

# Wage and Salary Survey

*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.*

## Utilities Industry Summary Report

### SURVEY RESULTS

The survey was completed with 55 employers in the Utilities industry sector who provided information on over 1,177 employees in various occupational classifications<sup>1</sup>. Survey data were collected between January and July 2019. 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](http://www.alis.alberta.ca/occinfo)

This industry has a relatively small number of employers in Alberta, and a small number of surveys were obtained in this survey cycle. Furthermore, employment captured by the survey was spread across a variety of occupations. There were very few individual occupational groups that were reported on by more than a few employers.

In order to provide information useful to this industry, selected NOC's common to the Utilities industry were identified based on 2016 Census data, and the Alberta survey average across all industries is presented for these occupations. Where possible, results exclusively from employers in this industry sector are also presented. For certain occupations, industry-specific results either could not be reported or 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 industry<sup>2</sup>. The tables below present results for four-digit NOCs.

<sup>1</sup> The estimated sample error at the establishment level for overall results for this industry is estimated to be  $\pm 10.5\%$  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.

<sup>2</sup> 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.

UTILITIES 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
<b>Common Business, Managerial, Administrative, and Clerical Occupations</b>							
<b>0016 Senior managers - construction, transportation, production and utilities</b>							
ALBERTA AVERAGE	380	1,037	A	41.2	\$78.80	\$101.76	\$92.86
<b>0111 Financial managers</b>							
ALBERTA AVERAGE	735	1,629	A	38.2	\$43.60	\$61.48	\$52.38
<b>0621 Retail and wholesale trade managers</b>							
ALBERTA AVERAGE	975	4,064	A	40.7	\$30.25	\$46.80	\$38.05
<i>Utilities Industry Average</i>	12	12	A	38.7	\$49.84	\$53.00	\$51.86
<b>0912 Utilities managers</b>							
ALBERTA AVERAGE	94	203	B	40.0	\$45.74	\$62.25	\$54.53
<i>Utilities Industry Average</i>	27	39	B	40.9	\$45.43	\$51.59	\$50.20
<b>1111 Financial auditors and accountants</b>							
ALBERTA AVERAGE	790	2,983	A	38.0	\$30.61	\$49.03	\$39.31
<i>Utilities Industry Average</i>	10	24	C	37.9	\$43.30	\$50.24	\$47.52
<b>1112 Financial and investment analysts</b>							
ALBERTA AVERAGE	127	1,265	A	38.0	\$34.87	\$55.67	\$43.40
<b>1121 Human resources professionals</b>							
ALBERTA AVERAGE	370	3,058	A	37.1	\$32.84	\$48.80	\$39.69
<b>1122 Professional occupations in business management consulting</b>							
ALBERTA AVERAGE	122	1,258	A	37.3	\$39.61	\$56.44	\$47.85
<b>1123 Professional occupations in advertising, marketing and public relations</b>							
ALBERTA AVERAGE	480	1,960	A	36.6	\$28.73	\$46.68	\$36.24

UTILITIES 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
<b>1221 Administrative officers</b>							
ALBERTA AVERAGE	1,230	6,783	A	37.4	\$24.84	\$38.90	\$31.06
<i>Utilities Industry Average</i>	15	35	C	37.6	\$25.22	\$39.26	\$30.77
<b>1225 Purchasing agents and officers</b>							
ALBERTA AVERAGE	269	1,251	A	38.5	\$33.29	\$49.91	\$41.68
<b>1241 Administrative assistants</b>							
ALBERTA AVERAGE	1,292	14,828	A	34.4	\$21.48	\$30.77	\$25.93
<i>Utilities Industry Average</i>	10	30	C	36.6	\$26.20	\$34.74	\$31.98
<b>1411 General office support workers</b>							
ALBERTA AVERAGE	799	8,104	A	34.3	\$20.90	\$28.00	\$24.53
<i>Utilities Industry Average</i>	15	21	C	31.7	\$20.94	\$28.28	\$26.33
<b>1414 Receptionists</b>							
ALBERTA AVERAGE	870	2,679	A	32.2	\$18.44	\$23.45	\$20.93
<i>Utilities Industry Average</i>	11	14	B	31.5	\$20.87	\$23.84	\$23.30
<b>1431 Accounting and related clerks</b>							
ALBERTA AVERAGE	1,105	3,647	A	37.4	\$21.69	\$30.22	\$25.80
<i>Utilities Industry Average</i>	16	44	C	36.6	\$23.96	\$31.41	\$29.71
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>							
<b>2131 Civil engineers</b>							
ALBERTA AVERAGE	105	1,983	A	37.9	\$37.83	\$73.33	\$51.38
<b>2132 Mechanical engineers</b>							
ALBERTA AVERAGE	67	475	B	39.6	\$35.43	\$58.65	\$47.42

