

FOOD PROCESSING SKILLS CANADA

Labour Market Information



SECURING CANADA'S **DAIRY** WORKFORCE

Real Challenges. Practical Solutions.
Fresh Perspectives.

Calgary, AB



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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.

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Food Processing Skills Canada

FPSC is your labour, skills and workforce development non-profit organization. Our job is to provide leadership in professionalizing the food and beverage manufacturing industry so that the most important resource - people - are the best in the world. We have developed a national skills strategy which is a proven long-term approach successfully utilized by other Canadian professional sectors. This strategy builds collaborations with industry, government, academia, unions, associations, community organizations and other stakeholders.

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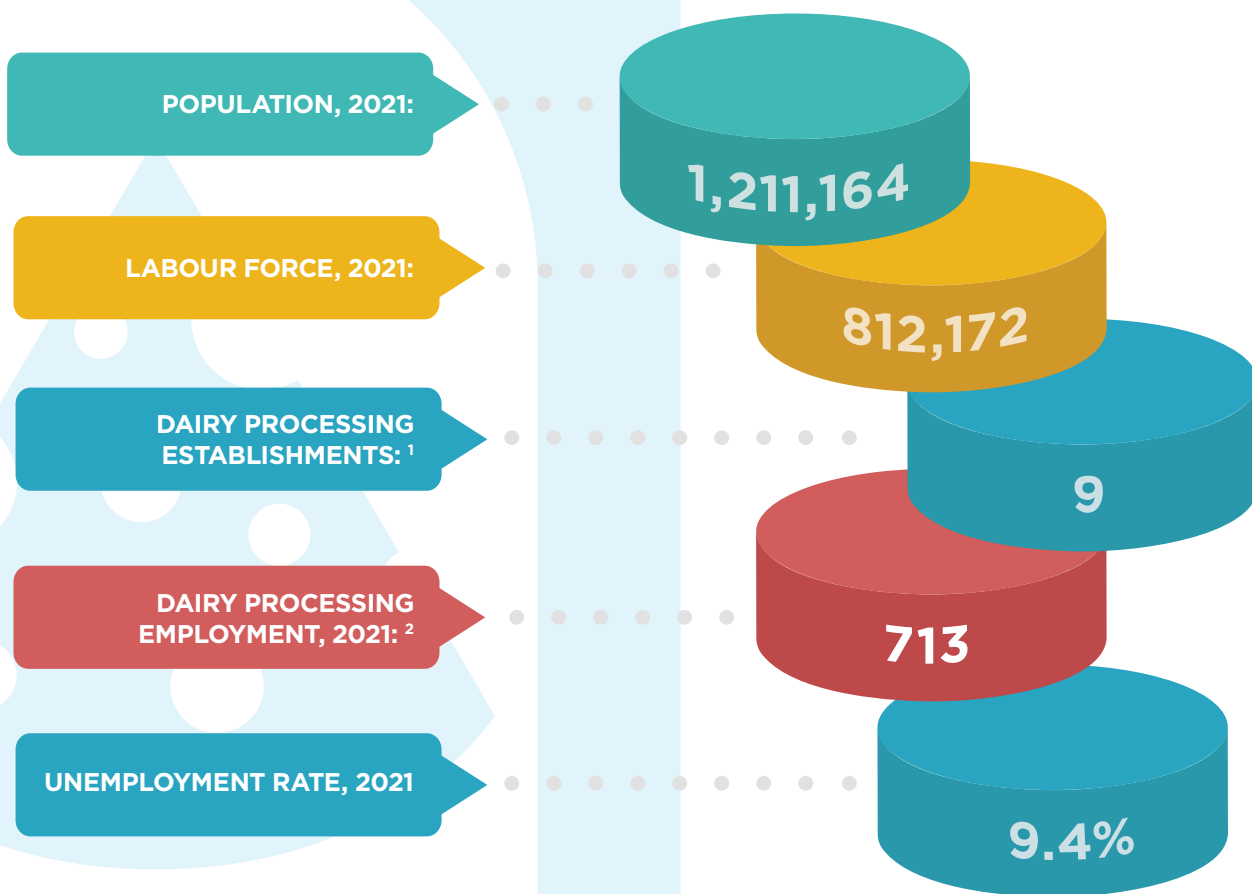
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Key Summary

- Calgary is located in Southern Alberta and is a hub for a region with a population of approximately 1,211,164.
- The region accounts just under one third of dairy processing facilities in Alberta.
- Dairy processing employment in the region is estimated at approximately 713 in 2021. Manufacturing overall accounts for approximately 5% of employment.

