



2021 Alberta Wage and Salary Survey

Agriculture industry summary report

Overview

The Alberta Wage and Salary Survey is undertaken by the Alberta government to provide current wage rates and skill shortage information on various occupations in Alberta, and in specific industries and economic regions. This labour market information helps Alberta employers to fine-tune their compensation and recruitment strategies, helps individuals make career and education choices, and aids the provincial government in developing effective policies and providing services.

Survey results

The survey was completed with 145 employers in the Agriculture sector who provided information on over 3,216 employees in various occupational classifications¹. Survey data were collected between January and August 2021. Alberta Wage and Salary Survey results by four-digit National Occupational Classification (NOC) for all of Alberta, by industry group, and by geographic area can be found at www.alis.alberta.ca/occinfo

A modest number of survey completions was obtained from employers in this industry. Many small agriculture operations would not have met the criteria for inclusion in the survey sample (ten or more employees in Calgary and Edmonton regions; five or more employees in other regions). Some occupations reported here are associated with lower levels of statistical reliability.

Wages for selected occupations

The following table illustrates the wage survey results associated with some common occupations within this industry². The tables below present results for three-digit NOC minor groups and for four-digit NOCs.

¹ The estimated sample error at the establishment level for overall results for this industry is estimated to be $\pm 8.4\%$ at a 95% confidence level (i.e., 19 times out of 20) taking into account the sample design effect associated with over/under sampling and data weighting.

² Occupations were selected as the top occupations in terms of number of employees as per Statistics Canada 2016 Census for this industry and supplemented by other occupations frequently reported by industry employers. Only occupations with a minimum number of reportable observations were selected. Some occupations common to this industry may not be listed if sufficient reliable data were not available.

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
Common Business, Managerial, Administrative, and Clerical Occupations							
011 Administrative services managers	14	16	C	43.2	\$32.54	\$38.35	\$34.77
0111 Financial managers	9	10	D	44.7	\$36.69	\$44.08	\$39.33
082 Managers in agriculture, horticulture and aquaculture	62	127	B	44.4	\$26.19	\$35.94	\$33.46
0821 Managers in agriculture	53	103	B	43.7	\$25.24	\$35.36	\$32.52
0822 Managers in horticulture	11	24	C	47.4	n/a	\$38.17	\$37.07
111 Auditors, accountants and investment professionals	9	15	D	34.2	\$25.30	\$47.19	\$38.86
1111 Financial auditors and accountants	9	15	D	34.2	\$25.30	\$47.19	\$38.86
122 Administrative and regulatory occupations	24	43	B	40.5	\$23.34	\$41.23	\$32.08
1221 Administrative officers	22	36	B	40.5	\$22.86	\$42.61	\$32.45
124 Office administrative assistants - general, legal and medical	25	45	B	36.3	\$19.95	\$23.94	\$21.78
1241 Administrative assistants	25	45	B	36.3	\$19.95	\$23.94	\$21.78
131 Finance, insurance and related business administrative occupations	17	26	C	35.8	\$25.19	\$31.81	\$28.15

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
1311 Accounting technicians and bookkeepers	17	26	C	35.8	\$25.19	\$31.81	\$28.15
141 General office workers	12	29	C	35.4	\$17.60	\$28.29	\$23.36
1411 General office support workers	10	27	C	35.3	\$17.31	\$28.28	\$23.06
143 Financial, insurance and related administrative support workers	10	17	C	37.9	\$21.38	\$30.33	\$27.40
1431 Accounting and related clerks	10	17	C	37.9	\$21.38	\$30.33	\$27.40
152 Supply chain logistics, tracking and scheduling co-ordination occupations	9	24	D	40.5	\$19.80	\$28.88	\$24.38
Common Professional, Technical, Skilled, and Labour Occupations							
642 Retail salespersons	10	59	C	32.2	\$15.63	\$20.15	\$17.68
6421 Retail salespersons	10	59	C	32.2	\$15.63	\$20.15	\$17.68
673 Cleaners	12	33	C	20.3	\$18.22	\$25.41	\$20.81
6733 Janitors, caretakers and building superintendents	7	24	D	28.6	\$19.61	\$30.87	\$23.58
731 Machinery and transportation equipment mechanics (except motor vehicles)	27	72	B	43.4	\$24.98	\$33.38	\$28.87
7312 Heavy-duty equipment mechanics	23	54	B	43.4	\$26.88	\$35.48	\$30.70

