2011 APEGS Salary Survey Summary Results

The Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) contacted a total of 4,102 Professional Engineers, Professional Geoscientists, Engineers-in-Training, Geoscientists-in-Training and Limited Members living in Saskatchewan via email. A total of 1,578 members completed the survey, representing a 38.5 per cent response rate. Of those, 1,542 were employed ful-time and used in the analysis. Surveys were completed from mid-February to mid-March 2011 and salaries reported were as at December 31, 2010. Insightrix Research Inc. compiled and tabulated all results. The detailed report from Insightrix can be found on the APEGS website at www.apegs.sk.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.

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Prior to 1974	32	\$121,850	\$78,000	\$97,500	\$116,000	\$143,500	\$180,000	2.2%
1974	10	\$120,546	\$80,000	\$93,500	\$109,000	\$150,960	\$200,000	0.7%
1975	14	\$131,175	\$78,370	\$103,000	\$122,500	\$171,000	\$200,000	1.0%
1976	16	\$131,025	\$89,000	\$113,628	\$129,500	\$150,500	\$187,148	1.1%
1977	12	\$119,333	\$65,000	\$98,750	\$119,250	\$143,000	\$175,000	0.8%
1978	18	\$120,173	\$73,176	\$97,500	\$114,389	\$130,000	\$198,000	1.2%
1979	13	\$128,255	\$82,000	\$114,000	\$132,000	\$140,000	\$175,000	0.9%
1980	20	\$110,279	\$78,800	\$100,000	\$111,675	\$120,000	\$140,913	1.4%
1981	13	\$125,576	\$88,000	\$112,000	\$125,000	\$143,460	\$153,000	0.9%
1982	23	\$114,081	\$68,000	\$94,000	\$108,000	\$140,000	\$160,000	1.6%
1983	17	\$130,189	\$60,000	\$120,000	\$130,000	\$144,000	\$166,000	1.2%
1984	17	\$117,420	\$80,000	\$92,000	\$124,000	\$131,000	\$178,000	1.2%
1985	21	\$110,426	\$68,000	\$85,000	\$106,000	\$125,000	\$185,000	1.4%
1986	29	\$113,422	\$82,000	\$96,000	\$110,000	\$126,000	\$150,000	2.0%
1987	30	\$114,154	\$60,000	\$101,000	\$110,345	\$138,000	\$160,000	2.0%
1988	26	\$103,954	\$65,000	\$85,000	\$107,500	\$121,544	\$137,500	1.8%
1989	24	\$111,619	\$74,000	\$97,750	\$108,500	\$129,000	\$141,000	1.6%
1990	22	\$116,337	\$78,370	\$94,969	\$105,244	\$135,000	\$180,000	1.5%
1991	22	\$112,325	\$76,616	\$93,126	\$107,817	\$120,000	\$160,000	1.5%
1992	19	\$106,580	\$75,000	\$92,500	\$102,960	\$111,523	\$174,000	1.3%
1993	21	\$104,259	\$68,000	\$100,000	\$105,000	\$118,000	\$126,000	1.4%
1994	33	\$111,833	\$72,500	\$99,000	\$110,000	\$125,800	\$160,000	2.2%
1995	28	\$111,350	\$68,120	\$82,250	\$109,500	\$133,500	\$160,500	1.9%
1996	39	\$103,925	\$60,000	\$84,000	\$105,000	\$123,000	\$140,000	2.6%
1997	33	\$107,150	\$60,000	\$83,500	\$105,000	\$125,000	\$150,000	2.2%
1998	33	\$96,310	\$57,000	\$87,636	\$96,000	\$106,000	\$124,000	2.2%
1999	46	\$97,030	\$62,500	\$80,640	\$95,500	\$107,000	\$140,000	3.1%
2000	51	\$89,407	\$60,000	\$78,123	\$88,796	\$99,693	\$124,000	3.5%
2001	66	\$85,061	\$60,000	\$76,550	\$84,500	\$93,300	\$108,200	4.5%
2002	58	\$90,222	\$64,000	\$80,000	\$89,500	\$100,000	\$115,000	3.9%
2003	58	\$81,309	\$52,500	\$69,500	\$81,500	\$92,000	\$113,000	3.9%
2004	67	\$80,227	\$60,800	\$72,000	\$80,000	\$89,000	\$98,500	4.6%
2005	87	\$75,986	\$55,549	\$69,000	\$74,039	\$83,000	\$96,976	5.9%
2006	74	\$74,228	\$55,500	\$65,000	\$72,900	\$83,000	\$95,000	5.0%
2007	91	\$67,901	\$50,000	\$58,600	\$67,000	\$75,030	\$88,000	6.2%
2008	116	\$64,466	\$50,000	\$57,655	\$61,000	\$71,750	\$80,100	7.9%
2009	95	\$61,154	\$52,000	\$56,100	\$59,269	\$66,000	\$74,000	6.5%
2010	77	\$59,487	\$49,920	\$54,000	\$56,993	\$63,500	\$73,000	5.2%
	1471							100.00%

