo Division (in dark blue in Figure 45).



5.1 Summary of Key Findings

Several notable findings emerged from the community profile:

- The Cariboo Chilcotin Region in British Columbia has an economy based heavily on the harvesting and processing of forest products. There have been several negative external influences on the forests in recent years, including the appearance of the Mountain Pine Beetle and significantly destructive forest fires. Demographic changes such as population ageing and urbanization are evident in the area, similar to other rural areas of Canada.
- The population in the Cariboo Chilcotin Region decreased by 0.6% between 2011 and 2016 while it increased by 5.6% across BC. This was driven in part by an ageing population (median age increased between 2011 and 2016), and small numbers of in-migration (66% of the population were 'non-movers' in 2016 compared to 61% for BC). The Cariboo Chilcotin Region had a substantially higher percentage of its population self-identified as Indigenous (17%) than British Columbia (6%) as a whole.
- Agriculture, forestry, fishing and hunting, mining, quarrying, oil and gas extraction, and manufacturing industries make up the economic base in the area. Mining, quarrying, and oil and gas extraction make up a smaller percentage of employment in the area. The base industries had no observable decreases in employment in the Region between 2011 and 2016. In more recent years, presumably, this will have changed due to external environmental influences mentioned earlier and the recent mill closures in the area.
- Agriculture, forestry, fishing and hunting, construction, and wholesale trade make up the largest share of businesses with employees in the Region. Compared to the relative size of employment in each industry, this suggests that businesses in mining and oil and gas extraction, manufacturing and health care, and social assistance tended to be larger businesses. Businesses in the agriculture, forestry, fishing, hunting, and retail trade tended to have a smaller number of employees.

5.2 Demographic portrait

The demographic data from Statistics Canada shows that the population in the Cariboo Chilcotin Region has been slowly declining over the last ten years (Figure 46). The only sub-region which experienced a population increase from 2011 to 2016 was the South Cariboo division (by 4.2%), although this returned the area to a similar level to its 2006 population levels before a decrease in 2011. All other sub-regions decreased in population size. The population in the entire province of British Columbia increased by 5.6%.



Figure 46: Total Population Characteristics in Cariboo Chilcotin Region, and British Columbia

Year	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	ВС
2006 Census	62,190	19,043	3,406	18,760	7,809	13,172	4,113,487
2011 Census	62,392	20,336	3,230	18,490	7,520	12,816	4,400,057
2016 Census	61,988	20,088	3,058	18,277	7,208	13,357	4,648,055
Pop Growth rate	-0.6%	-1.2%	-5.3%	-1.2%	-4.1%	4.2%	5.6%

Source: Statistics Canada; 2011 National Household Survey, 2016 Census Profile

The age distributions demonstrate that, compared to British Columbia, the Cariboo Chilcotin Region has relatively fewer individuals in the 25 to 45 age range and relatively more individuals who are aged 55 and above (Figure 47). The exception to this in the Region is the Central Cariboo Division Urban, which appears to follow the population composition of the rest of the province closely. Regarding the time trend, Figure 48 shows that the median age in the Cariboo Chilcotin Region increased by 2.3 years over the five years, while the province's median age increased by 2.1 years.

Figure 47: Age characteristics, percentage of overall population - detailed categories

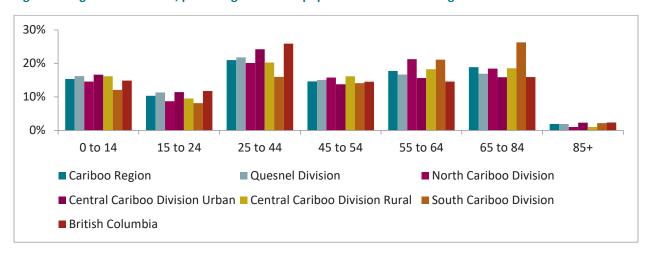




Figure 48: Median Age of Population, Cariboo Chilcotin Region, BC 2016

Year	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Median age population 2011	45.1	43.8	39.3	38.1	40.0	47.1	41.9
Median age population 2016	47.4	45.9	45.0	40.6	43.4	50.8	43.0

Source: Statistics Canada; 2011 National Household Survey, 2016 Census Profile

5.3 Dwelling Characteristics

Over two-thirds of dwellings occupied in the Cariboo Chilcotin Region in 2016 were single-detached houses (Figure 49), which is in contrast to British Columbia, where only 44% of dwellings were single-detached houses. This is typical of regions that are of longer distances to major metropolitan areas such as Vancouver. Compared to the broader province, the Cariboo Chilcotin Region also has a higher proportion of movable dwellings and a lower proportion of apartments.

Figure 49: Cariboo Chilcotin Region occupied dwellings by type, percentage of the overall population, 2016

Type of dwellings	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Total	100%	100%	100%	100%	100%	100%	100%
Single-detached house	72%	71%	77%	59%	87%	82%	44%
Apartment in a building that has five or							
more storeys	0%	0%	0%	0%	0%	0%	9%
Semi-detached house	2%	2%	0%	3%	1%	1%	3%
Row house	3%	3%	1%	5%	1%	2%	8%
Apartment or flat in a duplex	3%	3%	1%	7%	0%	0%	12%
Apartment in a building that has fewer							
than five storeys	7%	11%	2%	10%	0%	3%	20%
Another single-attached house	0%	1%	0%	0%	0%	1%	0%
Movable dwelling	12%	10%	17%	15%	10%	10%	3%

Source: Statistics Canada; 2016 Census Profile

Over two-thirds of dwellings are owned in the Cariboo Chilcotin Region (Figure 50). Within the Region, this varies with a higher proportion of owned dwellings in more urban areas. British Columbia has relatively more rented dwellings, but Central Cariboo and Quesnel had a similar ratio to the rest of the province (approximately 30%).



100% 12% 14% 90% 16% 22% 25% 28% 32% 80% 70% 60% 50% **79%** 84% 83% 40% 77% **75%** 71% 68% ■ Renter 30% 20% Owner 10% 0% North Central Central South **British** Cariboo Quesnel Cariboo Cariboo Cariboo Cariboo Region Division Columbia Division Division Division Division Urban Rural

Figure 50: Occupied dwellings by type, percentage of the overall population, 2016

Source: Statistics Canada; 2016 Census Profile

Figure 51 shows that the median value of dwellings in the Region was less than half that of British Columbia. In both the province and the Region, median dwelling values increased between 2011 and 2016. Cariboo Chilcotin Region also had lower median shelter costs than the province, although these prices were closer to BC than the dwelling values (approximately three-quarters of the cost). Monthly shelter costs also increased.

Figure 51: Average dwelling values and shelter costs for owned and rented dwellings⁶

Characteristics	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Median value of dwellings (\$) -							
2011	224,389	191,759	218,127	188,433	286,338	241,959	448,835
Median value of dwellings (\$) -							
2016	229,922	206,789	150,095	231,734	216,828	251,019	500,874
Median monthly shelter costs							
for rented dwellings (\$) -2011	666	649	773	607	672	691	903
Median monthly shelter costs							
for rented dwellings (\$) -2016	751	721	625	855	550	821	1,036

Source: Statistics Canada; 2011 National Household Survey Profile, 2016 Census Profile.

⁶ Medians for the regions were created by taking the average of the median values for each census sub-division. Due to Statistics Canada rules about data suppression, the number of sub-divisions included in these values were not consistent across years and could be subject to bias with extreme values in the remaining sub-divisions.



5.4 Indigenous Population

A relatively large proportion of residents in the Cariboo Chilcotin Region self-identify as having Aboriginal status on the 2016 census compared to British Columbia (Figure 52). The entire province of British Columbia had 6% of the population identify as Aboriginal⁷, while 17% of individuals in the Cariboo Chilcotin Region self-identified as Aboriginal. This proportion was particularly high in the Central Rural and Central Urban divisions, with 33% and 20% self-identifying as Aboriginal, respectively. Among the population who self-identified as Aboriginal in the Cariboo Chilcotin Region, 69% indicated they were First Nations, 29% indicated they were Métis, 1% identified as Inuk, and 1% listed multiple Aboriginal responses.

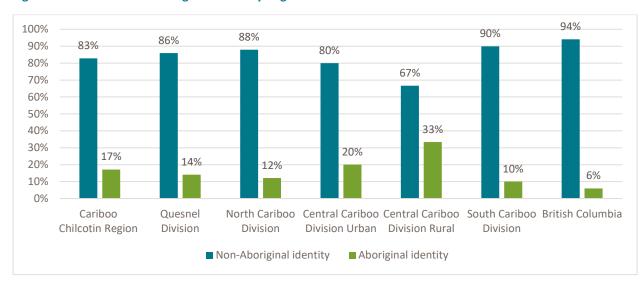


Figure 52: Self-Identified Aboriginal Status by Region in 2016

⁷ Note: Statistics Canada refers to Indigenous Peoples as "Aboriginal", in accordance with the *Constitution Act* (1982). This report refers to Aboriginal as the statistical reference only and acknowledges Indigenous Canadians and Indigenous Peoples as the proper modern nomenclature for this broad demographic classification, which includes First Nations, Inuit, and Métis.



Income

Median individual and household income in the Cariboo Chilcotin Region were both slightly below the corresponding value for British Columbia (Figure 53 and Figure 54). In the Cariboo Chilcotin Region, similar to the province, both household and individual income increased from 2011 to 2016.

Figure 53: Median total income for individuals⁸

Characteristics	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Median total income in 2010 among recipients (\$)	25,855	27,238	21,996	27,008	20,558	22,586	28,765
Median total income in 2015 among recipients (\$)	30,494	32,392	28,992	31,428	24,868	26,725	33,012
% change	18%	19%	32%	16%	21%	18%	15%

Source: Statistics Canada; 2011 National Household Survey Profile, 2016 Census Profile.

Figure 54: Median total income of households²

Characteristics	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Median total income of households in 2010 (\$)	55,027	57,907	47,498	57,373	46,062	45,251	60,333
Median total income of households in 2015 (\$)	63,638	68,397	56,199	60,481	37,635	48,585	69,995
% change	16%	18%	18%	5%	-18%	7%	16%

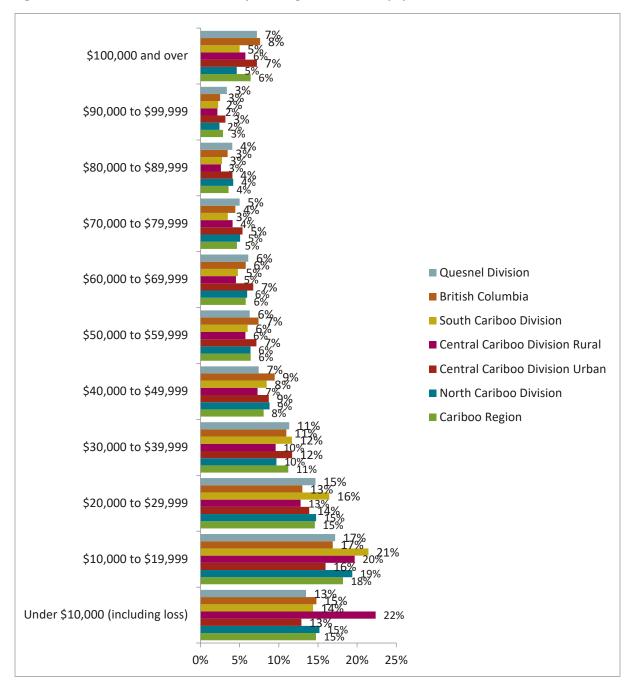
Source: Statistics Canada; 2011 National Household Survey Profile, 2016 Census Profile.

When the distribution of income is compared between the Cariboo Chilcotin Region and BC, the province has relatively more individuals in the upper end of the income distribution (Figure 55). Similar to BC, the Cariboo Chilcotin Region has a long 'upper tail' to its income distributions, meaning there are a significant number of individuals making more than \$100,000 per year or more.

⁸ Medians for the regions were created by taking the average of the median values for each census sub-division. Due to Statistics Canada rules about data suppression, the number of sub-divisions included in these values were not consistent across years and could be subject to bias with extreme values in the remaining sub-divisions.



Figure 55: Individual income distribution, percentage of the overall population, 2016





5.5 Education

An area's education levels are important indicators of the Region's capacity for growth and productivity. Figure 56 shows that the proportion of workers with an apprenticeship or post-secondary education (i.e., skilled labour) was significantly lower for the Region (47% in 2016) than across the rest of the province (64%). The change in this proportion between 2011 and 2016 also suggests that the proportion of skilled labour decreased by 1% across the province and 4% in the Cariboo Chilcotin Region. In other words, the rate of decline in skilled labour is stronger in the Cariboo Chilcotin Region than the province, even though both are experiencing some level of decline.

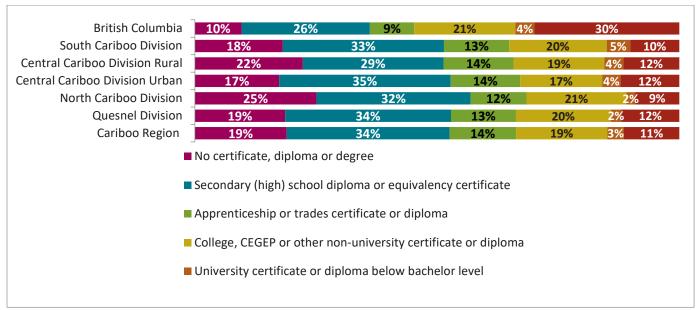
Figure 56: Proportion of population aged 25-64 with post-secondary or apprenticeship education (skilled labour)

Year	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Skilled Labour 2011	50%	53%	43%	51%	47%	50%	65%
Skilled Labour 2016	47%	47%	43%	47%	49%	49%	64%
% Change	-3%	-6%	-	-4%	+2%	-1%	-1%

Source: Statistics Canada: 2016 Census Profile

Delving deeper into the levels of educational attainment, Figure 57 shows the higher proportion of skilled labour in the province compared to the Cariboo Chilcotin Region is due to a much higher proportion of workers in *university certificate*, *diploma or degree at bachelor level or above* category. Across the Cariboo Chilcotin Region, approximately one-third of individuals have a high school diploma as their highest educational attainment, and approximately 20% have no certificate, diploma or degree.

Figure 57: Highest level of educational attainment, % of the population 25-64, 2016





The next figure shows the major fields of study of the working-age population. Compared to British Columbia, individuals who had post-secondary education in the Cariboo Chilcotin Region were more likely to have *physical and life sciences and technologies, mathematics, computer and information sciences,* or *architecture, natural resources, and conservation,* as their major field of study (Figure 58). Conversely, individuals in the Cariboo Chilcotin Region were less likely to have post-secondary education in fields relating to *business, management and public administration,* and *personal, protective, and transportation services*.

Figure 58: Major field of study, the percentage of the population aged 25-64, 2016

Major field of study	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Total	100%	100%	100%	100%	100%	100%	100%
No postsecondary certificate, diploma or degree	58%	59%	61%	58%	57%	56%	45%
Education	3%	4%	2%	3%	4%	3%	4%
Visual and performing arts, and communications technologies	1%	0%	1%	1%	1%	1%	3%
Humanities	1%	1%	2%	1%	2%	1%	3%
Social and behavioural sciences and law	3%	3%	1%	3%	3%	3%	6%
Business, management and public administration	6%	6%	7%	6%	6%	7%	11%
Physical and life sciences and technologies	1%	1%	1%	1%	1%	1%	2%
Mathematics, computer and information sciences	1%	1%	1%	1%	1%	1%	2%
Architecture, engineering, and related technologies	13%	13%	13%	12%	13%	13%	11%
Agriculture, natural resources and conservation	3%	2%	3%	3%	4%	2%	1%
Health and related fields	7%	6%	5%	7%	6%	7%	8%
Personal, protective and transportation services	3%	3%	2%	3%	4%	4%	3%
Other	0%	0%	0%	0%	0%	0%	0%



5.6 Mobility

Mobility characteristics from Statistics Canada can be helpful to better understand the background of the individuals in a region. In the Canadian Census, one section of questions in the survey asks whether individuals had moved during the last 1 to 5 years (Figure 59). In the 2016 Census, 61% of British Columbians had not moved in the prior five years. This proportion tended to be higher in the Cariboo Chilcotin Region, which had 66% non-movers overall, and up to 76.2% non-movers in the Central Rural area. The urban areas of the Cariboo Chilcotin Region tended to have more within-community movers than the Central Rural division. There are about 13% within-Canada migrants to the Region, and this proportion was highest in the South Cariboo division (18%). The Cariboo Chilcotin Region had fewer international migrants than the overall province (3% compared to 4%).

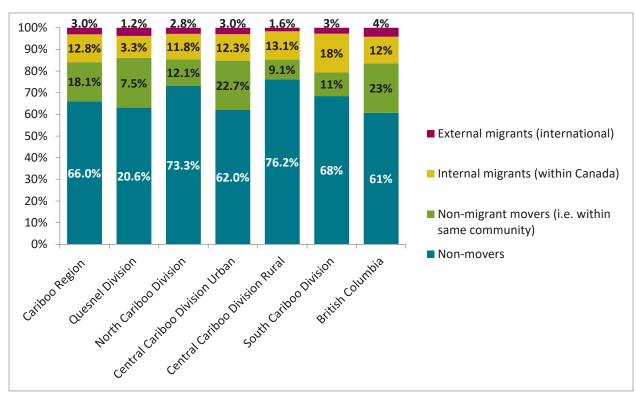


Figure 59: Mobility characteristics over the last five years, 2016



5.7 Labour Force

According to Statistics Canada's standard definition, the employed are persons having a job or business, whereas the unemployed are without work, are available for work, and are actively seeking work. Together the unemployed and the employed constitute the labour force⁹.

The labour force in the Cariboo Chilcotin Region as a whole decreased in size from 2011 to 2016, by 965 workers (Figure 60). This was not a uniform trend for the entire Region. The South Cariboo Region increased its labour force by 1005 workers (approximately 20%). The labour force in the province increased by 117,420 (approximately 5%).

Figure 60: Labour force size, 2011-16

Labour Force Size	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
In the labour force 2011	31,895	10,445	2,095	10,135	4,230	4,990	2,354,245
In the labour force 2016	30,930	10,045	1,545	9,660	3,685	5,995	2,471,665
Net (+/-)	-965	-400	-550	-475	-545	1,005	117,420

Source: Statistics Canada; 2011 National Household Survey; Census Profile, 2016

The unemployment rate in the Cariboo Chilcotin Region grew between 2001 and 2016 by one percent (Figure 61). This contrasts with the decrease in the unemployment rate over the same period in British Columbia by one percent. Within the Region, the Central Cariboo Rural Division was the only area that decreased its unemployment rate (down two percent), and the Central Cariboo Division urban division experienced the largest regional increase in the unemployment rate (up by two percent).

⁹ Statistics Canada. Retrieved on January 7, 2019 from < https://www150.statcan.gc.ca/n1/pub/81-004-x/def/4153361-eng.htm>



80% 70% 60% 50% 40% 30% 10% 0% Central Central North South Cariboo Cariboo Cariboo British Quesnel Cariboo Cariboo Region Division Division Columbia Division Division Rural Urban Participation rate 2016 60% 60% 61% 66% 61% 52% 64% 62% Participation rate 2011 63% 65% 68% 58% 53% 65% Unemployment rate 2016 12% 9% 7% 11% 10% 15% 11% Unemployment rate 2011 12% 12% 13% 11% 13% 11% 8% ■ Participation rate 2016 ■ Participation rate 2011 — Unemployment rate 2016 — Unemployment rate 2011

Figure 61: Labour force status, percentage of the population, 2011-2016

Source: Statistics Canada; 2011 National Household Survey; Census Profile, 2016

In terms of its class of workers ratio, the Cariboo Chilcotin Region has the same ratio of self-employed to employee ratio as the province of British Columbia (Figure 62). The Central Cariboo Rural Division and South Cariboo Division have comparatively higher numbers of self-employed individuals, with 21% and 20% respectively.

