Actuarial Valuation Report

San Mateo County Employees' Retirement Association

As of June 30, 2000

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William M. Mercer, Incorporated
3 Embarcadero Center
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San Francisco, CA 94111

415 743 8700

October 16, 2000

Board of Retirement
San Mateo County Employees' Retirement Association
702 Marshall, Suite 280
Redwood City, California 94063

Dear Members of the Board:

We are pleased to present the actuarial valuation for the San Mateo County Employees' Retirement Association prepared as of June 30, 2000 by William M. Mercer, Incorporated. The report includes:

1. a determination of the recommended employer contribution rates. These rates are calculated to be effective July 1, 2001;
2. a determination of the recommended member contribution rates, also to be effective on July 1, 2001;
3. a determination of the funded status as of June 30, 2000; and
4. financial reporting and disclosure information pursuant to applicable accounting standards.

At the January 25, 2000 Board meeting, the Board decided to establish a reserve to offset contingent liabilities that might arise from pending litigation on Ventura. The intent was to keep the County's contribution rates at the same level as was determined in the June 30, 1998 valuation. At the Board's request, we have calculated employer contribution rates in this report under two scenarios assuming:

1. No additional amount will be transferred to the contingent Ventura liability reserve.

2. The Board will continue with the policy established last year to transfer additional amounts to the reserve account established to help fund contingent Ventura liabilities. The additional transfer is determined as the amount that will keep this year's employer contributions at the same level as last year's valuation produced.

The results under this scenario are presented in the Special Study section of this report. Please note that with the exception of the Special Study section, all of the results in this report reflect no additional transfer to the contingent Ventura liability reserve.

This report incorporates the impact on funding status and contribution rates of the Retirement Board's expansion of the pay items includable in Earnable Compensation in response to the 1997 California Supreme Court decision in the Ventura County Deputy Sheriff's Association vs. Board of Retirement, Ventura County Employees' Retirement Association. This report assumes no retroactive application of the October 1, 1997, Ventura decision.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We look forward to presenting this report to the Board in the October meeting.

Sincerely,

Andy Yeung, ASA, EA, MAAA

Drew James, FSA, EA, MAAA

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Actuarial Certification

The annual actuarial valuation required for the San Mateo County Employees' Retirement Association has been prepared as of June 30, 2000 by William M. Mercer, Incorporated. In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to determine a sound value for the Association's assets, liability and future contribution requirements. Our calculations are based upon member data and unaudited financial information provided to us by the Association's staff. This data has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's data.

The contribution requirements are determined as a percentage of payroll. Employer rates provide for both normal cost and a contribution to amortize the unfunded actuarial accrued liability. The amortization period for the unfunded actuarial accrued liability is 11½ years as of June 30, 2000. The contribution to the unfunded actuarial accrued liability is calculated to remain as a level percentage of future payroll (including projected payroll for future members). Payments to the unfunded actuarial accrued liability are calculated to increase at 4.25% per year. The period for amortizing the unfunded actuarial accrued liability is set by the Board of Retirement.

Contribution levels are recommended by the Actuary and adopted by the Board each year. The ratio of Actuarial Value of Assets to Actuarial Accrued Liabilities increased from 92.0% to 98.4% during the year due primarily to favorable return on the Association's investments. Significant progress has been made toward achieving the funding objectives of the Association.

There are no changes to the economic and non-economic assumptions used in the current valuation.

The liabilities and costs in this valuation incorporate the Board's expansion of the pay items includable in Earnable Compensation in response to the 1997 California Supreme Court's decision in Ventura County Deputy Sheriff's Association vs. Board of Retirement, Ventura County Employee's Retirement Association. Terminal pay is excluded under the Board's policy and the expansion of Earnable Compensation only applies to retirees since October 1997 (i.e., no retroactive application).

In our opinion, the combined operation of the assumptions and methods applied in this valuation, fairly represent past and anticipated future experience of the Association and meet the parameters required by GASB Statement 25.

Future contribution requirements may differ from those determined in the valuation because of:

1. differences between actual experience and anticipated experience;
2. changes in actuarial assumptions or methods;

3. changes in statutory provisions; and
4. differences between the contribution rates determined by the valuation and those adopted by the Board.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render this actuarial opinion.

William M. Mercer, Incorporated

Andy Yeung, ASA, EA, MAAA	Drew James, FSA, EA, MAAA
Date	Date

Board Member Summary of Valuation Results

Summary of Recommendations

Employer Contributions Rates	June 30, 2000 *	June 30, 1999	Increase/Decrease
Normal Cost Rate:	11.31%	11.25%	0.06%
Rate of Contribution to Unfunded Actuarial Accrued Liability:	0.83%	3.95%	-3.12%
Total Employer Rate:	12.14%	15.20%	-3.06%
Estimated Annual Amount:	$ 31,449,000	$ 39,376,000	$ (7,927,000)

Member Contribution Rates	June 30, 2000	June 30, 1999	Increase/Decrease
General Members (Plan 1 & Plan 2)			
25	5.46%	5.46%	0.00%
35	5.82%	5.82%	0.00%
45	6.54%	6.54%	0.00%
General Members (Plan 4)			
25	5.21%	5.21%	0.00%
35	5.55%	5.55%	0.00%
45	6.24%	6.24%	0.00%
Safety Members (Plan 1 & Plan 2)			
21	6.77%	6.77%	0.00%
25	6.84%	6.84%	0.00%
30	7.03%	7.03%	0.00%
Safety Members (Plan 4)			
21	6.44%	6.44%	0.00%
25	6.51%	6.51%	0.00%
30	6.69%	6.69%	0.00%
Probation Officers (Plan 1, Plan 2 & Plan 4)			
21	7.58%	7.58%	0.00%
25	7.66%	7.66%	0.00%
30	7.87%	7.87%	0.00%
Estimated Annual Amount	$ 15,002,000	$ 15,002,000	$ -

Actuarial Assumptions	June 30, 2000	June 30, 1999	Increase/Decrease
Annual Inflation Rate:	4.25%	4.25%	0.00%
Annual Investment Return:	8.25%	8.25%	0.00%
Average Annual Salary Increases:	6.25%	6.25%	0.00%

Other assumptions are based upon the June 30, 1999 experience analysis.

* Assumes no additional transfer to contingent Ventura liability reserve.

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SAN MATEO COUNTY
Employees' Retirement Association
Summary of Significant Actuarial Statistics and Measures

Association Membership		**June 30, 2000**		**June 30, 1999**	**Increase/Decrease**
Active Members					
1. Number of Members		4,690		4,578	2.4%
2. Total Active Payroll	$	259,075,000	$	238,864,000	8.5%
3. Average Monthly Salary	$	4,603	$	4,348	5.9%
Retired Members					
1. Number of Members					
Service Retirement		2,383		2,295	3.8%
Disability Retirement		280		263	6.5%
Beneficiaries		439		401	9.5%
2. Total Retired Payroll	$	55,192,000	$	50,491,000	9.3%
3. Average Monthly Pension	$	1,483	$	1,422	4.3%
Inactive Vested Members					
1. Number of Members		646		613	5.4%

Asset Values (Net)		**June 30, 2000**		**June 30, 1999**	
Market Value	$	1,381,096,000	$	1,261,022,000	9.5%
Return on Market Value		9.57%		7.01%	
Actuarial Value	$	1,320,537,000	$	1,154,290,000	14.4%
Return on Actuarial Value		14.40%		14.55%	
Valuation Assets	$	1,271,565,000	$	1,109,417,000	14.6%
Return on Valuation Assets		14.61%		11.51%	

Liability Values		**June 30, 2000**		**June 30, 1999**	
Actuarial Accrued Liability	$	1,291,694,000	$	1,205,554,000	7.1%
Unfunded Actuarial Accrued Liability (UAAL)	$	20,129,000	$	96,137,000	-79.1%

Funding Ratios	**June 30, 2000**	**June 30, 1999**	
GASB No. 25*	98.4%	92.0%	6.4%

* Based on actuarial value of assets.

Explanation of Changes in Actuarial Values

Employer Contribution Rate

The average employer contribution rate decreased from 15.20% calculated in the June 30, 1999 valuation to 12.14% calculated in this valuation.

The gains and losses were as follows:

Summary of (Gains) / Losses	Contribution Rate		Dollar Impact
June 30, 1999 Rate	15.20%	$	39,376,000
Salary Increase more than expected	0.32%	$	831,000
Retiree COLA less than expected	(0.06%)	$	(145,000)
Assets (Gain) / Loss	(2.95%)	$	(7,639,000)
Reduction in UAAL Rate (Larger Payroll Base)	(0.16%)	$	(413,000)
Miscellaneous (Gains) / Losses	(0.21%)	$	(561,000)
June 30, 2000 Rate	12.14%	$	31,449,000

Explanation of Gains/Losses

1. Salary increase greater than expected – salary increases for continuing active employees averaged 7.88% (including a 4% across the board increase effective October 1, 2000) over 1999/2000, and was well over the 6.25% increase expected.
2. Retiree COLA less than expected – Retirees received a COLA which was less than the assumed COLA.
3. Assets (Gain)/Loss – The Association's valuation assets earned $71 million in excess of the 8.25% return assumption.
4. Reduction in UAAL Rate (larger payroll base) – the UAAL rate declined as a percentage of payroll due to the larger payroll available to amortize the payments.
5. Miscellaneous (Gains)/Losses – Other rate changes with untraced sources.

Member Contribution Rate

There were no changes in member contribution rates as a result of this valuation.

Funding Ratios

The increase in funding ratio is due primarily to significant investment gains.

