APEGM 2006 Salary Survey

APEGM Salary Research Committee

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Prepared by the APEGM Salary Research Committee

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1 Highlights

1.1 Survey Highlights

For the fourth year, the survey was conducted via a web-based format. This year the response rate was 30% compared to 37% in 2005 and 31% for the previous two years. The eligible APEGM Manitoba membership as of April 2006 was 3281 APEGM members and members-in-training. Not all of the survey responses were sufficiently completed for all survey analysis. The committee will be reviewing all questions to reduce any ambiguity for next year's survey.

This year's survey provides information on the graduation year of the membership which indicates the percentage of survey respondents based on year of graduation (see Tables 8 – 11).

In reviewing comparative salary data by industry sector and job function, the Mean Base Salary correlates strongly with the Mean Points value.

Highlights for this year's salary survey include:

- Highest median salary by industry sector was the petroleum sector ($89,500) followed by the heavy electrical sector ($88,500), both of which had the highest Mean Points.
- Of the industry sectors with more than 15 respondents, the top industry sectors were Mining and Communications.
- The two job functions with mean total incomes greater than $90,000 were Management and Administrative services, both of which had the highest Mean Points.
- The two lowest paid job functions based on mean total income were Production and Software Development, both of which had the lowest Mean Points.
- The highest participation rate in the survey by year of graduation was 2003 with 54% of eligible members responding.
- 60% of employers paid APEGM dues.
- 74% of employers provided fully paid training.
- Salaries for females were 7% higher for jobs with point ratings between 200 and 299 and were 8% lower for jobs with point's ratings between 500 and 599.
- Flexible work hours are available to 73% of members and 28% have profit sharing.
- Over 50% of the members worked for firms with more than 500 employees and 64.5% of the members worked for private enterprise.
- Only 845 of the 971 submitted surveys or 87% were sufficiently completed to be used for all survey analysis. Some surveys could not be used in the salary analysis due to the responses recorded in the base and total salary question.
- New Change of Employment question – 8% of responding members have changed employment in the last year.
- Overall Satisfaction – 78% of responding members indicated that they were somewhat to very satisfied with their current compensation. 35% of Engineers indicated that they were Very Satisfied compared to 20% of Geoscientists.

1.2 Membership Response

- Invitations to complete the web-based survey were sent to 3281 APEGM members and EIT/GITs resident in Manitoba in April 2006. Responses were accepted until May 3, 2006. The reference date for the survey was December 31, 2005.

- Responses were received from 971 members for an overall response rate of 29.5%, compared to 37% in 2005, 31% in 2004, 31% in 2003 and 24% in 2002.

- Of the responses, 63.2% (566/895) were Engineers, 3.8% (34/895) were Geoscientists, and 27.0% (242/895) were EIT/GITs. (Some respondents did not answer the APEGM registration question to indicate their current status.)

- The response rate for Engineers was 22.7% (566/2487). The response rate for Geoscientists was 23.7% (34/143). The response rate for EIT/GITs was 37.1% (242/651).

- This year, 24% (58) of the (242) respondents who were EIT/GITs graduated more than 5 years ago.

- This year was the fourth year that the APEGM used a web-based survey.

1.3 Salary

The primary purpose of the salary survey is to report base salary information as a function of job ratings. Jobs are rated using the APEGM Job Classification Guide, which provides typical job ratings of 140 for a recent Engineering graduate, 320 for a Design Engineer, 480 for a Senior Design Engineer, and 715 for a Division Executive for a large corporation.

1.4 Exclusions

Although 971 members logged in to the survey, difficulties with the online format resulted in not all the questions being completed. As a result, the number of respondents used in each separate table and chart varies.

For base salary calculations, responses were excluded for several reasons. First, some survey responses did not include a base salary. Second, some survey responses were excluded from some calculations because the respondent was not a full-time or contract employee. Third, statistical processes required the removal of outlier values for base salary calculations bringing the number of valid responses to 845.

1.5 Education

- Of the respondents, 36% (324/894) indicated that they had obtained a postgraduate degree.

- By membership category, this equates to 37% (222/597) of Engineers, 66% (24/36) of Geoscientists, and 30% (78/261) of EIT/GITs.
- 89% of respondents indicated their first degree in Engineering or Geoscience was from a Canadian university.

1.6 Gender

- Overall, 88% (782/891) of respondents were male and 12% (109/891) were female.
- Of the total eligible APEGM Membership, 26% (782/2971) of the male members responded and 35% (109/310) of the female members responded.
- Of the 891 respondents, 63% (496/782) of the males graduated after 1986, and 88% (96/109) of the females graduated after 1986.

1.7 Workplace Information

- The average official workweek was 38.5 hours.
- The typical number of hours worked was 43.5 hours.
- The average number of weeks of vacation reported was 3.5.
- This year, 64% of respondents were from the private sector, compared to 63% last year, and 63% the year before last.
- The average percentage change in the base annual salary from the previous year was 5.25%. Of the respondents, 15% (138/914) did not get a salary increase.

1.8 Comments

- This year, 10% of respondents provided written comments on their APEGM Salary Survey, compared to 8% who left comments in 2005, and 11% in the 2004 survey.

2 List of Tables

Table 1: Mean Base Salary vs. APEGM Points Equation

Year	Base Salary
2006	*107P + 18.7k*
2005	*102P + 19.2k*
2004	*89P + 22.7k*
2003	*85P + 24.1k*
2002	*86P + 22.2k*
2001	*84P + 20.6k*
2000	*89P + 18.2k*
1999	*93P + 14.6k*
1998	*87P + 17.0k*
1996	*84P + 15.7k*
1995	*96P + 11.8k*

(P = APEGM Points, k = $000)

Table 2: Base Salary at Different APEGM Point Levels (Based on Mean Base Salary Equations)

Year of Report	Mean Base Salary @ 200	% Incr.	Mean Base Salary @ 400	% Incr.	Mean Base Salary @ 600	% Incr.	*Cost of Living % increase
2006	45,630	4.5	61,913	1.0	80,813	0.3	1.8
2005	43,583	7.1	61,276	4.9	80,550	6.3	3.3
2004	40,500	(1.5)	58,300	0.3	76,100	1.3	0.8
2003	41,123	4.3	58,123	2.6	75,123	1.8	3.7
2002	39,426	5.3	56,626	4.5	73,826	4.0	3.2
2001	37,413	3.9	54,213	0.8	71,013	(0.8)	2.5
2000	36,000	8.4	53,800	3.9	71,600	1.7	2.3
1999	33,200	(3.5)	51,800	0.0	70,400	1.7	1.4
1998	34,400	5.8	51,800	5.1	69,200	4.7	1.2
1996	32,500	4.8	49,300	(1.8)	66,100	(4.8)	1.9
1995	31,000	(3.1)	50,200	2.9	69,400	5.8	3.0

* Based on Statistics Canada Consumer Price Index

Table 3: Industry Sector Statistics

Industry Sector	# Reported	%	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
Aerospace	67	7.9%	61,712	47,200	59,200	71,900	64,642	407
Agriculture/Equipment	15	1.8%	57,926	41,500	55,000	67,750	61,917	425
Agriculture/Food	19	2.2%	69,318	49,480	66,700	78,513	76,637	442
Biomedical	6	0.7%	63,941	48,750	64,324	77,162	64,734	397
Chemical	1	0.1%	NA	NA	NA	NA	NA	NA
Communications	22	2.6%	77,865	69,000	76,000	83,000	81,772	477
Computer/Software	7	0.8%	63,786	45,000	50,000	85,000	65,500	460
Construction	49	5.8%	70,765	55,000	67,909	84,374	76,978	504
Consulting	163	19.3%	65,843	46,200	58,000	84,000	70,356	459
Education	26	3.1%	66,500	52,977	62,000	85,507	68,174	506
Electronics	15	1.8%	61,764	51,635	62,000	76,500	62,442	411
Environmental	28	3.3%	65,870	45,875	67,383	81,250	67,119	470
Health Care	8	0.9%	72,999	59,250	75,796	86,550	74,734	442
Heavy Electrical	8	0.9%	87,579	78,250	88,500	96,848	90,829	599
Manufacturing	87	10.3%	62,426	45,750	55,900	72,000	65,192	437
Mechanical Equipment	13	1.5%	64,511	48,000	60,040	75,000	67,965	456
Metals - Fabricating	8	0.9%	67,463	49,150	53,250	80,000	78,650	505
Metals - Primary	7	0.8%	75,584	60,814	67,000	88,000	98,357	439
Mineral Exploration	12	1.4%	74,183	61,200	66,500	72,250	76,967	596
Mining	21	2.5%	83,932	65,000	72,960	95,000	97,181	494
Other	41	4.9%	73,091	59,917	78,852	90,000	74,827	511
Petroleum	5	0.6%	84,200	80,000	89,500	100,000	103,943	625
Pharmaceutical	8	0.9%	69,000	51,500	63,500	90,000	72,375	486
Research & Development	19	2.2%	71,204	56,500	70,000	92,100	72,518	510
Transportation	50	5.9%	69,662	58,125	72,000	82,283	72,259	514
Transportation Equipment	14	1.7%	79,100	54,975	60,001	99,750	83,207	513
Utilities (Gas, Hydro, Water)	126	14.9%	73,626	56,625	70,418	90,000	77,428	433
Total	845	100.0%						

Table 4: Industry Sector Statistics (Engineers)

Industry Sector	# Reported	%	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
Aerospace	35	6.2%	72,538	63,740	71,800	80,000	76,730	491
Agriculture/Equipment	9	1.6%	63,849	55,000	61,500	68,000	68,278	507
Agriculture/Food	12	2.1%	66,578	62,000	65,000	74,000	69,413	515
Biomedical	2	0.4%	NA	NA	NA	NA	NA	NA
Chemical	1	0.2%	NA	NA	NA	NA	NA	NA
Communications	17	3.0%	82,772	73,000	80,739	92,360	87,652	509
Computer/Software	3	0.5%	90,000	NA	NA	NA	94,000	584
Construction	42	7.4%	74,611	62,000	74,500	85,300	79,198	548
Consulting	111	19.6%	76,087	56,100	72,000	91,000	82,036	543
Education	14	2.5%	73,456	60,500	63,500	85,507	74,027	552
Electronics	9	1.6%	73,447	63,750	75,000	82,000	74,577	493
Environmental	16	2.8%	74,630	64,750	74,163	82,205	76,266	539
Health Care	6	1.1%	78,999	75,450	80,944	88,850	79,312	489
Heavy Electrical	7	1.2%	92,233	83,500	92,000	97,815	95,947	640
Manufacturing	56	9.9%	71,207	54,640	67,150	81,750	72,778	504
Mechanical Equipment	9	1.6%	74,404	60,040	70,000	76,600	78,282	539
Metals - Fabricating	6	1.1%	74,283	51,625	65,750	90,000	87,033	586
Metals - Primary	4	0.7%	88,250	78,250	88,000	98,000	124,875	507
Mining	12	2.1%	96,292	77,745	87,000	113,465	106,103	581
Other	29	5.1%	81,121	66,560	83,400	92,000	83,370	563
Petroleum	2	0.4%	NA	NA	NA	NA	NA	NA
Pharmaceutical	6	1.1%	76,500	60,250	80,000	90,000	81,000	539
Research & Development	12	2.1%	79,307	66,988	72,418	92,900	81,386	582
Transportation	40	7.1%	75,273	67,812	73,408	83,875	77,392	567
Transportation Equipment	12	2.1%	85,867	58,725	68,501	108,500	90,658	566
Utilities (Gas, Hydro, Water)	94	16.6%	81,057	66,906	80,250	92,981	85,043	490
Total	566	100.0%						

Table 5: Industry Sector Statistics (Geoscientists)

Industry Sector	# Reported	%	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
Consulting	2	5.9%	NA	NA	NA	NA	NA	NA
Education	6	17.6%	78,773	55,586	76,442	98,702	80,159	630
Environmental	5	14.7%	74,200	60,000	70,000	92,000	74,800	542
Manufacturing	1	2.9%	NA	NA	NA	NA	NA	NA
Mineral Exploration	10	29.4%	77,460	62,700	70,000	72,750	79,460	622
Mining	3	8.8%	72,672	NA	NA	NA	80,227	510
Other	3	8.8%	79,333	NA	NA	NA	79,333	682
Petroleum	2	5.9%	NA	NA	NA	NA	NA	NA
Research & Development	2	5.9%	NA	NA	NA	NA	NA	NA
Total	34	100.0%						

