

2024 APEGS Salary Survey Summary Results

The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted 7,068 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Licensees living in Saskatchewan. A total of 1,402 members completed the survey representing a 19.9 per cent response rate. Surveys were conducted between March 7 and May 6, 2024 and salaries reported were as of December 31, 2023. Inshtrix Research Inc. compiled and tabulated all results. The detailed report, which includes analysis by gender, can be found on the APEGS web site under the 'About' menu.

Professional designation (P.Eng. and/or P.Geo.), supervision scope and accident and health hazards are the top three predictors of salary.

The work of engineering and geoscience professionals contributes to the public wellbeing and economic stability of Saskatchewan. The goal of providing current market salary information for engineers and geoscientists is to help ensure that the province retains proficient and competent services in engineering and geoscience. Making this information available provides guidance to both employers and employees to assess current compensation for professionals at various levels of education, experience, and responsibility. The salary survey also has the additional benefit of providing students, career counsellors and other interested persons with information on employment in the engineering and geoscience professions in Saskatchewan.

Annual Salary by Final Year of Graduation (B.Sc.)

| | Count | Column N % | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|--------------------------|-------|------------|-----------|---------------|---------------|-----------|---------------|---------------|
| 1986 & Prior† | | | | | | | | |
| 1987 | 10 | 0.8% | \$171,971 | \$80,000 | \$163,420 | \$180,000 | \$209,500 | \$216,195 |
| 1988 | 11 | 0.8% | \$166,787 | \$93,600 | \$125,000 | \$156,000 | \$193,310 | \$250,000 |
| 1989† | | | | | | | | |
| 1990† | | | | | | | | |
| 1991† | | | | | | | | |
| 1992† | | | | | | | | |
| 1993 | 10 | 0.8% | \$168,655 | \$116,000 | \$139,296 | \$162,500 | \$179,011 | \$248,000 |
| 1994 | 15 | 1.1% | \$160,521 | \$76,000 | \$127,148 | \$148,664 | \$175,000 | \$330,000 |
| 1995 | 16 | 1.2% | \$178,077 | \$123,000 | \$132,500 | \$160,500 | \$225,074 | \$275,000 |
| 1996 | 17 | 1.3% | \$166,470 | \$72,000 | \$140,000 | \$172,000 | \$189,470 | \$276,000 |
| 1997 | 12 | 0.9% | \$167,553 | \$92,400 | \$128,000 | \$153,000 | \$177,799 | \$387,000 |
| 1998 | 14 | 1.1% | \$153,699 | \$84,000 | \$124,000 | \$150,500 | \$180,000 | \$239,000 |
| 1999 | 28 | 2.1% | \$150,631 | \$85,000 | \$121,250 | \$137,750 | \$162,313 | \$230,000 |
| 2000 | 19 | 1.4% | \$139,396 | \$35,120 | \$98,800 | \$126,058 | \$180,000 | \$285,000 |
| 2001 | 30 | 2.3% | \$153,047 | \$87,600 | \$122,000 | \$144,000 | \$175,500 | \$264,000 |
| 2002 | 35 | 2.7% | \$149,888 | \$80,000 | \$118,800 | \$140,550 | \$170,000 | \$250,000 |
| 2003 | 26 | 2.0% | \$148,367 | \$106,080 | \$120,000 | \$137,000 | \$172,000 | \$220,000 |
| 2004 | 32 | 2.4% | \$132,407 | \$55,000 | \$97,200 | \$131,500 | \$162,375 | \$220,000 |
| 2005 | 42 | 3.2% | \$146,534 | \$83,000 | \$119,000 | \$146,000 | \$173,000 | \$212,223 |
| 2006 | 37 | 2.8% | \$139,746 | \$86,400 | \$115,000 | \$137,000 | \$165,000 | \$196,000 |
| 2007 | 49 | 3.7% | \$135,167 | \$79,018 | \$114,660 | \$132,500 | \$160,000 | \$200,075 |
| 2008 | 52 | 3.9% | \$137,628 | \$84,000 | \$114,550 | \$135,075 | \$157,500 | \$202,000 |
| 2009 | 55 | 4.2% | \$132,615 | \$81,000 | \$106,000 | \$133,500 | \$150,000 | \$204,000 |
| 2010 | 49 | 3.7% | \$131,112 | \$68,000 | \$108,000 | \$126,000 | \$155,000 | \$200,000 |
| 2011 | 50 | 3.8% | \$119,175 | \$57,500 | \$95,000 | \$115,750 | \$140,000 | \$192,600 |
| 2012 | 64 | 4.9% | \$118,997 | \$85,629 | \$102,775 | \$118,250 | \$135,000 | \$158,000 |
| 2013 | 59 | 4.5% | \$118,133 | \$85,000 | \$105,000 | \$115,749 | \$132,000 | \$155,000 |
| 2014 | 48 | 3.6% | \$115,369 | \$79,014 | \$97,347 | \$111,000 | \$133,500 | \$158,000 |
| 2015 | 56 | 4.3% | \$105,918 | \$70,000 | \$90,000 | \$100,000 | \$115,375 | \$150,000 |
| 2016 | 44 | 3.3% | \$101,790 | \$71,000 | \$83,650 | \$96,200 | \$118,333 | \$150,000 |
| 2017 | 63 | 4.8% | \$93,907 | \$69,975 | \$81,150 | \$90,420 | \$104,000 | \$130,000 |

