

Calgary Economic Development

INDUSTRY REPORT: ADMINISTRATION & SUPPORT AND WASTE MANAGEMENT & REMEDIATION SERVICES

January 2008

Disclaimer:

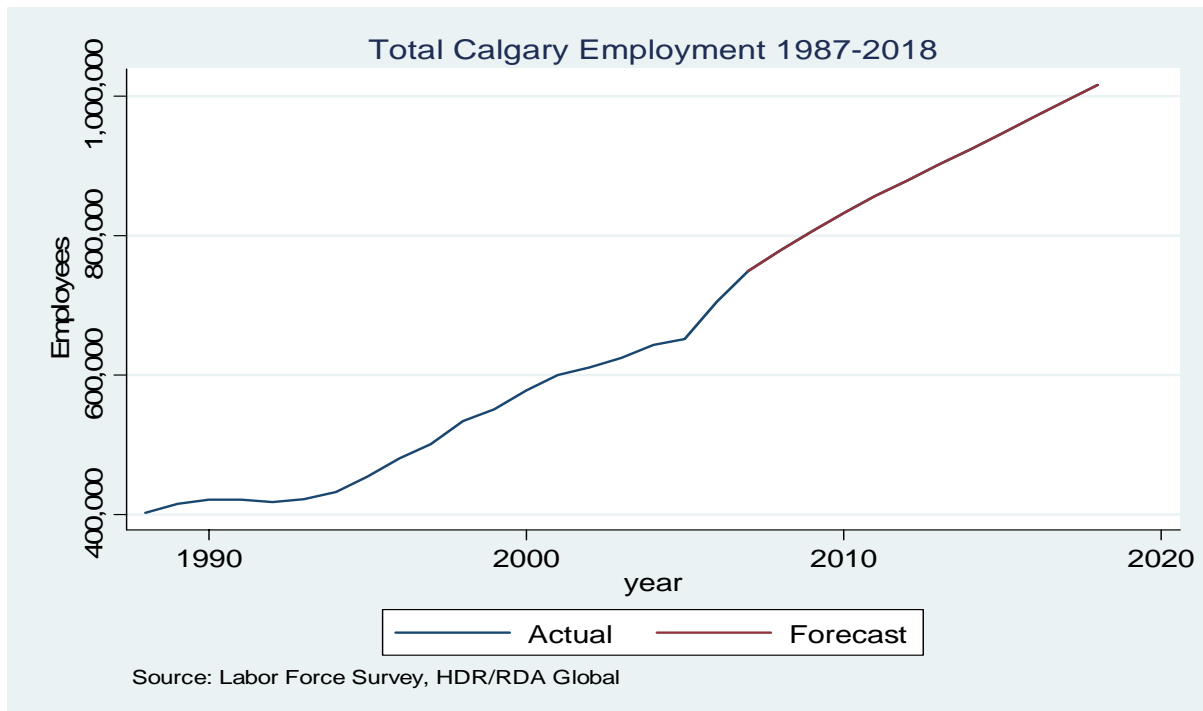
Calgary Economic Development provides this information in good faith. However, the aforementioned organization makes no representation, warranty or condition, statutory express or implied, takes no responsibility for any errors and omissions which may be contained herein and accepts no liability for any loss arising from any use or reliance on this report.

Funding provided by:



CALGARY LABOR MARKET

Figure 1: Total Calgary Employment Forecast (All Industries)



The Calgary economy has seen tremendous growth in labour demand over the previous decade with employment growth reaching an all-time high of 8.1%¹ in 2006. The recent strong growth in the Calgary economy has been driven by a combination of economic factors spurring growth in specific sectors and generally throughout the Calgary economy. Energy prices are a significant driver with West Texas Intermediate oil price rising 17%² in 2006. Investment levels in major construction projects have risen significantly compared to historical levels. Housing starts have risen from 13,700³ starts in 2005 to 17,000 starts in 2006, an increase of 25%. Calgary GDP grew at 7.7% in 2006.

Recent increases in employment levels have been highest in sectors of the Calgary economy which are related to energy, in particular in the professional services sector. However, overall growth has been relatively balanced among industries with significant growth in most sectors of the economy.