Table 6: Industry Sector Statistics (EIT/GITs)

Industry Sector	# Reported	%	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
Aerospace	31	12.9%	49,352	43,478	46,428	55,000	52,919	327
Agriculture/Equipment	5	2.1%	49,042	37,813	42,000	46,375	52,375	303
Agriculture/Food	7	2.9%	47,1280	43,500	48,960	50,000	47,994	283
Biomedical	4	1.7%	57,500	45,000	52,500	65,000	57,500	345
Communications	5	2.1%	61,181	55,997	60,000	61,317	61,781	371
Computer/Software	4	1.7%	44,125	42,875	45,000	46,250	44,125	366
Construction	6	2.5%	43,974	40,575	43,650	45,000	52,933	281
Consulting	50	20.7%	43,394	40,000	43,000	46,950	44,884	269
Education	6	2.5%	37,995	19,875	34,500	50,227	42,532	274
Electronics	6	2.5%	44,241	45,489	48,000	53,095	44,241	287
Environmental	7	2.9%	39,900	41,000	45,000	45,250	40,727	259
Health Care	2	0.8%	NA	NA	NA	NA	NA	NA
Heavy Electrical	1	0.4%	NA	NA	NA	NA	NA	NA
Manufacturing	29	12.0%	46,085	42,000	44,000	50,000	47,744	321
Mechanical Equipment	4	1.7%	42,250	40,000	42,000	44,250	44,750	267
Metals - Fabricating	2	0.8%	NA	NA	NA	NA	NA	NA
Metals - Primary	3	1.2%	58,696	NA	NA	NA	63,000	349
Mineral Exploration	2	0.8%	NA	NA	NA	NA	NA	NA
Mining	6	2.5%	64,843	60,000	66,500	70,075	76,150	312
Other	9	3.7%	45,139	37,252	40,000	55,000	45,243	288
Petroleum	1	0.4%	NA	NA	NA	NA	NA	NA
Pharmaceutical	2	0.8%	NA	NA	NA	NA	NA	NA
Research & Development	5	2.1%	43,340	41,198	47,000	53,000	43,340	330
Transportation	10	4.1%	47,221	43,092	46,415	50,000	51,727	302
Transportation Equipment	2	0.8%	NA	NA	NA	NA	NA	NA
Utilities (Gas, Hydro, Water)	32	13.3%	51,797	46,273	51,000	56,081	55,058	266
Total	241	100.0%						

Table 7: Job Function Statistics

Principal Job Function	# Reported	%	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
Administrative Services	8	1%	91,195	91,500	95,000	96,221	92,820	622
Computer Services	5	1%	63,383	60,000	64,101	67,800	66,423	369
Consulting	109	13%	64,662	47,000	59,000	78,000	67,901	461
Design	154	18%	58,185	45,700	54,956	68,000	60,586	386
Maintenance/Tech Supp.	56	7%	59,918	46,000	54,000	71,445	64,472	362
Management	160	19%	91,906	76,000	87,766	103,500	97,072	646
Marketing/Sales	22	3%	67,579	50,875	65,000	82,900	69,629	421
Mineral Exploration	9	1%	65,689	60,000	62,600	70,000	70,515	551
Planning	38	5%	70,985	60,000	62,600	70,000	73,348	422
Production	25	3%	56,248	45,000	55,000	65,000	59,692	364
Project Management	131	16%	67,333	52,000	65,000	82,000	72,660	457
Quality Assurance	9	1%	62,163	56,500	65,980	72,000	64,519	447
R&D	48	6%	64,031	48,500	62,438	80,625	66,000	435
Software Dev.	16	2%	54,888	44,875	55,500	62,438	55,216	340
Teaching	17	2%	66,096	60,000	65,300	72,836	66,999	520
Other	33	4%	63,106	50,000	67,070	80,000	67,142	438
Total	840	100%						

Table 8: Year of Graduation Statistics

Year of Grad	# Reported	% of Total	# of Eligible Members	% of Eligible Members	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
1960-1964	5	1%	90	6%	100,023	74,000	102,420	122,788	101,897	667
1965-1969	24	3%	167	14%	81,841	66,485	82,700	100,500	96,416	655
1970	7	1%	60	12%	95,357	85,250	91,000	115,000	99,929	632
1971	11	1%	74	15%	82,687	73,900	87,000	93,290	84,887	639
1972	10	1%	81	12%	85,266	77,500	80,708	92,500	86,736	619
1973	10	1%	72	14%	96,461	87,625	91,907	99,575	105,431	674
1974	19	2%	76	25%	90,643	81,910	85,000	95,000	96,854	676
1975	12	1%	55	22%	90,215	82,750	92,000	101,080	90,298	638
1976	8	1%	57	14%	90,833	74,250	90,047	98,426	93,708	644
1977	10	1%	63	16%	86,070	69,475	85,898	96,150	96,829	658
1978	13	2%	53	25%	96,354	85,000	92,000	124,000	104,565	644
1979	15	2%	69	22%	87,588	73,500	78,868	95,250	96,850	615
1980	11	1%	80	14%	87,600	78,000	82,000	91,550	90,864	620
1981	13	2%	73	18%	83,270	62,000	89,733	92,883	85,969	566
1982	15	2%	86	17%	84,488	71,500	89,000	94,725	87,712	591
1983	22	3%	96	23%	90,132	76,500	90,000	101,500	98,367	635
1984	21	3%	97	22%	81,447	70,000	78,868	94,000	87,642	581
1985	28	3%	103	27%	83,409	69,268	79,458	91,975	88,513	563
1986	19	2%	110	17%	70,590	62,300	68,000	79,500	72,717	482
1987	19	2%	94	20%	79,427	70,500	84,000	90,000	85,922	550
1988	23	3%	93	25%	75,047	65,500	73,000	85,000	77,006	539
1989	21	3%	73	29%	76,675	63,000	74,456	90,000	83,003	544
1990	19	2%	78	24%	84,354	69,780	75,104	89,488	92,639	536
1991	21	3%	77	27%	75,357	70,490	76,579	83,000	78,790	514
1992	28	3%	80	35%	75,376	67,500	75,500	83,254	79,227	502
1993	16	2%	78	21%	76,730	60,188	82,000	92,438	81,803	531
1994	26	3%	85	31%	69,085	62,000	67,325	74,739	72,646	476
1995	29	3%	82	35%	68,049	55,058	70,000	78,000	73,915	475
1996	30	4%	101	30%	62,357	55,000	60,820	68,793	67,697	435
1997	31	4%	83	37%	60,039	52,650	58,000	66,351	61,646	409
1998	34	4%	103	33%	60,320	52,000	60,000	66,425	62,314	417
1999	35	4%	87	40%	58,837	52,635	57,000	64,294	61,294	385
2000	33	4%	91	36%	55,709	50,000	55,000	62,000	58,359	367
2001	36	4%	104	35%	51,129	45,239	49,600	59,938	54,602	293
2002	46	5%	102	45%	49,880	45,000	48,150	55,000	53,268	312
2003	47	6%	87	54%	45,860	42,000	46,000	53,000	48,957	289
2004	38	5%	95	40%	44,458	40,250	43,210	47,313	45,486	250
2005-2006	34	4%	79	43%	40,279	38,500	40,800	43,100	41,575	236
Total	839	100%	3234							

Table 9: Year of Graduation Statistics (Engineers)

Year of Grad	# Reported	% of Total	# of Eligible Members	% of Eligible Members	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
1960-1964	5	1%	81	6%	100,023	74,000	102,420	122,788	101,897	667
1965-1969	21	4%	153	14%	91,464	75,000	98,000	112,607	100,666	672
1970	6	1%	53	11%	102,917	86,875	98,000	120,000	108,250	634
1971	8	1%	67	12%	84,569	80,231	89,290	97,000	87,594	596
1972	10	2%	74	14%	85,266	77,500	80,708	92,500	86,736	619
1973	10	2%	69	14%	96,461	87,625	91,907	99,575	105,431	674
1974	17	3%	72	24%	93,660	83,000	91,000	95,000	99,425	682
1975	11	2%	51	22%	90,052	82,500	92,000	101,160	90,052	654
1976	7	1%	53	13%	93,523	80,547	94,000	102,284	96,809	671
1977	8	1%	59	14%	93,837	84,250	90,198	100,500	106,661	721
1978	11	2%	48	23%	96,360	73,500	88,800	125,000	105,996	636
1979	11	2%	56	20%	87,757	73,500	78,157	93,900	100,114	613
1980	11	2%	71	15%	87,600	78,000	82,000	91,550	90,864	620
1981	8	1%	66	12%	80,454	70,325	85,617	90,500	82,214	584
1982	15	3%	79	19%	84,488	71,500	89,000	94,725	87,712	591
1983	21	4%	89	24%	92,194	81,000	90,000	102,000	100,432	648
1984	17	3%	87	20%	83,677	70,000	79,500	94,000	88,129	604
1985	24	4%	95	25%	86,063	72,627	80,000	91,975	91,935	575
1986	16	3%	100	16%	72,084	62,625	70,800	82,500	73,241	494
1987	19	3%	88	22%	79,427	70,500	84,000	90,000	81,922	550
1988	19	3%	82	23%	75,847	63,000	76,560	87,338	80,270	524
1989	18	3%	66	27%	80,565	68,438	78,000	91,823	87,947	568
1990	18	3%	68	26%	84,985	68,252	79,434	90,731	93,730	545
1991	19	3%	68	28%	76,835	70,745	78,500	85,766	79,964	520
1992	25	4%	71	35%	75,941	68,000	75,000	82,544	79,495	516
1993	13	2%	64	20%	82,207	61,398	83,000	99,750	88,450	554
1994	23	4%	75	31%	70,509	63,000	68,250	77,750	74,535	474
1995	25	4%	67	37%	70,477	57,700	71,500	78,852	76,806	487
1996	25	4%	75	33%	64,148	57,000	62,400	70,000	70,556	438
1997	24	4%	61	39%	64,429	54,684	58,750	74,250	66,439	424
1998	27	5%	66	41%	61,111	54,000	60,000	65,450	62,851	430
1999	27	5%	69	39%	61,875	54,500	60,040	65,961	64,295	392
2000	27	5%	52	52%	56,753	50,000	55,000	62,900	59,399	375
2001	12	2%	38	32%	56,955	55,000	60,000	65,392	61,910	328
2002	6	1%	15	40%	55,000	48,075	55,650	63,750	61,083	338
Total	564	100%	2448							

Table 10: Year of Graduation Statistics (Geoscientists)

Year of Grad	# Reported	% of Total	# of Eligible Members	% of Eligible Members	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
1961-1969	3	9%	22	14%	108,241	NA	NA	NA	108,667	536
1970-1979	14	41%	51	27%	79,867	64,750	85,000	92,000	81,634	636
1980-1989	14	41%	48	29%	79,400	60,500	67,500	94,471	82,298	570
1990-1996	3	9%	9	33%	66,005	NA	NA	NA	70,227	629
Total	34	100%	130							

Table 11: Year of Graduation Statistics (EIT/GITs)

Year of Grad	# Reported	% of Total	# of Eligible Members	% of Eligible Members	Mean Base Salary	Lower Q	Median	Upper Q	Mean Total Income	Mean Points
1977-96	30	12%	124	24%	56,546	45,457	52,800	64,565	60,140	386
1997	7	3%	22	32%	44,986	36,500	51,000	58,750	45,214	357
1998	7	3%	37	19%	57,271	46,400	54,000	67,550	60,242	364
1999	8	3%	17	47%	48,583	42,500	44,700	57,550	51,166	360
2000	6	2%	37	16%	51,012	47,054	50,500	54,000	53,679	332
2001	24	10%	66	36%	48,216	44,875	47,500	51,492	50,948	275
2002	40	17%	87	46%	49,112	45,000	47,500	55,000	52,095	309
2003	47	19%	87	54%	45,860	42,000	46,000	53,000	48,957	289
2004	38	16%	95	40%	44,458	40,250	43,210	47,313	45,486	250
2005-2006	35	14%	79	44%	40,279	38,500	40,800	43,100	41,575	236
Total	242	100%	651							