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
751 Motor vehicle and transit drivers	34	237	B	44.9	\$22.27	\$27.14	\$24.08
7511 Transport truck drivers	31	218	A	45.4	\$22.65	\$27.30	\$24.40
752 Heavy equipment operators	7	30	D	43.1	\$21.88	\$27.37	\$24.03
7521 Heavy equipment operators (except crane)	7	30	D	43.1	\$21.88	\$27.37	\$24.03
825 Contractors and supervisors, agriculture, horticulture and related operations and services	43	272	B	45.5	\$18.42	\$25.57	\$20.91
8252 Agricultural service contractors, farm supervisors and specialized livestock workers	38	264	B	45.7	\$18.27	\$25.75	\$20.87
843 Agriculture and horticulture workers	106	1,565	A	42.6	\$17.37	\$25.37	\$20.98
8431 General farm workers	81	1,257	A	44.4	\$17.99	\$27.69	\$22.32
8432 Nursery and greenhouse workers	25	308	B	36.6	\$15.29	\$17.58	\$16.49
861 Harvesting, landscaping and natural resources labourers	18	145	C	41.6	\$18.28	\$25.58	\$21.27
8611 Harvesting labourers	7	50	D	39.9	\$16.79	\$22.99	\$19.29
8612 Landscaping and grounds maintenance labourers	11	95	B	42.5	\$19.01	\$26.86	\$22.25

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	# of Employees	Data Reliability Code	Avg. Hours Worked per Week	Avg. Starting Pay	Avg. Top Pay	Overall Average Pay for All Employees
961 Labourers in processing, manufacturing and utilities	5	66	C	43.4	\$16.59	\$28.45	\$20.31
9617 Labourers in food and beverage processing	5	66	B	43.4	\$16.59	\$28.45	\$20.31

“n” in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 25 employers combined reported wages for 308 Nursery and greenhouse workers (NOC 8432).

Averages are calculated using data weighted by establishment to account for survey non-response (stratified by region, industry group and employer size) and by number of employees reported.

“n/a” indicates that results have been suppressed due to missing data for some employers or due to calculation anomalies.

Data Reliability Codes are based on coefficient of variation as an indicator of general reliability: “A”: coefficient of variation of less than or equal to ±6.00%, “B”: from ±6.01% to ±15.00%, “C”: from ± 15.01% to ±33.00%, “D”: more than ±33.01%.

Job vacancies and hiring difficulties – selected occupations

The following table illustrates the job vacancy survey results associated with some common occupations within the Agriculture industry as cited by survey respondents and confirmed through review of the data.

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
Common Business, Managerial, Administrative, and Clerical Occupations					
011 Administrative services managers	14	5%	0%	0%	0.0%

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
0111 Financial managers	9	7%	n/a	0%	n/a
082 Managers in agriculture, horticulture and aquaculture	62	18%	36%	4%	3.3%
0821 Managers in agriculture	53	22%	36%	5%	4.1%
0822 Managers in horticulture	11	0%	n/a	0%	n/a
111 Auditors, accountants and investment professionals	9	4%	n/a	0%	n/a
1111 Financial auditors and accountants	9	4%	n/a	0%	n/a
122 Administrative and regulatory occupations	24	19%	22%	4%	2.8%
1221 Administrative officers	22	12%	40%	5%	3.2%
124 Office administrative assistants - general, legal and medical	25	32%	3%	0%	n/a
1241 Administrative assistants	25	32%	3%	0%	n/a
131 Finance, insurance and related business administrative occupations	16-17	24%	59%	0%	n/a
1311 Accounting technicians and bookkeepers	16-17	24%	59%	0%	n/a

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
141 General office workers	12	12%	n/a	3%	1.3%
1411 General office support workers	10	14%	n/a	3%	1.4%
143 Financial, insurance and related administrative support workers	8-9	23%	n/a	0%	n/a
1431 Accounting and related clerks	8-9	23%	n/a	0%	n/a
152 Supply chain logistics, tracking and scheduling co-ordination occupations	9	31%	n/a	5%	2.4%
Common Professional, Technical, Skilled, and Labour Occupations					
642 Retail salespersons	10	52%	n/a	7%	1.2%
6421 Retail salespersons	10	52%	n/a	7%	1.2%
673 Cleaners	12	26%	n/a	0%	n/a
6733 Janitors, caretakers and building superintendents	7	42%	n/a	0%	n/a
731 Machinery and transportation equipment mechanics (except motor vehicles)	26	37%	52%	10%	3.5%
7312 Heavy-duty equipment mechanics	22	30%	39%	2%	1.0%