Actuarial Assumptions

There have been no changes to the economic or noneconomic assumptions since the last valuation on June 30, 1999.

Economic Actuarial Assumptions

Introduction

Economic actuarial assumptions are of three types:

1. *Inflation* results from increases in prices of goods and services. Inflation drives employee salary increases, retiree cost-of-living increases and the returns that investors demand from securities markets and other investments. For those reasons the inflation assumption underlies all economic actuarial assumptions. This assumption also determines the rate at which payments to the Unfunded Actuarial Accrued Liability (or credits from the Overfunded Actuarial Accrued Liability) increase each year.

2. *Investment Return* has a powerful influence on a retirement system's cost to employers and members. The more money earned from investments, the less needs to be contributed. Assuming a typical new member's pension is funded over a 25 year career and that employee receives pension checks for 20 years after retirement, a 1% higher rate of investment return will reduce required contributions by about 20% (all else remaining equal). For this reason, setting the investment return assumption is an important decision.

3. *Salary Increases* have a significant impact on the benefit members will receive at retirement. This assumption contains two components – cost-of-living (inflation) increases plus pay raises that members receive as a result of promotions and step increases.

Setting Economic Assumptions

The Actuarial Standards Board has issued a practice standard entitled "Selection of Economic Assumptions for Measuring Pension Obligations". This Actuarial Standard of Practice (SOP) is designed to provide pension actuaries guidance in the setting of economic assumptions. Section 3.4 of the SOP provides the following general steps for selecting economic assumptions for a specific measurement:

1. Identify components, if any, of each assumption and evaluate relevant data;

2. Develop a best-estimate range for each economic assumption required for the measurement, reflecting appropriate measurement-specific factors; and

3. Further evaluate measurement-specific factors and select a specific point within the best-estimate range.

After completing these steps for each assumption, the actuary should review the set of economic assumptions for reasonableness and consistency and make any needed changes.

The relevant data referred to in step 1 should consist of appropriate historical and current economic data. In Section 3.3, the SOP recommends that the actuary consider recent economic data, "however, the actuary should not give undue weight to recent experience."

The remainder of this Section provides the analytical development of each of the three economic assumptions.

Inflation

Recommendation

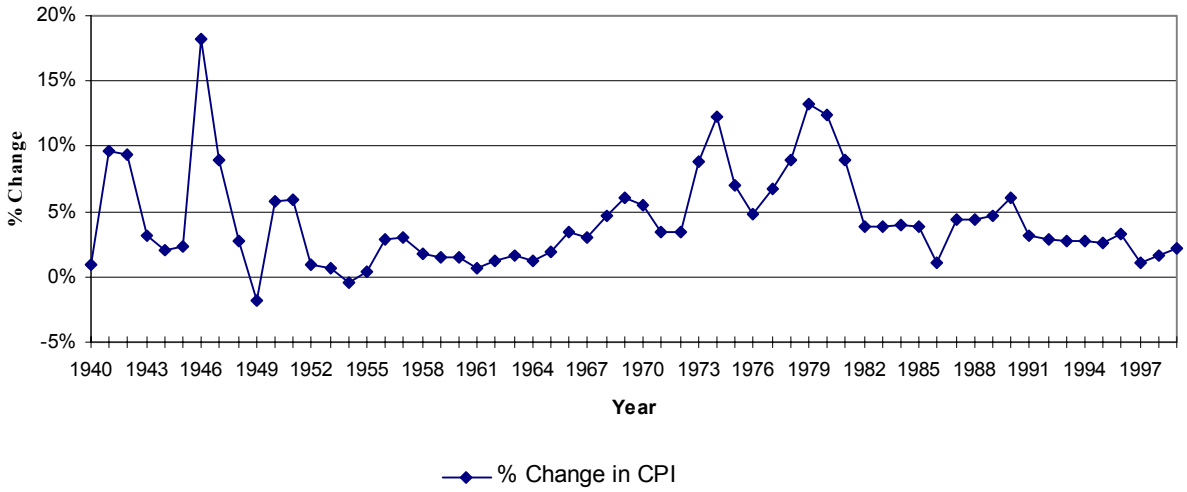
We recommend that the Board continue the current inflation rate of 4.25%. The analysis supporting our recommendation follows.

Setting the Assumption

The rate of inflation has varied significantly over time. The following chart shows the annual increases in the Consumer Price Index over the last 60 years:

Chart 1

Annual Increase in CPI (1940 Through 1999)



The actuarial SOP specifies the following data to be considered in setting the inflation assumption (Section 3.5.1):

- Consumer Price Indices (CPI)

- The Gross Domestic Product Implicit Price Deflator (IPD)
- Forecasts of inflation
- Yields on government securities of various maturities

Because the CPI and IPD have not differed significantly over the last 60 years, we will focus our analysis on the CPI.

CPI

Table 1 provides the annualized increases in the Consumer Price Index for recent and extended periods over the last 60 years.

Table 1
History of CPI Increases
Expressed as an Annualized Average (1)

Number of Years Ending 12/31/99:	CPI
10	2.82%
20	3.95%
30	5.08%
40	4.43%
50	3.98%
60	4.22%

(1) Geometric average. CPI data is based upon US All City Average, CPI-U for years after 1979.

With the exception of the last 30 year period, which is heavily influenced by the high inflationary period between 1972 and 1981, inflation has typically ranged between about 3.00% and 4.50%. On the other hand, the last ten years have produced inflation at the low end of this range. After considering both long-term historical and recent trends, we have concluded that an appropriate range for long-term inflation is 3.50% to 4.50%.

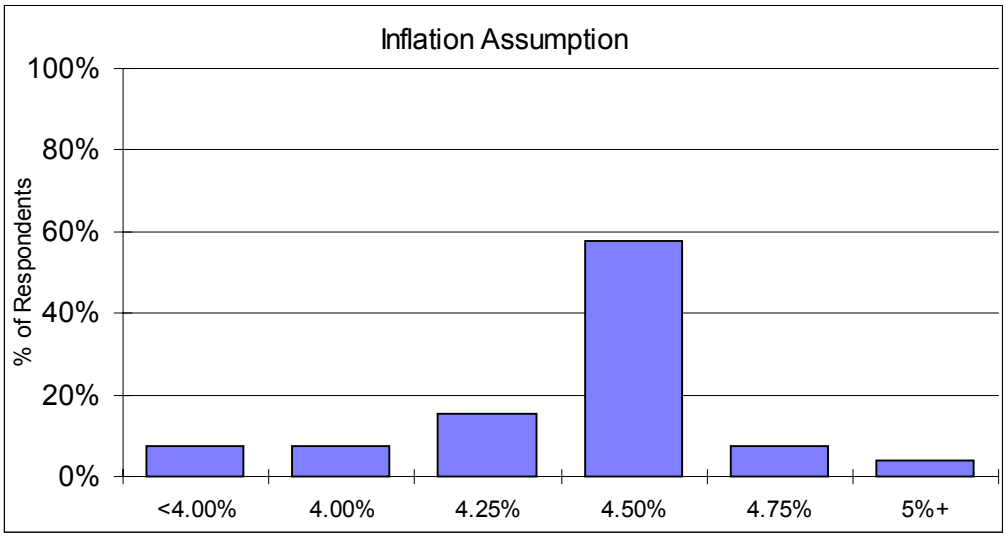
Forecasts of Inflation

We believe it is valuable to examine inflation assumptions adopted by similarly situated public retirement systems as an indicator of their long–term inflation expectations. Charts 2 and 3 provide the inflation assumptions used by the 26 California public retirement systems who

responded to Mercer's 1999 survey of economic actuarial assumptions, and the 16 1937 Act respondents, respectively.

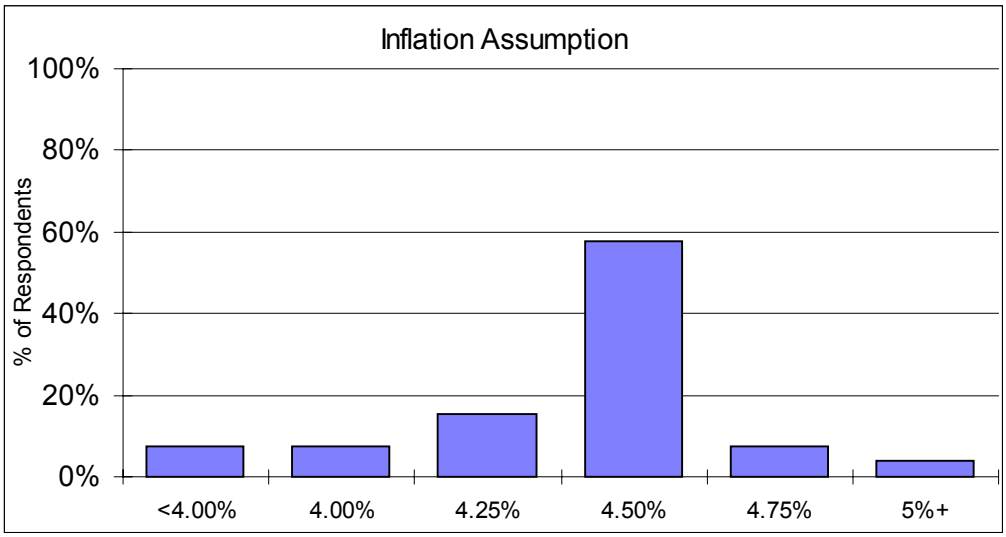
The average inflation rates from the survey for both of these groups was about 4.4%.