Table 12: Average Base Salary for Post Graduate or Other Supplemental Education

Education	Respondents	Mean Base salary	Mean APEGM Points
1 Eng. Degree	538	68,227	454
Supplemental Education			
Diploma or Other	65	63,479	454
M. Eng. Or M.Sc.	143	69,390	477
2nd B.Sc. (Eng. Or Other)	25	58,510	421
Multiple Supplemental Categories	11	74,174	533
PhD	36	79,491	577
MBA	18	87,744	604
Multiple Supplemental Categories (inc. MBA)	9	92,760	743
Total	845		

Table 13: Paid Benefits

Benefit	Employer Pays	Shared Cost	Employee Pays	Not Provided	Not Sure
Life insurance	29%	44%	12%	9%	5%
Pension Plan	14%	56%	4%	23%	3%
Short Term Disability	45%	30%	6%	7%	45%
Long Term Disability	36%	35%	12%	6%	11%
Extended Health Plan	34%	43%	13%	6%	5%
Drug Plan	38%	44%	9%	7%	2%
Dental Plan	39%	49%	7%	4%	1%
RRSP	5%	27%	15%	49%	4%
Stock purchase	1%	8%	10%	75%	5%
Vehicle	9%	4%	9%	78%	2%
Liability insurance	39%	3%	3%	42%	13%
Day Care	0%	1%	6%	85%	9%
Continued Education	41%	29%	5%	18%	8%
Training	74%	10%	3%	9%	3%
APEGM dues	60%	3%	23%	13%	1%
Technical Society Dues	45%	5%	20%	22%	8%
Maternity Leave	38%	7%	4%	20%	31%
Paternity Leave	33%	7%	5%	22%	34%

Table 14: Employment Benefits

Benefit	Employer Provides	Does Not Provide or NA
Savings Plan	24%	76%
Profit Sharing	28%	72%
Productivity Incentive	18%	82%
Leave of Absence	67%	33%
Flexible Work Hours	73%	28%
Job Sharing	24%	76%

Table 15: Average Classification Rating Results

Classification Rating	All	Engineers	Geoscientists	EIT/GIT
A-Duties	90	111	118	36
B-Education	70	70	79	68
C-Experience	92	108	130	50
D-Recommendations	94	105	114	67
E-Supervision Received	68	74	86	52
F-Leadership Authority	31	38	42	12
G-Supervision Scope	8	10	10	3
H-Use of Seal	6	9	6	0
I-Job Environment	2	2	4	3
J-Absence from Base of Operations	2	2	4	2
K- Accident and Health Hazards	4	4	7	4
Total	468	534	599	297

Table 16: Mean Base Salary for Different APEGM Point Ranges by Gender (Males)

Mean Base Salary	APEGM Point Ranges	# of Participants
$40,763	199 or Less	9
$45,266	200-299	132
$57,275	300-399	129
$66,510	400-499	140
$78,717	500-599	129
$94,142	600+	197

Table 17: Mean Base Salary for Different APEGM Point Ranges by Gender (Females)

Mean Base Salary	APEGM Point Ranges	# of Participants
$38,067	199 or Less	5
$48,571	200-299	33
$54,405	300-399	27
$67,307	400-499	17
$72,474	500-599	15
$88,203	600+	6

Table 18: Mean Base Salary and APEGM Point Ranges by Size of Employer

Size	Average Points	Average Base Salary	# of Respondents	% of Respondents
2-20 Employees	442	$70,753	88	10.4%
21-100 Employees	473	$68,761	139	16.4%
101-500 Employees	475	$68,708	182	21.5%
500+ Employees	463	$68,518	430	50.9%
Self Employed	492	$66,117	6	0.7%
Total			845	100.0%

