

Retirement calculator in Excel

Var1	Contribution rate	10.00%
Var2	Stock returns	8.00%
Var3	Bond returns	5.00%
Var4	Employer match	4.30%
Var5	Annual inflation	2.00%
Var6	Percent earnings in retirement	70.00%

A	B	C	D	E	F	G	H	I	J	K	L	M
Inflation factor	Earnings 2021 \$	Age	Earnings (inflation adjusted)	Retirement Savings	Contribution	Stk%	Bnd%	Stock position	Bond position	Stock returns	Bond returns	
				\$0	0	100.0%	0.0%	\$0.00	\$0.00	\$0.00	\$0.00	
1.00	\$68,000	37	\$68,000	\$7,092	\$7,092.42	100.0%	0.0%	\$7,092.42	\$0.00	\$68,000.00	\$0.00	
1.02	\$70,596	38	\$72,007	\$15,170	\$7,510.37	100.0%	0.0%	\$14,602.80	\$0.00	\$1,168.22	\$0.00	
1.04	\$75,126	39	\$78,161	\$24,491	\$8,152.24	100.0%	0.0%	\$23,322.43	\$0.00	\$1,865.79	\$0.00	
1.06	\$70,361	40	\$74,668	\$34,144	\$7,787.84	100.0%	0.0%	\$32,278.50	\$0.00	\$2,580.00	\$0.00	
1.08	\$68,832	41	\$74,506	\$44,498	\$7,770.97	100.0%	0.0%	\$41,915.26	\$0.00	\$3,353.22	\$0.00	
1.10	\$72,988	42	\$80,585	\$56,256	\$8,404.98	100.0%	0.0%					

Savings Phase

Column E x Column H

Column E x Column I

Column J x Var 2

Column K x Var 3

From US Bureau of Labor Statistics

Column A x Column B

Set to % of bonds in retirement fund

Set to % of stocks in retirement fund

Last year's sum + contribution + stock returns + bond returns

Inflation adjusted earnings x Var1 x (1 + Var4)

Calculated from Var5

For first year of retirement, calculated from Earnings at age 67 x Var6

Withdrawal Phase

A	B	C	D	E	F	G	H	I	J	K	L	M
Inflation factor	Earnings	Age	Total income	Retirement Savings	Withdrawals	SS receipts (inflation adjusted)	Stk%	Bnd%	Stock position	Bond position	Stock returns	Bond returns
1.85	\$0	68	\$100,437	\$1,026,111	\$66,227.15	\$34,209.95	57.6%	42.4%	\$629,536.76	\$463,409.00	\$50,362.94	\$23,170.45
1.88	\$0	69	\$102,446	\$1,032,093	\$67,551.69	\$34,894.15	55.2%	44.8%	\$603,701.73	\$489,960.83	\$48,296.14	\$24,498.04
1.92	\$0	70	\$104,495	\$1,035,984	\$68,902.72	\$35,592.04	52.8%	47.2%	\$583,380.20	\$521,506.54	\$46,670.42	\$26,075.33
1.96	\$0	71	\$106,585	\$1,038,449	\$70,280.78	\$36,303.88	50.4%	49.6%	\$558,799.80	\$549,929.96	\$44,703.98	\$27,496.50
2.00	\$0	72	\$108,716	\$1,038,963	\$71,686.39	\$37,029.95	48.0%	52.0%	\$533,111.75	\$577,537.72	\$42,648.94	\$28,876.89
2.04	\$0	73	\$110,891	\$1,037,369	\$73,120.12	\$37,770.55	45.6%	54.4%	\$506,382.94	\$604,105.96	\$40,510.64	\$30,205.30
2.08	\$0	74	\$113,108	\$1,033,502	\$74,582.52	\$38,525.97	43.2%	56.8%	\$478,692.60	\$629,392.12	\$38,295.41	\$31,469.61
2.12	\$0	75	\$115,371	\$1,027,193	\$76,074.17	\$39,296.48	40.8%	59.2%	\$450,133.02	\$653,134.18	\$36,010.64	\$32,656.71
2.16	\$0	76	\$117,678	\$1,018,265	\$77,595.66	\$40,082.41	38.4%	61.6%	\$420,810.39	\$675,049.99	\$33,664.83	\$33,752.50
2.21	\$0	77	\$120,032	\$1,006,534	\$79,147.57	\$40,884.06	36.0%	64.0%	\$390,845.54	\$694,836.51	\$31,267.64	\$34,741.83
2.25	\$0	78	\$122,432	\$991,813	\$80,730.52	\$41,701.74	33.6%	66.4%	\$360,374.77	\$712,169.18	\$28,829.98	\$35,608.46
2.30	\$0	79	\$124,881	\$973,907	\$82,345.13	\$42,525.75						
2.34	\$0	80	\$127,379	\$952,614	\$83,987.04	\$43,355.76						

For following years of retirement, calculated from Total Income at age 68 x Column A

Average SS receipts at age 67 in 2021 ie. \$18,516 x Column A

Adjusted according to plan

Calculated the same as during Savings Phase

Last year's sum + stock returns + bond returns - withdrawals

Column D - Column G