What is the true cost and benefit of a Calpers \$100,000 pension?

Costa Mesa currently has 63 employees with Calpers pensions exceeding \$100,000 per year.

Based on our three classifications of retirement benefits, the average retirement age and years of service for recent Costa Mesa retirees is as follows:

Employee Classification	Average Retirement Age	Average Years of Service		
Police	52	22.5		
Fire	55	28.0		
Miscellaneous (all others)	58	20.5		

The Social Security Administration estimates that a male who is alive at 65 has a life expectancy of 84 years.

Based this life expectancy, an employee who retires at 55 and lives until he is 84 will receive pension benefits for 30 years. (Female life expectancy is approximately 2 years longer than male life expectancy.)

Calpers COLA: All Costa Mesa retirees receive an automatic annual cost of living increase to their retirement benefit. This annual COLA is 2% of the prior year benefit. Retirees are also granted "purchasing power" protection that will pay them additional benefits should there be periods of increased inflation that might reduce the purchasing power of their benefits.

Discount Rate: Currently, Calpers pensions are funded using a 7.5% "Discount Rate". This is the rate of return that Calpers estimates it will earn on its investments. If Calpers fails to earn that anticipated rate of return, Costa Mesa will be required to submit additional payments to Calpers to cover "unfunded" obligations (Costa Mesa will be required to make additional payments to make up for investment returns that fail to average 7.5% per year).

Based upon an employee retiring at 55 years old, starting with a pension of \$100,000, how much money will be paid to the employee over the 30 years of his retirement?

- In the first year of retirement, at age 55, the employee will be paid a pension benefit of \$100,000.
- The Calpers COLA increases the benefit 2% each year so in the final year of retirement, at age 84, the retiree will be paid a pension benefit of \$177,584.
- Total benefits paid over the 30 years of retirement will equal \$4,056,808.

Present Value of Employee Retirement Account: Based upon the payments indicated above, how much must be saved in the employee retirement account to fund the benefit?

• If Calpers is able to earn the anticipated annual 7.5% return on investment over the 30 years of retirement, the Present Value of the Employee Retirement Account must be \$1,442,008 at age 55.

Potential Underfunding of Retirement Account: If Calpers is unable to earn the 7.5% rate of return, how much additional money would Costa Mesa need to contribute to rectify the "underfunding" of the employee retirement account?

- If Calpers averages a 6% annual rate of return over the 30 years of the employees' retirement, the Present Value of the Employee Retirement Account must be \$1,711,559 at age 55. This results in underfunding of \$269,551 (\$1,711,559 \$1,442,008) which is 19% of the required retirement account (\$269,551 / \$1,442,008).
- If Calpers averages a 5% annual rate of return over the 30 years of the employees' retirement, the Present Value of the Employee Retirement Account must be \$1,936,306 at age 55. This results in underfunding of \$494,298 (\$1,936,306 \$1,442,008) which is 34% of the required retirement account (\$494,298 / \$1,442,008).

Present Value of Calpers Pensions

Retirement Age 55
Life Expectancy 84
Benefit Payment in Years 30
Initial Annual Benefit 100,000
Annual Calpers COLA 2.00%
Calpers Discount Rate (Investment Rate of Return)

Present Value of Employee Retirement Account

1,442,008

			Beginning		
	Beginning	Investment	Account Value	Annual	
	Retirement	Gain based	plus	Retirement	Year End
	Account	on Rate of	Investment	Benefit paid	Retirement
Retiree Age	Value	Return	Gain	plus COLA	Account Value
55	1,442,008	108,151	1,550,159	100,000	1,450,159
56	1,450,159	108,762	1,558,921	102,000	1,456,921
57	1,456,921	109,269	1,566,190	104,040	1,462,150
58	1,462,150	109,661	1,571,811	106,121	1,465,690
59	1,465,690	109,927	1,575,617	108,243	1,467,374
60	1,467,374	110,053	1,577,427	110,408	1,467,018
61	1,467,018	110,026	1,577,045	112,616	1,464,429
62	1,464,429	109,832	1,574,261	114,869	1,459,392
63	1,459,392	109,454	1,568,847	117,166	1,451,681
64	1,451,681	108,876	1,560,557	119,509	1,441,047
65	1,441,047	108,079	1,549,126	121,899	1,427,227
66	1,427,227	107,042	1,534,269	124,337	1,409,931
67	1,409,931	105,745	1,515,676	126,824	1,388,852
68	1,388,852	104,164	1,493,016	129,361	1,363,655
69	1,363,655	102,274	1,465,929	131,948	1,333,981
70	1,333,981	100,049	1,434,030	134,587	1,299,443
71	1,299,443	97,458	1,396,901	137,279	1,259,623
72	1,259,623	94,472	1,354,094	140,024	1,214,070
73	1,214,070	91,055	1,305,126	142,825	1,162,301
74	1,162,301	87,173	1,249,474	145,681	1,103,792
75	1,103,792	82,784	1,186,577	148,595	1,037,982
76	1,037,982	77,849	1,115,831	151,567	964,264
77	964,264	72,320	1,036,584	154,598	881,986
78	881,986	66,149	948,135	157,690	790,445
79	790,445	59,283	849,728	160,844	688,885
80	688,885	51,666	740,551	164,061	576,490
81	576,490	43,237	619,727	167,342	452,385
82	452,385	33,929	486,314	170,689	315,626
83	315,626	23,672	339,297	174,102	165,195
84	165,195	12,390	177,585	177,584	0
Total Benefits Paid				4,056,808	

