

Calgary Economic Development

OCCUPATION REPORT (B): BUSINESS, FINANCE, AND ADMINISTRATION OCCUPATIONS

January 2008

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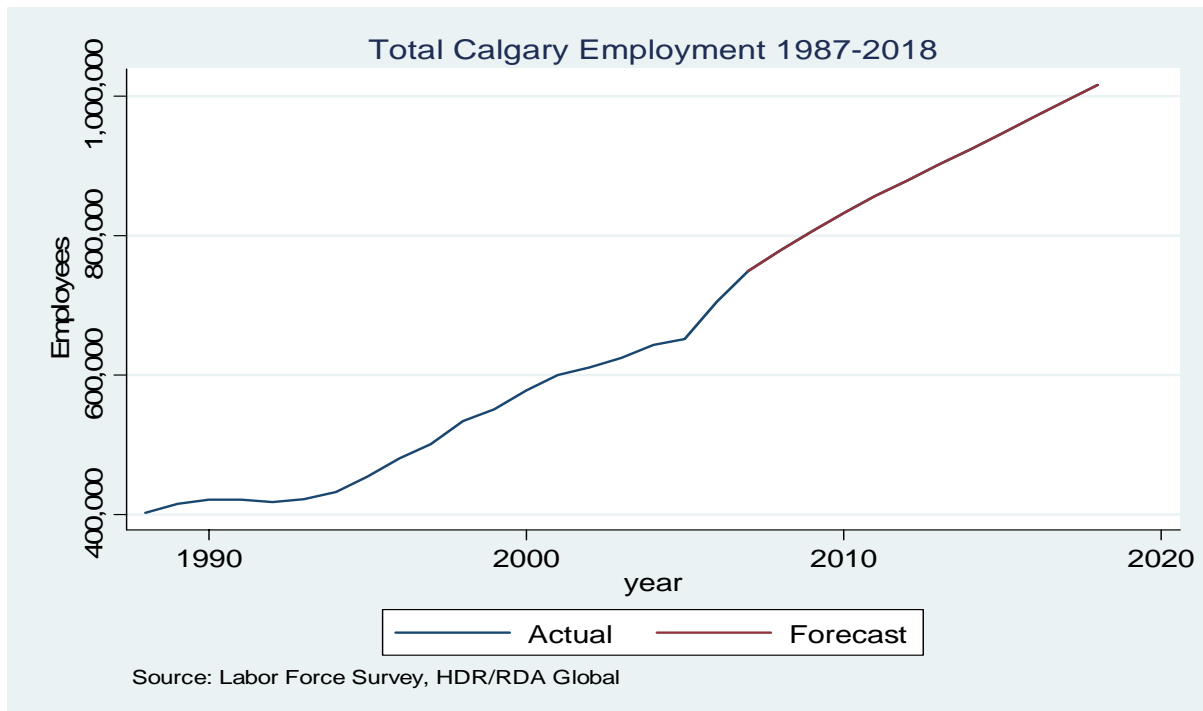
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Figure 1: Total Calgary Employment Forecast (All Industries)



