

## 2022 APEGS Salary Survey Summary Results

The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted 6,501 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Licensees living in Saskatchewan. A total of 1,457 members completed the survey representing a 22.4 per cent response rate. Surveys were completed in March and April 2022 and salaries reported were as of December 31, 2021. Inshgtrix 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.

Supervision scope, absence from base of operations and professional designation (P.Eng. and/or P.Geo.) 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
1978†								
1980†								
1981†								
1982	11	0.8%	\$175,789	\$86,000	\$100,000	\$114,000	\$190,000	\$600,000
1983†								
1984†								
1985†								
1986	11	0.8%	\$151,495	\$99,000	\$108,448	\$158,000	\$190,000	\$210,000
1987	19	1.4%	\$140,691	\$15,000	\$86,817	\$170,000	\$180,000	\$228,000
1988	12	0.9%	\$178,897	\$140,000	\$147,282	\$181,709	\$202,993	\$225,000
1989	12	0.9%	\$139,625	\$96,000	\$122,500	\$140,750	\$160,000	\$183,000
1990†								
1991†								
1992†								
1993	10	0.7%	\$153,225	\$115,115	\$132,000	\$142,500	\$168,933	\$220,000
1994	17	1.2%	\$151,767	\$84,000	\$118,000	\$160,000	\$180,000	\$225,000
1995	19	1.4%	\$157,977	\$90,000	\$120,000	\$147,500	\$190,000	\$325,000
1996	16	1.2%	\$171,768	\$112,000	\$150,375	\$172,869	\$194,275	\$240,000
1997	19	1.4%	\$148,625	\$81,000	\$124,821	\$145,000	\$175,000	\$250,000
1998	11	0.8%	\$157,510	\$60,000	\$134,000	\$158,481	\$185,000	\$238,000
1999	29	2.1%	\$160,601	\$109,000	\$123,227	\$140,000	\$204,000	\$250,000
2000	23	1.7%	\$142,366	\$73,000	\$116,940	\$135,000	\$170,334	\$225,000
2001	35	2.5%	\$139,641	\$74,400	\$105,000	\$137,000	\$168,500	\$215,225
2002	26	1.9%	\$138,243	\$96,000	\$115,000	\$136,500	\$162,500	\$197,000
2003	35	2.5%	\$134,397	\$70,000	\$100,000	\$131,000	\$159,000	\$206,000
2004	48	3.5%	\$126,569	\$32,640	\$97,386	\$130,000	\$150,275	\$202,000
2005	48	3.5%	\$134,410	\$75,500	\$110,000	\$131,500	\$159,891	\$200,000
2006	33	2.4%	\$120,418	\$70,000	\$104,550	\$119,000	\$134,508	\$167,000
2007	54	3.9%	\$116,983	\$70,000	\$101,000	\$113,393	\$131,000	\$160,000
2008	63	4.6%	\$120,591	\$88,800	\$105,000	\$115,000	\$135,000	\$174,000
2009	61	4.4%	\$107,573	\$52,000	\$91,104	\$110,000	\$124,000	\$150,000

<b>2010</b>	59	4.3%	\$116,463	\$82,621	\$99,240	\$115,000	\$135,000	\$154,000
<b>2011</b>	61	4.4%	\$107,703	\$77,500	\$92,900	\$102,178	\$123,000	\$145,000
<b>2012</b>	73	5.3%	\$103,897	\$73,730	\$90,000	\$100,360	\$113,500	\$140,000
<b>2013</b>	61	4.4%	\$102,187	\$57,000	\$90,000	\$101,000	\$112,500	\$145,000
<b>2014</b>	58	4.2%	\$93,630	\$68,000	\$80,000	\$89,000	\$101,400	\$140,000
<b>2015</b>	80	5.8%	\$87,832	\$60,000	\$76,970	\$89,000	\$98,000	\$125,624
<b>2016</b>	52	3.8%	\$89,646	\$65,000	\$77,125	\$89,000	\$99,500	\$130,000
<b>2017</b>	60	4.3%	\$81,921	\$55,009	\$69,501	\$78,918	\$90,963	\$114,625
<b>2018</b>	57	4.1%	\$76,467	\$58,000	\$70,000	\$75,000	\$82,000	\$98,000
<b>2019</b>	55	4.0%	\$72,933	\$51,840	\$66,700	\$72,349	\$79,900	\$92,600
<b>2020</b>	49	3.5%	\$70,406	\$55,000	\$62,400	\$69,000	\$80,151	\$86,000
<b>2021</b>	48	3.5%	\$64,738	\$52,000	\$61,000	\$64,900	\$69,100	\$81,000
<b>2022†</b>								

