

# ASSOCIATED ECONOMIC CONSULTANTS LTD.

## LOSS APPROXIMATOR

The multipliers below may be used with the enclosed data on earnings to derive approximate present values of future earnings of men and women in British Columbia. They may also be used to estimate present values of any constant annual employment income over the time periods specified below.

### MEN

PRESENT VALUE MULTIPLIERS DISCOUNTED AT 2.5% PER YEAR									
To Age	AGE AT START (CURRENT AGE)								
	16	18	22	25	30	35	40	45	55
20	3.804	1.950							
25	8.045	6.411	2.888						
30	11.776	10.335	7.233	4.693					
35	15.058	13.787	11.055	8.821	4.692				
40	17.940	16.818	14.412	12.447	8.813	4.688			
45	20.466	19.475	17.355	15.625	12.425	8.798	4.683		
50	22.674	21.797	19.926	18.401	15.582	12.388	8.775	4.674	
55	24.592	23.815	22.161	20.815	18.325	15.509	12.331	8.737	
60	26.245	25.554	24.086	22.894	20.688	18.197	15.395	12.236	4.635
65	27.646	26.028	25.718	24.657	22.692	20.477	17.992	15.204	8.566
70	28.806	28.248	27.070	26.116	24.351	22.364	20.143	17.660	11.820

### WOMEN

PRESENT VALUE MULTIPLIERS DISCOUNTED AT 2.5% PER YEAR									
To Age	AGE AT START (CURRENT AGE)								
	16	18	22	25	30	35	40	45	55
20	3.806	1.951							
25	8.057	6.420	2.890						
30	11.808	10.363	7.249	4.700					
35	15.115	13.840	11.093	8.845	4.699				
40	18.030	16.905	14.482	12.498	8.840	4.696			
45	20.596	19.602	17.463	15.713	12.484	8.829	4.693		
50	22.848	21.971	20.082	18.536	15.684	12.458	8.813	4.686	
55	24.819	24.042	22.372	21.005	18.483	15.632	12.417	8.786	
60	26.532	25.843	24.363	23.152	20.917	18.392	15.551	12.349	4.660
65	28.007	27.394	27.077	25.000	23.012	20.768	18.248	15.417	8.672
70	29.258	28.709	27.532	26.568	24.790	22.784	20.538	18.021	12.077

**BC MALES***Occupations containing approximately 50% of full-time, full year workers reported in the 2006 Census by skill level*