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

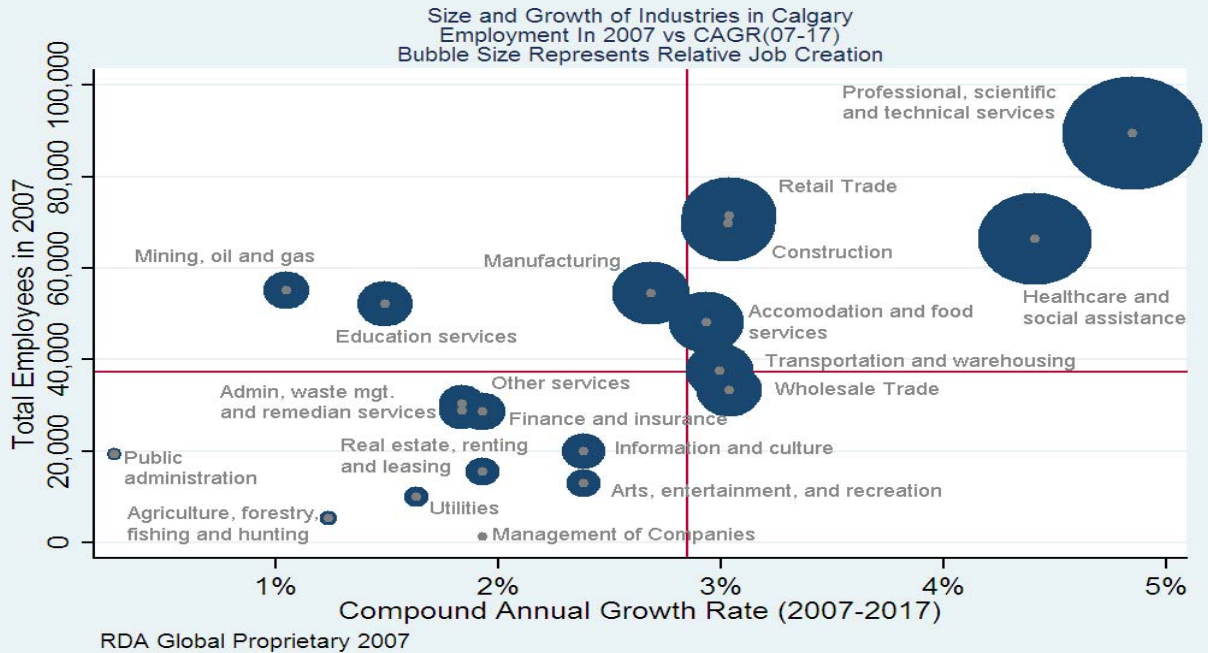


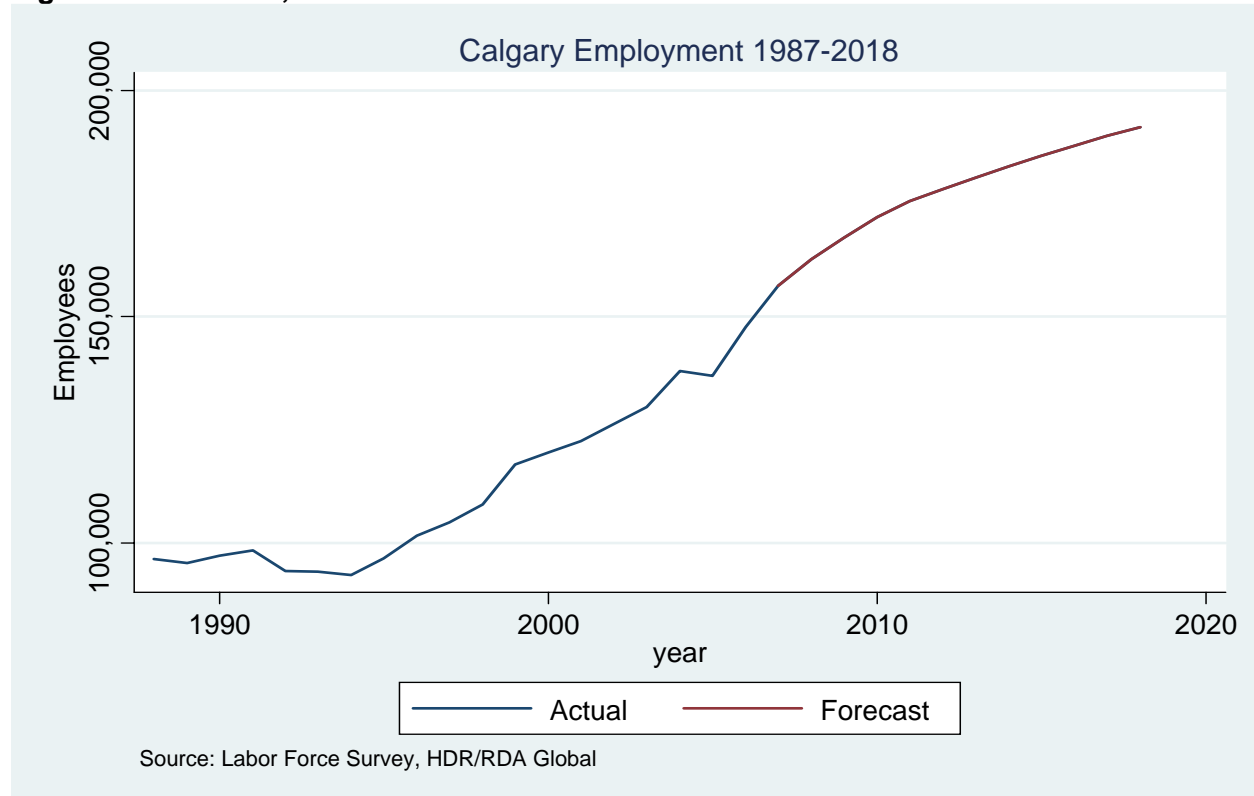
Figure 2 highlights the differences in job creation across industries in Calgary, with the larger circles representing industries with more job creations. Significant gains in employment will be somewhat distributed among economic sectors. However, there will be particularly strong expansion in the professional 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%.