Figure 62: Class of worker ratio, 2016

Labour force status	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Employee	84%	87%	78%	88%	76%	78%	84%
Self-employed	14%	11%	19%	11%	21%	20%	14%



5.8 Employment by Industry

Examining the Region's employment counts by industry in relation to the province overall reveals industries that are particularly concentrated in the area. It is important to acknowledge that the most recent data on employment by place of residence is from the last Canadian Census in 2016. As a result, they do not reflect the recent rash of mill and mine closures or downsizes. These results, if long-lasting, will not materialize until the next Census in 2021.

Figure 63 indicates that the *Agriculture, forestry, fishing and hunting, Mining, quarrying, and oil and gas extraction,* and *Manufacturing* industries are proportionally larger employers in the Cariboo Chilcotin Region then they are in British Columbia. Central Cariboo Rural Division, in particular has a notably high proportion of its labour force in *Agriculture, forestry fishing and hunting*. Quesnel Division has a particularly high proportion of individuals employed in the *Manufacturing* industry. The industries which employ proportionally fewer individuals in the Cariboo Chilcotin Region than in the province are employed in *Real estate, Finance and insurance,* and *Professional/scientific-related services*. The *Retail trade* and *Health care and social assistance* industries were similar in the Cariboo Chilcotin Region and BC.

Figure 63: Employed labour force by industry, percentage of the labour force, 2016

Industry (NAICS)	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
11 Agriculture, forestry, fishing and							
hunting	10%	8%	14%	9%	19%	10%	3%
21 Mining, quarrying, and oil and gas	2070	0,0	21,70	070	2570	2070	0,0
extraction	4%	2%	3%	6%	6%	1%	1%
22 Utilities	1%	0%	0%	1%	1%	1%	1%
23 Construction	8%	7%	6%	7%	9%	10%	8%
31-33 Manufacturing	13%	20%	12%	10%	5%	12%	6%
41 Wholesale trade	2%	2%	1%	3%	2%	2%	3%
44-45 Retail trade	12%	12%	10%	13%	9%	14%	11%
48-49 Transportation and warehousing	4%	4%	3%	5%	4%	5%	5%
51 Information and cultural industries	1%	1%	1%	1%	1%	1%	3%
52 Finance and insurance	2%	2%	2%	2%	1%	2%	4%
53 Real estate and rental and leasing	1%	1%	2%	1%	1%	2%	2%
54 Professional, scientific and technical services	4%	3%	6%	4%	3%	5%	8%
55 Management of companies and enterprises	0%	0%	1%	0%	0%	0%	0%
56 Administrative and support, waste management and remediation services	3%	3%	4%	3%	2%	4%	4%
61 Educational services	6%	6%	6%	5%	7%	4%	7%
62 Health care and social assistance	10%	10%	8%	10%	10%	9%	11%
71 Arts, entertainment and recreation	1%	1%	6%	1%	1%	2%	2%
72 Accommodation and food services	7%	7%	6%	7%	5%	8%	8%
81 Other services (except public							
administration)	4%	5%	5%	5%	4%	4%	5%
91 Public administration	5%	4%	4%	5%	8%	4%	5%

Source: Statistics Canada; 2011 National Household Survey; Census Profile, 2016



The changes in employment by industry in the Cariboo Chilcotin Region between 2011 and 2016 show that the *Retail trade, Professional, scientific and technical services,* and *Health care and social assistance* industries saw the largest growth in the Region (Figure 64). There were decreases in *Educational services, Accommodation and food services, Transportation and warehousing,* and particularly in *Public administration* (with a decrease of 515 workers).

Figure 64: Employed Labour Force by Industry (Number of Workers), 2011-16

Industry (NAICS)	Cariboo Chilcotin Region 2011	Cariboo Chilcotin Region 2016	Net (+/-)
Total	31,900	30,930	-970
11 Agriculture, forestry, fishing and hunting	3,115	3,170	55
21 Mining, quarrying, and oil and gas extraction	1,175	1,160	-15
22 Utilities	110	165	55
23 Construction	2,390	2,455	65
31-33 Manufacturing	4,100	4,090	-10
41 Wholesale trade	745	630	-115
44-45 Retail trade	3,485	3,820	335
48-49 Transportation and warehousing	1,585	1,305	-280
51 Information and cultural industries	405	330	-75
52 Finance and insurance	625	540	-85
53 Real estate and rental and leasing	415	415	0
54 Professional, scientific and technical services	890	1,105	215
55 Management of companies and enterprises	20	20	0
56 Administrative and support, waste management and remediation services	965	1,020	55
61 Educational services	1,980	1,750	-230
62 Health care and social assistance	2,845	2,960	115
71 Arts, entertainment and recreation	535	445	-90
72 Accommodation and food services	2,350	2,105	-245
81 Other services (except public administration)	1,405	1,365	-40
91 Public administration	2,010	1,495	-515

Source: Statistics Canada; 2011 National Household Survey; Census Profile, 2016

Employment Location Quotients are a formalized way of analyzing the relative strengths of certain industries in a region compared to the overall province or country. In the current base analysis, the relative concentration of employment in each industry within the Cariboo Chilcotin Region is compared to the concentration of the same respective industries in British Columbia. Location Quotients greater than one signify that industry employs a relatively larger proportion of individuals in the Cariboo Chilcotin Region compared to British Columbia and indicates that these industries are the economic drivers in the Region. A score of 1.25 or greater represents a sector of relative strength, a score between 0.75 and 1.25 represents a sector that is on par with the province (1.0 represents perfect parity). A score below 0.75 represents a sector of comparative weakness.



In order of decreasing quotients, Agriculture, forestry, fishing and hunting, Mining, quarrying, oil and gas extraction, and Manufacturing industries are among the most competitive sectors in the Region (Figure 65). Further, the relative competitiveness of these three industries all grew from 2011 to 2016. There were notable declines in employment in the Transportation and warehousing, Management of companies and enterprises, and Accommodation and Food services sectors. Anecdotally, it can also be inferred that the current competitiveness of Mining, quarrying, oil and gas extraction and Manufacturing would likely be notably lower than in 2016, due to recent trends of downsizing or closure.

Figure 65: Employment location quotient (LQ) analysis - concentration of employed labour force by industry

Industry (NAICS)	LQ2011	Strength	LQ2016	Strength	Change	Trend
11 Agriculture, forestry, fishing, and hunting	3.76	High	3.88	High	0.13	Growing
21 Mining, quarrying, and oil and gas extraction	3.41	High	3.58	High	0.17	Growing
22 Utilities	0.61	Low	1.06	Moderate	0.45	Growing
23 Construction	0.97	Moderate	0.98	Moderate	0.01	No change
31-33 Manufacturing	2.03	High	2.07	High	0.04	Growing
41 Wholesale trade	0.61	Low	0.61	Low	0.01	No change
44-45 Retail trade	0.97	Moderate	1.08	Moderate	0.11	Growing
48-49 Transportation and warehousing	0.99	Moderate	0.81	Moderate	-0.17	Declining
51 Information and cultural industries	0.48	Low	0.39	Low	-0.09	Declining
52 Finance and insurance	0.50	Low	0.46	Low	-0.04	Declining
53 Real estate and rental and leasing	0.56	Low	0.60	Low	0.04	Growing
54 Professional, scientific and technical services	0.37	Low	0.45	Low	0.08	Growing
55 Management of companies and enterprises	0.60	Low	0.37	Low	-0.23	Declining
56 Administrative and support, waste management and remediation services	0.72	Low	0.75	Moderate	0.03	Growing
61 Educational services	0.87	Moderate	0.80	Moderate	-0.07	Declining
62 Health care and social assistance	0.84	Moderate	0.87	Moderate	0.03	Growing
71 Arts, entertainment and recreation	0.69	Low	0.61	Low	-0.08	Declining
72 Accommodation and food services	0.97	Moderate	0.81	Moderate	-0.15	Declining
81 Other services (except public administration)	0.92	Moderate	0.97	Moderate	0.05	Growing
91 Public administration	1.03	Moderate	0.96	Moderate	-0.08	Declining

Source: Statistics Canada; 2016 Census Profile. Adapted by MDB Insight

Figure 66 presents the results of another analytical tool called a **shift-share analysis**. The shift-share articulates the factors which drive changes in employment through three primary considerations:

- Reference Area Growth Effect: The impact that changes in the overall broader economy at the provincial level has had on local employment in a given sector, leading to an increase or decrease in local employment.
- Industrial Mix Effect: The impact that changes among sectors of the provincial economy has had on local employment in the same respective sector (leading to an increase or decrease in local employment).



Differential Shift: The impact that local factors have had on increases or decreases in local employment (i.e., changes that cannot be explained by those in the reference area growth effect or industrial mix effect). The following are observations from the Shift-Share analysis of Cariboo Chilcotin Region:

- The overall provincial growth was positive, so it had an increasing effect on the labour market, as seen in the large positive area growth effect (1656 workers). Industry-specific labour force changes were present, but when summed, bring their net effect close to 0 (-5 workers for the total industrial mix effect). The balance implies that local factors played a negative role in the change in the labour force (-2456 workers). In total, the factors resulted in net losses of 805 jobs in the Cariboo Chilcotin Region.
- There were notable positive local area effects in *Retail trade* and *Professional, scientific and technical services*, which implies there were mechanisms in the local economy that made these industries grow beyond the rate of the industry in the province.
- There were substantial negative local area effects in Accommodation and food services, transportation and warehousing, and Health care and social assistance. Sectors with negative local area effects should help identify opportunities to focus on local policy and investment/business attraction to enhance employment opportunities in the area.

Figure 66: British Columbia/Cariboo Chilcotin Region - Shift Share Analysis

North American Industry Classification System	Area Growth Effect	Industrial Mix Effect	Differential Shift	Total
Agriculture, forestry, fishing and hunting	166	38	-148	55
Mining and oil and gas extraction	62	-41	-37	-15
Utilities	6	-12	61	55
Construction	127	116	-178	65
Manufacturing	218	23	-251	-10
Wholesale trade	40	-109	-45	-115
Retail trade	185	36	114	335
Transportation and warehousing	84	46	-410	-280
Information and cultural industries	22	11	-107	-75
Finance and insurance	33	-20	-99	-85
Real estate and rental and leasing	22	-21	-1	0
Professional, scientific and technical services	47	39	129	215
Management of companies and enterprises	1	14	-15	0
Administrative and support, waste management and remediation services	51	48	-45	55
Educational services	105	-35	-300	-230
Health care and social assistance	151	98	-134	115
Arts, entertainment and recreation	28	-19	-100	-90
Accommodation and food services	125	234	-604	-245
Other services (except public administration)	75	-80	-35	-40
Public administration	107	-371	-251	-515
Total	1656	-5	-2456	-805

Source: Statistics Canada; 2016 Census Profile. Adapted by MDB Insight. *Calculation does not include "not applicable industries*



The Cariboo Chilcotin Region makes up 1.3 percent of the total population of BC, but certain industries are highly concentrated in the area (Figure 67). For example, it made up 18% of the total employment in BC's veneer, plywood and engineered wood product manufacturing industry, 13.8 percent of metal ore mining, and 12.7% of the sawmills and wood preservation employment in the province.

Figure 67: Top 20 industries for employment in the Cariboo Chilcotin Region compared to British Columbia using 4-digit NAICS codes.

NAICS Code (4- digit)	Industry	Cariboo Chilcotin	British Columbia	% of the province
3211	Sawmills and wood preservation	2080	16440	12.7%
1133	Logging	1485	15475	9.6%
6111	Elementary and secondary schools	1485	97780	1.5%
7225	Full-service restaurants and limited-service eating places	1430	155350	0.9%
1110	Farms (except Greenhouses and Aquaculture)	950	27960	3.4%
6220	Hospitals	940	77215	1.2%
4451	Grocery stores	800	57005	1.4%
2122	Metal ore mining	755	5475	13.8%
3212	Veneer, plywood and engineered wood product manufacturing	730	4035	18.1%
2361	Residential building construction	645	48950	1.3%
5617	Services to buildings and dwellings	600	54640	1.1%
3221	Pulp, paper, and paperboard mills	510	7130	7.2%
2382	Building equipment contractors	500	44585	1.1%
9120	Provincial and territorial public administration (9121 to 9129)	495	31150	1.6%
1153	Support activities for forestry	480	4975	9.6%
7211	Traveller accommodation	455	33395	1.4%
6241	Individual and family services	435	25510	1.7%
6230	Nursing and residential care facilities (6231 to 6239)	425	40575	1.0%
4521	Department stores	360	14410	2.5%
4411	Automobile dealers	355	20270	1.8%



5.9 Employment by Occupation

In this section, we analyze the labour force in the Cariboo Chilcotin Region using the National Occupational Classification (NOC) system for 2011 and 2016. The Cariboo Chilcotin Region has a relatively high portion of workers classified as *Trades, transport and equipment operators and related occupations, Natural resources, agriculture, and related production occupations,* and *Occupations in manufacturing and utilities* compared to the rest of the province (Figure 68). These, along with workers classified under *Sales and service occupations,* make up approximately 60% of the Region's occupations.

Figure 68: Employed labour force by occupational category, percentage of labour force, 2016

Occupations (NOC)	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Occupation - not applicable	2%	2%	3%	2%	3%	2%	2%
0 Management occupations	10%	9%	9%	9%	14%	11%	11%
1 Business, finance and administration occupations	11%	10%	8%	11%	11%	11%	15%
2 Natural and applied sciences and related occupations	5%	4%	4%	4%	6%	5%	7%
3 Health occupations	5%	5%	4%	5%	4%	5%	7%
4 Occupations in education, law and social, community and government services	9%	9%	8%	9%	11%	8%	11%
5 Occupations in art, culture, recreation and sport	2%	2%	3%	1%	1%	2%	4%
6 Sales and service occupations	22%	22%	21%	22%	16%	23%	24%
7 Trades, transport and equipment operators and related occupations	22%	21%	24%	22%	21%	21%	15%
8 Natural resources, agriculture and related production occupations	7%	6%	8%	8%	10%	6%	3%
9 Occupations in manufacturing and utilities	7%	9%	6%	7%	3%	6%	3%

Source: Statistics Canada; 2011 National Household Survey; Census Profile, 2016

Using 2011 as a reference point in Figure 69, we observe that there was notable growth in the number of positions classified as *Natural and applied sciences and related occupations* (+130 workers), and *Health occupations* (+100 workers). The most significant decreases in occupations were those classified as *Business, finance and administration occupations* (-475), *Occupations in education, law and social, community and government services* (-330), *Occupations in manufacturing and utilities* (-245), and *Trades, transport and equipment operators and related occupations* (-225).



Figure 69: Employed labour force by occupational category (number of workers), 2011-16

Occupations (NOC)	Cariboo Chilcotin Region 2011	Cariboo Chilcotin Region 2016	Net (+/-)
Total	31,895	30,930	-965
Occupation - not applicable	730	595	-135
0 Management occupations	3,050	3,035	-15
1 Business, finance and administration occupations	3,750	3,275	-475
2 Natural and applied sciences and related occupations	1,295	1,425	130
3 Health occupations	1,495	1,595	100
4 Occupations in education, law and social, community and government services	3,100	2,770	-330
5 Occupations in art, culture, recreation, and sport	435	500	65
6 Sales and service occupations	6,635	6,710	75
7 Trades, transport and equipment operators and related occupations	6,875	6,650	-225
8 Natural resources, agriculture and related production occupations	2,130	2,215	85
9 Occupations in manufacturing and utilities	2,400	2,155	-245



5.10 Commuting Patterns

The study on commuting patterns measures the import and export characteristics of a region's workforce. A high percentage of the outside labour force working in the community depicts the attraction of the region for nearby communities. In contrast, if the majority of the workers in the community leave for their work (export of labour force), then it may hint towards a lack of proportional opportunities in the community. Figure 70 shows that, in the Cariboo Chilcotin Region, 44% of workers are employed within the same census sub-division as they reside. 52% commute to a different sub-division within the Cariboo Chilcotin Region. The percentage of individuals working in the sub-division they live in is relatively higher for Central Cariboo Urban (57% work within their census subdivision) and relatively lower for Central Cariboo Rural and North Cariboo Division (66% and 87% respectively commute to another census subdivision within Cariboo Chilcotin Region). Very few individuals commute outside of the Cariboo Chilcotin Region, except for South Cariboo Division, where 9% commute to another census division.

Figure 70: Commuting destination for the employed labour force, 2016

Commuting destination	Cariboo Chilcotin Region	Quesnel Division	North Cariboo Division	Central Cariboo Division Urban	Central Cariboo Division Rural	South Cariboo Division	British Columbia
Commute within census subdivision (CSD) of residence	44%	49%	9%	57%	27%	28%	49%
Commute to a different census subdivision (CSD) within census division (CD) of residence	52%	48%	87%	41%	66%	62%	46%
Commute to a different census subdivision (CSD) and census division (CD) within province or territory of residence	3%	2%	4%	2%	3%	9%	5%
Commute to a different province or territory	1%	1%	1%	0%	0%	1%	1%

Source: Statistics Canada; 2016 Census Profile



The commuting patterns study also examines the three largest urban areas of the Cariboo Chilcotin Region: Williams Lake, Quesnel, and 100 Mile House. They are studied in terms of the external commuting destinations of residents from these cities (Figure 71) and where the local workers commuted from (Figure 72) in 2016. Quesnel has 250 workers commuting to Cariboo A and B regions. Williams Lake had the highest number of total external commuters at 585, mostly to the surrounding sub-divisions (Cariboo D and F regions mainly). 100 Mile House had 70 total outward commuters.

Figure 71: Top 5 commuting destinations of workers commuting from Williams Lake; Quesnel; 100 Mile House 2016

Commuting from Quesnel	Total	Commuting from Williams Lake	Total	Commuting from 100 Mile House	Total
Cariboo A, RDA	150	Cariboo D, RDA	285	Williams Lake, CY	15
Cariboo B, RDA	100	Cariboo F, RDA	120	Cariboo G, RDA	15
Cariboo D, RDA	30	Cariboo E, RDA	30	Merritt, CY	10
Prince George, CY	30	Cariboo K, RDA	20	Thompson-Nicola, E	10
Cariboo I, RDA	25	Princeton, T	10	Kelowna, CY	10

*Note: This table displays the top 5 destinations for each municipality, so the total outward commuters will be greater than the sum of the columns

Source: Statistics Canada; 2016 Census Profile

All three municipalities had substantially higher numbers of individuals commuting into them than those that commuted out from the municipalities into rural areas (Figure 72). 3830 workers commute to Williams Lake to go to work, 3495 commutes to Quesnel, and 2035 commute to 100 Mile House. These individuals primarily commute from the rural areas around these municipalities.

Figure 72: Top 5 places of residence of the workers commuting to Williams Lake; Quesnel; 100 Mile House, 2016

Commuting to Quesnel	Total	Commuting to Williams Lake	Total	Commuting to 100 Mile House	Total
Cariboo A, RDA	1950	Cariboo E, RDA	1295	Cariboo G, RDA	950
Cariboo B, RDA	990	Cariboo F, RDA	985	Cariboo L, RDA	650
Cariboo, C	330	Cariboo D, RDA	880	Cariboo H, RDA	265
Cariboo, I	330	Cariboo G, RDA	80	Thompson-Nicola E (Bonaparte Plateau), RDA	20
Prince George, CY	55	Cariboo K, RDA	40	Surrey, CY	15

*Note: This table displays the top 5 places of residence for each municipality, so the total outward commuters will be greater than the sum of the columns

Source: Statistics Canada; 2016 Census Profile

In addition to the geographical commuting patterns, the industry-specific net import/export of workers for each urban area was studied (Figure 73). As mentioned earlier in this section, the number of workers commuting to the three municipalities examined is substantially larger than the number commuting out of the areas. All three municipalities are net importers of workers. Notably, both the City of Quesnel and the City of Williams Lake have a net export of workers in the *Mining* Industry classification. The largest import sectors across all three municipalities are in the *Manufacturing*, *Retail Trade*, and *Health and social services* industry classifications.



