SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM

REPORT ON THE EXPERIENCE STUDY
FOR THE PERIOD
JULY 1, 2003 THROUGH
JUNE 30, 2006

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We were commissioned by the Board to perform an experience study of the Retirement System as of June 30, 2006, using the unaudited statistical information supplied by the Retirement Office for the active, inactive and retired membership.

A brief summary of the results of our valuation is presented below. More comprehensive information on each topic is presented in the relevant section of the report.

Section II - Statistical Highlights

This section shows a summary of the inactive, retired and active membership data used for the experience analysis.

Section III - Summary of Actuarial Assumptions

Noneconomic Assumptions

We have examined the plan experience during the three year period from July 1, 2003 through June 30, 2006. We analyzed data for this period regarding service retirement, deaths, disabilities and terminations of employment and compared the number of actual terminations from each cause to the incidence expected using the current actuarial assumptions. Where the results differ materially, and the change points to a developing trend, we recommend modifying the assumptions. The summary of our findings and recommendations are incorporated in the body of this report.

Economic Assumptions

In order to ensure that the same inflationary expectations are consistently included in all of the economic assumptions, we used a building block approach in developing the economic assumptions. That is, we assumed that the investment return earned over the long term is comprised of the rate of

inflation and real rate of return, and we assumed that future salary increases are comprised of the same rate of inflation and merit and longevity increases.

The summary of our findings and recommendations is incorporated in the body of this report.

Section IV - Appendix

Detailed information on the current and recommended actuarial assumptions is shown in Section IV.

SECTION II: STATISTICAL HIGHLIGHTS

Our June 30, 2006 experience study of your System was based on the following data that was collected for the June 30, 2004, June 30, 2005 and June 30, 2006 actuarial valuations.

SUMMARY OF INACTIVE MEMBERSHIP			
	June 30, 2004	June 30, 2005	June 30, 2006
TOTAL Number*	717	757	778

  * Excludes pending withdrawals.

SUMMARY OF RETIRED MEMBERSHIP			
	June 30, 2004	June 30, 2005	June 30, 2006
TOTAL			
Number	2,440	2,561	2,679
Basic Annual Allowance	$40,607,000	$45,786,000	$50,052,000
Average Basic Monthly Allowance	$1,387	$1,490	$1,557
Total Annual Allowance	$52,268,000	$58,824,000	$64,580,000
Average Total Monthly Allowance	$1,785	$1,914	$2,009
Average Age	69.77	69.62	69.39

SUMMARY OF ACTIVE MEMBERSHIP			
	June 30, 2004	June 30, 2005	June 30, 2006
TOTAL			
Number	4,503	4,505	4,640
Annual Payroll †	$266,961,000	$267,786,000	$287,382,000
Average Monthly Salary	$4,940	$4,953	$5,161
Average Age	44.26	44.38	44.26
Average Service	10.17	10.32	10.28

  † Represents the annualization of active members' pay rates on each valuation date.

SUMMARY OF ACTIVE MEMBERSHIP			
	June 30, 2004	June 30, 2005	June 30, 2006
GENERAL PLAN 5A			
Number	1,454	1,337	1,245
Annual Payroll*	$88,872,000	$83,051,000	$81,139,000
Average Monthly Salary	$5,094	$5,176	$5,431
Average Age	49.89	50.46	51.03
Average Service	16.73	17.62	18.52
GENERAL PLAN 2			
Number	36	32	29
Annual Payroll*	$1,885,000	$1,691,000	$1,640,000
Average Monthly Salary	$4,363	$4,404	$4,713
Average Age	48.69	50.66	52.38
Average Service	14.64	16.28	17.79
GENERAL PLAN 5B			
Number	2,012	2,133	2,328
Annual Payroll*	$104,907,000	$110,718,000	$127,510,000
Average Monthly Salary	$4,345	$4,326	$4,564
Average Age	41.39	41.70	41.72
Average Service	4.61	5.00	5.20
SAFETY PLAN 4A			
Number	398	380	362
Annual Payroll*	$32,799,000	$32,099,000	$31,487,000
Average Monthly Salary	$6,867	$7,039	$7,248
Average Age	46.03	46.66	47.27
Average Service	18.38	18.86	19.48
SAFETY PLAN 4B			
Number	546	567	620
Annual Payroll*	$34,797,000	$36,316,000	$41,490,000
Average Monthly Salary	$5,311	$5,337	$5,577
Average Age	37.86	37.81	37.59
Average Service	6.71	6.79	6.81
APCD PLAN 1			
Number	38	37	36
Annual Payroll*	$2,652,000	$2,758,000	$2,758,000
Average Monthly Salary	$5,816	$6,212	$6,385
Average Age	49.76	51.05	51.61
Average Service	15.50	16.43	17.47
APCD PLAN 2			
Number	19	19	20
Annual Payroll*	$1,049,000	$1,153,000	$1,358,000
Average Monthly Salary	$4,601	$5,057	$5,658
Average Age	44.68	45.32	46.60
Average Service	4.21	5.58	6.10

∗   Represents the annualization of active members' pay rates on each valuation date.

To carry out an actuarial valuation of the assets and liabilities of your System, the actuary must first adopt assumptions with respect to each of the following items:

Noneconomic assumptions

- ◆ The probabilities of members separating from active service on account of withdrawal, vested termination, retirement for service, death, and disability, and
- ◆ The mortality rates to be experienced among retired persons.

Economic assumptions

- ◆ Investment earnings to be realized on the funds over many years in the future, and
- ◆ The relative increases in members' salaries from the date of the valuation to the date of separation from active service.

We discuss each of the above items in the following paragraphs of this Section.

NONECONOMIC ASSUMPTIONS

Rates of Separation from Active Service

In connection with the June 30, 2006 actuarial valuation, we compared the expected number of terminations from active service to the number actually experienced during the three-year period beginning July 1, 2003 and ending June 30, 2006. Based on this comparison and the trends observed over the prior three and/or six years, the probabilities of separation were adjusted accordingly, as identified below.

