

2013 APEGS Salary Survey Summary Results

The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted 4,864 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Licensees living in Saskatchewan. A total of 1,988 members completed the survey representing a 40.9 % response rate. Of those, 1,931 were employed full time and used in the analysis. Surveys were completed from mid February to late March 2014 and salaries reported were as at December 31, 2013. Insightrix Research Inc. compiled and tabulated all results. The detailed report from Insightrix can be found on the APEGS web site at www.apegs.ca

The main goals of the survey are:

to provide information to all members regarding monetary compensation for different levels of responsibility and advanced degrees; to provide information to employers to assist them in establishing appropriate pay levels for recent graduates and ensuring competitive compensation packages for experienced professionals; and to give students, career counsellors and other interested persons information on employment, including salaries, in the engineering and geoscience professions in.

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

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Prior to 1976	64	\$130,527	\$45,000	\$97,800	\$127,500	\$156,801	\$230,000	3.3%
1977	13	\$141,217	\$30,000	\$122,300	\$135,000	\$175,000	\$215,000	0.7%
1978	17	\$127,344	\$0	\$80,000	\$120,084	\$169,000	\$255,000	0.9%
1979	13	\$156,038	\$96,000	\$130,000	\$158,000	\$170,000	\$272,000	0.7%
1980	19	\$132,088	\$75,364	\$130,000	\$131,000	\$150,000	\$175,000	1.0%
1981	10	\$158,350	\$116,000	\$150,000	\$156,900	\$168,000	\$200,000	0.5%
1982	19	\$126,705	\$50,160	\$106,000	\$122,000	\$150,000	\$220,500	1.0%
1983	13	\$142,700	\$86,000	\$110,000	\$144,000	\$162,000	\$201,600	0.7%
1984	19	\$171,983	\$80,000	\$112,000	\$131,352	\$155,000	\$850,000	1.0%
1985	25	\$127,364	\$85,000	\$100,000	\$119,000	\$133,000	\$210,000	1.3%
1986	26	\$142,031	\$90,000	\$113,000	\$140,681	\$160,800	\$205,000	1.3%
1987	36	\$119,443	\$52,000	\$96,500	\$120,000	\$144,783	\$180,000	1.9%
1988	26	\$130,600	\$101,500	\$118,000	\$133,000	\$140,000	\$165,000	1.3%
1989	27	\$126,914	\$67,000	\$105,000	\$129,000	\$150,000	\$196,000	1.4%
1990	26	\$128,746	\$80,000	\$94,000	\$120,000	\$160,000	\$195,000	1.3%
1991	20	\$123,566	\$40,450	\$102,500	\$120,800	\$152,000	\$200,000	1.0%
1992	20	\$152,455	\$54,800	\$89,000	\$126,500	\$148,000	\$505,500	1.0%
1993	28	\$120,439	\$79,500	\$97,120	\$120,000	\$143,041	\$175,000	1.4%
1994	40	\$122,778	\$68,500	\$89,100	\$118,500	\$157,500	\$190,000	2.1%
1995	28	\$131,391	\$85,000	\$100,000	\$126,300	\$156,500	\$180,000	1.4%
1996	45	\$123,873	\$78,000	\$102,000	\$125,600	\$144,000	\$173,000	2.3%
1997	46	\$129,430	\$78,000	\$96,000	\$120,185	\$145,000	\$209,000	2.4%
1998	36	\$118,457	\$79,123	\$101,539	\$111,320	\$138,000	\$168,000	1.9%
1999	49	\$105,166	\$65,000	\$92,000	\$103,000	\$120,000	\$148,000	2.5%
2000	62	\$107,202	\$70,000	\$92,000	\$105,000	\$127,500	\$150,312	3.2%
2001	68	\$111,590	\$75,000	\$95,000	\$107,000	\$125,000	\$165,000	3.5%
2002	70	\$109,823	\$65,000	\$97,000	\$106,000	\$126,750	\$149,900	3.6%
2003	68	\$108,069	\$63,024	\$94,600	\$105,500	\$121,500	\$155,000	3.5%
2004	72	\$99,032	\$62,000	\$84,750	\$100,000	\$110,500	\$140,000	3.7%
2005	79	\$96,623	\$64,000	\$86,000	\$95,000	\$110,000	\$135,000	4.1%
2006	75	\$94,295	\$62,000	\$78,725	\$94,000	\$108,000	\$132,000	3.9%
2007	93	\$88,653	\$61,000	\$76,000	\$88,400	\$100,000	\$120,000	4.8%
2008	111	\$90,597	\$61,000	\$74,000	\$80,643	\$93,500	\$115,640	5.7%
2009	99	\$81,021	\$60,000	\$70,000	\$80,000	\$88,000	\$105,000	5.1%
2010	114	\$76,386	\$56,400	\$67,400	\$75,000	\$84,400	\$100,000	5.9%
2011	117	\$70,075	\$55,000	\$63,000	\$68,000	\$75,000	\$91,000	6.1%
2012	141	\$71,794	\$51,100	\$60,000	\$64,000	\$72,000	\$86,455	7.3%
2013	99	\$63,839	\$42,000	\$58,000	\$62,400	\$70,000	\$80,400	5.1%