As Figure 1 shows, labour demand in the Calgary Economic Region is expected to continue to grow at a healthy rate throughout the forecast, albeit at a lower, more sustainable level. The overall growth in employment in Calgary is expected to decline over the next several years settling at a more sustainable long-term employment growth rate of 2.4%, in line with historical average growth. However, this lower growth rate will continue to result in strong job creation. Over the previous ten years (1996-2006) Calgary employment increased adding 224,000 new

¹ Source: Labor Force Survey

² Source: US Energy Information Administration

³ Source for housing starts statistics and Metro GDP at basic prices was the Conference Board of Canada

jobs. Over the ten year forecast period (2007-2017) Calgary employment growth will result in the creation of an additional 244,000 new jobs. This growth in the Calgary economy will be driven by a number of factors including expectations that oil prices will remain at or near historically high levels. Energy prices are expected to be volatile in the near term, with possible spikes in prices, partially due to the declining value of the US dollar. However, for the long-term forecast, an average annual 1.7% growth rate in oil prices has been forecasted, which is consistent with conservative expectations of energy analysts⁴. Calgary GDP growth will moderate to a strong long term compound annual real growth rate of 3.8%.

Figure 2 Calgary Job Creation in Each Industry

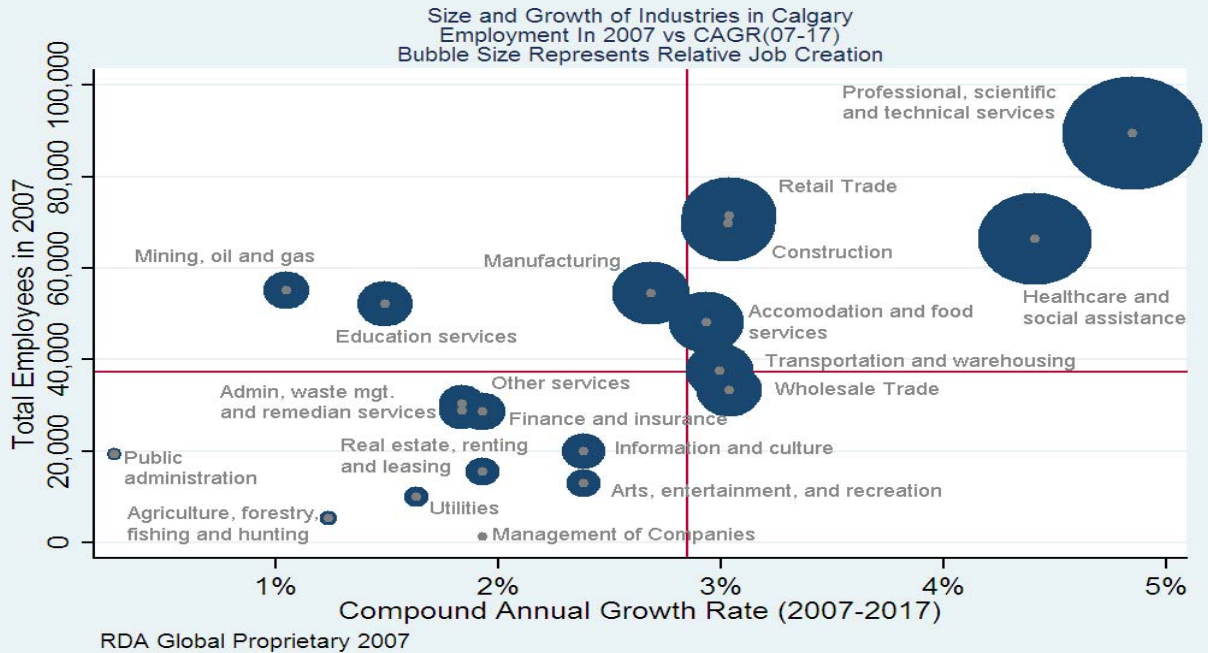


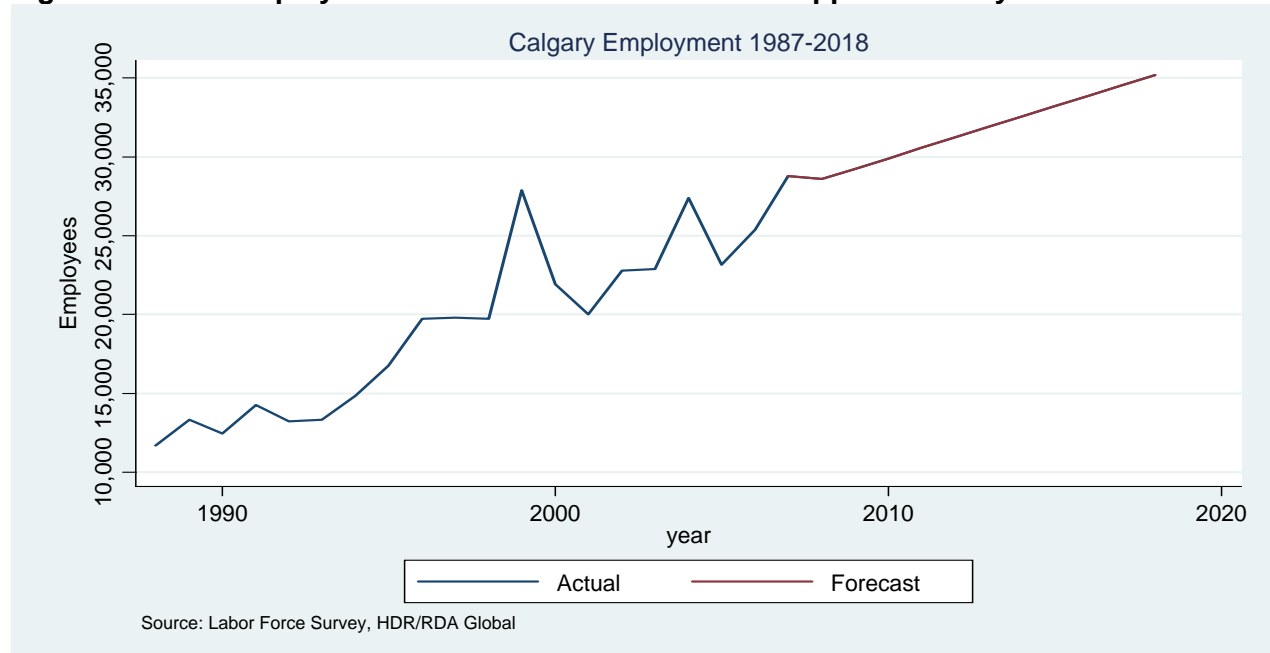
Figure 2 highlights the differences in job creation across industries in Calgary, with the larger circles representing industries with more job creations. Significant gains in employment will be somewhat distributed among economic sectors. However, there will be particularly strong expansion in the professional services sector, which is tied to continued demand for technical and