3 List of Figures

Figure 1: Response By Employment Sector

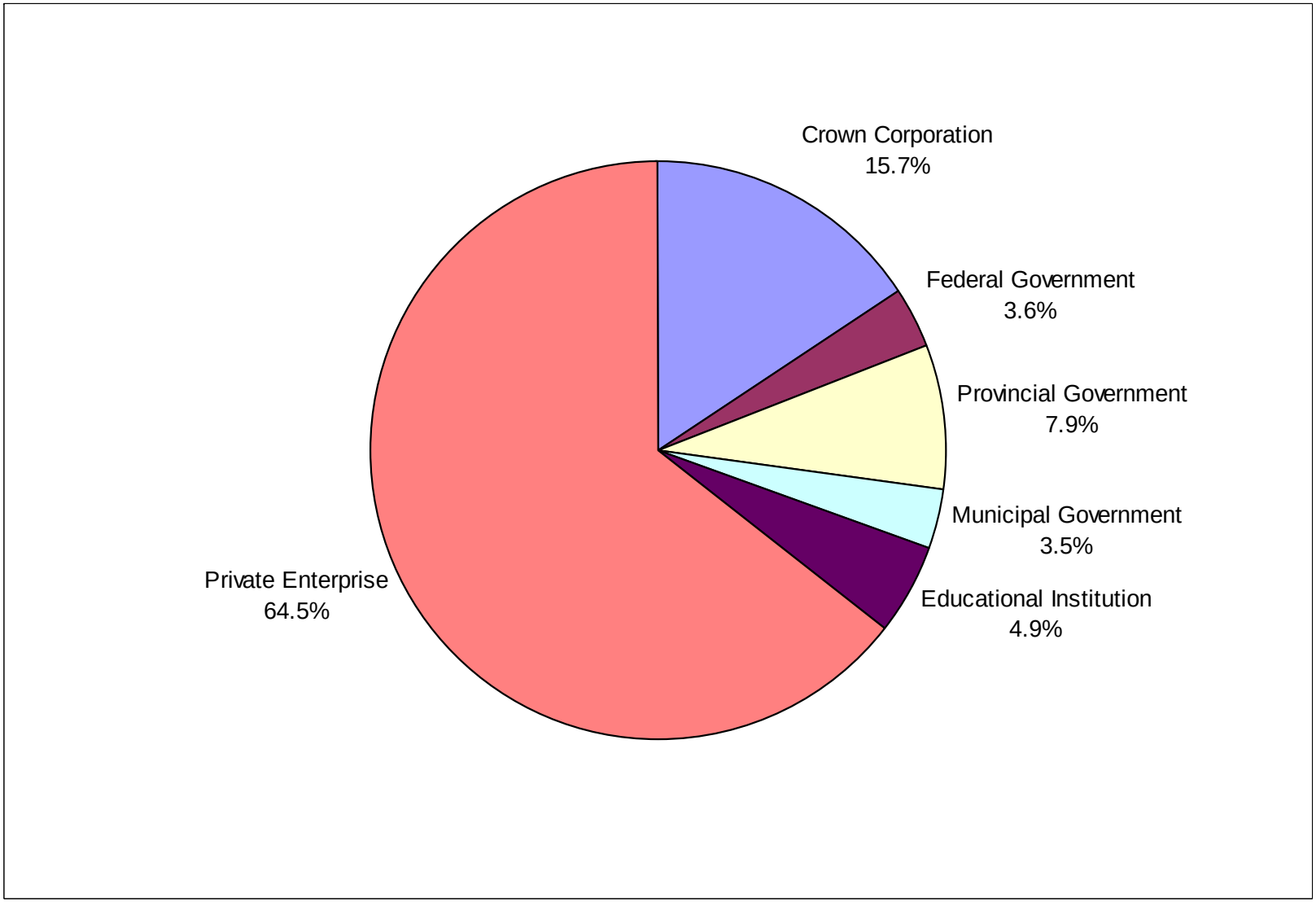


Figure 2: Responses By Discipline

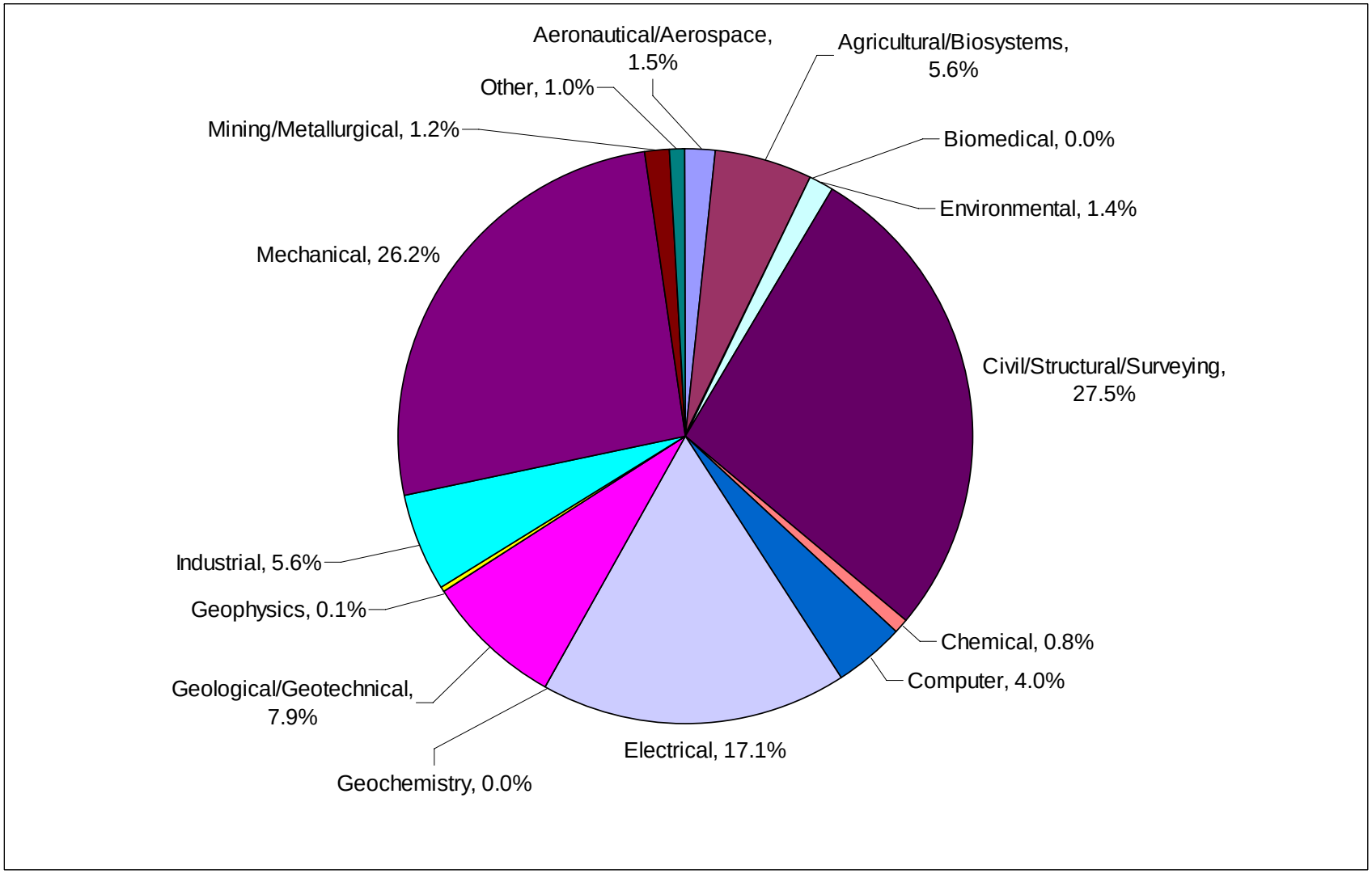


Figure 3: % Base Salary Increase for Public and Private Sectors

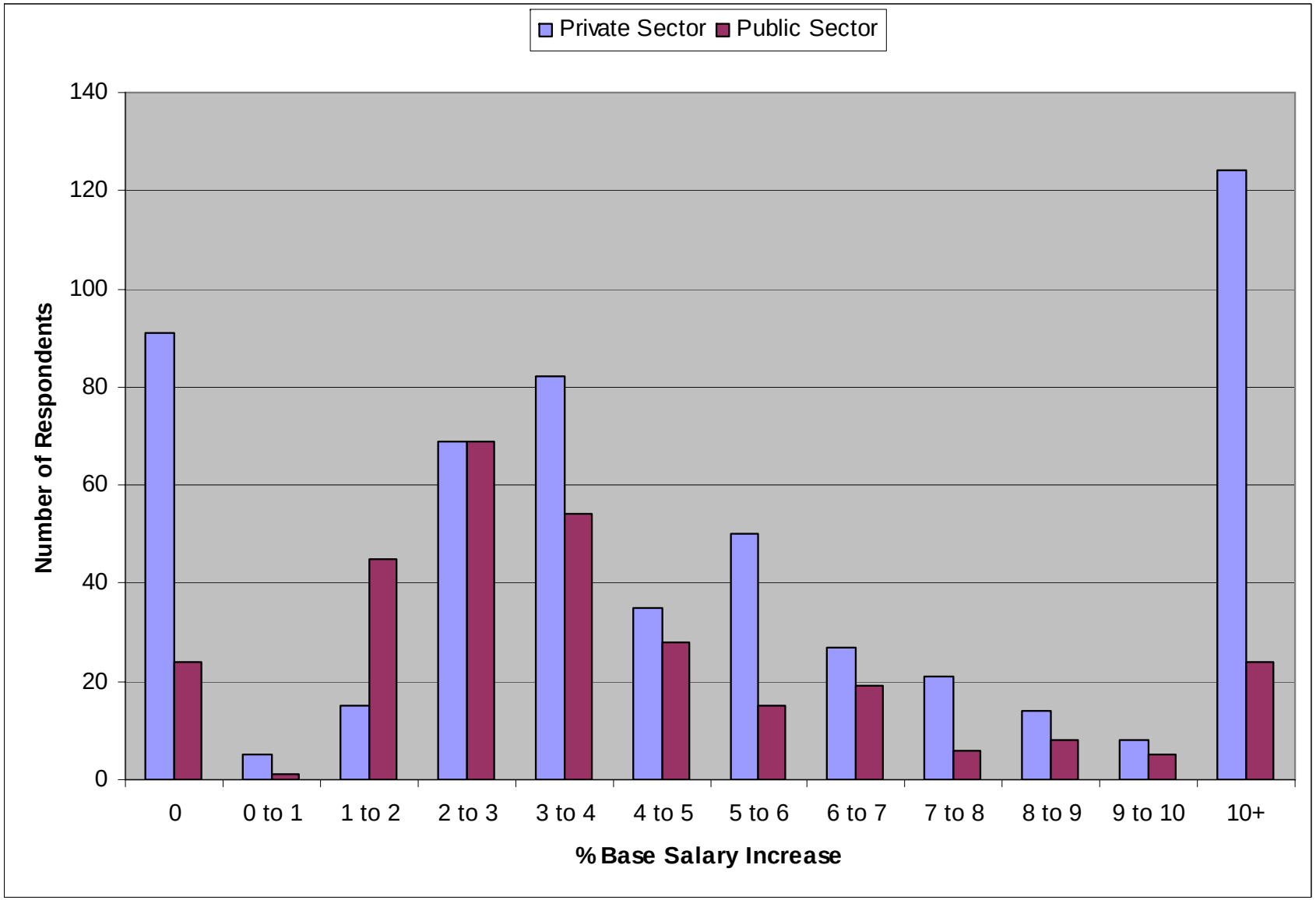


Figure 4: % Base Salary Increase for Public and Private Sectors (Engineers)

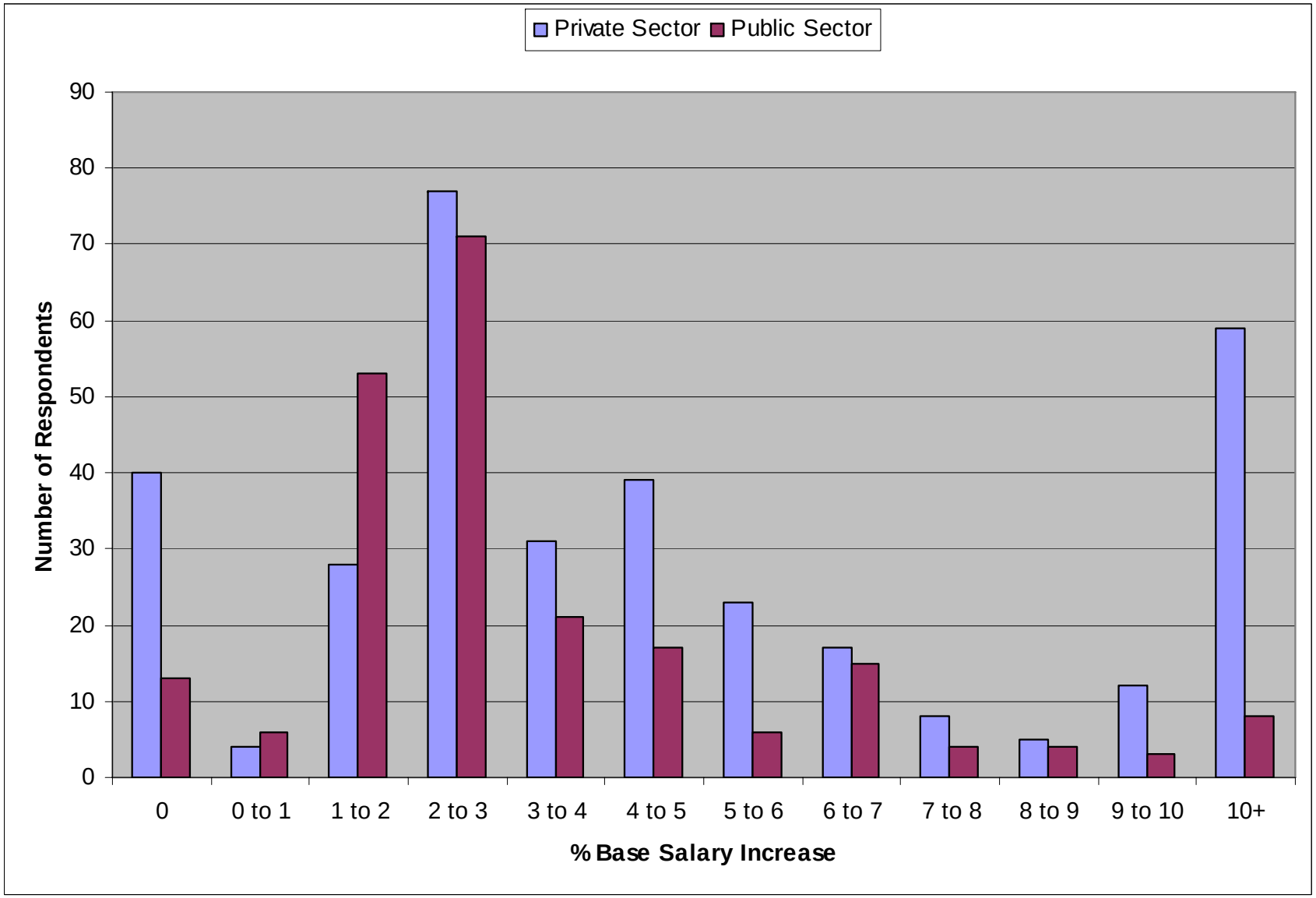


Figure 5: % Base Salary Increase for Public and Private Sectors (Geoscientists)

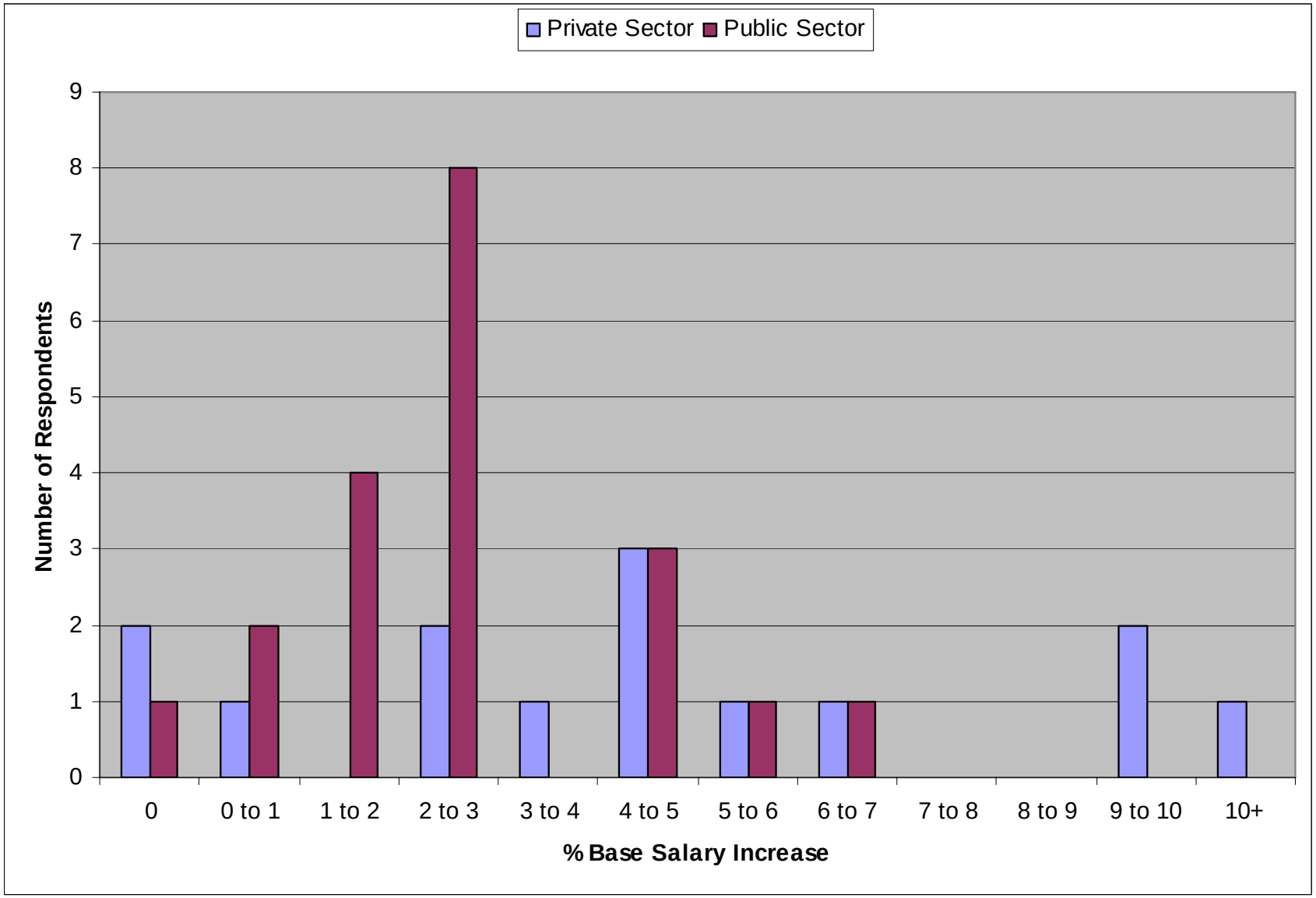


Figure 6: % Base Salary Increase for Public and Private Sectors (EIT/GITs)