Pre-retirement Death

During the experience study period, the number of deaths was lower than expected for General male members. We recommend that the *death while eligible* rates be lowered for this group to reflect the improved mortality.

Ordinary Disability

During the experience study period, the incidence of *ordinary disability* was considerably lower than expected for General male members. We recommend that the *ordinary disability* rates be lowered for this group. The incidence of *ordinary disability* was higher than expected for Safety members, but the pattern has reversed since the last experience study. We recommend no change to this group at this time and will continue to monitor the incidence of disabilities to see if a trend evolves.

Duty Disability

The number of actual separations due to *duty disability* was lower than expected for General male members and higher than expected for Safety members. We recommend that the *duty disability* rates be lowered for General males and increased for Safety members.

Service Retirement

The number of actual separations due to *service retirement* was lower than expected for General male members and higher than expected for General female members. We recommend decreasing the *service retirement* rates for General males and increasing the *service retirement* rates for General females.

Withdrawal

During the experience study period, the incidence of *withdrawal* was slightly lower than expected for General male and Safety members. The pattern has reversed since the last experience study and we recommend no change to the rates for these two groups.

Vested Termination

The number of actual separations due to *vested termination* was higher than the number of expected separations for General members. We recommend increasing the *vested termination* rates to reflect the experience for these two groups. The number of actual separations due to *vested termination* was lower than expected for Safety members. Taking into account the experience over the last six years, we are recommending no change to the *vested termination* rates for this group.

None of the other types of separation demonstrated a statistically significant difference from our assumptions during the period of this study or the prior three- or six-year period; hence, we recommend continuing the existing assumptions for the remaining types of separation.

The purpose of the following table is to provide the reader with a shorthand summary of the experience compared with the existing assumptions. A complete list of the current and recommended rates of separation from active service can be found in Schedule 2 of the Appendix. These rates should be viewed in the aggregate rather than examining each of them separately. This is due to the interdependency of the rates. For example, if turnover were to increase, there would be fewer retirements.

"Expected separations" means the number of terminations that would have occurred if the currently assumed probabilities were experienced by your actual work force over the period under investigation. "Revised separations" means the number of terminations that would have occurred if the revised assumed probabilities were experienced by your actual workforce over the period under investigation.

SUMMARY OF ACTUARIAL INVESTIGATION WITH RESPECT TO RATES OF SEPARATION FROM ACTIVE SERVICE			
	Actual Separations	Expected Separations	Revised Separations
Pre-retirement Death			
General Male	4	6.95	6.04
General Female	7	7.43	N/A
Safety	1	2.84	N/A
Ordinary Disability			
General Male	1	4.96	3.72
General Female*	11	10.83	N/A
Safety*	3	1.42	N/A
Duty Disability			
General Male	3	6.87	5.15
General Female*	8	7.27	N/A
Safety*	14	9.91	10.90
Service Retirement**			
General Male	86	109.45	99.63
General Female	149	116.76	129.27
Safety	67	47.06	N/A
Withdrawal			
General Male	133	152.81	N/A
General Female	344	371.38	N/A
Safety	32	51.09	N/A
Vested Termination			
General Male	79	43.59	56.66
General Female	144	100.48	120.58
Safety	33	26.47	N/A
All Terminations	1,119	1,077.57	1,110.55

* Include change to disability status after retirement.

** Excludes General members older than 70 and Safety members older than 60. Based on our expectation that members were waiting to retire after new benefits were implemented, no adjustments were made to Safety Service Retirement rates.

A complete listing of the revised rates of separation from active service can be found in Schedule 2 of the Appendix. These rates should be viewed in the aggregate rather than examining each of them separately. This is due to interdependency of the rates. For example, if turnover were to increase, there would be fewer retirements.

Mortality After Retirement

We have also analyzed mortality after retirement by comparing the expected number of deaths with the actual incidence of death after service retirement. The comparison was made by utilizing the following mortality tables currently in use.

<u>Current Service Retirement Mortality Tables</u>

- General Males — 1994 Group Annuity Mortality Table for Males, setback 2 years
- General Females — 1994 Group Annuity Mortality Table for Females, set forward 1 year
- Safety Males — 1994 Group Annuity Mortality Table for Males, setback 2 years
- Safety Females — 1994 Group Annuity Mortality Table for Females, set forward 1 year

Note: No setback means that the table is used as published. When the table is set forward one year, the member's life expectancy is that of someone one year older. When the table is set back one year, the member's life expectancy is that of someone one year younger.

The results of the experience analysis are as follows:

NUMBER OF DEATHS AFTER SERVICE RETIREMENT			
	Actual	Expected	Revised
General Males and Male Beneficiaries	95	82.4	N/A
General Females and Female Beneficiaries	115	119.1	107.3
Safety Members	7	12.3	12.2

During the period under investigation, the number of actual deaths was lower than expected for General females and Safety members. Based on these results, we recommend setting the female mortality table back one year. The number of expected deaths based on the recommended mortality tables is shown in the chart above in the column labeled "Revised".

<u>Revised Service Retirement Mortality Tables</u>

- General Males — 1994 Group Annuity Mortality Table for Males, setback 2 years
- General Females — 1994 Group Annuity Mortality Table for Females, no adjustment

◆ Safety Males   1994 Group Annuity Mortality Table for Males, setback 2 years

◆ Safety Females   1994 Group Annuity Mortality Table for Females, no adjustment

Note: No setback means that the table is used as published. When the table is set forward one year, the member's life expectancy is that of someone one year older. When the table is set back one year, the member's life expectancy is that of someone one year younger.

A full listing of the life expectancies based on these tables is shown in Schedule 3 of the Appendix.

Mortality After Disability Retirement

In addition, we analyzed mortality after disability retirement. This comparison was made by utilizing the following mortality tables currently in use.