Chart 2 - Comparisons of Economic Actuarial Assumptions
All Respondents
(based on 26 responses)



Average	4.37%
25th Percentile	4.25%
50th Percentile	4.50%
75th Percentile	4.50%

Chart 3 - Comparison of Economic Actuarial Assumptions
37 Act County Respondents
(based on 16 responses)



Average	4.39%
25th Percentile	4.44%
50th Percentile	4.50%
75th Percentile	4.50%

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Treasury Yield Curves

Inflation expectations implicit in Treasury yield curves can vary widely over a relatively short period of time. As a result, we have not included a treasury yield analysis as part of our inflation assumption development.

Summary

We conclude from our analysis that:

1. Historical inflation data indicates an assumption range of 3.5% to 4.5%; and

2. Inflation forecasts inherent in inflation assumptions adopted by similarly situated retirement systems were about 4.40% in 1999 and have been dropping since.

Based on this data, we believe a 4.25% long-term inflation assumption is reasonable.

Investment Return

Recommendation

We recommend that the Board continue the current investment return assumption of 8.25%. The analysis supporting our recommendation follows.

Setting the Assumption

Our calculations employ the Building Block Method specified in Section 3.6.2 of the SOP. We determine a reasonable range for the real rate of return and combine this with the inflation assumption to develop the investment return assumption.

The actuarial SOP specifies that in addition to historical plan performance, the following data may be considered in setting the investment return assumption (Section 3.6.1):

- Forecasts of inflation
- Historical risk-free returns
- Real return or risk premium for each asset class
- Yields to maturity on fixed income government securities and corporate bonds

The first item has already been addressed in the previous section. The second item is the historical return on short term Treasury bills, such as 30 days, and is used to develop risk premiums for other asset classes. The fourth item relates primarily to corporate pension plans. Our analysis will focus on the third item.

Section 3.6.3 of the actuarial SOP includes the following measurement-specific factors that should be considered in selecting the investment return assumption:

- Investment policy or asset allocation
- Expenses
- Investment manager performance

Each of these items will be addressed in the context of our analysis.

Real Rate of Return on Investments

The real rate of return on investments is a function of:

- The real rates of return on individual classes of assets within the investment portfolio;
- The relative proportion of the fund's total investments held in each class of securities (the "Asset Allocation");
- Expenses to be paid from earnings; and
- Reasonable risk (variability) adjustments.

Each of these four components are addressed separately.

Real Returns on Classes of Securities

Empirical studies of total real rates of return are available on most classes of securities in which the Association invests. These studies are used to develop historical average real rates of return. These historical averages are adjusted considering any fundamental changes in the economy, changes in government regulation, and any other factors, which might affect their continued applicability.

Many empirical studies have been carried out to measure historical real rates of return on various types of investment. One most frequently used is the Ibbotson Associates studies. Table 2 provides the Ibbotson-Sinquefield measure of the real rates of return between 1926 and 1999. Investment consulting firms also utilize this and other studies to derive expected long-term real rates of return for use in asset allocation models. These models serve as an aid to retirement plan fiduciaries in determining what proportion of the plans' investment portfolio to place in various classes of securities.

Table 2

Ibbotson Associates
Real Rates of Return of Investments
(Geometric Mean)

	(1926 – 1999)
Common Stocks	8.0%
Small Stocks	9.3%
Long-term government bonds	2.0%
Long-term corporate bonds	2.5%
Intermediate government bonds	2.1%
Treasury bills	0.7%

Since this data is entirely historical it does not necessarily reflect future expectations. It also does not cover some types of investments common in the Association's portfolio, Mercer has developed the following more detailed rate of return assumption by asset class. These expected real rates of return are taken from a number of sources which include consideration of future expectations.

Table 3
Expected Asset Class Returns Net of Inflation (Real)

Asset Class	Total Real Return
Large Stocks	6.3%
Small Stocks	7.2%
Int'l Stocks	6.9%
Long Bonds	4.0%
Intermediate Bonds	3.9%
Real Estate	5.3%
Money Market	1.9%

Asset Allocation

The Association employs a third-party investment consultant to assist in establishing its target asset allocation and investment policy. The target asset allocation reflects the consultant's professional opinion on expected returns; the Association's risk profile, prudent diversification, asset/liability matching, cash flow needs and other investment considerations. This target

allocation is designed as a guidepost for balancing investments among asset classes. As such, it is the best indicator for the Association actual long-term asset allocation. The target asset allocation will be combined with the real rates of return on classes of securities to develop the expected gross real rate of return assumption for the Association's portfolio.

The current and target asset allocations utilized by the Association are shown in Table 4.

Table 4
SamCERA Asset Allocation as of 6/30/00
At Market Value

	Current	Target
Domestic Stocks		
Large cap	39%	40%
Small cap	10%	10%
International Stocks	15%	15%
Bonds and Fixed Income	28%	29%
Real Estate	8%	6%
Cash Equivalents and Short-Term	0%	0%

Applying the target asset allocation (Table 4) to the information in Table 3 results in a real rate of return of approximately 5.71%. There are a number of additional factors, which must be considered before arriving at an appropriate level for actuarial valuation purposes. These are discussed below.

Expenses to be Paid from Earnings

The expected gross real rate of return must be reduced to reflect expenses to be charged against investment earnings. To the extent such charges are expected to be made in the future, the expense margin will be sufficient to cover (References are to sections of the County Employees' Retirement Law of 1937).

a) Administrative expenses (Section 31580.2);

b) The cost of actuarial valuations (Section 31596.1(a);

c) The cost of bank custodial services (Section 31596.1(b));

d) Fees related to investment in deeds of trust or mortgages (Section 31596.1(c));

e) Investment expenses (Section 31596.1(d)); and

f) The cost of legal counsel (Section 31529.5).

An expense percentage of 0.40% was used as an estimate of future expenses.

Risk Adjustment

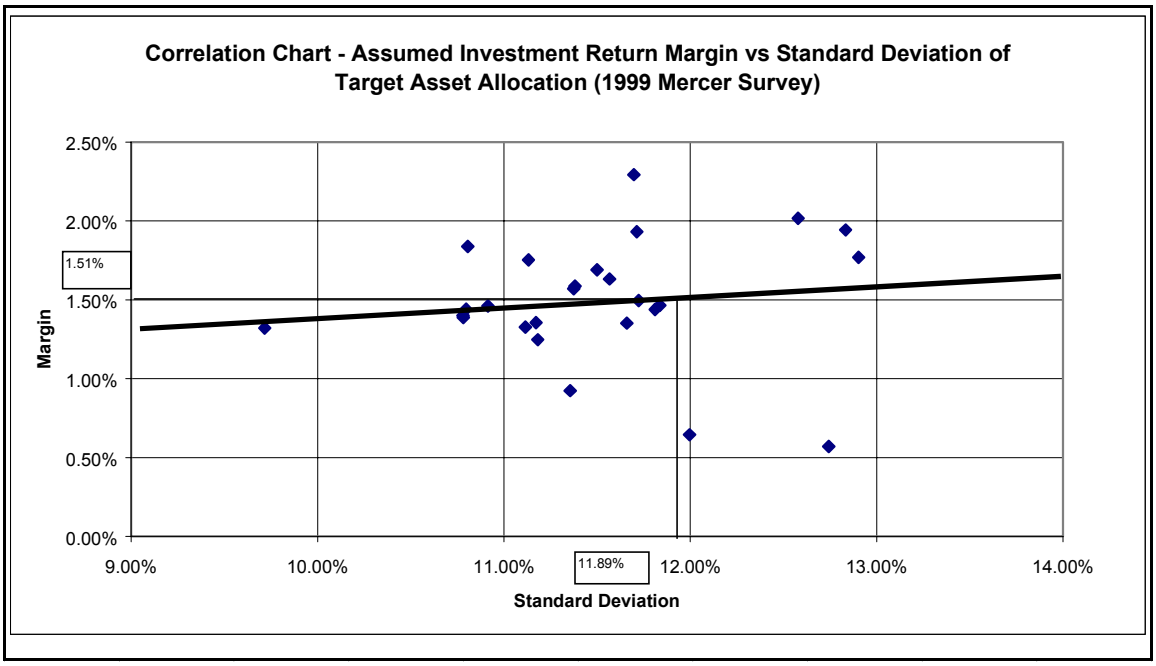
The net real rate of return assumption should reflect the risk associated with not achieving expectations. This is developed by considering:

- The probability that actual future returns within asset classes will deviate statistically from historical averages;
- The effect that asset diversification will have on dampening statistical fluctuations of future returns; and
- The expectation that fund managers will under-perform or outperform the general market indices upon which the real rates of return on individual classes of securities are measured.

Annual real rates of return have varied substantially over the years. For example, even if we expect the averages displayed in Table 4 to be a reasonable estimate of real returns in the future, we know there is some likelihood that future real rates will be more or less than historical averages. The risk lies in setting too high an investment earnings assumption, which leads to future losses and higher employer contributions. The risk adjustment helps protect against such an occurrence.

As an aid in setting an appropriate risk adjustment, Chart 4 presents a distribution diagram developed from Mercer's 1999 survey of economic assumptions of 26 California public retirement systems. From this survey we are able to identify how the risk adjustments implicit within a system's investment return assumption varies with the system's risk level (as measured by the standard deviation of their current asset allocation). The diagram in Chart 4 provides that relationship. The chart also includes a regression line which, given a system's risk level, can be used to identify a risk adjustment consistent with the survey data.

Chart 4



As you can see from the chart, the Association's risk adjustment so calculated would be approximately 1.51%, based on our calculation of the portfolio's annual standard deviation of 11.89% (based on the System's target asset allocation). This risk adjustment is notably higher than the adjustment derived from the 1998 survey (1.33%).