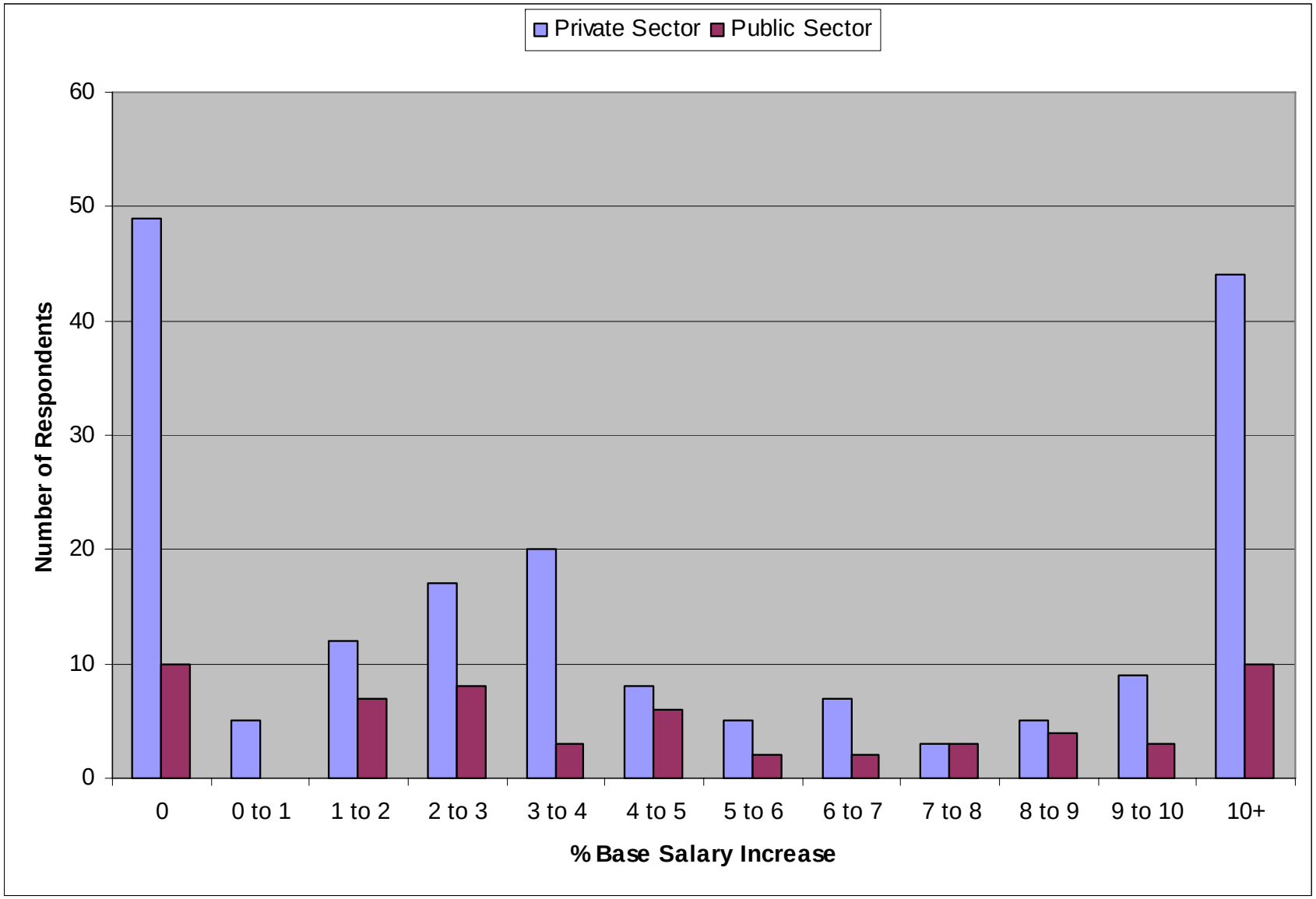


Figure 7: Average Base Salary and Total Salary (Bonus, Overtime, Commissions) by Discipline

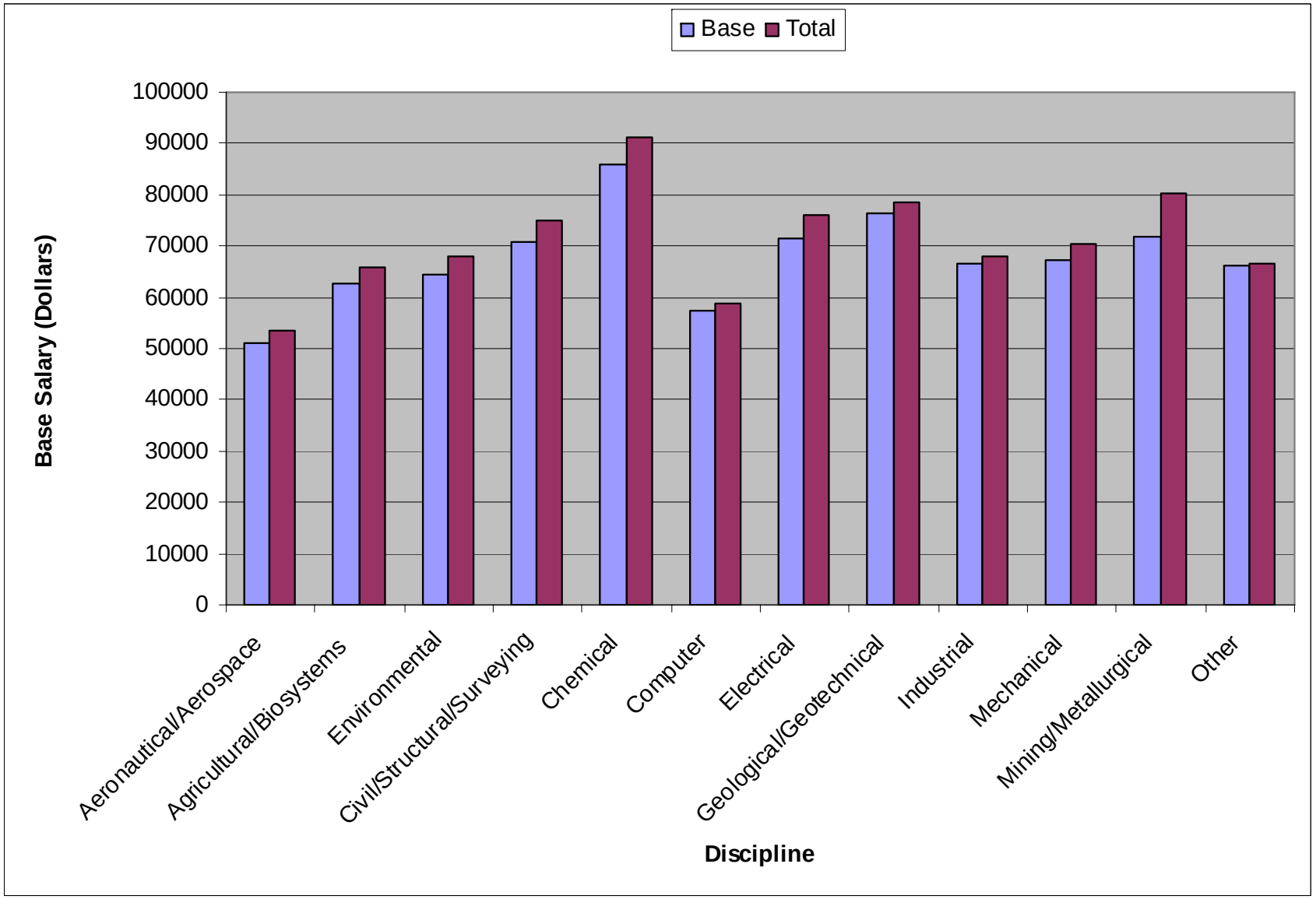


Figure 8: Overall Satisfaction (All, Engineers, Geoscientists, EIT/GITs)

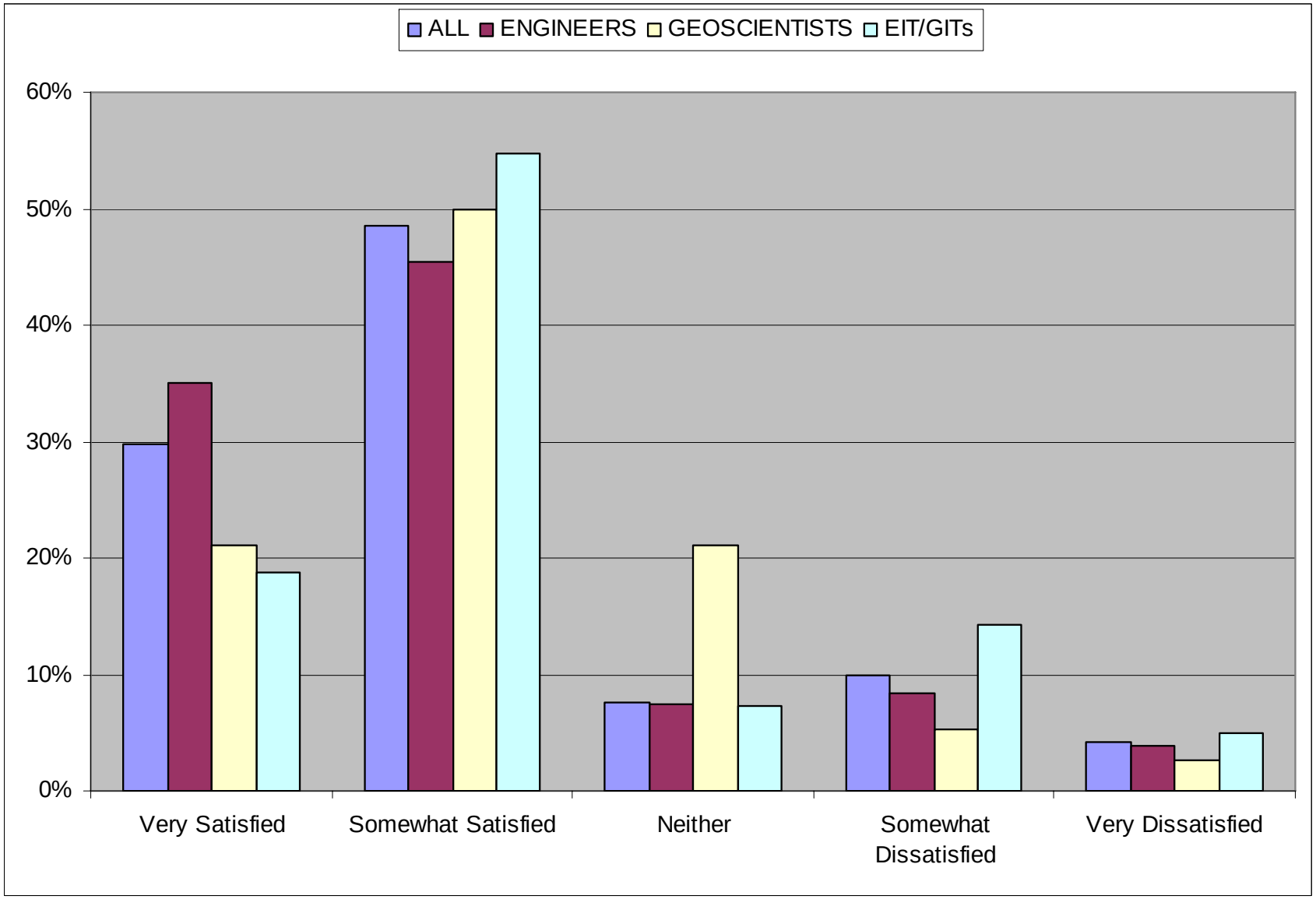


Figure 9: Mean Base Salary for Different APEGM Point Ranges by Gender:

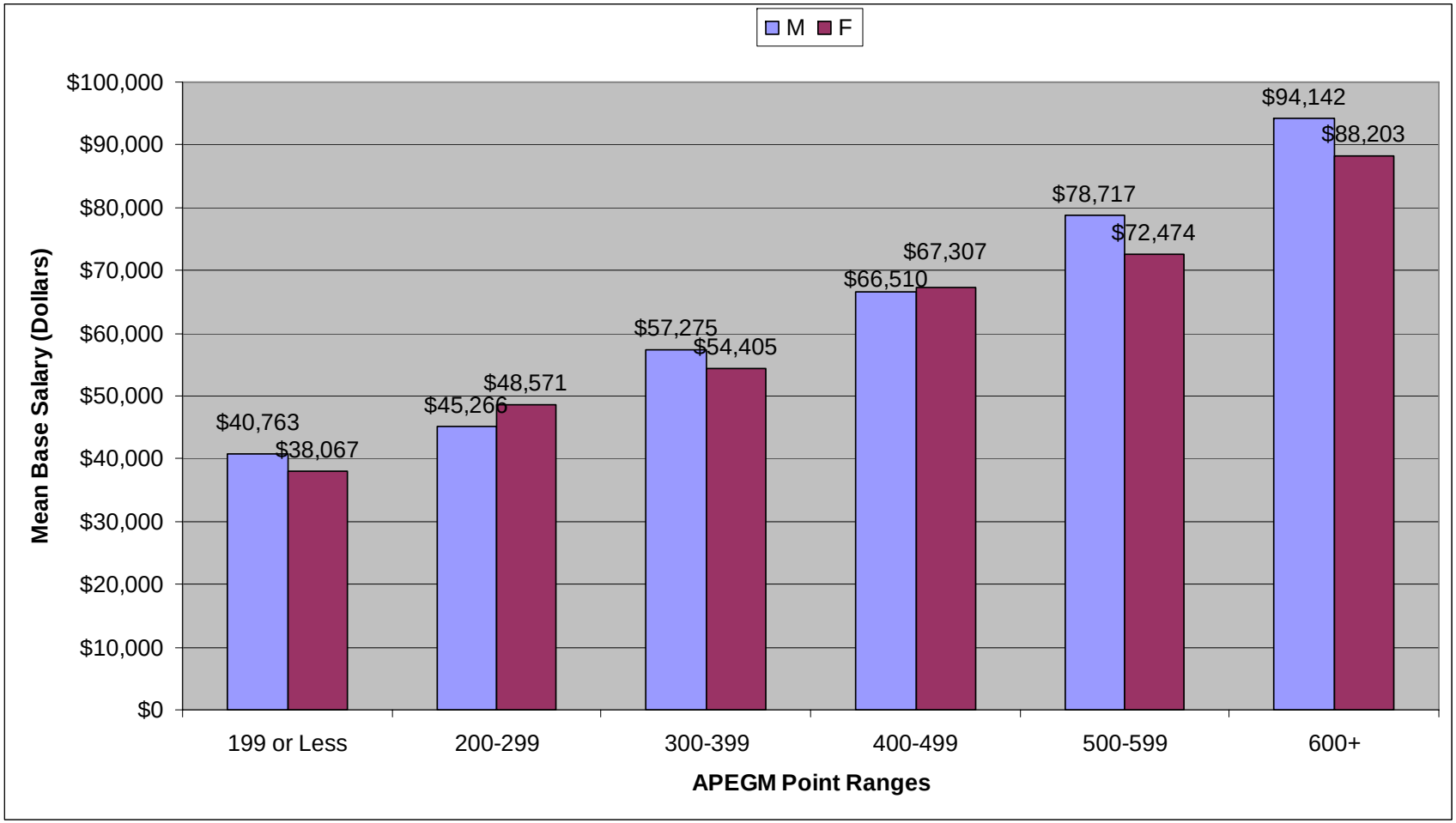


Figure 10: Compensation for Overtime

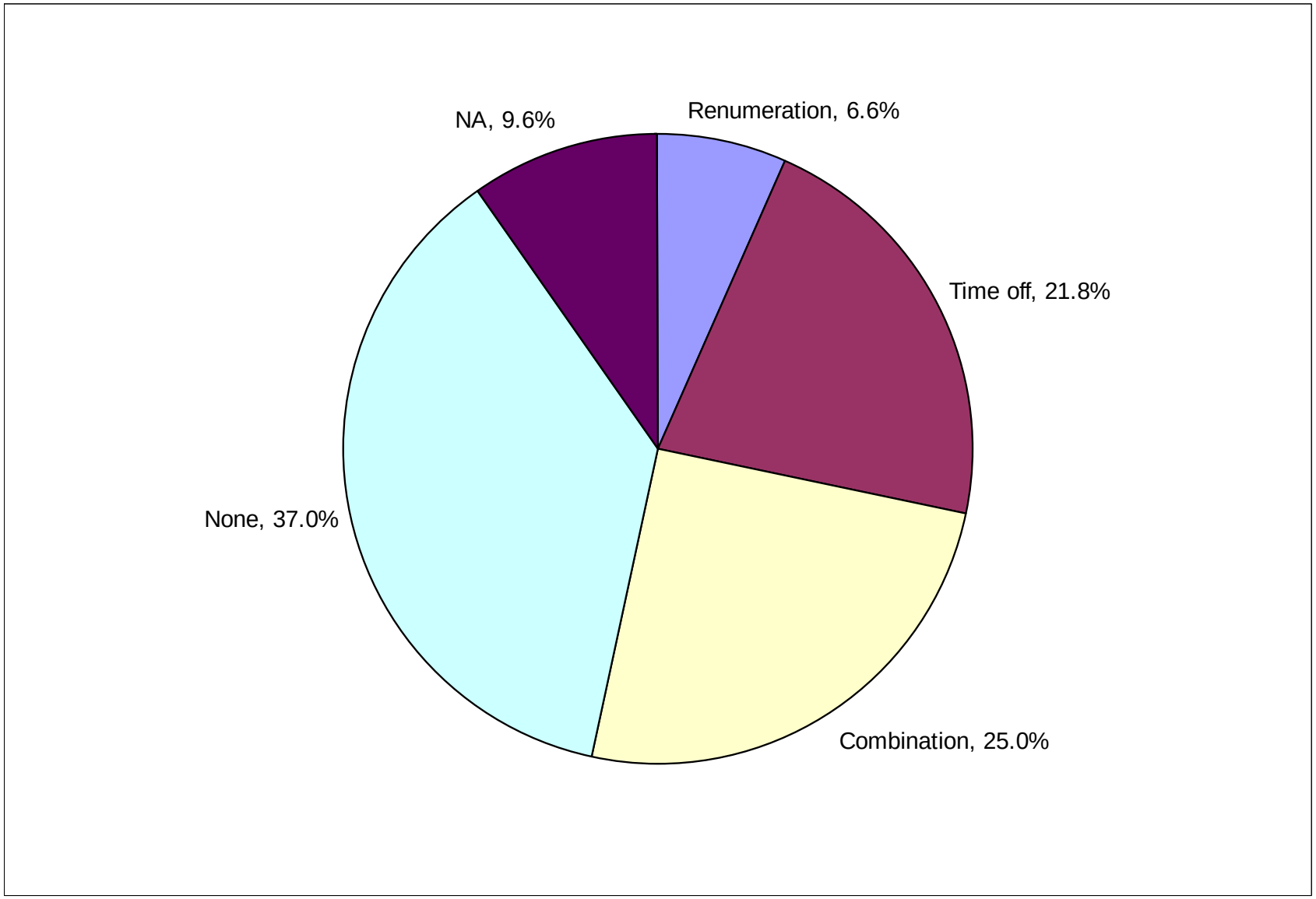


Figure 11: Size of Organization

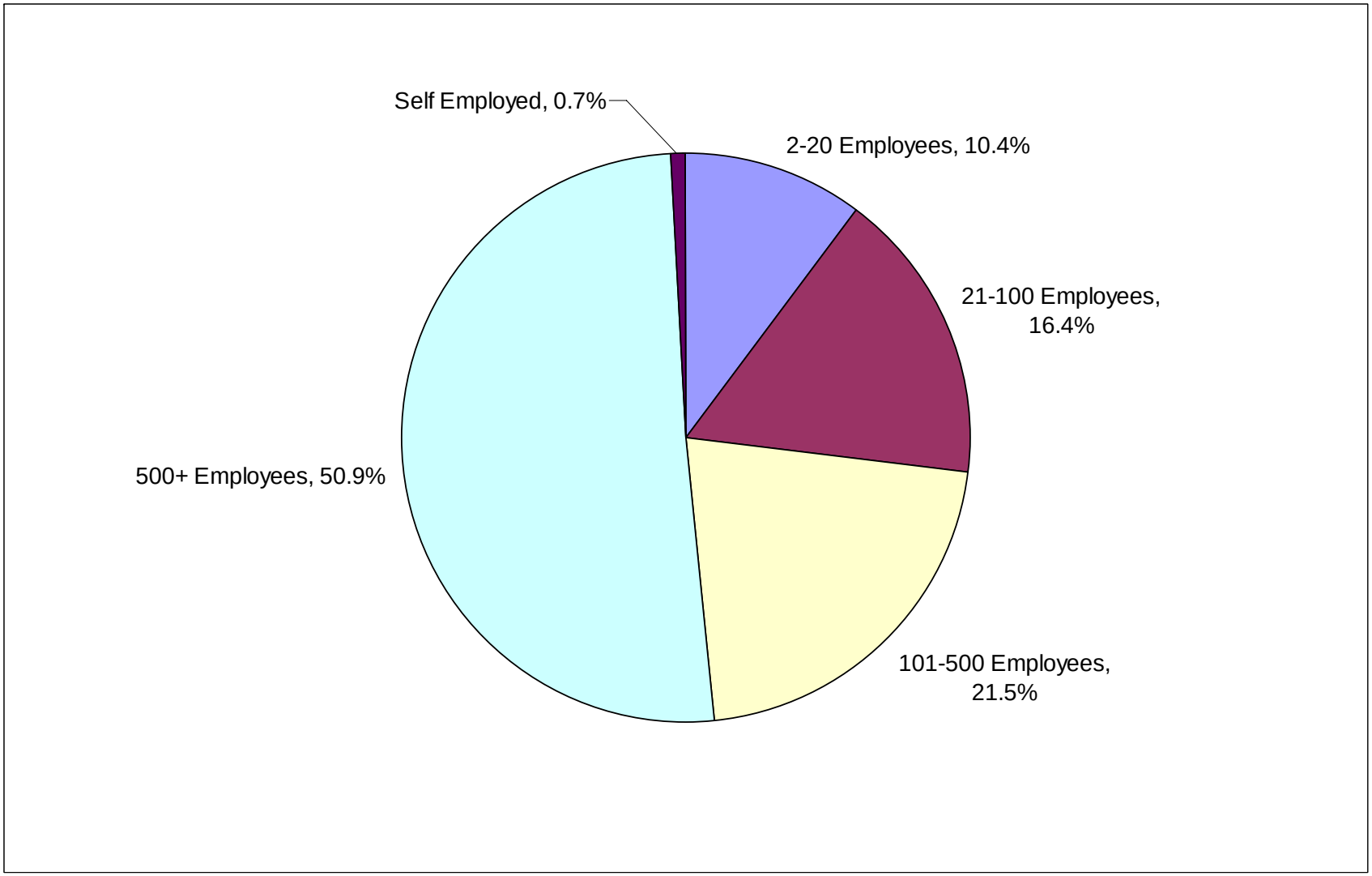


Figure 12: Principal Work Location

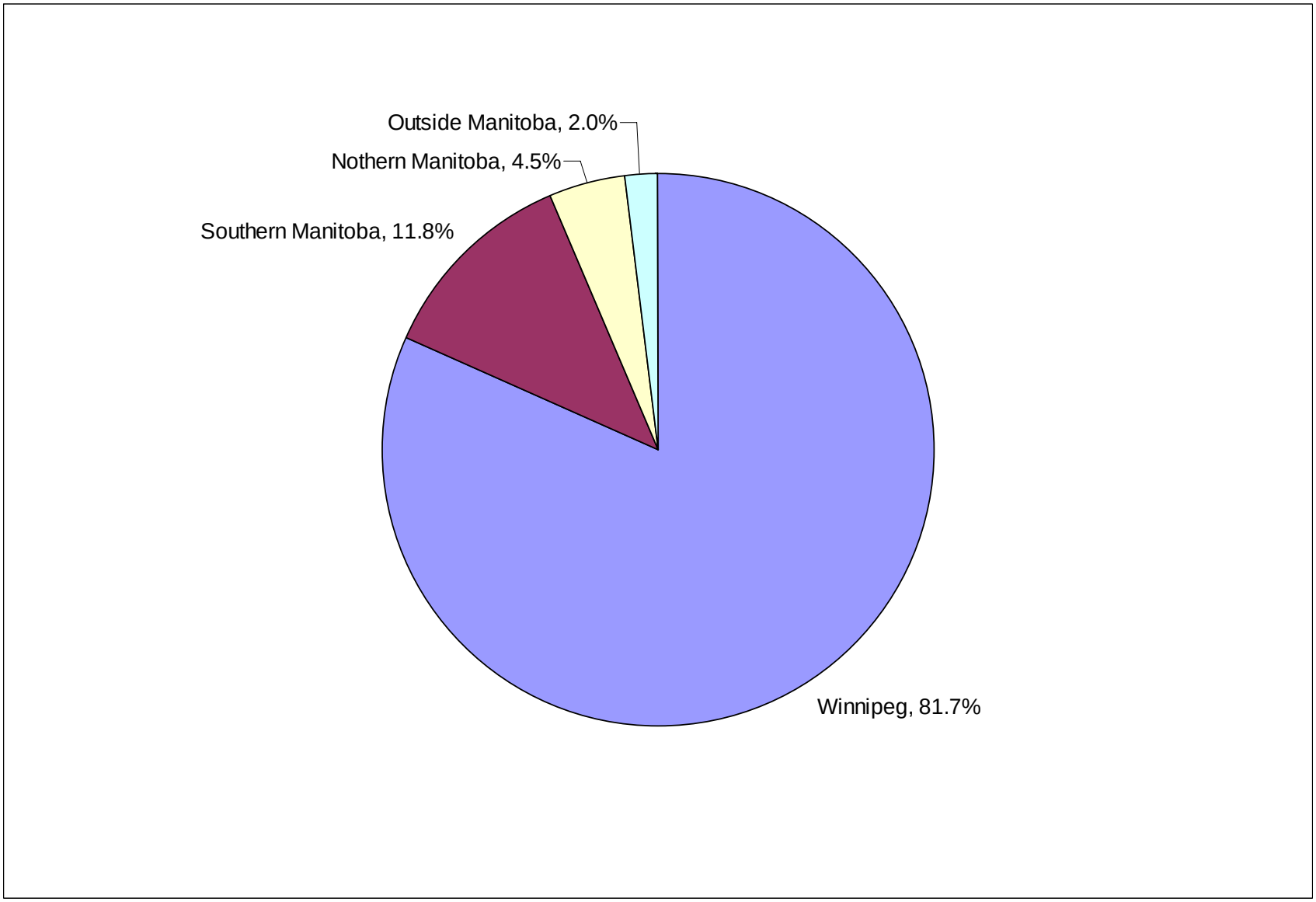


Figure 13: Change of Employment

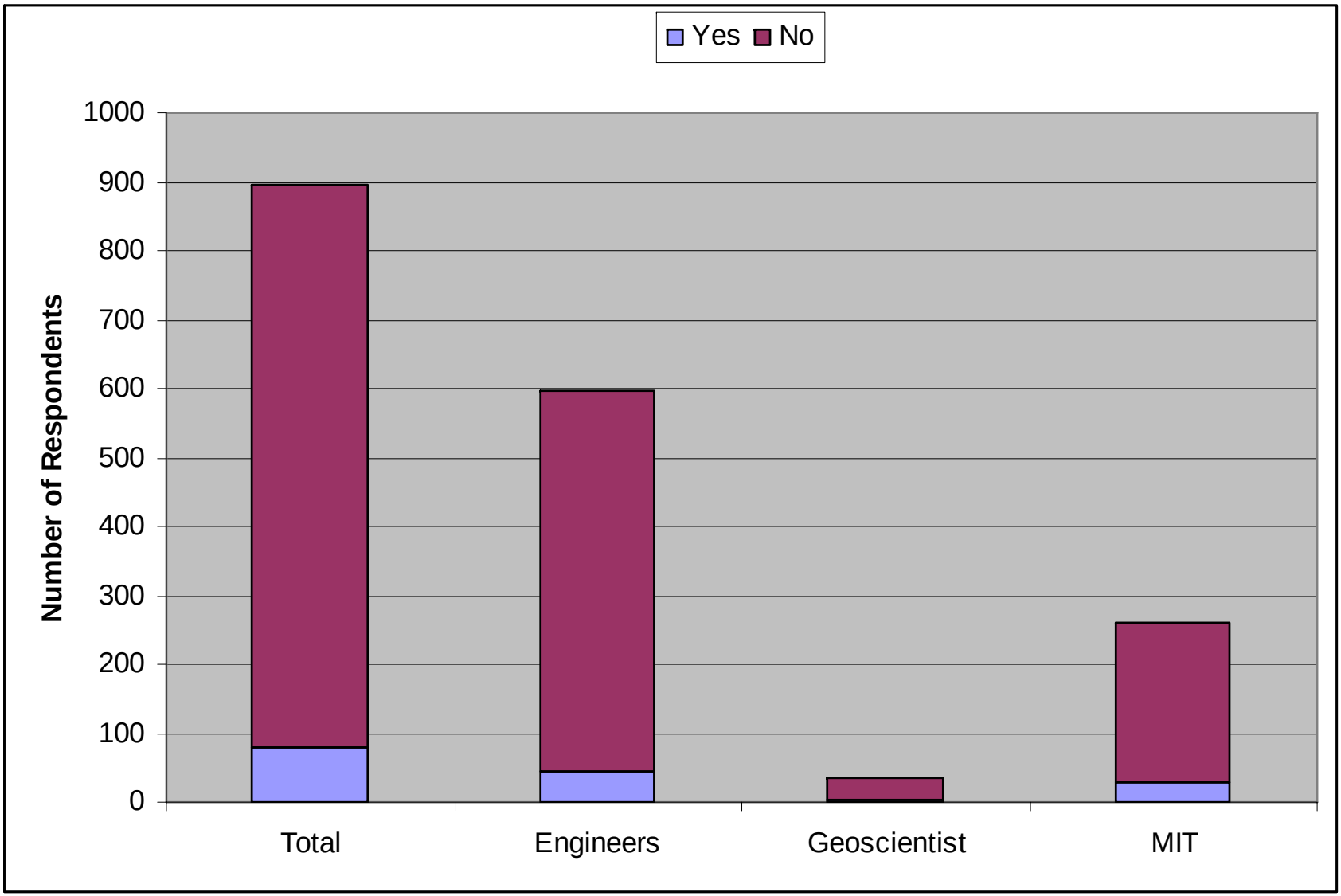
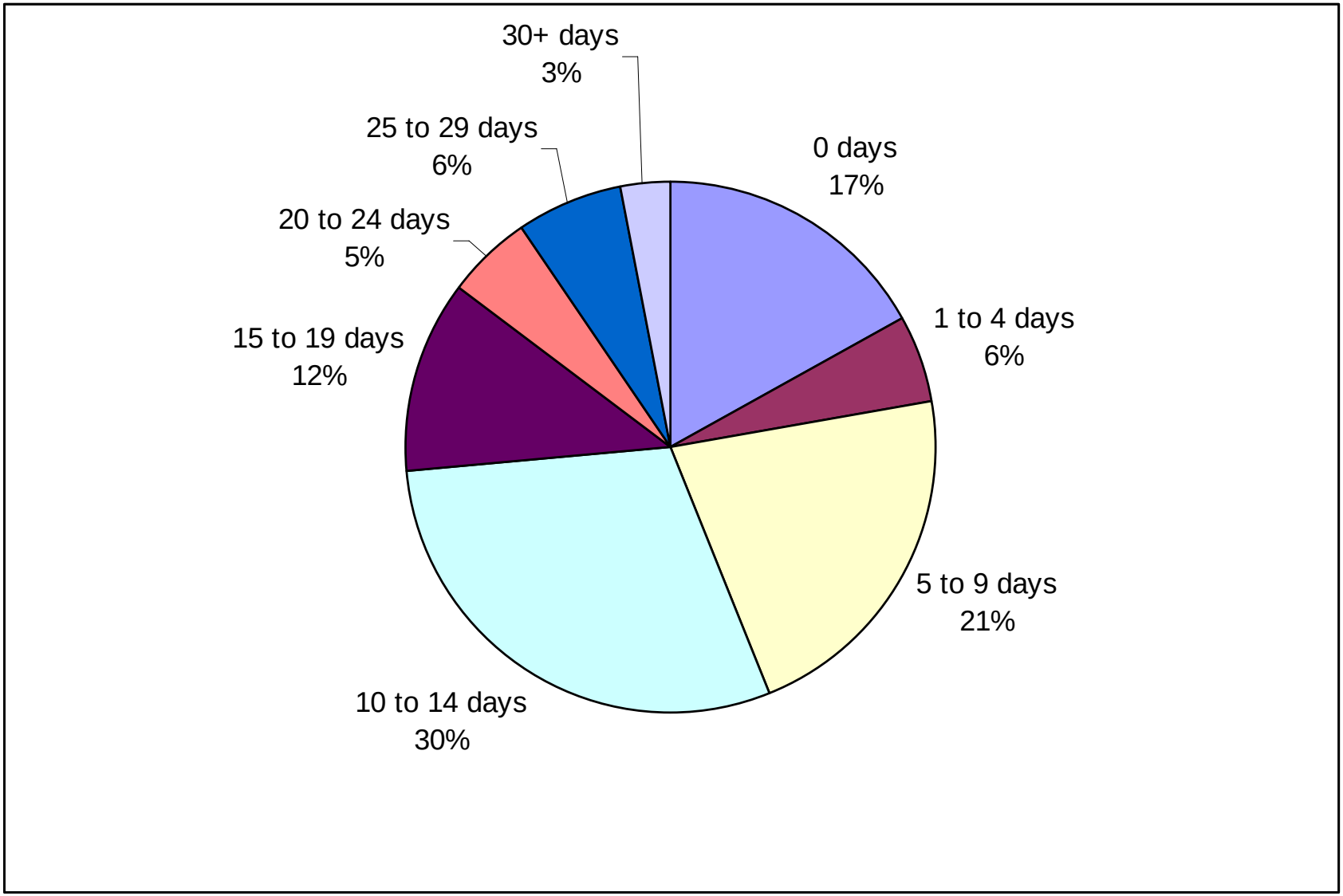


Figure 14: Sick Time – Entitlement



4 Comments in Detail

4.1 Survey Format (Suggested Changes)

Another factor to consider may be opportunity to interact with Engineering colleagues. This topic has been recently extensively discussed among my colleagues. I feel that it is important to have opportunities to interact with Engineering colleagues for improved ongoing training, development, communication, motivation (i.e. feedback), and improved job satisfaction.

---

the weight of point on education is far too high.

Weight on hazard and away from way way too low. consider flipping weights

---

I am happy with the benefits I recieve and believe that my wage is fair for work within Manitoba. However, I have recently been put on a lengthy work term in Alberta and am recieving the same wage as I would be in Winnipeg. The wage is fair in Manitoba where expenses are relatively cheaper but cannot even be compared to the wages fellow engineers employed in Alberta are receiving. Thus, I believe that compensation for travel should be an area worth highlighting in the survey.

Your questions really do not speak to the mgmt type of work I do. Mo mention really goes towards the selection contractors and consultant, including the contracting and RFP work and managing budgets

---

I really must protest the differentiation between 'Geochemistry' and 'Geology' in the first set of questions. As a geologist/geoscientist, I work with and use geochemistry!!

Benefits options don't adequately suite self-employed as there are some benefits provided by clients and some by the self-employed individuals business, but there is no way to distinguish.