Current Disability Retirement Mortality Tables

◆ General   1981 Disability Mortality Table for General Members, with no setback

◆ Safety   1981 Disability Mortality Table for Safety Members, setback two years

The results of the experience analysis are as follows:

NUMBER OF DEATHS AFTER DISABILITY RETIREMENT			
	Actual	Expected	Revised
General Members	11	18.1	13.3
Safety Members	3	7.9	4.3

During the period under investigation, the number of actual deaths after disability retirement was lower than expected for General and Safety members. We recommend changing to a new table that we anticipate will better reflect the future experience.

Revised Disability Retirement Mortality Tables

◆ General Males   1994 Group Annuity Mortality Table for Males, set forward 5 years

◆ General Females   1994 Group Annuity Mortality Table for Females, set forward 5 years

◆ Safety Males   1994 Group Annuity Mortality Table for Males, set forward 2 years

◆ Safety Females   1994 Group Annuity Mortality Table for Females, set forward 2 years

Note: No setback means that the table is used as published. When the table is set forward one year, the member's life expectancy is that of someone one year older. When the table is set back one year, the member's life expectancy is that of someone one year younger.

A full listing of the life expectancies based on these tables is shown in Schedule 3 of the Appendix.

Mortality Tables impact on Employee Contribution Rates

The recommended changes to the mortality table after service retirement mentioned above will cause an increase in the employee contribution rates. These rates will be provided in our final valuation report to the Board.

Recommendation

We recommend that the Board adopt the new rates of separation shown in Schedule 2 of the Appendix and the post-retirement mortality rates shown in Schedule 3 of the Appendix.

ECONOMIC ASSUMPTIONS

In setting the economic assumptions, we take a building block approach. Specifically, we first look at the rate of inflation that underlies both the total rate of return and the salary scale assumptions. To aid us in determining an appropriate inflation rate for your System, we have reviewed long-term historical inflation averages, recent trends, and the assumptions adopted by other public retirement systems governed by the 1937 Act. It should be noted that we have placed more emphasis on long-term historical averages and long-term future predictions than on the more recent, short-term trends. This helps to minimize fluctuations that are more apparent in short-term trends.

Secondly, we review the anticipated real rate of return on investments. The real rate of return is dependent on the anticipated returns on classes of investments and the asset allocation of the

System's investments. To develop the individual real rates of return we utilize various empirical studies. By applying the results of these studies to the System's target asset allocation, we develop the aggregate real rate of return. This rate may then be adjusted for any known or anticipated changes in the economy that may occur. Using our building block approach, we combine the underlying inflation assumption with the real rate of return to develop the total rate of return assumption.

The salary scale assumption is developed in a similar manner. The inflation rate is combined with merit and longevity increases to produce a total salary scale assumption.

Inflation

One of the most important assumptions used in valuing the System's liabilities is the rate of inflation. This assumption underlies both the investment return assumption and the salary increase assumption. These in turn directly impact the employer and employee contribution rates.

If the pattern of inflation during the last 90-year period is analyzed, it may be extrapolated that the current low rates will not continue into the future indefinitely. Inflation appears to move in a cyclical fashion as may be seen in the following graph.

HISTORICAL INFLATION RATE*
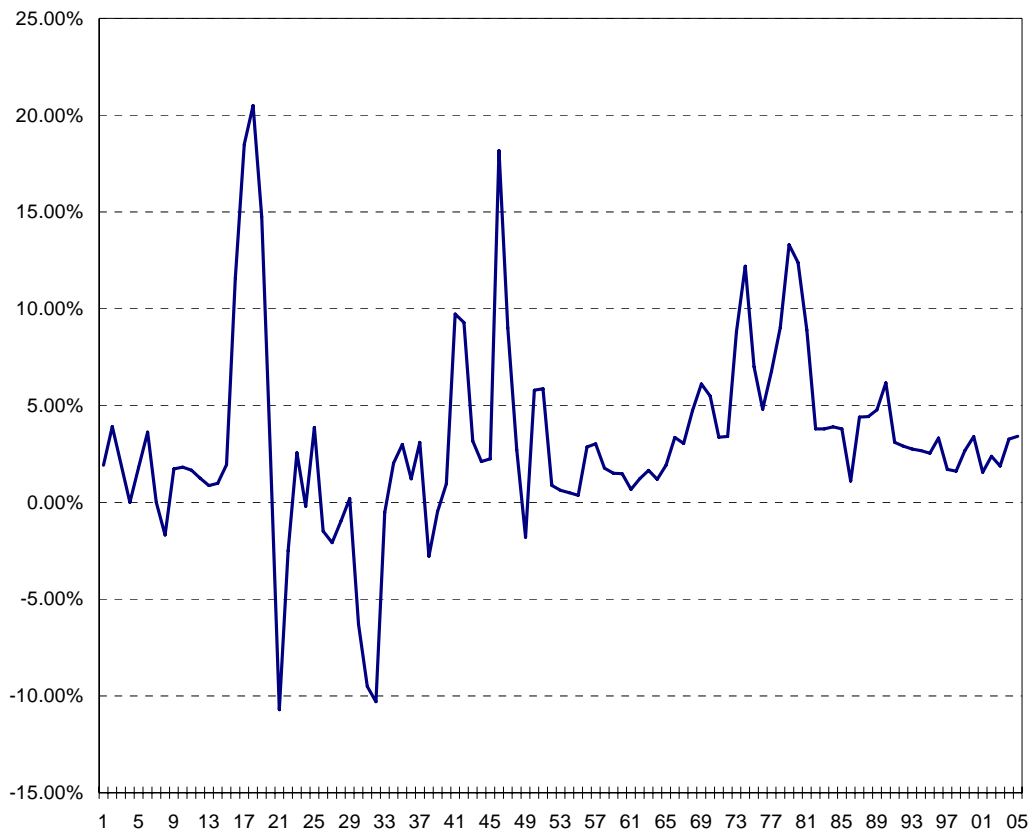
* US City Average (December index)　　　　**Year**

From	To	Years	Average
1996	2005	10	2.52%
1986	2005	20	3.00%
1976	2005	30	4.35%
1966	2005	40	4.70%
1956	2005	50	4.11%
1946	2005	60	4.12%
1936	2005	70	3.94%
1926	2005	80	3.12%
1916	2005	90	3.45%

Because of the cyclical nature of inflation and the long-term nature of the System's liabilities, we believe that it is appropriate to assume that the average inflation rate to be experienced over the next 30 to 50 years (which is approximately the lifetime of the present obligations of the System) will be between 4.00% and 4.75%. Also, inflation for the last 30 years is now less than the current 4.50% assumption.

