



ValueYourPension.com

Present Value Pension Calculations

Name of pension participant:	John
Sex:	Male
Date of Birth, Participant:	4/4/1971
Name of survivor beneficiary:	Mary
Sex of beneficiary:	Female
Date of Birth, Beneficiary:	5/5/1975
Marriage Date:	4/4/1999
End of Marriage (for purposes of coverture ratio only; adjusted for determination date):	12/2/2019
Determination date ("present value as of this date"):	12/2/2019
Date participation in pension plan began:	12/9/1995
Date participation in pension plan ended (for purposes of the marital coverture ratio only; adjusted for determination date):	12/2/2019
Coverture ratio (percent of the pension credits earned during marriage):	0.860627
Calculation date:	12/2/2019
Pension plan name:	Super Pension
Projected date when pension benefits will begin:	5/5/2033
Projected age of participant when benefits start:	62.0833
Projected age of beneficiary when benefits start:	58
Projected monthly benefit:	\$4,000.00
Pension has "pop up" feature:	Yes
Projected monthly benefit for purposes of "pop up" calculation:	\$4,500.00
Projected interest rate (usually 30-year Treasury):	2.85%
Mortality Table for Pension Participant:	2019 Male Combined Funding
Mortality Table for Pension Beneficiary:	2019 Female Combined Funding
Projected cost of living adjustment (COLA):	No COLA
Present value of pension as of 12/2/2019:	\$512,880.12
Marital portion of pension present value, based on coverture ratio:	\$441,398.48
Present value of the Survivor Benefit as of 12/2/2019:	\$108,723.70
Pension "Buy Out" Cost (Typically half of the marital portion of the pension belongs to the non-Participant. As long as the non-Participant remains the Survivor Beneficiary, the buy out cost will be equal to: 1/2 of the marital portion minus the present value of the Survivor Benefit):	\$111,975.54

The numbers and calculations provided here are for informational purposes only and are based on user inputs. They do not constitute professional legal or accounting advice.

Calculation of PARTICIPANT present value

Age	Year during which Age starts	Partial Year	Gross Annual Benefit	Dollar value of annual COLA in Gross Annual Benefit	Interest discount rate	Probability of Surviving each year	Present Value of Pop Up	Present Value of Annual Benefit
48	2019	0.4167 years interest and mortality discount			0.999011	0.999966		
49	2020				0.971329	0.998897		
50	2021				0.944413	0.998752		
51	2022				0.918243	0.998602		
52	2023				0.892798	0.998407		
53	2024				0.868058	0.998184		
54	2025				0.844004	0.997924		
55	2026				0.820617	0.997541		
56	2027				0.797877	0.997039		
57	2028				0.775768	0.996596		
58	2029				0.754271	0.996093		
59	2030				0.73337	0.995541		
60	2031				0.713048	0.994909		
61	2032				0.693289	0.994202		
62	2033	0.9167 years of Gross Annual Benefit	\$44,000.00	No COLA	0.674078	0.993415	\$90.53	\$28,120.74
63	2034		\$48,000.00	No COLA	0.655399	0.992557	\$110.47	\$29,619.03
64	2035		\$48,000.00	No COLA	0.637238	0.991723	\$122.85	\$28,572.99
65	2036		\$48,000.00	No COLA	0.61958	0.990816	\$135.88	\$27,539.81
66	2037		\$48,000.00	No COLA	0.602411	0.989838	\$149.64	\$26,518.83
67	2038		\$48,000.00	No COLA	0.585718	0.988841	\$163.74	\$25,510.27
68	2039		\$48,000.00	No COLA	0.569488	0.987747	\$178.03	\$24,514.24
69	2040		\$48,000.00	No COLA	0.553707	0.986538	\$192.41	\$23,529.78
70	2041		\$48,000.00	No COLA	0.538364	0.985192	\$206.70	\$22,555.77
71	2042		\$48,000.00	No COLA	0.523446	0.983678	\$220.81	\$21,590.89
72	2043		\$48,000.00	No COLA	0.508941	0.981969	\$234.61	\$20,633.65
73	2044		\$48,000.00	No COLA	0.494838	0.980046	\$247.94	\$19,682.61
74	2045		\$48,000.00	No COLA	0.481126	0.977867	\$260.58	\$18,736.38
75	2046		\$48,000.00	No COLA	0.467794	0.975403	\$272.28	\$17,793.59
76	2047		\$48,000.00	No COLA	0.454831	0.972613	\$282.79	\$16,853.06
77	2048		\$48,000.00	No COLA	0.442228	0.969433	\$291.82	\$15,913.64
78	2049		\$48,000.00	No COLA	0.429973	0.965818	\$299.08	\$14,974.34
79	2050		\$48,000.00	No COLA	0.418059	0.961705	\$304.19	\$14,034.57
80	2051		\$48,000.00	No COLA	0.406474	0.956987	\$306.77	\$13,093.93
81	2052		\$48,000.00	No COLA	0.395211	0.951893	\$306.20	\$12,154.13
82	2053		\$48,000.00	No COLA	0.384259	0.946101	\$302.11	\$11,217.87
83	2054		\$48,000.00	No COLA	0.373611	0.939495	\$294.20	\$10,286.57
84	2055		\$48,000.00	No COLA	0.363258	0.931963	\$282.29	\$9,362.37
85	2056		\$48,000.00	No COLA	0.353193	0.923494	\$266.37	\$8,448.84
86	2057		\$48,000.00	No COLA	0.343405	0.913842	\$246.64	\$7,550.54
87	2058		\$48,000.00	No COLA	0.33389	0.902999	\$223.64	\$6,673.02