engineering services in the energy sector. There will also be strong job growth in healthcare, driven by overall population growth and growth in the older segments of the population. Job expansion will also continue to be robust in retail, construction, accommodation & food services, transportation, manufacturing, and wholesale. Population growth is expected to drive up demand for education services. Most segments of the economy are expected to continue to see positive growth with employment growth rates in the 1% to 2.5% long-term growth range. However, total job creation in niche industries will be constrained by the relatively smaller size of these segments.

⁴ In development of this forecast, oil price forecasts of the Energy Information Administration and Sproule and Associates were consulted, however, final assumptions in the forecast model were based on a nominal annual growth rate of 1.7%.

ADMINISTRATION & SUPPORT AND WASTE MANAGEMENT AND REMEDIATION INDUSTRY

The Administration and Support industry is expected to continue to expand at a compound annual growth rate of 1.8% over the next ten years. Growth in the industry will fall below the overall employment growth in Calgary of 2.9% over the same forecast period. Growth in the industry will result in an additional 5,800 jobs created over the forecast period.

Figure 3: Total Employment in the Administration and Support Industry 1987-2018



The Administration and Support industry ranks thirteenth out of twenty industries in total employment. Historically, growth in this industry has slightly underperformed compared to the regional employment growth and it is expected to continue to grow at a rate lower than the regional average. In terms of jobs created, the industry ranked tenth over the 1997-2007 period, creating nearly 9,000 jobs. The industry will move down to become the thirteenth largest contributor to job creation in the 2007-2017 forecast period, creating nearly 5,800 new jobs.