Annual Salary by Designation

	COUNT	MEAN	5	25	MEDIAN	75	95	%
P.Eng.	1168	\$117,721	\$73,000	\$92,000	\$109,000	\$133,000	\$180,000	58.75%
P.Geo.	100	\$113,852	\$55,828	\$95,500	\$111,000	\$132,500	\$175,000	5.03%
P.Eng. and P.Geo	11	\$125,302	\$64,690	\$84,000	\$130,000	\$158,602	\$175,000	0.55%
Engineering License		NA	NA	NA	NA	NA	NA	
Engineer-in-Training	658	\$72,666	\$52,000	\$62,000	\$68,900	\$79,539	\$100,000	33.10%
Geoscience License		NA	NA	NA	NA	NA	NA	
Geoscientist-in-Training	43	\$83,816	\$36,000	\$72,000	\$82,500	\$93,000	\$120,000	2.16%

*NA=Not available due to reporting rules

Annual Salary by Discipline

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Agriculture and Forestry	42	\$104,918	\$52,000	\$65,000	\$86,000	\$105,000	\$153,000	2.1%
Chem., Ceramic & Metal.	80	\$107,021	\$62,000	\$80,000	\$94,000	\$134,500	\$180,000	4.0%
Civil	413	\$92,938	\$57,000	\$67,400	\$85,000	\$106,000	\$157,000	20.8%
Elec. & Eng. Physics	283	\$102,345	\$57,918	\$75,000	\$100,500	\$123,570	\$160,000	14.2%
Environmental	118	\$92,731	\$54,500	\$70,000	\$92,000	\$108,000	\$150,000	5.9%
Geo., Mining, Petro. Eng. Geo. (Geo., Geophysics,	265	\$114,325	\$64,500	\$82,000	\$101,300	\$133,000	\$196,000	13.3%
Geochemistry, Hydrogeology)	121	\$100,473	\$55,000	\$77,500	\$96,000	\$122,000	\$160,000	6.1%
Industrial	53	\$92,217	\$57,500	\$65,000	\$80,100	\$120,000	\$170,000	2.7%
Mechanical & Industrial	405	\$100,711	\$55,700	\$74,000	\$93,000	\$120,000	\$162,000	20.4%
Software, Computer Eng.	53	\$107,823	\$54,000	\$69,681	\$92,000	\$110,000	\$172,000	2.7%
Other	153	\$110,106	\$58,000	\$73,000	\$100,000	\$135,000	\$210,000	7.7%