Investment Manager Performance

Section 3.6.3.e. of the actuarial SOP states that:

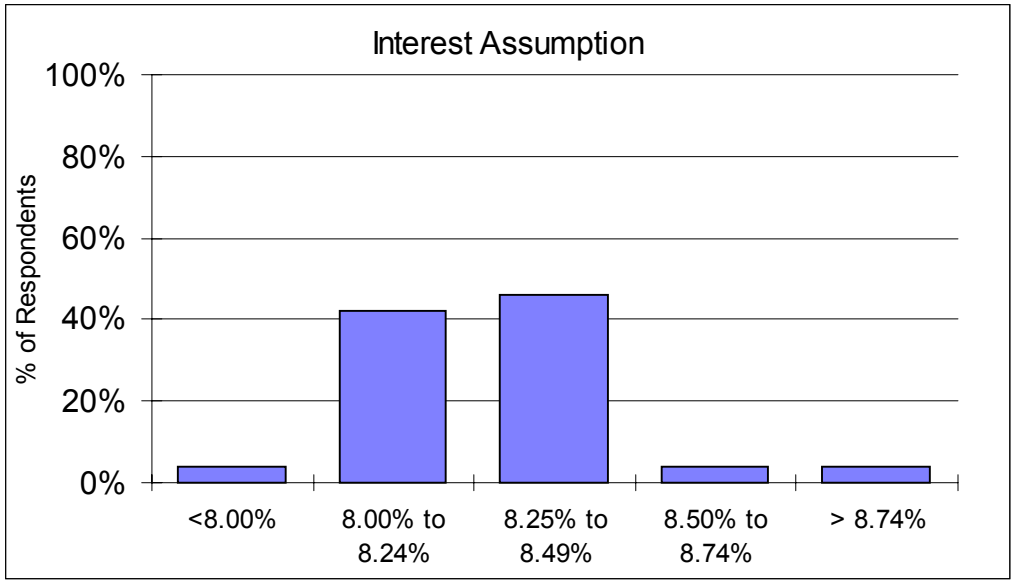
> Anticipating superior (or inferior) investment manager performance may be unduly optimistic (or pessimistic). Few investment managers consistently achieve significant above-market returns net of expenses over long periods. The plan sponsor may replace managers who consistently under-perform market indices.

We concur with this statement, thus do not make any provision within our investment return assumption for superior or inferior performance relative to the market.

Comparison with Similarly Situated Systems

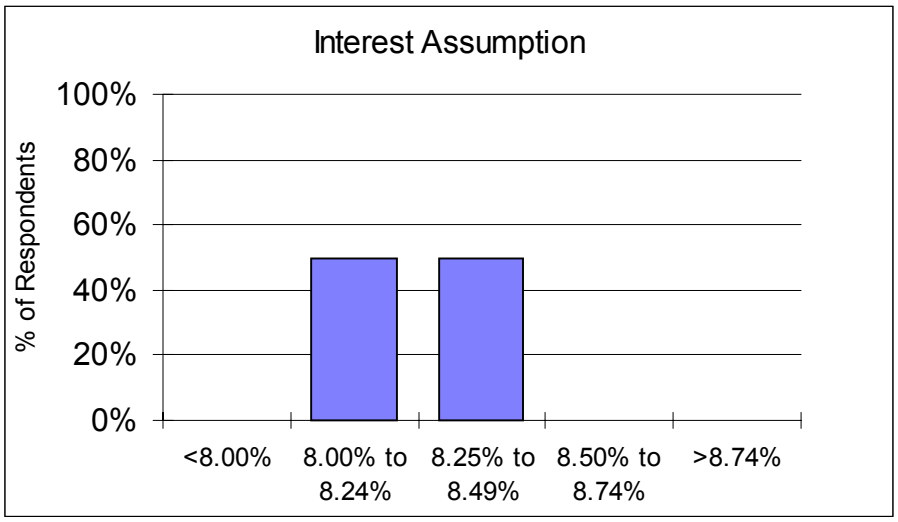
Charts 5 and 6 provide the investment return assumptions used by the 26 California public retirement systems who responded to Mercer's 1999 survey of the economic actuarial assumptions, and the 16 respondents subject to the 1937 Act, respectively.

Chart 5 - Comparisons of Economic Actuarial Assumptions
All Respondents
(based on 26 responses)



Average	8.14%
25th Percentile	8.00%
50th Percentile	8.25%
75th Percentile	8.25%

Chart 6 - Comparison of Economic Actuarial Assumptions
37 Act County Respondents
(based on 16 responses)



Average	8.13%
25th Percentile	8.00%
50th Percentile	8.13%
75th Percentile	8.25%

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The average investment return rates from the survey for both of these groups is approximately 8.1%. Exactly 50% of 1937 Act Systems are using a return assumption lower than 8.25%.

Development of Recommendation

Based on the above analysis, we arrive at a real rate of return assumption of 3.80% (average gross rate of return of 5.71% minus 0.40% expenses minus risk adjustment of 1.51%). Combining this rate and the inflation assumption of 4.25% results in an expected return of 8.05%. This compares with 8.18% derived in the 1999 valuation.

The reduction in expected return from 8.18% to 8.05% is due to a higher calculated risk adjustment. However, we recommend that the Board retain the current 8.25% investment return assumption, since we believe applying a risk adjustment of 1.31% is prudent, although relatively lower than what some California public retirement systems are applying. We will continue to monitor this information for the Board. We believe 8.25% remains a reasonable actuarial investment return assumption for SamCERA.

Salary Increase Assumptions

Recommendations

Salary Increase Assumptions

The Association's salary increase assumptions are comprised of two components:

- Inflation Rate
- Salary Scale

Salary increases are provided to employees in the form of cost-of-living adjustments to offset the debasement of pay levels caused by inflation. In addition to inflationary increases, active members will receive "real" salary increases (i.e., over inflation) as they advance through salary grades and receive promotions over their career.

As part of our 1999 experience study analysis we reviewed real salary increases received by members over the three years ending June 30, 1999. Members were grouped by service and age to determine how salary increases vary across these groups. Based on our experience analysis, the recommended real salary increase assumptions remain as follows:

Real Salary Increase Assumptions

	General Members	Safety Members
	Recommended Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 20-24	5.50%	4.75%
Ages 25-29	4.25%	4.50%
Ages 30-34	4.00%	3.50%
Ages 35-39	2.75%	2.25%
Ages 40-44	2.00%	1.50%
Ages 45-49	1.50%	1.00%
Ages 50-54	0.80%	0.75%
Ages 55-59	0.70%	0.50%
Ages 60-64	0.60%	0.40%
Ages 65-69	0.50%	0.00%
Age 70+	0.00%	0.00%

Setting the Assumption

The Actuarial Standards Board has specified the following data be considered in setting the salary increase assumption (Section 3.7) in its Standard of Practice (SOP):

- Employer's current compensation practice and any anticipated changes in this practice;
- Current compensation distributions by service or age;
- Historical compensation increases of employer and other employers in the same industry or geographic area; and
- Historical national wage and productivity increases.

In addition, the SOP states that the actuary should consider employer-specific compensation data, but the actuary must carefully weigh the credibility of this data when selecting the salary increase assumption.

The methodology used to construct the assumption is to utilize the inflation assumption as a base salary increase assumption. There is a sound economic reason for doing this. This is a long term assumption and represents the expected annual increases in the cost of goods and services. In order for a member to maintain the same standard of living in the future as he or she does today, wages must at least keep up with inflation. If they do not, members will suffer a continuously eroding standard of living, which in turn will increase member turnover as workers seek jobs elsewhere that offer more competitive salaries. This creates obvious instability, which may occur

for a short while, but eventually will have to return to equilibrium if the County and special districts are to continue as ongoing operating entities.

Once the inflation component of the salary increase assumption is set, the process turns to the selection of the real (inflation-free) salary increase assumption component.

Real Salary Increases

In addition to inflation, member salaries are expected to increase due to:

- General increases which exceeded inflation ("Real Across-the-Board Salary Increases"); and
- Merit and longevity increases.

Real Across-the-Board Salary Increases

These are generally categorized as productivity increases because, in theory, they are generated from any activity that allows workers to produce goods and services more efficiently, thus cheaper. If these efficiencies result in increased revenues to the employer and are passed along as salary increases, Real Across-the-Board Salary Increases will result.

There is currently no Real Across-the-Board Salary Increase assumption for the Association.

As part of our analysis, we monitor the Bureau of Labor Statistics Employment Cost Index (ECI). The ECI was developed in the early 1970's to provide wage growth data free from the influence of employment shifts among industries and occupations. The ECI was expanded to include a separate index for state and local governments in 1981.

The State and Local Government Workers ECI data provides evidence that real wage growth for this sector has averaged about 0.83% since 1982. However, we believe this evidence does not require any change to our current assumption of no real Across-The-Board wage growth for the following reasons:

1. The period since 1982 has been a period of low inflation. The average annual increase in total wage growth over this period was 4.12% – below our current 4.25% inflation assumption. This indicates that our inflation assumption is sufficient to predict total wage growth.

2. This has also been a period of very high real rates of investment return. Real rates of investment return have been almost double our long term assumptions. Adding a wage growth assumption to the 4.25% inflation rate would only make sense if we also increased the real rate of investment return assumption by at least that same amount. This would more than offset the effect of the additional wage growth assumption on liabilities.

We will continue to monitor the ECI to determine whether more compelling evidence for a real wage growth assumption emerges.