Table 1: Administration and Support Industry Compared with All Other Industries

NAICS Industry	Total Employment				Compound Annual Growth			Jobs Added		
	1987	1997	2007	2017	1987-97	1997-07	2007-17	1987-97	1997-07	2007-17
11 Agriculture, forestry, fishing and hunting	10,357	8,230	5,262	5,951	-2.3%	-4.4%	1.2%	(2,127)	(2,968)	689
21 Mining and oil and gas extraction	34,043	32,970	55,092	61,154	-0.3%	5.3%	1.0%	(1,073)	22,122	6,062
22 Utilities	4,700	3,800	9,881	11,621	-2.1%	10.0%	1.6%	(900)	6,081	1,740
23 Construction	21,500	36,600	69,847	94,177	5.5%	6.7%	3.0%	15,100	33,247	24,331
31-33 Manufacturing	30,500	42,900	54,380	70,890	3.5%	2.4%	2.7%	12,400	11,480	16,510
41 Wholesale trade	21,375	22,041	33,228	44,815	0.3%	4.2%	3.0%	666	11,187	11,586
44-45 Retail trade	46,025	47,459	71,546	96,493	0.3%	4.2%	3.0%	1,434	24,087	24,948
48-49 Transportation and warehousing	21,300	30,400	37,452	50,295	3.6%	2.1%	3.0%	9,100	7,052	12,844
51 Information and cultural industries	11,317	16,489	19,961	25,271	3.8%	1.9%	2.4%	5,172	3,472	5,310
52 Finance and insurance	16,662	21,266	28,538	34,543	2.5%	3.0%	1.9%	4,603	7,272	6,006
53 Real estate and rental and leasing	9,038	11,534	15,479	18,736	2.5%	3.0%	1.9%	2,497	3,944	3,258
54 Professional, scientific and technical services	27,200	43,700	89,591	143,873	4.9%	7.4%	4.9%	16,500	45,891	54,282
55 Management of companies and enterprises	501	879	1,169	1,415	5.8%	2.9%	1.9%	378	289	246
56 Admin & support, waste mgmt & remediation svcs.	11,299	19,821	28,790	34,543	5.8%	3.8%	1.8%	8,522	8,969	5,753
61 Educational services	23,800	31,900	52,154	60,488	3.0%	5.0%	1.5%	8,100	20,254	8,334
62 Health care and social assistance	33,700	43,200	66,471	102,326	2.5%	4.4%	4.4%	9,500	23,271	35,855
71 Arts, entertainment and recreation	7,283	10,611	12,845	16,262	3.8%	1.9%	2.4%	3,328	2,234	3,417
72 Accommodation and food services	20,200	32,100	48,100	64,248	4.7%	4.1%	2.9%	11,900	16,000	16,148
81 Other services (except public administration)	17,800	21,900	30,408	36,484	2.1%	3.3%	1.8%	4,100	8,508	6,076
91 Public administration	21,200	22,900	19,176	19,712	0.8%	-1.8%	0.3%	1,700	(3,724)	536
Grand Total	389,800	500,700	749,368	993,298	2.5%	4.1%	2.9%	110,900	248,668	243,930

JOBS CREATED BY OCCUPATION – ADMINISTRATION & SUPPORT INDUSTRY

Figure 4: Total Jobs by Occupation 2007 and 2017 – Administration and Support Industry