†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.	943	66.3%	\$126,480	\$78,000	\$98,000	\$118,000	\$145,016	\$200,000
P.Geo.	54	3.8%	\$137,561	\$89,000	\$106,000	\$125,200	\$165,000	\$225,000
P.Eng. and P.Geo	10	0.7%	\$121,900	\$70,000	\$107,000	\$120,000	\$140,000	\$175,000
Engineering License	10	0.7%	\$121,569	\$85,597	\$108,305	\$114,258	\$140,000	\$174,000
Engineer-in-Training	376	26.4%	\$76,315	\$51,840	\$64,575	\$73,000	\$84,000	\$110,000
Geoscientist-in-Training	28	2.0%	\$97,595	\$55,000	\$80,875	\$90,625	\$106,500	\$166,800
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	30	2.1%	\$92,894	\$46,700	\$73,000	\$87,190	\$102,500	\$165,000
Biological and Biomedical†								
Chemical, Ceramic and Metallurgical	65	4.6%	\$116,482	\$60,000	\$91,200	\$108,800	\$140,000	\$190,000
Civil	303	21.3%	\$111,235	\$63,000	\$80,113	\$100,800	\$128,000	\$190,000
Electrical and Engineering Physics	200	14.1%	\$116,454	\$65,262	\$83,023	\$108,631	\$144,000	\$199,500
Environmental	91	6.4%	\$105,054	\$57,000	\$77,692	\$96,834	\$125,000	\$175,000
Geological, Mining, Petroleum Engineering	124	8.7%	\$127,845	\$72,800	\$92,250	\$120,250	\$151,500	\$216,000
Geosciences: (Geology, Geophysics, Geochemistry, Hydrogeology)	74	5.2%	\$126,541	\$74,400	\$95,000	\$114,000	\$150,800	\$225,000

Mechanical and Industrial	341	24.0%	\$111,522	\$60,000	\$80,250	\$106,840	\$134,508	\$190,000
Software Engineering	34	2.4%	\$95,286	\$53,927	\$77,800	\$93,500	\$119,000	\$145,000
Other	157	11.0%	\$107,897	\$56,000	\$78,000	\$100,000	\$128,000	\$198,000

†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	138	9.7%	\$167,354	\$100,000	\$135,000	\$160,820	\$197,240	\$250,000
Project or Operations Management	462	32.5%	\$113,978	\$66,700	\$87,000	\$107,700	\$135,800	\$187,000
Project Administration	39	2.7%	\$101,585	\$61,100	\$80,000	\$96,000	\$118,656	\$170,000
Design	328	23.1%	\$97,528	\$60,000	\$70,000	\$89,500	\$113,875	\$155,000
Research/Planning	64	4.5%	\$106,170	\$56,000	\$83,010	\$97,082	\$123,250	\$175,642
Inspection or Quality Control or Resident Services	30	2.1%	\$89,830	\$50,000	\$65,480	\$82,500	\$116,000	\$135,000
Operating or Maintenance	157	11.0%	\$115,480	\$65,550	\$91,000	\$110,594	\$140,000	\$178,000
Teaching	24	1.7%	\$129,980	\$78,000	\$98,847	\$108,517	\$182,250	\$200,000
Marketing/Sales	20	1.4%	\$107,305	\$61,835	\$84,630	\$96,477	\$126,125	\$199,400
Regulatory Approvals and/or Enforcement	56	3.9%	\$102,452	\$72,000	\$80,250	\$98,228	\$118,000	\$171,000
Exploration	40	2.8%	\$110,679	\$40,750	\$85,000	\$97,000	\$131,250	\$190,675
Other	64	4.5%	\$91,359	\$47,000	\$65,500	\$89,500	\$109,750	\$165,000

