# 2015 APEGS Salary Survey Summary Results

The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted 5,148 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Licensees living in Saskatchewan.

A total of 2,002 members completed the survey, representing a 38.9 per cent response rate. Of those, 1,929 were employed full-time and used in the analysis. Surveys were completed from mid February to late March 2015 and salaries reported were as at December 31, 2014. Insightrix Research Inc. compiled and tabulated all results.

The detailed report from Insightrix can be found on the APEGS website 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 Saskatchewan.

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

	COUNT	MEAN	5	25	MEDIAN	75	95	%
< 1976	67	\$127,128	\$10,000	\$97,092	\$121,200	\$164 <b>,</b> 153	\$225,000	3.5%
1977	7	\$170,024	\$104,000	\$132,000	\$160,000	\$195,000	\$265,000	0.4%
1978	11	\$142,636	\$70,000	\$75,000	\$140,000	\$169,000	\$260,000	0.6%
1979	18	\$153,039	\$90,000	\$130,000	\$152,000	\$166,000	\$275,000	0.9%
1980	13	\$125,946	\$0	\$128,000	\$135,000	\$150,000	\$169,000	0.7%
1981	7	\$159,429	\$125,000	\$147,000	\$155,000	\$175,000	\$191,000	0.4%
1982	27	\$136,138	\$65,000	\$106,300	\$134,000	\$162,000	\$220,000	1.4%
1983	18	\$148,360	\$66,000	\$120,000	\$149,408	\$165,500	\$225,000	0.9%
1984	25	\$129,312	\$82,000	\$105,000	\$120,000	\$133,000	\$215,000	1.3%
1985	23	\$142,940	\$82,500	\$115,000	\$128,710	\$164,000	\$252,000	1.2%
1986	34	\$135,059	\$72,000	\$105,000	\$127,500	\$162,000	\$220,000	1.8%
1987	32	\$133,073	\$70,000	\$99,300	\$132,600	\$160,500	\$200,000	1.6%
1988	22	\$130,521	\$105,000	\$115,000	\$126,800	\$145,000	\$176,000	1.1%
1989	26	\$132,867	\$75,000	\$100,000	\$130,000	\$144,000	\$230,000	1.3%
1990	22	\$142,519	\$81,660	\$104,040	\$140,750	\$180,000	\$215,000	1.1%
1991	22	\$136,378	\$90,000	\$108,000	\$142,349	\$165,000	\$182,000	1.1%
1992	20	\$127,199	\$45,000	\$106,500	\$132,500	\$145,250	\$200,000	1.0%
1993	25	\$128,072	\$64,000	\$105,000	\$130,000	\$150,000	\$200,000	1.3%
1994	31	\$131,911	\$60,000	\$110,000	\$137,100	\$163,162	\$178,000	1.6%
1995	38	\$129,183	\$85,000	\$98,000	\$124,422	\$150,000	\$199,000	2.0%
1996	39	\$122,137	\$70,000	\$95,000	\$120,000	\$149,856	\$175,000	2.0%
1997	41	\$121,426	\$75,000	\$96,000	\$119,235	\$138,197	\$167,500	2.1%
1998	30	\$112,695	\$45,000	\$83,000	\$113,500	\$130,000	\$185,000	1.5%
1999	48	\$118,341	\$61,734	\$94,840	\$107,500	\$141,500	\$180,000	2.5%
2000	52	\$109,142	\$64,000	\$92,737	\$105,000	\$121,590	\$165,000	2.7%
2001	62	\$111,248	\$67,000	\$95,000	\$106,750	\$125,000	\$155,000	3.2%
2002	64	\$110,009	\$55,000	\$91,500	\$108,750	\$128,000	\$152,600	3.3%
2003	73	\$108,497	\$61,800	\$92,760	\$108,500	\$124,000	\$165,000	3.8%
2004	77	\$110,343	\$68,000	\$86,053	\$100,000	\$114,000	\$155,000	4.0%

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

	COUNT	MEAN	5	25	MEDIAN	75	95	%
2005	77	\$105,237	\$71,250	\$90,000	\$104,000	\$119,225	\$140,000	4.0%
2006	73	\$103,595	\$65,000	\$87,470	\$103,200	\$116,000	\$145,000	3.8%
2007	101	\$97,629	\$60,000	\$84,000	\$98,500	\$110,000	\$125,000	5.2%
2008	95	\$88,324	\$60,000	\$80,000	\$88,000	\$98,600	\$121,000	4.9%
2009	100	\$85,456	\$64,000	\$74,150	\$86,000	\$94,140	\$108,125	5.1%
2010	113	\$81,317	\$61,200	\$73,100	\$82,000	\$88,000	\$104,625	5.8%
2011	106	\$75,637	\$60,000	\$68,000	\$72,800	\$81,000	\$98,000	5.5%
2012	133	\$76,838	\$54,516	\$64,000	\$68,500	\$78,000	\$95,284	6.8%
2013	111	\$70,160	\$56,000	\$62,500	\$67,500	\$77,000	\$90,000	5.7%
2014	58	\$64,008	\$42,000	\$58,000	\$62,750	\$72,000	\$80,000	3.0%

