

**SANTA BARBARA COUNTY
EMPLOYEES' RETIREMENT SYSTEM**

**FINAL REPORT ON THE
ACTUARIAL VALUATION
AS OF DECEMBER 31, 1994**

**BUCK
CONSULTANTS**

**BUCK
CONSULTANTS**

100 California Street Suite 1300
San Francisco, California 94111

April 17, 1995

Board of Retirement
Santa Barbara County
Employees' Retirement System
County Administration Building, Room 301
105 East Anapamu Street
Santa Barbara, California 93101

Members of the Board:

We are pleased to present our report on the experience analysis and actuarial valuation of your retirement system as of December 31, 1994.

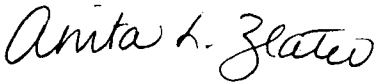
We hereby certify that the valuation was performed in accordance with generally accepted actuarial principles and practices.

We look forward to discussing this report with the Board and wish to express our appreciation for the invaluable cooperation extended to us by the Retirement Staff during the course of this study.

Respectfully submitted,



Krystyna H. Upstill, E.A., M.A.A.A.
Principal



Anita L. Zlatev, F.S.A., E.A.
Associate Consulting Actuary

TABLE OF CONTENTS

SECTION I: EXECUTIVE SUMMARY	1
SECTION II: STATISTICAL HIGHLIGHTS	6
SECTION III: SUMMARY OF ACTUARIAL ASSUMPTIONS	8
NONECONOMIC ASSUMPTIONS	8
ECONOMIC ASSUMPTIONS	19
SECTION IV: CONTRIBUTION RATES	26
MEMBER CONTRIBUTION RATES	27
EMPLOYER CONTRIBUTION RATES.....	29
RECOMMENDATIONS	32
AIR POLLUTION CONTROL DISTRICT	33
HEALTH INSURANCE OFFSET.....	35
SUPPLEMENTAL HEALTH CARE OFFSET.....	37
PHASE-IN OF EMPLOYER CONTRIBUTION RATES	38
SECTION V: ASSETS AND LIABILITIES	40
ACTUARIAL VALUE OF ASSETS	40
LIABILITIES	43
SECTION VI - APPENDIX	49
SCHEDULE 1: SUMMARY OF ACTUARIAL ASSUMPTIONS.....	50
SCHEDULE 2: SUMMARY OF MAJOR PLAN PROVISIONS.....	51
SCHEDULE 3: AGE AND SERVICE DISTRIBUTIONS WITH ANNUAL SALARY	54
SCHEDULE 4: SUMMARY OF ANNUAL RETIREMENT ALLOWANCES.....	60
SCHEDULE 5: MEMBERS' CONTRIBUTION RATES.....	61
SCHEDULE 6: PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE.....	71
SCHEDULE 7: YEARS OF LIFE EXPECTANCY.....	78
SCHEDULE 8: GLOSSARY OF TERMS.....	81
SCHEDULE 9: RATIO OF CURRENT COMPENSATION TO COMPENSATION ANTICIPATED AT RETIREMENT	83
SCHEDULE 10: ASSET STATEMENT	85

SECTION I: EXECUTIVE SUMMARY

We were commissioned by the Board to perform an experience analysis and actuarial valuation of the retirement system as of December 31, 1994, using the statistical information available for the active, inactive and retired membership, and the financial statements as of December 31, 1994.

The results presented herein are based upon the unaudited data supplied by the Retirement Office and the benefits for General Plan 1, 2, and 3 and Safety and Probation Plan 1 and 3 members under Sections 31676.1, 31486.4, and 31664, of the County Employees Retirement Law of 1937.

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

Total System membership increased from 5,367 to 5,708. Active membership increased by 6.1% while total covered payroll increased by 6.9%. These numbers exclude 79 active Air Pollution Control District members.

The number of retired members went up by 4.2% and the retired pension roll increased by 18.2%.

Section III - Summary of Actuarial Assumptions

Noneconomic Assumptions

We have examined the experience of the members of your Plan during the two-year period from January 1, 1993, through December 31, 1994. We analyzed the data for these two years regarding service retirements, deaths, disabilities and terminations of employment, and compared the number of actual terminations to the incidence expected using the current actuarial assumptions. When the

results differed materially, we recommend modifying the assumptions. The findings and adjustments made with regard to these rates are discussed in Section III.

Economic Assumptions

In order to ensure that the same inflationary expectations are consistently included in all of the economic assumptions, we have 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 two components: inflation and real rate of return.

In addition, we have assumed that future salary increases are comprised of the following components: inflation and merit and longevity increases.

In our report we calculated the contribution rates based on the current 5.00% long term level of inflation as well as on a 4.75% rate. In addition, based upon future anticipated returns on the system's current and targeted asset mixes, we also recommend that the 3.25% future real rate of return be continued. In combination, these assumptions equate to an 8.25% and 8.00%, respectively, long-term investment return assumption.

We incorporated the same inflation assumption levels into the long term salary increase assumption.

Section IV - Contribution Rates

A comparison between the current employer and employee contribution rates and the rates recalculated in this study utilizing the current economic and recommended noneconomic assumptions (Study 1) and the recommended economic and noneconomic assumptions (Study 2) is shown on the following page. All contribution rates and corresponding annual amounts exclude the amount due to the Air Pollution Control District members. Their contribution rate is shown separately in Section IV.

	EMPLOYER		EMPLOYEE	
	% of Payroll	Annual Amount**	% of Payroll	Annual Amount**
Current Rates*				
8.25 % interest, 5.00 % inflation	14.72 %	\$ 20,689,000	3.51 %	\$ 4,781,000
Recalculated Rates				
Study 1 - Based on 8.25 % interest, 5.00 % inflation				
Before Transfer	16.94 %	\$ 23,815,000	3.51 %	\$ 4,781,000
After Transfer	16.29 %	\$ 22,901,000	3.51 %	\$ 4,781,000
Study 2 - Based on 8.00 % interest, 4.75 % inflation				
Before Transfer	18.21 %	\$ 25,592,000	3.58 %	\$ 4,878,000
After Transfer	17.56 %	\$ 24,678,000	3.58 %	\$ 4,878,000

* Includes 0.24% contributions due to Health Insurance.

** Based on December 31, 1994 payroll. The employee contribution rates and annual amounts exclude General Plan 2 payroll.

The overall increase in employer contribution rates before the change in economic assumptions was primarily attributable to unfavorable plan experience.

The after transfer contribution rates and annual amounts shown above reflect the transfer of \$8,778,779 from the Designated Liability Transfer Account.

Section V - Assets and Liabilities

Actuarial Value of Assets

An actuarial value of assets is used for purposes of determining employer contribution rates. As of December 31, 1994 the net actuarial value of assets was \$548,014,000. The net value of assets was \$518,479,000 at book value and \$546,703,000 at market value. The return on investments, net of expenses, was 9.3% on a book value basis and (0.7%) on a market value basis. The above assets and rates of return do not take into account any transfers on behalf of the Air Pollution Control District.

Actuarial Balance Sheet

The actuarial balance sheet compares the present value of all future benefits anticipated to be paid for the current membership with the sources of funds to be used to provide these benefits. It illustrates that if recommended contribution levels made in the future prove out over time, current assets plus future employer and member contributions will be adequate to meet future benefit payments for the current membership.

Funding Ratio - GASB 5

In order to judge the funding progress of the System a comparison was made of the ratio of the System's liabilities for benefits earned to date to the current value of assets. For this purpose, liabilities were calculated in accordance with Governmental Accounting Standards Board Statement No. 5 (GASB 5). GASB 5 liabilities include all liabilities for current retired and inactive members including future automatic cost-of-living increases. For current active members, the liability reflects the projected retirement benefits earned through the valuation date.

	8.25% Interest, 5.00% Inflation 12/31/92	8.25% Interest, 5.00% Inflation Recalculated 12/31/94	8.25% Interest, 5.00% Inflation Study 1 12/31/94	8.00% Interest, 4.75% Inflation Study 2 12/31/94
1. GASB 5 Pension Benefit Obligation	\$484,729,000	\$582,954,000	\$574,390,000	\$586,293,000
2. Net Book Value of Assets*	\$429,421,000	\$516,489,000	\$516,502,000	\$516,671,000
3. Funding Ratio	89%	89%	90%	88%

* Reflects the transfer due to the Air Pollution Control District employees.

The funding ratio decreases by about 2% for each 0.25% decrease in the interest and inflation assumption.

Section VI - Appendix

A summary of the major provisions of the Plan is included in the Appendix, together with detailed information on the actuarial assumptions, demographic information and plan assets. General, Safety and Probation member contribution rates, by entry age, are shown in Schedule 5.

SECTION II: STATISTICAL HIGHLIGHTS

Our December 31, 1994 actuarial valuation of your System was based on the following data. Please note the data excludes the 79 active members of the Air Pollution Control District. For comparison, we also show a summary of the statistical information found in the prior actuary's December 31, 1992 report.

SUMMARY OF INACTIVE MEMBERSHIP			
	December 31, 1992	December 31, 1994	Percentage Change During the Period
TOTAL			
Number*	316	377	19.3 %

* Excludes pending withdrawals

SUMMARY OF RETIRED MEMBERSHIP			
	December 31, 1992	December 31, 1994	Percentage Change During the Period
TOTAL			
Number	1,587	1,654	4.2 %
Basic Annual Allowance	\$ 12,532,000	\$ 14,526,000	15.9 %
Average Basic Monthly Allowance	\$ 658	\$ 732	11.2 %
Total Annual Allowance	\$ 15,824,000	\$ 18,711,000	18.2 %
Average Total Monthly Allowance	\$ 831	\$ 943	13.5 %

SUMMARY OF ACTIVE MEMBERSHIP				
	December 31, 1992	December 31, 1994	Percentage Change During the Period	
GENERAL PLAN 1				
Number	2,548	2,661	4.4	%
Annual Payroll*	\$ 92,866,000	\$ 97,067,000	4.5	%
Average Monthly Salary	\$ 3,037	\$ 3,040	0.1	%
Average Age	42.28	42.85		
Average Service	7.53	7.96		
GENERAL PLAN 2				
Number	162	126	(22.2)	%
Annual Payroll*	\$ 5,554,000	\$ 4,427,000	(20.3)	%
Average Monthly Salary	\$ 2,857	\$ 2,928	2.5	%
Average Age	41.49	43.70		
Average Service	7.28	8.71		
GENERAL PLAN 3				
Number	N/A	92	N/A	
Annual Payroll*	N/A	\$ 2,553,000	N/A	
Average Monthly Salary	N/A	\$ 2,313	N/A	
Average Age	N/A	35.74		
Average Service	N/A	0.00		
SAFETY PLAN 1				
Number	610	633	3.8	%
Annual Payroll*	\$ 27,347,000	\$ 30,121,000	10.1	%
Average Monthly Salary	\$ 3,736	\$ 3,965	6.1	%
Average Age	40.54	41.23		
Average Service	12.31	12.97		
SAFETY PLAN 3				
Number	N/A	6	N/A	
Annual Payroll*	N/A	\$ 180,000	N/A	
Average Monthly Salary	N/A	\$ 2,500	N/A	
Average Age	N/A	31.83		
Average Service	N/A	0.00		
PROBATION				
Number	144	159	10.4	%
Annual Payroll*	\$ 5,765,000	\$ 6,223,000	7.9	%
Average Monthly Salary	\$ 3,336	\$ 3,262	(2.2)	%
Average Age	41.28	42.21		
Average Service	9.78	10.04		
TOTAL				
Number	3,464	3,677	6.1	%
Annual Payroll*	\$ 131,532,000	\$ 140,571,000	6.9	%
Average Monthly Salary	\$ 3,164	\$ 3,186	0.7	%
Average Age	41.90	42.38		
Average Service	8.45	8.73		

* Represents the annualization of active members' pay rates on December 31

SECTION III: SUMMARY OF ACTUARIAL ASSUMPTIONS

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 nonvested and vested withdrawal, retirement for service, death, and disability, and
- The mortality rates to be experienced among retired persons.

Economic assumptions

- Interest earnings to be realized on the funds over many years in the future, and
- The relative increases in a member's salary 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 December 31, 1994 actuarial valuation, we compared the expected number of terminations from active service to the number actually experienced during the two-year period beginning January 1, 1993 and ending December 31, 1994. Based on this comparison, we recommend adjusting the probabilities of separation accordingly. The results of the investigation with respect to each rate of separation from active service are summarized in this section.

The actual separations due to duty death were higher than the expected separations for General male members. Therefore, we recommend increasing the rates of duty death for this group.

Observed rates of death while eligible over the two-year period were lower than those currently in use for Safety and General male members. Adjustments were made to reflect the lower incidence of death while eligible.

During the two-year experience period, the incidence of ordinary and duty disability was lower than expected for Safety and General female members. The ordinary and duty disability rates were lowered for these members to reflect this experience.

Observed rates of service retirement over the two-year and four-year periods were higher than those currently in use for General members. Adjustments were made to the rates to reflect the higher incidence of service retirement, primarily at age 61 and below for General females and for ages 54-64 for General males.

In addition, adjustments were made to the service retirement rates for Safety members to more accurately reflect the actual experience of this group.

None of the other types of separation demonstrated a statistically significant trend when compared to the prior eight-year period; hence, we recommend continuing the existing assumptions for the remaining types of separation.

The purpose of the table below is to provide the reader with a shorthand summary of the experience compared with the existing assumptions. A complete listing of the current and recommended rates of separation from active service can be found in Schedule 6 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 separation" below means the number of terminations that would occur if the currently assumed probabilities were applied to your actual work force over the period under investigation.

SUMMARY OF ACTUARIAL INVESTIGATION WITH RESPECT TO RATES OF SEPARATION FROM ACTIVE SERVICE		
	Actual Separations	Expected Separations
Withdrawal		
General Male	97	92
General Female	179	204
Safety	20	27
Ordinary Death		
General Male	2	2
General Female	4	2*
Safety	0	1
Duty Death		
General Male	1	0**
General Female	0	0**
Safety	0	1
Death While Eligible		
General Male	0	2
General Female	1	1
Safety	0	1

* During the last 4-year period there were four actual and expected deaths.

** Less than one person.

**SUMMARY OF ACTUARIAL INVESTIGATION WITH
RESPECT TO RATES OF SEPARATION FROM ACTIVE SERVICE**

	Actual Separations	Expected Separations
Ordinary Disability*		
General Male	5	2
General Female	0	3
Safety	0	2
Duty Disability*		
General Male	3	3
General Female	1	2
Safety	0	13
Service Retirement		
General Male	50	39
General Female	56	49
Safety	11	18
Deferred Retirement		
General Male	26	25
General Female	51	44
Safety	3	10

* Actual separations include pending disabilities.

On the following pages, we show the number of members expected to eventually separate from active service for each of the various causes of termination based on both the current and recommended assumptions. We also show the percentage of members expected to eventually separate from the system, in pie chart format. For purposes of the chart, we have grouped the following:

- service retirement and terminated vested into Service,
- ordinary and duty disability into Disability, and
- ordinary death, duty death, and death while eligible into Death.