BUSINESS, FINANCE AND ADMINISTRATION OCCUPATIONS

Demand for workers with natural and applied science and related business, finance and administration occupations is expected to continue to expand at a compound annual growth rate of 1.9% over the next ten years. Demand for these workers will not grow as fast as overall employment growth in Calgary of 2.9%, however there will be nearly 33,000 new business, finance and administration jobs created over the forecast period.

Figure 3: Business, Finance and Administration Jobs 1987-2018

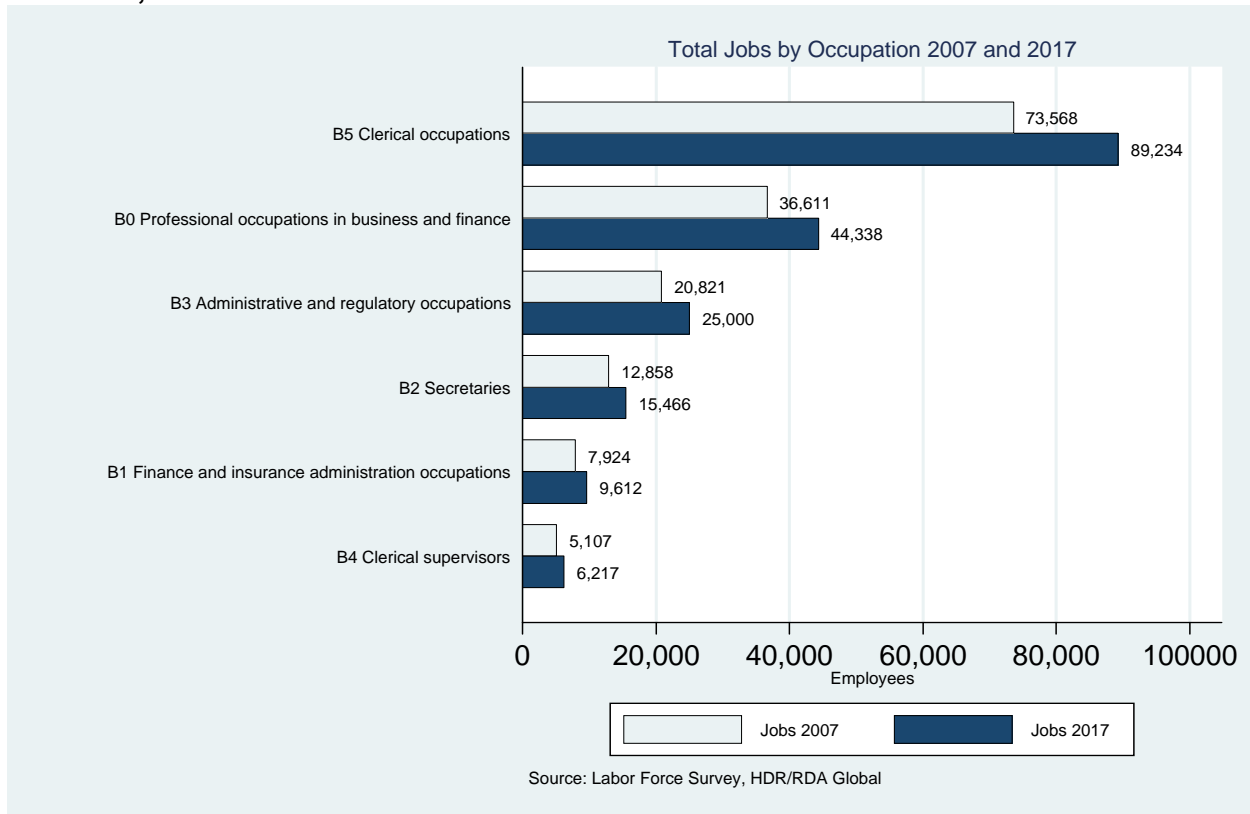


Business, finance and administration occupations rank second out of ten occupation groups for total employment with nearly 156,900 workers in 2007. Historically, demand for workers in this occupational category has roughly matched overall employment growth in the Calgary Economic Region. Over 52,300 natural and applied science and related jobs were created in the 1997-2007 period and about 33,000 will be created in the 2007-2017 forecast period, making this occupation category the third largest contributor to new jobs. About 14% of all new jobs created in Calgary will be business, finance and administration jobs.