Based on the information presented, we recommend that the inflation rate assumption of 4.50% be lowered to 4.00%.

Real Rate of Return

The first step in developing a real rate of return is to analyze how the System's assets are allocated among the various investment classes. Based on this information, we can then apply the anticipated rate of return to the respective classes and develop an overall estimated real rate of return. The System's target and actual asset allocations are shown in the table below.

There have been numerous studies performed which analyze the expected long-term real rates of return for use in asset allocation models. Roger Ibbotson and Rex A. Sinquefield produced one of these studies for the period 1926-2005 called *Stocks, Bonds and Inflation: Simulations of the Future*. The results of this study are presented below.

ASSET CLASS	ASSET ALLOCATION AS OF JUNE 30, 2006 (MARKET VALUE)		IBBOTSON-SINQUEFIELD REAL RATES OF RETURN (1926 – 2005)	TARGET WEIGHTED RETURN
	TARGET	ACTUAL		
Equity*	69%	71%	7.1%	4.90%
Fixed Income/Bonds*	25%	26%	2.6%	0.65%
Real Estate	5%	2%	4.0%	0.20%
Short Term	1%	1%	0.7%	0.01%
Total	100%	100%		5.76%
*Includes International Equity and Fixed Income				

Applying the System's target asset allocation to the real rates of return in the table above produces a real rate of return of approximately 5.76% (assuming an equal proportion of government and corporate bonds and assuming a return of 4% for real estate). After adjusting for expenses and potential adverse future experience, we believe that a real rate of return of 4.00% provides a reasonable degree of conservatism when used with a 4.00% inflation rate. Thus, we recommend that the 8.00% investment return assumption be continued. In addition, since the reserves are credited at the assumed interest rate semiannually, the 8.00% interest rate is compounded for valuation purposes.

The return on assets, net of expenses, experienced by the Fund since 1981 is shown below. The increase in the Consumer Price Index is also shown for comparative purposes.

NET RETURN ON ASSETS vs. INCREASE IN CONSUMER PRICE INDEX		
Year Ended June 30,	Net Return @ Market Value	Increase in Consumer Price Index*
1988	1.9%	4.0%
1989	17.6%	5.2%
1990	10.8%	4.7%
1991	9.7%	4.7%
1992	18.5%	3.1%
1993	13.2%	3.0%
1994	(0.7)%	2.5%
1995	17.7%	3.0%
1996	15.6%	2.8%
1997	19.9%	2.3%
1998	18.9%	1.7%
1999	10.5%	2.0%
2000	6.4%	3.7%
2001	(4.3)%	3.3%
2002	(5.4)%	1.1%
2003	4.6%	2.1%
2004	15.7%	3.3%
2005	9.9%	2.5%
18-Year Compound Average	9.7%	3.1%

* Based on All Urban Consumers – U.S. City Average, June indices.

Merit and Longevity Increases

The merit and longevity component of the total salary scale assumption reflects increases in members' salaries due to promotions, advances in pay grades, etc. These increases are dependent on an individual's membership and are graded downward as member ages.

Our analysis of the salary increase assumption for the 3-year period shows that the merit and longevity increase had been higher than the current assumption. We have also analyzed the annual increases for continuing members over the three-year experience study period and the results are presented in the table below.

Year	General Members	Safety Members	Cost of living pay increases *
7/1/2003 – 6/30/2004	6.1%	7.9%	3.35%
7/1/2004 – 6/30/2005	3.1%	3.1%	0.00%
7/1/2005 – 6/30/2006	6.7%	5.8%	2.00%
Three-year average	6.4%	6.7%	1.78%

* For General members.

Our recommend salary increase assumption is detailed in schedule 4. The overall effect of the merit and longevity increases is to add approximately 2.00% to the total salary scale assumption.

Recommendation

Based on the information presented in this section, we recommend that an 8.00% interest rate assumption (effective rate of 8.16%), a long-term inflation rate assumption of 4.00%, and an age-based salary increase assumption averaging approximately 6.00% be used to develop the System's costs.

SECTION IV - APPENDIX

SCHEDULE 1

<u>SUMMARY OF ACTUARIAL ASSUMPTIONS</u>

The Entry Age Normal Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The Unfunded Actuarial Accrued Liability is being funded over 15 years from the date each new liability is first recognized.

1.	Interest:	8.00% per annum, compounded biannually.
2.	Interest Credited to Employee Accounts:	8.00% per annum, compounded biannually.
3.	Inflation:	4.00% per annum.
4.	Asset Valuation:	Actuarial value.
5.	Salary Scale:	See Schedule 4
6.	Spouses and Dependents:	80% of male employees and 50% of female employees assumed married at retirement, with wives assumed three years younger than husbands.
7.	Rates of Termination of Employment:	See Schedule 2
8.	Years of Life Expectancy After Retirement:	See Schedule 3
9.	Years of Life Expectancy After Disability:	See Schedule 3
10.	Reciprocity Assumption:	50% of members who terminate with a vested benefit are assumed to enter a reciprocal system.
11.	Deferral Age for Vested Terminations:	62 for General members; 55 for Safety members

SCHEDULE 2

PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE

The following pages indicate the probability of separation from active service for each of eight separate sources of termination:

- *Withdrawal:*   member terminates and elects refund of member contributions.

- *Vested termination:*   member terminates and contributions are left on deposit.

- *Ordinary death:*   member dies prior to eligibility for retirement; death not employment-related.

