

## How Long will a Portfolio Last?

### #1. USUAL (Reference Case). Rebalance every year back to original design mix.

**Conclusion: 21 years of full withdrawals for spending.**

Inputs	
Initial portfolio value	1,000
Constant dollar (C\$) withdrawal for spending	44 "4.40% withdrawal rate"
Initial Stock Mix	80%
Total investing cost	0.10%

Spending Year	Withdrawal for spending in the next year	Portfolio at start of year after withdrawal	Portfolio Composition			Portfolio Value end of year				Real Return*		
			at start of year	Stock	Mix	Value at end of year, net of investing cost	Percent decline from prior year initial value	Year	Stocks	Bonds		
1	44.0	956.0	764.8	191.2	80%	658.8	174.8	833.6	-16.6%	1969	-13.8%	-8.5%
2	44.0	789.6	631.7	157.9	80%	621.3	171.2	792.5	-4.9%	1970	-1.6%	8.5%
3	44.0	748.5	598.8	149.7	80%	661.5	160.6	822.1	3.7%	1971	10.6%	7.4%
4	44.0	778.1	622.5	155.6	80%	715.6	158.5	874.1	6.3%	1972	15.1%	1.9%
5	44.0	830.1	664.1	166.0	80%	520.2	155.1	675.3	-22.7%	1973	-21.6%	-6.5%
6	44.0	631.3	505.0	126.3	80%	330.7	118.1	448.7	-33.5%	1974	-34.5%	-6.4%
7	44.0	404.7	323.8	80.9	80%	414.8	82.0	496.8	10.7%	1975	28.2%	1.4%
8	44.0	452.8	362.2	90.6	80%	427.8	99.1	526.9	6.1%	1976	18.2%	9.5%
9	44.0	482.9	386.4	96.6	80%	335.6	90.7	426.3	-19.1%	1977	-13.0%	-6.0%
10	44.0	382.3	305.9	76.5	80%	298.7	70.9	369.6	-13.3%	1978	-2.3%	-7.2%
11	44.0	325.6	260.5	65.1	80%	272.4	58.2	330.6	-10.5%	1979	4.7%	-10.5%
12	44.0	286.6	229.3	57.3	80%	270.0	50.9	321.0	-2.9%	1980	17.9%	-11.0%
13	44.0	277.0	221.6	55.4	80%	193.2	53.7	246.8	-23.1%	1981	-12.7%	-3.0%
14	44.0	202.8	162.3	40.6	80%	189.7	38.3	228.0	-7.6%	1982	17.0%	-5.4%
15	44.0	184.0	147.2	36.8	80%	173.7	36.9	210.5	-7.7%	1983	18.1%	0.2%
16	44.0	166.5	133.2	33.3	80%	136.0	36.7	172.8	-17.9%	1984	2.2%	10.4%
17	44.0	128.8	103.0	25.8	80%	130.6	31.2	161.8	-6.4%	1985	26.9%	21.1%
18	44.0	117.8	94.2	23.6	80%	110.4	27.9	138.3	-14.5%	1986	17.3%	18.5%
19	44.0	94.3	75.5	18.9	80%	76.0	18.1	94.1	-32.0%	1987	0.8%	-4.1%
20	44.0	50.1	40.1	10.0	80%	44.7	10.3	55.0	-41.5%	1988	11.7%	3.3%
21	44.0	11.0	8.8	2.2	80%	11.1	2.4	NOT ENUF		1989	25.8%	10.6%

\$55 at the end of 20th year allows a full withdrawal in year 21. Not enough at the end of year 21 for a full withdrawal for the next year.

Downward spiral to depletion.

\* Data Source: Stocks, Bonds, Bills and Inflation. Ibbotson, et al.  
I used returns for Large Company stocks – the S&P 500 – and the average of Long-term and Intermediate-term Government Bonds.