Table 1: Comparison of Job Occupation Categories in Calgary

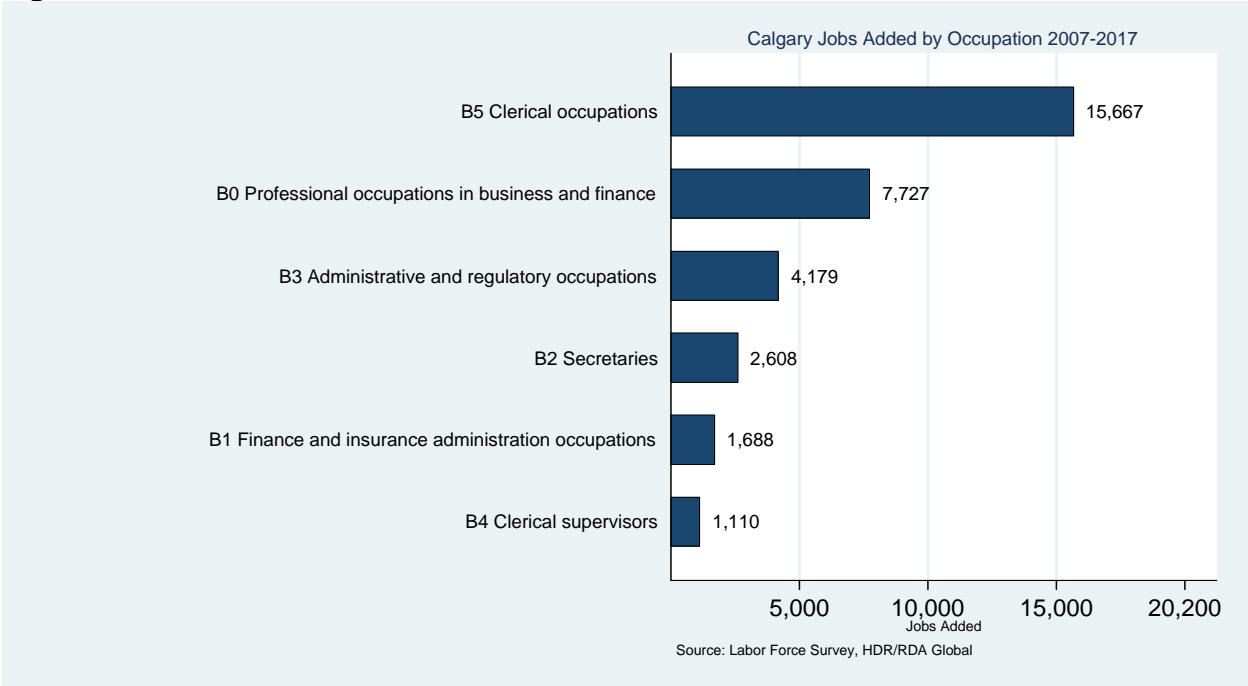
National Occupational Classification	Total Employment				Compound Annual Growth			Jobs Added		
	1987	1997	2007	2017	1987-97	1997-07	2007-17	1987-97	1997-07	2007-17
A Management occupations	36,858	55,680	74,819	98,676	4.2%	3.0%	2.8%	18,822	19,138	23,857
B Business, finance and administration occupations	90,639	104,579	156,889	189,868	1.4%	4.1%	1.9%	13,940	52,310	32,978
C Natural and applied sciences and related occupations	39,436	51,764	86,925	128,173	2.8%	5.3%	4.0%	12,329	35,160	41,249
D Health occupations	18,121	23,096	38,007	59,079	2.5%	5.1%	4.5%	4,975	14,910	21,072
E Occupations in social science, education, government service and religion	26,756	38,502	61,698	83,847	3.7%	4.8%	3.1%	11,746	23,196	22,149
F Occupations in art, culture, recreation and sport	10,467	14,573	18,889	25,844	3.4%	2.6%	3.2%	4,106	4,316	6,955
G Sales and service occupations	88,787	108,383	163,524	211,685	2.0%	4.2%	2.6%	19,596	55,141	48,161
H Trades, transport and equipment operators and related occupations	54,521	74,654	108,860	141,739	3.2%	3.8%	2.7%	20,133	34,206	32,879
I Occupations unique to primary industry	10,779	12,465	14,111	17,751	1.5%	1.2%	2.3%	1,686	1,646	3,640
J Occupations unique to processing, manufacturing and utilities	13,435	17,002	25,646	36,636	2.4%	4.2%	3.6%	3,567	8,644	10,990
Grand Total	389,800	500,700	749,368	993,298	2.5%	4.1%	2.9%	110,900	248,668	243,930