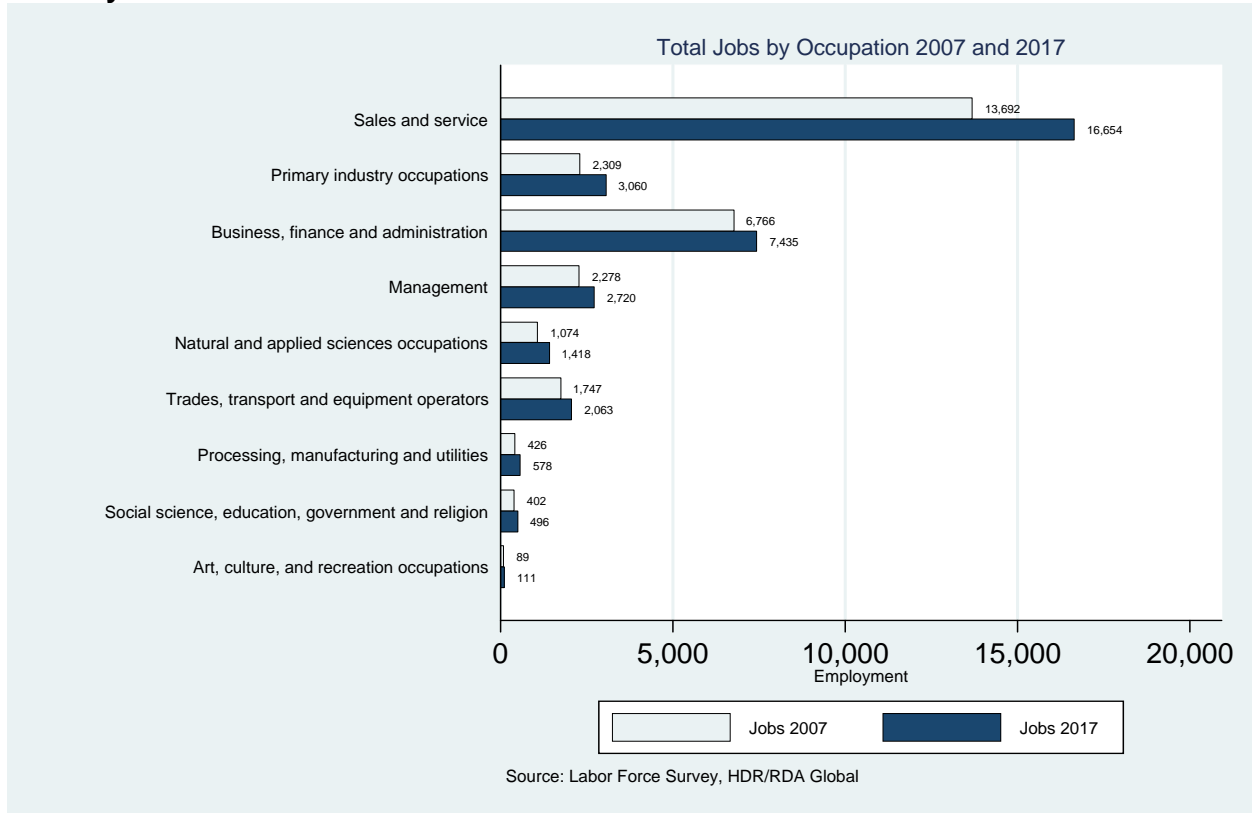
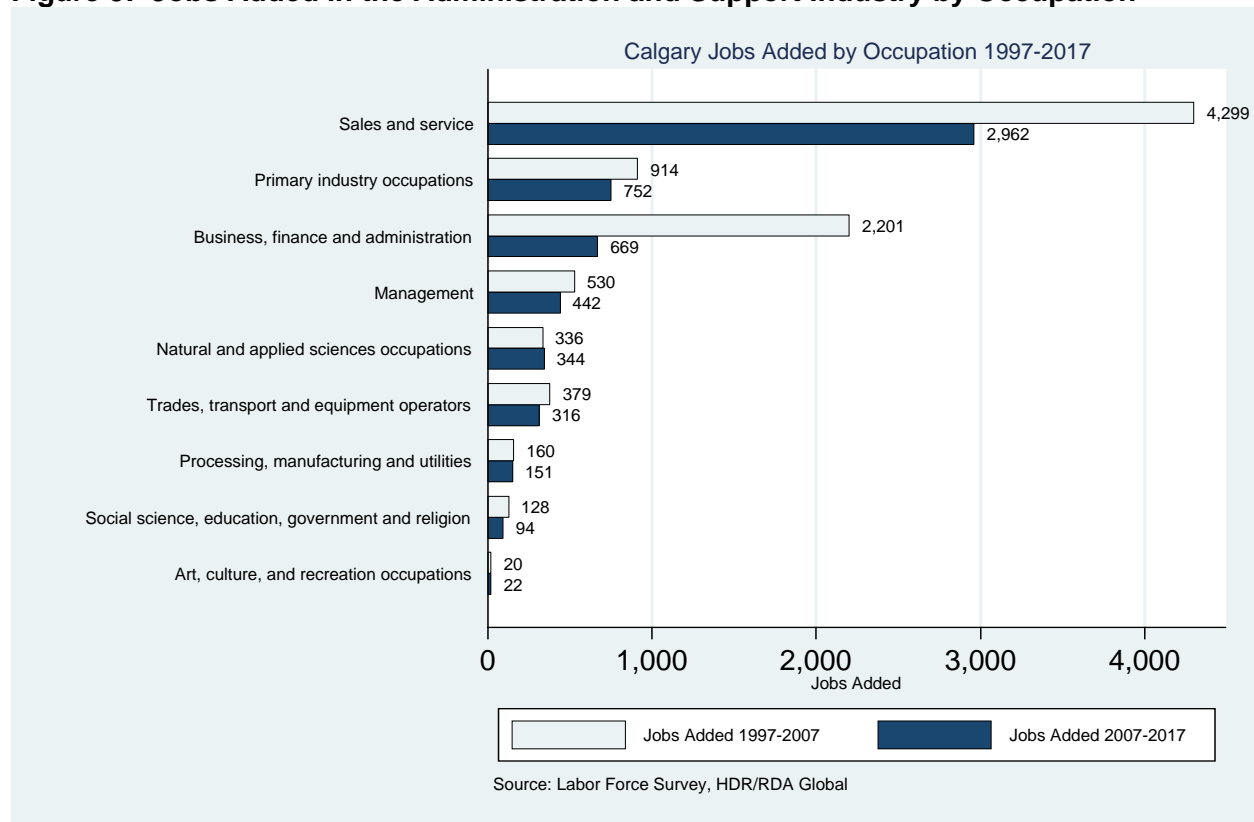