- *Ordinary disability:*   member receives disability retirement; disability not employment-related.

- *Service retirement:*   member retires after satisfaction of requirements of age and/or service for reasons other than disability.

- *Duty disability:*   member receives disability retirement; disability is employment-related.

- *Duty death:*   member dies prior to retirement; death is employment-related.

- *Death while eligible:*   member dies prior to retirement but after satisfaction of age and/or service requirements for service retirement or ordinary disability.

The probabilities shown for each cause of termination represent the probability that a given member will terminate at a particular age for the indicated reason. For example, if the probability of withdrawal at age 25 is .1380, then we are assuming that 13.8% of the active members at age 25 will terminate without vested rights during the next year.

SCHEDULE 2
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
(RECOMMENDED ASSUMPTIONS)
GENERAL MEMBERS -- MALES

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	0.18975	0.00011	0.00000	0.00000	0.00000	0.00013	0.00008	0.00000
21	0.17825	0.00011	0.00000	0.00000	0.00000	0.00013	0.00008	0.00000
22	0.16675	0.00011	0.00000	0.00000	0.00000	0.00013	0.00008	0.00000
23	0.15525	0.00011	0.00000	0.00000	0.00000	0.00013	0.00008	0.00000
24	0.14375	0.00011	0.00000	0.00000	0.00000	0.00013	0.00008	0.00000
25	0.13800	0.00017	0.00000	0.00000	0.00005	0.00013	0.00008	0.00000
26	0.13225	0.00017	0.00000	0.00000	0.00005	0.00013	0.00008	0.00000
27	0.12363	0.00017	0.00000	0.00000	0.00005	0.00013	0.00008	0.00000
28	0.11500	0.00017	0.00000	0.00000	0.00005	0.00013	0.00008	0.00130
29	0.10638	0.00017	0.00000	0.00000	0.00005	0.00013	0.00008	0.00260
30	0.09775	0.00023	0.00000	0.00000	0.00010	0.00013	0.00017	0.00585
31	0.09200	0.00023	0.00000	0.00000	0.00010	0.00013	0.00017	0.00845
32	0.08625	0.00023	0.00000	0.00000	0.00010	0.00013	0.00017	0.01105
33	0.08050	0.00023	0.00000	0.00000	0.00010	0.00013	0.00017	0.01430
34	0.07475	0.00023	0.00000	0.00000	0.00010	0.00013	0.00017	0.01560
35	0.06900	0.00029	0.00008	0.00000	0.00010	0.00013	0.00025	0.01690
36	0.06325	0.00029	0.00008	0.00000	0.00010	0.00013	0.00033	0.01755
37	0.05865	0.00029	0.00008	0.00000	0.00015	0.00013	0.00041	0.01820
38	0.05520	0.00029	0.00008	0.00000	0.00015	0.00013	0.00050	0.01690
39	0.05175	0.00034	0.00016	0.00000	0.00015	0.00013	0.00058	0.01560
40	0.04945	0.00034	0.00016	0.00000	0.00015	0.00013	0.00066	0.01560
41	0.04715	0.00034	0.00016	0.00000	0.00020	0.00013	0.00074	0.01625
42	0.04485	0.00039	0.00024	0.00000	0.00020	0.00013	0.00091	0.01690
43	0.04140	0.00039	0.00032	0.00000	0.00025	0.00013	0.00099	0.01820
44	0.03795	0.00039	0.00040	0.00000	0.00025	0.00013	0.00107	0.01950
45	0.03450	0.00045	0.00047	0.00000	0.00031	0.00013	0.00124	0.02145
46	0.03220	0.00051	0.00055	0.00000	0.00035	0.00013	0.00132	0.02340
47	0.02990	0.00056	0.00063	0.00000	0.00040	0.00013	0.00140	0.02600
48	0.02875	0.00062	0.00071	0.00000	0.00051	0.00013	0.00148	0.02340
49	0.02760	0.00068	0.00087	0.00000	0.00062	0.00013	0.00157	0.02145
50	0.02645	0.00073	0.00103	0.02000	0.00071	0.00013	0.00165	0.01950
51	0.02530	0.00079	0.00119	0.02000	0.00082	0.00013	0.00182	0.01820
52	0.02415	0.00090	0.00134	0.02000	0.00091	0.00013	0.00198	0.01690
53	0.02300	0.00101	0.00150	0.02000	0.00106	0.00013	0.00206	0.01560
54	0.02185	0.00112	0.00166	0.03000	0.00122	0.00013	0.00214	0.01430
55	0.02070	0.00124	0.00182	0.06000	0.00138	0.00013	0.00231	0.01300
56	0.01955	0.00135	0.00197	0.04000	0.00153	0.00013	0.00247	0.01235
57	0.01840	0.00146	0.00213	0.04500	0.00168	0.00013	0.00256	0.01105
58	0.01725	0.00157	0.00236	0.05000	0.00184	0.00013	0.00264	0.01040
59	0.01610	0.00169	0.00260	0.09000	0.00199	0.00013	0.00281	0.00975
60	0.01495	0.00180	0.00292	0.12700	0.00209	0.00013	0.00289	0.00910
61	0.01380	0.00191	0.00323	0.20000	0.00224	0.00013	0.00305	0.00845
62	0.01265	0.00203	0.00355	0.30000	0.00239	0.00013	0.00314	0.00780
63	0.01150	0.00214	0.00386	0.12000	0.00255	0.00013	0.00330	0.00715
64	0.01150	0.00225	0.00418	0.20000	0.00270	0.00013	0.00346	0.00650
65	0.01150	0.00236	0.00449	0.29000	0.00286	0.00013	0.00000	0.00000
66	0.01150	0.00253	0.00481	0.22000	0.00301	0.00013	0.00000	0.00000
67	0.01150	0.00270	0.00520	0.22000	0.00317	0.00013	0.00000	0.00000
68	0.01150	0.00287	0.00559	0.30000	0.00337	0.00013	0.00000	0.00000
69	0.01150	0.00304	0.00599	0.40000	0.00357	0.00013	0.00000	0.00000
70	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000