88	2059		\$48,000.00	No COLA	0.324637	0.89089	\$198.26	\$5,823.50
89	2060		\$48,000.00	No COLA	0.315642	0.877382	\$171.60	\$5,010.10
90	2061		\$48,000.00	No COLA	0.306895	0.862456	\$144.90	\$4,241.49
91	2062		\$48,000.00	No COLA	0.298391	0.846708	\$119.27	\$3,527.81
92	2063		\$48,000.00	No COLA	0.290123	0.830493	\$95.49	\$2,879.57
93	2064		\$48,000.00	No COLA	0.282083	0.814158	\$74.12	\$2,304.97
94	2065		\$48,000.00	No COLA	0.274267	0.797925	\$55.71	\$1,808.58
95	2066		\$48,000.00	No COLA	0.266667	0.781993	\$40.47	\$1,390.82
96	2067		\$48,000.00	No COLA	0.259277	0.763424	\$28.39	\$1,046.48
97	2068		\$48,000.00	No COLA	0.252093	0.744465	\$19.21	\$768.37
98	2069		\$48,000.00	No COLA	0.245107	0.72477	\$12.53	\$549.79
99	2070		\$48,000.00	No COLA	0.238315	0.704524	\$7.87	\$382.76
100	2071		\$48,000.00	No COLA	0.231711	0.683831	\$4.77	\$258.88
101	2072		\$48,000.00	No COLA	0.22529	0.662897	\$2.79	\$169.87
102	2073		\$48,000.00	No COLA	0.219048	0.642175	\$1.58	\$108.04
103	2074		\$48,000.00	No COLA	0.212978	0.621803	\$0.86	\$66.55
104	2075		\$48,000.00	No COLA	0.207076	0.601873	\$0.46	\$39.69
105	2076		\$48,000.00	No COLA	0.201338	0.583255	\$0.23	\$22.93
106	2077		\$48,000.00	No COLA	0.195759	0.565371	\$0.12	\$12.84
107	2078		\$48,000.00	No COLA	0.190334	0.548359	\$0.06	\$6.97
108	2079		\$48,000.00	No COLA	0.18506	0.532301	\$0.03	\$3.67
109	2080		\$48,000.00	No COLA	0.179932	0.517245	\$0.01	\$1.88
110	2081		\$48,000.00	No COLA	0.174946	0.503278	\$0.01	\$0.93
111	2082		\$48,000.00	No COLA	0.170098	0.498086	\$0.00	\$0.46
112	2083		\$48,000.00	No COLA	0.165385	0.498592	\$0.00	\$0.22
113	2084		\$48,000.00	No COLA	0.160802	0.498996	\$0.00	\$0.11
114	2085		\$48,000.00	No COLA	0.156346	0.499549	\$0.00	\$0.05
115	2086		\$48,000.00	No COLA	0.152014	0.5	\$0.00	\$0.03
116	2087		\$48,000.00	No COLA	0.147801	0.5	\$0.00	\$0.01
117	2088		\$48,000.00	No COLA	0.143706	0.5	\$0.00	\$0.01
118	2089		\$48,000.00	No COLA	0.139724	0.5	\$0.00	\$0.00
119	2090		\$48,000.00	No COLA	0.135852	0.5	\$0.00	\$0.00
120	2091		\$48,000.00	No COLA	0.132087	0	\$0.00	\$0.00