Table 2: 30-Year Occupational Growth for the Administration and Support Industry

Occupation (1 Digit NOC)	Total Employees				Compound Annual Growth		
	1987	1997	2007	2017	1987-97	1997-07	2007-17
A Management occupations	837	1,74	2,27	2,72	7.6%	2.7%	1.8%
B Business, finance and administration occupations	2,910	4,565	6,766	7,435	4.6%	4.0%	0.9%
C Natural and applied sciences and related occupations	397	738	1,074	1,418	6.4%	3.8%	2.8%
D Health occupations	2	3	6	8	6.8%	6.3%	1.7%
E Occupations in social science, education, government service and religion	132	274	402	496	7.5%	3.9%	2.1%
F Occupations in art, culture, recreation and sport	39	70	89	111	6.0%	2.5%	2.2%
G Sales and service occupations	5,626	9,393	13,692	16,654	5.3%	3.8%	2.0%
H Trades, transport and equipment operators and related occupations	744	1,369	1,747	2,063	6.3%	2.5%	1.7%
I Occupations unique to primary industry	451	1,395	2,309	3,060	11.9%	5.2%	2.9%
J Occupations unique to processing, manufacturing and utilities	160	266	426	578	5.2%	4.8%	3.1%
Grand Total	11,299	19,821	28,790	34,543	5.8%	3.8%	1.8%

There are nearly 28,800 employees in the Administration and Support industry today. About 13,700 of these workers have sales and service occupations, representing the largest share of occupations. Demand for workers in these jobs will rise to nearly 16,700 over the forecast period. The next largest occupational category is business, finance, and administration jobs, which currently employ about 6,800 workers and will employ about 7,400 workers in 2017.

Figure 5: Jobs Added in the Administration and Support Industry by Occupation



More than half of all jobs created in this industry will be sales and service occupations, a total of about 3,000 new jobs by 2017. The industry will generate about 670 jobs for workers in business and finance occupations and about 750 jobs for workers in occupations unique to primary industry.

Table 3: Ten-Year Forecast of Jobs by Major Occupational Group –Administration and Support Industry

Occupation (1 Digit NOC)	Annual Employment											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A Management occupations	1,954	2,278	2,268	2,348	2,396	2,447	2,496	2,548	2,591	2,634	2,677	2,720
B Business, finance and administration occupations	5,339	6,766	6,668	6,835	6,922	7,008	7,095	7,186	7,273	7,363	7,453	7,544
C Natural and applied sciences and related occupations	985	1,074	1,085	1,147	1,165	1,184	1,224	1,270	1,303	1,337	1,377	1,418
D Health occupations	6	6	6	6	6	6	6	7	7	7	7	8
E Occupations in social science, education, government service and religion	352	402	394	406	413	423	434	447	459	471	483	496
F Occupations in art, culture, recreation and sport	76	89	82	87	87	91	93	97	100	104	107	111
G Sales and service occupations	12,152	13,692	13,705	13,780	14,164	14,545	14,890	15,196	15,561	15,929	16,293	16,654
H Trades, transport and equipment operators and related occupations	1,513	1,747	1,696	1,742	1,773	1,810	1,849	1,895	1,938	1,980	2,022	2,063
I Occupations unique to primary industry	2,141	2,309	2,291	2,418	2,498	2,568	2,643	2,731	2,812	2,894	2,976	3,060
J Occupations unique to processing, manufacturing and utilities	357	426	429	453	469	484	500	516	531	547	562	578
Grand Total	25,374	28,790	28,623	29,222	29,893	30,566	31,230	31,893	32,555	33,218	33,881	34,543