	COUNT	MEAN	5	25	MEDIAN	75	95	%
P.Eng.	893	\$104,998	\$66,500	\$82,000	\$99,000	\$120,000	\$160,500	57.9%
P.Geo.	62	\$109,437	\$70,000	\$87,000	\$99,900	\$128,000	\$178,000	4.0%
P.Eng. and P.Geo.	16	\$125,480	\$67,000	\$105,500	\$114,000	\$145,480	\$206,000	1.0%
Engineer-In-Training	527	\$65,077	\$48,548	\$56,750	\$62,500	\$72,000	\$88,660	34.2%
Geoscientist-In-Training	38	\$80,291	\$62,400	\$72,000	\$78,000	\$87,000	\$115,000	2.5%
Limited Member	6	\$109,667	\$73,000	\$76,000	\$116,000	\$130,000	\$147,000	0.4%
	1542							100.00%

Annual Salary by Discipline

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Ag. & Forestry	46	\$83,959	\$45,000	\$62,000	\$81,056	\$103,000	\$130,000	3.0%
Chem., Ceramic & Metal.	86	\$94,318	\$54,500	\$70,400	\$85,000	\$115,000	\$168,000	5.6%
Civil	337	\$89,512	\$55,000	\$66,000	\$80,088	\$105,000	\$150,000	21.9%
Elec. & Eng. Physics	330	\$88,797	\$50,376	\$66,000	\$82,750	\$103,000	\$148,000	21.4%
Environmental	133	\$82,274	\$53,000	\$62,000	\$76,000	\$98,000	\$125,000	8.6%
Geo., Mining, Petro.Eng.	133	\$102,897	\$57,500	\$70,400	\$92,900	\$125,000	\$175,000	8.6%
Geosciences, Geology	79	\$100,166	\$67,000	\$80,000	\$88,000	\$113,800	\$178,000	5.1%
Mech. & Industrial	384	\$92,385	\$54,000	\$66,000	\$86,250	\$110,000	\$150,000	24.9%
Software Engineering	14	\$78,679	\$36,000	\$62,500	\$74,545	\$92,000	\$144,000	0.9%
	1542							100.00%

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Corp. Mgmt.	116	\$137,319	\$75,000	\$111,650	\$129,250	\$154,000	\$220,000	7.5%
Design	351	\$76,766	\$52,300	\$59,500	\$71,000	\$86,700	\$120,000	22.8%
Inspec./Res. Services	49	\$70,369	\$50,173	\$57,750	\$65,000	\$78,000	\$112,000	3.2%
Marketing/Sales	14	\$111,153	\$51,200	\$70,000	\$95,500	\$150,000	\$252,000	0.9%
Operating or Maintenance	90	\$89,287	\$61,000	\$72,000	\$84,000	\$105,000	\$125,000	5.8%
Other	56	\$82,177	\$50,000	\$62,750	\$75,000	\$100,000	\$129,000	3.6%
Project Admin.	70	\$79,558	\$54,000	\$62,000	\$74,000	\$90,000	\$124,000	4.5%
Project/Op. Mgmt.	601	\$96,468	\$56,847	\$71,940	\$92,000	\$113,800	\$154,000	39.0%
Reg. Approvals/Enforce.	45	\$80,690	\$54,200	\$69,432	\$84,000	\$91,000	\$111,200	2.9%
Research/Planning	115	\$82,159	\$45,000	\$66,450	\$82,000	\$95,000	\$124,000	7.5%
Teaching	35	\$97,670	\$65,000	\$83,210	\$95,000	\$113,600	\$137,000	2.3%
-	1542							100.00%

	COUNT	MEAN	5	25	MEDIAN	75	95	%
Construc. of Facilities	135	\$84,416	\$55,000	\$60,800	\$75,000	\$100,000	\$150,000	8.8%
Consulting	392	\$84,945	\$53,000	\$60,450	\$75,000	\$98,500	\$150,000	25.4%
Education	54	\$97,381	\$45,000	\$80,000	\$90,500	\$117,000	\$147,000	3.5%
Environ./Public Safety	63	\$87,205	\$56,000	\$69,848	\$85,000	\$99,000	\$124,200	4.1%
Freight/Passenger Trans.	41	\$85,312	\$58,000	\$64,665	\$84,300	\$99,240	\$127,061	2.7%
Manufac./Processing	174	\$83,467	\$49,300	\$60,000	\$74,950	\$99,693	\$142,825	11.3%
Other	55	\$89,111	\$41,600	\$59,500	\$83,000	\$107,000	\$175,000	3.6%
Resource Industry	342	\$104,088	\$62,500	\$77,000	\$95,000	\$125,000	\$171,000	22.2%
Support Services	30	\$83,745	\$50,376	\$66,722	\$79,545	\$103,600	\$135,000	1.9%
Utilities	256	\$94,064	\$55,008	\$72,277	\$91,290	\$110,000	\$150,000	16.6%
	1542							100.00%