### **Annual Salary by Designation**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
P.Eng.	1242	\$116,972	\$70,000	\$91,000	\$110,000	\$135,000	\$188,625	62.0%
P.Geo.	87	\$121,054	\$70,000	\$100,000	\$117,000	\$145,000	\$176,000	4.3%
P.Eng. & P.Geo	18	\$120,799	\$66,000	\$93,000	\$110,000	\$150,000	\$185,000	0.9%
Engineering Licensee		NA	NA	NA	NA	NA	NA	
Engineer-in-Training	602	\$75,507	\$52,000	\$64,000	\$71,312	\$82,400	\$105,000	30.1%
Geoscience Licensee		NA	NA	NA	NA	NA	NA	
Geoscientist-in-Training	42	\$90,913	\$60,000	\$73,000	\$84,000	\$99,000	\$160,000	2.1%

<sup>\*</sup>NA=Not available due to reporting rules.

### **Annual Salary by Discipline**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Civil	391	\$97,500	\$58,000	\$70,000	\$88,500	\$110,000	\$171,000	19.5%
Mech/Ind	397	\$102,690	\$59,800	\$73,757	\$96,000	\$123,600	\$167,000	19.8%
Elec/Physics	277	\$104,533	\$60,000	\$77,281	\$96,000	\$124,000	\$170,000	13.8%
Chem/Ceramic/Metal	90	\$110,898	\$65,004	\$81,675	\$97,950	\$134,000	\$180,000	4.5%
Geo/Mining/Petro Eng	261	\$119,219	\$71,000	\$87,600	\$109,000	\$140,000	\$192,000	13.0%
Agriculture/Forestry	40	\$80,233	\$35,000	\$62,250	\$78,250	\$99,000	\$121,000	2.0%
Environmental	124	\$90,009	\$48,750	\$67,076	\$90,000	\$106,500	\$141,072	6.2%
Geoscience	123	\$107,087	\$64,800	\$81,000	\$99,000	\$130,000	\$175,000	6.1%
Software Eng	55	\$105,319	\$61,872	\$80,080	\$104,256	\$120,000	\$185,000	2.7%
Industrial	64	\$102,752	\$102,752	\$64,500	\$74,415	\$95,500	\$117,500	3.2%
Other	175	\$108,271	\$108,271	\$57,500	\$75,000	\$100,000	\$130,000	8.7%

# **Annual Salary by Function**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Project/Op Mgmt	788	\$109,545	\$62,000	\$82,000	\$100,000	\$128,000	\$178,000	39.4%
Project Admin	67	\$86,739	\$55,967	\$70,000	\$89,000	\$100,000	\$125,000	3.3%
Design	430	\$90,639	\$58,000	\$68,500	\$82,900	\$104,000	\$153,000	21.5%
Research/Planning	105	\$96,118	\$54,000	\$71,000	\$90,000	\$115,000	\$162,000	5.2%
Inspection/Quality/Residential	52	\$79,277	\$22,344	\$63,750	\$74,940	\$94,125	\$135,000	2.6%
Operating/Maintenance	145	\$101,407	\$64,000	\$82,000	\$98,600	\$119,000	\$150,300	7.2%
Teaching	45	\$121,363	\$75,000	\$92,000	\$120,200	\$149,966	\$169,000	2.2%
Marketing/Sales	18	\$99,089	\$50,000	\$67,500	\$77,325	\$115,000	\$220,000	0.9%
Reg Approvals/Enforcement	60	\$98,495	\$62,750	\$78,000	\$95,000	\$110,850	\$143,000	3.0%
Exploration	71	\$102,730	\$61,293	\$81,000	\$95,088	\$115,000	\$175,000	3.5%
Other	80	\$94,120	\$17,400	\$65,400	\$94,680	\$116,000	\$163 <b>,</b> 162	4.0%