Figure 73: Net import/export of workers by the industry for Williams Lake, Quesnel and 100 Mile House

		Williams	
Industry (NAICS)	Quesnel	Lake	100 Mile House
Total	3430	2910	1965
11 Agriculture	130	65	100
21 Mining	-70	-295	0
22 Utilities	10	45	10
23 Construction	95	165	55
31-33 Manufacturing	835	455	305
41 Wholesale trade	70	120	100
44-45 Retail trade	555	620	300
48-49 Transportation and warehousing	110	125	65
51 Information and cultural industries	40	30	35
52 Finance and insurance	50	65	30
53 Real estate and rental and leasing	75	110	95
54 Professional, scientific and technical services	85	115	120
55 Management of companies and enterprises	0	-10	0
56 Administrative and support, waste management and remediation services	60	45	60
61 Educational services	210	230	105
62 Health care and social assistance	520	445	340
71 Arts, entertainment and recreation	35	40	15
72 Accommodation and food services	235	155	160
81 Other services (except public administration)	165	140	65
91 Public administration	155	265	80

Source: Statistics Canada; 2016 Census Profile



5.11 Business Counts

Statistics Canada's Canadian Business Counts provides a record of business establishments by industry sector and size. This data is collected from the Canada Revenue Agency (CRA) by Statistics Canada. The Canadian Business Counts data records business counts as either "Without Employees" or "With Employees." The establishments in the "Without Employees" category include the self-employed (i.e., those who do not maintain an employee payroll, but may have a workforce consisting of contracted workers, family members or business owners). It should be noted that the Canadian Business Counts data use the Canada Revenue Agency as a primary resource in establishment counts; therefore, businesses without a business number or indicating annual sales less than \$30,000 are not included.

The following observations emerge from the industry-specific business counts in the Region (Figure 74):

- 60% of classified businesses did not have any employees
- 54% of businesses with employees employed 1-4 people in the Region
- Agriculture, forestry, fishing and hunting, and Construction were the two sectors with the most businesses and had the highest number of businesses with and without employees
- Real estate and rental housing had the highest proportion of businesses with no employees
- Public Administration and Retail trade had the highest proportion of businesses with employees.
- Note: This section includes all registered companies that have a Goods and Services Tax number, as registered through the Canada Revenue Agency. Results should not be compared directly to existing business directories in the Cariboo Chilcotin Region as the criteria for registering are different for both. The Canadian Business Counts data are used primarily so that comparisons can be made to the Provincial Distribution of businesses across the same categories.



Figure 74: Business counts in the Cariboo Chilcotin Region by industry and business size (number of employees)

		Sub-Total Without	Sub-Total with			10-	20-	50-	100-	200-	
Industry (NAICS)	Total	Employees	Employees	1-4	5-9	19	49	99	199	499	500 +
Total	8982	3928	2527	1391	527	335	179	53	28	9	5
Unclassified	502	308	97	70	13	9	3	1	1	0	0
Sub-total, classified	8480	3620	2430	1321	514	326	176	52	27	9	5
11 - Agriculture, forestry, fishing and hunting	1502	812	345	219	53	40	26	3	2	2	0
21 - Mining and oil and gas extraction	66	32	17	10	3	2	0	0	1	0	1
22 – Utilities	19	5	7	6	1	0	0	0	0	0	0
23 – Construction	1180	524	328	213	61	34	15	3	2	0	0
31-33 – Manufacturing	249	89	80	33	13	10	6	3	9	5	1
41 - Wholesale trade	189	63	63	27	18	8	8	2	0	0	0
44-45 - Retail trade	796	148	324	115	100	69	26	9	5	0	0
48-49 - Transportation and warehousing	575	179	198	126	34	26	9	2	1	0	0
51 - Information and cultural industries	44	16	14	6	3	4	0	1	0	0	0
52 - Finance and insurance	272	148	62	26	14	15	4	3	0	0	0
53 - Real estate and rental and leasing	805	623	91	67	16	7	0	0	0	0	1
54 - Professional, scientific and technical services	501	227	137	92	29	12	4	0	0	0	0
55 - Management of companies and enterprises	32	22	5	5	0	0	0	0	0	0	0
56 - Administrative and support, waste management and remediation services	271	95	88	46	21	13	3	5	0	0	0
61 - Educational services	60	26	17	7	3	4	1	0	0	0	2
62 - Health care and social assistance	536	160	188	101	36	23	15	9	2	2	0
71 - Arts, entertainment and recreation	132	52	40	19	13	5	3	0	0	0	0
72 - Accommodation and food services	469	117	176	60	45	26	35	9	1	0	0
81 - Other services (except public administration)	717	281	218	140	46	24	8	0	0	0	0
91 - Public administration	55	1	27	1	3	4	12	3	4	0	0

Source: Statistics Canada, Canadian Business Counts, December 2018



Figure 75 shows the distribution of the number of businesses with employees by industry in the Cariboo Chilcotin Region. As previously mentioned, the *Agriculture, forestry, fishing and hunting* and *Construction* sectors make up the two largest percentages of total businesses and businesses with employees in the Region. *Retail trade* also makes up a large proportion of the total businesses with employees, as well as *Other services (except public administration)*, and *Transportation and warehousing*.

Figure 75: Businesses by industry in Cariboo Chilcotin Region, percentage of total businesses with employees, 2018

Industry (NAICS)	Business with employees	%
Total	2425	100%
11 - Agriculture, forestry, fishing and hunting	345	14%
21 - Mining and oil and gas extraction	17	1%
22 - Utilities	7	0%
23 - Construction	328	14%
31-33 - Manufacturing	80	3%
41 - Wholesale trade	63	3%
44-45 - Retail trade	324	13%
48-49 - Transportation and warehousing	198	8%
51 - Information and cultural industries	14	1%
52 - Finance and insurance	62	3%
53 - Real estate and rental and leasing	91	4%
54 - Professional, scientific and technical services	137	6%
55 - Management of companies and enterprises	5	0%
56 - Administrative and support, waste management and remediation services	88	4%
61 - Educational services	17	1%
62 - Health care and social assistance	188	8%
71 - Arts, entertainment and recreation	40	2%
72 - Accommodation and food services	176	7%
81 - Other services (except public administration)	218	9%
91 - Public administration	27	1%

Source: Statistics Canada, Canadian Business Counts, December 2018



Again, using the location quotient analysis, where 1.25 or greater represents strength, 0.75 to 1.25 represents proximity to the Provincial distribution, and below 0.75 represents low competitiveness, four sectors emerged as highly competitive in terms of proportions of business counts. These, shown in Figure 76 were: *Agriculture, forestry, fishing and hunting, Utilities, Transportation and warehousing*, and *Public administration*.

Figure 76: Business count location quotients (LQ) businesses with employees by industry, 2018

Industry (NAICS)	LQ2018	Strength
11 - Agriculture, forestry, fishing and hunting	4.32	High
21 - Mining and oil and gas extraction	1.10	Moderate
22 - Utilities	2.84	High
23 - Construction	1.03	Moderate
31-33 - Manufacturing	0.87	Moderate
41 - Wholesale trade	0.56	Low
44-45 - Retail trade	1.24	Moderate
48-49 - Transportation and warehousing	1.94	High
51 - Information and cultural industries	0.37	Low
52 - Finance and insurance	0.68	Low
53 - Real estate and rental and leasing	0.70	Low
54 - Professional, scientific and technical services	0.48	Low
55 - Management of companies and enterprises	0.34	Low
56 - Administrative and support, waste management and remediation services	0.78	Moderate
61 - Educational services	0.48	Low
62 - Health care and social assistance	0.80	Moderate
71 - Arts, entertainment and recreation	0.99	Moderate
72 - Accommodation and food services	1.08	Moderate
81 - Other services (except public administration)	1.09	Moderate
91 - Public administration	2.42	High

Source: Statistics Canada; Canadian Business Counts December 2018. Adapted by MDB Insight.



6. Regional Workforce Development Governance Structure

Planning for workforce development is recognized as a priority across the Region, with varying degrees of activity underway in many communities. Those involved in its planning and delivery recognize that it cannot be done in isolation of an in-depth understanding of the local and regional economies. Furthermore, it is necessary to more clearly understand which organizations are active in this space, what they are undertaking, and how might opportunities for collaboration and coordination be pursued.

Figure 77 shows the ecosystem of workforce development support organizations in the Cariboo Chilcotin Region. Activities being delivered in the Region are broken up by the following categories:

- **Training:** any organization or educational institution that offers training programs to job seekers and the labour force at large.
- Literacy Programs: Organizations or institutions that provide literacy training.
- Post-Secondary Institutions: Universities, colleges, or trade schools. These institutions represent significant talent pools, and their alignment with the local industry can be a key determinant in local workforce development.
- Immigration: Organizations that assist new immigrants in the Region with navigating, landing, and integration.
- Recruitment: Organizations that assist employers with the recruitment of talent either externally in other parts of BC, Canada, or other countries – or internally within the Region. Economic development officers often assist with this.
- **Employment Supports/Job Readiness:** Recognizing that some job seekers may require assistance with life skills, work readiness, or navigating complex application processes, employment support organizations are an essential component of this structure.
- Labour Market Information: A central and high-level service to any workforce development structure. Labour Market Information is data that assists employers and support organizations with setting priorities and planning for the future to better assist job seekers. To be effective in informing the workforce ecosystem, labour market information must be communicated effectively across the network.

The following mind map lists local and regional organizations identified under appropriate categories. While this map is not meant to be exhaustive, it does provide a strong starting point for the identification of those that are contributing to workforce planning, development, and delivery in the Region.



Figure 77 Cariboo Chilcotin Region Workforce Development Mind Map

Training

- CCATEC
- •TRU/ College of New Caledonia
- Sage Trainers
- •School district does some continuing education
- Privately operated training providers
- Community Futures
- Trades Training:
- Heavy Metal Rocks;
- private traffic control and safety training)

Literacy Programs

- Quesnel Literacy Society
- •New Focus Society (Q)
- Cariboo Chilcotin Literacy (includes financial literacy)

Post-Secondary Institutions

- •TRU (WL and 100M)
- •CNC (Q)
- •UNBC (Q)

Employment Supports/Job Readiness

- •Work BC (job fairs, workshops, job club etc.)
- •College of New Caledonia
- CCATEC
- •Thompson Rivers University

Immigration

- •Immigration Settlement CCPL
- •New Focus Society (Q)
- •IMSS (Prince George based)

Labour Market Information

- •BC Stats
- Local employers

Regional Workforce Development

Recruitment

- City of Quesnel (targeted) (specific occupations, residents, media and social media)
- Williams Lake Central Interior Rural Division of Family Practice
- Visitor Centres (relocation packages)
- City of Quesnel Healthcare Professionals Recruitment Program



7. Regional Asset Inventory and Value Proposition

The Cariboo Chilcotin Region is often celebrated for its lifestyle assets. Throughout consultations, stakeholders revealed time and time again that the factors that attract and retain residents are its affordability, outdoor recreation opportunities, and its balanced quality of life. To best leverage those lifestyle assets, it is important to take stock of what they are, where they are, and to attempt to quantify the value those assets bring. In a Region such as the Cariboo Chilcotin, where its geography is broad, and its communities are far apart, taking inventory of overall assets presents the opportunity to appreciate the beauty of living and working in the Region.

This section captures the input of the Tribal Councils of Northern Secwepemc, Tŝilhqot'in and Southern Carrier/Dakelh First Nations, and municipalities of Quesnel, Williams Lake, 100 Mile House, and Wells. Many of these communities have economic development offices that recognize and promote the value in their communities and available assets to businesses and residents. This exercise offers an inventory of those assets and begins the process of creating a value proposition for talent attraction and retention in the Region. It is important to note that the list is not meant to be exhaustive, rather representative of the vastness of assets across multiple categories that tend to be of interest to those looking to relocate to or remain in an area.

The lifestyle assets examined in the Cariboo Chilcotin Region in British Columbia included 69 educational institutions, 129 healthcare facilities, 77 social services facilities, 72 cultural and recreational establishments, and 81 environmental assets (e.g., national/provincial parks, trails, etc.). These numbers alone do not tell the whole story; rather, they can be used as a guide to communicate what the Region has to offer. These are elaborated in detail in the following subsections. Also, each subsection concludes with a brief value statement, which is designed for marketing the asset category. A value proposition is a way of connecting the value of a concept or idea so that it can be marketed. In the context here, the value proposition pertains to that of the Cariboo Chilcotin Region.

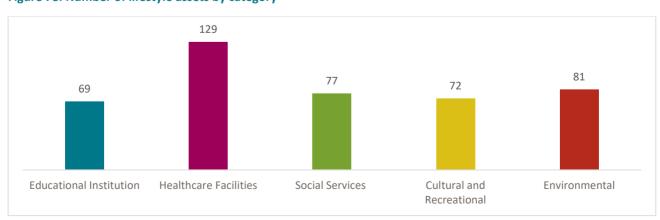


Figure 78: Number of lifestyle assets by category

Source: DMB Hoovers, Adapted by MDB Insight, 2019.



7.1 Education Institutions: Schools, Universities, Colleges, and Other Education Institutions

Education institutions represent an opportunity. Their presence in any community or region appeals to practical needs like those of young families, who may form their decision about where to live around the best or most fitting school for their child. They also signal something much bigger, though. The presence of educational institutions, especially at the post-secondary level, can signal that a community is innovative and forward-thinking. A well-integrated post-secondary institution can signal to the business community that the labour pipeline is strong, and it can be a sign to a potential resident that they can upgrade or reskill as needed.

In the Cariboo Chilcotin Region, the presence of College of New Caledonia's campus in Quesnel, Thompson Rivers University's campuses in Williams Lake and 100 Mile House, and University of Northern BC's satellite campus in Quesnel are all major assets that present opportunities for local organizations and businesses to work with those institutions. There are already numerous examples of those institutions collaborating with local employers and organizations to support the local labour market, including accelerated trades certificate programs for high school students.

In total, there are 40 elementary and secondary schools; 4 colleges, universities and professional schools; and 33 other education institutions that include fine arts schools, sport instruction centres, and education support services.

Value Proposition:

The Cariboo Chilcotin Region is serviced by plenty of innovative, accessible, and progressive educational institutions that provide learning opportunities for all ages, from four to forty and beyond.

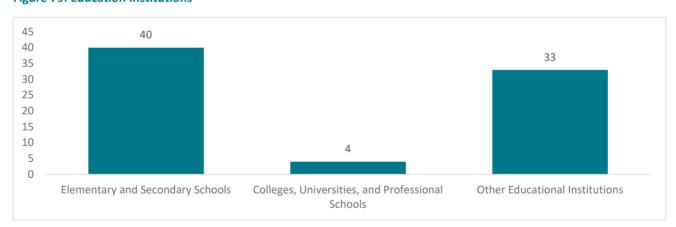


Figure 79: Education Institutions

Source: DMB Hoovers, Adapted by MDB Insight, 2019.



7.2 Healthcare Amenities

Health care amenities are essential at any age. Being close to doctors, dentists, and hospitals is an important consideration for making residential and business choices. This exercise revealed that the Cariboo Chilcotin Region is equipped with ample health care access that can be leveraged in resident and business attraction activities.

In total, the Region is home to 11 General Medical and Surgical Hospitals located in the communities of Anahim Lake, Alexis Creek, Williams Lake, 100 Mile House, and Quesnel. Some of these are managed by Interior Health and Northern Health and provide services such as basic laboratory and radiology, urgent care, outpatient ambulatory care, community services, long term residential care services, and/or on-site doctors' offices. This exercise also revealed that there are 41 Offices of Physicians in the Region to complement hospitals and Interior Health and Northern Health Authority services.

The area also has 30 dental and vision clinics, two mental health and substance abuse facilities, 21 alternative healthcare facilities, and nine senior housing and continuing care facilities. These facilities may provide opportunities for the ageing population to maintain an active lifestyle in proximity to other healthcare services and social and recreational amenities. Captured within these totals are also First Nations health centers, which are located in each community, which would fall under Hospital, Clinics, and Other Medical Centre. Also included in this category would be maternity facilities, which have been observed by some stakeholders to be lacking in the Region.

Value Proposition

Live in a peaceful and serene setting in the Cariboo Chilcotin Region and never worry about access to health care needs. Wherever you are in the Region, you'll be cared for.

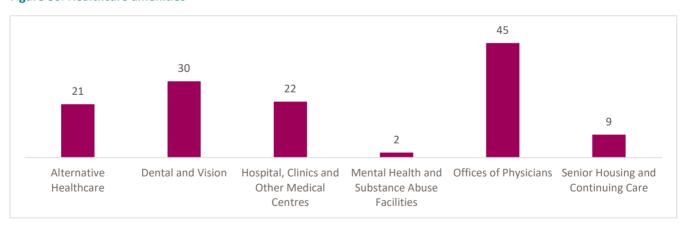


Figure 80: Healthcare amenities

Source: DMB Hoovers, Adapted by MDB Insight, 2019.



7.3 Social Services

Social services assets are critical components of any community. They support residents of all ages from children, to youth, to seniors. They help vulnerable residents develop new skills, and they facilitate access to opportunity. In the Cariboo Chilcotin Region, there are a total of 83 social services assets, including children, youth, and family services, daycare services, services for the elderly, and vocational rehabilitation services. Stakeholder engagements identified that there are social issues such as increasing homelessness and drug addiction that require attention.

Value Proposition

In the Cariboo Chilcotin Region, we have the tools to set you up for success.

25

Child, Youth and Family Child Day Care Services Emergency and Other Services

Emergency and Other Relief Services Services and Persons with Services Disabilities

Figure 81: Social Services Facilities

Source: DMB Hoovers, Adapted by MDB Insight, 2019.

7.4 Cultural, Recreational, and Environmental Assets

Arguably, the Cariboo Chilcotin Region's best asset is its beautiful setting amongst the Coast Mountains, Cariboo Mountains, lakes, and rivers in the central interior of British Columbia. This component is largely qualitative based on suggestions from stakeholders. Many environmental assets are not listed in directories such as Dunn & Bradstreet. For example, the listings did not capture the 454 trails that are listed in the Cariboo Chilcotin Coast on recreational websites like Trailforks. The Region's landscape offers recreational opportunities to residents of all abilities. Throughout consultations, it was revealed that Cariboo's major draw is its quality of life and outdoor lifestyle offerings. For this reason, recreation and cultural assets are grouped and considered together as interconnected assets. Major highlights in these asset categories include 17 provincial parks throughout the Region and over 400 trails of varying degrees of accessibility and ruggedness.

It was found through consultation that some communities in the Cariboo Chilcotin Region fall short in terms of cultural and social offerings. This gap was cited as a reason that the Region has challenges

¹⁰ https://www.trailforks.com/region/cariboo-chilcotin-coast/?activitytype=1&z=6.8&lat=51.91110&lon=-122.60734



retaining young people. Through this exercise, it was found that throughout the Region as a whole, Cariboo has roughly 19 Amusement and Recreation Industries and 11 Performing Arts assets.

Value Proposition

Enjoy an active lifestyle in the Cariboo Chilcotin Region. You'll never be far from the adventure of a lifetime.

Amusement and Recreational Recreation Industries Sports Country Clubs Parks

Figure 82: Cultural and Recreational Assets

Source: DMB Hoovers, Adapted by MDB Insight, 2019.

The Region is home to the Itcha Ilgachuz Provincial Park, the Bowron Lake Provincial Park, and the Cariboo Mountains Provincial Park, among many others.

7.5 Value Proposition for the Region

Taking these various assets together, a value proposition has been created for the Cariboo Chilcotin Region.

Wherever you live and work in the Cariboo Chilcotin Region, access to adventure, community, and opportunity awaits.