SCHEDULE 2

PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE

(RECOMMENDED ASSUMPTIONS)

GENERAL MEMBERS -- FEMALES

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	0.17250	0.00010	0.00000	0.00000	0.00000	0.00010	0.00012	0.00000
21	0.16500	0.00010	0.00000	0.00000	0.00000	0.00010	0.00012	0.00000
22	0.15750	0.00010	0.00000	0.00000	0.00000	0.00010	0.00012	0.00000
23	0.14750	0.00010	0.00000	0.00000	0.00000	0.00010	0.00012	0.00000
24	0.13750	0.00010	0.00000	0.00000	0.00000	0.00010	0.00012	0.00000
25	0.13250	0.00010	0.00018	0.00000	0.00008	0.00010	0.00012	0.00000
26	0.13000	0.00010	0.00018	0.00000	0.00008	0.00010	0.00012	0.00000
27	0.12500	0.00020	0.00018	0.00000	0.00008	0.00010	0.00012	0.00528
28	0.12000	0.00020	0.00018	0.00000	0.00008	0.00010	0.00012	0.00792
29	0.11500	0.00020	0.00018	0.00000	0.00008	0.00010	0.00012	0.01056
30	0.11000	0.00020	0.00018	0.00000	0.00008	0.00010	0.00012	0.01320
31	0.10500	0.00020	0.00018	0.00000	0.00008	0.00010	0.00012	0.01584
32	0.10000	0.00020	0.00035	0.00000	0.00008	0.00010	0.00012	0.01848
33	0.09500	0.00020	0.00035	0.00000	0.00008	0.00010	0.00012	0.02112
34	0.09100	0.00020	0.00035	0.00000	0.00008	0.00010	0.00012	0.02244
35	0.08700	0.00030	0.00050	0.00000	0.00008	0.00010	0.00024	0.02376
36	0.08200	0.00030	0.00050	0.00000	0.00008	0.00010	0.00024	0.02376
37	0.07600	0.00030	0.00050	0.00000	0.00008	0.00010	0.00036	0.02376
38	0.06900	0.00030	0.00050	0.00000	0.00008	0.00010	0.00036	0.02376
39	0.06200	0.00030	0.00050	0.00000	0.00008	0.00010	0.00048	0.02376
40	0.05500	0.00040	0.00068	0.00000	0.00008	0.00010	0.00060	0.02442
41	0.05000	0.00040	0.00085	0.00000	0.00008	0.00010	0.00072	0.02508
42	0.04500	0.00040	0.00085	0.00000	0.00008	0.00010	0.00084	0.02508
43	0.04000	0.00040	0.00117	0.00000	0.00008	0.00010	0.00096	0.02508
44	0.03600	0.00040	0.00135	0.00000	0.00008	0.00010	0.00096	0.02508
45	0.03200	0.00050	0.00153	0.00000	0.00016	0.00010	0.00108	0.02508
46	0.03000	0.00050	0.00168	0.00000	0.00016	0.00010	0.00108	0.02508
47	0.02900	0.00050	0.00168	0.00000	0.00016	0.00010	0.00120	0.02442
48	0.02800	0.00060	0.00185	0.00000	0.00024	0.00010	0.00132	0.02442
49	0.02700	0.00060	0.00203	0.00000	0.00024	0.00010	0.00144	0.02376
50	0.02600	0.00060	0.00219	0.03000	0.00032	0.00010	0.00144	0.02310
51	0.02500	0.00060	0.00236	0.01800	0.00040	0.00010	0.00156	0.02178
52	0.02400	0.00070	0.00252	0.01800	0.00048	0.00010	0.00168	0.01980
53	0.02300	0.00080	0.00252	0.03000	0.00056	0.00010	0.00180	0.01716
54	0.02200	0.00090	0.00270	0.02000	0.00064	0.00010	0.00192	0.01320
55	0.02100	0.00100	0.00286	0.04000	0.00072	0.00010	0.00204	0.01056
56	0.02000	0.00110	0.00305	0.03000	0.00080	0.00010	0.00216	0.00792
57	0.01900	0.00120	0.00319	0.03500	0.00088	0.00010	0.00216	0.00660
58	0.01800	0.00140	0.00354	0.03900	0.00096	0.00010	0.00228	0.00528
59	0.01700	0.00160	0.00387	0.04400	0.00104	0.00010	0.00240	0.00528
60	0.01650	0.00180	0.00422	0.06600	0.00112	0.00010	0.00252	0.00528
61	0.01550	0.00200	0.00458	0.10000	0.00120	0.00010	0.00264	0.00528
62	0.01500	0.00220	0.00506	0.20000	0.00128	0.00010	0.00276	0.00528
63	0.01500	0.00240	0.00557	0.15000	0.00136	0.00010	0.00288	0.00528
64	0.01500	0.00260	0.00608	0.15000	0.00144	0.00010	0.00300	0.00528
65	0.01500	0.00280	0.00000	0.25000	0.00160	0.00010	0.00000	0.00000
66	0.01500	0.00300	0.00000	0.25000	0.00176	0.00010	0.00000	0.00000
67	0.01500	0.00330	0.00000	0.25000	0.00192	0.00010	0.00000	0.00000
68	0.01500	0.00360	0.00000	0.30000	0.00208	0.00010	0.00000	0.00000
69	0.01500	0.00390	0.00000	0.50000	0.00224	0.00010	0.00000	0.00000
70	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000

SCHEDULE 2

PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
(RECOMMENDED ASSUMPTIONS)