| | | | | | | | | |
|------|----|------|----------|----------|----------|----------|----------|-----------|
| 2018 | 64 | 4.9% | \$89,062 | \$65,000 | \$82,425 | \$88,050 | \$96,750 | \$123,000 |
| 2019 | 60 | 4.6% | \$89,795 | \$65,215 | \$79,850 | \$89,450 | \$97,800 | \$119,900 |
| 2020 | 47 | 3.6% | \$83,989 | \$69,600 | \$73,000 | \$83,100 | \$92,000 | \$105,700 |
| 2021 | 57 | 4.3% | \$77,316 | \$60,114 | \$69,600 | \$74,077 | \$80,000 | \$99,000 |
| 2022 | 45 | 3.4% | \$77,665 | \$66,000 | \$69,396 | \$76,872 | \$84,500 | \$95,000 |
| 2023 | 40 | 3.0% | \$76,300 | \$62,480 | \$67,085 | \$75,000 | \$80,113 | \$100,690 |

†Not available due to reporting rules (insufficient data)

Annual Salary by Designation

| | Count | Column N % | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|--------------------------|-------|------------|-----------|---------------|---------------|-----------|---------------|---------------|
| P.Eng. | 876 | 63.7% | \$135,004 | \$85,000 | \$105,000 | \$128,000 | \$156,134 | \$215,000 |
| P.Geo. | 68 | 4.9% | \$144,508 | \$85,500 | \$116,500 | \$140,000 | \$165,000 | \$226,000 |
| P.Eng. and P.Geo† | | | | | | | | |
| Engineering License | 14 | 1.0% | \$130,836 | \$85,820 | \$113,000 | \$130,000 | \$140,000 | \$211,000 |
| Engineer-in-Training | 372 | 27.1% | \$83,693 | \$63,300 | \$71,126 | \$80,000 | \$92,000 | \$120,000 |
| Geoscientist-in-Training | 33 | 2.4% | \$91,410 | \$61,000 | \$79,400 | \$90,000 | \$100,000 | \$130,000 |
| Geo Licensee† | | | | | | | | |

†Not available due to reporting rules (insufficient data)

Annual Salary by Discipline

| | Count | Column N % | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|--|-------|------------|-----------|---------------|---------------|-----------|---------------|---------------|
| Agriculture and Forestry | 33 | 2.4% | \$104,956 | \$58,000 | \$83,086 | \$90,000 | \$130,746 | \$172,000 |
| Biological and Biomedical† | | | | | | | | |
| Chemical, Ceramic and Metallurgical | 64 | 4.7% | \$125,397 | \$73,500 | \$94,375 | \$122,500 | \$145,000 | \$229,000 |
| Civil | 301 | 21.9% | \$114,016 | \$69,300 | \$85,000 | \$105,000 | \$135,000 | \$188,831 |
| Electrical and Engineering Physics | 213 | 15.5% | \$126,507 | \$68,640 | \$90,500 | \$120,000 | \$154,000 | \$190,120 |
| Environmental | 72 | 5.2% | \$106,899 | \$65,000 | \$84,522 | \$105,000 | \$121,976 | \$172,070 |
| Geological, Mining, Petroleum Engineering | 131 | 9.5% | \$135,552 | \$75,000 | \$98,389 | \$128,000 | \$160,368 | \$212,000 |
| Geosciences: (Geology, Geophysics, Geochemistry, Hydrogeology) | 80 | 5.8% | \$130,995 | \$76,625 | \$98,000 | \$124,000 | \$150,750 | \$190,000 |
| Mechanical and Industrial | 322 | 23.4% | \$118,414 | \$67,000 | \$86,500 | \$111,000 | \$141,400 | \$205,000 |
| Software Engineering | 33 | 2.4% | \$111,099 | \$70,800 | \$80,000 | \$103,082 | \$140,000 | \$150,000 |
| Other | 125 | 9.1% | \$122,099 | \$69,401 | \$91,719 | \$112,000 | \$143,000 | \$183,000 |