8. Labour Supply & Demand

8.1 Labour Supply & Demand

At the time this labour market supply and demand analysis were completed, the statistics indicated that 673 new jobs would be created, combined with a retirement replacement need of 1,163, totalling a demand for 1,835 workers over the next five years. These occupations were predominantly in agriculture and forestry; mining, oil and gas extraction; and manufacturing. Since this analysis was completed, new developments on the ground occurred in the local forestry sector that, while they are not yet reflected in available statistical data, have a significant impact on the Region. This section begins with a high-level analysis of the potential impact of recent closures in the forestry sector. It is then followed by the projections that are made based on 2016 Statistics Canada data, before recent developments.

- As of the 2016 census, there were 1,735 employed in the area in agriculture, forestry, fishing and hunting
- Within that category 440 are employed in logging and 295 in support activities for forestry, which amounts to 735 in these two industries
- In 2016 there were 3,780 employed in manufacturing
- Within that category 3,410 were employed in sawmills, wood products, and pulp and paper

For illustrative purposes only, this estimate assumed job losses of 20% in each

- 150 losses in agriculture, forestry (20% of 735)
- Roughly 700 in manufacturing (20% of 3,410). If we assume the forestry closures will immediately reduce employment in forestry activities in the Region, that will reduce jobs in that industry by about 150. This estimate of 150 was based on rough numbers reported in June 2019 of closures at the 100 Mile House and Quesnel sawmills.
- Economic base jobs in the Region total about 6,500, so a steep erosion of that base is possible.
- If we assume these job holders view the cuts as permanent, they may leave the area.
- The impact on local activities may be significant as they take their dependents with them. Population serving jobs health care, service sector jobs will decline as a result. The holders of the population serving jobs will likely seek employment elsewhere if necessary. This, in turn, means less spending locally, more job losses, etc. as the direct losses turn into indirect and induced losses.

The impacts of the closures, if permanent, have repercussions not only for occupations in forestry and wood product-related industries but also across most other industries as well.

Continued monitoring of these impacts is necessary.

¹¹ Note: the mining sector has also experienced variable performance which is likely to impact statistical results once Statistics Canada captures this data. Unfortunately, these data are not yet available, but the likely change in mining statistics is acknowledged.



Summary of Key Findings from 2016 Data Projections

NOTE: These projections are based on historical Statistics Canada data, which has been modeled to project labour supply, and, by consequence, key labour gaps.

- The Region's net natural change in population has turned negative in recent years; this means the birth rate is lower than the death rate. However, the positive population changes have been influenced by the accelerated in-migration from other parts of British Columbia and, to a lesser extent, from international and interprovincial migration.
- The North Cariboo Region shows the largest number of jobs in manufacturing. Meanwhile, the Central Cariboo Urban area's major strength is in mining, oil, and gas extraction. For the rest of the geography, agriculture and forestry showed a major source of employment based on the statistics available for this exercise. The manufacturing industry is also closely linked to the agricultural and forestry sectors; wood product manufacturing and paper product manufacturing were important subsectors among the Region. That said, the on-the-ground reality of this sector indicates a recent downturn that will have impacts in supporting sectors as well.¹²
- Based on the historical performance of the forestry sector, metroeconomics projects an estimated demand of 1,835 workers over the five next years.¹³ The industries expected to see growth include agriculture and forestry; mining, oil and gas extraction; and manufacturing. This growth includes new positions and the replacement of retiring workers.
- The top three occupations expected to see the largest growth include managers in agriculture, labourers in wood, pulp, and paper processing; and transport truck drivers.

8.2 Projections of Cariboo Chilcotin Region Employment by Industry and Occupation

Sub-Dividing the Region

For this assessment, the Cariboo Regional District (Census Division 5941) has been divided into three areas (Census-estimated populations are provided). *Metroeconomics* conducted the labour force analysis following Census Agglomerations. North Cariboo and Central Cariboo/Urban regions match exactly areas referred to by Statistics Canada respectively as the Quesnel Census Agglomeration (CA) and the Williams Lake Agglomeration (CA).

CAs, by definition, define urban labour market areas, equalling the sum of contiguous Census Subdivisions (CSDs) whose urban core and suburban residents have interdependent needs, working and shopping at locations mainly in the core municipality of the CA. Residents of Williams Lake, for example, and those residing within the vicinity, oftentimes shop and work in Williams Lake.

¹² https://globalnews.ca/news/5394991/bc-forestry-job-losses-canfor/

¹³ It is recognized that the forestry sector is not likely to see improvement in the immediate future because of the Mountain Pine Beetle problem and consequential forest fires, which require significant regrowth.



Due to a lack of detailed base year data for Cariboo Rural/South alone, occupation projections are presented for Cariboo Region as a whole.

The following reflects the breakdown of each sub-region by population

- North Cariboo with a population of 23,146 in 2016 (down by 420 from 23,566 in 2011)
- Central Cariboo Urban with a population of 18,277 in 2016 (down by 213 from 2011)
- Central Cariboo Rural/South Cariboo (or Other Cariboo) with a population of 20,565 in 2016 (up by 229 from 2011)

Analysis' key findings are as follows:

According to the Census, the population of Cariboo Chilcotin Region, including all three sub-regions, fell by 404 from 62,392 in 2011 to 61,988 in 2016.

North Cariboo covers 21,715 square kilometres, Central Cariboo Urban 2,658 square kilometres and the remainder of Cariboo Chilcotin Region 56,201 square kilometres. Thus, the Central Cariboo Urban area is the most densely populated (at 6.88 people per sq. km), followed by North Cariboo (1.06 people per sq. km) and the rest of the Cariboo Chilcotin Region (0.37 people per sq. km).

The census subdivisions (CSDs) included in the North Cariboo match exactly those that define the Quesnel Census Agglomeration (CA) while the CSDs included in Central Cariboo Urban match exactly those that define the Williams Lake CA.

In 2016 employers provided 9,025 jobs in North Cariboo (or 390 jobs per 1,000 residents), 8,860 jobs in Central Cariboo Urban (485 jobs per 1,000 residents) and 5,745 jobs in the rest of Cariboo (or 279 per 1,000 residents).

Recent Changes in Population

Recently released postcensal population estimates by Statistics Canada for CD 5941 suggest the Region's population fell by an average of 98 people per year between 2006 and 2011 but grew by an average of 183 per year between 2011 and 2016. The postcensal estimates adjust the counts obtained from the Census by the estimated undercount of the Census and shift the day of estimation from mid-May to July 1st. The postcensal estimates suggest the Census undercounted the population by 1,682 (or 2.6 percent) in 2006, by 988 (or 1.6 percent) in 2011 and by 2,308 in 2016 (or 3.6 percent). Undercounts of anywhere from 2 to 4 percent are typical, so the undercounts for the Region are well within the norm.

By either measure, the population of the Region did not grow much between 2006 and 2016. The Census counts suggest a ten-year decline of 202; the postcensal estimates suggest a ten-year increase of 424. The postcensal estimates, which decompose the population changes each year into their key sources (Figure 83), suggest Cariboo's population resumed growing recently, reaching a pace of 395 per year between 2016 and 2018.



Though the Region's net natural change in population (births fewer than deaths) recently turned negative, net in-migration accelerated to an average of 454 per year. Half of that gain was accounted for by net in-migration from other parts of British Columbia and the remainder by net in-migration from other countries and other parts of Canada.

Figure 83: Cariboo Chilcotin Region Population and Sources of Population Change Annual Data 2006-2011, 2011-2016 and 2016-2018

	06-11	11-16	16-18
Population in 2011, 2016 and 2018	63,380	64,296	65,086
Average annual changes			
Total population	-98	183	395
Births	649	570	595
Deaths	511	557	654
Net natural	137	13	-59
Net international migration	149	500	132
Net interprovincial migration	-138	-7	105
Net intraprovincial migration	-255	-340	217
Net non-permanent residents	8	16	1
Net migration	-236	170	454

Source: Statistics Canada Post Censal Population Estimates

The Economy of the Cariboo Chilcotin Region

Based on Census data regarding employment by place of work by the industry for the Region from the key economic drivers of the Region are agriculture, forestry, mining, and manufacturing. Total employment by place of work overall fell between 2006 and 2016 from 25,910 to 23,545 or by 2,365. Among the economic base industries, employment in mining increased by 310, but in agriculture and forestry, it fell by 1,005, and in manufacturing, it fell by 610. Among the population serving industries, the largest gains were in retail trade (up 315), health and social services (up 220), and utilities (up 80). All other industries witnessed either steady employment (professional, scientific and technical services was up 10) or declines with the largest occurring in wholesale trade (down 315), education (down 275), accommodation and food (down 240), transportation and warehousing (down 185) and government (down 175).

Figure 84 reveals where, within the Region, the jobs were found in 2016. All three sub-regions lay claim to jobs within the industries driving the area's overall economy. North Cariboo accommodates the greatest number of jobs in manufacturing, Central Cariboo Urban, the greatest number in mining and oil and gas, and the rest of the Region the greatest number in agriculture and forestry. Within manufacturing, two industries dominate wood products (in all three sub-regions) and paper products (only in North Cariboo).



Figure 84: Cariboo Chilcotin Region by Sub-Region Employment by Place-of-Work by Industry in 2016

		Central		Total
	North	Cariboo	Other	Cariboo
	Cariboo	Urban	Cariboo	Region
Total population	23,146	18,277	20,565	61,988
EPOW per 1,000 residents	390	485	275	380
Total EPOW all industries	9,025	8,860	5,660	23,545
Agriculture, forestry	575	375	765	1,715
Mining, oil and gas	70	645	235	950
Utilities	35	75	20	130
Construction	300	360	305	965
Manufacturing	2,150	1,090	535	3,775
Wholesale trade	150	260	125	535
Retail trade	1,210	1,365	870	3,445
Transportation, warehousing	250	325	150	725
Information, culture	135	85	50	270
Finance, insurance	270	385	225	880
Professional, scientific, technical services	285	355	275	915
Other business services	190	190	165	545
Education	680	555	325	1,560
Health, social services	1,010	1,075	555	2,640
Arts, entertainment, recreation	175	100	65	340
Accommodation, food	695	645	500	1,840
Other services	495	410	225	1,130
Government	350	565	270	1,185
Total EPOW manufacturing	2,150	1,090	535	3,775
Food	10	10	70	90
Beverage and Tobacco Products	10	10	10	30
Textile Mills	0	10	0	10
Textile Product Mills	0	0	0	- (
Clothing	0	0	0	(
Leather and Allied Products	0	0	0	(
Wood Products	1,545	945	395	2,885
Paper	505	10	0	515
Printing and Related Support Activities	10	15	0	25
Petroleum and Coal Products	0	10	0	10
Chemical	10	0	10	20
Plastics and Rubber Products	10	10	0	20
Non-Metallic Mineral Products	20	20	10	50
Primary Metal	0	0	0	(
Fabricated Metal Products	10	0	20	30
Machinery	20	20	10	50
Computer and Electronic Products	0	0	0	(
Electrical Equipment, Appliance and Compon	0	0	0	(
Transportation Equipment	0	0	0	(
Furniture and Related Products	0	10	0	10
Miscellaneous	0	20	10	30

Source: Statistics Canada 2016 Census

EPOW = Employment by Place of Work



metroeconomics estimates total employment by place-of-work declined slightly between 2016 and 2019 by 220, but a gain of 673 is projected over the five years from 2019 to 2024.

Among the economic drivers, agriculture and forestry are expected to post a gain of 46, mining a gain of 40 and manufacturing a gain of 157. These economic base job gains – along with the need to replace retiring Baby Boomers – should result in a population gain for the Region as a whole over that span of 1,200. As a result, gains in employment in many of the population serving industries can be expected, most notably in health and social services (up 185), accommodation and food (up 104), professional, scientific, and technical services (up 72) and education (up 64). The distribution of these projected changes by sub-region is tabulated in Figure 85.

Figure 85: Cariboo Chilcotin Region by Sub-Region Employment by Place-of-Work by Industry Estimated 2019 and Projected 2024

		20	2019				2024				Change 2019 to 2024			
	North Cariboo	Central Cariboo Urban	Other Cariboo	Cariboo Region	North Cariboo	Central Cariboo Urban	Other Cariboo	Cariboo Region	North Cariboo	Central Cariboo Urban	Other Cariboo	Cariboo Region		
Total population	24,113	19,041	21,424	64,578	24,561	19,394	21,822	65,778	448	354	398	1,200		
Total employment by place of work	8,922	8,687	5,716	23,325	9,194	8,927	5,877	23,998	272	240	161	673		
Agriculture, forestry	575	375	785	1,736	590	385	806	1,781	15	10	21	46		
Mining, oil and gas	69	640	218	928	72	667	228	968	3	27	9	40		
Utilities	34	72	15	120	34	73	15	122	0	1	0			
Construction	294	352	288	935	307	367	301	974	12	15	12	3		
Manufacturing	2,166	1,083	554	3,803	2,255	1,128	577	3,960	89	45	23	15		
Wholesale trade	145	250	127	521	137	237	121	495	-7	-13	-7	-2		
Retail trade	1,179	1,324	874	3,377	1,164	1,308	863	3,334	-15	-17	-11	-4		
Transportation, warehousing	247	320	160	727	258	334	167	758	11	14	7	3		
Information, culture	132	83	25	240	127	79	24	230	-5	-3	-1	-1		
Finance, insurance	264	375	208	848	263	373	207	843	-2	-2	-1	-!		
Professional, scientific, technical services	279	346	278	903	301	374	300	975	22	28	22	7		
Other business services	187	186	184	556	193	192	190	575	6	6	6	1		
Education	667	542	338	1,548	695	565	352	1,611	27	22	14	6		
Health, social services	999	1,059	582	2,640	1,069	1,133	622	2,824	70	74	41	18		
Arts, entertainment, recreation	172	98	65	335	178	101	67	345	5	3	2	1		
Accommodation, food	687	635	481	1,802	726	671	508	1,906	40	37	28	10		
Other services	484	399	223	1,106	492	406	227	1,124	8	6	4	1		
Government	341	548	311	1,200	333	536	304	1,172	-8	-13	-7	-2		

Source: metroeconomics

Based on these estimates for 2019 and projections for 2024, *metroeconomics* developed detailed projections for each of 303 industries and each of 500 occupations for the Region. The projections by industry and by occupation reflect the growth in jobs that can be expected due to the expansion of the area's economy over those five years. Estimates were also developed for each occupation of the likely number of retirees over that span.

Figure 86 summarizes the occupation projections. It lists the 50 occupations for which the greatest demand is expected to occur between 2019 and 2024, where demand includes that due to economic expansion plus that due to retiree replacement.

The top 50 occupations account for 54 percent of all those employed in the Region in 2019 and for 68 percent of the total demand by occupation that will occur between 2019 and 2024 (71 percent of the demand due to economic expansion and 66 percent of the demand due to retiree replacement).



The greatest total need for new workers will occur among:

- Managers in agriculture (69)
- Labourers in wood, pulp, and paper processing (67)
- Transport truck drivers (58)
- Food-counter attendants, etc. (43)
- Elementary school and kindergarten teachers (37)
- Sawmill machine operators (37)
- Cooks (36)
- Administrative assistants (35)
- Financial auditors and accountants (35)
- Early childhood educators and assistants (35)

These ten occupations alone out of 500 occupations in total collectively account for 25 percent of all of the recruits that will be required in the Cariboo Chilcotin Region over the next five years.



Figure 86: Cariboo Chilcotin Region Employment by Place-of-Work by Occupation Estimated 2019, Projected 2024, Projected Economic Demand 2019 to 2024 - Projected Retirees 2019 to 2024 - Projected Total Demand 2019 to 2024

Rank	NOC#	Occupation	2019	2024	Change 19-24	Retirees 19-24	To Dema 19-
		Total All 500 Occupations	24,332	25,004	673	1,163	1,8
		Top 50 Occupations Ranked by Total Demand	13,127	13,607	480	768	1,2
		Top 50 Percent Share	54	54	71	66	
1	821	Managers in agriculture	393	396	2	66	
2	9614	Labourers in wood, pulp and paper processing	693	735	43	25	
3	7511	Transport truck drivers	436	459	23	35	
4	6711	Food counter attendants, kitchen helpers and related support occupations	459	493	33	10	
5	4032	Elementary school and kindergarten teachers	421	440	19	18	
6	9431	Sawmill machine operators	247	271	24	13	
7	6322	Cooks	400	428	28	9	
8	1241	Administrative assistants	492	499	7	28	
9	1111	Financial auditors and accountants	290	303	14	21	
10	4214	Early childhood educators and assistants	318	336	18	16	
11	6513	Food and beverage servers	370	398	29	5	
12	7311	Construction millwrights and industrial mechanics	352	366	15	18	
13	6731	Light duty cleaners	421	432	11	21	
14	3413	Nurse aides, orderlies and patient service associates	350	364	14	18	
15	8431	General farm workers	294	296	2	29	
16	7521	Heavy equipment operators (except crane)	225	238	13	18	
17	3012	Registered nurses and registered psychiatric nurses	322	338	16	14	
18	1221	Administrative officers	320	324	4	24	
19	4031	Secondary school teachers	317	332	14	10	
20	6611	Cashiers	611	604	-7	31	
21	9436	Lumber graders and other wood processing inspectors and graders	136	148	12	12	
22	6232	Real estate agents and salespersons	123	141	18	6	
23	6733	Janitors, caretakers and building superintendents	283	289	6	18	
24	6421	Retail salespersons	849	831	-18	41	
25	1311	Accounting technicians and bookkeepers	170	176	6	14	
26	7321	Automotive service technicians, truck and bus mechanics and mechanical repairers	300	307	7	12	
27	621	Retail and wholesale trade managers	532	523	-9	28	
28	6541	Security guards and related security service occupations	114	117	3	15	
29	7452	Material handlers	299	307	8	11	
30	631	Restaurant and food service managers	160	175	14	4	
31	7271	Carpenters	183	191	9	9	
32	9434	Other wood processing machine operators	117	126	9	8	
33	4212	Social and community service workers	208	216	8	9	
34	1222	Executive assistants	56	56	0	16	
35	4112	Lawyers and Quebec notaries	100	104	4	11	
36	2171	Information systems analysts and consultants	89	88	0	15	
37	9215	Supervisors, forest products processing	160	168	8	7	
38	1414	Receptionists	193	200	7	8	
39	7514	Delivery and courier service drivers	158	165	7	8	
40	3112	General practitioners and family physicians	83	91	8	6	
41	911	Manufacturing managers	122	127	4	10	
42	6341	Hairstylists and barbers	154	165	11	3	
43	4412	Home support workers, housekeepers and related occupations	124	133	9	5	
44	7333	Electrical mechanics	43	44	1	12	
45	4021	College and other vocational instructors	87	88	1	13	
46	1243	Medical administrative assistants	118	129	11	2	
47	1122	Professional occupations in business management consulting	75	79	4	9	
48	7513	Taxi and limousine drivers and chauffeurs	37	42	5	8	
49	1411	General office support workers	189	190	1	12	
50	4413	Elementary and secondary school teacher assistants	135	141	6	6	

Source: metroeconomics



9. Vicinity Jobs Reporting – Real-Time Labour Market Intelligence

During the Vicinity Jobs reporting period beginning, January 1, 2018, and ending March 31, 2019, a total of 4,111 job postings and a total of 2,710 job seekers were recorded.

- 85% of all job demand (jobs available) took place in Williams Lake and Quesnel. 77% of job seekers were also located in these communities.
- The strongest sector for demand was Health Care and Social Assistance. 24% of the Region's job postings were classified into a sector. Accommodation and Food Services had the highest number of job seekers (30%).
- The Sales and Service Occupation category (NOC 6) accounted for 29% of all job postings and 24% of job seekers.
- 27% of all job postings required a college degree; approximately 27% of job seekers had a college diploma or degree.

The full-sized Vicinity Jobs report is attached separately and included here as a snapshot.