Figure 4: Total Jobs by Occupation 2007 and 2017 – Occupational Sub-Groups of Business, Finance and Administration Jobs



Clerical occupations are the largest sub-group of business, finance and administration jobs with 73,600 workers in 2007, growing to 89,200 workers in 2017. Professional occupations in business and finance is the second largest occupational group with 36,600 workers in 2007 growing to 44,300 workers by 2017. Administrative and regulatory occupations will grow from 20,800 workers in 2007 to 25,000 workers in 2017. Appendix A contains additional detail on the jobs within each of these occupational categories.

Figure 5: New Business, Finance and Administration Jobs Created 2007-2017



As the Calgary economy expands over the 2007-2017 period, there will be continued demand for 15,700 new clerical workers. There will be demand for about 7,700 new professional workers in business and finance and about 4,200 new administrative and regulatory workers. Appendix A contains additional detail on the jobs within each of these occupational categories.

BUSINESS, FINANCE AND ADMINISTRATION JOBS IN EACH INDUSTRY

Table 2: Business, Finance, and Administration Jobs in Each Industry

Key Sector	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	1,251	559	312	286	-7.7%	-5.7%	-0.9%	(692)	(247)	(26)
21 Mining and oil and gas extraction	11,680	10,472	17,498	16,967	-1.1%	5.3%	-0.3%	(1,208)	7,026	(531)
22 Utilities	1,526	1,184	3,308	3,563	-2.5%	10.8%	0.7%	(342)	2,123	255
23 Construction	2,172	3,279	6,690	8,558	4.2%	7.4%	2.5%	1,107	3,412	1,868
31-33 Manufacturing	4,133	5,453	6,938	8,008	2.8%	2.4%	1.4%	1,320	1,486	1,070
41 Wholesale trade	6,106	5,641	8,762	11,204	-0.8%	4.5%	2.5%	(465)	3,121	2,442
44-45 Retail trade	5,792	5,517	8,739	11,250	-0.5%	4.7%	2.6%	(275)	3,222	2,511
48-49 Transportation and warehousing	5,489	7,404	10,112	13,040	3.0%	3.2%	2.6%	1,915	2,708	2,928
51 Information and cultural industries	2,842	3,801	4,911	5,770	2.9%	2.6%	1.6%	958	1,110	859
52 Finance and insurance	12,489	15,234	20,622	24,447	2.0%	3.1%	1.7%	2,745	5,387	3,825
53 Real estate and rental and leasing	3,380	3,807	4,833	5,524	1.2%	2.4%	1.3%	427	1,026	691
54 Professional, scientific and technical services	8,103	12,220	25,427	37,373	4.2%	7.6%	3.9%	4,117	13,207	11,946
55 Management of companies and enterprises	374	635	870	1,035	5.4%	3.2%	1.8%	260	235	166
56 Administrative and support, waste management and remediation services	2,910	4,565	6,766	7,435	4.6%	4.0%	0.9%	1,655	2,201	669
61 Educational services	3,610	4,030	6,829	6,437	1.1%	5.4%	-0.6%	420	2,800	(392)
62 Health care and social assistance	6,382	7,368	10,499	14,831	1.4%	3.6%	3.5%	986	3,131	4,331
71 Arts, entertainment and recreation	852	1,093	1,332	1,494	2.5%	2.0%	1.2%	242	238	162
72 Accommodation and food services	622	930	1,378	1,751	4.1%	4.0%	2.4%	308	448	373
81 Other services (except public administration)	2,631	2,906	4,051	4,400	1.0%	3.4%	0.8%	275	1,146	349
91 Public administration	8,296	8,482	7,013	6,495	0.2%	-1.9%	-0.8%	187	(1,469)	(518)
Grand Total	90,639	104,579	156,889	189,868	1.4%	4.1%	1.9%	13,940	52,310	32,978