e.g. stock options provided by client, insurances paid for by consulting business - do you want them all down regardless of who pays for it?

Why don't you make reference to geoscientists in workplace questions instead of just engineeers?

Sick Leave is actually 200 days but could not insert it.

Please add a 'Not Sure' option to the Sick Day Entitlement question.

The job responsibilities section might provide the opportunity to select more than one responsibility using a % of time diferentiation. For example
Administration 50%
Teaching 25%
Research 25%

I would like to point out an issue I have with the previous year's (2005) Survey. The results give a best fit curve for point vs. salary. The curve in all years previous to 2005 seems to fit the data points at various point levels. In 2005 there appeared be be some error especailly towards the lower end of the spectrum.

I feel that the Industry sector 'consulting' classification is far to broad. In fact, our firm does not even use the APEGM salary survey because the 'consulting' sector encompasses civil, mechanical, electrical, and geotechnical consulting as well as many others. Salaries range dramatically within these fields, and there are hundreds of engineers within the 'consulting' sector. I would appreciate it, and our company would appreciate it if you broke the 'consulting' sector into 'civil engineering consulting', 'mechanical engineering consulting', 'electrical engineering consulting', 'geotechnical engineering consulting' etc. I believe that each consultant category will have at least as many respondents at the 'pharmaceutical' sector, which is currently listed. It would also make the survey more relevant to our company. Furthermore, it would enable consultants to compare to other university graduates within their discipline. For example, I would like to know what other civil engineers are earning within the consultant field. It only makes sense to me to divide the consultant field along the lines of our respective education areas.

Do we really need a Salary Survey EVERY year? Maybe we do, but in my opinion every other year would be fine.

I guess my APEGM dues need to go somewhere.