CARIBOO REGIONAL DISTRICT, BC

REPORTING PERIOD OF JANUARY 1 - MARCH 31, 2019











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Introduction

The real-time Jobs Demand Report's intelligence gathering system provides ongoing monitoring of online job postings with extensive quality assurance to analyze and compile each local job demand report. The Data Warehouse and Reporting Engine allows for the monitoring of the on-line local job market within the Cariboo Regional District. This technology permits the extraction of relevant information about each online job posting, including but not limited to the following metrics:

- Job Location
- Employer and employer industry (NAICS)
- Occupational Category (NOCS)
- Type of job (full-time/part-time, contract/permanent)

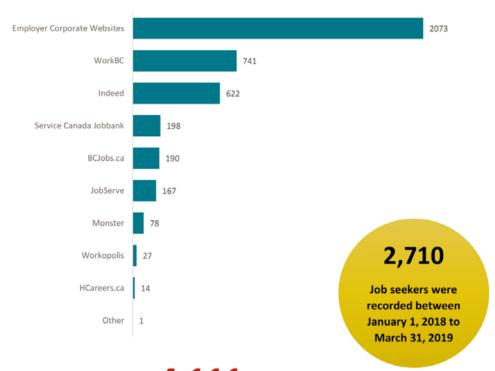
For these communities, job postings were collected starting in January of 2018.





Overview - Recent Hiring Trends

Job Postings by Data Source¹ - Jan 1, 2018 - Mar 31, 2019



4,111
Total jobs posted between January 1, 2018 to March 31, 2019

MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019

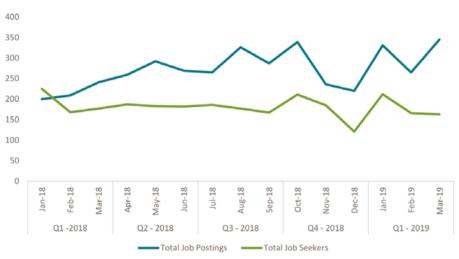
¹ The figures presented below provide a summary account of the online jobs demand activity within Cariboo Regional District for the reporting period beginning January 1, 2018 and ending March 31, 2019. These figures are derived from Vicinity Job's online reporting portal (http://bcreporting.vicinityjobs.com/)The portal allows for an examination of the underlying data used to create the figures within this report.





Job Postings Analysis





- During 2018 and the first quarter of 2019, the hiring demand peaked in March 2019. Meanwhile, during the same period, labour supply saw its highest number in January 2018. During this month the labour supply exceeded the labour demand.
- Compared to the first quarter of 2018, the first quarter of 2019 recorded an increase of 45% in the number of job postings, and a fall of 5% in the number of job seekers (For quarter to quarter analysis, Workopolis is excluded to allow consistency in the data).

Job Postings/Seekers by Location - January 1, 2018 to March 31, 2019



 Around 85% of job postings were in Williams Lake and Quesnel. On the other hand, 77% of job seekers were in these communities.

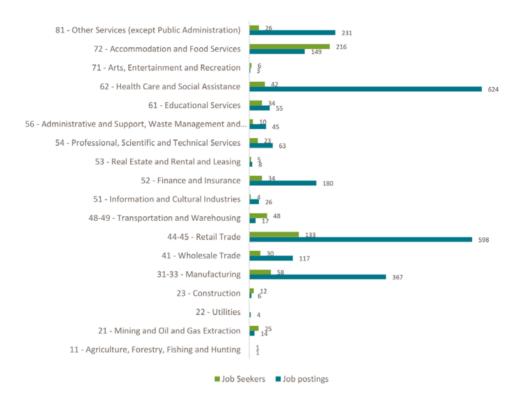
MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019





Employers and Industries

Job Postings/Seekers by Industry Sector² - January 1, 2018 to March 31, 2019



- The figure above illustrates the number of job postings and job seekers that could be matched to a specific sector, as defined by the North American Industrial Classification System (NAICS). The Heath Care and Social Assistance sector generated the highest portion of the area's hiring demand, with 24% of the region's job postings classified to a sector.
- Accommodation and Food Services had the largest number of job seekers in the area, with 30% of region's job seekers classified to a sector.

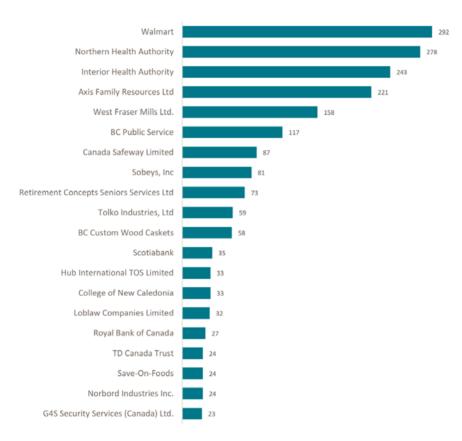
MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019

² Number of Postings applicable to the reporting period but excluded from this report's grand total due to lack of reliable and relevant information (job postings 1,481) (job seekers 712)





Job Postings by Employer – Top 20 – January 1, 2018 to March 31, 2019



- A total of 2,470 postings were matched to an employer (60% of the total)
- The top five known employers during the reporting period were responsible for almost a half of all postings matched to an employer (1,192 job postings in total or 48.20%).
 - The top employer was Walmart and accounted for 12% of the identified online job postings.
 - The top public sector employer in terms of online job postings was Northern Health Authority with 278 postings (11% of identified online job postings).

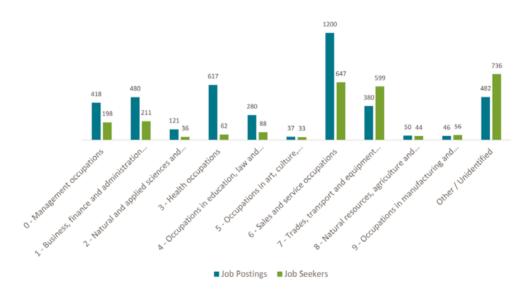
MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019







Job Postings/Seekers by Occupation (1-Digit NOC) – January 1, 2018 to March 31, 2019



The figure above illustrates the number of job postings/job seekers that could be matched to a specific Occupation Group, as defined by the National Occupational Classification (NOC). This identifies occupational groups in the District's economy that have the greatest online hiring demand. It also acts as an indicator of where there may be weaker online hiring demand.

- Demand and supply remained strongest in the sales and service occupations category (NOC 6), which accounted for 29% of all job postings and 24% of labour supply.
- 88% of all job postings found in the reporting period could be matched to a
 specific occupational category, as defined by the National Occupational
 Classification (NOC) for Human Resources Development Canada (at a singledigit NOC code level). The remaining 12% were valid job postings, however
 the job titles listed were not specific enough to allow allocation to NOC
 occupational categories.

MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019





Top 20 In-demand Occupations (4-Digit NOC) – January 1, 2018 to March 31, 2019

Occupations (4-Digit NOC)	Job Postings	%
3012 - Registered nurses and registered psychiatric nurses	176	4.30%
4212 - Social and community service workers	128	3.10%
6421 - Retail salespersons	99	2.40%
6322 - Cooks	95	2.30%
0621 - Retail and wholesale trade managers	90	2.20%
6611 - Cashiers	90	2.20%
3414 - Other assisting occupations in support of health services	74	1.80%
3233 - Licensed practical nurses	73	1.80%
1411 - General office support workers	65	1.60%
3413 - Nurse aides, orderlies and patient service associates	64	1.60%
6622 - Store shelf stockers, clerks and order fillers	64	1.60%
6552 - Other customer and information services representatives	63	1.50%
7311 - Construction millwrights and industrial mechanics	59	1.40%
1241 - Administrative assistants	50	1.20%
6411 - Sales and account representatives - wholesale trade (non-technical)	49	1.20%
6623 - Other sales related occupations	48	1.20%
1414 - Receptionists	40	1.00%
6311 - Food service supervisors	38	0.90%
6513 - Food and beverage servers	38	0.90%
3112 - General practitioners and family physicians	37	0.90%

The table above illustrates the hiring demand for the 20 occupations at the 4-digit NOC level that accounted the largest number of job postings.





Top 20 Occupations (4-Digit NOC) by Number of Job Seekers – January 1, 2018 to March 31, 2019

Occupations (4-Digit NOC)	Job Seekers	%
6611 - Cashiers	132	4.90%
7452 - Material handlers	115	4.20%
6322 - Cooks	76	2.80%
7511 - Transport truck drivers	71	2.60%
6552 - Other customer and information services representatives	63	2.30%
6421 - Retail salespersons	60	2.20%
7514 - Delivery and courier service drivers	60	2.20%
0621 - Retail and wholesale trade managers	59	2.20%
7311 - Construction millwrights and industrial mechanics	43	1.60%
6623 - Other sales related occupations	37	1.40%
4412 - Home support workers, housekeepers and related occupations	36	1.30%
6513 - Food and beverage servers	36	1.30%
7521 - Heavy equipment operators (except crane)	36	1.30%
7237 - Welders and related machine operators	32	1.20%
1414 - Receptionists	31	1.10%
6711 - Food counter attendants, kitchen helpers and related support occupations	27	1.00%
6731 - Light duty cleaners	26	1.00%
7612 - Other trades helpers and labourers	26	1.00%
7241 - Electricians (except industrial and power system)	25	0.90%
1241 - Administrative assistants	24	0.90%

The table above illustrates the 20 occupations at the 4-digit NOC level that accounted the largest number of job seekers.

Occupations in Sales and Service have the largest number of job seekers

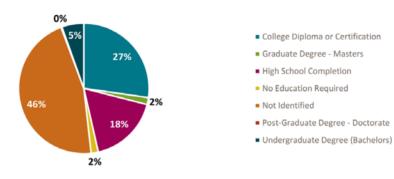
MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019



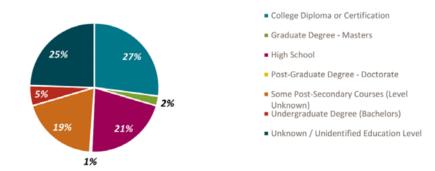


Job Quality Indicators

Job Postings by Level of Education – January 1, 2018 to March 31, 2019



Job Seekers by Level of Education – January 1, 2018 to March 31, 2019



- 18% of job postings require at least high school completion, and 27% college diploma or certification.
- 27% of job seekers had a college diploma or certification. 21% have at least finished high school.
- 5% of job postings required an undergraduate degree.

MDB Insight – Job Demand Report. Cariboo Regional District, BC. January 1, 2018 – March 31, 2019





Appendix 1

"Real-time" labour market information (LMI) is generated by extracting information from publicly available online job postings. Since the Web has evolved as the primary media through which employers connect with job applicants, it houses information about a significant portion of the job openings that employers are looking to fill. By using continuously improved text-scraping and artificial intelligence technologies to extract intelligence from the content of those web postings, real-time LMI can gather, organize, categorize, and analyze the vast quantities of data in a very short period of time. Real-time LMI data include a vast volume of unstructured background information that employers provide to potential jobseekers through their current employment advertisements. These advertisements tell workers that employers plan to hire in the near future to meet business needs, and they also describe the knowledge, skills, and abilities that a firm will require to succeed in the near-term future.

Organized and aggregated, this information provides a powerful tool that can help policymakers understand companies' short-term hiring plans and the factors influencing those plans. Current computing and data management technologies allow for quick data mining and processing, transforming raw job posting data into information that can be used for analysis. Data aggregated from job postings is cross-referenced against databases containing information about local employers and communities, to produce meaningful hiring demand reports by community, employer, and industry. In contrast to reports based on traditional reporting methodologies, which can take months or years to produce, real-time LMI reports are available within a few weeks. They enable analysts to monitor ongoing short-term job market trends as they unravel, whereas traditional public survey data usually only becomes available months or years after decisions have been made.

As with any other statistical analytic methodologies, it is very important to ensure the credibility of the analyzed data. For this reason, Vicinity Jobs / MDB have chosen to only process job postings advertised on websites that have deployed effective control processes to ensure the authenticity of job openings and credibility of advertisers.

- Postings from free job boards that do not validate the authenticity of job openings (such as Kijiji and Craigslist) are not included in the Vicinity Jobs reporting service
- Postings from the Service Canada Job Bank are included because Service Canada verifies the employer's identity before accepting job postings (by requiring them to provide a valid CRA payroll ID).
- Significant sources of job postings are not added without prior notifications to users
 of the reporting system, accompanied by analysis of the impact that the change is
 expected to have on overall numbers. Similar analysis and notifications are
 provided when a data source becomes unavailable.





However, real-time LMI is not produced by public data agencies, so it does not have the same quality standards as Federal statistical sources. Furthermore, because it is still experimental and likely biased in ways that are not clear, Federal data agencies have been slow to adopt the technology. The data focuses narrowly on the hiring outlook of those companies that advertise job opportunities on the web (rather than all employers). Private data providers, however, are experimenting extensively with real-time LMI. Despite these limitations, as businesses become increasingly comfortable with using the Internet as a worker recruitment tool and as analysts better understand the inherent biases of the data, real-time LMI can help to revolutionize the way data is collected and analyzed, including the speed at which insightful information is available to understand economic turning points and the characteristics of emerging trends.









10. Education Pipeline & Graduation Rates

10.1 Secondary School Cohort Assessment:

At the secondary school level, the 2017-18 School District 27 graduate cohort had a graduation rate of 79% and 423 graduates, and School District 28 had an 80% completion rate and 305 graduates in the same year. Therefore, the total number of secondary student graduates in the Region was 728. The total projected labour force demand by 2024 is 1200 new workers. If secondary graduation stays constant over the next five years, this will result in 3640 new adults entering the labour force. The supply of labour should, therefore, have the capacity to meet three times the demand with purely local talent (even without immigration). In practice, many young adults may leave the Region to study or find work elsewhere. This emphasizes the importance of retention techniques for local talent, as well as the attraction of new talent.

Local Graduates Snapshot, Peter Skene Ogden Secondary, 100 Mile House:

Rough estimates for the transition to post-secondary were provided by school officials from Peter Ogden Secondary School in 100 Mile House. These estimates should be considered anecdotal, but they do offer some perspective on the preferences of local graduates and the directions that homegrown talent takes.

- Total number of graduates (2019): 109
- Total that continued to post-secondary: 33 (30% of the graduating class)
- Those that attended post-secondary went to the following schools:
 - University of British Columbia 4 (12% of the graduating class)
 - The University of Victoria 2 (6% of the graduating class)
 - University of Northern British Columbia 8 (24% of the graduating class)
 - Thompson Rivers University 10 (30% of the graduating class)
 - University of the Fraser Valley -1 (3% of the graduating class)
 - Sprott Shaw College 1 (3% of the graduating class)
 - Kwantlen Polytechnic 1 (3% of the graduating class)
 - Attending but unsure where -6 (18% of the graduating class)

School officials reported that of those students that go on to post-secondary, there is a relatively even split between those pursuing Arts & Sciences and Trades.

These numbers suggest that there may be a preference among local secondary school graduates to attend local institutions like Thompson Rivers University and the University of Northern British Columbia.



10.2 Post-Secondary Education Pipeline:

The data assessed for this analysis was derived from the B.C. Ministry of Advanced Education, Skills, and Training Student Transitions Project, 2018 Data Submission. This analysis examined credentials awarded for the 2017-18 academic year for the University of Northern British Columbia, College of New Caledonia, and Thompson Rivers University. Data for that academic year were assumed to be a snapshot of constant graduate trends, instead of long-term projection data. Unfortunately, data specific to local campuses located in the Cariboo Chilcotin Region was unavailable for this exercise.

Credentials were broken down by program areas that align with the Classification of Instructional Programs (CIP) areas. Those program areas are:

- Arts & Sciences: liberal arts, humanities, and social and physical sciences
- Business & Management: business, management, marketing, office administration, and related. Does not include computer and information sciences
- Developmental: Adult Basic Education, Adult Special Education, English as a Second Language training, and other pre-post-secondary level education
- Education: including preschool and aides, and library services programs
- Engineering & Applied Sciences: agriculture, natural resources, and conservation, architecture, computing, engineering, and science technologies
- Health: health professions and related clinical sciences as well as residency programs
- Human & Social Services: legal professions, family and consumer sciences, parks, recreation and fitness, security services, public administration, and social services
- Other: programs not associated with a specific program; sometimes general studies
- Personal Improvement & Leisure: primarily leisure and recreational courses, interpersonal and social skills courses, personal awareness and self-improvement courses, and some health-related courses such as First Aid
- **Trades:** apprenticeship programs and other trades training, also transportation
- Visual & Performing Arts: visual art, music, drama, and other fine arts

These high-level data were assessed alongside projected in-demand occupations to gain a broad view of workforce alignment if students pursued appropriate programs within broad program areas.

Each in-demand occupation was matched to its appropriate Employment and Social Development Canada (ESDC) Skills Classification. The ESDC Skills Classification identifies each 2016 National Occupation Classification (NOC) with a skill level, identified by letters A to D:

- A: Occupations usually require a university education
- B: Occupations usually require college education or apprenticeship training
- C: Occupations usually require secondary school and occupation-specific training
- D: On-the-job training is usually provided for occupations



Projected in-demand occupations were matched to a common program area through a qualitative assessment. Occupations with an ESDC Skills Classification A were assessed alongside Thompson Rivers University and University of Northern British Columbia credentials awarded only, as those are the only institutions that provide university-level education. Occupations with an ESDC Skills Classification B were assessed alongside the College of New Caledonia credentials awarded only.

The remaining occupations, classified by ESDC C and D, were not assessed for this exercise, as they do not usually require post-secondary education. Some occupations were omitted from this analysis as they require specific education credentials, such as early childhood educators, and the data available did not lend itself to that level of granularity.

As the data available did not allow for the differentiation of programs of study, this exercise is meant to be regarded as a high-level assessment of overall educational needs. The key findings from this analysis were as follows:

- The local post-secondary institutions will provide more than enough supply for the labour needed in the coming five years. Special attention is required to ensure that the proportion of graduates from each program is representative of the in-demand jobs in the Region.
- Certain educational streams are proportionally misaligned with the demand in the Region. Arts & Sciences make up 13% of the graduates from local universities, but only 3% of the total projected demand. Contrary to that, trades make up 10% of the graduates but 33% of the projected demand.
- The imbalances imply that many graduates will leave the Region to find work in other areas. On the one hand, this implies a steady stream of talent is available in the Region. On the other hand, a lack of employment opportunities in the area may be a factor driving away many potential residents.
- The greatest demand will be for jobs that require training in the trades (33%), followed by business & management (23%) and education (13%).
- The largest future job demand in the Cariboo Chilcotin Region will be for Managers in agriculture, and Labourers in wood, pulp and paper processing. Figure 87 outlines the job-specific projected demands for the top 50 most demanded occupations in the Cariboo Chilcotin Region for the next five years.



Figure 87: Estimates of numbers of graduates from local post-secondary institutions compared to projected demand (among the top 50 in-demand occupations)

	2018 Gı	2018 Graduates Thompson			Projected s by 2024	Total Projected Demand		
	UNBC	CNC	Thompson Rivers	Number	Percent	Number	Percent	
Arts & Sciences	210	45	375	3150	13%	28	3%	
Business & Management	100	145	755	5000	21%	209	23%	
Developmental	0	30	745	3875	16%	0	0%	
Education	85	0	140	1125	5%	123	13%	
Engineering & Applied Sciences	115	55	180	1750	7%	98	11%	
Health	140	115	540	3975	17%	89	10%	
Human & Social Services	40	90	300	2150	9%	77	8%	
Other	0	0	0	0	0%	0	0%	
Personal Improvement & Leisure	0	0	0	0	0%	0	0%	
Trades	0	200	250	2250	10%	301	33%	
Visual & Performing Arts	0	10	50	300	1%	0	0%	

B.C Ministry of Advanced Education, Skills, and Training Student Transitions Project 2018 Data Submission, *metroeconomics*. Adapted by MDB Insight.