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
751 Motor vehicle and transit drivers	32-33	56%	70%	12%	4.2%
7511 Transport truck drivers	29-30	53%	72%	12%	4.5%
752 Heavy equipment operators	7	87%	43%	0%	n/a
7521 Heavy equipment operators (except crane)	7	87%	43%	0%	n/a
825 Contractors and supervisors, agriculture, horticulture and related operations and services	39-40	44%	67%	13%	4.5%
8252 Agricultural service contractors, farm supervisors and specialized livestock workers	35-36	43%	69%	11%	3.8%
843 Agriculture and horticulture workers	103-104	51%	52%	6%	2.0%
8431 General farm workers	79-80	50%	60%	5%	1.9%
8432 Nursery and greenhouse workers	24	53%	28%	7%	2.3%
861 Harvesting, landscaping and natural resources labourers	18	62%	34%	11%	n/a
8611 Harvesting labourers	7	57%	n/a	0%	n/a

AGRICULTURE INDUSTRY Selected Occupations (4-Digit NOC)	Employers Reporting (n)	% of Employers that Hired for this Occupation within the Last 2 Years	% of Employers Experiencing Hiring Difficulties (out of those hiring)	% of Employers with Vacancies of Greater than 4 Months	Job Vacancy Rate
8612 Landscaping and grounds maintenance labourers	11	65%	15%	18%	14.9%
961 Labourers in processing, manufacturing and utilities	5	100%	0%	0%	n/a
9617 Labourers in food and beverage processing	5	100%	0%	0%	n/a

“n” in the above table represents the range of the number of employers who indicated at least one employee in an occupation and responded to individual questions about hiring difficulties and vacancies (not all employers responded to all questions).

“n/a” indicates that results have been suppressed due to missing data for some employers.

Statistics on hiring activity, hiring difficulties, and employers reporting vacancies were calculated based on *the number of employers responding* for each question, weighted by establishment for survey non-response (stratified by region, industry group and employer size).

Job Vacancy Rate for vacancies that had been unfilled for 4 months or more calculated as: $\text{Sum of Unfilled Vacancies} / (\text{Sum of Current Employees} + \text{Sum of Unfilled Vacancies})$, with data weighted by establishment for survey non-response (stratified by industry group and employer size).

Industry Definition as per North American Industry Classification System (NAICS)

Agriculture Sector (NAICS 111, 112, 1151, 1152)

For this survey, the Agriculture industry group is composed of four NAICS subsectors.

The Crop production subsector (NAICS 111) comprises of establishments, such as farms, orchards, groves, greenhouses and nurseries, primarily engaged in growing crops, plants, vines, trees and their seeds (excluding those engaged in forestry operations). Industries have been created taking into account input factors, such as suitable land, climatic conditions, type of equipment, and the amount and type of labour required. The production process is typically completed when the raw product or commodity grown reaches the farm gate for market, that is, at the point of first sale or price determination.

Establishments in these industries may use traditional crop production methods, employ modified or improved crop inputs, or engage in organic crop production. An establishment is classified within this subsector provided that 50 per cent or more of the establishment's agricultural production consists of crops. Establishments with 50 per cent or more crop production and with no one product or family of products accounting for 50 per cent of the production are treated as combination crop farms and classified to All other crop farming (NAICS 11199), except if 50 per cent or more of the production is a combination of oilseeds and grains, in which case they are classified to Other grain farming (NAICS 11119)

The Animal production and aquaculture subsector (NAICS 112) comprises of establishments, such as ranches, farms and feedlots, primarily engaged in raising animals, producing animal products and fattening animals. Industries have been created taking into account input factors such as suitable grazing or pasture land, specialized buildings, type of equipment, and the amount and type of labour required.

An establishment is classified within this subsector provided that 50 per cent or more of the establishment's agricultural production consists of animal production or aquaculture. Establishments with 50 per cent or more animal production or aquaculture and with no one product or family of products accounting for 50 per cent of the production are treated as combination animal farms and classified to All other animal production (NAICS 11299).

Establishments not classified to any other industry, primarily engaged in raising animals, such as llamas, bison, wild boar, deer, elk, worms, crickets, laboratory animals and companion animals, for example dogs, cats, pet birds and other pets are also included in this industry and classified to All other animal production (NAICS 11299)

NAICS 1151 and 1152 comprises establishments engaged in supportive activities for growing crops.

Research conducted for the Alberta Government by R.A. Malatest & Associates Ltd.