Table 4: Top 50 Occupations Adding Jobs From 2007-2017⁵

Rank	Occupation (4 Digit NOC)	Employees				Jobs Created 2007-2017
		1987	1997	2007	2017	
1	G933 Janitors, caretakers and building superintendents	1,213	2,082	2,980	3,687	707
2	G711 Travel counsellors	884	1,517	2,096	2,639	543
3	G631 Security guards and related occupations	940	1,388	2,177	2,705	529
4	G931 Light duty cleaners	1,232	2,115	3,000	3,499	499
5	I212 Landscaping and grounds maintenance labourers	254	785	1,311	1,740	429
6	I015 Landscaping and grounds maintenance contractors and managers	136	421	675	889	214
7	G932 Specialized cleaners	354	606	870	1,063	193
8	G015 Cleaning supervisors	227	390	548	684	136
9	C142 Electronic service technicians (household and business equipment)	126	234	338	456	118
10	C125 Landscape and horticultural technicians and specialists	110	205	298	408	110
11	I016 Supervisors, landscape and horticulture	59	182	309	413	103
12	G016 Other service supervisors	182	313	455	554	99
13	G625 Other protective service occupations	176	259	414	509	95
14	A361 Other services managers	128	272	346	433	87
15	B511 General office clerks	285	453	721	806	85
16	B553 Customer service, information and related clerks	224	357	576	642	67
17	B311 Administrative officers	403	580	738	799	62
18	A211 Retail trade managers	123	262	341	399	58
19	J319 Other labourers in processing, manufacturing and utilities	67	122	156	211	55
20	J181 Printing machine operators	51	80	146	196	50
21	B575 Dispatchers and radio operators	147	234	397	446	49
22	A131 Sales, marketing and advertising managers	107	229	298	346	49
23	G111 Sales representatives, wholesale trade (non-technical)	103	189	337	384	47
24	H612 Public works maintenance equipment operators	106	164	212	258	47
25	E213 Employment counsellors	49	103	151	197	46
26	B535 Collectors	94	149	237	282	45
27	H523 Other trades and related occupations	71	115	167	211	44
28	B211 Secretaries (except legal and medical)	228	328	415	459	44
29	H812 Material handlers	117	275	299	343	44
30	C071 Information systems analysts and consultants	65	122	178	220	43
31	H831 Public works and maintenance labourers	67	150	184	226	42
32	A114 Other administrative services managers	68	145	187	227	40
33	A302 Banking, credit and other investment managers	51	108	142	182	40
34	A141 Facility operation and maintenance managers	65	138	187	226	39
35	B531 Accounting and related clerks	134	213	340	376	36
36	A303 Other business services managers	98	209	261	295	34
37	G211 Retail salespersons and sales clerks	100	165	253	287	34
38	G973 Other elemental sales occupations	100	172	252	286	33
39	J213 Electronics assemblers, fabricators, inspectors and testers	28	45	83	112	29
40	C182 User support technicians	34	64	93	120	26
41	C181 Computer and network operators and web technicians	33	62	90	116	26
42	B011 Financial auditors and accountants	103	230	349	375	25
43	E033 Business development officers and marketing researchers and consultants	33	68	99	124	25
44	B313 Personnel and recruitment officers	177	255	317	342	25
45	A111 Financial managers	40	86	112	135	23
46	B413 Supervisors, library, correspondence and related information clerks	79	126	196	216	20
47	A392 Utilities managers	24	49	73	92	20
48	H326 Welders and related machine operators	42	68	100	119	19
49	H821 Construction trades helpers and labourers	58	136	139	158	19
50	H421 Automotive service technicians, truck mechanics and mechanical repairers	39	62	103	122	19
	Others	1,662	2,741	4,042	4,526	483
	Grand Total	11,299	19,821	28,790	34,543	5,753