GENERAL MALE MEMBERS

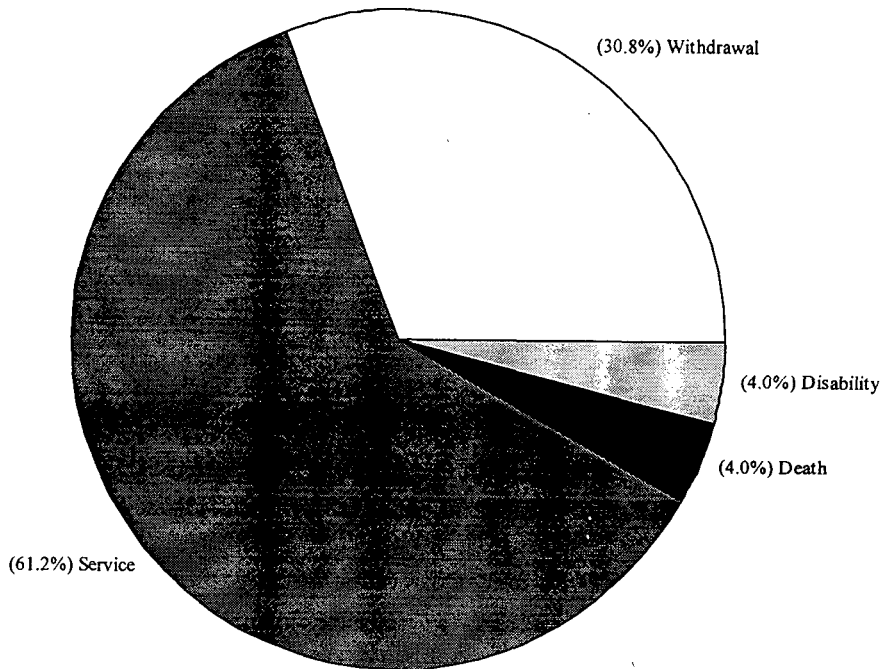
Current Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	15	12	1	1	0	0	0	0	0
25-29	54	38	8	7	1	0	0	0	1
30-34	139	77	31	24	2	2	0	2	2
35-39	155	64	51	28	3	3	0	3	4
40-44	204	61	90	34	4	5	0	4	5
45-49	186	38	106	23	4	5	0	4	5
50-54	126	17	87	9	3	4	0	3	3
55-59	74	5	60	3	1	2	0	2	1
60-64	48	2	43	1	1	1	0	1	0
65 & OVER	20	0	19	0	0	0	0	0	0
TOTAL	1,021	315	496	128	19	21	1	19	22
		30.8%	48.6%	12.6%	1.8%	2.1%	0.1%	1.9%	2.1%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



GENERAL FEMALE MEMBERS

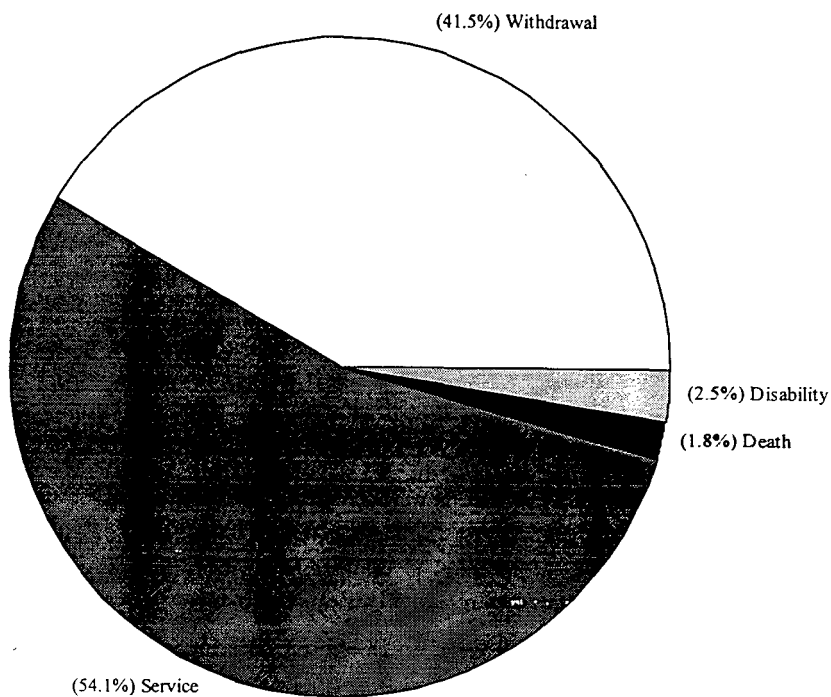
Current Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	79	69	3	5	0	0	0	0	0
25-29	207	160	17	26	1	1	0	1	1
30-34	266	168	43	47	2	1	0	2	2
35-39	306	148	85	59	3	2	0	4	4
40-44	287	100	120	51	4	2	0	5	5
45-49	274	71	152	34	4	3	0	5	5
50-54	190	35	130	13	3	2	0	4	3
55-59	129	15	104	3	2	1	0	2	2
60-64	92	5	83	1	1	1	0	1	0
65 & OVER	28	1	27	0	0	0	0	0	0
TOTAL	1,858	772	765	240	19	13	2	25	22
		41.5%	41.2%	12.9%	1.0%	0.7%	0.1%	1.3%	1.2%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



SAFETY MEMBERS

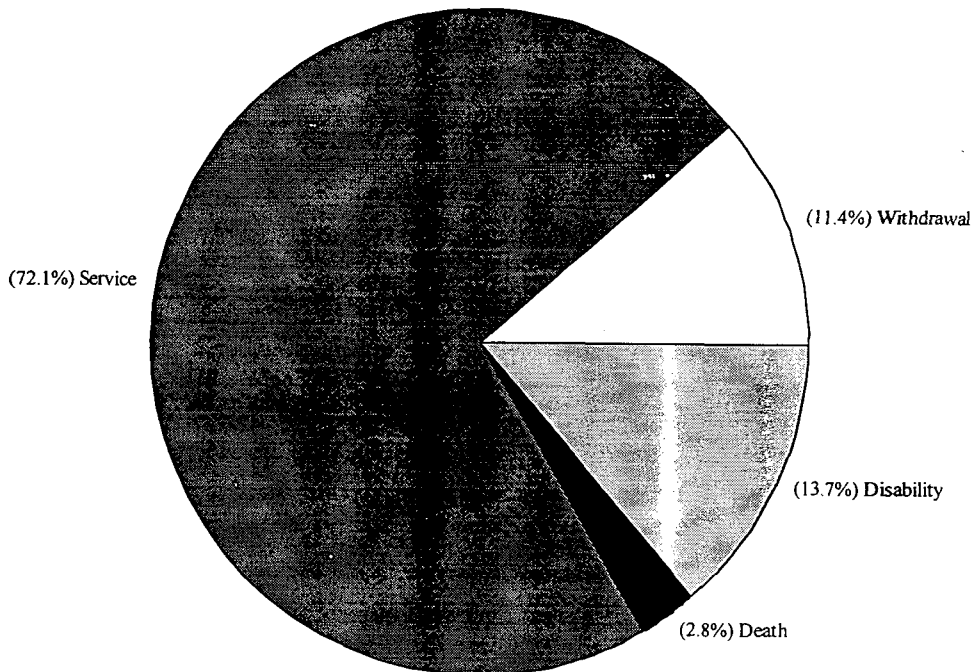
Current Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	16	7	4	2	0	0	0	0	1
25-29	82	28	29	12	1	1	1	2	10
30-34	122	26	60	11	1	2	1	3	18
35-39	151	19	91	8	1	2	2	5	24
40-44	124	7	88	3	1	2	1	3	18
45-49	138	4	112	1	1	2	1	2	15
50-54	126	1	114	0	1	1	1	1	6
55 & OVER	39	0	39	0	0	0	0	0	0
TOTAL	798	91	537	38	6	9	7	17	92
		11.4%	67.3%	4.8%	0.7%	1.2%	0.9%	2.1%	11.6%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



GENERAL MALE MEMBERS

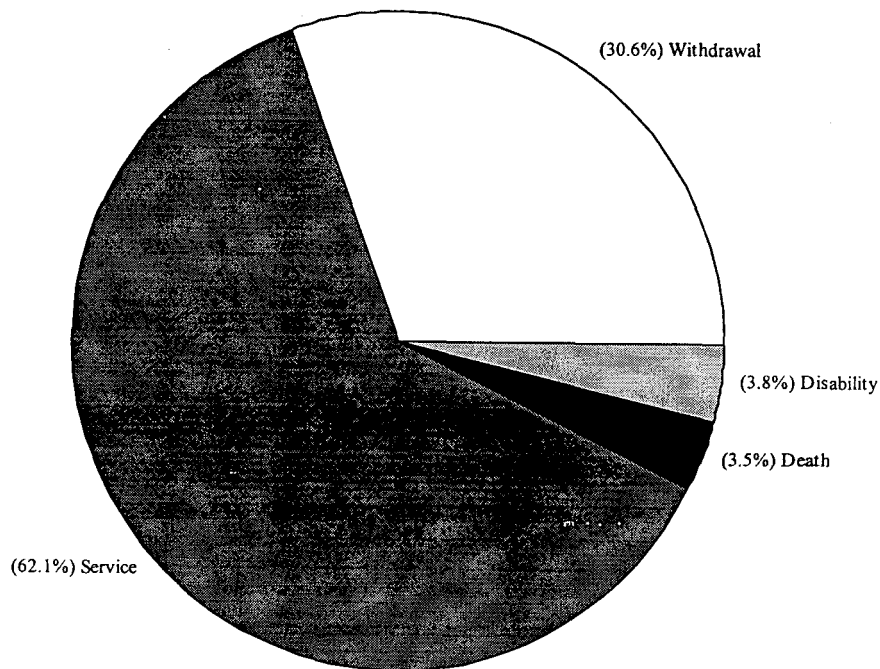
Recommended Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	15	12	1	1	0	0	0	0	0
25-29	54	38	8	7	1	0	0	0	1
30-34	139	77	32	24	2	1	0	1	2
35-39	155	64	52	28	3	2	0	2	3
40-44	204	61	92	34	4	4	0	4	5
45-49	186	37	109	23	4	4	0	4	5
50-54	126	16	90	9	3	3	0	3	3
55-59	74	5	61	2	1	1	0	2	1
60-64	48	2	43	1	1	1	0	1	0
65 & OVER	20	0	19	0	0	0	0	0	0
TOTAL	1,021	312	507	127	18	17	1	18	21
		30.6%	49.7%	12.5%	1.7%	1.7%	0.1%	1.8%	2.0%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



GENERAL FEMALE MEMBERS

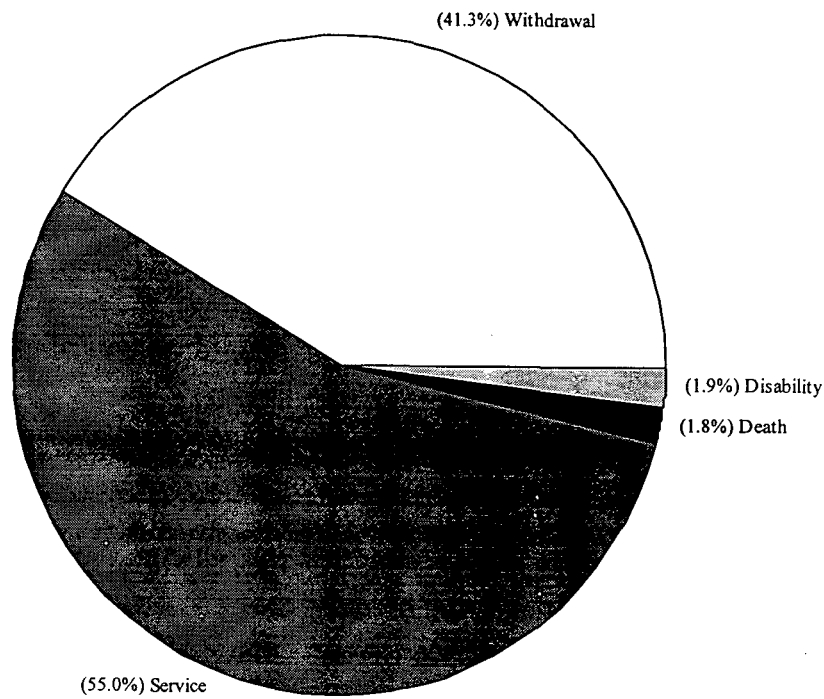
Recommended Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	79	69	4	5	0	0	0	0	0
25-29	207	160	18	26	1	0	0	1	1
30-34	266	168	44	47	2	1	0	2	2
35-39	306	148	88	59	3	2	0	3	3
40-44	287	100	123	50	3	2	0	4	4
45-49	274	70	156	34	4	3	0	4	4
50-54	190	34	133	12	3	2	0	3	2
55-59	129	14	106	3	2	1	0	1	1
60-64	92	5	83	1	1	1	0	0	0
65 & OVER	28	1	27	0	0	0	0	0	0
TOTAL	1,858	768	782	239	18	13	2	18	18
		41.3%	42.1%	12.9%	1.0%	0.7%	0.1%	1.0%	0.9%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



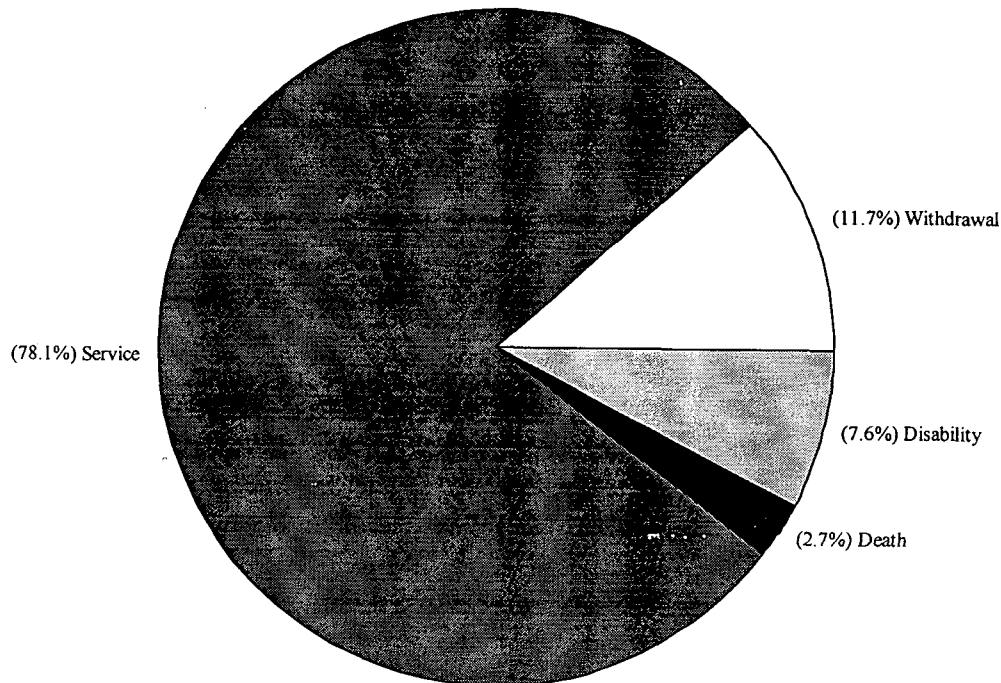
SAFETY MEMBERS
Recommended Assumptions*

Expected Number to Eventually Separate for Indicated Cause

Age	Number of Actives	Withdrawal	Service	Terminated Vested	Ordinary Death	Death While Eligible	Duty Death	Ordinary Disability	Duty Disability
20-24	16	7	5	2	0	0	0	0	1
25-29	82	28	34	12	1	1	1	1	5
30-34	122	27	68	11	1	1	1	3	10
35-39	151	19	103	9	1	2	2	3	13
40-44	124	7	98	3	1	1	1	2	10
45-49	138	4	120	1	1	1	1	2	8
50-54	126	1	118	0	1	1	1	1	3
55 & OVER	39	0	39	0	0	0	0	0	0
TOTAL	798	93	584	39	6	7	8	12	48
		11.7%	73.2%	4.9%	0.8%	0.9%	1.0%	1.5%	6.1%

* The individual numbers in the columns may not add to the total shown due to rounding

Expected Percentage to Eventually Separate for Indicated Cause



Mortality After Service Retirement

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

Current Service Retirement Mortality Tables

General Males	1983 Group Annuity Mortality Table for Males, set forward 1 year
General Females	1983 Group Annuity Mortality Table for Females, set forward 1 year
Safety	1983 Group Annuity Mortality Table for Males, set forward 1 year

The results of the experience analysis are as follows:

NUMBER OF DEATHS AFTER SERVICE RETIREMENT		
	Actual	Expected
General Males and Male Beneficiaries	41	51
General Females and Female Beneficiaries	47	43
Safety Members	5	4

During the two-year period under investigation, the number of actual deaths was lower for General male members and higher for General female and Safety members. However, during 1994 the actual and expected numbers for General members were very close (26 vs. 26 for General males, and 23 vs. 22 for General females).

Based on these results, we recommend that the mortality tables remain unchanged.

A full listing of the life expectancies based on these tables is shown in Schedule 7 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
- Safety 1981 Disability Mortality Table for Safety Members

The results of the experience analysis are as follows:

NUMBER OF DEATHS AFTER DISABILITY RETIREMENT		
	Actual	Expected
General Members	9	8
Safety Members	2	3

We recommend that the current disability mortality tables continue be used to determine life expectancy after disability retirement. A full listing of the life expectancies based on these tables is shown in Schedule 7 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 which 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 which 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 funds. 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 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 (interest rate assumption).