Table 3: Ten-Year Forecast of Business, Finance, and Administration Jobs in Each Industry

Occupation (1 Digit NOC)	Annual Employment											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
11 Agriculture, forestry, fishing and hunting	369	312	324	327	328	326	322	316	309	302	294	286
21 Mining and oil and gas extraction	16,630	17,498	17,657	17,819	17,716	17,391	17,050	16,907	16,901	16,929	16,945	16,967
22 Utilities	2,485	3,308	3,348	3,481	3,626	3,597	3,500	3,438	3,449	3,483	3,521	3,563
23 Construction	5,892	6,690	7,866	8,278	8,584	8,727	8,735	8,657	8,588	8,555	8,546	8,558
31-33 Manufacturing	6,617	6,938	7,037	7,123	7,268	7,398	7,523	7,626	7,730	7,825	7,917	8,008
41 Wholesale trade	8,369	8,762	9,155	9,470	9,704	9,933	10,165	10,397	10,607	10,811	11,009	11,204
44-45 Retail trade	8,334	8,739	9,173	9,561	9,775	9,987	10,225	10,474	10,678	10,873	11,063	11,250
48-49 Transportation and warehousing	11,242	10,112	10,359	10,466	10,807	11,250	11,679	12,002	12,282	12,545	12,796	13,040
51 Information and cultural industries	4,853	4,911	5,037	5,095	5,215	5,301	5,398	5,474	5,559	5,632	5,703	5,770
52 Finance and insurance	19,898	20,622	20,876	21,330	21,739	22,132	22,530	22,928	23,314	23,695	24,072	24,447
53 Real estate and rental and leasing	4,686	4,833	4,882	5,015	5,083	5,148	5,221	5,297	5,356	5,413	5,468	5,524
54 Professional, scientific and technical services	22,333	25,427	27,436	29,190	31,168	32,718	33,754	34,562	35,398	36,156	36,796	37,373
55 Management of companies and enterprises	841	870	880	897	915	932	950	968	985	1,002	1,019	1,035
56 Administrative and support, waste management and remediation services	5,839	6,766	6,668	6,835	6,922	7,008	7,095	7,186	7,253	7,315	7,376	7,435
61 Educational services	6,151	6,829	6,602	6,498	6,485	6,485	6,480	6,477	6,474	6,466	6,454	6,437
62 Health care and social assistance	9,774	10,499	11,454	12,019	12,519	12,971	13,406	13,782	14,107	14,385	14,627	14,831
71 Arts, entertainment and recreation	1,359	1,332	1,373	1,377	1,401	1,408	1,432	1,447	1,463	1,473	1,484	1,494
72 Accommodation and food services	1,261	1,378	1,423	1,490	1,522	1,556	1,595	1,636	1,666	1,695	1,723	1,751
81 Other services (except public administration)	3,535	4,051	3,994	4,048	4,106	4,157	4,212	4,259	4,299	4,335	4,368	4,400
91 Public administration	7,180	7,013	7,185	7,163	7,103	7,030	6,947	6,860	6,771	6,680	6,587	6,495
Grand Total	147,650	156,889	162,730	167,481	171,985	175,455	178,219	180,695	183,191	185,568	187,769	189,868

Business, finance and administration jobs are relatively evenly distributed throughout all industries in the Calgary economy. The largest portion of these workers are employed in the professional, scientific and technical services industry. Finance and insurance is the second largest employer of these workers and mining and oil and gas extraction is the third largest.