SAFETY MEMBERS

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	0.07000	0.00007	0.00000	0.00000	0.00000	0.00006	0.00015	0.00000
21	0.06700	0.00007	0.00000	0.00000	0.00000	0.00006	0.00015	0.00260
22	0.06400	0.00007	0.00000	0.00000	0.00000	0.00006	0.00015	0.00585
23	0.06100	0.00007	0.00000	0.00000	0.00000	0.00006	0.00015	0.00910
24	0.05800	0.00007	0.00000	0.00000	0.00000	0.00006	0.00020	0.01235
25	0.05500	0.00015	0.00004	0.00000	0.00006	0.00013	0.00030	0.01560
26	0.05200	0.00015	0.00004	0.00000	0.00006	0.00013	0.00040	0.01885
27	0.04900	0.00015	0.00004	0.00000	0.00006	0.00013	0.00054	0.02145
28	0.04500	0.00015	0.00004	0.00000	0.00006	0.00013	0.00069	0.02405
29	0.04100	0.00015	0.00004	0.00000	0.00006	0.00013	0.00085	0.02340
30	0.03800	0.00015	0.00004	0.00000	0.00006	0.00013	0.00103	0.02275
31	0.03500	0.00015	0.00007	0.00000	0.00006	0.00013	0.00123	0.02145
32	0.03200	0.00015	0.00010	0.00000	0.00012	0.00013	0.00143	0.01950
33	0.02900	0.00015	0.00017	0.00000	0.00012	0.00013	0.00168	0.01690
34	0.02700	0.00015	0.00025	0.00000	0.00012	0.00013	0.00193	0.01365
35	0.02500	0.00015	0.00032	0.00000	0.00012	0.00013	0.00222	0.01235
36	0.02300	0.00015	0.00038	0.00000	0.00018	0.00013	0.00257	0.01170
37	0.02100	0.00015	0.00046	0.00000	0.00024	0.00013	0.00292	0.01105
38	0.01900	0.00015	0.00052	0.00000	0.00024	0.00013	0.00327	0.01040
39	0.01700	0.00015	0.00059	0.00000	0.00030	0.00013	0.00362	0.00975
40	0.01500	0.00023	0.00066	0.00000	0.00036	0.00020	0.00396	0.00910
41	0.01300	0.00023	0.00074	0.00000	0.00036	0.00020	0.00430	0.00845
42	0.01100	0.00023	0.00081	0.00000	0.00036	0.00020	0.00470	0.00780
43	0.00900	0.00023	0.00084	0.00000	0.00042	0.00020	0.00510	0.00650
44	0.00700	0.00023	0.00084	0.00000	0.00042	0.00020	0.00549	0.00520
45	0.00600	0.00030	0.00088	0.00660	0.00048	0.00026	0.00594	0.00455
46	0.00500	0.00030	0.00088	0.00880	0.00054	0.00033	0.00639	0.00390
47	0.00450	0.00030	0.00091	0.01100	0.00054	0.00039	0.00683	0.00325
48	0.00400	0.00038	0.00091	0.01100	0.00060	0.00045	0.00727	0.00260
49	0.00400	0.00038	0.00094	0.01100	0.00060	0.00052	0.00772	0.00195
50	0.00400	0.00045	0.00094	0.05500	0.00066	0.00058	0.00816	0.00130
51	0.00400	0.00052	0.00098	0.04400	0.00072	0.00065	0.00867	0.00104
52	0.00400	0.00060	0.00098	0.04400	0.00078	0.00071	0.00916	0.00091
53	0.00400	0.00068	0.00102	0.03850	0.00084	0.00078	0.00965	0.00078
54	0.00400	0.00075	0.00105	0.03850	0.00090	0.00084	0.01014	0.00065
55	0.00000	0.00082	0.00000	0.10000	0.00096	0.00091	0.00000	0.00000
56	0.00000	0.00090	0.00000	0.07500	0.00102	0.00097	0.00000	0.00000
57	0.00000	0.00097	0.00000	0.07500	0.00108	0.00104	0.00000	0.00000
58	0.00000	0.00105	0.00000	0.15000	0.00114	0.00117	0.00000	0.00000
59	0.00000	0.00112	0.00000	0.40000	0.00120	0.00130	0.00000	0.00000
60	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	0.00000

SCHEDULE 3

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT
(RECOMMENDED ASSUMPTIONS)

Age	GENERAL Male	GENERAL Female	SAFETY Male	SAFETY Female	Age	GENERAL Male	GENERAL Female	SAFETY Male	SAFETY Female
50	32.55	34.89	32.55	34.89	81	8.88	9.71	8.88	9.71
51	31.62	33.94	31.62	33.94	82	8.37	9.14	8.37	9.14
52	30.69	32.99	30.69	32.99	83	7.89	8.58	7.89	8.58
53	29.77	32.05	29.77	32.05	84	7.44	8.05	7.44	8.05
54	28.85	31.11	28.85	31.11	85	7.00	7.54	7.00	7.54
55	27.95	30.17	27.95	30.17	86	6.59	7.06	6.59	7.06
56	27.04	29.24	27.04	29.24	87	6.19	6.59	6.19	6.59
57	26.15	28.31	26.15	28.31	88	5.80	6.15	5.80	6.15
58	25.27	27.40	25.27	27.40	89	5.43	5.73	5.43	5.73
59	24.39	26.49	24.39	26.49	90	5.07	5.34	5.07	5.34
60	23.52	25.59	23.52	25.59	91	4.73	4.98	4.73	4.98
61	22.67	24.70	22.67	24.70	92	4.42	4.64	4.42	4.64
62	21.83	23.82	21.83	23.82	93	4.13	4.33	4.13	4.33
63	21.00	22.96	21.00	22.96	94	3.86	4.04	3.86	4.04
64	20.18	22.11	20.18	22.11	95	3.61	3.76	3.61	3.76
65	19.39	21.28	19.39	21.28	96	3.37	3.51	3.37	3.51
66	18.60	20.46	18.60	20.46	97	3.16	3.28	3.16	3.28
67	17.84	19.65	17.84	19.65	98	2.98	3.06	2.98	3.06
68	17.10	18.86	17.10	18.86	99	2.81	2.86	2.81	2.86
69	16.37	18.08	16.37	18.08	100	2.66	2.67	2.66	2.67
70	15.66	17.31	15.66	17.31	101	2.52	2.50	2.52	2.50
71	14.97	16.54	14.97	16.54	102	2.39	2.34	2.39	2.34
72	14.29	15.78	14.29	15.78	103	2.26	2.19	2.26	2.19
73	13.63	15.04	13.63	15.04	104	2.15	2.06	2.15	2.06
74	12.98	14.31	12.98	14.31	105	2.04	1.94	2.04	1.94
75	12.34	13.60	12.34	13.60	106	1.93	1.83	1.93	1.83
76	11.72	12.90	11.72	12.90	107	1.84	1.74	1.84	1.74
77	11.12	12.22	11.12	12.22	108	1.75	1.66	1.75	1.66
78	10.53	11.57	10.53	11.57	109	1.68	1.59	1.68	1.59
79	9.96	10.93	9.96	10.93	110	1.62	1.54	1.62	1.54
80	9.40	10.31	9.40	10.31					