Annual Salary by Function

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Corp. Management	128	\$139,565	\$90,000	\$114,000	\$135,000	\$158,000	\$210,000	6.4%
Design	463	\$91,576	\$55,000	\$65,000	\$80,000	\$100,000	\$144,700	23.3%
Exploration	72	\$101,152	\$54,000	\$76,500	\$92,500	\$123,772	\$175,000	3.6%
Inspect./Quality Control or Resident Services	53	\$76,070	\$56,000	\$61,320	\$65,000	\$82,300	\$120,000	2.7%
Marketing/Sales	27	\$105,758	\$60,040	\$68,040	\$98,000	\$125,351	\$215,000	1.4%
Operating or Maintenance	138	\$96,457	\$60,000	\$76,000	\$92,750	\$114,255	\$145,600	6.9%
Project Administration	82	\$87,594	\$58,000	\$69,024	\$82,201	\$100,000	\$125,312	4.1%
Project or Op. Mgmt.	762	\$108,155	\$60,944	\$80,000	\$100,000	\$129,000	\$176,000	38.3%
Reg. Approvals/Enforcement	61	\$91,700	\$60,000	\$75,000	\$90,000	\$105,700	\$131,000	3.1%
Research/Planning	105	\$94,597	\$54,500	\$72,000	\$94,200	\$112,000	\$147,000	5.3%
Teaching	33	\$111,190	\$63,000	\$85,000	\$116,000	\$136,566	\$160,500	1.7%
Other	64	\$86,926	\$0	\$60,000	\$80,200	\$110,000	\$155,000	3.2%

Annual Salary by Industry

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Agriculture and Forestry	19	\$82,537	\$51,750	\$62,500	\$76,000	\$102,420	\$122,000	0.96%
Consulting	606	\$96,771	\$56,000	\$66,150	\$87,746	\$119,500	\$168,000	30.48%
Educational Services	66	\$119,462	\$45,000	\$76,000	\$114,500	\$140,000	\$170,000	3.32%
Manufacturing Durables	155	\$91,042	\$53,500	\$67,155	\$79,040	\$102,000	\$150,000	7.80%
Manufacturing Non-Durables	60	\$108,114	\$51,257	\$77,250	\$94,000	\$142,800	\$180,000	3.02%
Procurement and Construction	137	\$91,887	\$59,000	\$66,400	\$81,700	\$105,000	\$151,000	6.89%
Resource Industry Oil & Gas	83	\$105,520	\$60,000	\$79,000	\$100,000	\$126,500	\$165,000	4.18%
Resource Ind. except Oil & Gas	359	\$115,903	\$70,353	\$88,040	\$105,000	\$135,000	\$176,000	18.06%
Service For Profit	27	\$87,186	\$41,600	\$59,000	\$80,000	\$98,000	\$175,000	1.36%
Service Not For Profit	148	\$93,362	\$61,320	\$73,000	\$90,000	\$105,000	\$133,000	7.44%
Utilities	259	\$107,280	\$61,000	\$82,000	\$102,240	\$123,570	\$165,132	13.03%
Other	69	\$94,107	\$53,000	\$70,167	\$97,000	\$115,000	\$152,000	3.47%

Annual Salary by Degrees

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Bachelor's Degree or qualified for registration	1347	\$98,129	\$57,500	\$70,000	\$90,000	\$115,000	\$165,000	67.76%
Qualification between Bachelor and Master's degree	237	\$106,769	\$59,000	\$82,500	\$103,500	\$128,400	\$168,000	11.92%
Master's Degree	297	\$105,447	\$53,500	\$78,000	\$96,408	\$121,200	\$178,000	14.94%
Qualification between Master's and Doctorate Degree	31	\$118,456	\$30,000	\$82,500	\$121,000	\$154,000	\$220,000	1.56%
Doctorate Degree	76	\$126,670	\$49,513	\$93,000	\$121,597	\$149,668	\$170,000	3.82%