# **Annual Salary by Industry**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Consulting Service	588	\$98,145	\$56,000	\$68,016	\$88,100	\$120,000	\$175,000	29.4%
Oil & Gas	93	\$111,832	\$70,000	\$83,000	\$100,000	\$127,561	\$200,000	4.6%
Resource Except Oil & Gas	367	\$118,001	\$73,000	\$90,900	\$108,250	\$140,000	\$175,000	18.3%
Procurement/Construction	167	\$102,598	\$60,000	\$70,200	\$90,000	\$110,000	\$210,000	8.3%
Manufacturing Durables	152	\$90,144	\$56,129	\$65,700	\$83,000	\$106,400	\$150,000	7.6%
Manufacturing Non-Durables	53	\$113,845	\$55,000	\$79,000	\$104,000	\$137,000	\$204,000	2.6%
Service For Profit	26	\$100,604	\$48,000	\$72,000	\$95,000	\$121,000	\$175,000	1.3%
Service Not For Profit	143	\$98,979	\$63,000	\$77,000	\$94,800	\$111,700	\$150,000	7.1%
Utilities	265	\$107,754	\$64,572	\$83,000	\$105,000	\$126,000	\$167,500	13.2%
Educational Services	69	\$115,816	\$20,000	\$83,985	\$116,928	\$149,966	\$195,000	3.4%
Agriculture/Forestry	12	\$92,035	\$71,582	\$78,040	\$89,000	\$102,250	\$125,000	0.6%
Other	67	\$93,242	\$50,000	\$69,000	\$91,250	\$105,427	\$149,000	3.3%

# **Annual Salary by Degrees**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Bachelor's/qualified registration	1347	\$100,912	\$60,000	\$73,000	\$91,700	\$119,000	\$169,000	67.3%
Between Bachelor & Master's	217	\$106,659	\$58,834	\$82,000	\$101,200	\$125,000	\$167,000	10.8%
Master's Degree	312	\$110,185	\$56,000	\$83,851	\$105,000	\$132,000	\$185,000	15.6%
Between Master's & Doctorate	35	\$123,420	\$44,000	\$83,044	\$105,000	\$165,000	\$260,000	1.7%
Doctorate Degree	91	\$122,924	\$55,000	\$97,000	\$120,000	\$150,000	\$195,000	4.5%

# Annual Salary by Experience

	COUNT	MEAN	5	25	MEDIAN	75	0.5	%
				25		75	95	
<1 year	64	\$63,926	\$39,500	\$57,000	\$64,000	\$72,000	\$83,600	3.2%
1 year	35	\$72,144	\$55,000	\$61,872	\$66,866	\$79,290	\$100,000	1.7%
1.5 years	77	\$70,183	\$53,000	\$63,000	\$67,000	\$75,000	\$95,687	3.8%
2 years	120	\$72,367	\$53,258	\$63,750	\$68,750	\$78,896	\$96,650	6.0%
3 years	165	\$73,331	\$55,000	\$65,000	\$72,000	\$82,400	\$96,000	8.2%
4 years	130	\$80,692	\$54,000	\$71,000	\$79,000	\$89,902	\$107,474	6.5%
5 years	125	\$94,825	\$64,000	\$75,000	\$86,000	\$95,000	\$145,000	6.2%
6 years	114	\$91,848	\$62,000	\$82,500	\$90,000	\$102,600	\$120,000	5.7%
7-8 years	196	\$100,467	\$67,503	\$87,500	\$99,000	\$111,892	\$134,000	9.8%
9-10 years	174	\$107,461	\$69,000	\$92,000	\$104,000	\$122,400	\$154,150	8.7%
11-12 years	113	\$116,931	\$65,000	\$94,160	\$110,000	\$126,000	\$165,000	5.6%
13-14 years	111	\$120,120	\$75,000	\$100,812	\$116,000	\$131,280	\$180,000	5.5%
15-17 years	111	\$120,565	\$73,770	\$98,000	\$120,000	\$144,380	\$167,000	5.5%
18-20 years	97	\$137,401	\$88,200	\$116,525	\$138,000	\$159,000	\$192,000	4.8%
21-24 years	84	\$132,815	\$76,000	\$105,000	\$131,000	\$155,000	\$200,000	4.2%
25+ years	286	\$141,953	\$70,000	\$113,000	\$136,750	\$165,000	\$220,500	14.3%

#### **Annual Salary by Sector**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Public Sector	612	\$104,364	\$60,036	\$80,000	\$100,000	\$122,630	\$166,000	30.9%
Private Sector	1366	\$104,199	\$58,500	\$75,000	\$95,000	\$124,000	\$180,000	69.1%

#### **Total Salary**

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Base Salary	1929	\$105,111	\$60,000	\$76,500	\$97,000	\$124,000	\$175,000	100%
Salary including bonus	1929	\$121,447	\$63,500	\$82,500	\$106,000	\$142,124	\$220,000	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%
2015	\$97,000	2.65%	\$105,111	2.57%

#### **Regression Analysis**

Stepwise linear regression was used to find the best model for estimating salaries. The formula produced explains over 50 per cent of the variance in salary (51.1%). Any model explaining at least 50 per cent 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)	151	0.211
Experience (C)	309	0.272
Supervision Scope (G)	958	0.221
Professional designation	8,012	0.084
(Constant)	56,265	

### Formula for expected salary (SE) without bonus:

 $SE = 56265 + (151 \times A) + (309 \times C) + (958 \times G)$ 

Add 8,012 if you have acquired professional status within your field (P.Eng or P.Geo)