

ASSOCIATED ECONOMIC CONSULTANTS LTD.

COST OF FUTURE CARE APPROXIMATOR

Cost of care multiplier factors below may be used to derive approximate present values of annual future care costs for males and females in British Columbia.

MALES

PRESENT VALUE MULTIPLIER FACTORS DISCOUNTED AT 3.5% PER ANNUM TO LIFE EXPECTANCY								
FREQUENCY OF COST TO LIFE EXPECTANCY	AGE AT START (CURRENT AGE)							
	10	20	30	40	50	60	70	80
EVERY YR	25.848	24.637	23.080	20.948	18.147	14.665	10.709	6.824
EVERY 2 YRS	13.174	12.568	11.790	10.724	9.323	7.583	5.604	3.662
EVERY 3 YRS	8.951	8.547	8.029	7.318	6.384	5.224	3.906	2.613
EVERY 4 YRS	6.841	6.538	6.149	5.616	4.916	4.047	3.059	2.092
EVERY 5 YRS	5.576	5.334	5.023	4.597	4.037	3.341	2.553	1.783
EVERY 6 YRS	4.734	4.532	4.273	3.918	3.451	2.873	2.217	1.580
EVERY 7 YRS	4.133	3.961	3.738	3.434	3.034	2.539	1.978	1.436
EVERY 8 YRS	3.683	3.532	3.338	3.071	2.722	2.289	1.800	1.331
EVERY 9 YRS	3.334	3.200	3.027	2.790	2.480	2.096	1.662	1.251
EVERY 10 YRS	3.055	2.934	2.779	2.566	2.287	1.942	1.554	1.188
EVERY 15 YRS	2.224	2.144	2.040	1.899	1.713	1.486	1.236	1.018
EVERY 20 YRS	1.815	1.757	1.677	1.574	1.433	1.271	1.083	0.963

FEMALES

PRESENT VALUE MULTIPLIER FACTORS DISCOUNTED AT 3.5% PER ANNUM TO LIFE EXPECTANCY								
FREQUENCY OF COST TO LIFE EXPECTANCY	AGE AT START (CURRENT AGE)							
	10	20	30	40	50	60	70	80
EVERY YR	26.402	25.375	23.972	22.036	19.472	16.230	12.331	8.070
EVERY 2 YRS	13.451	12.937	12.236	11.268	9.986	8.365	6.415	4.285
EVERY 3 YRS	9.136	8.793	8.326	7.681	6.826	5.745	4.446	3.028
EVERY 4 YRS	6.980	6.723	6.372	5.888	5.248	4.437	3.464	2.401
EVERY 5 YRS	5.687	5.482	5.201	4.814	4.302	3.654	2.876	2.029
EVERY 6 YRS	4.826	4.655	4.422	4.099	3.672	3.133	2.484	1.782
EVERY 7 YRS	4.212	4.066	3.865	3.589	3.223	2.761	2.207	1.606
EVERY 8 YRS	3.752	3.624	3.449	3.207	2.887	2.484	1.999	1.476
EVERY 9 YRS	3.395	3.282	3.126	2.911	2.627	2.268	1.838	1.377
EVERY 10 YRS	3.110	3.008	2.868	2.674	2.419	2.096	1.711	1.299
EVERY 15 YRS	2.261	2.193	2.099	1.971	1.801	1.587	1.337	1.076
EVERY 20 YRS	1.843	1.793	1.721	1.627	1.497	1.344	1.153	0.987

EXAMPLES OF THE USES OF THE COST OF CARE APPROXIMATOR

The cost of care multiplier factors are derived using a discount rate of 3.5% and survival probabilities, based on Statistics Canada's 2000-2002 Life Tables, for the average BC-resident male or female. The cost of care approximator may be used to determine present values of costs of future care, as illustrated in the examples below.

For example, assume that a 30-year old BC male expects to incur an annual cost of \$2,000 for the rest of his life. The present value of such a cost would be:

$$\$2,000 \times 23.080 = \$46,160,$$

where 23.080 is the multiplier factor at row 1 of the table for males who are 30 years of age.

As another example, suppose a back support costs \$70 (including taxes) and needs to be replaced every 3 years to life expectancy. The present value of this cost, say, for a 20-year old BC female, is calculated as:

$$\$70 \times 8.793 = \$616,$$

where 8.793 is the multiplier factor at row 3 of the table for females who are 20 years of age.

The investment income generated by an award for costs could have an impact upon an individual's tax situation in the future. This implies that a "tax gross-up" calculation should be performed, to determine the amount required to offset the taxes attracted by the investment income earned by a cost of care award.

For your convenience, Associated Economic Consultants Ltd. can assist in this regard. For more information, please contact:

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