Industry Profiles 2017

Professional, Scientific and Technical Services Industry
OVERVIEW

The Professional, Scientific and Technical Services industry\(^1\) in Alberta includes enterprises that make knowledge and skills available to other organizations or to the public, often on a project basis. For example, they may provide:

- legal services and accounting and related services;
- architectural, engineering and related services;
- surveying and mapping services;
- graphic, industrial or computer systems design services;
- management, scientific and technical consulting services, research and development services;
- advertising, public relations or market research services;
- translation services; and
- veterinary services.

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\(^1\) North American Industry Classification System (NAICS) 2007 major group 54
SECTION A
BUSINESS ENVIRONMENT

1. 2016 Employment and Unemployment Numbers and Rates

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Alberta</th>
<th>Professional, Scientific and Technical Services Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>2,263,800</td>
<td>179,300</td>
</tr>
<tr>
<td>Employment Share</td>
<td>N/A</td>
<td>7.9%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>200,800</td>
<td>8,400</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>8.1%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics\(^2\) website or Statistics Canada\(^3\).

2. Industry’s Growth

- The Professional, Scientific and Technical Services industry accounted for 7.9% of total employment in Alberta in 2016.
- Employment in this industry is expected to grow at an average rate of 2.3% from 2016 to 2019\(^4\).
- The industry is expected to account for 8.3% of total employment in Alberta in 2017.

For more information, see the Alberta Learning Information Service (ALIS)\(^5\) website for descriptions of industries.

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\(^3\) See [http://www.statcan.gc.ca](http://www.statcan.gc.ca)
\(^5\) See [http://www.alis.alberta.ca](http://www.alis.alberta.ca)
3. Facts, Trends and Outlook

According to Statistics Canada’s National Economic Accounts, the Professional, Scientific and Technical Services industry accounted for approximately 4.9% of Alberta’s Gross Domestic Product in 2015, up from 4.7% in 2005. Its contribution to Alberta’s total employment increased from 7.5% in 2006 to 7.9% in 2016.

Total employment (the total number of employees and self-employed people, 15 years and over) in 2016 was 3.4% higher than its level in 2015. Over the last 10 years, employment increased by 35,400 from 2006, a 24.6% increase. There were 179,300 employed in the industry in 2016, of whom 85.0% were full time and 15.0% were part time.

Table 2

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Alberta</th>
<th>Professional, Scientific and Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Retirement Age (years)</td>
<td>63.3</td>
<td>66.1</td>
</tr>
<tr>
<td>Average Number of Hours Worked per Week</td>
<td>36.2</td>
<td>36.3</td>
</tr>
<tr>
<td>Multiple Jobholders (% of total employment)</td>
<td>5.9%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Average Job Tenure (months)</td>
<td>90.2</td>
<td>86.9</td>
</tr>
<tr>
<td>Employees Under Union Coverage (%)</td>
<td>20.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Employees Working Overtime per Week (%)</td>
<td>17.1%</td>
<td>14.7%</td>
</tr>
</tbody>
</table>


Note: The percentage of multiple jobholders is obtained by dividing the number of multiple jobholders by total employment. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.
4. Size of Businesses in Alberta and the Industry

Table 3

<table>
<thead>
<tr>
<th>Establishment Size</th>
<th>Businesses in Alberta</th>
<th>Businesses in Professional, Scientific and Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Employees</td>
<td>%*</td>
</tr>
<tr>
<td>Less than 20 employees</td>
<td>673,000</td>
<td>35.6%</td>
</tr>
<tr>
<td>20 to 99 employees</td>
<td>671,400</td>
<td>35.5%</td>
</tr>
<tr>
<td>100 to 500 employees</td>
<td>346,900</td>
<td>18.3%</td>
</tr>
<tr>
<td>More than 500 employees</td>
<td>199,800</td>
<td>11.0%</td>
</tr>
</tbody>
</table>

* Percentages may not add up to 100 due to rounding
Note: Statistics Canada’s survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.
SECTION B
HUMAN RESOURCES PROFILE

1. Occupational Information

Some examples of occupations in the Professional, Scientific and Technical Services industry include:
- accountant;
- architect;
- civil engineer;
- graphic designer; and
- lawyer.

For a complete listing of all occupations related to this industry, as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles website.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Professional, Scientific and Technical Services industry in 2016 was as follows:

- women employed: 76,300 people, or 42.6%
- men employed: 103,000 people, or 57.4%

Overall in Alberta, women accounted for 45.5% and men made up 54.5% of total employment (for all industries).

Table 4

<table>
<thead>
<tr>
<th>Age Characteristics</th>
<th>Employment in Alberta</th>
<th>Employment in Professional, Scientific and Technical Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%*</td>
</tr>
<tr>
<td>15-24 years</td>
<td>303,200</td>
<td>13.4%</td>
</tr>
<tr>
<td>25-54 years</td>
<td>1,536,000</td>
<td>67.9%</td>
</tr>
<tr>
<td>55 years and over</td>
<td>424,600</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

*Percentages may not add up 100 due to rounding.

6 See http://occinfo.alis.alberta.ca/occinfopreview
3. Wages and Salaries

Chart 1

Hourly Wage Comparison 2016
Alberta

<table>
<thead>
<tr>
<th>WAGE RATE ($)</th>
<th>Average hourly wage rate</th>
<th>Median hourly wage rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employees, all industries</td>
<td>29.61</td>
<td>25.89</td>
</tr>
<tr>
<td>Professional, Scientific and Technical Services</td>
<td>33.33</td>
<td>33.33</td>
</tr>
</tbody>
</table>

Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.
### Wage and Salary Information for Selected Occupations

#### Table 5

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Average Hourly Wage</th>
<th>Average Annual Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Starting</td>
<td>Overall</td>
</tr>
<tr>
<td>Lawyer and Quebec notary</td>
<td>$38.70</td>
<td>$66.25</td>
</tr>
<tr>
<td>Electrical engineer</td>
<td>$36.18</td>
<td>$49.02</td>
</tr>
<tr>
<td>Graphic designer</td>
<td>$22.35</td>
<td>$31.88</td>
</tr>
<tr>
<td>Veterinarian</td>
<td>$36.64</td>
<td>$44.62</td>
</tr>
</tbody>
</table>

Data Source: 2015 Alberta Wage and Salary Survey

For more information on the *2015 Alberta Wage and Salary Survey*, refer to the WAGEinfo website. For job descriptions, duties, skills and educational requirements of specific occupations in the Professional, Scientific and Technical Services industry, visit the ALIS website.

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7 See [http://www.alis.alberta.ca/wageinfo](http://www.alis.alberta.ca/wageinfo)

8 See [http://www.alis.alberta.ca](http://www.alis.alberta.ca)
SECTION C
ADDITIONAL INFORMATION

Links to Industry Associations

- Alberta Association of Architects (http://www.aaa.ab.ca)
- Alberta Innovates Technology Futures (http://www.albertainnovates.ca)
- Alberta Land Surveyors’ Association (http://www.alsa.ab.ca)
- Association of Professional Engineers, and Geoscientists of Alberta (http://www.apegga.org)
- Chartered Professional Accountants Alberta (http://www.cpaalberta.ca)
- Economic Developers of Alberta (http://www.edaalberta.ca)
- Law Society of Alberta (http://www.lawsocietyalberta.com)
Call us or visit our website for more information or to find the following publications:

- 2016 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Packages
- Alberta’s Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

[www.work.alberta.ca/labour.html](http://www.work.alberta.ca/labour.html) (see Labour Market Information)

In Edmonton: 780.422.4266
Long distance: 1.800.661.3753

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