Survey took too long to complete. Needs to be set-up differently to expedite.
I could not specify my sick leave allowance correctly using the format of days per year.

Perhaps to include a 'Not Sure' option for items that do not have one. I cannot be sure of certain employee benefits and do not want to skew results by unknowingly answering a question incorrectly.

Since I took time to enter the survey results, it would be nice to share my own option of these results with me. If I can get a copy of my survey results on-line with my given user ID and password for my own inventory. It will give me a good idea and summary about my work benefits, career progression and work environment.

Supervision Evaluation (Guide F) remains biased towards a large engineering corporation such as Manitoba Hydro. The definitions need to be broadened out for a non-corporate arrangement such as a consulting engineer working in a multi-firm team environment that nonetheless oversees a large group of people as a lead discipline engineer.

There is a problem w.r.t. the survey asks about salary at Dec.31,2005 whereas the summary sheet indicates Dec.31, 2004

Have a look at the apegga salary survey results. two graphs are good. one is compensation vs grad year and other shows compensation vs grad year vs responsabilty.

Area of work should also include typical prairie sales territory of Manitoba, Saskatchewan and NW Ontario.

It would be nice to see what we entered last year while filling in this year's survey.

There should also be a disclaimer when releasing the survey results that they are based on participating members only and should NOT represent a guide for what employers should pay their engineers/geoscientists.

If the survey is based on the last completed calender year only, the survey should be done at the end of December or the beginning of January to ensure more timely and relevant information. This is especially true for individuals who get their cost of living increases in January.
It's cumbersome to have to complete the entire survey prior to revising any previous entries.

The salary data entry requires two fields to be entered - one for thousands and one for hundreds of dollars. Could there be a single data entry field for slarary?

Other Education--Entry made in Box for 2nd Degree was 'Science'. Print-out of entry is Diploma, which is incorrect, but cannot be changed by key entry.

This questionaire is not suitable for selfemployed consulting geoscientists (geologists).

The survey forced certain answers:

i) Sick leave- the employer gives a total of 360 days in one's career- cannot be broken down by year. However, in order to proceed with the survey, I had to put an arbitrary answer.

ii) I am an academic, and my employer permits me to do a limited amount of professional consulting limited to 0.5 days per workweek. There was no place to add additional renumeration from such activity.

You should have a 'back' button to change responses if required.

4.2 Survey Format (Positive)

Good thing you made this a lot quicker. I did not fill out these surveys in the past as theye were far too time consuming

Survey is well structured and easy to follow.

I've noticed some subtle improvements from last year - keep up the good work.

This survey has improved a bit over last year. It took under ten minutes to complete. Keep-up with your good work.

The salary was easy to complete. I look forward to reading the results

This is probably one of the best things APEGM has going! I always look forward to the salary survey with eagar anticipation each year. And it was easy like Sunday morning to complete! One comment about the results though: BRING BACK THE SCATTER PLOT... please. I made a lot of money last year and I want to see my dot!!

faster internet process

Great Survey! Gets easier every year. Keep up the good work.

Not bad so far, let's see if the review features work....

4.3 General Comments

no comments

It is important to let us know what is being done with the data/information collected

No comment.

none, thanks

I found that most of the questions did not have much of a bearing on the type of work I am involved in as a field geoscientist

Have noticed some changes in staff at APEGM. Hopefully will now be focused on real issues for engineering authority (like with the architects etc) and not on who calls themselves an Engineer. As long as someone is not representing themselves as a professional engineer to the public I don't think it's worth APEGM's effort (we come across as irrelivant, turf protecting and self serving).

Thank you

none

The increasing costs of living and housing in Manitoba especially in Winnipeg demand a significant increase in salaries.

None.

Looking forward to know the results.

Could you send this information to HR departments? They don't seem to believe us when we quote the APEGM salary data.

Reduce professional fees.

I would be interested in the association polling employers to determine the types of skill sets that are seeking.

It could serve to focas future training resources.

It's done!

Great improvements and flow to this years survery. Looking forward to a comprehensive and accurate representation of the industry guidelines. I would like to see a Manitoba based Employer submitted survey to compare with Employee surveys, as I have seen the two surveys differ slightly on interpretation of questions and results.

Make the results of the survey readily available to employers of engineers, so they can base their pay scales off of actual industry standard wages.

Please send electronic and hard copies of the survey.

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no additional comments

4.4 Engineering & Geoscience Professions

I would appriciate being paid time and a half for my overtime as anyone should for working above and beyond what should be expected of a single individual. To the best of my knowledge the Nygard case produced some leginslative basis for this. And I believe it should be a basic labour law. We engineers find ways of keeping ourselves down and under valuing our work. It is time to stand up and move forward.

The salaries paid to practicing engineers is very low when compared with other practicing professionals of other disciplines. The difficulty in obtaining the degree and level of responsibility are not commiserate with the scale of compensation. To remain a practicing engineer is not desirable given the low pay when compared to other options available to professionals in society (management stream, health care, law). A second degree in any other discipline would likely be more financially rewarding.

The biggest cause of the low compensation is working engineers themselves, as well as APEGM. Low-ball bidding on project work, not billing according to level of professional status as doctors and lawyers do, the association not assigning minimum wages to EITs all perpetuate the inequity.

I will be pursuing a second degree in business to achieve a higher level of salary compensation.

Someone should investigate the relative salary of engineers versus other professionals with respect to time. At what point in history did we become less valuable than a plumber?

It would seem that an engineer's worth is based not on technical ability or experience, but supervisory responsibility.

Some action must be taken to enhance the value of the profession not just the 'image'. What about supply side managment?

I think it is clear the ship is sinking and where the water is coming in. Are the results of the study to be just shelved or will action be taken? Perhaps a meeting to discuss this issue is in order!

New grads are led to believe by engineering managers hiring in consulting companies that they are worthless becaue they are fresh out of school. Times are different and there is no lack of jobs in the engineering industry. Base salaries have barely risen in the past 5 years for EITs and it sickens me. At countless meetings people say we need to do more to attract young people, yet these are the same people that aren't willing to pay for the bright young minds they say they want to keep. When a civil EIT can only get $38K in MB it is only natural that he/she would leave to make $60K in Alberta. News flash boys and girls, young people are our greatest resource and its time to put our money where are mouths are!

Engineers are the unappreciated work-horses of the modern business environment.

It is my belief that this survey is simply a tool for the employer to gauge next years annual increase in salaries. Some people in our office have tried to negotiate their salary based on their duties performed with the duties defined by the company for each level of engineer. It was found that this employee is entitled to a reclassification. However, nothing has come of it and nothing will likely ever come of it. We should simply set standard hourly rates.

Salaries for Professional Engineers in Manitoba continue to lag other provinces, whereas the cost of living continues to rapidly increase in Manitoba. There is marginal difference, if any, now in the cost of living among Canadian provinces.

Opportunities in Manitoba continue to remain slim, and it can be difficult to regain Professional Engineering employment after being laid-off or downsized. Professional Engineering opportunities and salaries continue to remain much better in Alberta, Ontario, and British Columbia. Overall, if a Winnipeg company can hire an Engineer at a low 'bottom-feeder' salary, they will hire him or her simply based on a low salary, regardless of the education, skills and value of professional services they bring.

Nothing has changed in the last twenty years, since leaving the province. Manitoba will continue to lose qualified professionals to other provinces.

From my limited time as a P. Eng. in Winnipeg (recent graduate), I have been finding that Engineers are NOT typically paid sufficiently for the resposibilties that they take and the hours of work they put in. I feel that this may be due to a lack of public relations regarding the feild of engineering, P. Eng.'s and the resulting corporate view.

I think that with the amount of work that there currently is in Manitoba, and with the limited number of qualified Professionals around that can do that work, the overall pay of Professional Engineers in the Project Management field should be substantially higher.

Project Management is often seen as a non-demanding, non-specialized role in the Engineering field, which is completely wrong. It is actually a very dynamic and demanding part of the Engineering Profession, shich requires a lot of knowledge of various disciplines within a descipline.

Thank you.

The survey doesn't appear to provide any input, or solicit opinion, concerning the respondent's impression of the Engineering Profession within the framework of the overall marketplace.

How does one express concern over the 'second rate' treatment that Professional Engineer's have allowed themselves to experience as Professionals? My experience bears-out that Engineering is perceived by those who purchase our services as nothing more than a glorified construction trade. Why has this happened? How can APEGM rectify this condition? Surely one does not call for tenders by Doctor's performing surgeries?

APEGM really needs to establish a pay-scale for engineers within MB, so that society/public/employers treat us fairly and respectfully. APEGM really needs to establish 'hours of work allowable within a week' guidelines to protect engineers from being over-worked by employers.

Only 10 yrs into my professional career I was the last among my university peers who went into consulting. I too, have now left and will NEVER go back. The local consulting community has nickel and dimed itself into shame. Quality of design sacrificed in the name of 'getting the job' at a low-ball fee. Consulting engineering work in Manitoba is one notch above a fast food job & poorly compensated. Small wonder engineers are leaving the industry, leaving the province.

Engineers do not get paid enough, especially in consulting, where some employers do not properly compensate engineers for excessive overtime requirements. Apegm should encourage employers to try and minimize overtime, and when it is required, pay for overtime, or better still create more jobs!

I would like some more focus on the Manufacturing sector, as a mechanical engineer you do not see much in the ways of pooling all the Process/Manufacturing groups together by the association. Our stamps and association are not supposed to just bind the design, geo and civils engineers together.

If then being registered is just for new job applications for guys in the manufacturing side, why have it? The CME is the only group working with us, Lean, Six Sigma, helping grow the manufacturing sector in our Province, because believe me, we need it!

In this time of much work, our company is concerned over the lack of intermediate to senior engineers available for hire. It would appear that it is indeed an employee's market at the moment, and salaries of engineers will no doubt have to rise to compensate i.e. supply and demand.

4.5 Personal Results

Though academically qualified since 1981 and taken major responsibilities in the past I am currently an EIT with a lessor level of responsibilities and working under the supervision of a P. Eng., responsible for my works.

I switched from a engineer role to management role half way through the year. Tried to answer the questions as best I could.

Thanks!

MY CURRENT SALARY LEVEL IS APPROXIMATELY $10,000 TO $12,000 BELOW THE AVERAGE FOR MY LEVEL OF EXPERIENCE (6 YEARS RELATED EXPERIENCE), A MASTERS DEGREE IN A RELATED FIELD AND P.ENG. DESIGNATION.

I am a post doctor fellow.

The present position is a 2nd career taken following the retirement from a major corporation after a long tenure as an engineering manager.

The information provided in this survey gives a view of my job activities for the year of 2005. Some job activities and location have changed for 2006 and will be reflected in next year survey.

I have two jobs one with occasional pay and the other part time not related to engineering

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It is difficult to apply much of the criteria for my position in an educational environment, but I did the best I could.

I am hoping APEGM make more efforts towards graduates from outside. Make easier for them to get registered. My impression is that APEGM is just making money from these graduates, not trying to make them be accepted here. I give this comment because it will affect the salary a lot of this group of people.

I feel that Manitoba is in the bottom quartile of Canada, and I'm in the bottom quartile of Manitoba. And they wonder why engineers seem to be leaving the province for other areas?

I have noticed decisions from Management are more and more not supporting their engineers (the work environment is deteriorating). The survey reflects working conditions (heat, danger, etc) but not 'attitude' working conditions within an office.

This being my first survey was ackward, I work primarily with contractors so I don't deal with or have subordinates. The survey limited me to answer WRT Dec 2005, I had only a short time employed. I feel my benefits are now more proportional to my expertise, so I look forward to the next survey.

Could not reply to sick leave question correctly. Although my company provides sick leave there is no annual entitlement. Supervisor may grant sick leave up to 4 consecutive days and then may place employee on short term disbility program (paid by company) for longer periods up to 6 months if have at least 1 year seniority. There is no accumulation of sick days or maximum number of days per year allowed sick with pay.

This survey is not very applicable to me. I am currently helping in my spouse's consulting firm. The amount of work and pay depends on the amount of contracts we got.

This was difficult to complete as a grad student. Descriptions were irrelevant.

This questionaire does not fit with academia

My position is in a highly seasonal and cyclical industry with associated peaks and valleys of level of activity.