1994 GA (x-2, y) for General Members

1994 GA (x-2, y) for Safety Members

SCHEDULE 3

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT
(RECOMMENDED ASSUMPTIONS)

	GENERAL		SAFETY			GENERAL		SAFETY	
Age	Male	Female	Male	Female	Age	Male	Female	Male	Female
50	26.15	30.17	28.85	32.99	81	5.80	7.06	7.00	8.58
51	25.27	29.24	27.95	32.05	82	5.43	6.59	6.59	8.05
52	24.39	28.31	27.04	31.11	83	5.07	6.15	6.19	7.54
53	23.52	27.40	26.15	30.17	84	4.73	5.73	5.80	7.06
54	22.67	26.49	25.27	29.24	85	4.42	5.34	5.43	6.59
55	21.83	25.59	24.39	28.31	86	4.13	4.98	5.07	6.15
56	21.00	24.70	23.52	27.40	87	3.86	4.64	4.73	5.73
57	20.18	23.82	22.67	26.49	88	3.61	4.33	4.42	5.34
58	19.39	22.96	21.83	25.59	89	3.37	4.04	4.13	4.98
59	18.60	22.11	21.00	24.70	90	3.16	3.76	3.86	4.64
60	17.84	21.28	20.18	23.82	91	2.98	3.51	3.61	4.33
61	17.10	20.46	19.39	22.96	92	2.81	3.28	3.37	4.04
62	16.37	19.65	18.60	22.11	93	2.66	3.06	3.16	3.76
63	15.66	18.86	17.84	21.28	94	2.52	2.86	2.98	3.51
64	14.97	18.08	17.10	20.46	95	2.39	2.67	2.81	3.28
65	14.29	17.31	16.37	19.65	96	2.26	2.50	2.66	3.06
66	13.63	16.54	15.66	18.86	97	2.15	2.34	2.52	2.86
67	12.98	15.78	14.97	18.08	98	2.04	2.19	2.39	2.67
68	12.34	15.04	14.29	17.31	99	1.93	2.06	2.26	2.50
69	11.72	14.31	13.63	16.54	100	1.84	1.94	2.15	2.34
70	11.12	13.60	12.98	15.78	101	1.75	1.83	2.04	2.19
71	10.53	12.90	12.34	15.04	102	1.68	1.74	1.93	2.06
72	9.96	12.22	11.72	14.31	103	1.62	1.66	1.84	1.94
73	9.40	11.57	11.12	13.60	104	1.57	1.59	1.75	1.83
74	8.88	10.93	10.53	12.90	105	1.53	1.54	1.68	1.74
75	8.37	10.31	9.96	12.22	106	1.50	1.50	1.62	1.66
76	7.89	9.71	9.40	11.57	107	1.49	1.49	1.57	1.59
77	7.44	9.14	8.88	10.93	108	1.49	1.49	1.53	1.54
78	7.00	8.58	8.37	10.31	109	1.48	1.48	1.50	1.50
79	6.59	8.05	7.89	9.71	110	1.45	1.45	1.49	1.49
80	6.19	7.54	7.44	9.14					

1994 GA (x+5, y+5) for General Members

1994 GA (x+2, y+2) for Safety Members

Santa Barbara County
Employees Retirement System

SCHEDULE 4

SALARY INCREASE ASSUMPTION
(RECOMMENDED ASSUMPTIONS)

Age	General Members	Safety Members	Age	General Members	Safety Members
20	10.0%	10.0%	46	6.0%	5.0%
21	10.0%	10.0%	47	6.0%	5.0%
22	10.0%	10.0%	48	6.0%	5.0%
23	10.0%	10.0%	49	6.0%	5.0%
24	10.0%	10.0%	50	5.5%	5.0%
25	10.0%	10.0%	51	5.5%	5.0%
26	10.0%	10.0%	52	5.5%	4.5%
27	9.0%	10.0%	53	5.5%	4.5%
28	9.0%	10.0%	54	5.5%	4.5%
29	8.5%	9.5%	55	5.5%	4.5%
30	8.5%	7.5%	56	5.5%	4.5%
31	8.5%	7.0%	57	5.5%	4.5%
32	8.5%	7.0%	58	5.5%	4.5%
33	7.5%	7.0%	59	5.5%	4.5%
34	7.5%	7.0%	60	5.5%	4.5%
35	7.5%	7.0%	61	5.0%	4.5%
36	7.5%	6.5%	62	5.0%	4.5%
37	7.5%	6.5%	63	5.0%	4.5%
38	7.5%	6.5%	64	5.0%	4.5%
39	7.5%	6.5%	65	5.0%	4.5%
40	6.5%	6.0%	66	4.5%	4.5%
41	6.5%	6.0%	67	4.5%	4.5%
42	6.5%	6.0%	68	4.5%	4.5%
43	6.5%	6.0%	69	4.5%	4.5%
44	6.5%	6.0%	70	4.5%	4.5%
45	6.5%	5.0%			

Note: Salary scale assumption reflects 4.00% for inflation and graded merit and longevity.