	Number of full-time, full year workers	Full-time, full year earnings (2009 dollars)	
<b>SKILL LEVEL 4, MALES</b>			
A211.0621 Retail Trade Managers	22,360	\$62,900	
A131.0611 Sales, Marketing & Advertising Managers	11,340	\$91,500	
B011.1111 Financial Auditors & Accountants	8,665	\$84,500	
A371.0711 Construction Managers	7,230	\$94,100	
C071.2171 Information Systems Analysts & Consultants	6,840	\$74,300	
C074.2174 Computer Programmers & Interactive Media Developers	6,655	\$68,200	
E131.4141 Secondary School Teachers	6,635	\$63,600	
A221.0631 Restaurant & Food Service Managers	6,290	\$39,600	Subtotal, workforce employed in listed occupations: 112,050
A391.0911 Manufacturing Managers	6,175	\$90,000	Total Skill Level 4 workforce: 220,565
A301.0121 Insurance, Real Estate & Financial Brokerage Managers	4,880	\$98,400	Percent of Skill Level 4 workforce represented: 50.8%
E012.4112 Lawyers & Quebec Notaries	4,755	\$153,800	Average full-time, full year earnings for Skill Level 4: \$87,600
A016.0016 Senior Managers - Goods Production, Utilities, Transportation & Construction	4,235	\$202,000	
A013.0013 Senior Managers - Financial, Communications Carriers & Other Business Services	4,110	\$179,000	
C031.2131 Civil Engineers	4,050	\$87,800	
B014.1114 Other Financial Officers	4,015	\$101,900	
E132.4142 Elementary School & Kindergarten Teachers	3,815	\$61,600	
<b>SKILL LEVEL 3, MALES</b>			
H121.7271 Carpenters	14,020	\$41,600	
H421.7321 Auto Service Technicians, Truck Mechanics & Mechanical Repairers	11,370	\$49,300	
G412.6242 Cooks	6,460	\$26,400	
I011.8251 Farmers & Farm Managers	6,355	\$30,900	
H411.7311 Construction Millwrights & Industrial Mechanics (except Textile)	6,185	\$71,500	
H211.7241 Electricians (except Industrial & Power System)	5,860	\$51,500	
H326.7265 Welders & Related Machine Operators	5,450	\$55,200	
G611.6261 Police Officers (except Commissioned)	4,925	\$86,900	
C142.2242 Electronic Service Technicians (Household & Business Equipment)	4,920	\$46,600	
H412.7312 Heavy-duty Equipment Mechanics	4,305	\$71,200	
H111.7251 Plumbers	4,260	\$49,600	
G411.6241 Chefs	3,925	\$34,500	Subtotal, workforce employed in listed occupations: 118,685
G121.6221 Technical Sales Specialists, Wholesale Trade	3,920	\$77,500	Total Skill Level 3 workforce: 235,675
C182.2282 User Support Technicians	3,310	\$51,800	Percent of Skill Level 3 workforce represented: 50.4%
H144.7294 Painters & Decorators	3,210	\$35,400	Average full-time, full year earnings for Skill Level 3: \$57,200
C181.2281 Computer & Network Operators & Web Technicians	3,175	\$62,500	
F141.5241 Graphic Designers & Illustrators	2,945	\$48,600	
H212.7242 Industrial Electricians	2,890	\$77,000	
G612.6262 Fire-fighters	2,855	\$76,600	
H311.7231 Machinists & Machining & Tooling Inspectors	2,835	\$57,400	
G011.6211 Retail Trade Supervisors	2,700	\$47,200	
B314.1224 Property Administrators	2,675	\$80,300	
G132.6232 Real Estate Agents & Salespersons	2,600	\$96,000	
H019.7219 Contractors & Supervisors, Other Construction Trades, Installers, Repairers & Servicers	2,535	\$58,100	
H422.7322 Motor Vehicle Body Repairers	2,525	\$44,400	
H134.7284 Plasterers, Drywall Installers, Finishers & Lathers	2,475	\$39,500	
<b>SKILL LEVEL 2, MALES</b>			
H711.7411 Truck Drivers	20,250	\$48,600	
G211.6421 Retail Salespersons & Sales Clerks	19,245	\$47,400	
H812.7452 Material Handlers	12,125	\$45,800	Subtotal, workforce employed in listed occupations: 84,345
G111.6411 Sales Representatives, Wholesale Trade (Non-technical)	9,745	\$64,800	Total Skill Level 2 workforce: 164,935
H611.7421 Heavy Equipment Operators (except Crane)	6,245	\$60,800	Percent of Skill Level 2 workforce represented: 51.1%
B571.1471 Shippers & Receivers	6,105	\$40,900	Average full-time, full year earnings for Skill Level 2: \$48,100
H714.7414 Delivery & Courier Service Drivers	6,070	\$37,600	
B553.1453 Customer Service, Information & Related Clerks	4,560	\$43,700	
<b>SKILL LEVEL 1, MALES</b>			
G933.6663 Janitors, Caretakers & Building Superintendents	10,805	\$38,400	Subtotal, workforce employed in listed occupations: 28,030
H821.7611 Construction Trades Helpers & Labourers	7,495	\$37,900	Total Skill Level 1 workforce: 53,990
J314.9614 Labourers in Wood, Pulp & Paper Processing	4,880	\$55,400	Percent of Skill Level 1 workforce represented: 51.9%
G631.6651 Security Guards & Related Occupations	4,850	\$33,000	Average full-time, full year earnings for Skill Level 1: \$38,200

## BC FEMALES

Occupations containing approximately 50% of full-time, full year workers reported in the 2006 Census by skill level