10.3 Limitations of the Analysis

Several key factors have emerged during the analysis, which was not anticipated at the time of conceptualizing this assessment. They represent limitations which need to be acknowledged for the benefit of the reader:

- The B.C Ministry of Advanced Education, Skills, and Training Student Transitions Project's 2018 Data Submission is based on reports produced by each educational institution. These reports are presented by each institution in an aggregate form representing total institutional output for each program category. They do not acknowledge output from satellite campuses, instead including these results as part of the overall total. As such, results from satellite campuses of Thompson River University and the University of Northern British Columbia are unavailable at that level of specificity.
- Programming is conceptualized by the B.C Ministry of Advanced Education, Skills, and Training Student Transitions Project into 11 broad categories, without additional insight into degree programs within those categories. As such, "trades" are not subdivided into specific areas of specialization such as carpentry, culinary, engineering technology, or any other component or configuration that would allow for a greater level of insight into specific output rates for associated occupations. Talent pipeline calculations consequently can only be presented at a generalized level.



Figure 88: In-demand occupations & Education Pipeline Matrix

NOC	Top 50 In-Demand Occupations	ESDC Skills Classification	Common Program Areas	UNBC Credential Awarded 2017-18	CNC Credential Awarded 2017- 18	Thompson Rivers University	Total Projected Labour Demand by 2029
821	Managers in agriculture	В	Engineering & Applied Sciences	115	55	180	69
9614	Labourers in wood, pulp, and paper processing	D	N/A	N/A	N/A	N/A	67
7511	Transport truck drivers	С	Trades	0	200	250	58
6711	Food counter attendants, kitchen helpers, and related support occupations	D	N/A	N/A	N/A	N/A	43
4032	Elementary school and kindergarten teachers	А	Education	85	0	140	37
9431	Sawmill machine operators	С	Trades	0	200	250	37
6322	Cooks	В	Trades	0	200	250	36
1241	Administrative assistants	В	Business & Management	100	145	755	35
1111	Financial auditors and accountants	А	Business & Management	100	145	755	35
4214	Early childhood educators and assistants	В	Education	85	0	140	35
6513	Food and beverage servers	С	N/A	N/A	N/A	N/A	34
7311	Construction millwrights and industrial mechanics	В	Trades	0	200	250	33
6731	Light duty cleaners	D	N/A	N/A	N/A	N/A	32
3413	Nurse aides, orderlies and patient service associates	С	Health	140	115	540	32
8431	General farmworkers	С	N/A	N/A	N/A	N/A	31
7521	Heavy equipment operators (except crane)	С	Trades	0	200	250	31
3012	Registered nurses and registered psychiatric nurses	А	Health	140	115	540	30
1221	Administrative officers	В	Human & Social Services	40	90	300	28
4031	Secondary school teachers	А	Education	85	0	140	25
6611	Cashiers	D	N/A	N/A	N/A	N/A	24
9436	Lumber graders and other wood processing inspectors and graders	С	Trades	0	200	250	24
6232	Real estate agents and salespersons	В	Business & Management	100	145	755	24
6733	Janitors, caretakers, and building superintendents	D	N/A	N/A	N/A	N/A	24



NOC	Top 50 In-Demand Occupations	ESDC Skills Classification	Common Program Areas	UNBC Credential Awarded 2017-18	CNC Credential Awarded 2017- 18	Thompson Rivers University	Total Projected Labour Demand by 2029
6421	Retail salespersons	С	N/A	N/A	N/A	N/A	23
1311	Accounting technicians and bookkeepers	В	Business & Management	100	145	755	20
7321	Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	Trades	0	200	250	19
621	Retail and wholesale trade managers	В	Business & Management	100	145	755	19
6541	Security guards and related security service occupations	С	Human & Social Services	40	90	300	18
7452	Material handlers	С	N/A	N/A	N/A	N/A	18
631	Restaurant and food service managers	В	Business & Management	100	145	755	18
7271	Carpenters	В	Trades	0	200	250	18
9434	Other wood processing machine operators	С	Trades	0	200	250	17
4212	Social and community service workers	В	Human & Social Services	40	90	300	17
1222	Executive assistants	В	Business & Management	100	145	755	16
4112	Lawyers and Quebec notaries	А	Arts & Sciences	210	45	375	16
2171	Information systems analysts and consultants	А	Engineering & Applied Sciences	115	55	180	15
9215	Supervisors, forest products processing	В	Engineering & Applied Sciences	115	55	180	15
1414	Receptionists	С	Business & Management	100	145	755	15
7514	Delivery and courier service drivers	С	N/A	N/A	N/A	N/A	14
3112	General practitioners and family physicians	А	Health	140	115	540	14
911	Manufacturing managers	А	Business & Management	100	145	755	14
6341	Hairstylists and barbers	В	Trades	0	200	250	14
4412	Home support workers, housekeepers and related occupations	С	Human & Social Services	40	90	300	14
7333	Electrical mechanics	В	Trades	0	200	250	14
4021	College and other vocational instructors	А	Education	85	0	140	14



NOC	Top 50 In-Demand Occupations	ESDC Skills Classification	Common Program Areas	UNBC Credential Awarded 2017-18	CNC Credential Awarded 2017- 18	Thompson Rivers University	Total Projected Labour Demand by 2029
1243	Medical administrative assistants	В	Health	140	115	540	13
1122	Professional occupations in business management consulting	А	Business & Management	100	145	755	13
7513	Taxi and limousine drivers and chauffeurs	С	N/A	N/A	N/A	N/A	13
1411	General office support workers	С	Arts & Sciences	210	45	375	13
4413	Elementary and secondary school teacher assistants	С	Education	85	0	140	12

Source: ESDC Skills Classification Matrix 2019; B.C Ministry of Advanced Education, Skills, and Training Student Transitions Project 2018 Data Submission. Adapted by MDB Insight.



10.4 Thompson Rivers University Williams Lake Campus Graduation Data

Commencement booklets from Thompson Rivers University Williams Lake Campus for the years 2017, 2018, and 2019 were provided. Commencement numbers by a program offered a detailed view of the stream of education and talent within the Williams Lake area. The following table is an overview of total graduate numbers and program areas. The following high-level observations emerged from this analysis:

- The number of Saw Filer graduates at all levels (1, 2, 3) exceeds graduates of any other program. These graduates would maintain wood sawing machines in lumber and paper mills. In our projections of top in-demand occupations by 2029, labourers in wood, pulp, and paper processing, sawmill machine operators, other wood processing machine operators all fell into the top 50 in-demand occupations.
- The Health Care Assistant program prepares students to "be employed as a caregiver in a variety of settings including residential care facilities, home support agencies, and assisted living facilities." This program has the potential to assist with meeting the demand for in-demand occupations.
- The TRU Start program and Youth in Trades program appear to have steady enrolment. Electrical foundation, heavy mechanical foundation, residential construction, and welding all had similar numbers of Youth in Trades representation in commencement numbers in 2019.

Program	2017 Total Graduates	2018 Total Graduates	2019 Total Graduates
Office Admin Assistant/Bookkeeping	5	32	7
Nursing (Bachelor & Practical)	18	33	15
Health Care Assistant	19	11 (Williams Lake, 1 TRU Start) 8 (100 Mile House, 4 TRU Start)	24 (6 TRU Start)
Human Services Diploma	5	12	2
Work Skills	6	3	2
Education Assistant	-	16	-
Early Childhood Education	-	-	6
Applied Sustainable Ranching	7	-	5
Open Learning – General Studies	21	31	27

¹⁴ https://www.tru.ca/williamslake/programs/nursingprograms/health-care-assistant-certificate.html



Trades Programs			
Electrical Foundation	14	8	11
Heavy Mechanical (Foundation, Apprentice level 1 and 2)	32	11	14
Saw Filer (Level 1, 2, 3)	37	92	71
Residential Construction	11	-	12
Welding	11	14	9
Total Youth in Trades Program and TRU Start Students	19	16	17

Source: TRU Williams Lake Campus convocation programmes, 2017, 2018, 2019. Adapted by MDB Insight.

Data for the University of Northern British Columbia's Quesnel campus was unavailable for this exercise.

11. Sector and Skills Analysis

The Sector and Skills Analysis process informs the types of education and training required to assist the local industry in meeting their current and future employment demands. The National Occupation Classification (NOC) skills matrix is used to guide this analysis. First, industry subsectors are identified for the top 10 projected occupations identified by *metroeconomics* where applicable. In some cases, occupations can be applicable across a variety of sectors, such as administrative assistants. In others, a sector is easily identifiable by a three or four-digit NAIC code. Then, the Employment and Skills Development Canada skill level is applied to that occupation using the National Occupation Classification Matrix 2016. The National Occupation Classification Matrix is the Government of Canada's tool to provide an overview of all listed occupations and their skill levels. It also illustrates the relationship between broad occupational categories and skill levels. ¹⁵

The key local industry subsectors in the Cariboo Chilcotin Region, as projected by *metroeconomics*, are agriculture and forestry (+46 jobs by 2024), mining (+40 jobs by 2024), and manufacturing (+157 jobs by 2024).

Gains in many of the population serving industries can also be expected, most notably in health and social services (+185 jobs by 2024), accommodation and food (+104 jobs by 2024), professional, scientific and technical services (+72 jobs by 2024) and education (+64 jobs by 2024).

The following table offers a matrix of the top 10 occupations, associated industries relevant to the Cariboo Chilcotin Region, and the required ESDC skill level attached to that occupation.

¹⁵ For more information visit: https://noc.esdc.gc.ca/Structure/Matrix/66de863cd5c44a9182827e9b74fff53f



Figure 89 Sector and Skills Analysis Matrix

NOC & Occupation (Need by 2024)	Industry Sector	ESDC Skills Classification
821 Managers in agriculture (69)	111 Crop production 112 Animal production and aquaculture	B: Occupations usually require college education or apprenticeship training
9614 Labourers in wood, pulp, and paper processing (67)	321 Wood product manufacturing 322 Paper manufacturing	D: On-the-job training is usually provided for occupations
7511 Transport truck drivers (58)	484 Truck transportation	C: Occupations usually require secondary school and occupation-specific training
6711 Food-counter attendants, etc. (43)	722 Food services and drinking places	D: On-the-job training is usually provided for occupations
4032 Elementary school and kindergarten teachers (37)	611 Educational services	A: Occupations usually require a university education
9431 Sawmill machine operators (37)	321 Wood product manufacturing	C: Occupations usually require secondary school and occupation-specific training
6322 Cooks (36)	722 Food services and drinking places 721 Accommodation services 623 Nursing and residential care facilities	B: Occupations usually require a college education or apprenticeship training
1241 Administrative assistants (35)	This occupation has an application in many industries, across many sectors* 561 Administrative and support services	B: Occupations usually require a college education or apprenticeship training
1111 Financial auditors and accountants (35)	541 Professional, scientific and technical services	A: Occupations usually require a university education
4214 Early childhood educators and assistants (35)	6244 Child day-care services	B: Occupations usually require a college education or apprenticeship training

Source: metroeconomics, Employment, and Social Development Canada Skills Matrix. Adapted by MDB Insight.



11.1 Transferrable Skills Analysis

Different occupations in the workplace rely on specific skill sets that are defined by the needs of the occupation in question. Skills can be looked at in various ways, including education attainment/ requirements, essential skills relative to the occupation, and soft skills, which make for effective and productive relationships between employees and other stakeholders they may be engaging with.

The Employment and Social Development Canada (ESDC) Essential Skills listing is a tool developed by the Canadian government to define essential skills needed for most occupations. Seven skills categories each contain a variety of essential skills that range in complexity from low (1) to high (5). The categories are reading, document use, writing, numeracy, oral communication, thinking, and digital technology. For each category, an average can be obtained by adding all the skill complexity levels assigned to the various indicators and dividing by the total number of indicators. By averaging across multiple skills categories, it is also possible to determine what the overall level of skill complexity is for a given occupation. A scoring method has been developed to identify skill complexity based on a spectrum of skill levels spanning:

- Minimal (less than 2.0)
- Moderate (2.0 to 2.24)
- Advanced (2.25 to 2.74)
- Expert (2.75 and more)

Another consideration is the level of education required to enter a career under a given occupation. National Occupation Classifications can also be tracked by minimum education requirements via a Human Resources and Social Development Canada (HRSDC) Skills Classification Level framework which functions as follows:

- O = University
- A = University
- B = College or Apprenticeship
- C = Secondary School
- D = Incomplete Secondary School

With these different skill attribution tools in mind, a profile of the expected level of minimal education and skills competency for occupations can be studied.

Figure 90 provides a listing of the top 50 in-demand occupations according to HRSDC Skills Classification Level and ESDC Essential Skills.

The Essential Skills Classification is colour coded as follows:



Generally, data highlighted in the table can be summarized as follows:

The highest-skilled occupations with advanced to the expert level essential skills across the board were financial auditors and accountants, secondary school teachers, real estate agents and salespersons, information systems analysts and consultants, professional occupations in business management consulting.



- Eight occupations represent classifications that do not have any essential skills listings, mostly occurring in A and B skills classification categories.
- Occupations that were associated with the forestry industry (sawmill operators, labourers in the wood pulp, and paper industry) require moderate to advanced skills in reading and document use. These skills could be leveraged in a variety of roles in other sectors. The essential skills required for transport truck drivers, for example, are identical to those required for labourers in wood pulp and paper processing.
- Supervisors in forest product processing required advanced to moderate essential skills across the board. These highly skilled positions would be able to leverage those skillsets to other supervisory or management roles.



Figure 90 Transferrable Skills Analysis - ESDC Skills Matrix

NOC	National Occupation Category	ESDC Skills Classificati on Level	Average ESDC Skill Level	Reading	Document Use	Writing	Numeracy	Oral Communi- cation	Thinking	Digital Technology
821	Managers in agriculture	В	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9614	Labourers in wood, pulp, and paper processing*	D	1.64	2.00	2.11	1.20	2.00	1.38	1.79	1.00
7511	Transport truck drivers	С	1.88	2.50	2.20	1.75	1.60	1.67	1.77	1.67
6711	Food counter attendants, kitchen helpers, and related support occupations	D	1.50	2.00	1.60	1.50	1.25	1.00	1.45	1.67
4032	Elementary school and kindergarten teachers	А	2.44	2.88	2.00	2.00	2.50	2.86	2.40	2.71
9431	Sawmill machine operators	С	1.60	2.00	2.33	1.00	1.75	1.33	1.78	1.00
6322	Cooks	В	1.93	2.43	1.67	1.67	2.00	2.00	2.00	1.73
1241	Administrative assistants	В	2.02	2.13	1.75	2.25	1.70	1.83	1.79	2.71
1111	Financial auditors and accountants	А	2.96	3.33	2.80	3.00	3.33	2.60	2.92	2.71
4214	Early childhood educators and assistants	В	2.12	2.50	1.67	2.00	1.92	2.29	2.33	2.11
6513	Food and beverage servers	С	1.73	2.10	1.43	1.50	1.58	2.20	1.79	1.50
7311	Construction millwrights and industrial mechanics	В	2.15	2.43	2.38	2.00	2.09	2.33	2.20	1.64
6731	Light duty cleaners	D	1.50	2.00	1.88	1.50	1.79	1.43	1.94	0.00
3413	Nurse aides, orderlies and patient service associates	С	1.70	2.00	1.60	1.33	1.33	1.83	2.07	1.71
8431	General farmworkers	С	1.73	2.13	1.83	1.25	1.73	1.60	1.81	1.73
7521	Heavy equipment operators (except crane)	С	1.72	2.20	1.67	1.33	1.86	1.50	1.85	1.67
3012	Registered nurses and registered psychiatric nurses	А	2.39	2.82	2.25	2.71	1.81	2.62	2.78	1.71
1221	Administrative officers	В	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4031	Secondary school teachers	А	2.80	3.17	2.71	2.71	3.00	2.86	2.59	2.56
6611	Cashiers	D	1.68	1.86	1.60	1.33	1.29	2.22	1.69	1.75
9436	Lumber graders and other wood processing inspectors and graders	С	1.84	2.63	1.79	1.60	1.90	1.73	1.75	1.50
6232	Real estate agents and salespersons	В	2.52	2.33	2.29	2.43	2.60	2.67	2.75	2.57



6733	Janitors, caretakers, and building superintendents	D	1.50	1.93	1.88	1.50	1.79	1.43	1.95	0.00
6421	Retail salespersons	С	2.19	1.82	1.70	1.67	1.83	2.11	1.81	4.38
1311	Accounting technicians and bookkeepers	В	2.43	2.33	2.25	2.20	2.83	2.14	2.59	2.67
7321	Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	2.33	2.44	2.67	2.14	1.67	1.80	3.76	1.86
621	Retail and wholesale trade managers	В	1.82	2.22	1.60	1.80	1.33	1.86	2.15	1.75
6541	Security guards and related security service occupations	С	1.81	2.22	1.60	1.80	1.33	1.86	2.15	1.73
7452	Material handlers	С	1.71	2.25	1.82	1.17	1.71	1.40	1.93	1.67
631	Restaurant and food service managers	В	N/A							
7271	Carpenters	В	2.36	2.56	2.43	1.60	3.91	2.14	2.00	1.91
9434	Other wood processing machine operators	С	1.70	2.17	1.87	1.75	1.64	1.63	1.82	1.00
4212	Social and community service workers	В	2.35	2.60	1.67	2.75	1.85	2.83	2.67	2.06
1222	Executive assistants	В	2.33	2.75	2.20	2.67	2.25	2.00	2.30	2.13
4112	Lawyers and Quebec notaries	А	N/A							
2171	Information systems analysts and consultants	А	2.77	2.83	2.50	2.86	2.45	3.00	2.47	3.25
9215	Supervisors, forest products processing	В	2.35	2.63	2.14	2.20	2.70	2.40	2.38	2.00
1414	Receptionists	С	1.79	1.88	1.83	1.83	1.73	1.33	1.75	2.14
7514	Delivery and courier service drivers	С	1.57	2.00	1.71	1.17	1.58	1.33	1.54	1.67
3112	General practitioners and family physicians	А	N/A							
911	Manufacturing managers	А	N/A							
6341	Hairstylists and barbers	В	1.85	2.57	1.50	1.50	1.67	2.17	1.94	1.60
4412	Home support workers, housekeepers and related occupations	С	N/A							
7333	Electrical mechanics	В	N/A							
4021	College and other vocational instructors	А	2.60	3.13	2.25	2.60	2.56	2.67	2.75	2.29
1243	Medical administrative assistants	В	2.17	2.67	2.20	2.00	2.09	2.00	2.22	2.00
1122	Professional occupations in business management consulting	А	2.75	2.50	2.67	2.43	3.08	2.86	2.83	2.88



	7513	Taxi and limousine drivers and chauffeurs	С	1.60	2.20	1.22	2.00	1.50	1.33	1.92	1.00
Γ	1411	General office support workers	С	1.89	2.13	2.27	2.00	1.85	1.29	1.59	2.14
Γ	4413	Elementary and secondary school teacher assistants	С	1.96	2.43	2.13	1.78	1.54	2.00	1.87	2.00

^{*}Category includes considerations from NOC 9611

Source: Employment and Social Development Canada Skills Profiles. Adapted by MDB Insight, 2019.



12. Workforce Immigration & Integration

An inclusive and integrative workforce is one that values the individual and group differences within its workforce. It embraces the diversity of backgrounds and perspectives of the employees, which in turn increases their talent, innovation, creativity, and contributions. ¹⁶

Age diversity is also an important consideration. With a rapidly ageing population, semi-retired or retired persons offer experience, gained knowledge, and demonstrated skills often in demand.

12.1 Embracing Diversity

Embracing cultural, racial, and ethnic diversity is only one component of the bigger picture that is workforce diversity. Diversity also encompasses age and generation, gender and gender identity, sexual orientation, disability, religious and spiritual beliefs, and more.