- By the end of this decade (2030), it is estimated that 177 new hires will be required for the regional dairy processing industry, with 60% of this requirement due to replacement of current workers (e.g., retirements).
- Recruitment and retention challenges within this time period are expected to increase as a result of increased labour market tightness.

key stats

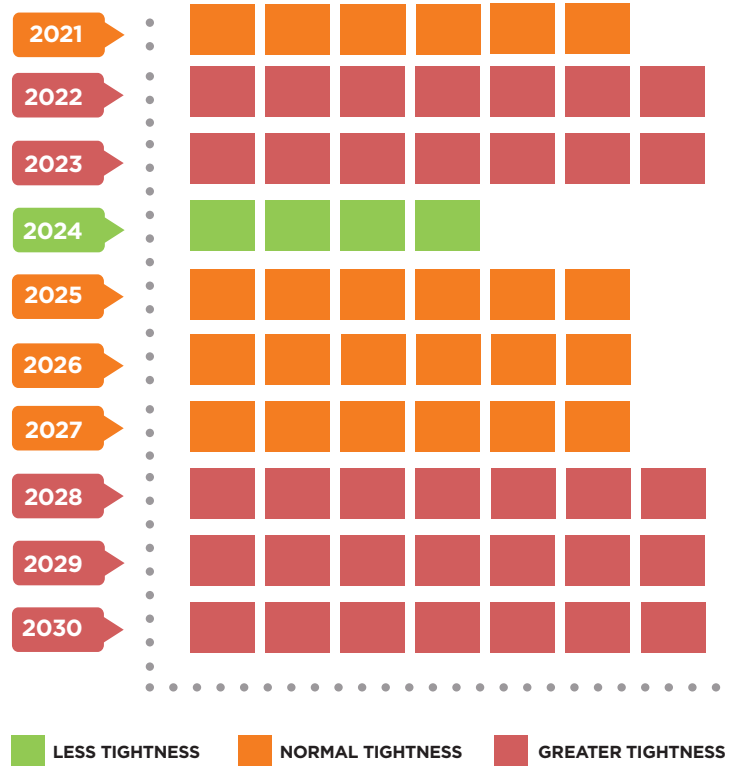


¹ The number of establishments is based on 2021 data from Statistics Canada's Business Register

² Prism Economics and Analysis, 2021



labour market tightness ratings

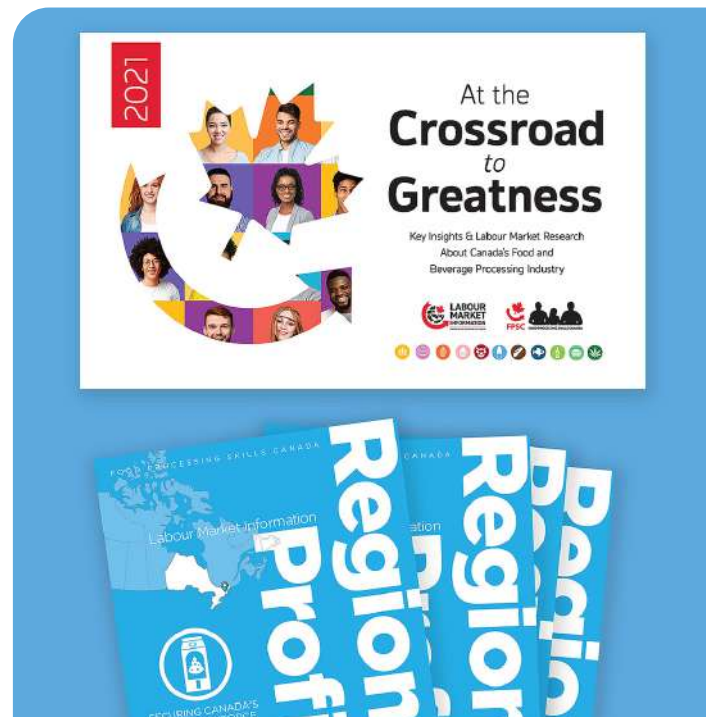


LMI report series

Food Processing Skills Canada (FPSC)

has developed this regional profile of the Calgary, Alberta dairy processing as one within a series of 11 regional reports for the Canadian dairy processing industry. The regional report series is one component of a larger labour market information study of dairy processing within the context of an overall study of the Canadian food and beverage processing sector.

<https://fpsc-ctac.com/lmi-reports/>



objectives

Labour markets are often best understood at a local or regional level where various contributing factors are well understood, sources of labour supply can be characterized, and detailed knowledge of individual facilities exist. The purpose of this regional report is to provide information on the dairy processing industry in the greater Calgary, Alberta area so that readers have detailed information and a better understanding of the local dairy processing industry. The profile outlines the demographic and socio-economic characteristics of the region, the regional labour force, the regional dairy processing industry, and an outlook for the specific dairy processing workforce in the Calgary region.