Merit and Longevity Salary Increases

Merit and longevity increases reflect the promotional grade increase an individual member is expected to receive over his or her career. This assumption is based on observed experience of real salary increases by category of member by age and/or service group. This assumption is reviewed at the time of the triennial experience investigation.

Adding the 4.25% recommended inflation rate to the recommended merit and longevity salary increases results in the following total salary increase assumptions:

Total Recommended Salary Increase Assumption

Age	General Members	Safety and Probation Members
20-24	9.75%	9.00%
25-29	8.50%	8.75%
30-34	8.25%	7.75%
35-39	7.00%	6.50%
40-44	6.25%	5.75%
45-49	5.75%	5.25%
50-54	5.05%	5.00%
55-59	4.95%	4.75%
60-64	4.85%	4.65%
65-69	4.75%	4.25%
70+	4.25%	4.25%

Noneconomic Actuarial Assumptions

General

Noneconomic assumptions are based on observed experience by category of employment by age and/or service group.

The noneconomic assumptions were reviewed at the time of June 30, 1999 triennial experience investigation. Adjustments to the current assumptions will be based upon a determination of the likelihood that the most recent experience could be produced as merely a statistical variation of the current assumptions.

If the most recent experience demonstrates a deviation from current assumptions which is deemed statistically significant, a credibility weighting is attached to this experience. The credibility weighting can vary significantly among the various components depending upon whether there is a low or high number of occurrences. The credibility weighting will also depend upon the presence of any non-recurring events that might affect the predictive ability of the recent experience.

Post-retirement mortality tables will generally be some variation of standard tables developed by actuarial professional organizations from a much wider base of data.

Components

1. Nonvested withdrawal
2. Service retirement
3. Disability retirement (service and nonservice connected)
4. Pre-retirement death benefits (service and nonservice connected)
5. Deferred retirement
6. Post-retirement mortality

Components 1 through 5 represent the probabilities of separation from active service due to various causes. Component 6 represents the length of time members will live after retirement.

Separation from Active Service

An experience analysis was carried out as of June 30, 1999 to determine the probability of members terminating from active service for various causes. The probabilities developed at that study are used as the basis of determining costs in this study.

The probabilities for each noneconomic assumption component are listed in Appendix B

Post-Retirement Mortality

The mortality after service and after disability was also analyzed in the June 30, 1999 experience study: The life expectancies based on tables adopted at that time are shown in Appendix B.

Mortality Basis for Members' Basic Contribution Rates

We have calculated member contribution rates utilizing a sex-independent mortality basis under Section 31676.1 for General members and Section 31664 for Safety members and Probation Officers. The mortality table for General Members is the 1994 Group Annuity Mortality Table for female (set forward 1 year) and for Safety Members and Probation Officers is the 1994 Group Annuity Mortality Table for males (set forward 1 year). In our opinion, these tables can reasonably be expected to represent the aggregate future mortality for each group and provide an adequate and equitable mortality basis for determining member contribution rates.

Actuarial Valuation Methods

Actuarial Funding Method

Responsibility of the Actuary

A retirement system is a long term proposition. It contains benefit promises that extend many decades into the future. The fiduciaries responsible for funding the Association cannot wait until these promises become due before seeking out the money needed to pay for them. The actuary's primary responsibility is to assist the Board to structure a financial plan to advance fund the benefit promises of the Association and to monitor its performance. This financial plan is more commonly referred to as an actuarial funding method.

Employer Contributions

Employer contributions consist of two components:

1. *Normal Cost* - That annual contribution rate which, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution rate is expressed as a level percentage of the member's compensation.

2. *Contribution to the Unfunded Actuarial Accrued Liability (UAAL)* - That annual contribution rate which, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution is calculated to remain as a level percentage of future active member payroll (including payroll of new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments are scheduled to increase at the annual inflation rate of 4.25% along with expected payroll. The UAAL is being funded over the 11½ year period following June 30, 2000.

The actuarial funding method just described, which has been adopted by the Board, is called the Entry Age Normal Funding Method.

In our June 30, 1999 valuation, we were directed by the Retirement Board to establish a reserve of $32,145,000 in order to offset any future contingent Ventura liabilities and to maintain the employer's contribution rates at level established at the June 30, 1998 valuation.

In this report, we have calculated employer contribution rates under two scenarios assuming:

1. No additional amount will be transferred to the contingent Ventura liability reserve.

2. The Board will continue with the policy established last year to transfer additional amount to the reserve account established to help fund contingent Ventura liabilities so as to keep this year's County contribution rates at the same level as last year.

The results under this scenario are presented in the Special Study section of this report. Please note that with the exception of the Special Study section, all of the results in this report reflect no additional transfer to the contingent Ventura liability reserve.

No Additional Transfer to Contingent Ventura Liability

The UAAL rates under this scenario were calculated by taking the UAAL rates calculated by plan in last year's valuation and adjusting them proportional to the change in the aggregate UAAL rate during the 1999/2000 plan year.

This methodology allocates plans with the larger UAAL rates larger rate reductions. Consistent application of this approach will require plans with larger UAAL rates be allocated with larger rate increases if SamCERA experiences actuarial losses in the future.

With Additional Transfer to Contingent Ventura Liability

The "same" employer contribution rates provided in the Special Study section were developed using the following steps:

1. Employer normal cost contribution rates were established at the rates calculated in this valuation.

2. Employers contribution rates to the unfunded actuarial accrued liability were determined by taking the difference between the total employer contribution rates established at the June 30, 1999 valuation and the June 30, 2000 normal cost rates as explained in item 1.

Taking this approach implies how assets are allocated among the membership categories.

A more complete definition of the Unfunded Actuarial Accrued Liability and other actuarial terms is provided in the Glossary of Actuarial Terms which can be found in Appendix E.

Member Contributions

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General members; and Safety members and Probation Officers, respectively. The basic contribution rate is determined as that percentage of compensation which, if paid annually from a member's first year of membership through age 60 for General members (age 50 for Safety members and Probation Officers), would accumulate to the amount necessary to fund an annuity at that age equal to 1/120 of Final Average Salary for

General members (1/100 for Safety members and Probation Officers). Accumulation includes annual crediting of interest at the assumed investment earnings rate. For those Safety members who are not management employees or sergeants, the County is now paying 15% of the Safety members' contribution on a nonrefundable basis. The members do not contribute towards the cost of living benefit.

Actuarial Value of Assets

Background

Under the Entry Age Normal Actuarial Funding Method, a determination is made of the assets the Association would have on hand if the current levels of employer normal cost and member contribution rates had been paid from each member's entry age through the actuarial valuation date and credited with the current actuarial interest rate assumption. This target value of assets is called the Actuarial Accrued Liability (AAL). The Unfunded Actuarial Accrued Liability (UAAL) is equal to the AAL less the Actuarial Value of Assets as of the actuarial valuation date.

Actuarial Standards

In 1993 the Actuarial Standards Board issued Standard of Practice (SOP) No. 4 entitled Measuring Pension Obligations. Section 5.2.6 of SOP No. 4 states, in part, that the Actuarial Value of Assets should generally reflect some function of market value; however, it may be appropriate to use methods which smooth out the effects of short-term volatility in market value.

In Mercer's opinion, the use of smoothing methods are especially important for employers with limited budgetary flexibility, such as governmental entities.

Determination of Actuarial Value of Assets

Effective with the fiscal year ending June 30, 1997, the Association adopted a smoothed market value of assets for establishing its reserves. This allows us to use the Association's reserves directly for actuarial purposes. The actuarial value of assets calculated using this method is provided in the following table.

Calculation of Smoothed Market Value of Assets
June 30, 2000

From	To	Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return
7/96	6/97	$151,565,063	$65,384,853	$86,180,210	0.2	$17,236,042
7/97	12/97	$55,406,564	$40,075,645	$15,330,919	0.4	$6,132,369
1/98	6/98	$112,680,907	$42,418,662	$70,262,245	0.5	$35,131,123
7/98	12/98	17,930,384	47,015,616	($29,085,232)	0.6	($17,451,139)
1/99	6/99	64,623,459	47,810,457	$16,813,003	0.7	$11,769,102
7/99	12/99	113,267,236	51,326,419	61,940,817	0.8	$49,552,654
1/00	6/00	8,714,823	55,171,686	(46,456,862)	0.9	($41,811,176)

1. Total deferred return	$60,558,975
2. Market Value	$1,381,096,428
3. Actuarial Value of Assets for Funding Ratio (Item 2 - Item 1)	$1,320,537,453
4. Non-valuation reserves and designations:	
a. Reserve for Interest Fluctuations	$13,907,272
b. Medicare Part B Reserve	$297,469
c. Ventura reserve	$34,768,032
d. Total	$48,972,773
5. Actuarial Value of Assets for valuation (Item 3 - Item 4)	$1,271,564,680

Actuarial Valuation Results

Employer and Member Contribution Rates

The following Table 9 provides a comparison of the Employer and Member contribution rates and estimated annual contribution amounts under the valued actuarial assumption sets. The estimated annual contribution amounts are based upon annual payroll as of the actuarial valuation date.

Table 9
Contribution Rates and Estimated Annual Contributions

Valuation Basis (Inflation/Investment Return/ Salary Increase)	Employer Contributions		Member Contributions	
	Rate*	Annual Amount*	Rate*	Annual Amount
Current Rates (4.25%/8.25%/6.25%)	15.20%	$ 39,376,000	5.79%	$ 15,002,000
Recalculated Rates (4.25%/8.25%/6.25%)	12.14%	$ 31,449,000	5.79%	$ 15,002,000

* Based on total annual salaries as of June 30, 2000 of $259,075,000

Recommendation

Mercer recommends the adoption of the valuation basis and contribution rates according to the Recalculated Rates unless the Board transfers additional amounts to the contingent Ventura liability reserve, in which case the recommended rates can be found in the Special Study section. The component parts of the current and recalculated employer and member contribution rates broken down among the various member categories can be found in Tables 10 and 11, respectively.