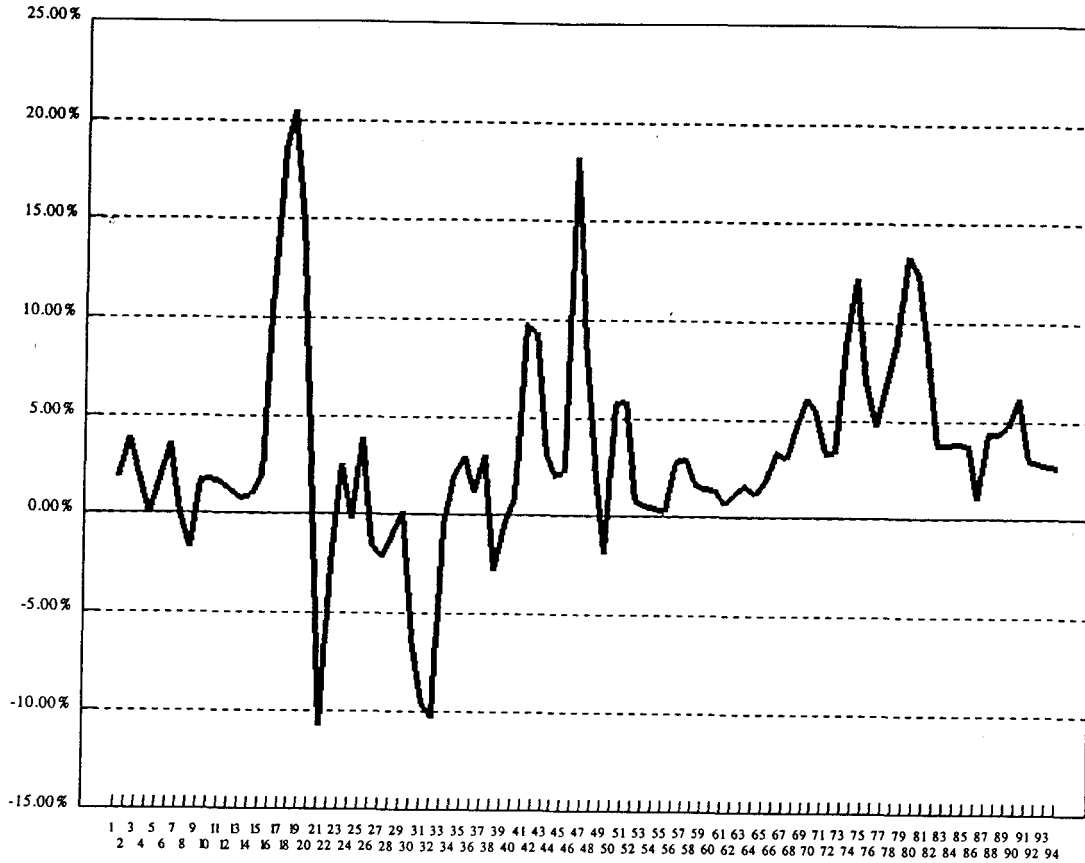
The salary scale assumption is developed in a similar manner. The inflation rate is combined with merit and longevity increases to produce a total salary scale assumption.

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 increases assumption. These in turn directly impact the employer and employee contribution rates.

The annual inflation rates have averaged about 2.9% per year, for the most recent four years; for the four years prior to that, the average was 4.9%. 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. Currently, we seem to be near the bottom of the most recent downturn.

HISTORICAL INFLATION RATES *



* US city average (December index)

From	To	Years	Average	
1985	-	1994	10	3.61%
1975	-	1994	20	5.49%
1965	-	1994	30	5.41%
1955	-	1994	40	4.45%
1945	-	1994	50	4.44%
1935	-	1994	60	4.19%
1925	-	1994	70	3.23%
1915	-	1994	80	3.56%
1905	-	1994	90	3.30%

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 4.50% and 5.50%.

The current long term inflation assumptions adopted by the other 1937 act counties are shown in the following chart. The average inflation assumption for these systems is currently 4.81%.

**Current Long Term Inflation Assumptions
Adopted by Other 1937 Act Counties**

<u>Retirement System</u>	<u>Assumed Inflation Rate</u>	<u>Retirement System</u>	<u>Assumed Inflation Rate</u>
Alameda	4.75 %	Sacramento	4.50 %
Contra Costa	4.75 %	San Bernardino	5.00 %
Fresno	4.75 %	San Diego	5.00 %
Imperial	5.00 %	San Joaquin	4.50 %
Kern	4.00 %	San Mateo	4.75 %
Los Angeles	5.00 %	Santa Barbara	5.00 %
Marin	5.00 %	Sonoma	5.00 %
Mendocino	5.00 %	Stanislaus	4.50 %
Merced	5.25 %	Tulare	5.00 %
Orange	5.00 %	Ventura	4.50 %

We believe that it is appropriate to lower the inflation rate assumption to 4.75% at this time.

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 has adopted the following target asset allocation:

**Asset Allocation as of December 31, 1994
(Market Value)**

	Target
Equity	48 %*
Fixed Income/Bonds	48 %*
Real Estate	3 %
Short Term Cash Equivalents	1 %

* Includes International Equity and Fixed Income

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. Sinquefeld produced such a study for the period 1926-1992 called Stocks, Bonds and Inflation: Simulations of the Future. The results of this study are presented below.

**Ibbotson-Sinquefeld
Real Rates of Return
(1926 - 1992)**

Stocks	7.0%
Long-term government bonds	1.7%
Long-term corporate bonds	2.3%
Treasury bills	0.5%

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 4.4% (assuming an equal proportion of government and corporate bonds and a 4.0% return on real estate). This rate, however, should be adjusted to reflect expenses and potential adverse future experience.

After making this adjustment, we believe that a real rate of return of 3.25% provides a reasonable degree of conservatism when used with a 4.75% inflation rate. This leads to an 8.0% investment return assumption.

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 @ Book Value	Net Return @ Market Value	Increase in Consumer Price Index
1981	10.2 %	%	9.6 %
1982	11.7 %	%	7.1 %
1983	10.9 %	%	2.6 %
1984	3.0 %	%	4.2 %
1985	13.7 %	%	3.8 %
1986	24.2 %	%	1.8 %
1987	16.6 %	%	3.7 %
1988	4.0 %	1.9 %	4.0 %
1989	10.3 %	17.6 %	5.2 %
1990	11.3 %	10.8 %	4.7 %
1991	8.6 %	9.7 %	4.7 %
1992	13.0 %	18.5 %	3.1 %
1993	13.0 %	13.2 %	3.0 %
1994	9.3 %	(0.7) %	2.5 %
14-Year Average	11.4 %	N/A	4.2 %
7-Year Average	9.9 %	10.1 %	4.5 %

Recommendation

Based on the information provided in this section, we recommended that the inflation assumption be lowered to 4.75%. This will lower the long term interest assumption to 8.00%.

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 members age.

The overall effect of the merit and longevity increases is to add approximately 1.0% to the total salary scale assumption. Combined with the 4.75% inflation rate, the total recommended salary scale assumption amounts to 5.75%.

SECTION IV: CONTRIBUTION RATES

Below we show a comparison between the current contribution rates, the rates recalculated as of December 31, 1994 based on the same economic actuarial assumptions and new noneconomic actuarial assumptions (Study 1), and the rates developed for this valuation (Study 2) based on the recommended economic and noneconomic actuarial assumptions.

	EMPLOYER		EMPLOYEE	
	% of Payroll	Annual Amount**	% of Payroll	Annual Amount**
Current Rates*				
8.25 % interest, 5.00 % inflation	14.48 %	\$ 20,352,000	3.51 %	\$ 4,781,000
Recalculated Rates				
Study 1 - Based on 8.25 % interest, 5.00 % inflation				
Before Transfer	16.94 %	\$ 23,815,000	3.51 %	\$ 4,781,000
After Transfer	16.29 %	\$ 22,901,000	3.51 %	\$ 4,781,000
Study 2 - Based on 8.00 % interest, 4.75 % inflation				
Before Transfer	18.21 %	\$ 25,592,000	3.58 %	\$ 4,878,000
After Transfer	17.56 %	\$ 24,678,000	3.58 %	\$ 4,878,000

* Excludes 0.24% contributions due to Health Insurance.

** Based on December 31, 1994 payroll. The employee contribution rates and annual amounts exclude General Plan 2 payroll.

The after transfer contribution rates and annual amounts shown above reflect the transfer of \$8,778,779 from the Designated Liability Transfer Account.

MEMBER CONTRIBUTION RATES

Member Basic Contributions

Sections 31621.4 and 31621 set forth the basis for the determination of the normal rates of contribution for General Plan 1 and Plan 3 members, respectively. Sections 31639.5 and 31639.25 set forth the basis for the normal rates of contribution for Safety and Probation Plan 1 and Plan 3 members.

The law further provides that the contribution rates of members will be based on the age nearest birthday at the time of entrance into the Retirement System. Section 31453 states that no adjustment will be included in the rates of contribution for time prior to the effective date of any revisions. Note that the law was changed in 1976 to remove the sex differential in member contribution rates.

The basic employee contribution rates for General members were calculated on a unisex basis using the 1983 Group Annuity Mortality Table for Males with a 2 year setback. The Safety basic employee rates continue to be based upon the 1983 Group Annuity Mortality Table for Males set forward 1 year.

The Study 2 employee basic contribution rates have increased for General and Safety members due to a lower future interest rate assumption. This increase was partially offset by the lower future inflation assumption.

Cost of Living Contributions

The employees do not pay for any portion of the cost-of-living contribution rates.

A summary of the average employee contribution rates based on Study 1 and Study 2 assumptions is provided on the following page. Rates at sample ages are also shown.

AVERAGE MEMBER BASIC CONTRIBUTION RATES					
	GENERAL		SAFETY		PROBATION
	Plan 1	Plan 3	Plan 1	Plan 3	Plan 1*
Current Rates	2.93 %	5.87 %	4.08 %	8.49 %	8.72 %
Recalculated Rates					
Study 1	2.93 %	5.87 %	4.08 %	8.49 %	8.72 %
Study 2	2.99 %	5.98 %	4.16 %	8.69 %	8.91 %

* There were no Plan 3 Probation members as of the valuation date.

SAMPLE GENERAL PLAN 1 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	2.80 %	2.85 %
35	2.98 %	3.04 %
59	3.90 %	3.98 %

SAMPLE GENERAL PLAN 3 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	5.33 %	5.43 %
35	5.67 %	5.78 %
59	7.41 %	7.57 %

SAMPLE SAFETY PLAN 1 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	4.28 %	4.37 %
35	4.63 %	4.72 %
49	5.13 %	5.24 %

SAMPLE SAFETY PLAN 3 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	8.03 %	8.22 %
35	8.68 %	8.88 %
49	9.62 %	9.85 %

SAMPLE PROBATION PLAN 1 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	8.56 %	8.74 %
35	9.25 %	9.45 %
49	10.25 %	10.47 %

SAMPLE PROBATION PLAN 3 MEMBER CONTRIBUTION RATES		
Entry Age	Study 1	Study 2
25	8.03 %	8.22 %
35	8.68 %	8.88 %
49	9.62 %	9.85 %

Schedule 5 in the Appendix contains the complete set of members' basic contribution rates. The interest rate, mortality table, inflation rate, and cost-of-living benefit are indicated on the bottom of the schedules.

EMPLOYER CONTRIBUTION RATES

Employer contributions have been determined under the Entry Age Normal Actuarial Cost Method, permitted by Section 31453.5. The Entry Age Normal method defines the Normal Cost as the level percentage of salary necessary to fund the projected future benefit over the period from the date of entry to the date of separation from active service. The Actuarial Accrued Liability is the cost allocated to years prior to the actuarial valuation date; it is the excess of the total value of benefits

over the value of future member contributions and the value of future Normal Costs. The difference between the Actuarial Accrued Liability and the plan assets is called the Unfunded Actuarial Accrued Liability and is funded (amortized) as a level percentage of projected future payroll over 11 years from December 31, 1994.

The average amortization period for the 1937 Act Counties is approximately 20 years as of January 1, 1995. The actual amortization periods vary between 5 and 28 years.

The following charts specify the employer contributions and components thereof (expressed as a level percentage of payroll) for the last valuation based on the prior actuary's report and the rates recommended in this valuation (Study 2). It shows a breakdown between basic and cost of living benefits.

TOTAL EMPLOYER CONTRIBUTION RATES

Current Contribution Rates

BREAKDOWN BETWEEN BASIC AND COST OF LIVING BENEFITS						
	General Members			Safety Members		Probation
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 3	Plan 1
Basic Benefits	7.82 %	4.91 %	5.98 %	12.81 %	10.11 %	12.87 %
Cost of Living Benefits	4.33 %	1.91 %	4.40 %	9.10 %	9.17 %	8.92 %
Total	12.15 %	6.82 %	10.38 %	21.91 %	19.28 %	21.79 %

Average Rate for Total Group = 14.48%

TOTAL EMPLOYER CONTRIBUTION RATES

Study 1 Assumptions

BREAKDOWN BETWEEN BASIC AND COST OF LIVING BENEFITS						
	General Members			Safety Members		Probation
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 3	Plan 1
Basic Benefits	10.60 %	6.99 %	9.19 %	15.59 %	13.03 %	11.14 %
Cost of Living Benefits	<u>3.56 %</u>	<u>0.85 %</u>	<u>3.73 %</u>	<u>11.46 %</u>	<u>12.06 %</u>	<u>8.14 %</u>
Total Before Transfer	14.16 %	7.84 %	12.92 %	27.05 %	25.09 %	19.28 %
Less Transfer	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>
Total After Transfer	13.51 %	7.19 %	12.27 %	26.40 %	24.44 %	18.63 %

Average Rate for Total Group Before Transfer = 16.94%

Average Rate for Total Group After Transfer = 16.29%

TOTAL EMPLOYER CONTRIBUTION RATES

Study 2 Assumptions

BREAKDOWN BETWEEN BASIC AND COST OF LIVING BENEFITS						
	General Members			Safety Members		Probation
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 3	Plan 1
Basic Benefits	11.17 %	7.49 %	9.75 %	16.93 %	14.34 %	11.92 %
Cost of Living Benefits	<u>3.94 %</u>	<u>1.12 %</u>	<u>4.12 %</u>	<u>12.47 %</u>	<u>13.11 %</u>	<u>8.73 %</u>
Total Before Transfer	15.11 %	8.61 %	13.87 %	29.40 %	27.45 %	20.65 %
Less Transfer	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>	<u>-0.65 %</u>
Total After Transfer	14.46 %	7.96 %	13.22 %	28.75 %	26.80 %	20.00 %

Average Rate for Total Group Before Transfer = 18.21%

Average Rate for Total Group After Transfer = 17.56%

The overall increase in employer contribution rates was primarily attributable to unfavorable plan experience and changes recommended in the economic and noneconomic assumptions.

Specifically, the average entry age of the new hires was significantly higher than anticipated. For new General members, the average entry age was 37 and for new Safety members, the average entry age was 32. This compares to an average entry age of 34 for existing General members and 29 for existing Safety members. We anticipated that the average age for new entrants would remain constant over time. The impact of this trend is significant on the employer contribution rates because of the relative size of the new entrant group; for this study approximately 25% of the active population are new entrants.

Also contributing to the increase in employer contributions is a lower than expected number of withdrawals and higher than expected number of service retirements from the System. This pattern alone caused the liabilities to increase by approximately \$12 million.

Please note that the employer contribution rates decreased slightly for the Probation Plan 1 members due to favorable plan experience. Specifically, the total Probation population grew by 10% while the average monthly salary was lower than expected.

RECOMMENDATIONS

We recommend that the Board adopt the Study 2 contribution rates as shown in this section. These rates reflect the recommended economic and noneconomic assumptions, are based on the Entry Age Normal Actuarial Cost Method with an unfunded actuarial accrued liability amortized as a level percentage of payroll over 11 years from December 31, 1994, and utilize an actuarial value of assets. This combination of assumptions and methods reflects our best judgment of future long term experience for the System.

Employer contribution rates at the recommended level expressed as a percentage of payroll are as follows:

TOTAL EMPLOYER CONTRIBUTION RATES

Recommended Assumptions (Study 2)

BREAKDOWN BETWEEN BASIC AND COST OF LIVING BENEFITS						
	General Members			Safety Members		Probation
	Plan 1	Plan 2	Plan 3	Plan 1	Plan 3	Plan 1
Basic Benefits	11.17 %	7.49 %	9.75 %	16.93 %	14.34 %	11.92 %
Cost of Living Benefits	3.94 %	1.12 %	4.12 %	12.47 %	13.11 %	8.73 %
Total Before Transfer	15.11 %	8.61 %	13.87 %	29.40 %	27.45 %	20.65 %
Less Transfer	-0.65 %	-0.65 %	-0.65 %	-0.65 %	-0.65 %	-0.65 %
Total After Transfer	14.46 %	7.96 %	13.22 %	28.75 %	26.80 %	20.00 %

Average Rate for Total Group Before Transfer = 18.21%

Average Rate for Total Group After Transfer = 17.56%

The recommended employee contribution rates are shown in Schedule 5 of the Appendix.

AIR POLLUTION CONTROL DISTRICT

We have determined the employee and employer contribution rates associated with the Air Pollution Control District (APCD) members as a separate group of SBCERS as of December 31, 1994. Our results are based upon the list of the 79 APCD active members provided by the Retirement Office.