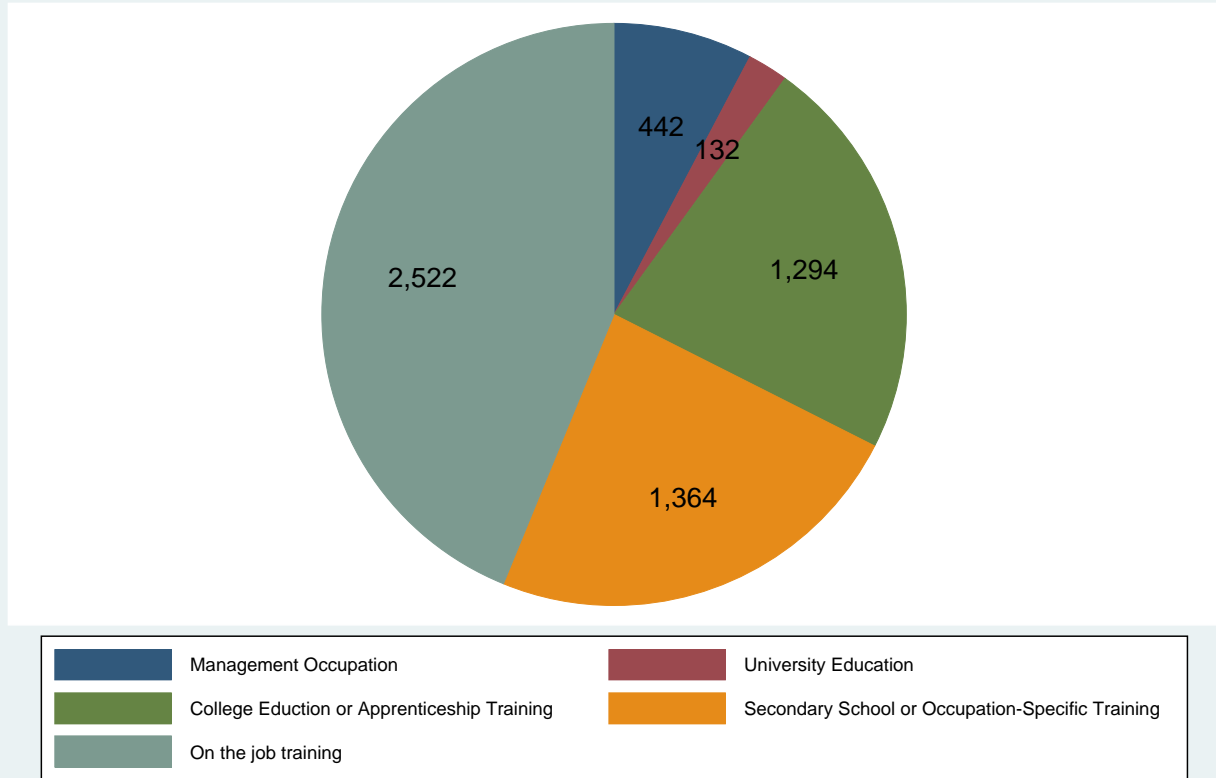
⁵ Note that these job creations in Figure 6 capture only jobs created in the Administration and Support industry and do not represent total job creations for all of Calgary. Jobs with these occupations will also be created in other industries.

EMPLOYMENT GROWTH BY SKILL LEVEL – ADMINISTRATION & SUPPORT INDUSTRY

From a skill level perspective, there will be about 450 new management occupations, 1,300 jobs requiring some college education or apprenticeship training, 1,350 jobs which require secondary school or occupation-specific training, 130 that require university training and about 2,500 that require only on the job training

Figure 6: Jobs Added by Skill Level in the Administration and Support Industry

Jobs Added 2007-2017 by Skill Level



Source: Labor Force Survey, 2001 Census, HDR/RDA Global

APPENDIX 1: INDUSTRY DEFINITION – ADMINISTRATION & SUPPORT

This industry comprises two different types of establishments: those primarily engaged in activities that support the day-to-day operations of other organizations; and those primarily engaged in waste management activities.

The first type of establishment is engaged in activities such as administration, hiring and placing personnel, preparing documents, taking orders from clients, collecting payments for claims, arranging travel, providing security and surveillance, cleaning buildings, and packaging and labelling products. These activities are often undertaken, in-house, by establishments found in many industries of the economy. The establishments classified to this industry specialize in one or more of these activities and can therefore provide services to clients in a variety of industries and, in some cases, to households.

Waste management establishments are engaged in the collection, treatment and disposal of waste material, the operation of material recovery facilities, the remediation of polluted sites and the cleaning of septic tanks.