†Not available due to reporting rules (insufficient data)

Annual Salary by Function

| | Count | Column N % | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|--|-------|------------|-----------|---------------|---------------|-----------|---------------|---------------|
| Corporate Management | 128 | 9.3% | \$176,275 | \$110,000 | \$138,635 | \$168,720 | \$200,000 | \$285,000 |
| Project or Operations Management | 430 | 31.3% | \$121,931 | \$71,474 | \$90,500 | \$116,000 | \$143,000 | \$200,000 |
| Project Administration | 31 | 2.3% | \$113,333 | \$80,000 | \$89,000 | \$107,000 | \$130,000 | \$171,000 |
| Design | 376 | 27.3% | \$102,398 | \$67,000 | \$78,000 | \$94,060 | \$118,725 | \$164,000 |
| Research/Planning | 58 | 4.2% | \$109,425 | \$49,812 | \$84,948 | \$100,500 | \$140,550 | \$180,000 |
| Inspection or Quality Control or Resident Services | 19 | 1.4% | \$104,772 | \$63,000 | \$78,000 | \$99,500 | \$120,000 | \$182,455 |
| Operating or Maintenance | 141 | 10.3% | \$124,935 | \$72,014 | \$97,000 | \$124,000 | \$146,200 | \$189,470 |
| Teaching | 22 | 1.6% | \$155,219 | \$93,000 | \$105,598 | \$140,529 | \$201,000 | \$233,000 |
| Marketing/Sales | 12 | 0.9% | \$113,128 | \$50,883 | \$76,750 | \$107,500 | \$144,300 | \$230,000 |
| Regulatory Approvals and/or Enforcement | 40 | 2.9% | \$108,058 | \$72,932 | \$92,750 | \$105,500 | \$120,655 | \$154,250 |
| Exploration | 57 | 4.1% | \$121,873 | \$73,000 | \$90,000 | \$114,000 | \$145,000 | \$196,000 |
| Other | 61 | 4.4% | \$113,872 | \$63,000 | \$82,160 | \$106,000 | \$140,000 | \$192,000 |

Annual Salary by Industry

| | Count | Column N % | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|------------------------------------|-------|------------|-----------|---------------|---------------|-----------|---------------|---------------|
| Consulting Service | 323 | 23.5% | \$111,039 | \$65,325 | \$81,000 | \$100,000 | \$132,400 | \$195,000 |
| Resource Industry Oil & Gas | 54 | 3.9% | \$122,810 | \$68,680 | \$96,432 | \$115,550 | \$150,000 | \$200,000 |
| Resource Industry Except Oil & Gas | 254 | 18.5% | \$141,722 | \$85,000 | \$106,000 | \$140,000 | \$163,000 | \$225,000 |
| Procurement and Construction | 110 | 8.0% | \$111,454 | \$67,000 | \$82,500 | \$102,250 | \$130,000 | \$202,730 |
| Manufacturing Durables | 143 | 10.4% | \$105,881 | \$68,310 | \$78,000 | \$96,000 | \$124,000 | \$175,000 |
| Manufacturing Non-Durables | 51 | 3.7% | \$135,690 | \$80,000 | \$105,000 | \$130,444 | \$158,000 | \$238,000 |
| Service For Profit | 18 | 1.3% | \$116,030 | \$50,883 | \$87,500 | \$111,128 | \$140,000 | \$216,550 |
| Service Not For Profit | 123 | 8.9% | \$111,365 | \$72,600 | \$90,000 | \$110,000 | \$124,000 | \$161,000 |
| Utilities | 197 | 14.3% | \$129,307 | \$72,014 | \$95,000 | \$125,000 | \$154,799 | \$220,000 |
| Educational Services | 34 | 2.5% | \$137,430 | \$60,000 | \$99,998 | \$118,003 | \$190,000 | \$233,000 |
| Agriculture and Forestry | 29 | 2.1% | \$98,821 | \$58,000 | \$79,000 | \$87,100 | \$110,000 | \$160,000 |
| Other | 39 | 2.8% | \$111,155 | \$63,000 | \$82,458 | \$100,000 | \$125,355 | \$207,000 |