Sum of the present values of each annual benefit, including "top up" benefits: \$512,880.12

Calculation of SURVIVOR BENEFICIARY present value

Age of Participant	Age of Beneficiary	Year during which Age starts	Partial Year	Gross Annual Benefit	Dollar value of annual COLA in Gross Annual Benefit	Interest discount rate	Probability that Beneficiary Survives each year	Probability that Participant Dies each year	Present Value of Survivor Beneficiary Annual Benefit
48	44.5	2019	0.4167 years interest and mortality discount			0.999011	0.999986	0.000014	
49	45.5	2020				0.971329	0.999542	0.000458	

50	46.5	2021				0.944413	0.999490	0.000510	
51	47.5	2022				0.918243	0.999430	0.000570	
52	48.5	2023				0.892798	0.999361	0.000639	
53	49.5	2024				0.868058	0.999281	0.000719	
54	50.5	2025				0.844004	0.999187	0.000813	
55	51.5	2026				0.820617	0.999094	0.000906	
56	52.5	2027				0.797877	0.998979	0.001021	
57	53.5	2028				0.775768	0.998845	0.001155	
58	54.5	2029				0.754271	0.998688	0.001312	
59	55.5	2030				0.73337	0.998444	0.001556	
60	56.5	2031				0.713048	0.998129	0.001871	
61	57.5	2032				0.693289	0.997844	0.002156	
62	58.5	2033	0.9167 years of Gross Annual Benefit	\$44,000.00	No COLA	0.674078	0.997539	0.002461	\$828.10
63	59.5	2034		\$48,000.00	No COLA	0.655399	0.997196	0.002804	\$1,021.05
64	60.5	2035		\$48,000.00	No COLA	0.637238	0.996789	0.003211	\$1,144.93
65	61.5	2036		\$48,000.00	No COLA	0.61958	0.996266	0.003734	\$1,274.78
66	62.5	2037		\$48,000.00	No COLA	0.602411	0.995689	0.004311	\$1,410.12
67	63.5	2038		\$48,000.00	No COLA	0.585718	0.994999	0.005001	\$1,549.45
68	64.5	2039		\$48,000.00	No COLA	0.569488	0.994356	0.005644	\$1,692.54
69	65.5	2040		\$48,000.00	No COLA	0.553707	0.993637	0.006363	\$1,839.28
70	66.5	2041		\$48,000.00	No COLA	0.538364	0.992794	0.007206	\$1,989.49
71	67.5	2042		\$48,000.00	No COLA	0.523446	0.991979	0.008021	\$2,143.14
72	68.5	2043		\$48,000.00	No COLA	0.508941	0.991104	0.008896	\$2,300.30
73	69.5	2044		\$48,000.00	No COLA	0.494838	0.990141	0.009859	\$2,460.70
74	70.5	2045		\$48,000.00	No COLA	0.481126	0.989094	0.010906	\$2,624.09
75	71.5	2046		\$48,000.00	No COLA	0.467794	0.987912	0.012088	\$2,789.89
76	72.5	2047		\$48,000.00	No COLA	0.454831	0.986575	0.013425	\$2,957.24
77	73.5	2048		\$48,000.00	No COLA	0.442228	0.985061	0.014939	\$3,125.14
78	74.5	2049		\$48,000.00	No COLA	0.429973	0.983358	0.016642	\$3,292.10
79	75.5	2050		\$48,000.00	No COLA	0.418059	0.981419	0.018581	\$3,456.22
80	76.5	2051		\$48,000.00	No COLA	0.406474	0.979205	0.020795	\$3,615.30
81	77.5	2052		\$48,000.00	No COLA	0.395211	0.976665	0.023335	\$3,764.36
82	78.5	2053		\$48,000.00	No COLA	0.384259	0.973751	0.026249	\$3,899.91
83	79.5	2054		\$48,000.00	No COLA	0.373611	0.970398	0.029602	\$4,017.95
84	80.5	2055		\$48,000.00	No COLA	0.363258	0.966518	0.033482	\$4,113.83
85	81.5	2056		\$48,000.00	No COLA	0.353193	0.962329	0.037671	\$4,182.41
86	82.5	2057		\$48,000.00	No COLA	0.343405	0.957528	0.042472	\$4,219.14
87	83.5	2058		\$48,000.00	No COLA	0.33389	0.952035	0.047965	\$4,218.41
88	84.5	2059		\$48,000.00	No COLA	0.324637	0.945788	0.054212	\$4,175.00
89	85.5	2060		\$48,000.00	No COLA	0.315642	0.938684	0.061316	\$4,084.77
90	86.5	2061		\$48,000.00	No COLA	0.306895	0.930618	0.069382	\$3,944.95
91	87.5	2062		\$48,000.00	No COLA	0.298391	0.921554	0.078446	\$3,754.17
92	88.5	2063		\$48,000.00	No COLA	0.290123	0.911452	0.088548	\$3,514.43
93	89.5	2064		\$48,000.00	No COLA	0.282083	0.900269	0.099731	\$3,231.50
94	90.5	2065		\$48,000.00	No COLA	0.274267	0.887833	0.112167	\$2,914.42
95	91.5	2066		\$48,000.00	No COLA	0.266667	0.874400	0.125600	\$2,575.06
96	92.5	2067		\$48,000.00	No COLA	0.259277	0.860136	0.139864	\$2,227.93
97	93.5	2068		\$48,000.00	No COLA	0.252093	0.845220	0.154780	\$1,886.23
98	94.5	2069		\$48,000.00	No COLA	0.245107	0.829789	0.170211	\$1,561.98
99	95.5	2070		\$48,000.00	No COLA	0.238315	0.813897	0.186103	\$1,264.73