Please note that the current and recalculated rates are calculated assuming no subsidies of normal costs between plans.

Explanation of Changes in Actuarial Values

Employer Contribution Rate

The average employer contribution rate decreased from 15.20% calculated in the June 30, 1999 valuation to 12.14% calculated in this valuation.

The gains and losses were as follows:

Summary of (Gains) / Losses	Contribution Rate		Dollar Impact
June 30, 1999 Rate	15.20%	$	39,376,000
Salary Increase more than expected	0.32%	$	831,000
Retiree COLA less than expected	(0.06%)	$	(145,000)
Assets (Gain) / Loss	(2.95%)	$	(7,639,000)
Reduction in UAAL Rate (Larger Salary Base)	(0.16%)	$	(413,000)
Miscellaneous (Gains) / Losses	(0.21%)	$	(561,000)
June 30, 2000 Rate	12.14%	$	31,449,000

Explanation of Gains/Losses

1. Salary increase greater than expected – salary increases for continuing active employees averaged 7.88% (including a 4% across the board increase effective October 1, 2000) over 1999/2000, and was well over the 6.25% increase expected.
2. Retiree COLA less than expected – Retirees received a COLA which was less than the assumed COLA.
3. Assets (Gain)/Loss – The Association's valuation assets earned $71 million in excess of the 8.25% return assumption.
4. Reduction in UAAL Rate (larger salary base) – the UAAL rate declined as a percentage of payroll due to the larger salary base available to amortize the payments.
5. Miscellaneous (Gains)/Losses – Other rate changes with untraced sources.

Member Contribution Rate

There were no changes in member contribution rates as a result of this valuation.

Funding Ratios

The increase in funding ratio is due primarily to significant investment gains.

Actuarial Assumptions

There have been no changes to the economic and noneconomic assumptions since the last valuation on June 30, 1999.

Table 10
Summary of Employee Basic Contribution Rates

Current Member Rates

4.25% inflation, 8.25% interest, and 6.25% salary increase assumptions

	GENERAL			SAFETY*			PROBATION
	Plan 1 and 2	Plan 4		Plan 1 and 2	Plan 4		Plan 1, 2 and 4
Entry Age	Rate	Rate	Entry Age	Rate	Rate	Entry Age	Rate
25	5.46%	5.21%	21	6.77%	6.44%	21	7.58%
35	5.82%	5.55%	25	6.84%	6.51%	25	7.66%
45	6.54%	6.24%	30	7.03%	6.69%	30	7.87%

Recommended Member Rates

4.25% inflation, 8.25% interest, and 6.25% salary increase assumptions

	GENERAL			SAFETY*			PROBATION
	Plan 1 and 2	Plan 4		Plan 1 and 2	Plan 4		Plan 1, 2 and 4
Entry Age	Rate	Rate	Entry Age	Rate	Rate	Entry Age	Rate
25	5.46%	5.21%	21	6.77%	6.44%	21	7.58%
35	5.82%	5.55%	25	6.84%	6.51%	25	7.66%
45	6.54%	6.24%	30	7.03%	6.69%	30	7.87%

* Note: For those Safety members who are not management employees or sergeants, the County is paying 15% of the Safety members' basic rates. For Management employees and Sergeants, their rates should be calculated by taking the above rates and dividing by 85%.

Table 11

Employer Contribution Rate Detail
Current Rates
4.25% inflation, 8.25% interest, and a 6.25% salary increase assumption

GENERAL

	Plan 1		Plan 2		Plan 3		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	11.64%	$ 3,247,000	10.34%	$ 12,925,000	6.03%	$ 753,000	8.64%	$ 4,253,000
Contribution to UAAL	4.03%	$ 1,124,000	3.51%	$ 4,388,000	3.31%	$ 413,000	2.72%	$ 1,339,000
Total	15.67%	$ 4,371,000	13.85%	$ 17,313,000	9.34%	$ 1,166,000	11.36%	$ 5,592,000
Payroll		$ 27,894,000		$ 125,004,000		$ 12,490,000		$ 49,237,000

SAFETY

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	20.64%	$ 1,826,000	16.96%	$ 2,844,000	15.06%	$ 838,000
Contribution to UAAL	7.52%	$ 665,000	7.31%	$ 1,226,000	6.12%	$ 341,000
Total	28.16%	$ 2,491,000	24.27%	$ 4,070,000	21.18%	$ 1,179,000
Payroll		$ 8,847,000		$ 16,767,000		$ 5,566,000

PROBATION

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	29.72%	$ 857,000	16.70%	$ 1,082,000	13.37%	$ 523,000
Contribution to UAAL	2.50%	$ 72,000	7.04%	$ 456,000	5.23%	$ 204,000
Total	32.22%	$ 929,000	23.74%	$ 1,538,000	18.60%	$ 727,000
Payroll		$ 2,883,000		$ 6,478,000		$ 3,909,000

Average Rate for the total group = 15.20%

Table 11 (Cont'd)

Employer Contribution Rate Detail
Recommended Rates - Assuming No Additional Amount Will Be Transferred to the Contingent Ventura Liability Reserve
4.25% inflation, 8.25% interest, and a 6.25% salary increase assumption

GENERAL

	Plan 1		Plan 2		Plan 3		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	11.87%	$ 3,311,000	10.38%	$ 12,975,000	6.22%	$ 777,000	8.73%	$ 4,298,000
Contribution to UAAL	0.85%	$ 237,000	0.74%	$ 925,000	0.70%	$ 87,000	0.57%	$ 281,000
Total	12.72%	$ 3,548,000	11.12%	$ 13,900,000	6.92%	$ 864,000	9.30%	$ 4,579,000
Payroll		$ 27,894,000		$ 125,004,000		$ 12,490,000		$ 49,237,000

SAFETY

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	20.72%	$ 1,833,000	17.12%	$ 2,871,000	15.26%	$ 849,000
Contribution to UAAL	1.58%	$ 140,000	1.54%	$ 258,000	1.29%	$ 72,000
Total	22.30%	$ 1,973,000	18.66%	$ 3,129,000	16.55%	$ 921,000
Payroll		$ 8,847,000		$ 16,767,000		$ 5,566,000

PROBATION

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	26.63%	$ 768,000	16.73%	$ 1,084,000	13.53%	$ 529,000
Contribution to UAAL	0.53%	$ 15,000	1.48%	$ 96,000	1.10%	$ 43,000
Total	27.16%	$ 783,000	18.21%	$ 1,180,000	14.63%	$ 572,000
Payroll		$ 2,883,000		$ 6,478,000		$ 3,909,000

Average Rate for the total group = 12.14%

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Funding Status

Evaluation of Funding Status

Background

The evaluation of the Association's funding status is simply the comparison of its actual value of assets to a target value of assets. The Association's funding status is calculated using the GASB25 measure:

Funding Status Measure	Target Assets	Actual Assets
GASB No. 25 Funding Method Progress	Actuarial Accrued Liability	Actuarial Value of Assets

This section of the report provides the Association's funding status under the GASB No. 25 measure, followed by an exhibit which summarizes the Association's funding history.

Funding Progress - GASB No. 25

The GASB has issued two statements; Accounting for Pensions by State and Local Government Employers (GASB Statement No. 27); and Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25). These statements require funding status to be measured based upon the actuarial funding method adopted by the Board of Retirement, i.e., for SamCERA, the Entry Age Normal Funding Method. Thus, the target value of assets is equal to the Actuarial Accrued Liability (AAL) and the actual value of assets is the Actuarial Value of Assets developed earlier in this report.

The GASB Statement No. 25 liabilities and assets calculated as of June 30, 1995 through June 30, 2000 are as follows:

Actuarial Valuation Date	Actuarial Value of Assets [1] (a)	Actuarial Accrued Liabilility (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a percentage of Covered Payroll ((b-a)/c)
06/30/1995	$ 651,217,000	$ 945,417,000	$ 294,200,000	68.9%	$ 188,822,000	155.8%
06/30/1996	$ 728,369,000	$ 963,162,000	$ 234,793,000	75.6%	$ 187,926,000	124.9%
06/30/1997	$ 856,679,000	$ 1,037,431,000	$ 180,752,000	82.6%	$ 196,391,000	92.0%
06/30/1998	$ 992,314,000	$ 1,104,070,000	$ 111,756,000	89.9%	$ 211,529,000	52.8%
06/30/1999	$ 1,109,417,000	$ 1,205,554,000	$ 96,137,000	92.0%	$ 238,864,000	40.2%
06/30/2000	$ 1,271,565,000	$ 1,291,694,000	$ 20,129,000	98.4%	$ 259,075,000	7.8%

[1] Exclude accounts payable

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Funding History

It is informative to monitor the history of key actuarial and other financial results over time as a dynamic indicator of the Association's ongoing funding progress. The following exhibit provides a 8-year history of the following items:

1. Actuarial Accrued Liability (AAL)
2. Actuarial Value of Assets
3. Unfunded Actuarial Accrued Liability (UAAL)
4. Funding Method Progress Ratio
5. Investment Return Assumption
6. Rate of Return on Actuarial Value of Assets
7. Aggregate Employer Contribution Rate
8. Aggregate Member Contribution Rate
9. Total Contributions to the Association
10. Benefit Payments
11. Aggregate Contributions minus Benefit Payments
12. Investment Income
13. Aggregate Contributions plus Investment Income minus Benefit Payments