Common Barriers for Persons with Disabilities

There are approximately 334,000 British Columbians aged 15 to 64 who self-identify as having a disability. Barriers¹⁷ to employment for these individuals can range from physical to social. ¹⁸

Physical Barriers: A physical environment that is inaccessible or hard to navigate adversely impacts the employment possibilities for a person with a disability. Physical barriers can take the form of structural issues in the environment that impede the ability of someone with a physical disability to perform at the same level as their peers. A common example of this is the lack of a wheelchair ramp or elevator to access the workplace. Lack of modified equipment or assistive tools/technologies to help a person be effective is also a prominent barrier. For example, if a person has severe dyslexia or visual impairments, they need to be provided with a computer that can read the screen to them. Furthermore, tasks may take longer for persons with disabilities, and some programs and policies in place by employers may not provide enough time for completion.

Social barriers: Negative attitudes may exist within the work environment. This can include judgments and assumptions about disabled persons during the hiring and onboarding process or transfer over to the day-to-day experience in the workplace. These attitudes can lead to prejudice, stigma, and discrimination. While this is becoming less of an issue than it once was, it can still be a factor and a barrier to both getting a job and keeping a job. Communication obstacles can create an inability to effectively speak, read, write, or otherwise understand what is required to be effective in a job. Examples include the inability to use a phone due to a hearing issue or a person with cognitive impairments struggling to understand technical language.

¹⁶ Sokolava (2016). "Characteristics of an Inclusive Workplace." LinkedIn Blog.

¹⁷ https://riseservicesinc.org/barriers-to-employment-for-adults-with-disabilities/

¹⁸ https://www.workbc.ca/Employer-Resources/Your-Workforce/Employers-engage-people-with-disabilities.aspx



Barriers for Youth

Many young people, especially those from marginalized groups, experience difficulties in accessing or maintaining employment. ¹⁹ Although there are regional differences in the type and availability of employment, there are many common themes that emerge across the province. ²⁰

In a survey of over 150 young people in British Columbia, 28% of them felt employers were actively discriminating against them because of their age or appearance. Employers prefer hiring older people because they immediately believe it saves them time and money in training. This type of discrimination is particularly common for youth identified as Aboriginal, LGBTQ2S+, young parents, and youth with a history of substance abuse, addiction, or criminal activity.

Many young people feel they are indirectly restricted from opportunities. When positions became available, many qualified and experienced older people apply. This raises the standard for a job, and youth are finding an undergraduate degree is often the minimum requirement for positions where a degree is not necessary to do the job (e.g., cashier). The cost of education makes it difficult for some youth to obtain a degree and thus prevents them from qualifying for many opportunities. Due to long waitlists, age limits, and difficult interview processes, young people often also have trouble accessing employment programs to help them gain similar experience to older applicants.

Lack of Access to Resources: Vulnerable youth or those located in rural areas may have limited access to a computer, unreliable internet access, are not comfortable with computers or have literacy challenges. Homeless youth, in particular, feel caught in a position where they could not get a job because they had no address or phone but could not get these because they had no job to pay for them. Other youths are unsure about how to get identification and what steps they should take to get a SIN card. Furthermore, most employment opportunities that were available to youth, such as construction and food-industry jobs, started before public transit was running in an area or are currently hard to access for young people in rural areas. This leads to the requirement of a vehicle and a driver's license, which young people cannot afford without a job.

Possible Solutions

A 2018 study by McKinsey & Company of over 1000 companies in 12 different countries found that companies in the top-quartile for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability. It found that diversity could be a key differentiator among companies. However, "companies in the bottom quartile for both gender and ethnic/ cultural diversity were 29% less likely to achieve above-average profitability, than were all other companies in the data set." ²¹

The benefits of embracing diversity to strengthen company growth, and broader economic growth, are undeniable at this point. Creating a broader business culture that embraces diversity is an essential step for the Cariboo Chilcotin Region toward its economic development goals and, ultimately, the competitiveness and prosperity of the Region.

¹⁹ https://careerwise.minnstate.edu/jobs/barriers-employment.html

²⁰ http://www.mcs.bc.ca/pdf/negotiating barriers to employment.pdf

²¹ McKinsey & Company (2018). Delivering through Diversity. https://www.mckinsey.com/business-functions/organization/our-insights/delivering-through-diversity



Some examples of practices that businesses can apply for better inclusion and integration of a diverse workforce are:

- Investing in language training for employees who require it
- Utilizing non-traditional recruitment strategies
- Recognizing and embracing all religious holidays
- Progressive parental leave and family benefits to promote gender diversity
- Mentorship programs tailored to newcomers, women, LGBTQ2S+ community members, and those with disabilities
- HR strategies dedicated to diversity sourcing
- A unified toolkit of resources for employers in the Region and resources to connect employees to language services, upskilling, etc.
- An information pamphlet outlining business strategies for recruitment and retention distributed to local employers
- Diversity workshop series, committing each workshop to a different category of diversity

12.1.1 Immigration Strategies in Cariboo Chilcotin Region

Canada and Rural Northern Immigration Pilot

The Canada and Rural Northern Immigration Pilot is a new community-driven program meant to spread the benefits of economic immigration to rural and northern communities. It currently has 11 participating communities across the country, some of which are yet to launch. Currently, no communities in the Cariboo Chilcotin Region are on the roster. It is aimed at skilled economic immigrants with intentions to settle in the community.

The program allows communities to take the lead in attracting new immigrants, matching them with employment opportunities, and promoting themselves. To be eligible, communities must:

- have a population of 50,000 people or less and be located at least 75 km from the core of a CMA or up to 200,000 people and be considered remote from other larger cities (using Statistics Canada's index of remoteness)
- be located in Alberta, British Columbia, Manitoba, Northwest Territories, Nunavut, Ontario, Saskatchewan or Yukon;
- have job opportunities;
- have an economic development plan;
- have a local economic development organization that can manage the pilot;
- have the capacity to settle new immigrants in the community by having or developing:
 - relationships with local or regional immigrant-serving organizations;



- opportunities to connect newcomers with established members of the community, such as through mentoring or networking;
- access to key services like education, housing, transportation, and health care.

This program presents the opportunity to the Cariboo Chilcotin Region to potentially take advantage of this on a regional level. Cariboo Chilcotin Region communities that have their own economic development plan and capacity could do this in-house, but developing a regional strategy for the District and managing something of this nature on a regional level would allow the more rural communities within the District to benefit from economic immigration.

Province-wide immigration initiatives

The Province of British Columbia runs several programs aimed at welcoming immigrant families into B.C. and ensuring they have support for integrating into the workforce. Foundationally, there are programs that assist immigrant and refugee families in settling and finding places to live. They also include language assessment and training. In the Cariboo Chilcotin Region, there are centres for the Cariboo Chilcotin Partners for Literacy Society in Williams Lake and 100 Mile House, as well as the Kamloops Cariboo Chilcotin Regional Immigration Society nearby in Kamloops. These centres all provide language training as well as help with daily life, supporting a sense of community and easing feelings of isolation.

Along with settlement and language supports, the provincial government also runs employment training centres through the WorkBC program. Three WorkBC centres are present in the Cariboo Chilcotin Region, in Quesnel, Williams Lake, and 100 Mile House. These centres help all individuals looking to find employment through job search resources, employment planning, skills assessment, training, and experiential work opportunities. Another provincial program available is the B.C. Employer Training Grant, which is a form of cost-splitting between the provincial government and employers to incentivize them to offer job training to current or potential employees. Under this program, job training can be offered in foundational, technical, or workforce streams.

Along with the general employment support programs, the province offers programs specifically directed at immigrants. Career Paths for Skilled Immigrants program is specifically directed at immigrants who arrive with job-related skills or qualifications. The program helps with language training, gaining relevant work experience, and progressing towards getting foreign accreditations licensed for regulated Canadian occupations. The WelcomeBC website provides information for current and prospective immigrants on Foreign Qualifications Recognition (FQR). The Immigrant Employment Council of BC (IEC-BC) is a not-for-profit organization that helps employers in BC attract and retain immigrant talent into their workforce. The IEC-BC provides employers with information about resources for recruitment of immigrant talent, provides advice for best practices in immigrant employment policies, programs and services, and facilitates partnerships among employers, industry/business associations, and government.

Status of immigration in the Cariboo Chilcotin Region

The Cariboo Chilcotin Region has a proportionally smaller number of immigrants compared to the entire province of British Columbia. Figure 91 uses the 2016 Canadian Census data to show that 9% of the population of the Cariboo Chilcotin Region were born outside of Canada, compared to 28% of the population of British Columbia.



Figure 91: Immigrant status of the population in the Cariboo Chilcotin Region compared to British Columbia

	Cariboo Ch	Cariboo Chilcotin Region		nbia
	Number	Percent	Number	Percent
Non-immigrants	55170	90%	3167155	69%
Immigrants	5630	9%	1292675	28%
Total - 25% sample data	61005		4560240	

Source: Statistics Canada, 2016. Adapted by MDB Insight.

The make-up of the immigrant population in the Cariboo Chilcotin Region is substantially different from the rest of the province as well (Figure 92). More than half of the immigrants in the Cariboo Chilcotin Region (53%) originated from Europe, while just 25% of the total provincial population of immigrants came from Europe. Out of the European immigrant population in the Cariboo Chilcotin Region, the largest portions of individuals come from Germany (27%) and the Netherlands (9%). 61% of the immigrant population in the province came from Asia, while only 21% of the immigrant population in the Cariboo Chilcotin Region is from Asia. The Cariboo Chilcotin Region has a larger proportion of immigrants originating from the Americas, compared to only 9% of the provincial immigrant population. The immigrant population in the Cariboo Chilcotin Region originating from the Americas are predominantly from the United States (85%).

Figure 92: Places of origin of the immigrant population in the Cariboo Chilcotin Region compared to British Columbia

	Cariboo Chi	lcotin Region	British Colu	mbia
	Number	Percent	Number	Percent
Europe	2970	53%	319885	25%
Americas	1220	22%	110850	9%
Asia	1155	21%	788055	61%
Africa	185	3%	42805	3%
Oceania and other places of birth	90	2%	31075	2%
Total	5620		1292670	

Source: Statistics Canada, 2016. Adapted by MDB Insight.

The immigrant statistics can provide useful insights towards an immigration attraction and retention strategy. The overall smaller proportion of immigrants in the Cariboo Chilcotin Region compared to the rest of the province implies that there is a substantial pool of immigrants arriving in British Columbia who could be attracted to the Cariboo Chilcotin Region. The relatively smaller proportion of immigrants from Asia shows that the Region has not been as effective as the rest of the province at attracting this large population. Further, the populations in which the Cariboo Chilcotin Region has relatively higher concentrations should be examined, since immigrants from abroad can benefit from communities of expats from their respective countries. Immigrants already living in the Cariboo Chilcotin Region could act as a connection between the Region and their home countries, attracting businesses and future immigrants to the Region.



Regional Entrepreneur Immigration Pilot

Presently, Quesnel, Williams Lake, and 100 Mile House are participating in a Regional Entrepreneur Immigration Pilot. The program is directed at attracting foreign entrepreneurs to rural communities and small cities in BC. It is the only direct economic immigration tool to attract entrepreneurs wanting to start a business.

The Regional Pilot will include incentives such as requiring a lower investment threshold and personal net worth to apply. The program is only for start-up businesses, although people wishing to purchase an existing business are encouraged to apply through the regular Provincial Nominee Program.

With this priority in place, it will be essential to ensure that the business climate in the Cariboo Chilcotin Region is as welcoming as possible to these recruits.

12.2 Indigenous Strategies

Common Barriers to Indigenous Labour Force Participation

Figure 93 captures the reasons identified by Indigenous peoples as barriers to work, as drawn from the Aboriginal Peoples Survey, 2017. Not having the work experience and not having enough education or training for available jobs were the top responses by the 84,580 persons that responded. Not having the means of transportation was another prevalent answer, with 31.8% of respondents citing this as a difficulty in finding employment.

Figure 93 Reasons for difficulty in finding work by Aboriginal identity, unemployed, 2017

Reason	% Total Age Groups, 2017
Not knowing how or where to look for work	20.6
Not knowing the type of job he or she wanted	25.6
Not having the work experience	44.6
Not having enough education or training for available jobs	44.5
Not having the means of transportation to get to available jobs	31.8
A shortage of jobs	60.3
Other	23

Source: Statistics Canada. Table 41-10-0014-01 Reasons for difficulty in finding work by Aboriginal identity, unemployed, adapted by MDB Insight

Barriers to labour market participation for Indigenous peoples are seen across Canada. Some of the systemic challenges Indigenous peoples experience that creates barriers to employment are:

Literacy and education: high school and basic literacy skills are requirements for nearly all jobs. In 2017, 44.5% of Aboriginal identity persons reported not having enough education or training for available jobs



as a reason for the difficulty in finding work.²² In 2011, the graduation rate of Aboriginal youth in Canada was 24% of 15 to 24-year-olds, compared with 84% in the non-native population. That rate improved some in the 2016 census, but the disparity is still high. Also, the complicated history of residential schools means that many Indigenous families may not trust the educational system.

 Possible solutions: work with schools to implement a mentoring program that encourages children to believe that education is important. Have mentors speak about the benefits of staying in school and the opportunities that open up with a high school or equivalency certificate.

Cultural differences: employers and co-workers may not understand or respect the unique cultural differences of Indigenous peoples, which can create an atmosphere of disrespect, resentment, or distrust.

 Possible solutions: Provide cultural humility courses within organizations and businesses. Encourage interaction between Indigenous community leaders and staff. For example, the First Nations Health Authority offers cultural humility courses.²³

Stereotypes: As one of the fundamental barriers to Indigenous employment. For example, there can be perceived special treatment of Indigenous peoples by non-Indigenous people.

Poor interview skills: poverty, broken families, racism, stereotypes, discrimination, few role models all contribute to the potential for poor interviews from Indigenous candidates. Further, basic cultural differences such as conversational approaches, silences after being asked questions, or hesitancy to focus on themselves are things that may contribute to poor interviews from Indigenous candidates.²⁴

Possible solution: By understanding that limited availability of work, lack of training opportunities, distance from major economic centres and a variety of personal factors may be responsible for inconsistent work records, the interviewer can more accurately assess an Indigenous candidate's résumé. Encourage employers to walk Indigenous candidates through the interview process to ensure they are familiar and comfortable.

Transportation: a real stumbling block in remote communities; just getting to the nearest office to write the initial test can be challenging; taking driver's training is similarly a challenge as there may not be easily accessed training providers or, for that matter, a vehicle on which to learn. Few remote communities are serviced by public transit; automobile insurance is expensive and out of reach for many in preemployment situations; again, owning a vehicle or having access to a vehicle is frequently not a reality. In 2017, 32% of Indigenous peoples in the Aboriginal Peoples Survey cited not having the means of transportation to get to available jobs as a reason for the difficulty in finding work.²⁵

Possible solution: having a driver's license is almost as critical to getting a job as having a Grade 12 or
equivalency certificate. Consider offering free driver training lessons in the community; arrange the
drivers' exams and arrange transportation to the nearest testing station.

22

 $\frac{https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4110001401\&pickMembers\%5B0\%5D=1.1\&pickMembers\%5B1\%5D=3.1\&pickMembers\%5B2\%5D=5.5\&pickMembers\%5B3\%5D=6.1$

²³ https://www.fnha.ca/wellness/cultural-humility/webinars

²⁴ https://indigenousworks.ca/en/resources/inclusion-tips/hiring-aboriginal-employees

²⁵ Statistics Canada. <u>Table 41-10-0014-01</u> Reasons for difficulty in finding work by Aboriginal identity, <u>unemployed</u>



Child Care: safe, affordable childcare is a challenge for almost all working parents. It especially impacts Indigenous candidates who may be unable to work due to childcare responsibilities.

 Possible solutions: advocate for more equitable childcare supports. Work with social service organizations to ensure childcare support is accessible for all.

Indigenous Strategies for Labour Force Participation in the Cariboo Chilcotin Region

The purpose of this section is to understand the ecosystem of Indigenous employment support available in the Cariboo Chilcotin Region. Employment coordinators in individual communities offered insight into the variety of programs available, and sources such as the CCATEC website and other government websites were consulted for further context to these efforts. Indigenous strategies for labour market participation benefit from a relatively progressive history in the Cariboo Chilcotin Region, where Indigenous communities and leadership drive much of the program development and delivery. Individual community's benefit from an employment assistance person whose role is to work with members of the community with job searching, as well as liaise with the government for funding information and assistance, education providers, and create awareness of opportunities. Each community places a high priority on education, training, and employment.

Cariboo Chilcotin Aboriginal Training Employment Centre (CCATEC)

The central organization that leads Indigenous training and employment in the Cariboo Chilcotin Region is CCATEC. CCATEC is a registered non-profit society that stems from efforts in the early 1980s by BC Canada Employment Centre to ensure that First Nations had input to the training programs being delivered to First Nations populations. Its earlier iterations were District Advisory Boards that offered advice to the government department on project funding. Since then, its purpose has evolved into the development and delivery of programs. Today, CCATEC's constitution dictates that it was established to:

- 1. Identify, develop, implement and assist, where possible, with the attainment of employment, training, and education programs responsive to the current and future requirements of Aboriginal people, Aboriginal bands, Aboriginal organizations, and Aboriginal individuals.
- 2. Coordinate and liaise with Aboriginal people, Aboriginal bands, Aboriginal organizations, Aboriginal individuals, and with all levels and branches of governments in Canada, and to access and attain maximum utilization of all funding sources available to achieve the purposes of the Society.
- 3. Offer funding to First Nations organizations and individuals that will help them attain training or employment skills to gain employment or to keep their skills updated to prevent job loss.
- 4. Provide Aboriginal Labour Market Programs to the fifteen bands

CCATEC works closely with individual bands and tribal councils' employment assistance services (EAS) coordinators. These individuals work directly with their communities and clients and are equipped with knowledge of available funding programs, and they assist clients with résumé and funding application writing. They keep abreast of labour market needs and trends and coordinate with other employment coordinators and education providers to host job fairs and other employment initiatives. Employment assistance services can be accessed in all 15 First Nations communities in the Cariboo Chilcotin Region.



Provincial and Federal Governments

WorkBC's website page on resources for Indigenous people organizes their services and resources into the following categories:

- Pursue post-secondary education
- Get funding for your education
- Gain work experience and job skills
- Create or expand your own business.

The First Nations Education Steering Committee and First Nations Schools Association offer the Career Journeys First Nations Career Role Model Program. This program features First Nations Role Models in various career fields and raises awareness in First Nations youth about career possibilities²⁶. Towards education and skills training, the provincial²⁷ and federal²⁸ governments have a variety of training and financial assistance programs available. For career development, there is the Indigenous Skills and Employment Training (ISET) Program through the federal government and the Indigenous Youth Internship Program through the provincial government. The ISET provides funding to Indigenous service delivery organizations that design and deliver job training to Indigenous Peoples.

Local Initiatives

The City of Williams Lake outlined in their 2018 Economic Development Strategy²⁹ various ways that they are collaborating with the Indigenous communities in the area towards economic development. The first is their collaboration with the Williams Lake Indian Band (WLIB). The WLIB has businesses in forestry, business services, ranching, land development, and tourism. They are also developing the residential Coyote Rock Development Area. The City of Williams Lake recognizes the mutual economic benefits of helping the WLIB to develop their businesses and attract residents to the Coyote Rock Development Area. Another potential for economic development comes from the recent Supreme Court of Canada's backing for the WLIB's land claim. This will most likely lead to compensation, resulting in potential investment funds for the WLIB. The City of Williams Lake outlines in their Economic Development Strategy that they would like to find a more overlapping strategic vision and identify joint economic development projects to collaborate on. They would also like to support the continued development of the Youth Mountain Bike Program and the mountain biking trails under development by the Indigenous communities in the area.