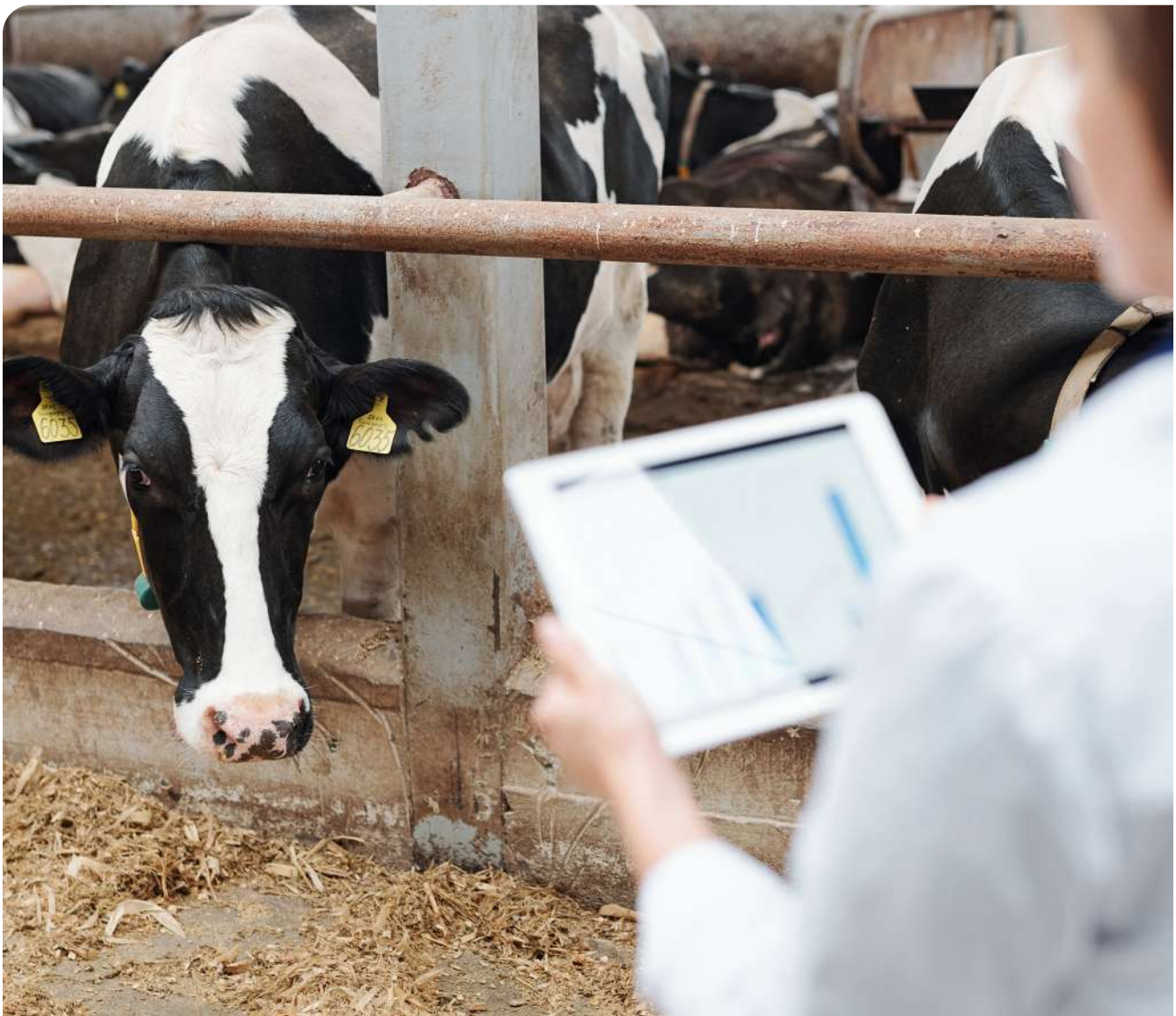


methods

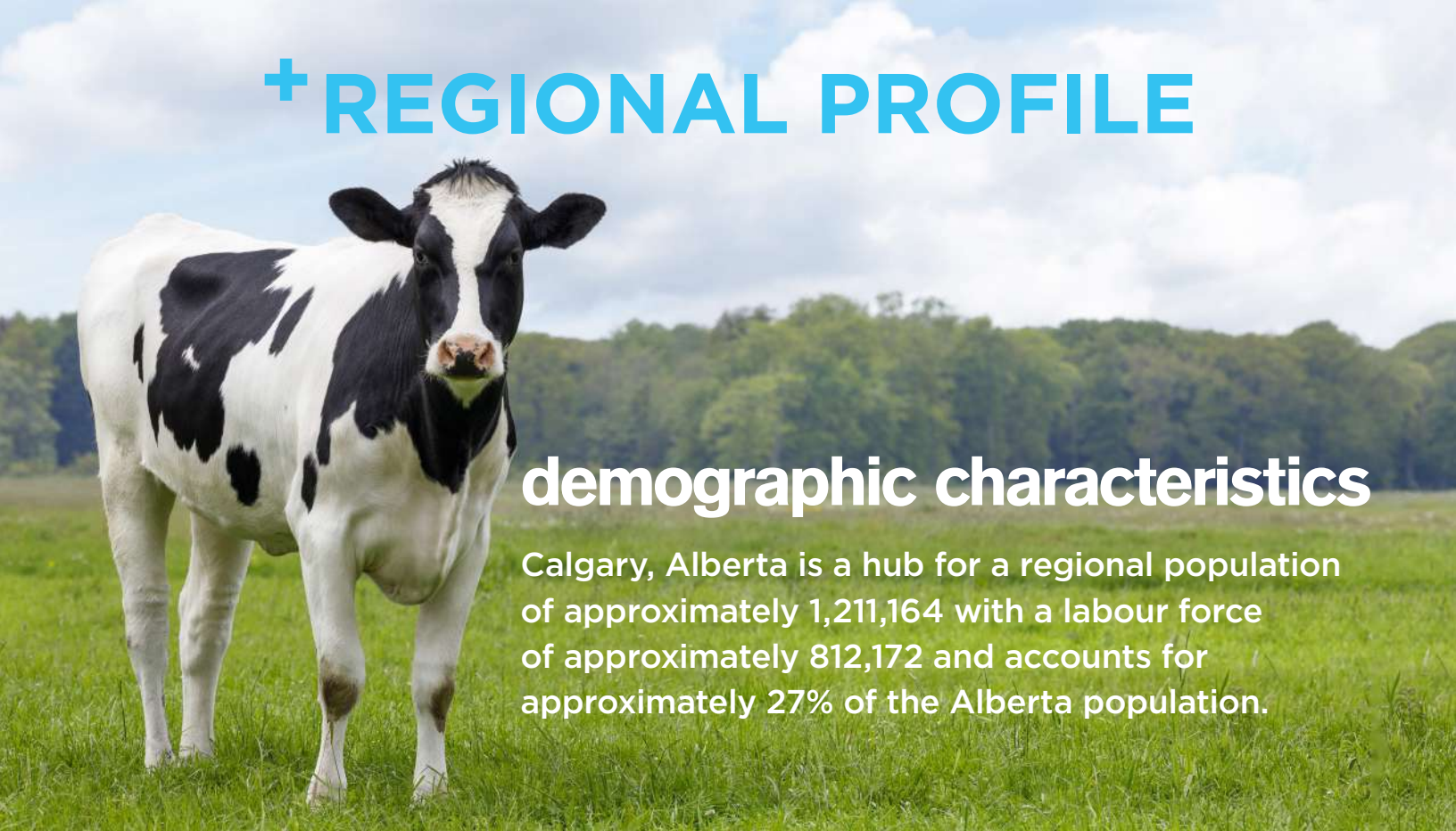
The methods used to develop the regional profiles included an extensive review of Statistics Canada reports and data that contributed to profile the industry, and project growth in production and employment at the regional level.