Annual Salary by Deg	rees							
	COUNT	MEAN	5	25	MEDIAN	75	95	%
Bachelor's Degree or aca	demically							
qualified for registration	1030	\$88,256	\$54,000	\$64,000	\$80,000	\$103,000	\$150,000	66.8%
Qualification between Ba	chelor							
and Master's degree	201	\$94,271	\$57,194	\$72,000	\$86,000	\$110,000	\$150,000	13.0%
Master's Degree	218	\$96,080	\$55,000	\$72,000	\$88,436	\$115,000	\$172,597	14.1%
Qualification between Ma	aster's							
and Doctorate Degree	28	\$115,472	\$55,000	\$83,605	\$102,000	\$152,000	\$220,000	1.8%
Doctorate Degree	65	\$100,459	\$50,000	\$85,000	\$100,000	\$117,000	\$144,000	4.2%
-	1542							100.00%

	COUNT	MEAN	5	25	MEDIAN	75	95	%
<1 year	81	\$59,170	\$44,343	\$52,500	\$55,200	\$62,500	\$75,000	5.3%
1 year	30	\$66,625	\$40,000	\$56,100	\$60,000	\$70,400	\$98,000	1.9%
1.5 years	79	\$62,021	\$51,840	\$56,000	\$58,000	\$67,000	\$77,000	5.1%
2 years	95	\$64,933	\$45,000	\$57,000	\$63,400	\$72,000	\$86,000	6.2%
3 years	143	\$69,298	\$54,000	\$58,800	\$65,000	\$75,030	\$101,000	9.3%
4 years	98	\$76,391	\$55,000	\$65,000	\$73,414	\$84,000	\$100,300	6.4%
5 years	114	\$78,789	\$60,000	\$70,000	\$77,973	\$86,500	\$99,600	7.4%
6 years	81	\$80,198	\$60,800	\$72,000	\$78,000	\$89,000	\$110,000	5.3%
7-8 years	112	\$86,096	\$60,000	\$75,000	\$85,000	\$94,150	\$115,000	7.3%
9-10 years	117	\$92,629	\$62,000	\$80,640	\$92,000	\$103,000	\$125,000	7.6%
11-12 years	76	\$98,089	\$57,000	\$83,321	\$96,550	\$109,000	\$144,000	4.9%
13-14 years	71	\$109,872	\$74,900	\$91,000	\$105,000	\$123,000	\$150,000	4.6%
15-17 years	78	\$110,287	\$60,000	\$90,000	\$110,000	\$126,000	\$160,000	5.1%
18-20 years	60	\$115,263	\$67,500	\$96,776	\$110,000	\$132,500	\$180,000	3.9%
21-24 years	102	\$114,931	\$80,000	\$96,000	\$110,000	\$128,719	\$160,000	6.6%
25+ years	205	\$130,971	\$80,000	\$105,000	\$123,600	\$150,000	\$210,000	13.3%
1542							100.00%	

Employment Secto	r							
	COUNT	MEAN	5	25	MEDIAN	75	95	%
Public Sector	554	\$91,928	\$55,000	\$71,739	\$87,964	\$107,000	\$144,000	36.2%
Private Sector	976	\$90,833	\$53,875	\$65,000	\$80,824	\$107,600	\$155,000	63.8%
	1530							100.00%

Total Salary							
	COUNT	MEAN	5	25	MEDIAN	75	95
Base Salary	1542	\$91,154	\$54,000	\$67,000	\$84,224	\$107,000	\$150,000
Salary Incl. bonus	1542	\$102,189	\$55,000	\$72,000	\$91,450	\$119,616	\$187,200

	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%

Regression Analysis

Stepwise linear regression was used to find the best model for estimating salaries. The formula produced explains about two-thirds of the variance in salary (66.5 per cent) regardless of industry. 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.sk.ca, to determine the values for each factor.

FACTOR	B (COEFFICIENT)	BETA (RELATIVE IMPORTANCE)
Duties (A)	156	.328
Experience (C)	227	.310
Leadership Authority and/or Supervision Exercised (F)		
Supervision Scope (G)	563	.205
Absence From Base Of Operations (J)		
Receipt of professional designation	8486	
(Constant)	48424	N/A

Formula for expected salary (S_E) without bonus:

SE = 48424 + 156*(A) + 227*(C) + 563*(G)

Add 8486 if you have acquired professional status within your field (P.Eng or P.Geo.)