UTILITIES 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
<b>2133 Electrical and electronics engineers</b>							
ALBERTA AVERAGE	56	518	B	39.6	\$34.91	\$57.11	\$46.49
<b>2171 Information systems analysts and consultants</b>							
ALBERTA AVERAGE	208	3,887	A	38.1	\$34.82	\$57.27	\$46.78
<b>2241 Electrical and electronics engineering technologists and technicians</b>							
ALBERTA AVERAGE	84	821	A	39.8	\$28.70	\$42.72	\$35.80
<b>6221 Technical sales specialists - wholesale trade</b>							
ALBERTA AVERAGE	259	1,260	A	39.3	\$26.15	\$45.09	\$38.17
<b>6552 Other customer and information services representatives</b>							
ALBERTA AVERAGE	451	4,287	A	36.5	\$19.28	\$27.66	\$23.13
<i>Utilities Industry Average</i>	8	51	D	38.9	\$29.25	\$39.08	\$34.94
<b>7243 Power system electricians</b>							
ALBERTA AVERAGE	7	216	B	43.5	\$37.41	\$44.82	\$40.19
<b>7244 Electrical power line and cable workers</b>							
ALBERTA AVERAGE	23	376	B	40.0	\$37.46	\$52.91	\$49.95
<i>Utilities Industry Average</i>	7	258	B	39.7	\$36.66	\$57.49	\$56.12
<b>7253 Gas fitters</b>							
ALBERTA AVERAGE	40	205	A	40.7	\$31.67	\$44.78	\$38.74
<i>Utilities Industry Average</i>	18	68	C	40.0	\$29.45	\$45.57	\$37.21
<b>7311 Construction millwrights and industrial mechanics</b>							
ALBERTA AVERAGE	156	1,179	A	40.2	\$32.47	\$39.69	\$35.57

UTILITIES 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
<b>7442 Waterworks and gas maintenance workers</b>							
ALBERTA AVERAGE	36	191	A	39.8	\$26.17	\$34.76	\$31.32
<i>Utilities Industry Average</i>	17	70	C	40.0	\$25.07	\$39.99	\$33.64
<b>7521 Heavy equipment operators (except crane)</b>							
ALBERTA AVERAGE	341	4,554	A	44.2	\$25.63	\$36.15	\$30.77
<i>Utilities Industry Average</i>	5	35	B	41.1	\$27.66	\$38.15	\$30.69
<b>9212 Supervisors, petroleum, gas and chemical processing and utilities</b>							
ALBERTA AVERAGE	48	221	A	39.7	\$37.49	\$50.04	\$43.41
<b>9232 Central control and process operators, petroleum, gas and chemical processing</b>							
ALBERTA AVERAGE	19	708	C	41.5	\$32.22	\$44.27	\$38.03
<b>9241 Power engineers and power systems operators</b>							
ALBERTA AVERAGE	54	451	B	41.1	\$33.72	\$42.09	\$39.18
<b>9243 Water and waste treatment plant operators</b>							
ALBERTA AVERAGE	101	819	B	40.2	\$25.55	\$38.67	\$29.11
<i>Utilities Industry Average</i>	6	34	D	40.0	\$33.43	\$45.54	\$38.90

"n" in the above table represents the number of employers who indicated at least one employee in an occupation. For example, 17 employers combined reported wages for 70 Waterworks and gas maintenance workers (NOC 7442).

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  $\pm 6.00\%$ , "B": from  $\pm 6.01\%$  to  $\pm 15.00\%$ , "C": from  $\pm 15.01\%$  to  $\pm 33.00\%$ , "D": more than  $\pm 33.01\%$ .

## JOB VACANCIES & HIRING DIFFICULTIES – SELECTED OCCUPATIONS

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

UTILITIES 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
<b>Common Business, Managerial, Administrative, and Clerical Occupations</b>					
<b>0016 Senior managers - construction, transportation, production and utilities</b>					
ALBERTA AVERAGE	368-369	11%	18%	1%	n/a
<b>0111 Financial managers</b>					
ALBERTA AVERAGE	695-704	26%	18%	2%	1.5%
<b>0621 Retail and wholesale trade managers</b>					
ALBERTA AVERAGE	947-956	20%	25%	2%	1.2%
<i>Utilities Industry Average</i>	12	26%	n/a	0%	0.0%
<b>0912 Utilities managers</b>					
ALBERTA AVERAGE	85-87	20%	15%	2%	2.1%
<i>Utilities Industry Average</i>	27	21%	0%	0%	n/a
<b>1111 Financial auditors and accountants</b>					
ALBERTA AVERAGE	743-753	33%	15%	2%	1.3%
<i>Utilities Industry Average</i>	9-10	43%	n/a	0%	n/a
<b>1112 Financial and investment analysts</b>					
ALBERTA AVERAGE	95-100	37%	10%	4%	1.1%
<b>1121 Human resources professionals</b>					
ALBERTA AVERAGE	323-339	35%	9%	3%	2.3%
<b>1122 Professional occupations in business management consulting</b>					
ALBERTA AVERAGE	87-93	35%	21%	3%	2.1%