100	96.5	2071		\$48,000.00	No COLA	0.231711	0.796346	0.203654	\$1,000.31
101	97.5	2072		\$48,000.00	No COLA	0.22529	0.778080	0.221920	\$771.74
102	98.5	2073		\$48,000.00	No COLA	0.219048	0.758987	0.241013	\$580.22
103	99.5	2074		\$48,000.00	No COLA	0.212978	0.739228	0.260772	\$424.63
104	100.5	2075		\$48,000.00	No COLA	0.207076	0.718971	0.281029	\$302.19
105	101.5	2076		\$48,000.00	No COLA	0.201338	0.698437	0.301563	\$208.91
106	102.5	2077		\$48,000.00	No COLA	0.195759	0.677715	0.322285	\$140.17
107	103.5	2078		\$48,000.00	No COLA	0.190334	0.657003	0.342997	\$91.20
108	104.5	2079		\$48,000.00	No COLA	0.18506	0.636706	0.363294	\$57.51
109	105.5	2080		\$48,000.00	No COLA	0.179932	0.616721	0.383279	\$35.14
110	106.5	2081		\$48,000.00	No COLA	0.174946	0.597192	0.402808	\$20.79
111	107.5	2082		\$48,000.00	No COLA	0.170098	0.578804	0.421196	\$11.92
112	108.5	2083		\$48,000.00	No COLA	0.165385	0.561460	0.438540	\$6.62
113	109.5	2084		\$48,000.00	No COLA	0.160802	0.545119	0.454881	\$3.57
114	110.5	2085		\$48,000.00	No COLA	0.156346	0.529721	0.470279	\$1.87
115	111.5	2086		\$48,000.00	No COLA	0.152014	0.515403	0.484597	\$0.95
116	112.5	2087		\$48,000.00	No COLA	0.147801	0.502144	0.497856	\$0.47
117	113.5	2088		\$48,000.00	No COLA	0.143706	0.496985	0.503015	\$0.23
118	114.5	2089		\$48,000.00	No COLA	0.139724	0.498597	0.501403	\$0.11
119	115.5	2090		\$48,000.00	No COLA	0.135852	0.500000	0.500000	\$0.05
120	116.5	2091		\$48,000.00	No COLA	0.132087	0.500000	0.500000	\$0.03

Sum of the present values of each annual survivor beneficiary benefit: \$108,723.70