Annual Salary by Sector

| | Count | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|----------------|-------|-----------|---------------|---------------|-----------|---------------|---------------|
| Public Sector | 430 | \$120,775 | \$72,000 | \$91,448 | \$113,175 | \$140,307 | \$193,112 |
| Private Sector | 935 | \$120,435 | \$67,744 | \$86,783 | \$111,000 | \$145,000 | \$208,000 |

Total Salary (full time positions)

| | Count | Mean | Percentile 05 | Percentile 25 | Median | Percentile 75 | Percentile 95 |
|--------------------|-------|-----------|---------------|---------------|-----------|---------------|---------------|
| Base Salary | 1,375 | \$120,690 | \$68,680 | \$88,000 | \$112,000 | \$144,000 | \$204,000 |
| Salary incl. bonus | | \$147,519 | \$71,684 | \$95,000 | \$125,295 | \$174,300 | \$302,000 |

Salary Changes - Full Time Positions (not including bonus, not all survey years listed)

| | median salary | % increase | mean salary | % increase |
|------|---------------|------------|-------------|------------|
| 2015 | \$97,000 | 2.65% | \$105,111 | 2.57% |
| 2016 | \$96,000 | -1.03% | \$104,628 | -0.46% |
| 2017 | \$97,000 | 1.04% | \$107,130 | 2.39% |
| 2018 | \$96,485 | -0.53% | \$104,743 | -2.23% |
| 2019 | \$97,500 | 1.05% | \$107,287 | 2.43% |
| 2020 | \$99,265 | 1.81% | \$107,298 | 0.00% |
| 2021 | \$98,022 | -1.25% | \$108,008 | 0.65% |
| 2022 | \$104,000 | 6.10% | \$112,940 | 4.57% |
| 2023 | \$105,000 | 0.96% | \$114,143 | 1.07% |
| 2024 | \$112,000 | 6.67% | \$120,690 | 5.74% |

Regression Analysis

A lasso regression model was used to establish a framework for predicting salaries for engineers and geoscientists working in different industries. This process was used to:

- Identify how closely factors are associated with salaries
- Identify Boolean components (such as receipt of professional designation) influencing salary
- Create a linear formula that effectively predicts salaries while minimizing model overfitting

The model explains about 60 percent (60.3%) of variance in salary. A formula was produced which members of APEGGS can easily use to estimate their salary.

| Factor | Coefficient |
|-------------------------------------|-------------|
| (Constant) | \$ 32206.06 |
| Duties (A) | \$ 135.46 |
| Education (B) | \$ 169.87 |
| Experience (C) | \$ 434.83 |
| Recommendations (D) | \$ 53.05 |
| Supervision Received (E) | \$ 63.14 |
| Supervision Scope (G) | \$ 933.48 |
| Job Environment (I)* | \$ 306.50 |
| Absence from Base of Operations (J) | \$ 340.68 |
| Accident and Health Hazards (K) | \$ 460.92 |
| Professional Designation(s) | \$ 8867.26 |

To calculate the approximate projected salary, input the points for each variable in the following formula:

Formula for expected salary (S_E) without bonus:

$$S_E = 32,206 + 135*A + 170*B + 435*C + 53*D + 63*E + 933*G - 307*I + 341*J + 461*K$$

Add \$8,867 if you have acquired professional status within your field (P.Eng. and/or P.Geo.)

Additional Notes

- Use of professional seal was excluded from the model due to this factor being not applicable for some respondents.
- The lasso algorithm determined that the predictor leadership authority does not contribute significantly to the model's predictive power and has been excluded.
- 10-fold cross validation was used to select a lambda value for the lasso model.
- Higher ratings for factors with an asterisk (*) are associated with lower wages.