²⁶ http://www.fnesc.ca/careerjourneys/

²⁷ https://www.workbc.ca/getmedia/6e4bdae0-ac4d-4b31-9f45-42794afefc61/British-Columbia-Indigenous-Skills-Training-Programs-Inventory.pdf.aspx

²⁸ https://www.aadnc-aandc.gc.ca/eng/1461940615477/1461940651472

²⁹ https://www.williamslake.ca/DocumentCenter/View/2396/FINAL-Williams-Lake-Econ-Strategy-Dec-17-2018?bidld=



13. Environmental Lens

Environmental changes are certain in the coming decades, and it is important to take into consideration the impacts that these will have on regional labour markets. These environmental changes reflect environmental impacts and environmental policy/social changes. In this section, we will identify the current and future expected changes in these categories as they relate to the Cariboo Chilcotin Region. Following this, we will investigate how these changes can be expected to affect labour markets, using local, regional, and international evidence. These findings will be used to generate discussion surrounding the labour force changes to be expected in the Cariboo Chilcotin Region due to environmental causes, and how to best prepare the Region to adapt to the changes and prosper in the economy of the future.

13.1 Environmental Changes

Every region affects and, in turn, is affected by the environment and how it changes around them. Rural and natural resource-based economies are intrinsically linked to the well-being of the ecosystems that support them. External catalysts of environmental change come in many forms: alien species, human over-harvesting, natural disasters, water and soil contamination, and changes in precipitation and temperature. Many of these external forces are symptoms of larger phenomena such as climate change and increased human economic activity.

13.1.1 Climate Change

Any discussion of environmental changes in the modern-day would be incomplete without acknowledging a large driving force behind many of the observed changes. Although the exact effects climate change will have on specific areas is relatively unpredictable, one thing for certain is that the climate is changing. Extreme weather patterns are likely to increase in the coming decade. The International Panel on Climate Change (IPCC) released a report in 2018³⁰, estimating the scope of some of these impacts. The report indicates with a high degree of certainty, dependent on the geographic region, the impacts of changing global temperatures would mean higher rates of floods, droughts, forest fires, invasive species, soil erosion, acidification, and severe storms, among other things. While estimating specific impacts of climate change on the Cariboo Chilcotin Region is beyond the scope of the current review, it is important to acknowledge the presence of a changing climate as an underlying factor in the other environmental changes in the area. The take-home message is that the quantity and frequency of extreme weather patterns should be expected to increase in the future.

13.1.2 Invasive Species

The Cariboo Chilcotin Region also needs no introduction to the concept of invasive species after a multiple decades-long fight against the spread of the destructive Mountain Pine Beetle³¹. This beetle was native to Northern British Columbia but began to spread further south as temperatures warmed across the province. The spread of beetles became a concern in the early 2000s with a peak in their destructive activity occurring in 2004 before control measures were undertaken. Initially, the province increased the

³⁰ https://www.ipcc.ch/sr15/chapter/chapter-3/

³¹https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-health/forest-pests/bark-beetles/mountain-pine-beetle/responding-to-the-1999-2015-outbreak



Annual Allowable Cut (AAC) because the trees killed by the pine beetles were still harvestable for 15 years after their death³². This enabled industries to reduce the wastage as much as possible from the epidemic. Over the next ten years, the AAC had been planned to be reduced to less than the pre-beetle AAC, which will shrink the production capacity of the forestry industry, and thus shrink the amount of labour required for production. The Mountain Pine Beetle is another phenomenon commonly cited as a reason for plant closures in recent years. Coupled with the record-breaking forest fires over the past two years, the tree stock shifted even lower than expected, and at an earlier date. While the spread of Mountain Pine Beetles is largely under control, invasive species like these are another symptom of a changing climate. It is, therefore, necessary to expect that invasive species will increase in the future and that early identification and adaptive technologies and systems are necessary to prevent economic impacts in the area.

13.1.3 Forest Fires

The Cariboo Chilcotin Region is very familiar with the impacts of forest fires, after back-to-back record-breaking years for forest fires in the Region³³. The provincial government of BC noted that the years were record-breaking for the number of people displaced in 2017 and the total land area burned in 2018. The fires have had substantial economic impacts in the area, particularly in the displacement of workers and the loss of forestry stock. When announcing the recent mill closures in the area, most companies cited a decreased forest stock due in part to the 2017 forest fires as one of the driving factors rendering their mills non-sustainable in the area³⁴. In addition to forestry and related businesses in the supply chain, many communities have been devastated overall, and fires have had impacts on non-forestry related business. While large forest fires may become more common in the future, an improvement of technology and strategy to prevent and subdue these fires can also be expected to occur. This may lead to employment increases in labour areas concerning forest fire abatement and planning in the area.

13.1.4 Soil and Water Contamination

Direct human-made pollution and spills can also cause adverse consequences for environments and the economies that rely on them. Tailings from infrastructure projects such as mines and manufacturing plants can cause erosion, water acidification, and contamination of water basins and soil. When spills or breaches occur, it often leads to the halting of facility operations for a period, such as has occurred at some of the mines in the Cariboo Chilcotin Region³⁵. These stoppages halt labour demand in the area and cause lower desirability for tourism and the real estate surrounding the affected areas. While generally in Canada, a high degree of care is taken to prevent spills and minimize the effects of effluent and spills, it is still worth noting pollution as a potential cause of environmental change in the area to consider.

³² https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-health/forest-pests/bark-beetles/mountain-pine-beetle/responding-to-the-1999-2015-outbreak

³³ https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/wildfire-history/wildfire-season-summary

³⁴ https://www.cbc.ca/news/canada/british-columbia/west-fraser-lumber-mill-closure-1.5179345

³⁵ https://www2.gov.bc.ca/gov/content/environment/air-land-water/spills-environmental-emergencies/spill-incidents/past-spill-incidents/mt-polley



13.2 Social and Policy Changes

Environmental impacts on the labour force of a region can come directly from changes in the local ecosystem but can also stem from changing social and policy attitudes towards environmental issues. These policies and shifts in social opinion/demand can be regional, national, or global in scope, and their effects on regions are worth considering. The implications can affect business costs and demand for goods, which in turn impacts the labour market as well.

13.2.1 Carbon Tax

One of the most pertinent debates on environmental policies currently is the Federal government's price on carbon emissions³⁶. While there was already a carbon tax in place in BC, the Federal government's new policy has introduced more stringent taxes, which will continue to increase in value until 2022. This policy will have positive and negative effects on different parts of the labour force. On the negative side, industries will have to pay more for fuel, so running machinery, traveling to remote worksites, and shipping will all become more expensive. Businesses will have to adjust their expenditure, and a lower level of demand for employment may be a part of this. The increase in fuel price will also incrementally decrease demand for fuel products, and hence businesses producing fuel will need to produce less. This may lead to lower levels of labour necessary in oil and fuel production.

On the positive side, a higher cost of fuel means industries and consumers will shift their preferences towards fuel-saving practices to decrease costs. This translates to a higher value for local products (less shipping fuel), and green technologies/practices. Canadian industries that can lower carbon intensity will have a price advantage over higher polluting alternatives. This effect has the opportunity to expand employment in green innovation, efficiency-improvement, and adaptable tradespeople. In net impacts, some studies have found that a carbon tax had no observable effects on employment in manufacturing industries³⁷, and others have found that the previously existing carbon tax in BC was net-positive for employment outcomes³⁸.

13.2.2 Air and Water Pollution Regulations

Over the last several decades, scientific and monitoring advancements have identified many new sources of concern for health and safety to do with air and water pollution from various sources. This has resulted in governments across the world, implementing regulations in these industries to curtail the potential negative effects of pollution. For air pollution, the government already has regulations in place to lower amounts of acid rain, smog, ozone-depleting substances, and toxics³⁹. For soil and water pollution, governments are increasingly concerned with substances that cause health problems in individuals through swimming/drinking water and which harm ecosystems that depend on the water⁴⁰. With these regulations and measures becoming more stringent over time, they will have implications for the

³⁶ https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/pricing-carbon-pollution/estimated-impacts-federal-system.html

³⁷ https://www.sciencedirect.com/science/article/pii/S0047272714001078#f0005

 $^{^{38}\} https://institute.smartprosperity.ca/sites/default/files/jobs-and-bc-carbon-tax.pdf$

³⁹ https://www.canada.ca/en/environment-climate-change/services/air-pollution.html

 $^{^{40}\,}https://www.canada.ca/en/environment-climate-change/services/water-overview/comprehensive-approach-clean.html$



Canadian labour market. Similar to the forces in the carbon tax section, industries unable to easily adapt to more stringent regulations will likely see decreases in employment, while the industries that support pollution abatement, along with the industries equipped to adapt, will get a competitive advantage. There may also be some positive effects on the labour market from higher health and safety regulation, such as lower closures due to breaches and higher ecotourism in the areas which would otherwise be affected by pollution.

13.2.3 Public Attitudes

While there is mixed evidence of which direction public opinion is heading, the long-term worldwide trend is that as information about adverse impacts improves, individuals demand environmental protection. As demand for these products increases, employment in sectors that can provide environmentally sustainable products will increase, and employment in industries producing less sustainable products will decrease.

13.3 Labour Force Impacts

Across all the topics, a similar theme can be identified. As environmental issues emerge, policies and public awareness react to them. Industries that are highly affected by environmental changes, as well as industries that are stuck using highly environmentally impactful practices, will most likely need to decrease costs for production to stay competitive, hence decreasing labour. The forces of increasing environmental impacts, higher policy stringency, and heightened awareness of environmental issues by the public will drive labour increases in jobs relating to environmental protection, mitigation, and adaptation. It can also be expected to increase the demand for products that are relatively more environmentally friendly. These companies will gain a competitive advantage over the others in their industry from the decreased relative costs of the goods (due to taxes and regulations on higher polluting products) and the increased demand for the goods (from higher consumer demand). With higher costs of high-polluting practices, there will be greater demand for clean technology so that the labour market will need more innovators and producers of this technology. The trends align with the ECO Canada predictions for trends in the environmental labour market, where they note that changing policy landscapes, new technologies, and better information will drive the changes in all labour markets from an environmental point-of-view⁴¹.

A recent OECD report modeled the impacts of national greening policies on the labour force in the country. It noted that the impacts depend directly on the flexibility of the local markets to adapt to change⁴². The report suggests that 'green jobs' which are based on energy efficiencies and environmental protection will tend to grow with heightened environmental policies, while 'brown jobs' which are relatively environmentally damaging and non-energy efficient will tend to decrease. It is pointed out that the primary labour impacts will occur in the energy sector, which makes up a reasonably small portion of the total employment (this is also true in the Cariboo Chilcotin Region). An example of benefits that can accrue to industries that are adaptable is also provided. Construction workers could position themselves in a point of advantage as they acquire the skills to build energy-efficient buildings. This would most likely

⁴¹ https://www.eco.ca/blog/environmental-trends-2019/

⁴² https://www.oecd.org/els/emp/50503551.pdf



require some top-up training for individuals in the construction industry. Still, after doing so, they would be well-positioned to supply the increased demand for energy-efficient buildings (which is created by more expensive energy costs).

To avoid decreases in employment from the environmental trends identified in this report, forward-planning regions could invest in the development, production, and use of efficient, green technologies to stay ahead of the curve. Regions could also be prioritizing the training of workers to increase efficiency in the various practices related to their industries. These workers are already experts in their fields, so with some minimal educational support, they can drive the local industries towards competitive advantage in the coming environmental landscape.



14. Best and Promising Practices – Case Study Examples

14.1 Community Promotion and Settlement Support

Build a New Life - Prince Edward County, Ontario

The Community Development Department (CDD) of Prince Edward County in Ontario runs a program called Build a New Life⁴³. The program aims to attract potential workers, businesses, and residents away from larger urban areas by promoting the luxuries of rural living. Their strategy involved promoting the natural beauty, space, and quality of life in the area while also driving home the entrepreneurial spirit present in its regions. Individuals with interest in moving to the County are supported further by the program with simplified access to business funding, real estate information, job opportunities, and other business assistance.

Deciding to move to a new place is a big and difficult decision. For business owners, when considering the possibility, all sorts of questions come to mind regarding where to locate the business, which sources of funding are available, whether there is the demand for their product, etc. For residents, the idea of finding new social circles, places to live, and the uncertainty about the lifestyle can all be limiting factors in their decisions to relocate. The BuildANewLife.ca website provides access to readily available information for both of these types of potential movers, all in one place. Prospective movers can go on the website and easily get a sense of their prospects in the area, and even develop a plan. Making the process as easy and clear as possible enables Prince Edward County's urban-dwelling target audience to turn their dreams of a life without the traffic and high costs of urban living into a reality all under a single website. The program has had great success, prompting the rise of the County's tourism and entrepreneurship sectors. It has also won awards among economic developers, such as that presented by the Economic Developers Association of Canada in 2019.

Applicability to the Cariboo Chilcotin Region

The Cariboo Chilcotin Region is in a similar situation to Prince Edward County in that it is an area with lots of natural beauty and relatively low costs of living compared to the metropolises in the surrounding areas such as Vancouver and Calgary. Similar to Prince Edward County, the Cariboo Chilcotin Region could develop a marketing and workforce settlement campaign that serves two purposes: attracting workers and ensuring they have the best possible chance of success. Similar to Prince Edward County, a simple, clean looking website could be established with promotional media alongside functional resources to increase what marketers refer to as the conversion rate: Website visitors first develop an interest in the area, then through user-friendly links are converted from interested to considering to move, planning to move and moving. Promotional video and other media could direct individuals to visit

⁴³ http://buildanewlife.ca/



14.2 Succession Planning

RedTire Program – University of Kansas

A group at the University of Kansas identified a similar trend in their state and developed a program to help the situation of closing rural businesses. The 'REDefine your reTIREment' program acts as a matchmaker between pre-retirement business owners and qualified university Alumni⁴⁴. Pre-retirement business owners are referred to the program through banks, attorneys, or economic development officials. Alumni are notified and can fill out applications describing their experience, abilities, and why they are a good fit to take over the business. If selected, the business owner and buyer negotiate the terms on their own, with support from the RedTire team. If the candidates are not selected, their records are kept on file in case other opportunities arise for which they are better suited.

Applicability to the Cariboo Chilcotin Region

In rural settings across Canada, businesses are being forced to close because business owners do not have someone to take over their operations when they retire. The effects of this are worsened by the ageing population in many of these regions. As businesses close, this has an amplifying effect because visitors and tourists come to the town and see a substantial number of the businesses closed, and this negatively impacts their perceptions of potential economic prosperity in the area.

Individuals at universities and colleges are increasingly qualified on average, and many are interested in entrepreneurship. With enhanced connections to retiring individuals who have fully-functional businesses running (that they no longer want to operate), it is highly likely many of these individuals would be interested in taking on the opportunity. The Cariboo Chilcotin Region could set up a service (website or physical location) that connected prospective retirees with interested and qualified alumni from post-secondary institutions. This service could also provide support and connections necessary for the business exchange, such as access to loans and legal advice for sale.

14.3 Workforce Retention

TD Bank Group – Financial Services (Canada)⁴⁵

In 2019, TD Bank Group was recognized as one of Canada's top 100 employers, top employers for Canadians over 40, and Greater Toronto's top employers.

The banking industry has been particularly impacted by AI and automation practices. Machines are especially effective at compiling and sifting through swaths of data and analyzing contracts, which makes the adoption of AI fitting within the banking sector. The workforce is changing too, with millennial workers valuing flexibility, something that has historically not been a component of the highly structured banking culture. Bank employees used to follow a straight line up through one business, while millennials expect to make multiple career changes throughout their lives.

⁴⁴ http://redtire.org/

⁴⁵ https://content.eluta.ca/top-employer-td-bank

⁴⁶ https://www.ey.com/Publication/vwLUAssets/ey-the-future-of-talent-in-banking/\$FILE/ey-the-future-of-talent-in-banking.pdf



TD Bank Group's challenge was to remain a competitive employer in this changing workforce. To do this, the company took an intentional, holistic approach to diversity and inclusion. Examples of this include its recruitment and retention program development targeted at millennial women, and LGBTQ2S+, and multicultural HR program development. TD Bank Group partners with community organizations to connect with diverse candidates.

TD Bank Group invests in its people for the changing world. It offers its employees new courses, programs, and tools to adapt to technologies and to instill confidence. The company offers a series of leadership-focused training programs and mentorship opportunities.

That TD Bank Group was recognized as one of Canada's Top Employers for Canadians Over 40 and one of Canada's Top Employers for Young People simultaneously in 2019 is a testament to the company's investment in the diversity of its employees, at all phases of life.

Applicability to the Cariboo Chilcotin Region

Establishing an attractive company culture that goes beyond financial incentives is a critical component in attracting talent to TD and ensuring long-term employee satisfaction. Acknowledging and rewarding performance and providing continuous learning opportunities to support the professional development of employees and management are important parts of the culture TD has built. Taking a holistic approach to inclusion and diversity has meant that employees remain engaged and feel valued at every stage of their careers.

Aligning talent management approaches with the broader business strategy of the company is a very important part of attraction and retention to ensure that the right skills are available to support the firm in the future. As identified in the Job Seeker Survey and Business Survey of this report, in the Cariboo Chilcotin Region, there is a divide of opinions, with many businesses identifying lack of work ethic in job candidates and many job seekers identifying a lack of suitable job opportunities. Employers should work to ensure that their employees are challenged but also well-supported/ appreciated to ensure that they see the value in their work.

14.4 Soft Landing for Newcomers to the Area

As found in some of the previously mentioned studies, a significant factor in the successful integration of families into a community is whether the spouse and children of the recruited individual succeed in finding work and a social network. This can add stress to the decision to move to an area, particularly in rural communities, where the perceived employment opportunities may be limited to certain industries. Various strategies have been used in Canadian cities and abroad, some of which we will highlight here.

International House, Copenhagen

The International House in Copenhagen is a physical building in the centre of the city, designed as a one-stop-shop for newcomers to Denmark⁴⁷. It was created in collaboration between the municipality and local companies. In the same building in which newcomers file their paperwork, business is recruiting spouses, and services that help families get connected within the community are offered. The program is beneficial in ensuring that the recruited individuals have the best start possible to their employment and social lives in the new area. The program also helps to streamline the process for newcomers, since all the

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⁴⁷ https://ihcph.kk.dk/



businesses, agencies and functions are forced to work together under one roof, limiting administrative burden for newcomers. The International House required some initial set-up costs for the municipality but is currently paid for by the rent coming from the tenants in the building.

Global Expat Centre – Stockholm, Sweden

This centre is a similar concept to the International House in Copenhagen, with an important addition. The Global Expat Centre is run almost entirely by volunteer ex-pats in the area, who themselves relocated to the area for work permanently⁴⁸. These volunteers are highly involved in the design and implementation of the centre's programs and functioning. The advantage of running the centre under the advisement of ex-pats is that they have experienced many of the anxieties and hardships that come along with relocating to the area. They have learned firsthand which practices and policies were especially helpful (and not helpful) to them settling in. They are living success stories of recruitment and retention, all gathered under one roof as a welcoming party to newcomers. The centre also organizes support groups and social events to help families feel a sense of community and minimize feelings of loneliness and alienation.

Applicability to the Cariboo Chilcotin Region

To give newcomers the best chance of success settling into the area, an accessible all-encompassing centre to handle incoming residents would be very beneficial. One or more of these centres could be located in one of the municipalities of the Cariboo Chilcotin Region. Like the Expat Centre in Stockholm, the outcomes would be enhanced if previous newcomers were highly involved in the programming and set-up. Bringing together all the services and requirements for newcomers under one roof ensures that the process is streamlined and well-organized. It also makes it easy to ensure newcomers have all the information possible about services and supports available to them during their transition. While there would be initial set-up costs purchasing a location to house the centre, the rent charged to companies occupying the building should offset any operating costs.

⁴⁸ https://www.yourlivingcity.com/stockholm/essentials/education/swedish-language-courses/global-expatcentre/