## Annual Salary by Industry

	Count	Column N %	Mean	Percentile 05	Percentile 25	Median	Percentile 75	Percentile 95
Consulting Service	297	20.9%	\$107,609	\$58,000	\$75,000	\$95,000	\$127,000	\$185,000
Resource Industry Oil & Gas	59	4.1%	\$111,419	\$40,000	\$90,405	\$108,800	\$134,000	\$167,000
Resource Industry Except Oil & Gas	248	17.4%	\$132,208	\$80,000	\$100,000	\$124,911	\$151,875	\$209,000
Procurement and Construction	129	9.1%	\$109,140	\$64,500	\$77,592	\$100,800	\$128,000	\$187,500
Manufacturing Durables	137	9.6%	\$89,981	\$54,000	\$68,000	\$84,000	\$104,000	\$160,000
Manufacturing Non-Durables	56	3.9%	\$129,103	\$75,000	\$97,177	\$115,500	\$148,513	\$215,225
Service For Profit	26	1.8%	\$98,389	\$61,000	\$78,000	\$90,326	\$118,000	\$159,564
Service Not For Profit	124	8.7%	\$105,235	\$69,900	\$82,170	\$100,207	\$118,750	\$160,000
Utilities	216	15.2%	\$122,445	\$68,931	\$90,250	\$119,500	\$147,500	\$190,000
Educational Services	47	3.3%	\$130,829	\$59,000	\$91,356	\$111,000	\$180,000	\$205,234
Agriculture and Forestry	23	1.6%	\$80,296	\$46,700	\$65,550	\$77,800	\$90,000	\$130,000
Other	60	4.2%	\$93,201	\$40,250	\$67,761	\$88,500	\$111,500	\$190,200

## Annual Salary by Sector

	Count	Column N %	Mean	Percentile 05	Percentile 25	Median	Percentile 75	Percentile 95
<b>Public Sector</b>	464	100.0%	\$114,638	\$68,000	\$86,000	\$106,000	\$136,971	\$190,000
<b>Private Sector</b>	950	100.0%	\$112,030	\$59,950	\$79,517	\$102,446	\$135,000	\$191,500

## Total Salary (full time positions)

	Count	Column N %	Mean	Percentile 05	Percentile 25	Median	Percentile 75	Percentile 95
<b>Base Salary</b>			\$112,940	\$61,000	\$82,000	\$104,000	\$135,000	\$190,000
<b>Salary incl. bonus</b>	1,422	97.7%	\$137,978	\$63,470	\$88,562	\$117,000	\$164,000	\$276,000

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

	median salary	% increase	mean salary	% increase
1987	\$48,000	n/a	\$49,269	n/a
1991	\$54,110	7.58%	\$57,578	-8.44%
1995	\$56,400	3.52%	\$59,142	4.30%
1999	\$62,500	4.17%	\$65,401	5.03%
2003	\$68,800	4.24%	\$71,210	3.39%
2007	\$74,000	4.21%	\$77,374	5.12%
2008	\$76,352	3.18%	\$83,025	7.30%
2009	\$80,000	4.78%	\$86,908	4.68%
2010	\$82,950	3.69%	\$91,548	5.34%
2011	\$84,224	1.54%	\$91,154	-0.43%
2012	\$89,472	6.23%	\$96,219	5.56%
2013	\$90,000	0.59%	\$98,030	1.88%
2014	\$94,500	5.00%	\$102,475	4.53%
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%

## 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 51 percent (50.6%) of variance in salary. A formula was produced which members of APEGS can easily use to estimate their salary.

Factor	Coefficient
(Constant)	\$ 44,683.33
Duties (A)	\$ 209.19
Experience (C)	\$ 364.61
Recommendations (D)	\$ 28.95

Supervision Scope (G)	\$ 889.89
Job Environment (I)	\$ 52.08
Absence from Base of Operations (J)	\$ 673.97
Accident and Health Hazards (K)	\$ 60.13
Professional Designation(s)	\$8,152.63

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

**Formula for expected salary ( $S_E$ ) without bonus:**

$$S_E = 44,683 + 209*A + 365*C + 29*D + 890*G - 52*I + 674*J - 60*K$$

Add \$8,153 if you have acquired professional status within your field (P.Eng. and/or P.Geo.)