In addition, the regional profiles benefitted from a review of other primary and secondary data that enabled the research team to estimate potential labour demand for specific regions, and to identify key industry trends.

The “region” of Calgary, Alberta focuses on a catchment radius of approximately a one-hour commute to dairy establishments to estimate the approximate distance of maximum commuting distance for potential labour force.



+ REGIONAL PROFILE



demographic characteristics

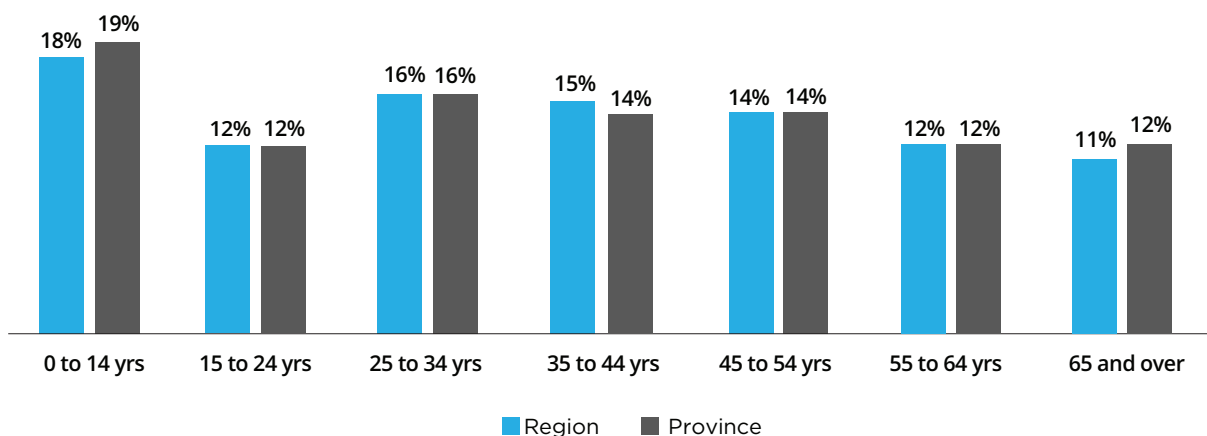
Calgary, Alberta is a hub for a regional population of approximately 1,211,164 with a labour force of approximately 812,172 and accounts for approximately 27% of the Alberta population.

Population Summary

	Calgary	Alberta
Total Population	1,211,164	2,456,400
Total Labour Force	4,456,000	736,020
Total Employment	812,172	2,241,500

Source: Alberta Population Projections, Government of Alberta; Prism Economics and Analysis, 2021

Population by Age Group



Source: Census 2016

The age profile of the Calgary population is similar to the age distribution of Alberta overall. Within the Calgary region's population approximately 11% are in the traditional retirement age category of 65 years or older compared with 12% of the Alberta population. There is the same proportion of the Calgary population in the pre-retirement age category of 55 to 64 years of age (12% compared to 12% for Alberta). The proportion of the classic core working age population (25-54) is 45% in the Calgary region compared with 44% in Alberta overall.

Population Diversity

	Calgary	Alberta
Immigrants <i>Share of Population</i>	392,800 30%	845,220 21%
Not Canadian Citizens <i>Share of Population</i>	149,620 12%	355,410 9%
Visible Minority <i>Share of Population</i>	448,280 34%	933,165 23%
Aboriginal Identity <i>Share of Population</i>	37,875 3%	258,640 7%

Source: Census 2016

The diversity of population according to immigrant status and visible minorities is higher for the Calgary region compared with Alberta overall. The share of population who were immigrants in 2016 was 30% compared with 21% in Alberta, and self-identified visible minorities made up 34% of the Calgary population compared with 23% of Alberta. Similarly, there were larger proportions of the region's population who were not Canadian citizens (12%) compared to Alberta overall (9%).