The demographics of the members included in our study are shown on the following page.

SUMMARY OF APCD MEMBERSHIP

GENERAL PLAN 1

Number	73
Annual Payroll*	\$ 3,671,000
Average Monthly Salary	\$ 4,191
Average Age	40.18
Average Service	5.71

GENERAL PLAN 2

Number	6
Annual Payroll*	\$ 282,000
Average Monthly Salary	\$ 3,917
Average Age	40.67
Average Service	8.50

* Represents the annualization of active members' pay rates on December 31.

The results of our study are as follows:

TOTAL EMPLOYER CONTRIBUTION RATES

Study 1 Assumptions

	Plan 1	Plan 2
Basic Benefits	10.63 %	7.38 %
Cost of Living Benefits	3.66 %	0.85 %
Total Before Transfer	14.29 %	8.23 %
Less Transfer	-0.65 %	-0.65 %
Total After Transfer	13.64 %	7.58 %

Average Rate for Total Group Before Transfer = 13.86%

Average Rate for Total Group After Transfer = 13.21%

TOTAL EMPLOYER CONTRIBUTION RATES

Study 2 Assumptions

	Plan 1	Plan 2
Basic Benefits	11.19 %	7.90 %
Cost of Living Benefits	4.05 %	1.12 %
Total Before Transfer	15.24 %	9.02 %
Less Transfer	-0.65 %	-0.65 %
Total After Transfer	14.59 %	8.37 %

Average Rate for Total Group Before Transfer = 14.80%

Average Rate for Total Group After Transfer = 14.15%

As part of this study, we have allocated a portion of the total plan assets to the APCD group. These assets were allocated in order to keep the unfunded actuarial accrued liability (UAAL) rate before transfer of the designated liability transfer account the same for the APCD members and the remaining SBCERS population. We have determined the amount of assets to be transferred as follows:

	Study 1	Study 2
Basic UAAL rate	3.63 %	4.05 %
Basic Assets	\$ 1,490,184	\$ 1,394,222
Basic and COL UAAL rate	4.48 %	5.17 %
Basic and COL Assets	\$ 1,977,028	\$ 1,807,291

HEALTH INSURANCE OFFSET

As requested, we have calculated the liabilities associated with the current monthly Health Insurance Offset benefit (\$8.00 per year of service for covered employees and \$1.47 per year of service for non-covered employees). We assumed that this benefit does not receive any future adjustment after retirement. Our results are based upon the current retirees and members retiring in the future from

the current active and inactive group. We assumed that 60% of the current active and inactive group will be covered at the time of retirement based on the most recent actuarial experience.

The liabilities determined as of December 31, 1994 are shown below. These amounts reflect the new recommended economic and noneconomic actuarial assumptions. Note that employees hired after December 31, 1994 are excluded from this analysis.

HEALTH INSURANCE OFFSET BENEFIT	
Present Value of Benefits	
Current Actives and Inactives	\$ 13,941,000
Current Retirees	16,847,000
Total Present Value	\$ 30,788,000
Present Value Future Normal Cost	4,875,000
Accrued Liability	\$ 25,913,000
Less: Health Coverage Reserve	33,221,000
Unfunded Accrued Liability	\$ (7,308,000)

The contribution rate needed to fully fund this benefit is shown below:

Contribution	% of Payroll
Normal Cost	0.38 %
UAAL	(0.56) %
Total	(0.18) %

Recommendation

Based on the overfunded status of this benefit, we recommend that no Normal Cost contribution be made at this time.

SUPPLEMENTAL HEALTH CARE OFFSET

As requested, we have calculated the lump sum (single sum) cost of paying the current monthly amounts towards health insurance premiums, assuming 60% participation. For members retiring on or after July 1, 1990, the current monthly amount is equal to \$1.00 for each year of service. For members retiring before July 1, 1990, the retiree or beneficiary receives the benefit based on the following schedule:

Service	Monthly Amount
Less than 5 years of service	\$ 1.00/Year of Service
5 or more years of service, but less than 10 years	\$ 46.45
10 or more years	\$ 141.36

In the table on the following page we summarize the lump sum liabilities required to provide this benefit on a long-term basis for both present and future retired members. Please note that future retired members include only those from the present active and inactive members' groups. In calculating the liabilities shown we assumed that the supplemental benefit payable to members retiring before July 1, 1990 will increase annually by 3%.

SUMMARY OF RESULTS AS OF DECEMBER 31, 1994

1.	Number of Retired Members Receiving Benefit		1,565
2.	Annual Supplemental Benefit	\$	1,783,000
3.	Retiree Lump Sum Liabilities		
	a. Pre 7/1/90 Retirees	\$	17,165,000
	b. Post 7/1/90 Retirees		709,000
	c. Total Retired Liability	\$	17,874,000
4.	Supplemental Health and Special Allowance Reserves		25,100,000
5.	Net Retired Unfunded Liabilities	\$	(7,226,000)
6.	Active and Term Vested Liabilities		1,512,000
7.	Net Unfunded Liabilities	\$	(5,714,000)

Please note that our calculations assume that the Retiree Health Insurance Reserve will be credited with interest at the rate of 8% and that benefits will be paid from this reserve.

PHASE-IN OF EMPLOYER CONTRIBUTION RATES

Shown below is the effect of phasing in over two or three years the increase in the employer contribution rates:

TWO YEAR PHASE-IN				
	Employer Contribution Rates			
	Study #1		Study #2	
Current Rates*	14.72	%	14.72	%
Rates as of 12/31/94	15.53	%	16.18	%
Rates as of 12/31/95	16.34	%	17.65	%

* Includes 0.24% contributions due to Health Insurance.

Please note that the ultimate employer contribution rates of 16.34% and 17.65% are greater than the Study 1 and Study 2 rates of 16.29% and 17.56%, respectively.

THREE YEAR PHASE-IN			
	Employer Contribution Rates		
	Study #1	Study #2	
Current Rates*	14.72 %	14.72 %	
Rates as of 12/31/94	15.27 %	15.71 %	
Rates as of 12/31/95	15.82 %	16.70 %	
Rates as of 12/31/96	16.36 %	17.69 %	

* Includes 0.24% contributions due to Health Insurance.

Please note that the ultimate employer contribution rates of 16.36% and 17.69% are greater than the Study 1 and Study 2 rates of 16.29% and 17.56%, respectively.

SECTION V: ASSETS AND LIABILITIES

ACTUARIAL VALUE OF ASSETS

For purposes of calculating the required contribution rates for the valuation, a modified book value of the Fund's assets was used. Under this approach, recognition is given each year to total earnings of the Fund to date.

The current approach used by your System is to spread each year's unrealized gains and losses over five years. In other words, only 20% of unrealized gains and losses are to be recognized in any one year. Please note that starting with the 1993-1994 Fiscal Year realized and unrealized gains and losses are treated the same. This was done on a prospective basis only i.e., the effect of this change is reflected for the first time in this actuarial valuation.

These modified assets, which we called the Actuarial Value of Assets, were arrived at as follows:

1. Gains (Losses)

Year Ending June 30	Total Gains (Losses)	Percentage Recognized to 12/31/94	Total Gains (Losses) Recognized to 12/31/94
1990*	\$ 33,220,445	100 %	\$ 33,220,445
1991	5,358,656	90 %	4,822,790
1992	26,505,503	70 %	18,553,852
1993	9,638,878	50 %	4,819,439
1994	(26,712,121)	30 %	(8,013,636)
1994**	(1,114,300)	10 %	(111,430)

2. Total Gains (Losses) Recognized to December 31, 1994 \$ 53,291,460

* Total as of 6/30/90.

** Last six months of 1994.

3. Book Value as of December 31, 1994 (less payables)	\$	518,478,581
4. Less Realized Gains Through December 31, 1994		(18,672,726)
5. Total Gains (Losses) Recognized Through December 31, 1994		53,291,460
6. Item 3 + Item 4 + Item 5	\$	<u>553,097,315</u>
7. Corridor Limit: (Net assets at Market: \$546,702,915)		
a. 80% of Market Value (less payables)	\$	437,362,332
b. 120% of Market Value (less payables)	\$	656,043,498
8. Item 6 After Corridor Applied	\$	553,097,315
9. Actuarial Value Ratio (Item 8/Item 3)		1.06677

The ratio arrived at in Item 9 above is only used to adjust the reserves used in determining the employer contribution rate. These reserves are the Member Deposit, County Advance, Employer Supplemental and Retired Member Reserves. Total Actuarial Value of Assets, with the ratio applied only to these reserves, are \$562,860,925. These assets were derived as follows:

1. Member Deposit, County Advance, Employer Supplemental and Retired Member Reserves	\$	442,348,381
2. Actuarial Value Ratio		1.06677
3. Item 1* Item 2	\$	471,883,982
4. Members Supplemental Reserve, Accounts Payable, Health Coverage Reserve, Designated Liability Transfer Account, Special Allowance, Supplemental Health Coverage Reserve, Burial Allowance, Special Reserve for Interest Fluctuation, Unreserved Earnings, Undesignated	\$	92,784,234
5. Item 3 + Item 4	\$	564,668,216
6. Air Pollution Control District Asset Transfer	\$	1,807,291
7. Actuarial Value of Assets (Item 5 - Item 6)	\$	562,860,925

Reserve Certifications

Certain reserves are excluded from the actuarial valuation of assets for purposes of determining contribution rates. The following section clarifies the purpose of these reserves in supporting the liabilities of the Santa Barbara County Employees' Retirement System.

Special Reserve for Interest Fluctuation

The Special Reserve for Interest Fluctuation of \$5,351,326 as of December 31, 1994 has been funded by investment income that has exceeded the interest crediting benchmark over the years. It will be utilized to supplement investment income in shortfall periods. The following describes its importance in the operation of the 1937 Act and the setting of actuarial interest rates.

There are two aspects to the application of the actuarial interest rate in 1937 Act retirement systems: (1) The expected long-term total rate of return on the funds, and (2) a short-term benchmark for the semiannual crediting of interest on the fund's reserves.

With respect to the second application, six-month returns on the fund are volatile, due to the short measuring period. In some six-month periods, the returns will exceed the benchmark, and in others they will fall short. Given that the actuarial rate serves as a benchmark, there is a natural tendency to minimize the probability of a shortfall by setting a lower benchmark. The restricted balance counteracts this tendency by serving as a stabilizing mechanism which allows the county retirement systems to consistently maintain a higher level of interest crediting on reserve accounts that are used to determine employer contribution rates.

Thus, the restricted balance mechanism is a factor in the actuarial interest rate setting process. We can focus on the expected long-term total rate of return in setting the interest rate assumption rather than on the short-term downside risks.

LIABILITIES

In this report we present two different perspectives of the system's funding. Our first view of the funding of the System is given by an Actuarial Balance Sheet. The Actuarial Balance Sheet provides insight into the ongoing employer and employee financial commitment necessary to fund the benefits provided by the System. The other perspective is a snapshot of assets and liabilities. This provides insight into the funding status of the System by comparing current assets against a different measure of the current accumulated liability.

Actuarial Balance Sheet

In this approach, we first determine the amount and timing of all future payments that will be made by the System. We then discount these payments at 8.00% per annum to December 31, 1994, the date of the valuation, thereby determining their present value. We see from the lower portion of the Balance Sheet that the total present value of benefits to be paid to current members or their beneficiaries equals \$848.0 million (including \$92.8 million in reserves used for other purposes). We title this present value the "liability" of the System.

Second, in the upper portion, we determine how this liability will be met. Item 1 in the Balance Sheet represents the amount of assets (\$562.9 million) already accumulated by the System at Actuarial Value. Item 2 is the present value of the contributions (\$45.4 million) anticipated to be received in the future from the current members. Item 3 is the present value of future employer normal costs with respect to current members, using the Entry Age Normal Cost method. The employer is budgeting a percentage of payroll on behalf of each member. The Entry Age Normal Cost percentage is, simply stated, the employer's level percentage of payroll needed to fund benefits for new entrants to the System. The present value of these contributions amounts to \$159.1 million.

Finally, we compare the existing assets plus the present value of the future normal costs and future member contributions to the present value of the benefits to be paid from the System. We see that we are "short" by \$80.6 million (\$848.0 million - \$562.9 million - \$45.4 million - \$159.1 million).

This shortfall (or balancing item) of \$80.6 million is known as the Unfunded Actuarial Accrued Liability of your System. In the text we will abbreviate it as UAAL. To bring the System into actuarial balance, we then need to budget a pattern of contributions in respect to the UAAL which has a present value of \$80.6 million. The UAAL is amortized as a level percentage of payroll for the next 11 years from December 31, 1994.

ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1994			
ASSETS			
1.	Net value of assets	\$	562,860,925 *
2.	Present value of future contributions by members		45,407,574
3.	Present value of future employer contributions for normal cost		159,143,006
4.	Present value of other future employer contributions (UAAL)		80,592,041 *
5.	Total actuarial assets	\$	848,003,546
LIABILITIES			
6.	Present value of retirement allowances payable to retired members and their survivors	\$	217,097,659
7.	Present value of service retirement allowances payable to presently active members and their survivors		425,786,006
8.	Present value of allowances payable to vested terminated members and their survivors		52,265,989
9.	Present value of disability retirement allowances payable to presently active members and their survivors		34,422,494
10.	Present value of death benefits payable on behalf of presently active members		9,787,850
11.	Present value of members' contributions to be returned upon withdrawal		15,859,314
12.	Contingency reserves		5,351,326
13.	Other designated reserves		70,778,874
14.	Miscellaneous liabilities		16,654,034
15.	Total actuarial liabilities	\$	848,003,546

Funding Ratio -- GASB 5

The second view of the funding of your System is the standardized pension obligation measurement promulgated by GASB 5. This measurement assumes an ongoing plan, that is, it includes future withdrawals, deaths and service and disability retirements. It is the actuarial present value of credited projected benefits. This view focuses on benefits based on projected salaries and current service; unlike the balance sheet value, it does not take into account future service.

The following example demonstrates how the calculation is prepared. In a plan that provides 2% of final average pay at age 60 for each year of service, a person who entered the plan at age 30 and is now age 50 is two-thirds of the way to retirement and therefore has earned two-thirds of the projected benefit expected at age 60. If the member's current average monthly salary was \$1,000, projected final salary would be about \$1,800, and total GASB obligation would be based on a monthly benefit of \$720 ($\$1,800 \times 2\% \times 30 \text{ years} \times 2/3$). We then determine the present value of \$720 per month taking into account the probability the member will receive the benefit, the likely duration of the benefit, and expected cost-of-living increases.

Applying the above methodology to all assumption and benefit combinations being considered, we have determined the following:

GOVERNMENTAL ACCOUNTING STANDARDS BOARD STATEMENT NO. 5

	8.25% Interest, 5.00% Inflation 12/31/92	8.25% Interest, 5.00% Inflation Recalculated 12/31/94	8.25% Interest, 5.00% Inflation Study 1 12/31/94	8.00% Interest, 4.75% Inflation Study 2 12/31/94
1. Pension Benefit Obligation (PBO)				
a. Current Retirees and Beneficiaries	\$ 186,765,000	\$ 212,536,000	\$ 212,536,000	\$ 217,098,000
b. Terminated Vested Participants	10,290,000	21,461,000	21,461,000	21,775,000
c. Active Participants' Accumulated Contributions	53,996,000	56,968,000	56,968,000	56,968,000
d. Active Participants' Employer Financed Portion	<u>182,198,000</u>	<u>226,348,000</u>	<u>217,784,000</u>	<u>224,811,000</u>
e. Total Pension Benefit Obligation	\$ 433,249,000	\$ 517,313,000	\$ 508,749,000	\$ 520,652,000
f. Other Designated Reserves	<u>51,480,000</u>	<u>65,641,000</u>	<u>65,641,000</u>	<u>65,641,000</u>
g. Total Benefit Obligations	\$ 484,729,000	\$ 582,954,000	\$ 574,390,000	\$ 586,293,000
2. Book Value of Assets*	\$ 429,421,000	\$ 516,489,000	\$ 516,502,000	\$ 516,671,000
3. Funding Ratio	88.6%	88.6%	89.9%	88.1%

* Reflects the transfer due to the Air Pollution Control District employees.

For comparative purposes, we have provided on the following page a summary of the current GASB #5 ratios and the underlying interest rate assumptions for all of the 1937 Act counties.