Annual Salary by Experience

	COUNT	MEAN	5	25	MEDIAN	75	95	%
<1 year	91	\$65,803	\$40,000	\$58,000	\$62,000	\$70,300	\$92,000	4.58%
1 year	54	\$68,517	\$47,000	\$55,000	\$64,500	\$72,000	\$120,000	2.72%
1.5 years	98	\$68,794	\$53,500	\$60,000	\$64,196	\$76,500	\$93,450	4.93%
2 years	128	\$67,839	\$52,000	\$61,250	\$65,000	\$75,000	\$88,000	6.44%
3 years	161	\$79,453	\$55,000	\$66,120	\$73,576	\$82,500	\$100,000	8.10%
4 years	123	\$82,375	\$60,000	\$70,000	\$80,000	\$88,400	\$110,000	6.19%
5 years	132	\$91,531	\$64,000	\$75,000	\$83,778	\$95,000	\$119,000	6.64%
6 years	114	\$89,881	\$64,000	\$78,000	\$90,000	\$100,000	\$129,000	5.73%
7-8 years	172	\$98,033	\$65,000	\$84,000	\$96,038	\$111,000	\$133,000	8.65%
9-10 years	143	\$106,262	\$72,000	\$93,000	\$104,000	\$120,000	\$142,000	7.19%
11-12 years	113	\$112,428	\$78,000	\$97,044	\$108,000	\$126,500	\$160,000	5.68%
13-14 years	96	\$112,569	\$80,000	\$97,928	\$109,500	\$130,500	\$160,000	4.83%
15-17 years	130	\$126,260	\$70,000	\$100,000	\$120,000	\$140,000	\$168,000	6.54%
18-20 years	85	\$135,356	\$75,000	\$104,544	\$126,364	\$158,000	\$203,000	4.28%
21-24 years	90	\$142,023	\$85,000	\$110,000	\$132,500	\$150,000	\$196,000	4.53%
25+ years	258	\$137,465	\$75,000	\$110,557	\$132,000	\$158,000	\$215,000	12.98%

Annual Salary by Sector

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Public Sector	572	\$103,406	\$60,000	\$79,553	\$98,600	\$120,000	\$161,318	29.1%
Private Sector	1393	\$100,893	\$56,000	\$71,000	\$91,380	\$120,000	\$170,000	70.9%

Total Salary

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Base Salary	1931	\$102,475	\$58,240	\$74,000	\$94,500	\$120,084	\$168,000	100%
Salary including bonus	1931	\$116,432	\$60,000	\$80,000	\$104,000	\$135,000	\$215,000	100%

Salary Changes - Full Time Positions

	MEDIAN SALARY	% INCREASE	AVERAGE SALARY	% INCREASE
1987	\$48,000		\$49,269	
1989	\$50,928	6.10%	\$62,887	27.60%
1991	\$54,110	6.20%	\$57,578	-8.40%
1993	\$54,480	0.70%	\$56,703	-1.50%
1995	\$56,400	3.50%	\$59,142	4.30%
1997	\$60,000	6.40%	\$62,266	5.30%
1999	\$62,500	4.20%	\$65,401	5.00%
2001	\$66,000	5.60%	\$68,877	5.30%
2003	\$68,800	4.20%	\$71,210	3.40%
2005	\$71,008	3.20%	\$73,607	3.40%
2007	\$74,000	4.20%	\$77,374	5.10%
2008	\$76,352	3.20%	\$83,025	7.30%
2009	\$80,000	4.80%	\$86,908	4.70%
2010	\$82,950	3.70%	\$91,548	5.30%
2011	\$84,224	1.54%	\$91,154	-0.40%
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%

Regression Analysis

Stepwise linear regression was used to find the best model for estimating salaries. The formula produced explains over fifty percent of the variance in salary (51.6%). Any model explaining at least 50% of the variance in the dependent variable can be considered an effective model. Refer to the "Classification Rating Guide", which can be found on www.apegs.ca, to determine the values for each factor.

FACTOR	B (COEFFICIENT)	BETA (RELATIVE IMPORTANCE)
Duties (A)	188	0.233
Experience (C)	283	0.226
Supervision Scope (G)	606	0.126
Receipt of professional designation	9,461	0.090
(Constant)	51,895	

Formula for expected salary (SE) without bonus:

$$SE = 51895 + (188 \times A) + (283 \times C) + (606 \times G)$$

Add 9,461 if you have acquired professional status within your field (P.Eng or P.Geo)