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

Rank	Occupation (4 Digit NOC)	Employees				Jobs Created	CAGR
		1987	1997	2007	2017	2007-2017	2007-2017
1	B011 Financial auditors and accountants	8,395	12,620	21,459	25,883	4,424	1.9%
2	B511 General office clerks	8,065	8,902	14,401	17,188	2,787	1.8%
3	B531 Accounting and related clerks	6,113	6,626	11,121	13,425	2,304	1.9%
4	B311 Administrative officers	7,918	8,133	10,809	13,059	2,250	1.9%
5	B211 Secretaries (except legal and medical)	6,574	6,685	8,711	10,394	1,683	1.8%
6	B553 Customer service, information and related clerks	4,306	4,888	7,527	9,141	1,614	2.0%
7	B514 Receptionists and switchboard operators	3,419	4,006	6,505	7,901	1,396	2.0%
8	B571 Shippers and receivers	2,924	3,083	4,833	5,939	1,106	2.1%
9	B022 Professional occupations in business services to management	1,345	2,264	4,032	4,935	903	2.0%
10	B014 Other financial officers	1,674	2,578	3,693	4,535	842	2.1%
11	B541 Administrative clerks	2,345	2,604	4,102	4,932	830	1.9%
12	B111 Bookkeepers	2,872	2,707	3,684	4,497	813	2.0%
13	B533 Customer service representatives - Financial services	1,831	2,118	3,116	3,785	669	2.0%
14	B522 Data entry clerks	1,781	1,992	3,068	3,736	668	2.0%
15	B314 Property administrators	2,207	2,310	2,903	3,492	589	1.9%
16	B212 Legal secretaries	1,401	1,603	2,594	3,175	581	2.0%
17	B012 Financial and investment analysts	1,180	1,708	2,641	3,200	559	1.9%
18	B563 Couriers, messengers and door-to-door distributors	951	1,216	1,934	2,474	540	2.5%
19	B013 Securities agents, investment dealers and brokers	1,134	1,621	2,358	2,898	539	2.1%
20	B574 Purchasing and inventory clerks	1,350	1,403	2,221	2,705	484	2.0%
21	B312 Executive assistants	1,854	1,781	2,422	2,896	474	1.8%
22	B315 Purchasing agents and officers	1,862	1,748	2,361	2,827	466	1.8%
23	B021 Specialists in human resources	1,089	1,623	2,428	2,887	459	1.7%
24	B575 Dispatchers and radio operators	1,111	1,381	2,104	2,563	459	2.0%
25	B532 Payroll clerks	1,142	1,247	1,961	2,358	397	1.9%
26	B534 Banking, insurance and other financial clerks	1,094	1,257	1,840	2,237	397	2.0%
27	B562 Letter carriers	591	826	1,082	1,428	346	2.8%
28	B412 Supervisors, finance and insurance clerks	998	1,070	1,691	2,031	340	1.9%
29	B561 Mail, postal and related clerks	627	841	1,170	1,504	334	2.5%
30	B513 Records management and filing clerks	950	1,061	1,618	1,950	333	1.9%
31	B411 Supervisors, general office and administrative support clerks	842	967	1,507	1,830	323	2.0%
32	B213 Medical secretaries	888	969	1,209	1,486	277	2.1%
33	B112 Loan officers	940	978	1,154	1,402	248	2.0%
34	B415 Supervisors, recording, distributing and scheduling occupations	637	684	1,068	1,312	244	2.1%
35	B572 Storekeepers and parts clerks	701	712	1,074	1,314	240	2.0%
36	B113 Insurance adjusters and claims examiners	955	1,027	1,152	1,387	235	1.9%
37	B313 Personnel and recruitment officers	715	841	1,094	1,303	209	1.8%
38	B114 Insurance underwriters	705	773	895	1,081	186	1.9%
39	B573 Production clerks	457	561	869	1,047	178	1.9%
40	B115 Assessors, valuers and appraisers	513	521	606	726	120	1.8%
41	B535 Collectors	341	417	569	685	116	1.9%
42	B554 Survey interviewers and statistical clerks	285	331	491	597	106	2.0%
43	B413 Supervisors, library, correspondence and related information clerks	246	320	495	600	105	1.9%
44	B316 Conference and event planners	453	515	611	715	103	1.6%
45	B414 Supervisors, mail and message distribution occupations	189	254	346	444	98	2.5%
46	B542 Personnel clerks	359	370	563	657	94	1.6%
47	B116 Customs, ship and other brokers	311	304	433	519	87	1.8%
48	B318 Immigration, employment insurance and revenue officers	833	756	571	651	80	1.3%
49	B214 Court recorders and medical transcriptionists	246	270	344	410	67	1.8%
50	B576 Transportation route and crew schedulers	145	192	286	351	64	2.1%
	Others	773	915	1,160	1,375	215	1.7%
	Grand Total	90,639	104,579	156,889	189,868	32,978	1.9%

⁵ Note that these job creations in Table 4 capture only business, finance and administration jobs created and do not represent total job creations for all of Calgary.