County	Valuation Date	Interest Rate	GASB #5 Ratio
Alameda	01/01/94	8.00%	75%
Contra Costa	01/01/94	8.00%	70%
Fresno	07/01/94	8.25%	95%
Imperial	07/01/94	8.00%	78%
Kern	07/01/92	8.25%	77%
Los Angeles	07/01/92	8.00%	98%
Marin	07/01/94	8.00%	70%
Mendocino	07/01/94	8.25%	69%
Merced	07/01/93	8.25%	76%
Orange	01/01/93	8.00%	101%
Sacramento	07/01/94	8.00%	74%
San Bernardino	07/01/94	8.00%	78%
San Diego	07/01/94	8.00%	104%
San Joaquin	01/01/94	8.25%	105%
San Mateo	07/01/94	8.00%	74%
Santa Barbara	01/01/95	8.00%	88%
Sonoma	01/01/94	8.25%	103%
Stanislaus	07/01/94	8.00%	82%
Tulare	07/01/94	8.00%	94%
Ventura	07/01/94	8.25%	86%
Average		8.09%	85%

Note: All of the GASB #5 ratios are based on assets at cost value except for Sacramento (accounting value), San Bernardino (actuarial value), and Tulare (market value).

SECTION VI - APPENDIX

SCHEDULE 1

SUMMARY OF ACTUARIAL ASSUMPTIONS

The Entry Age Normal Actuarial Cost Method was used in conjunction with the following actuarial assumptions. The UAAL is being funded over 11 years from the December 31, 1994 valuation date.

1. Interest: 8.00% per annum.
2. Interest Credited to Employee Accounts: 8.00% per annum.
3. Inflation: 4.75% per annum.
4. Asset Valuation: Actuarial book value.
5. Salary Scale: See Schedule 9
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 6
8. Years of Life Expectancy After Retirement: See Schedule 7
9. Years of Life Expectancy After Disability: See Schedule 7
10. Life Expectancy After Retirement for Employee Contribution Rate Purposes
 - General Members: 1983 Group Annuity Table for Males, set back two years.
 - Safety Members: 1983 Group Annuity Table for Males set ahead one year.

SCHEDULE 2
SUMMARY OF MAJOR PLAN PROVISIONS

1. ELIGIBILITY

First of pay period following date of employment.

2. DEFINITION OF SALARY

Highest 12 consecutive months of compensation earnable for Plan 1 members and highest 36 consecutive months of compensation earnable for Plan 2 and Plan 3 members.

3. SERVICE RETIREMENT

- Normal retirement age

Ages 57, 65 and 50 for Sections 31676.1 (General Plans 1 and 3), 31486.4 (General Plan 2) and 31664 (Safety and Probation), respectively.

- Early retirement

Age 50 and 10 years for Plans 1 and 3 and age 55 and 10 years for General Plan 2; or 30 years for General Plans 1 and 3, and 20 years for Safety and Probation.

- Benefit

- 1/60 times final average salary per year of service for General Plans 1 and 3,

- 2% of final average salary per year of service (max. 35 years) plus 1% of final average salary per year of service in excess of 35 (max. 10 years) reduced by 1/35 of Social Security benefit at age 65 per year of service (max. 35 years) for General Plan 2, and

- 1/50 times final average salary per year of service for Safety and Probation.

- Benefit adjustments

Reduced for retirement before ages 57, 65 and 50 for Sections 31676.1, 31486.4 and 31664, respectively. Reductions for Section 31486.4 are actuarial equivalents.

Increased for retirement after ages 57 and 50 for Sections 31676.1 and 31664, respectively.

4. DISABILITY RETIREMENT

- Nonservice connected for Plans 1 and 3

1.5% (General Plans 1 and 3) and 1.8% (Safety and Probation) of final average salary per year of service, with a maximum of 33-1/3% if projected service is used (age 65 for General Plans 1 and 3, age 55 for Safety and Probation), or 90% of the accrued service retirement benefit without a benefit adjustment.

- Service connected for Plans 1 and 3

Greater of 50% of final average salary or service retirement benefit (if eligible).

- Benefit for General Plan 2

60% of salary provided outside of the Plan. Payments are reduced by other disability income benefits. Service retirement at age 65 (credit given toward service retirement while disabled under the LTD plan).

5. DEATH BEFORE RETIREMENT

- Nonservice connected before eligible to retire, for Plans 1 and 3
 - refund of contributions plus 1/12 of last years' salary per year of service up to 6 years.
- Eligible for nonservice connected disability or service retirement for Plans 1 and 3
 - 60% of member's accrued allowance.
- Service connected for Plans 1 and 3
 - 50% of salary.
- Benefit for General Plan 2
 - 1/12 of last years' salary per year of service up to 6 years.

6. DEATH AFTER RETIREMENT

- \$1,000 lump sum death benefit for Plans 1 and 3.
- Service retirement or nonservice connected disability
 - 60% of member's allowance payable to an eligible spouse for Plans 1 and 3.
 - 50% of member's allowance payable to an eligible spouse for General Plan 2.
- Service connected disability
 - 100% of member's allowance payable to an eligible spouse for Plans 1 and 3.
 - 50% of member's allowance payable to an eligible spouse for General Plan 2.

7. VESTING

- Must leave contributions on deposit.
- Five years of service for Plans 1 and 3.
- Ten years of service for General Plan 2.

8. MEMBERS' CONTRIBUTIONS

- Based on entry age.
- Half rates for General and Safety Plan 1. Full rates for General and Safety Plan 3 and Probation. General Plan 2 is noncontributory.

9. MAXIMUM BENEFIT

- 100% of final average salary for Plans 1 and 3.
- Benefit and Social Security combined cannot exceed 70% of final average salary if service is less than 35, otherwise 80% for General Plan 2.

10. COST-OF-LIVING

- "Automatic" 3% COLA except for Plans 1 and 3.
- None for General Plan 2.

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY
as of December 31, 1994

ACTIVE GENERAL PLAN 1 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL	
15	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER
	20426	0	0	0	0	0	0	0	0	0	0	20426	SALARY
20	72	2	0	0	0	0	0	0	0	0	0	74	NUMBER
	1666324	47141	0	0	0	0	0	0	0	0	0	1713465	SALARY
25	175	55	1	0	0	0	0	0	0	0	0	231	NUMBER
	4760681	1614082	27620	0	0	0	0	0	0	0	0	6402383	SALARY
30	216	127	29	1	0	0	0	0	0	0	0	373	NUMBER
	6543507	4338862	1040967	34795	0	0	0	0	0	0	0	11958131	SALARY
35	184	137	83	24	0	0	0	0	0	0	0	428	NUMBER
	5997890	5100666	3112711	861537	0	0	0	0	0	0	0	15072804	SALARY
40	194	124	75	54	8	0	0	0	0	0	0	455	NUMBER
	6633003	5004519	3310289	2455582	294533	0	0	0	0	0	0	17697926	SALARY
45	132	123	79	51	37	12	0	0	0	0	0	434	NUMBER
	4623146	5459908	3771114	2394839	1654444	468729	0	0	0	0	0	18372180	SALARY
50	87	79	47	45	27	12	5	0	0	0	0	302	NUMBER
	2819292	3184863	2248289	1933695	1397146	558955	232328	0	0	0	0	12374568	SALARY
55	44	45	31	31	18	16	5	4	0	0	0	194	NUMBER
	1387199	1619997	1265966	1310283	692141	737911	187127	226446	0	0	0	7427070	SALARY
60	26	29	28	20	17	3	5	1	0	0	0	129	NUMBER
	878646	1012556	1051783	755723	687200	110554	192504	31375	0	0	0	4720341	SALARY
65	10	2	5	4	4	1	0	0	0	0	0	26	NUMBER
	333634	56549	140588	183076	112309	26980	0	0	0	0	0	853136	SALARY
70	4	2	1	2	2	0	1	0	0	0	0	12	NUMBER
	81729	134314	28954	65882	57697	0	30166	0	0	0	0	398742	SALARY
75	0	0	0	1	0	0	0	0	0	0	0	1	NUMBER
	0	0	0	28147	0	0	0	0	0	0	0	28147	SALARY
80	0	0	1	0	0	0	0	0	0	0	0	1	NUMBER
	0	0	27751	0	0	0	0	0	0	0	0	27751	SALARY
TOTAL	1145	725	380	233	113	44	16	5	0	0	0	2661	NUMBER
	35745477	27573457	16026032	10023559	4895470	1903129	642125	257821	0	0	0	97067070	SALARY

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY

as of December 31, 1994

ACTIVE GENERAL PLAN 2 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER
	0	0	0	0	0	0	0	0	0	0	0	0	0	SALARY
20	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER	
	26354	0	0	0	0	0	0	0	0	0	0	26354	SALARY	
25	8	2	0	0	0	0	0	0	0	0	0	10	NUMBER	
	256867	56345	0	0	0	0	0	0	0	0	0	313212	SALARY	
30	7	9	5	0	0	0	0	0	0	0	0	21	NUMBER	
	204730	327987	201176	0	0	0	0	0	0	0	0	733893	SALARY	
35	6	10	8	0	0	0	0	0	0	0	0	24	NUMBER	
	164824	394434	258379	0	0	0	0	0	0	0	0	817637	SALARY	
40	4	8	5	4	1	0	0	0	0	0	0	22	NUMBER	
	123731	270999	163252	145974	44466	0	0	0	0	0	0	748422	SALARY	
45	0	6	6	2	2	1	0	0	0	0	0	17	NUMBER	
	0	275848	209843	62642	80166	43266	0	0	0	0	0	671765	SALARY	
50	1	4	1	1	0	0	0	0	0	0	0	7	NUMBER	
	38686	161190	68619	25744	0	0	0	0	0	0	0	294239	SALARY	
55	2	3	0	1	0	1	0	0	0	0	0	7	NUMBER	
	74806	86408	0	28954	0	38289	0	0	0	0	0	228457	SALARY	
60	1	9	0	0	0	0	0	0	0	0	0	10	NUMBER	
	52888	282660	0	0	0	0	0	0	0	0	0	335548	SALARY	
65	0	2	1	0	0	0	0	0	0	0	0	3	NUMBER	
	0	130052	27015	0	0	0	0	0	0	0	0	157067	SALARY	
70	0	2	0	0	0	0	0	0	0	0	0	2	NUMBER	
	0	59405	0	0	0	0	0	0	0	0	0	59405	SALARY	
75	1	1	0	0	0	0	0	0	0	0	0	2	NUMBER	
	11890	28954	0	0	0	0	0	0	0	0	0	40844	SALARY	
TOTAL	31		26		3		0		0		0		NUMBER	
	954776		928284		124632		0		0		0		SALARY	
		56		8		2		0		0			NUMBER	
		2074282		263314		81555		0		0			SALARY	
										0			NUMBER	
										0			SALARY	
												126	NUMBER	
												4426843	SALARY	

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY
as of December 31, 1994

ACTIVE GENERAL PLAN 3 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER
	0	0	0	0	0	0	0	0	0	0	0	0	0	SALARY
20	18	0	0	0	0	0	0	0	0	0	0	18	NUMBER	
	388871	0	0	0	0	0	0	0	0	0	0	388871	SALARY	
25	20	0	0	0	0	0	0	0	0	0	0	20	NUMBER	
	461056	0	0	0	0	0	0	0	0	0	0	461056	SALARY	
30	11	0	0	0	0	0	0	0	0	0	0	11	NUMBER	
	321222	0	0	0	0	0	0	0	0	0	0	321222	SALARY	
35	9	0	0	0	0	0	0	0	0	0	0	9	NUMBER	
	201444	0	0	0	0	0	0	0	0	0	0	201444	SALARY	
40	14	0	0	0	0	0	0	0	0	0	0	14	NUMBER	
	524322	0	0	0	0	0	0	0	0	0	0	524322	SALARY	
45	9	0	0	0	0	0	0	0	0	0	0	9	NUMBER	
	245617	0	0	0	0	0	0	0	0	0	0	245617	SALARY	
50	7	0	0	0	0	0	0	0	0	0	0	7	NUMBER	
	305653	0	0	0	0	0	0	0	0	0	0	305653	SALARY	
55	2	0	0	0	0	0	0	0	0	0	0	2	NUMBER	
	52098	0	0	0	0	0	0	0	0	0	0	52098	SALARY	
60	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER	
	43266	0	0	0	0	0	0	0	0	0	0	43266	SALARY	
65	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER	
	9440	0	0	0	0	0	0	0	0	0	0	9440	SALARY	
TOTAL	92		0		0		0		0		0		NUMBER	
	2552989		0		0		0		0		0		SALARY	
		0		0		0		0		0			NUMBER	
		0		0		0		0		0			SALARY	
												92	NUMBER	
												2552989	SALARY	

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY
as of December 31, 1994

ACTIVE SAFETY PLAN 1 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER
	0	0	0	0	0	0	0	0	0	0	0	0	0	SALARY
20	11	1	0	0	0	0	0	0	0	0	0	12	NUMBER	
	401542	38517	0	0	0	0	0	0	0	0	0	440059	SALARY	
25	46	23	0	0	0	0	0	0	0	0	0	69	NUMBER	
	1771876	939469	0	0	0	0	0	0	0	0	0	2711345	SALARY	
30	36	40	19	0	0	0	0	0	0	0	0	95	NUMBER	
	1431526	1727091	864623	0	0	0	0	0	0	0	0	4023240	SALARY	
35	23	41	28	33	0	0	0	0	0	0	0	125	NUMBER	
	916979	1898124	1345034	1594886	0	0	0	0	0	0	0	5755023	SALARY	
40	7	18	26	35	8	0	0	0	0	0	0	94	NUMBER	
	274821	792229	1250861	1767881	437640	0	0	0	0	0	0	4523432	SALARY	
45	10	14	16	20	26	21	0	0	0	0	0	107	NUMBER	
	474577	637111	745546	1004479	1553915	1120755	0	0	0	0	0	5536383	SALARY	
50	1	6	10	6	31	42	8	0	0	0	0	104	NUMBER	
	65431	268324	542164	332026	1684147	2439541	442346	0	0	0	0	5773979	SALARY	
55	1	2	0	5	4	2	4	0	0	0	0	18	NUMBER	
	44869	96093	0	232355	213482	123744	235777	0	0	0	0	946320	SALARY	
60	1	2	1	1	2	1	0	0	0	0	0	8	NUMBER	
	54656	78880	41863	54651	85397	36643	0	0	0	0	0	352090	SALARY	
65	0	0	0	1	0	0	0	0	0	0	0	1	NUMBER	
	0	0	0	59378	0	0	0	0	0	0	0	59378	SALARY	
TOTAL	136	100	71	12	0	0	0	0	0	0	0	633	NUMBER	
	5436277	4790091	3974581	678123	0	0	0	0	0	0	0	30121249	SALARY	
		147	101	66	0	0	0	0	0	0	0		NUMBER	
		6475838	5045656	3720683	0	0	0	0	0	0	0		SALARY	

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY
as of December 31, 1994

ACTIVE SAFETY PLAN 3 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER
	0	0	0	0	0	0	0	0	0	0	0	0	0	SALARY
20	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER	
	31739	0	0	0	0	0	0	0	0	0	0	31739	SALARY	
25	1	0	0	0	0	0	0	0	0	0	0	1	NUMBER	
	23234	0	0	0	0	0	0	0	0	0	0	23234	SALARY	
30	2	0	0	0	0	0	0	0	0	0	0	2	NUMBER	
	56173	0	0	0	0	0	0	0	0	0	0	56173	SALARY	
35	2	0	0	0	0	0	0	0	0	0	0	2	NUMBER	
	68742	0	0	0	0	0	0	0	0	0	0	68742	SALARY	
40	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
45	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
50	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
55	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
60	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
65	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER	
	0	0	0	0	0	0	0	0	0	0	0	0	SALARY	
TOTAL	6	0	0	0	0	0	0	0	0	0	0	6	NUMBER	
	179888	0	0	0	0	0	0	0	0	0	0	179888	SALARY	
		0	0	0	0	0	0	0	0	0	0		NUMBER	
		0	0	0	0	0	0	0	0	0	0		SALARY	