Present Value of Calpers Pensions

Retirement Age
Life Expectancy

Benefit Payment in Years
Initial Annual Benefit
Annual Calpers COLA
Calpers Discount Rate
(Investment Rate of Return)

55
84
100,000
2.00%
6.00%

Present Value of Employee Retirement Account

1,711,559

			Beginning		
	Beginning	Investment	Account	Annual	Year End
	Retirement	Gain based	Value plus	Retirement	Retirement
	Account	on Rate of	Investment	Benefit paid	Account
Retiree Age	Value	Return	Gain	plus COLA	Value
55	1,711,559	102,694	1,814,253	100,000	1,714,253
56	1,714,253	102,855	1,817,108	102,000	1,715,108
57	1,715,108	102,906	1,818,014	104,040	1,713,974
58	1,713,974	102,838	1,816,813	106,121	1,710,692
59	1,710,692	102,642	1,813,333	108,243	1,705,090
60	1,705,090	102,305	1,807,396	110,408	1,696,987
61	1,696,987	101,819	1,798,807	112,616	1,686,190
62	1,686,190	101,171	1,787,362	114,869	1,672,493
63	1,672,493	100,350	1,772,843	117,166	1,655,677
64	1,655,677	99,341	1,755,018	119,509	1,635,508
65	1,635,508	98,130	1,733,639	121,899	1,611,739
66	1,611,739	96,704	1,708,444	124,337	1,584,106
67	1,584,106	95,046	1,679,153	126,824	1,552,328
68	1,552,328	93,140	1,645,468	129,361	1,516,108
69	1,516,108	90,966	1,607,074	131,948	1,475,126
70	1,475,126	88,508	1,563,634	134,587	1,429,047
71	1,429,047	85,743	1,514,790	137,279	1,377,511
72	1,377,511	82,651	1,460,162	140,024	1,320,138
73	1,320,138	79,208	1,399,346	142,825	1,256,521
74	1,256,521	75,391	1,331,913	145,681	1,186,231
75	1,186,231	71,174	1,257,405	148,595	1,108,811
76	1,108,811	66,529	1,175,339	151,567	1,023,773
77	1,023,773	61,426	1,085,199	154,598	930,601
78	930,601	55,836	986,437	157,690	828,747
79	828,747	49,725	878,472	160,844	717,628
80	717,628	43,058	760,686	164,061	596,625
81	596,625	35,798	632,423	167,342	465,081
82	465,081	27,905	492,986	170,689	322,297
83	322,297	19,338	341,635	174,102	167,533
84	167,533	10,052	177,585	177,584	0
Total Benefits Paid				4,056,808	

Present Value of Calpers Pensions

Retirement Age 55
Life Expectancy 84
Benefit Payment in Years 30
Initial Annual Benefit 100,000
Annual Calpers COLA 2.00%
Calpers Discount Rate (Investment Rate of Return)

Present Value of Employee Retirement Account

1,936,306

			Beginning		
	Beginning	Investment	Account	Annual	
	Retirement	Gain based	Value plus	Retirement	Year End
	Account	on Rate of	Investment	Benefit paid	Retirement
Retiree Age	Value	Return	Gain	plus COLA	Account Value
55	1,936,306	96,815	2,033,121	100,000	1,933,121
56	1,933,121	96,656	2,029,777	102,000	1,927,777
57	1,927,777	96,389	2,024,166	104,040	1,920,126
58	1,920,126	96,006	2,016,133	106,121	1,910,012
59	1,910,012	95,501	2,005,512	108,243	1,897,269
60	1,897,269	94,863	1,992,133	110,408	1,881,724
61	1,881,724	94,086	1,975,811	112,616	1,863,194
62	1,863,194	93,160	1,956,354	114,869	1,841,486
63	1,841,486	92,074	1,933,560	117,166	1,816,394
64	1,816,394	90,820	1,907,214	119,509	1,787,704
65	1,787,704	89,385	1,877,090	121,899	1,755,190
66	1,755,190	87,760	1,842,950	124,337	1,718,612
67	1,718,612	85,931	1,804,543	126,824	1,677,719
68	1,677,719	83,886	1,761,605	129,361	1,632,244
69	1,632,244	81,612	1,713,856	131,948	1,581,908
70	1,581,908	79,095	1,661,004	134,587	1,526,417
71	1,526,417	76,321	1,602,738	137,279	1,465,459
72	1,465,459	73,273	1,538,732	140,024	1,398,708
73	1,398,708	69,935	1,468,643	142,825	1,325,819
74	1,325,819	66,291	1,392,110	145,681	1,246,429
75	1,246,429	62,321	1,308,750	148,595	1,160,155
76	1,160,155	58,008	1,218,163	151,567	1,066,596
77	1,066,596	53,330	1,119,926	154,598	965,328
78	965,328	48,266	1,013,595	157,690	855,905
79	855,905	42,795	898,700	160,844	737,856
80	737,856	36,893	774,749	164,061	610,688
81	610,688	30,534	641,223	167,342	473,881
82	473,881	23,694	497,575	170,689	326,886
83	326,886	16,344	343,231	174,102	169,128
84	169,128	8,456	177,585	177,584	0
Total Benefits Paid				4,056,808	