	Number of full-time, full year workers	Full-time, full year earnings (2009 dollars)	
<b>SKILL LEVEL 4, FEMALES</b>			
D112.3152 Registered Nurses	16,195	\$67,500	
E132.4142 Elementary School & Kindergarten Teachers	15,360	\$55,900	
A211.0621 Retail Trade Managers	15,030	\$39,900	Subtotal, workforce employed in listed occupations: 78,990
B011.1111 Financial Auditors & Accountants	8,745	\$59,900	Total Skill Level 4 workforce: 158,085
E131.4141 Secondary School Teachers	6,310	\$57,800	Percent of Skill Level 4 workforce represented: 50.0%
A221.0631 Restaurant & Food Service Managers	5,095	\$31,300	Average full-time, full year earnings for Skill Level 4: \$61,100
A131.0611 Sales, Marketing & Advertising Managers	4,900	\$67,600	
A302.0122 Banking, Credit & Other Investment Managers	3,940	\$67,800	
E121.4131 College & Other Vocational Instructors	3,415	\$59,000	
<b>SKILL LEVEL 3, FEMALES</b>			
B311.1221 Administrative Officers	13,810	\$46,000	
B211.1241 Secretaries (except Legal & Medical)	10,355	\$39,300	
B111.1231 Bookkeepers	8,015	\$42,500	
E217.4214 Early Childhood Educators & Assistants	6,350	\$22,400	Subtotal, workforce employed in listed occupations: 65,075
E212.4212 Community & Social Service Workers	5,530	\$39,100	Total Skill Level 3 workforce: 129,450
G412.6242 Cooks	4,905	\$24,200	Percent of Skill Level 3 workforce represented: 50.3%
G911.6271 Hairstylists & Barbers	4,160	\$23,500	Average full-time, full year earnings for Skill Level 3: \$41,600
G011.6211 Retail Trade Supervisors	3,085	\$34,600	
G131.6231 Insurance Agents & Brokers	3,010	\$44,000	
E211.4211 Paralegal & Related Occupations	2,990	\$48,700	
B212.1242 Legal Secretaries	2,865	\$43,400	
<b>SKILL LEVEL 2, FEMALES</b>			
G211.6421 Retail Salespersons & Sales Clerks	18,330	\$30,100	
B511.1411 General Office Clerks	16,370	\$40,400	Subtotal, workforce employed in listed occupations: 76,865
B514.1414 Receptionists & Switchboard Operators	9,930	\$32,800	Total Skill Level 2 workforce: 150,390
B531.1431 Accounting & Related Clerks	9,900	\$40,800	Percent of Skill Level 2 workforce represented: 51.1%
D312.3413 Nurse Aides, Orderlies & Patient Service Associates	8,435	\$38,200	Average full-time, full year earnings for Skill Level 2: \$35,400
B553.1453 Customer Service, Information & Related Clerks	7,250	\$35,600	
B541.1441 Administrative Clerks	6,650	\$43,000	
<b>SKILL LEVEL 1, FEMALES</b>			
G311.6611 Cashiers	8,215	\$25,800	Subtotal, workforce employed in listed occupations: 21,025
G961.6641 Food Counter Attendants, Kitchen Helpers & Related Occupations	6,425	\$22,300	Total Skill Level 1 workforce: 36,790
G931.6661 Light Duty Cleaners	6,385	\$25,100	Percent of Skill Level 1 workforce represented: 57.1%
			Average full-time, full year earnings for Skill Level 1: \$26,100

Counts were obtained from 2006 Census data and are expressed as reported by Statistics Canada. Earnings were also obtained from 2006 Census data and are adjusted for general wage inflation to derive 2009 dollar values shown above. All source data were provided by Statistics Canada.

### Sample calculation:

The present value of full-time, full year earnings of a BC female legal secretary who is 25 years of age and chooses to work until age 70:

Average full-time, full year earnings:	\$43,400
Multiplier value:	26.568

Therefore, the present value of future earnings is estimated to be about \$1,153,100.

*NOTE: Income estimates shown above are not age specific. The estimates shown are averages for persons 15 years of age and over. Since earnings tend to increase with age and experience, results may understate the present value of earnings for individuals who are well established in the labour market. Note also that the above estimates do not include adjustments for labour market behaviour and that, in most instances, it is necessary to factor in such contingencies.*

For more information, please contact **Associated Economic Consultants Ltd.**

**EARNINGS BY HIGHEST LEVEL OF EDUCATION AND GENDER  
BRITISH COLUMBIA – 2006 CENSUS**

<b>HIGHEST LEVEL OF EDUCATION</b>	<b>FULL-TIME, FULL YEAR INCOME IN 2009 DOLLARS</b>	
	<b>MALES</b>	<b>FEMALES</b>
Total - Highest Certificate, Diploma or Degree	\$64,600	\$45,400
No certificate, diploma or degree	\$49,100	\$30,000
High school graduation certificate or equivalent	\$53,100	\$38,200
Apprenticeship or trades certificate or diploma - Total	\$59,400	\$36,400
Registered apprenticeship certificate	\$62,300	\$36,200
Other trades certificate or diploma	\$56,000	\$36,400
College, CEGEP or other non-university certificate or diploma:		
Programs of 3 months to less than 1 year	\$58,500	\$40,600
Programs of 1 year to 2 years	\$63,500	\$43,300
Program of more than 2 years	\$66,200	\$51,500
University certificate or diploma below bachelor level	\$67,800	\$49,500
Bachelor's degree or university certificate above bachelor level:		
Not including legal professions and studies	\$80,800	\$56,300
Legal professions and studies	\$151,900	\$95,800
Degree in medicine, dentistry, veterinary medicine or optometry	\$137,400	\$103,700
Master's degree	\$92,400	\$68,900
Earned doctorate	\$99,900	\$79,300

Earnings values are based on Statistics Canada's 2006 Census data for those 15 years of age and over. These values are adjusted for general wage inflation to derive the 2009 dollar values shown above.

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