San Mateo County Employees' Retirement Association Funding History
(All Dollars in 000's)

Actuarial Valuation Date	(1) AAL	(2) Actuarial Value of Assets	(3) UAAL	(4) (2)/(1) Funding Method Progress Ratio	(5) Investment Return Assumption	(6) Net Return on Actuarial Value of Assets	(7) Employer Contribu-tion Rate	(8) Average Member Contribution Rate	(9) Prior Year Total Contribu-tions to Association	(10) Prior Year Benefit Payments	(11) Prior Year Free Cash Flow (9)-(10)
June 30, 1993	$873,890	$564,709	$309,181	64.6%	8.25%	3.95%	20.76%	5.72%	$37,724	$32,935	$4,789
June 30, 1994	$905,175	$605,389	$299,786	66.9%	8.00%	6.06%	22.06%	5.34%	$43,464	$37,187	$6,277
June 30, 1995	$945,417	$651,217	$294,200	68.9%	8.00%	6.25%	22.04%	5.30%	$48,368	$39,444	$8,924
June 30, 1996	$963,162	$728,369	$234,793	75.6%	8.00%	8.22%	20.67%	5.39%	$50,713	$41,606	$9,107
June 30, 1997	$1,037,431	$856,679	$180,752	82.6%	8.00%	13.78%	19.00%	5.54%	$54,084	$43,799	$10,285
June 30, 1998	$1,104,070	$992,314	$111,756	89.9%	8.00%	15.00%	15.55%	5.68%	$54,709	$47,051	$7,658
June 30, 1999	$1,205,554	$1,109,417	$96,137	92.0%	8.25%	11.51%	15.46%	5.64%	$53,876	$51,132	$2,744
June 30, 2000	$1,291,694	$1,271,565	$20,129	98.4%	8.25%	14.40%	12.14%	5.79%	$53,078	$54,986	-$1,908

Actuarial Balance Sheet

The purpose of the Actuarial Balance Sheet is to compare assets with liabilities in order to define the portion of the liabilities which need to be funded by the Employer and Members in the future.

Association liabilities equal the present value of all future benefits expected to be paid to current and future pensioners and beneficiaries of the Association.

Association assets are equal to the sum of:

- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current active members, and
- the present value of future contributions expected to be made by the employer.

The last item, the present value of future employer contributions, is made up of two parts:

1. The Present Value of Future Employer Normal Costs: Using the Entry Age Normal Cost Method, the employer budgets a certain percentage of payroll which will be sufficient to fund benefits for members from their entry into the Association. The Normal Cost is the level percentage of salary each year that is necessary to fund Members' benefits under the current benefit provisions. Normal Cost is funded from a Member's date of employment to the expected retirement date. An adjustment is made for the deductions which will be made from the future salaries of Association members. For this valuation, the Normal Costs are:

Member Category	Contribution Rate	Annual Amount
General Plan 1	11.87%	$ 3,311,000
General Plan 2	10.38%	$ 12,975,000
General Plan 3	6.22%	$ 777,000
General Plan 4	8.73%	$ 4,298,000
Safety Plan 1	20.72%	$ 1,833,000
Safety Plan 2	17.12%	$ 2,871,000
Safety Plan 4	15.26%	$ 849,000
Probation Plan 1	26.63%	$ 768,000
Probation Plan 2	16.73%	$ 1,084,000
Probation Plan 4	13.53%	$ 529,000

The present value of these future Employer Normal Cost contributions represents one piece of the present value of future employer contributions.

2. The Unfunded Actuarial Accrued Liability: The portion of the present value of future employer contributions which will not be funded by the future Entry Age Normal Cost contributions is the Unfunded Actuarial Accrued Liability (UAAL). The UAAL arises from prior contributions that were less than the current Normal Cost. This usually results from benefits and assumption changes and the net effect of prior gains and losses. If the employer had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the Normal Cost would be sufficient to fund all benefits and there would be no UAAL.

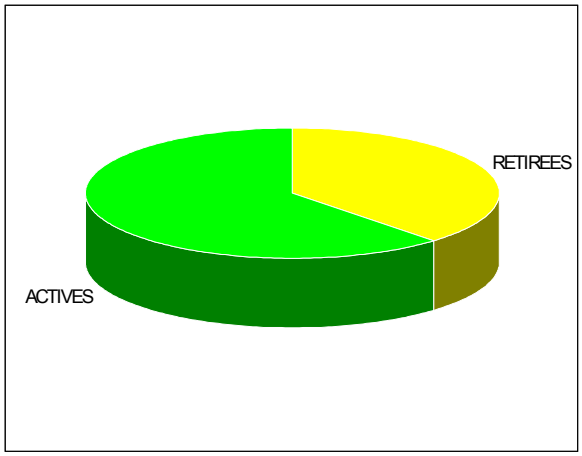
   For the current year, we have determined that the appropriate amounts needed to fund the UAAL are:

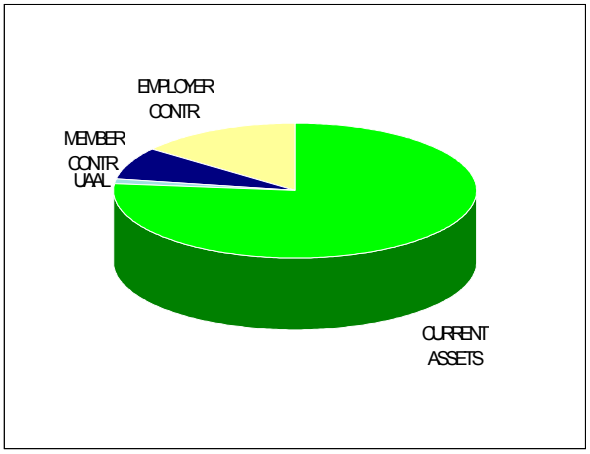
Member Category	Contribution Rate	Annual Amount*
General Plan 1	0.85%	$ 237,000
General Plan 2	0.74%	$ 925,000
General Plan 3	0.70%	$ 87,000
General Plan 4	0.57%	$ 281,000
Safety Plan 1	1.58%	$ 140,000
Safety Plan 2	1.54%	$ 258,000
Safety Plan 4	1.29%	$ 72,000
Probation Plan 1	0.53%	$ 15,000
Probation Plan 2	1.48%	$ 96,000
Probation Plan 4	1.10%	$ 43,000

* Increase with inflation rate to remain as a level percentage of payroll for current and future members.

The following chart illustrates the breakdown of Balance Sheet assets and liabilities of the Association. It shows that 38% of the Associations' liabilities are due to the retired members and their beneficiaries and 62% to active members. About 77% of Association assets consist of current available assets with 23% consisting of future contributions from the employer and the members.

Chart 9
ACTUARIAL BALANCE SHEET





ACTUARIAL BALANCE SHEET
(As of June 30, 2000)

ASSETS

	Basic	COL	Total
1. Total Assets at Actuarial Value	$ 813,197,902	$ 507,042,088	$ 1,320,239,990
2. Present Value of Future Member Contributions	137,724,630	0	137,724,630
3. Present Value of Future Employer Contributions on Account of:			
a) Normal Cost	167,812,071	79,140,801	246,952,872
b) Unfunded Actuarial Accrued Liability	38,843,358	(18,714,020)	20,129,338
4. Total Actuarial Assets	$ 1,157,577,961	$ 567,468,869	$ 1,725,046,830

LIABILITIES

	Basic	COL	Total
5. Present Value of Retirement Allowances Payable to Present Retired Members	$ 334,726,676	$ 320,182,671	$ 654,909,347
6. Present Value of Retirement Allowances to be Granted for:			
a) Service Retirement	669,547,490	218,675,687	888,223,177
b) Disability Retirement	77,999,176	25,508,331	103,507,507
7. Present Value of Death Benefits to be Granted for:			
a) Lump Sum Death Benefit and Return of Contributions	66,135	0	66,135
b) Death while Eligible to Retire	9,102,582	2,248,088	11,350,670
c) Duty Death	2,454,169	854,092	3,308,261
8. Present Value of Members' Contributions to be Returned Upon Withdrawal Before Retirement	15,006,429	0	15,006,429
9. Reserve for Interest Fluctuation	13,907,272	0	13,907,272
10. Contingent Ventura Liability Reserve	34,768,032	0	34,768,032
11. Total Actuarial Liabilities	$ 1,157,577,961	$ 567,468,869	$ 1,725,046,830

Association Assets

The market value of assets and related financial information was provided to us by the Association staff. We have not audited or verified the financial statements.

The approximate rates of return on plan assets are shown below, based on the following analysis:

	Market Value	Actuarial Value	Valuation Assets	
Value of Assets at 6/30/99	$ 1,261,022,241	$ 1,154,290,104	$ 1,109,417,101	*
Contributions				
Employer and Member	$ 53,078,332	$ 53,078,332	$ 53,078,332	
Benefits Paid to Members	$ 54,986,202	$ 54,986,202	$ 54,986,202	
Expenses Paid	$ 6,376,366	$ 6,376,366	$ 6,376,366	
Investment Earnings	$ 128,358,423	$ 174,531,585	$ 170,431,828	
Value of Assets at 6/30/00	$ 1,381,096,428	$ 1,320,537,453	$ 1,271,564,693	
NET RATE OF RETURN	9.57%	14.40%	14.61%	

* Net of $32,145,000 established to offset future contingent Ventura liabilities.

The 14.61% rate of return on the valuation assets is more than the 8.25% rate assumed for the prior year. This results in a reduction in contribution rates, all else being equal.