<b>UTILITIES INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b>% of Employers that Hired for this Occupation within the Last 2 Years</b>	<b>% of Employers Experiencing Hiring Difficulties (out of those hiring)</b>	<b>% of Employers with Vacancies of Greater than 4 Months</b>	<b>Job Vacancy Rate</b>
<b>1123 Professional occupations in advertising, marketing and public relations</b>					
ALBERTA AVERAGE	446-451	48%	14%	3%	1.7%
<b>1221 Administrative officers</b>					
ALBERTA AVERAGE	1163-1181	26%	17%	2%	n/a
<i>Utilities Industry Average</i>	15	39%	0%	0%	n/a
<b>1225 Purchasing agents and officers</b>					
ALBERTA AVERAGE	228-235	28%	16%	1%	n/a
<b>1241 Administrative assistants</b>					
ALBERTA AVERAGE	1229-1241	44%	14%	1%	n/a
<i>Utilities Industry Average</i>	9-10	37%	n/a	10%	5.6%
<b>1411 General office support workers</b>					
ALBERTA AVERAGE	744-754	41%	14%	4%	1.4%
<i>Utilities Industry Average</i>	15	20%	n/a	0%	n/a
<b>1414 Receptionists</b>					
ALBERTA AVERAGE	832-843	50%	12%	3%	1.5%
<i>Utilities Industry Average</i>	11	3%	n/a	0%	0.0%
<b>1431 Accounting and related clerks</b>					
ALBERTA AVERAGE	1054-1064	36%	17%	2%	1.0%
<i>Utilities Industry Average</i>	16	39%	8%	0%	n/a
<b>Common Professional, Technical, Skilled, and Labour Occupations</b>					
<b>2131 Civil engineers</b>					
ALBERTA AVERAGE	80-83	42%	26%	15%	3.7%

<b>UTILITIES INDUSTRY Selected Occupations (4-Digit NOC)</b>	<b>Employers Reporting (n)</b>	<b>% of Employers that Hired for this Occupation within the Last 2 Years</b>	<b>% of Employers Experiencing Hiring Difficulties (out of those hiring)</b>	<b>% of Employers with Vacancies of Greater than 4 Months</b>	<b>Job Vacancy Rate</b>
<b>2132 Mechanical engineers</b>					
ALBERTA AVERAGE	55-57	37%	19%	5%	1.2%
<b>2133 Electrical and electronics engineers</b>					
ALBERTA AVERAGE	46-47	47%	32%	6%	3.9%
<b>2171 Information systems analysts and consultants</b>					
ALBERTA AVERAGE	164-173	35%	25%	4%	1.4%
<b>2241 Electrical and electronics engineering technologists and technicians</b>					
ALBERTA AVERAGE	59-61	46%	17%	2%	n/a
<b>6221 Technical sales specialists - wholesale trade</b>					
ALBERTA AVERAGE	249-253	46%	30%	10%	4.0%
<b>6552 Other customer and information services representatives</b>					
ALBERTA AVERAGE	415-418	57%	21%	5%	1.2%
<i>Utilities Industry Average</i>	7-8	41%	n/a	0%	n/a
<b>7243 Power system electricians</b>					
ALBERTA AVERAGE	6	85%	n/a	0%	0.0%
<b>7244 Electrical power line and cable workers</b>					
ALBERTA AVERAGE	20-21	51%	39%	5%	3.6%
<i>Utilities Industry Average</i>	6-7	58%	n/a	0%	n/a
<b>7253 Gas fitters</b>					
ALBERTA AVERAGE	36-38	35%	46%	9%	2.5%
<i>Utilities Industry Average</i>	18	29%	33%	10%	2.9%

UTILITIES 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
<b>7311 Construction millwrights and industrial mechanics</b>					
ALBERTA AVERAGE	131-139	52%	39%	12%	3.8%
<b>7442 Waterworks and gas maintenance workers</b>					
ALBERTA AVERAGE	34	50%	10%	3%	n/a
<i>Utilities Industry Average</i>	17	27%	28%	7%	2.2%
<b>7521 Heavy equipment operators (except crane)</b>					
ALBERTA AVERAGE	321-324	60%	46%	12%	2.8%
<i>Utilities Industry Average</i>	5	77%	n/a	18%	3.3%
<b>9212 Supervisors, petroleum, gas and chemical processing and utilities</b>					
ALBERTA AVERAGE	36-38	22%	22%	2%	n/a
<b>9232 Central control and process operators, petroleum, gas and chemical processing</b>					
ALBERTA AVERAGE	18-19	33%	0%	0%	n/a
<b>9241 Power engineers and power systems operators</b>					
ALBERTA AVERAGE	37-39	33%	4%	2%	n/a
<b>9243 Water and waste treatment plant operators</b>					
ALBERTA AVERAGE	89	39%	43%	4%	2.3%
<i>Utilities Industry Average</i>	6	14%	n/a	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)**

**Utilities Sector (NAICS 22)**

This sector comprises establishments primarily engaged in operating electric, gas and water utilities. These establishments generate, transmit, control and distribute electric power; distribute natural gas; treat and distribute water; operate sewer systems and sewage treatment facilities; and provide related services, generally through a permanent infrastructure of lines, pipes and treatment and processing facilities.

*Research conducted for the Alberta Ministry of Labour by R.A. Malatest & Associates Ltd.*