SCHEDULE 3

AGE AND SERVICE DISTRIBUTION WITH ANNUAL SALARY

as of December 31, 1994

ACTIVE PROBATION PLAN 1 MEMBERS

SERVICE AGE	1	5	10	15	20	25	30	35	40	45	50	TOTAL		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	NUMBER
	0	0	0	0	0	0	0	0	0	0	0	0	0	SALARY
20	3	0	0	0	0	0	0	0	0	0	0	3	NUMBER	
	76447	0	0	0	0	0	0	0	0	0	0	76447	SALARY	
25	10	2	0	0	0	0	0	0	0	0	0	12	NUMBER	
	286878	71425	0	0	0	0	0	0	0	0	0	358303	SALARY	
30	8	15	2	0	0	0	0	0	0	0	0	25	NUMBER	
	240738	603723	78909	0	0	0	0	0	0	0	0	923370	SALARY	
35	6	7	9	2	0	0	0	0	0	0	0	24	NUMBER	
	149831	277197	382292	96868	0	0	0	0	0	0	0	906188	SALARY	
40	4	6	10	10	0	0	0	0	0	0	0	30	NUMBER	
	123471	254685	423661	421284	0	0	0	0	0	0	0	1223101	SALARY	
45	9	5	4	9	2	2	0	0	0	0	0	31	NUMBER	
	278913	194449	150217	397532	119116	177324	0	0	0	0	0	1317551	SALARY	
50	4	6	3	6	2	1	0	0	0	0	0	22	NUMBER	
	130694	224140	138631	257272	111879	48664	0	0	0	0	0	911280	SALARY	
55	2	2	0	0	3	1	2	0	0	0	0	10	NUMBER	
	56037	63948	0	0	144637	51112	106983	0	0	0	0	422717	SALARY	
60	0	1	0	0	0	0	0	0	0	0	0	1	NUMBER	
	0	44556	0	0	0	0	0	0	0	0	0	44556	SALARY	
65	0	1	0	0	0	0	0	0	0	0	0	1	NUMBER	
	0	39451	0	0	0	0	0	0	0	0	0	39451	SALARY	
TOTAL	46		28		7		2		0		0		NUMBER	
	1343009		1173710		375632		106983		0		0		SALARY	
		45		27		4		0		0			NUMBER	
		1773574		1172956		277100		0		0			SALARY	
												159	NUMBER	
												6222964	SALARY	

SCHEDULE 4
SUMMARY OF ANNUAL RETIREMENT ALLOWANCES
as of December 31, 1994

GENERAL MEMBERS

	<u>Number</u>	<u>Annual Allowance</u>
Service		
Males	550	\$ 7,134,239
Females	589	5,005,041
Total	<u>1,139</u>	<u>\$ 12,139,280</u>
Disability		
Males	53	\$ 568,548
Females	25	252,856
Total	<u>78</u>	<u>\$ 821,404</u>
Beneficiaries		
Males	39	\$ 165,747
Females	166	1,005,228
Total	<u>205</u>	<u>\$ 1,170,975</u>
Total	<u><u>1,422</u></u>	<u><u>\$ 14,131,659</u></u>

SAFETY MEMBERS

	<u>Number</u>	<u>Annual Allowance</u>
Service		
Males	102	\$ 2,675,702
Females	6	132,558
Total	<u>108</u>	<u>\$ 2,808,260</u>
Disability		
Males	76	\$ 1,230,703
Females	3	31,753
Total	<u>79</u>	<u>\$ 1,262,456</u>
Beneficiaries		
Males	5	\$ 50,684
Females	40	457,548
Total	<u>45</u>	<u>\$ 508,232</u>
Total	<u><u>232</u></u>	<u><u>\$ 4,578,948</u></u>

SCHEDULE 5
(Current Assumptions)

GENERAL PLAN 1 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate																
20	2.78 %	40	3.12 %																
21	2.78	41	3.15																
22	2.78	42	3.19																
23	2.79	43	3.22																
24	2.80	44	3.25																
25	2.80	45	3.29																
26	2.82	46	3.33																
27	2.83	47	3.36																
28	2.84	48	3.40																
29	2.86	49	3.44																
30	2.88	50	3.48																
31	2.89	51	3.52																
32	2.91	52	3.57																
33	2.94	53	3.61																
34	2.96	54	3.66																
35	2.98	55	3.70																
36	3.01	56	3.75																
37	3.04	57	3.80																
38	3.06	58	3.85																
39	3.09	59 +	3.90																
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">INTEREST:</td> <td>8.25%</td> <td></td> <td></td> </tr> <tr> <td>INFLATION:</td> <td>5.00%</td> <td></td> <td></td> </tr> <tr> <td>COLA:</td> <td>3.00%</td> <td></td> <td></td> </tr> <tr> <td>MORTALITY:</td> <td>83 GA (Male, -2)</td> <td></td> <td></td> </tr> </table>				INTEREST:	8.25%			INFLATION:	5.00%			COLA:	3.00%			MORTALITY:	83 GA (Male, -2)		
INTEREST:	8.25%																		
INFLATION:	5.00%																		
COLA:	3.00%																		
MORTALITY:	83 GA (Male, -2)																		

SCHEDULE 5
(Current Assumptions)

GENERAL PLAN 3 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	5.27 %	40	5.93 %
21	5.28	41	5.99
22	5.28	42	6.05
23	5.29	43	6.11
24	5.31	44	6.18
25	5.33	45	6.25
26	5.35	46	6.32
27	5.37	47	6.39
28	5.40	48	6.46
29	5.43	49	6.53
30	5.46	50	6.61
31	5.50	51	6.69
32	5.53	52	6.78
33	5.58	53	6.86
34	5.62	54	6.94
35	5.67	55	7.03
36	5.71	56	7.12
37	5.76	57	7.22
38	5.82	58	7.31
39	5.87	59 +	7.41
<p>INTEREST: 8.25%</p> <p>INFLATION: 5.00%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, -2)</p>			

SCHEDULE 5
(Current Assumptions)

SAFETY PLAN 1 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	4.11 %	35	4.63 %
21	4.14	36	4.66
22	4.18	37	4.70
23	4.21	38	4.73
24	4.25	39	4.77
25	4.28	40	4.81
26	4.31	41	4.84
27	4.35	42	4.88
28	4.38	43	4.92
29	4.41	44	4.95
30	4.45	45	4.98
31	4.48	46	5.02
32	4.52	47	5.05
33	4.55	48	5.09
34	4.59	49 +	5.13
<p>INTEREST: 8.25%</p> <p>INFLATION: 5.00%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, +1)</p>			

SCHEDULE 5
(Current Assumptions)

SAFETY AND PROBATION PLAN 3 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	7.71 %	35	8.68 %
21	7.78	36	8.75
22	7.84	37	8.81
23	7.90	38	8.88
24	7.97	39	8.95
25	8.03	40	9.02
26	8.09	41	9.09
27	8.16	42	9.16
28	8.22	43	9.22
29	8.28	44	9.29
30	8.35	45	9.35
31	8.41	46	9.42
32	8.48	47	9.48
33	8.54	48	9.55
34	8.61	49 +	9.62
<p>INTEREST: 8.25%</p> <p>INFLATION: 5.00%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, +1)</p>			

SCHEDULE 5
(Current Assumptions)

PROBATION PLAN 1 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	8.22 %	35	9.25 %
21	8.29	36	9.32
22	8.36	37	9.39
23	8.42	38	9.47
24	8.49	39	9.54
25	8.56	40	9.61
26	8.63	41	9.69
27	8.69	42	9.76
28	8.76	43	9.83
29	8.83	44	9.90
30	8.90	45	9.97
31	8.97	46	10.04
32	9.04	47	10.11
33	9.11	48	10.18
34	9.18	49 +	10.25
<p>INTEREST: 8.25%</p> <p>INFLATION: 5.00%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, +1)</p>			

SCHEDULE 5
(Recommended Assumptions)

GENERAL PLAN I MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	2.82 %	40	3.18 %
21	2.83	41	3.21
22	2.83	42	3.24
23	2.84	43	3.28
24	2.84	44	3.31
25	2.85	45	3.35
26	2.87	46	3.39
27	2.88	47	3.43
28	2.89	48	3.47
29	2.91	49	3.51
30	2.93	50	3.55
31	2.95	51	3.59
32	2.97	52	3.63
33	2.99	53	3.68
34	3.01	54	3.73
35	3.04	55	3.77
36	3.06	56	3.82
37	3.09	57	3.87
38	3.12	58	3.92
39	3.15	59 +	3.98
<p>INTEREST: 8.00%</p> <p>INFLATION: 4.75%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, -2)</p>			

SCHEDULE 5
(Recommended Assumptions)

GENERAL PLAN 3 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate																
20	5.37 %	40	6.05 %																
21	5.38	41	6.11																
22	5.39	42	6.18																
23	5.40	43	6.24																
24	5.41	44	6.31																
25	5.43	45	6.38																
26	5.45	46	6.45																
27	5.48	47	6.52																
28	5.50	48	6.59																
29	5.54	49	6.67																
30	5.57	50	6.75																
31	5.61	51	6.83																
32	5.65	52	6.92																
33	5.69	53	7.00																
34	5.73	54	7.09																
35	5.78	55	7.18																
36	5.83	56	7.27																
37	5.88	57	7.37																
38	5.94	58	7.47																
39	5.99	59 +	7.57																
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">INTEREST:</td> <td style="width: 40%;">8.00%</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td>INFLATION:</td> <td>4.75%</td> <td></td> <td></td> </tr> <tr> <td>COLA:</td> <td>3.00%</td> <td></td> <td></td> </tr> <tr> <td>MORTALITY:</td> <td>83 GA (Male, -2)</td> <td></td> <td></td> </tr> </table>				INTEREST:	8.00%			INFLATION:	4.75%			COLA:	3.00%			MORTALITY:	83 GA (Male, -2)		
INTEREST:	8.00%																		
INFLATION:	4.75%																		
COLA:	3.00%																		
MORTALITY:	83 GA (Male, -2)																		

SCHEDULE 5
(Recommended Assumptions)

SAFETY PLAN 1 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	4.20 %	35	4.72 %
21	4.23	36	4.76
22	4.26	37	4.80
23	4.30	38	4.83
24	4.33	39	4.87
25	4.37	40	4.91
26	4.40	41	4.95
27	4.44	42	4.98
28	4.47	43	5.02
29	4.51	44	5.06
30	4.54	45	5.09
31	4.58	46	5.13
32	4.61	47	5.16
33	4.65	48	5.20
34	4.69	49 +	5.24
<p>INTEREST: 8.00%</p> <p>INFLATION: 4.75%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, +1)</p>			

SCHEDULE 5
(Recommended Assumptions)

SAFETY AND PROBATION PLAN 3 MEMBERS' CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate
20	7.89 %	35	8.88 %
21	7.96	36	8.95
22	8.02	37	9.02
23	8.09	38	9.09
24	8.15	39	9.16
25	8.22	40	9.23
26	8.28	41	9.30
27	8.35	42	9.37
28	8.41	43	9.44
29	8.48	44	9.51
30	8.54	45	9.58
31	8.61	46	9.64
32	8.68	47	9.71
33	8.74	48	9.78
34	8.81	49 +	9.85
<p>INTEREST: 8.00%</p> <p>INFLATION: 4.75%</p> <p>COLA: 3.00%</p> <p>MORTALITY: 83 GA (Male, +1)</p>			

SCHEDULE 5
(Recommended Assumptions)

PROBATION PLAN 1 CONTRIBUTION RATES
(expressed as a percentage of biweekly compensation)

Entry Age	Rate	Entry Age	Rate																
20	8.39 %	35	9.45 %																
21	8.46	36	9.52																
22	8.53	37	9.59																
23	8.60	38	9.67																
24	8.67	39	9.74																
25	8.74	40	9.82																
26	8.81	41	9.89																
27	8.88	42	9.97																
28	8.95	43	10.04																
29	9.01	44	10.11																
30	9.08	45	10.18																
31	9.16	46	10.25																
32	9.23	47	10.33																
33	9.30	48	10.40																
34	9.37	49 +	10.47																
<table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">INTEREST:</td> <td style="width: 20%;">8.00%</td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> <tr> <td>INFLATION:</td> <td>4.75%</td> <td></td> <td></td> </tr> <tr> <td>COLA:</td> <td>3.00%</td> <td></td> <td></td> </tr> <tr> <td>MORTALITY:</td> <td>83 GA (Male, +1)</td> <td></td> <td></td> </tr> </table>				INTEREST:	8.00%			INFLATION:	4.75%			COLA:	3.00%			MORTALITY:	83 GA (Male, +1)		
INTEREST:	8.00%																		
INFLATION:	4.75%																		
COLA:	3.00%																		
MORTALITY:	83 GA (Male, +1)																		

SCHEDULE 6

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.

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 .1500, then we are assuming that 15.0% of the active members at age 25 will terminate without vested rights during the next year.

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
GENERAL MEMBERS – MALES
(Current Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.1650	.0002	.0000	.0000	.0000	.0001	.0001	.0000
21	.1550	.0002	.0000	.0000	.0000	.0001	.0001	.0000
22	.1450	.0002	.0000	.0000	.0000	.0001	.0001	.0000
23	.1350	.0002	.0000	.0000	.0000	.0001	.0001	.0000
24	.1250	.0002	.0000	.0000	.0000	.0001	.0001	.0000
25	.1200	.0003	.0000	.0000	.0001	.0001	.0001	.0000
26	.1150	.0003	.0000	.0000	.0001	.0001	.0001	.0000
27	.1075	.0003	.0000	.0000	.0001	.0001	.0001	.0000
28	.1000	.0003	.0000	.0000	.0001	.0001	.0001	.0010
29	.0925	.0003	.0000	.0000	.0001	.0001	.0001	.0020
30	.0850	.0004	.0000	.0000	.0002	.0001	.0002	.0045
31	.0800	.0004	.0000	.0000	.0002	.0001	.0002	.0065
32	.0750	.0004	.0000	.0000	.0002	.0001	.0002	.0085
33	.0700	.0004	.0000	.0000	.0002	.0001	.0002	.0110
34	.0650	.0004	.0000	.0000	.0002	.0001	.0002	.0120
35	.0600	.0005	.0001	.0000	.0002	.0001	.0003	.0130
36	.0550	.0005	.0001	.0000	.0002	.0001	.0004	.0135
37	.0510	.0005	.0001	.0000	.0003	.0001	.0005	.0140
38	.0480	.0005	.0001	.0000	.0003	.0001	.0006	.0130
39	.0450	.0006	.0002	.0000	.0003	.0001	.0007	.0120
40	.0430	.0006	.0002	.0000	.0003	.0001	.0008	.0120
41	.0410	.0006	.0002	.0000	.0004	.0001	.0009	.0125
42	.0390	.0007	.0003	.0000	.0004	.0001	.0011	.0130
43	.0360	.0007	.0004	.0000	.0005	.0001	.0012	.0140
44	.0330	.0007	.0005	.0000	.0005	.0001	.0013	.0150
45	.0300	.0008	.0006	.0000	.0006	.0001	.0015	.0165
46	.0280	.0009	.0007	.0000	.0007	.0001	.0016	.0180
47	.0260	.0010	.0008	.0000	.0008	.0001	.0017	.0200
48	.0250	.0011	.0009	.0000	.0010	.0001	.0018	.0180
49	.0240	.0012	.0011	.0000	.0012	.0001	.0019	.0165
50	.0230	.0013	.0013	.0454	.0014	.0001	.0020	.0150
51	.0220	.0014	.0015	.0236	.0016	.0001	.0022	.0140
52	.0210	.0016	.0017	.0245	.0018	.0001	.0024	.0130
53	.0200	.0018	.0019	.0236	.0021	.0001	.0025	.0120
54	.0190	.0020	.0021	.0226	.0024	.0001	.0026	.0110
55	.0180	.0022	.0023	.0542	.0027	.0001	.0028	.0100
56	.0170	.0024	.0025	.0415	.0030	.0001	.0030	.0095
57	.0160	.0026	.0027	.0396	.0033	.0001	.0031	.0085
58	.0150	.0028	.0030	.0500	.0036	.0001	.0032	.0080
59	.0140	.0030	.0033	.0555	.0039	.0001	.0034	.0075
60	.0130	.0032	.0037	.1019	.0041	.0001	.0035	.0070
61	.0120	.0034	.0041	.1235	.0044	.0001	.0037	.0065
62	.0110	.0036	.0045	.3118	.0047	.0001	.0038	.0060
63	.0100	.0038	.0049	.1355	.0050	.0001	.0040	.0055
64	.0100	.0040	.0053	.1793	.0053	.0001	.0042	.0050
65	.0100	.0042	.0057	.2889	.0056	.0001	.0000	.0000
66	.0100	.0045	.0061	.2262	.0059	.0001	.0000	.0000
67	.0100	.0048	.0066	.2048	.0062	.0001	.0000	.0000
68	.0100	.0051	.0071	.2985	.0066	.0001	.0000	.0000
69	.0100	.0054	.0076	.4048	.0070	.0001	.0000	.0000
70	.0000	.0000	.0000	.8730	.0000	.0000	.0000	.0000