APPENDIX A: ADDITIONAL DETAIL ON BUSINESS, FINANCE AND ADMINISTRATION OCCUPATIONS

Figure 6: Total Jobs by Occupation 2007 – Detailed Occupational Sub-Groups of Business, Finance and Administration Jobs

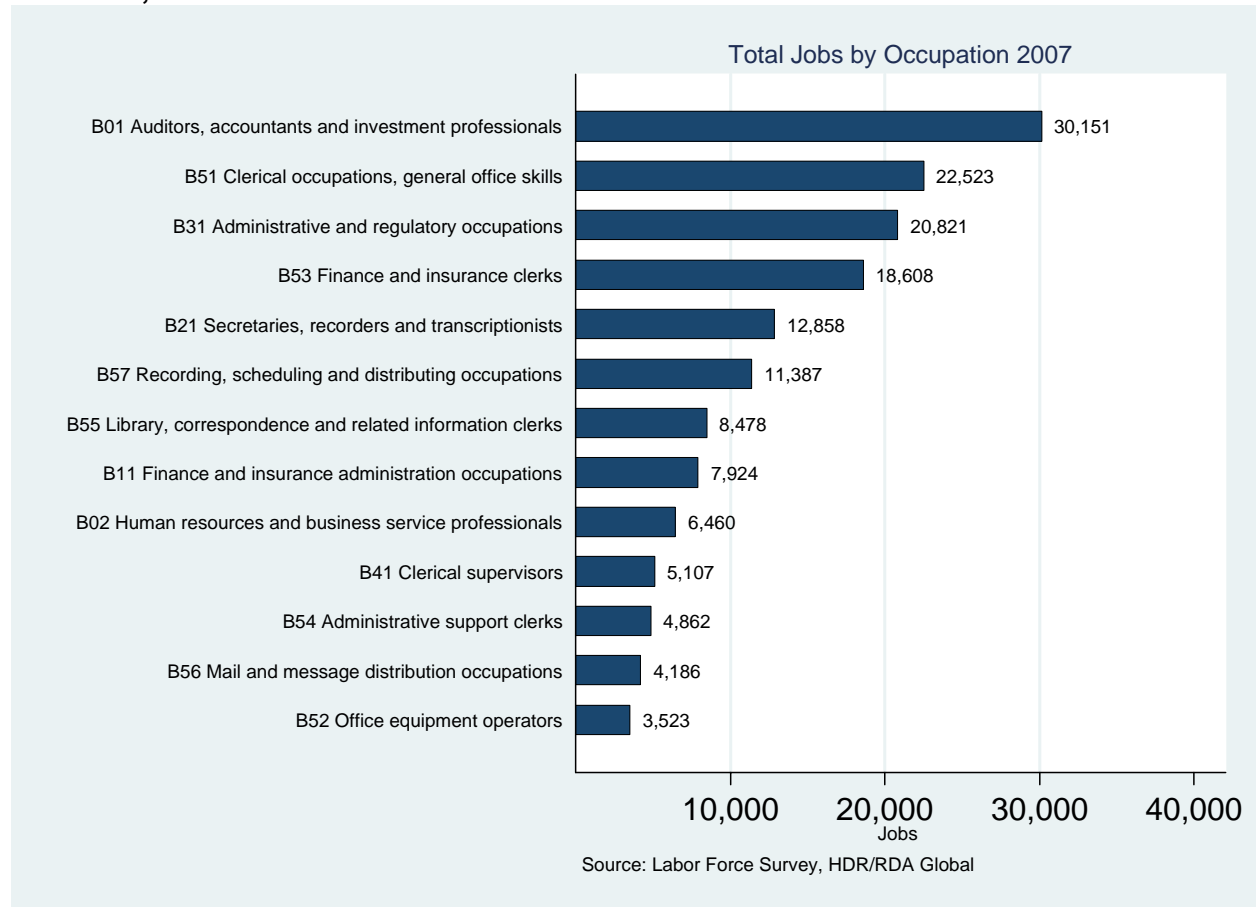


Figure 7: New Jobs Created 2007-2017—Detailed Sub-Groups of Business, Finance and Administration Occupations