Population Mobility (5 years)

	Calgary	Alberta
Non-migrants <i>Share of Population</i>	341,675 62%	899,165 54%
Migrants <i>Share of Population</i>	211,990 38%	762,890 46%
Internal migrants <i>Share of Population</i>	123,515 58%	559,860 73%
<i>Intraprovincial</i> <i>Share of Population</i>	51,995 42%	333,775 60%
<i>Interprovincial</i> <i>Share of Population</i>	71,510 58%	226,090 40%
External Migrants <i>Share of Population</i>	88,485 42%	203,025 27%

Source: Census 2016

According to the 2016 Census, there was similar mobility within the population of Edmonton region (42%) compared with Alberta overall (46%) meaning that there were similar proportions of people moving into the region within the previous 5 years. The majority of mobility was due to internal migrants (65%). External migrants from outside of Canada was higher for Edmonton region (35%) compared with Alberta (27%).

Indigenous Communities

First Nation	Reserve(s)	Location	Population
Stoney	Big Horn 144a Eden Valley 216 Stoney 142-143-144 Stoney 142b	Twp 39, Rge 16, W5m 80 Km Sw/So Of/De Calgary 56 Km W/O Of/De Calgary 48 Km Nw/No Of/De Calgary	4,530
Tsuut'ina Nation	Tsuu T'ina Nation 145	13 Km Se/Se Of/De Calgary	1,645
Siksika Nation	Siksika 146	80 Km E/E Of/De Calgary (Blackfoot 146)	3,460
Total:			9,635

Source: Census 2021

In the surrounding areas, there are three First Nations with six communities with a total population of approximately 9,635 community members. Overall, approximately 3% of the region’s population self-identify as Aboriginal according to the 2016 Census which is lower compared to the overall rate of 7% for the province.

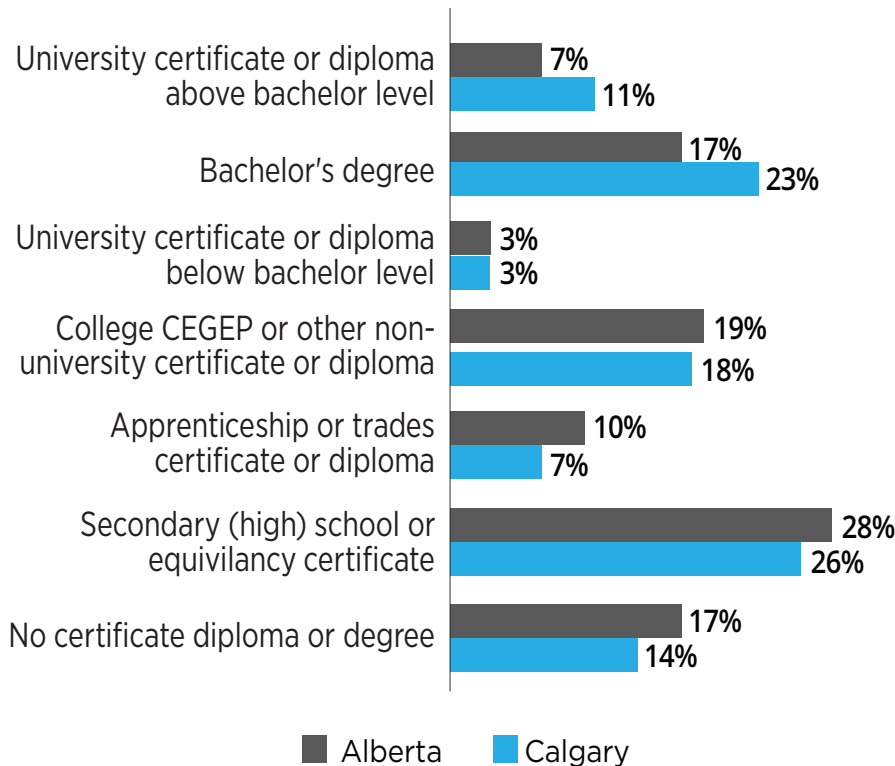
Overall,
approximately
3% of the
Calgary region’s
population
self-identify as
Aboriginal.*



*According to the 2016 Census which is similar to the overall rate of 7% for the province.

socio-economic characteristics

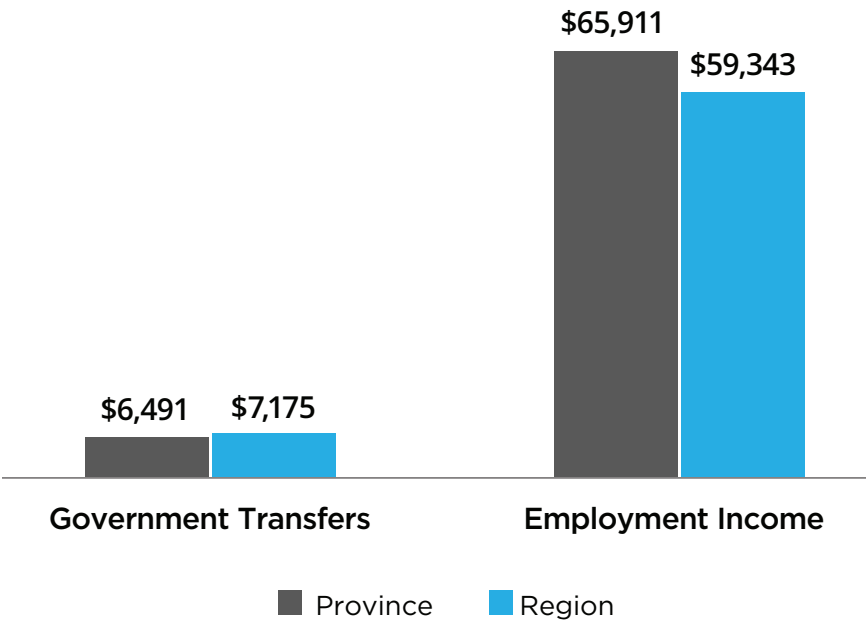
Educational Attainment



Source: Census 2016

The Calgary regional population has slightly higher rates of post-secondary participation compared with Alberta overall. Approximately 60% report having some form of post-secondary diploma, certificate or degree compared with 55% of Alberta overall.