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
GENERAL MEMBERS – FEMALES
(Current Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.1725	.0001	.0000	.0000	.0000	.0001	.0001	.0000
21	.1650	.0001	.0000	.0000	.0000	.0001	.0001	.0000
22	.1575	.0001	.0000	.0000	.0000	.0001	.0001	.0000
23	.1475	.0001	.0000	.0000	.0000	.0001	.0001	.0000
24	.1375	.0001	.0000	.0000	.0000	.0001	.0001	.0000
25	.1325	.0001	.0001	.0000	.0001	.0001	.0001	.0000
26	.1300	.0001	.0001	.0000	.0001	.0001	.0001	.0000
27	.1250	.0002	.0001	.0000	.0001	.0001	.0001	.0040
28	.1200	.0002	.0001	.0000	.0001	.0001	.0001	.0060
29	.1150	.0002	.0001	.0000	.0001	.0001	.0001	.0080
30	.1100	.0002	.0001	.0000	.0001	.0001	.0001	.0100
31	.1050	.0002	.0001	.0000	.0001	.0001	.0001	.0120
32	.1000	.0002	.0002	.0000	.0001	.0001	.0001	.0140
33	.0950	.0002	.0002	.0000	.0001	.0001	.0001	.0160
34	.0910	.0002	.0002	.0000	.0001	.0001	.0001	.0170
35	.0870	.0003	.0003	.0000	.0001	.0001	.0002	.0180
36	.0820	.0003	.0003	.0000	.0001	.0001	.0002	.0180
37	.0760	.0003	.0003	.0000	.0001	.0001	.0003	.0180
38	.0690	.0003	.0003	.0000	.0001	.0001	.0003	.0180
39	.0620	.0003	.0003	.0000	.0001	.0001	.0004	.0180
40	.0550	.0004	.0004	.0000	.0001	.0001	.0005	.0185
41	.0500	.0004	.0005	.0000	.0001	.0001	.0006	.0190
42	.0450	.0004	.0005	.0000	.0001	.0001	.0007	.0190
43	.0400	.0004	.0007	.0000	.0001	.0001	.0008	.0190
44	.0360	.0004	.0008	.0000	.0001	.0001	.0008	.0190
45	.0320	.0005	.0009	.0000	.0002	.0001	.0009	.0190
46	.0300	.0005	.0010	.0000	.0002	.0001	.0009	.0190
47	.0290	.0005	.0010	.0000	.0002	.0001	.0010	.0185
48	.0280	.0006	.0011	.0000	.0003	.0001	.0011	.0185
49	.0270	.0006	.0012	.0000	.0003	.0001	.0012	.0180
50	.0260	.0006	.0013	.0200	.0004	.0001	.0012	.0175
51	.0250	.0006	.0014	.0120	.0005	.0001	.0013	.0165
52	.0240	.0007	.0015	.0120	.0006	.0001	.0014	.0150
53	.0230	.0008	.0015	.0130	.0007	.0001	.0015	.0130
54	.0220	.0009	.0016	.0130	.0008	.0001	.0016	.0100
55	.0210	.0010	.0017	.0200	.0009	.0001	.0017	.0080
56	.0200	.0011	.0018	.0200	.0010	.0001	.0018	.0060
57	.0190	.0012	.0019	.0250	.0011	.0001	.0018	.0050
58	.0180	.0014	.0021	.0300	.0012	.0001	.0019	.0040
59	.0170	.0016	.0023	.0350	.0013	.0001	.0020	.0040
60	.0165	.0018	.0025	.0600	.0014	.0001	.0021	.0040
61	.0155	.0020	.0027	.0600	.0015	.0001	.0022	.0040
62	.0150	.0022	.0030	.2000	.0016	.0001	.0023	.0040
63	.0150	.0024	.0033	.1500	.0017	.0001	.0024	.0040
64	.0150	.0026	.0036	.1500	.0018	.0001	.0025	.0040
65	.0150	.0028	.0000	.3000	.0020	.0001	.0000	.0000
66	.0150	.0030	.0000	.2500	.0022	.0001	.0000	.0000
67	.0150	.0033	.0000	.2500	.0024	.0001	.0000	.0000
68	.0150	.0036	.0000	.3000	.0026	.0001	.0000	.0000
69	.0150	.0039	.0000	.5000	.0028	.0001	.0000	.0000
70	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
SAFETY AND PROBATION MEMBERS
(Current Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.0700	.0001	.0000	.0000	.0000	.0001	.0003	.0000
21	.0670	.0001	.0000	.0000	.0000	.0001	.0003	.0020
22	.0640	.0001	.0000	.0000	.0000	.0001	.0003	.0045
23	.0610	.0001	.0000	.0000	.0000	.0001	.0003	.0070
24	.0580	.0001	.0000	.0000	.0000	.0001	.0004	.0095
25	.0550	.0002	.0001	.0000	.0001	.0002	.0006	.0120
26	.0520	.0002	.0001	.0000	.0001	.0002	.0008	.0145
27	.0490	.0002	.0001	.0000	.0001	.0002	.0011	.0165
28	.0450	.0002	.0001	.0000	.0001	.0002	.0014	.0185
29	.0410	.0002	.0001	.0000	.0001	.0002	.0017	.0180
30	.0380	.0002	.0001	.0000	.0001	.0002	.0021	.0175
31	.0350	.0002	.0002	.0000	.0001	.0002	.0025	.0165
32	.0320	.0002	.0003	.0000	.0002	.0002	.0029	.0150
33	.0290	.0002	.0005	.0000	.0002	.0002	.0034	.0130
34	.0270	.0002	.0007	.0000	.0002	.0002	.0039	.0105
35	.0250	.0002	.0009	.0000	.0002	.0002	.0045	.0095
36	.0230	.0002	.0011	.0000	.0003	.0002	.0052	.0090
37	.0210	.0002	.0013	.0000	.0004	.0002	.0059	.0085
38	.0190	.0002	.0015	.0000	.0004	.0002	.0066	.0080
39	.0170	.0002	.0017	.0000	.0005	.0002	.0073	.0075
40	.0150	.0003	.0019	.0000	.0006	.0003	.0080	.0070
41	.0130	.0003	.0021	.0000	.0006	.0003	.0087	.0065
42	.0110	.0003	.0023	.0000	.0006	.0003	.0095	.0060
43	.0090	.0003	.0024	.0000	.0007	.0003	.0103	.0050
44	.0070	.0003	.0024	.0000	.0007	.0003	.0111	.0040
45	.0060	.0004	.0025	.0060	.0008	.0004	.0120	.0035
46	.0050	.0004	.0025	.0080	.0009	.0005	.0129	.0030
47	.0045	.0004	.0026	.0100	.0009	.0006	.0138	.0025
48	.0040	.0005	.0026	.0100	.0010	.0007	.0147	.0020
49	.0040	.0005	.0027	.0092	.0010	.0008	.0156	.0015
50	.0040	.0006	.0027	.0494	.0011	.0009	.0165	.0010
51	.0040	.0007	.0028	.0394	.0012	.0010	.0175	.0008
52	.0040	.0008	.0028	.0392	.0013	.0011	.0185	.0007
53	.0040	.0009	.0029	.0350	.0014	.0012	.0195	.0006
54	.0040	.0010	.0030	.0384	.0015	.0013	.0205	.0005
55	.0000	.0011	.0000	.0992	.0016	.0014	.0000	.0000
56	.0000	.0012	.0000	.0832	.0017	.0015	.0000	.0000
57	.0000	.0013	.0000	.0897	.0018	.0016	.0000	.0000
58	.0000	.0014	.0000	.1677	.0019	.0018	.0000	.0000
59	.0000	.0015	.0000	.5019	.0020	.0020	.0000	.0000
60	.0000	.0000	.0000	1.0000	.0000	.0000	.0000	.0000

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
GENERAL MEMBERS – MALES
(Recommended Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.1650	.0002	.0000	.00000	.00000	.00013	.0001	.0000
21	.1550	.0002	.0000	.00000	.00000	.00013	.0001	.0000
22	.1450	.0002	.0000	.00000	.00000	.00013	.0001	.0000
23	.1350	.0002	.0000	.00000	.00000	.00013	.0001	.0000
24	.1250	.0002	.0000	.00000	.00000	.00013	.0001	.0000
25	.1200	.0003	.0000	.00000	.00008	.00013	.0001	.0000
26	.1150	.0003	.0000	.00000	.00008	.00013	.0001	.0000
27	.1075	.0003	.0000	.00000	.00008	.00013	.0001	.0000
28	.1000	.0003	.0000	.00000	.00008	.00013	.0001	.0010
29	.0925	.0003	.0000	.00000	.00008	.00013	.0001	.0020
30	.0850	.0004	.0000	.00000	.00017	.00013	.0002	.0045
31	.0800	.0004	.0000	.00000	.00017	.00013	.0002	.0065
32	.0750	.0004	.0000	.00000	.00017	.00013	.0002	.0085
33	.0700	.0004	.0000	.00000	.00017	.00013	.0002	.0110
34	.0650	.0004	.0000	.00000	.00017	.00013	.0002	.0120
35	.0600	.0005	.0001	.00000	.00017	.00013	.0003	.0130
36	.0550	.0005	.0001	.00000	.00017	.00013	.0004	.0135
37	.0510	.0005	.0001	.00000	.00025	.00013	.0005	.0140
38	.0480	.0005	.0001	.00000	.00025	.00013	.0006	.0130
39	.0450	.0006	.0002	.00000	.00025	.00013	.0007	.0120
40	.0430	.0006	.0002	.00000	.00025	.00013	.0008	.0120
41	.0410	.0006	.0002	.00000	.00034	.00013	.0009	.0125
42	.0390	.0007	.0003	.00000	.00034	.00013	.0011	.0130
43	.0360	.0007	.0004	.00000	.00042	.00013	.0012	.0140
44	.0330	.0007	.0005	.00000	.00042	.00013	.0013	.0150
45	.0300	.0008	.0006	.00000	.00051	.00013	.0015	.0165
46	.0280	.0009	.0007	.00000	.00059	.00013	.0016	.0180
47	.0260	.0010	.0008	.00000	.00068	.00013	.0017	.0200
48	.0250	.0011	.0009	.00000	.00085	.00013	.0018	.0180
49	.0240	.0012	.0011	.00000	.00102	.00013	.0019	.0165
50	.0230	.0013	.0013	.04500	.00119	.00013	.0020	.0150
51	.0220	.0014	.0015	.02500	.00136	.00013	.0022	.0140
52	.0210	.0016	.0017	.02500	.00153	.00013	.0024	.0130
53	.0200	.0018	.0019	.02500	.00178	.00013	.0025	.0120
54	.0190	.0020	.0021	.03000	.00204	.00013	.0026	.0110
55	.0180	.0022	.0023	.06000	.00230	.00013	.0028	.0100
56	.0170	.0024	.0025	.04000	.00255	.00013	.0030	.0095
57	.0160	.0026	.0027	.04500	.00280	.00013	.0031	.0085
58	.0150	.0028	.0030	.07000	.00306	.00013	.0032	.0080
59	.0140	.0030	.0033	.09000	.00331	.00013	.0034	.0075
60	.0130	.0032	.0037	.11000	.00348	.00013	.0035	.0070
61	.0120	.0034	.0041	.25000	.00374	.00013	.0037	.0065
62	.0110	.0036	.0045	.31000	.00399	.00013	.0038	.0060
63	.0100	.0038	.0049	.12000	.00425	.00013	.0040	.0055
64	.0100	.0040	.0053	.20000	.00450	.00013	.0042	.0050
65	.0100	.0042	.0057	.29000	.00476	.00013	.0000	.0000
66	.0100	.0045	.0061	.22000	.00501	.00013	.0000	.0000
67	.0100	.0048	.0066	.22000	.00527	.00013	.0000	.0000
68	.0100	.0051	.0071	.30000	.00561	.00013	.0000	.0000
69	.0100	.0054	.0076	.40000	.00595	.00013	.0000	.0000
70	.0000	.0000	.0000	1.00000	.00000	.00000	.0000	.0000

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
GENERAL MEMBERS – FEMALES
(Recommended Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.1725	.0001	.00000	.00000	.0000	.0001	.00008	.0000
21	.1650	.0001	.00000	.00000	.0000	.0001	.00008	.0000
22	.1575	.0001	.00000	.00000	.0000	.0001	.00008	.0000
23	.1475	.0001	.00000	.00000	.0000	.0001	.00008	.0000
24	.1375	.0001	.00000	.00000	.0000	.0001	.00008	.0000
25	.1325	.0001	.00008	.00000	.0001	.0001	.00008	.0000
26	.1300	.0001	.00008	.00000	.0001	.0001	.00008	.0000
27	.1250	.0002	.00008	.00000	.0001	.0001	.00008	.0040
28	.1200	.0002	.00008	.00000	.0001	.0001	.00008	.0060
29	.1150	.0002	.00008	.00000	.0001	.0001	.00008	.0080
30	.1100	.0002	.00008	.00000	.0001	.0001	.00008	.0100
31	.1050	.0002	.00008	.00000	.0001	.0001	.00008	.0120
32	.1000	.0002	.00015	.00000	.0001	.0001	.00008	.0140
33	.0950	.0002	.00015	.00000	.0001	.0001	.00008	.0160
34	.0910	.0002	.00015	.00000	.0001	.0001	.00008	.0170
35	.0870	.0003	.00022	.00000	.0001	.0001	.00016	.0180
36	.0820	.0003	.00022	.00000	.0001	.0001	.00016	.0180
37	.0760	.0003	.00022	.00000	.0001	.0001	.00024	.0180
38	.0690	.0003	.00022	.00000	.0001	.0001	.00024	.0180
39	.0620	.0003	.00022	.00000	.0001	.0001	.00032	.0180
40	.0550	.0004	.00030	.00000	.0001	.0001	.00040	.0185
41	.0500	.0004	.00038	.00000	.0001	.0001	.00048	.0190
42	.0450	.0004	.00038	.00000	.0001	.0001	.00056	.0190
43	.0400	.0004	.00052	.00000	.0001	.0001	.00064	.0190
44	.0360	.0004	.00060	.00000	.0001	.0001	.00064	.0190
45	.0320	.0005	.00068	.00000	.0002	.0001	.00072	.0190
46	.0300	.0005	.00075	.00000	.0002	.0001	.00072	.0190
47	.0290	.0005	.00075	.00000	.0002	.0001	.00080	.0185
48	.0280	.0006	.00082	.00000	.0003	.0001	.00088	.0185
49	.0270	.0006	.00090	.00000	.0003	.0001	.00096	.0180
50	.0260	.0006	.00097	.02000	.0004	.0001	.00096	.0175
51	.0250	.0006	.00105	.01200	.0005	.0001	.00104	.0165
52	.0240	.0007	.00112	.01200	.0006	.0001	.00112	.0150
53	.0230	.0008	.00112	.01300	.0007	.0001	.00120	.0130
54	.0220	.0009	.00120	.01300	.0008	.0001	.00128	.0100
55	.0210	.0010	.00127	.05000	.0009	.0001	.00136	.0080
56	.0200	.0011	.00135	.03000	.0010	.0001	.00144	.0060
57	.0190	.0012	.00142	.02500	.0011	.0001	.00144	.0050
58	.0180	.0014	.00157	.03500	.0012	.0001	.00152	.0040
59	.0170	.0016	.00172	.04000	.0013	.0001	.00160	.0040
60	.0165	.0018	.00187	.06000	.0014	.0001	.00168	.0040
61	.0155	.0020	.00203	.10000	.0015	.0001	.00176	.0040
62	.0150	.0022	.00225	.20000	.0016	.0001	.00184	.0040
63	.0150	.0024	.00247	.15000	.0017	.0001	.00192	.0040
64	.0150	.0026	.00270	.15000	.0018	.0001	.00200	.0040
65	.0150	.0028	.00000	.30000	.0020	.0001	.00000	.0000
66	.0150	.0030	.00000	.25000	.0022	.0001	.00000	.0000
67	.0150	.0033	.00000	.25000	.0024	.0001	.00000	.0000
68	.0150	.0036	.00000	.30000	.0026	.0001	.00000	.0000
69	.0150	.0039	.00000	.50000	.0028	.0001	.00000	.0000
70	.0000	.0000	.00000	1.00000	.0000	.0000	.00000	.0000

SCHEDULE 6
PROBABILITIES OF SEPARATION FROM ACTIVE SERVICE
SAFETY AND PROBATION MEMBERS
(Recommended Assumptions)