Average Employment Income

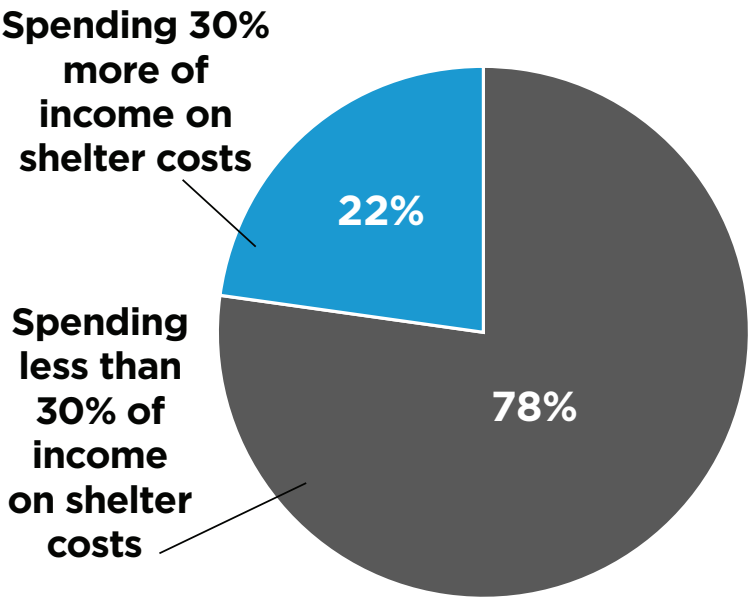


Source: Census 2016

Average employment income among Calgary regional residents was approximately 11% higher in 2015 compared with Alberta overall according to Census 2016. The average employment income for Calgary regional residents was approximately \$65,911 compared with \$59,343 for Alberta overall. The average government transfers was approximately 9% lower for Calgary region residents at \$6,491 compared with \$7,175 for Alberta overall in 2015.

Approximately two thirds of Edmonton region population (68%) are home owners, with a higher proportion (77%) of the region reporting spending less than 30% of their income on shelter costs in 2016. The average monthly housing costs for home owners was \$1,539, compared with the average monthly housing costs for renters at \$1,270.

Housing Costs

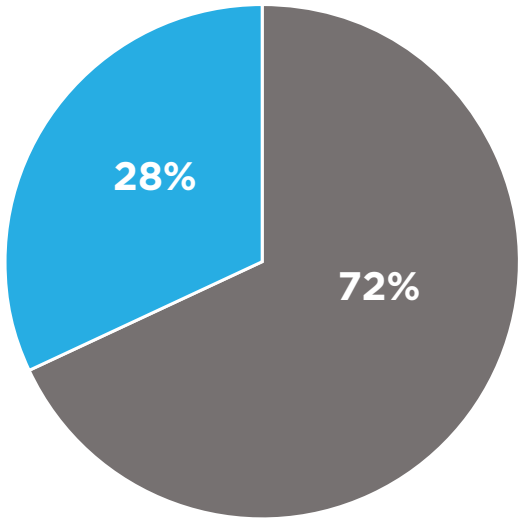


Source: Census 2016



Housing Composition

72% of the Calgary region population are home owners.



- Owner households - Average Monthly Cost of Housing for Owners \$1,629
- Renter households - Average Monthly Cost of Housing for Renters \$1,354

Source: Census 2016

regional labour force

The size of the regional labour force in 2021 was 675,000 which is 28% of Alberta's overall labour force. The participation rate in the region is very similar (67.9%) compared to Alberta (67.7%). Among those in the labour force, the unemployment rates were similar (10.0% vs. 8.7% in Alberta overall).

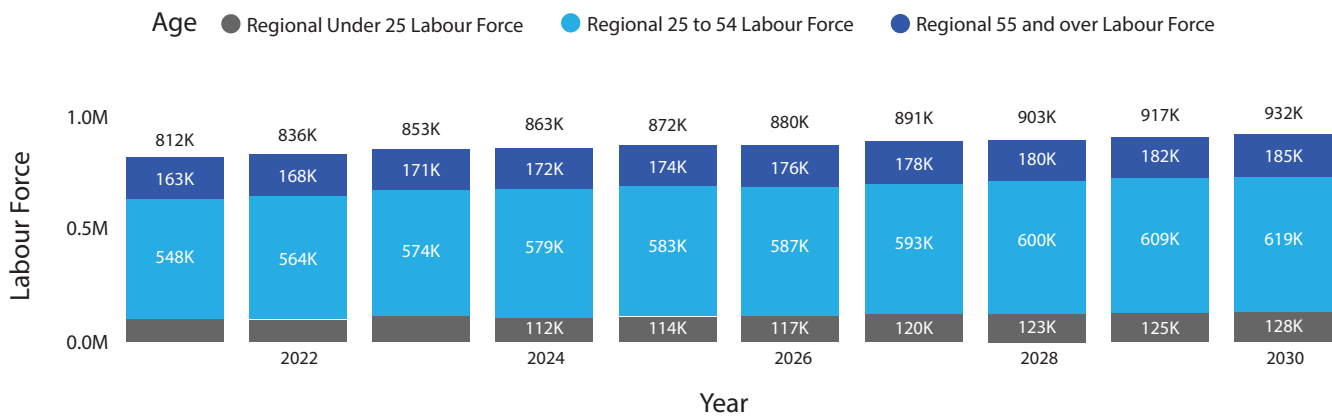
Labour Force Characteristics

	Calgary	Alberta
In Labour Force	812,172	2,456,400
Employed	736,020	2,241,500
Unemployed	76,152	214,800
Participation Rate	69.1%	67.7%
Employment Rate	62.6%	61.8%
Unemployment Rate	9.4%	8.7%

Source: Statistics Canada, Labour Force Survey;
Prism Economics and Analysis, 2021

Labour force projections indicate an approximate 14% overall growth in the next decade rising from approximately 676,000 in 2021 to 769,000 by 2030. The anticipated largest increases are expected to occur in the core group of workers aged 25 to 54 years old.

Labour Force Characteristics



Source: Prism Economics and Analysis, 2021

Labour Force by Industry

Industry	Regional Labour Force	% of Labour Force
Health care and social assistance	101,562	13%
Professional, scientific and technical services	88,407	11%
Retail trade	83,432	10%
Construction	70,849	9%
Educational services	63,423	8%
Accommodation and food services	42,570	5%
Manufacturing	41,162	5%

Source: Statistics Canada, Labour Force Survey; Prism Economics and Analysis, 2021

The largest proportions of the Edmonton regional labour force are working in health care and social assistance (13%) and the retail trade (12%), with a similar proportion working in construction (11%). The manufacturing industry accounts for 5% of the regional labour force and is the sector within which the dairy processing sector would be categorized.

Job Characteristics by Industry (Alberta overall)

Alberta	Job Vacancy Rate	Average Hourly Wage
All Industries	3.3%	\$23.64
Food manufacturing	3.5%	\$19.43
Accommodation and food services	5.4%	\$15.33
Administrative and support, waste management and remediation services	4.6%	\$20.65
Professional, scientific, and technical services	3.6%	\$33.71
Health care and social assistance	3.5%	\$25.02
Arts, entertainment, and recreation	5.0%	\$19.97
Transportation and warehousing	3.4%	\$22.63

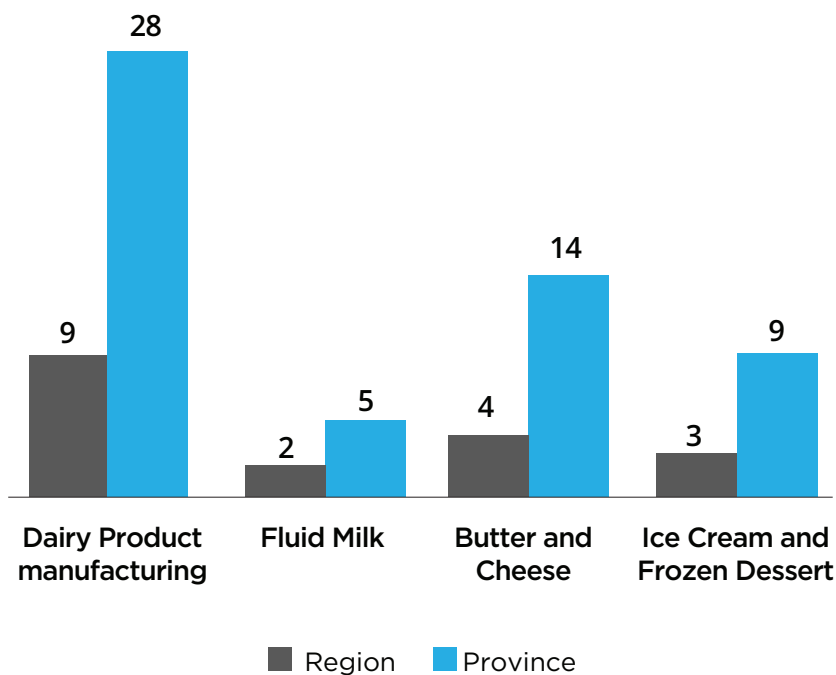
Source: Job Vacancy and Wage Survey Q3 2020 - Q2 2021, Alberta

Although not available at the regional level, an examination of the Alberta vacancy rate and average hourly wage data by industry gives some indication for the region as to the potential opportunities and challenges in recruiting and retaining sufficient labour for the dairy processing industry. The job vacancy rate for food manufacturing is similar at 3.5% when compared to all industries at 3.3%. The average hourly wage (\$19.43) is somewhat lower than that for all industries (\$23.64), but significantly higher than the minimum wage in Alberta of \$15.00 (as of April 1st, 2022).

dairy processing sector regional profile

Within the greater Calgary region, there are nine dairy processing establishments. The region accounts for approximately 32% of the dairy processing facilities in Alberta. Regional employment in the dairy processing sector is estimated in 2021 at 713, with the largest proportions of the workforce in management, finance, sales or administrative positions (303; 42%), and skilled or semi-skilled occupations (205; 29%). Other sizeable proportions of the regional dairy workforce are found in the trades (105; 15%).