Age	Withdrawal	Ordinary Death	Ordinary Disability	Service	Death While Eligible	Duty Death	Duty Disability	Terminated Vested
20	.0700	.0001	.00000	.00000	.00000	.0001	.00015	.0000
21	.0670	.0001	.00000	.00000	.00000	.0001	.00015	.0020
22	.0640	.0001	.00000	.00000	.00000	.0001	.00015	.0045
23	.0610	.0001	.00000	.00000	.00000	.0001	.00015	.0070
24	.0580	.0001	.00000	.00000	.00000	.0001	.00020	.0095
25	.0550	.0002	.00007	.00000	.00008	.0002	.00030	.0120
26	.0520	.0002	.00007	.00000	.00008	.0002	.00040	.0145
27	.0490	.0002	.00007	.00000	.00008	.0002	.00055	.0165
28	.0450	.0002	.00007	.00000	.00008	.0002	.00070	.0185
29	.0410	.0002	.00007	.00000	.00008	.0002	.00085	.0180
30	.0380	.0002	.00007	.00000	.00008	.0002	.00105	.0175
31	.0350	.0002	.00014	.00000	.00008	.0002	.00125	.0165
32	.0320	.0002	.00021	.00000	.00015	.0002	.00145	.0150
33	.0290	.0002	.00035	.00000	.00015	.0002	.00170	.0130
34	.0270	.0002	.00049	.00000	.00015	.0002	.00195	.0105
35	.0250	.0002	.00063	.00000	.00015	.0002	.00225	.0095
36	.0230	.0002	.00077	.00000	.00022	.0002	.00260	.0090
37	.0210	.0002	.00091	.00000	.00030	.0002	.00295	.0085
38	.0190	.0002	.00105	.00000	.00030	.0002	.00330	.0080
39	.0170	.0002	.00119	.00000	.00038	.0002	.00365	.0075
40	.0150	.0003	.00133	.00000	.00045	.0003	.00400	.0070
41	.0130	.0003	.00147	.00000	.00045	.0003	.00435	.0065
42	.0110	.0003	.00161	.00000	.00045	.0003	.00475	.0060
43	.0090	.0003	.00168	.00000	.00052	.0003	.00515	.0050
44	.0070	.0003	.00168	.00000	.00052	.0003	.00555	.0040
45	.0060	.0004	.00175	.00600	.00060	.0004	.00600	.0035
46	.0050	.0004	.00175	.00800	.00068	.0005	.00645	.0030
47	.0045	.0004	.00182	.01000	.00068	.0006	.00690	.0025
48	.0040	.0005	.00182	.01000	.00075	.0007	.00735	.0020
49	.0040	.0005	.00189	.01000	.00075	.0008	.00780	.0015
50	.0040	.0006	.00189	.05000	.00082	.0009	.00825	.0010
51	.0040	.0007	.00196	.04000	.00090	.0010	.00875	.0008
52	.0040	.0008	.00196	.04000	.00097	.0011	.00925	.0007
53	.0040	.0009	.00203	.03500	.00105	.0012	.00975	.0006
54	.0040	.0010	.00210	.03500	.00112	.0013	.01025	.0005
55	.0000	.0011	.00000	.01000	.00120	.0014	.00000	.0000
56	.0000	.0012	.00000	.07500	.00127	.0015	.00000	.0000
57	.0000	.0013	.00000	.07500	.00135	.0016	.00000	.0000
58	.0000	.0014	.00000	.15000	.00142	.0018	.00000	.0000
59	.0000	.0015	.00000	.40000	.00150	.0020	.00000	.0000
60	.0000	.0000	.00000	1.00000	.00000	.0000	.00000	.0000

SCHEDULE 7

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT

Age	General		Safety	Age	General		Safety
	Male	Female			Male	Female	
50	28.30	33.97	28.30	81	6.81	9.09	6.81
51	27.42	33.03	27.42	82	6.43	8.57	6.43
52	26.55	32.10	26.55	83	6.07	8.07	6.07
53	25.68	31.16	25.68	84	5.73	7.58	5.73
54	24.83	30.24	24.83	85	5.41	7.11	5.41
55	23.98	29.31	23.98	86	5.10	6.66	5.10
56	23.13	28.39	23.13	87	4.82	6.23	4.82
57	22.29	27.48	22.29	88	4.54	5.81	4.54
58	21.46	26.57	21.46	89	4.28	5.41	4.28
59	20.64	25.67	20.64	90	4.04	5.02	4.04
60	19.83	24.78	19.83	91	3.80	4.66	3.80
61	19.02	23.89	19.02	92	3.58	4.31	3.58
62	18.23	23.02	18.23	93	3.37	3.98	3.37
63	17.45	22.15	17.45	94	3.16	3.67	3.16
64	16.69	21.29	16.69	95	2.98	3.37	2.98
65	15.95	20.43	15.95	96	2.80	3.10	2.80
66	15.23	19.59	15.23	97	2.62	2.84	2.62
67	14.52	18.76	14.52	98	2.45	2.60	2.45
68	13.84	17.94	13.84	99	2.28	2.36	2.28
69	13.18	17.13	13.18	100	2.11	2.14	2.11
70	12.54	16.34	12.54	101	1.95	1.94	1.95
71	11.92	15.57	11.92	102	1.78	1.74	1.78
72	11.31	14.81	11.31	103	1.61	1.55	1.61
73	10.72	14.08	10.72	104	1.43	1.37	1.43
74	10.15	13.38	10.15	105	1.26	1.19	1.26
75	9.60	12.69	9.60	106	1.09	1.03	1.09
76	9.08	12.03	9.08	107	.92	.87	.92
77	8.57	11.40	8.57	108	.74	.71	.74
78	8.10	10.79	8.10	109	.50	.50	.50
79	7.64	10.20	7.64	110	--	--	--
80	7.21	9.63	7.21	111	--	--	--

1983 GA (x+1, y+1) for General Members

1983 GA (x+1) for Safety Members

SCHEDULE 7

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT

GENERAL MEMBERS

Age	Years of Life Expectancy	Age	Years of Life Expectancy	Age	Years of Life Expectancy
20	38.73	51	20.59	82	6.27
21	37.98	52	20.11	83	5.94
22	37.26	53	19.63	84	5.63
23	36.56	54	19.16	85	5.34
24	35.87	55	18.68	86	5.06
25	35.19	56	18.22	87	4.80
26	34.53	57	17.75	88	4.55
27	33.87	58	17.29	89	4.31
28	33.23	59	16.83	90	4.09
29	32.60	60	16.37	91	3.87
30	31.98	61	15.91	92	3.66
31	31.37	62	15.45	93	3.46
32	30.76	63	14.99	94	3.26
33	30.17	64	14.53	95	3.07
34	29.58	65	14.07	96	2.89
35	29.00	66	13.60	97	2.71
36	28.43	67	13.13	98	2.54
37	27.87	68	12.66	99	2.37
38	27.31	69	12.18	100	2.20
39	26.76	70	11.70	101	2.04
40	26.21	71	11.21	102	1.88
41	25.67	72	10.72	103	1.72
42	25.14	73	10.22	104	1.55
43	24.61	74	9.73	105	1.38
44	24.09	75	9.24	106	1.21
45	23.57	76	8.76	107	1.04
46	23.06	77	8.28	108	.88
47	22.56	78	7.83	109	.72
48	22.06	79	7.41	110	.50
49	21.57	80	7.00		
50	21.08	81	6.63		

1981 Disability (General)

SCHEDULE 7

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT

SAFETY AND PROBATION MEMBERS

Age	Years of Life Expectancy	Age	Years of Life Expectancy	Age	Years of Life Expectancy
20	49.29	51	22.80	81	6.63
21	48.39	52	22.03	82	6.27
22	47.48	53	21.26	83	5.94
23	46.58	54	20.50	84	5.63
24	45.68	55	19.77	85	5.34
25	44.79	56	19.06	86	5.06
26	43.89	57	18.40	87	4.80
27	43.01	58	17.78	88	4.55
28	42.12	59	17.20	89	4.31
29	41.24	60	16.64	90	4.09
30	40.36	61	16.11	91	3.87
31	39.48	62	15.59	92	3.66
32	38.61	63	15.08	93	3.46
33	37.74	64	14.58	94	3.26
34	36.88	65	14.09	95	3.07
35	36.02	66	13.61	96	2.89
36	35.16	67	13.13	97	2.71
37	34.31	68	12.66	98	2.54
38	33.46	69	12.18	99	2.37
39	32.61	70	11.70	100	2.20
40	31.77	71	11.21	101	2.04
41	30.93	72	10.72	102	1.88
42	30.09	73	10.22	103	1.72
43	29.26	74	9.73	104	1.55
44	28.43	75	9.24	105	1.38
45	27.61	76	8.75	106	1.21
46	26.80	77	8.28	107	1.04
47	25.99	78	7.83	108	.88
48	25.18	79	7.41	109	.72
49	24.38	80	7.00	110	.50
50	23.59				

1981 Disability (Safety)

SCHEDULE 8

GLOSSARY OF TERMS

Following is a glossary of some of the commonly used actuarial terms.

<i>Actuarial Accrued Liability</i>	The portion, as determined by a particular cost method, of the total present value of benefits that is attributable to past service credit
<i>Actuarial Gain (Loss)</i>	A measure of the difference between actual and expected experience based upon a set of actuarial assumptions. Examples include higher than expected salary increases (loss) and a higher return on fund assets than anticipated (gain).
<i>Actuarial Present Value</i>	Also referred to as the present value of benefits. It is the value, as of a specified date, of an amount payable in the future, where the amount has been adjusted to reflect both the time value of money and the probability that the payment is actually made.
<i>Amortization or UAAL Payment</i>	That portion of the pension plan contribution which is designed to pay off (amortize) the unfunded actuarial accrued liability in a systematic fashion. Equivalently, it is a series of periodic payments required to pay off a debt.
<i>Annual Amount</i>	Estimated contributions due for the year in order to ensure the orderly funding of the pension plan (equal to the contribution rate multiplied by the annual payroll). The annual amount is comprised of normal cost and UAAL payments.

Entry Age Actuarial Cost Method

This method assumes that the annual costs are the level premiums needed from entry age until retirement age to fund the ultimate retirement benefit. These premiums are expressed as a percentage of salary. The portion of this actuarial present value allocated to a valuation year is called the normal cost.

Final Average Salary

The average amount of compensation earned over a specified number of consecutive months preceding retirement during which compensation was highest.

Funding Policy

The policy for the amounts and timing of contributions to be made by the employer, members, and any other sources to provide the benefits promised by the pension plan.

Noneconomic Actuarial Assumptions

Probabilities that members will separate from active service for causes such as retirement, disability, death and withdrawal, as well as rates of post-retirement mortality. The probabilities reflect the experience of the System membership.

Normal Cost

The ongoing annual cost allocated to the system by a particular actuarial cost method for providing benefits (future cost). Normal cost payments are made during the working lifetime of the member.

*Projected Unit Credit Method
Actuarial Cost Method*

This method assumes that the benefit for a new is zero. Each year that an employee works a portion of the ultimate retirement benefit is accrued, based on a service ratio. These actuarial accrued liability under this method is the present value of the benefit earned to date

Unfunded Actuarial Accrued Liability

The excess of the actuarial accrued liability over the actuarial value of assets.

Vested Benefit

The benefit an employee is entitled to even if the employee separates from active service prior to normal retirement age.

SCHEDULE 9

**RATIO OF CURRENT COMPENSATION
TO COMPENSATION ANTICIPATED AT RETIREMENT**

(Current Assumptions)

Age	General Members	Safety Members	Age	General Members	Safety Members
20	0.038	0.084	46	0.276	0.447
21	0.042	0.090	47	0.293	0.477
22	0.046	0.096	48	0.311	0.510
23	0.051	0.102	49	0.330	0.544
24	0.056	0.108	50	0.351	0.579
25	0.061	0.115	51	0.371	0.616
26	0.067	0.123	52	0.393	0.656
27	0.073	0.131	53	0.415	0.697
28	0.079	0.140	54	0.439	0.739
29	0.086	0.149	55	0.465	0.784
30	0.093	0.159	56	0.491	0.823
31	0.101	0.170	57	0.518	0.864
32	0.109	0.181	58	0.546	0.907
33	0.117	0.194	59	0.576	0.952
34	0.126	0.207	60	0.607	1.000
35	0.135	0.220	61	0.639	
36	0.145	0.235	62	0.673	
37	0.155	0.250	63	0.709	
38	0.166	0.267	64	0.745	
39	0.178	0.285	65	0.784	
40	0.190	0.303	66	0.823	
41	0.202	0.323	67	0.864	
42	0.216	0.344	68	0.907	
43	0.230	0.367	69	0.952	
44	0.244	0.392	70	1.000	
45	0.260	0.418			

Note: Salary scale assumption reflects 5% for inflation and graded merit and longevity.

SCHEDULE 9

**RATIO OF CURRENT COMPENSATION
TO COMPENSATION ANTICIPATED AT RETIREMENT**

(Recommended Assumptions)

Age	General Members	Safety Members	Age	General Members	Safety Members
20	0.043	0.093	46	0.292	0.462
21	0.047	0.098	47	0.310	0.492
22	0.052	0.105	48	0.328	0.524
23	0.057	0.111	49	0.347	0.558
24	0.062	0.118	50	0.368	0.593
25	0.068	0.125	51	0.388	0.630
26	0.074	0.133	52	0.410	0.668
27	0.081	0.142	53	0.433	0.709
28	0.088	0.151	54	0.456	0.750
29	0.095	0.161	55	0.482	0.793
30	0.103	0.171	56	0.508	0.831
31	0.111	0.182	57	0.534	0.870
32	0.119	0.194	58	0.562	0.911
33	0.128	0.207	59	0.591	0.955
34	0.137	0.220	60	0.622	1.000
35	0.147	0.234	61	0.653	
36	0.157	0.249	62	0.686	
37	0.168	0.264	63	0.720	
38	0.179	0.281	64	0.756	
39	0.191	0.299	65	0.793	
40	0.204	0.318	66	0.831	
41	0.217	0.338	67	0.870	
42	0.230	0.360	68	0.911	
43	0.245	0.383	69	0.955	
44	0.260	0.407	70	1.000	
45	0.276	0.434			

Note: Salary scale assumption reflects 4.75% for inflation and graded merit and longevity.

SCHEDULE 10

ASSET STATEMENT

CASH	30,601,371.36
RECEIVABLES	
CONTRIBUTIONS	1,091,551.25
INVESTMENT	6,686,747.51
TRADE	513,641.37
INVESTMENTS AT COST	
CORPORATE BONDS (MARKET VALUE 140,507,334)	150,250,756.51
GOVERNMENT BONDS (MARKET VALUE 143,918,360)	156,315,162.20
REAL ESTATE (MARKET VALUE 1,838,422)	1,076,515.82
EQUITY SECURITIES (MARKET VALUE 236,199,524)	<u>188,596,868.44</u>
TOTAL	<u>535,132,614.56</u>
ACCOUNTS PAYABLE	26,485.56
BENEFIT PAYABLE	1,811,005.71
TRADES PAYABLE	3,823,459.05
DEFERRED REVENUE ACCT	<u>10,993,083.28</u>
TOTAL LIABILITIES	16,654,033.60
FUND EQUITY	
MEMBER DEPOSIT RESERVES	
GENERAL	
NORMAL	37,957,343.17
COL	3,878,266.23
SAFETY	
NORMAL	20,326,784.34
COL	1,697,593.31
INACTIVE DEPOSITS	9,714.29
MEMBERS SUPPLEMENTAL RESERVE	<u>7,104,236.64</u>
TOTAL MEMBER RESERVES	70,973,937.98
COUNTY & DISTRICT ADVANCE RESERVES	
GENERAL	
CURRENT SERVICE	23,583,682.83
COL	51,859,523.31
SUPPLEMENTAL CURRENT SERVICE	4,467,510.64
SUPPLEMENTAL COL	102,868.61
NON-CONTRIBUTORY	3,262,998.92
NON-CONTRIBUTORY COL	689,169.70
DEATH BENEFITS	816,062.49
SAFETY	
CURRENT SERVICE	52,985,737.87
COL	30,808,207.80
SUPPLEMENTAL CURRENT SERVICE	12,801,965.58
SUPPLEMENTAL COL	541,717.66
DEATH BENEFITS	600,592.42
HEALTH COVERAGE RESERVE	33,221,077.82
DESIGNATED LIABILITY TRANSFER ACCT	<u>8,778,779.21</u>
TOTAL	224,519,894.86
RETIRED MEMBER RESERVES	
GENERAL	
ANNUITY	25,030,518.49
PENSION	88,557,471.03
COL	25,148,448.41
PRIOR BENEFIT	352,213.77
SAFETY	0.00
ANNUITY	7,926,233.50
PENSION	38,387,474.93
COL	10,430,991.07
PRIOR BENEFIT	125,290.19
SPECIAL ALLOWANCE	19,918,428.14
SUPPLEMENTAL HEALTH COVERAGE RESERVE	5,181,220.47
BURIAL ALLOWANCE	216,462.83
UNDESIGNATED	<u>3,057,455.56</u>
TOTAL RETIRED	224,332,208.39
DESIGNATED	
INVESTMENT CONTINGENCY	5,351,326.15
UNRESERVED EARNINGS	<u>(6,698,786.42)</u>
TOTAL FUND EQUITY	<u>(1,347,460.27)</u>
TOTAL LIABILITIES & FUND EQUITY	<u>535,132,614.56</u>