Dairy Processing Establishments (2021)



The Calgary region accounts for approximately 32% of the dairy processing facilities in Alberta

Source: Canadian Business Counts, establishment and location counts, June 2021

Dairy Processing Employment (2021)

Occupation Group	# Employed
Management, Finance, Sales, Admin	303
Skilled/Semi-Skilled	205
Trades	105
Entry-level Labourers	58
Product Development and QC	29
Other	11
Total	713

Source: Prism Economics and Analysis, 2021

dairy processing workforce outlook

Dairy processing employment in the Edmonton region is expected to grow by approximately 16% over the upcoming decade rising from 402 in 2021 to 465 by 2030 a change of approximately 63. However, the overall hiring requirements will be substantially larger due to the need to replace workers as they retire or leave the industry for various reasons. The actual hiring requirement is expected to be in the range of 120 workers. Anticipated growth will account for 64 new hires (52%) while the remaining 59 new hires (42%) will be needed due to replacement requirements. The largest hiring requirements will occur in the second half of the decade in 2026-2030. From the demographic analysis, new youth entrants are expected to moderate, averaging one new entrant per year over the remainder of the forecast. This suggests that hiring requirements will need to consider other labour supply sources in order to meet the demand, largely attributable to labour replacement requirements (retirements).

Total Dairy Processing Workforce Outlook

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Labour Force	723	775	805	797	801	805	811	823	832	839
Employment	713	714	728	739	747	754	762	770	776	782
Net Hiring Requirement	11	10	22	19	13	17	21	23	21	20
<i>Employment Growth</i>	0	1	15	11	8	7	8	8	7	6
<i>Replacement</i>	11	9	8	8	5	10	13	15	15	14
Youth New Entrants	6	2	2	2	2	2	2	2	2	2

Source: Census 2016

Dairy processing employment in the Calgary region is expected to grow by approximately 16% over the upcoming decade.



dairy processing workforce outlook

Dairy Processing Employment Outlook

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Management, Finance, Sales, and Administration	303	289	295	300	303	306	309	313	315	318
Entry-level Labourers	58	57	58	59	60	61	61	62	62	63
Other	11	13	14	14	14	14	14	14	14	14
Product Development and Quality Control	29	33	34	34	35	35	35	36	36	36
Skilled/Semi-Skilled	205	220	225	228	230	233	235	237	240	241
Trades	105	101	103	104	105	106	107	108	109	110
Total	713	714	728	739	747	754	762	770	776	782

Dairy Processing Hiring Requirement Outlook

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Management, Finance, Sales, and Administration	5	-10	10	9	6	8	10	11	10	9
Entry-level Labourers	1	0	2	1	1	1	1	1	1	1
Other	1	3	1	1	1	1	1	1	1	1
Product Development and Quality Control	2	5	2	2	1	2	2	3	3	2
Skilled/Semi-Skilled	1	15	5	4	3	3	3	3	3	3
Trades	2	-3	3	3	2	3	3	4	3	3
Total	11	10	22	19	13	17	21	23	21	20

The types of workers that will be needed for the Calgary region dairy processing industry vary slightly year to year according to estimates, yet across the decade, the largest proportion of new hires will be within the occupations aligned with management, finance, sales and administration with a total of 68 new workers needed accounting for approximately 38% of the total hiring requirements between 2021 and 2030. The next largest hiring requirement will be for skilled/semi-skilled workers (43; 24%). Similar numbers of trades (23; 13%) and product development and quality control (24; 14%) workers will be needed. This is of particular concern given the more extensive training requirements for these combined with the increasing competition for these occupations from other industries.

labour market tightness

Labour market tightness is a measure of the share of the annual supply change that occurs after accounting for available new entrants. Recruitment challenges increase as the proportion of workers need to be recruited from other industries, occupations and geographic regions rises. Recruitment challenges are exacerbated when tightness in other industries exceeds that of the dairy sector.

Reading the Rankings

Labour markets have tightened significantly in recent years and what were previously periodic recruitment challenges have now become permanent challenges faced by employers in all sectors of the economy. Given this reality, the ranks are intended to be interpreted in relation to recruitment and retention conditions experienced over the previous five years. The analysis of labour market tightness uses a relative ranking system:

- Rank of 1 - recruitment/retention less challenging than previous years
- Rank of 2 - recruitment/retention present comparable challenges to previous years
- Rank of 3 - recruitment/retention more challenging than previous years

For the Calgary region’s dairy processing sector, the labour market tightness rating will increase as of 2022 which will likely result in the industry experiencing more challenges in recruitment and retention than previous years. This is will ease between 2024 and 2027, but then again increase as of 2028 which will likely result again in increased challenges in recruitment and retention.

Labour Market Tightness Ratings 2021-2030: Calgary Region

2021	2 - Normal Tightness
2022	3 - Greater Tightness
2023	3 - Greater Tightness
2024	1 - Less Tightness
2025	2 - Normal Tightness
2026	2 - Normal Tightness
2027	2 - Normal Tightness
2028	3 - Greater Tightness
2029	3 - Greater Tightness
2030	3 - Greater Tightness



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