Special Study

In this section, we have determined the County's contribution rates assuming the Board will continue with the policy established last year to transfer additional amounts to the reserve account established to help fund for contingent Ventura liabilities so as to keep this year's County contribution rates at the same level as last year.

The change in the employer rates is provided in the table on the following page.

The change in the Association's funding ratio and the Reserve to help fund contingent Ventura liabilities is provided below:

	Without Additional Transfer	With Additional Transfer
Funding Ratio	98.4%	92.7%
Contingent Ventura Liability Reserve	$34,768,000	$108,883,000

Employer Contribution Rate Detail
Recommended Rates - Assuming the Additional Transfer to Contingent Ventura Liability Reserve
4.25% inflation, 8.25% interest, and a 6.25% salary increase assumption

GENERAL

	Plan 1		Plan 2		Plan 3		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	11.87%	$ 3,311,000	10.38%	$ 12,975,000	6.22%	$ 777,000	8.73%	$ 4,298,000
Contribution to UAAL	3.80%	$ 1,060,000	3.47%	$ 4,338,000	3.12%	$ 390,000	2.63%	$ 1,295,000
Total	15.67%	$ 4,371,000	13.85%	$ 17,313,000	9.34%	$ 1,167,000	11.36%	$ 5,593,000
Payroll		$ 27,894,000		$ 125,004,000		$ 12,490,000		$ 49,237,000

SAFETY

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	20.72%	$ 1,833,000	17.12%	$ 2,871,000	15.26%	$ 849,000
Contribution to UAAL	7.44%	$ 658,000	7.15%	$ 1,199,000	5.92%	$ 330,000
Total	28.16%	$ 2,491,000	24.27%	$ 4,070,000	21.18%	$ 1,179,000
Payroll		$ 8,847,000		$ 16,767,000		$ 5,566,000

PROBATION

	Plan 1		Plan 2		Plan 4	
	% of Payroll	Annual Amount	% of Payroll	Annual Amount	% of Payroll	Annual Amount
Normal Cost	26.63%	$ 768,000	16.73%	$ 1,084,000	13.53%	$ 529,000
Contribution to UAAL	5.59%	$ 161,000	7.01%	$ 454,000	5.07%	$ 198,000
Total	32.22%	$ 929,000	23.74%	$ 1,538,000	18.60%	$ 727,000
Payroll		$ 2,883,000		$ 6,478,000		$ 3,909,000

Average Rate for the total group = 15.20%

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Appendices

Appendix A Major Provisions of the Present System

Benefit Sections 31676.1, 31497.3 and 31664 of the 1937 County Act

Briefly summarized below are the major provisions of the County Employees Retirement Law of 1937, as amended through June 30, 2000, and as adopted by San Mateo County.

Membership

Employees hired after July 6, 1980 become members under Plan 2. General Plan 3 members can elect membership under Plan 2 after 5 years of service. Probation Officers in 1990 were given the choice of remaining in the General Plan or electing Safety status for future service under a new Probation Plan. There is a new General, Safety and Probation Plan 4 for all new employees.

Final Average Salary

Final average salary (FAS) is defined as the highest 12 consecutive months of compensation earnable for General and Safety Plan 1 and 2 members. FAS for General Plan 3 and all Plan 4 members and Probation Officers is based on the highest 36 consecutive months.

Return of Contributions

If a member should resign or die before becoming eligible for retirement, his or her contributions plus interest will be refunded. In lieu of receiving a return of contributions, a member with five years of service may elect to leave his or her contributions on deposit and receive a deferred vested benefit when eligible for retirement.

Service Retirement Benefit

(a) Plan 1, Plan 2 and Plan 4

Members with 10 years of service who have attained the age of 50 are eligible to retire. Members with 30 years of service (20 years for Safety), regardless of age, are eligible to retire.

The benefit is a percentage of monthly FAS per year of service, depending on age at retirement and is illustrated below for typical ages.

PERCENTAGE OF FINAL AVERAGE SALARY
(ROUNDED)

Age	General	Safety and Probation
50	1.18%	2.00%
55	1.49%	2.62%
60	1.92%	2.62%
62	2.09%	2.62%
65 and over	2.43%	2.62%

(b) Plan 3

Members with 10 years of service, who have attained the age of 55, are eligible to retire.

Benefit

The percentage of monthly FAS per year of service, depending on age at retirement, is illustrated below for typical ages.

Age	Percentage*
55	0.74%
60	1.20%
62	1.46%
65 & over	2.00%

* One-half of these percentages is credited for years of service over 35. Percentages for ages below 65 are actuarially reduced and may change from time to time.

The benefit arrived at by using the percentages shown above will be reduced by using a Social Security offset formula shown below:

Social Security Offset = 1/35 times County years of service times P.I.A. at age 65 (not greater than 100% P.I.A.) where P.I.A. is the Primary Insurance Amount from Social Security.

The maximum (Plan 3 benefit and P.I.A. combined) is 70% of final average salary for years of service less than 35 and is 80% of FAS for years of service greater than 35.

Disability Benefit

(a) Plan 1, Plan 2 and 4

Members with 5 years of service, regardless of age, are eligible for nonservice connected disability. The benefit is 1.5% (1.8% for Safety members) of FAS for each year of service. If this benefit does not equal 1/3 of FAS, the benefit is increased by the above percentage of FAS for the years which would have been credited to age 65 for General members and age 55 for Safety members. The total benefit in this case cannot be exceed 1/3 of FAS.

If the disability is service connected, the member may retire regardless of length of service, with a benefit of 50% of FAS.

(b) Plan 3

There is no disability benefit payable under the Retirement Plan until the member reaches age 65. At that time the benefit is calculated as a service retirement benefit counting years of service while disabled.

Death Benefit Before Retirement

(a) Plan 1, Plan 2 and Plan 4

In addition to the return of contributions, a lump sum death benefit is payable to the member's beneficiary or estate equal to one month's salary for each completed year of service under the Retirement Association, based on the salary earned during the last 12 months preceding the members' death, but not to exceed six months' salary.

If a member dies while eligible for service retirement or non-service connected disability, the spouse receives 60% of the allowance that the member would have received for retirement on the day of his or her death.

If a member dies in the performance of duty, the spouse receives 50% of the member's FAS.

(b) Plan 3

No benefit is payable under the Retirement Plan on death before retirement.

Death Benefit After Retirement

(a) Plan 1, Plan 2 and Plan 4

If the retirement was for service connected disability, 100% of the member's allowance as it was at death is continued to the surviving spouse for life.

If the retirement was for other than service connected disability, 60% of the member's allowance is continued to the spouse for life.

(b) Plan 3

50% of the member's allowance is continued to the surviving spouse for life.

Maximum Benefit

The maximum basic benefit payable to a member or beneficiary is 100% of FAS.

Cost of Living

The maximum increase in retirement allowance is 5% per year for General and Safety Plan 1 and 3% per year for Probation Plan 1 and all Plan 2. Plan 4 members will get a maximum of 2% per year. Increases are based on the annual change in the Consumer Price Index for the year ending December 31.

Contribution Rates

Member basic rates are based on a formula reflecting the age at entry into the Association. The rates are such as to provide an average annuity at age 60 of 1/120 of final average salary for General members under Plan 1, Plan 2 and Plan 4, and at age 50 of 1/100 of final average salary for Safety and Probation Officer members. The County is now paying 15% of certain Safety members' contributions on a nonrefundable basis. The members do not contribute towards the cost of living benefit.

The County rates are actuarially determined to provide for the balance of the contributions needed to fund the benefits promised under the Retirement System. In addition, it is paying one-half of contributions of management and confidential employees on a refundable basis.

Appendix B Summary of Assumptions and Funding Method

Assumptions

Valuation Interest Rate	8.25%
Inflation Assumption	4.25%
Interest Rate Credited to Active Member Accounts	8.25%

Post-Retirement Mortality

(a)	Service	
	General Males	1994 Group Annuity Mortality Table set forward 1 year (Male)
	Females	1994 Group Annuity Mortality Table set back 1 year (Female)
	Safety and Probation Members	1994 Group Annuity Mortality Table set forward 1 year (Male)
	Beneficiaries	1994 Group Annuity Mortality Table set back 1 year (Female)
(b)	Disability	
	General	1981 General Disability Mortality Table set back 3 years
	Safety and Probation	1981 Safety Disability Mortality Table set back 1 year
(c)	For Employee Contribution Rate Purposes	1994 Group Annuity Mortality Table set forward 1 year (Female) for General Members 1994 Group Annuity Mortality Table set forward 1 year (Male) for Safety Members and Probation Officers
Pre-Retirement Mortality		Based upon the Experience Analysis as of 6/30/99
Withdrawal Rates		Based upon the Experience Analysis as of 6/30/99
Disability Rates		Based upon the Experience Analysis as of 6/30/99
Service Retirement Rates		Based upon the Experience Analysis as of 6/30/99

Salary Scales	Total increases of 6.25% per year reflecting approximately 4.25% for inflation and approximately 2.00% for merit and longevity
Value of Assets for Contribution Rate Purposes	Actuarial Value as described in Actuarial Valuation Methods Section
Percentage of Members Married at Retirement	85% for General male, Safety and Probation members. 55% for General female members.
Members Eligible for Reciprocal Benefit	50%
Additional Employer Normal Cost for General Plan 3	An additional cost equal to 2% of payroll was added to the Normal Cost for General Plan 3 to anticipate the future increase in cost from those members expected to transfer to General Plan 2

Funding Method

The County's liability is being funded on the Entry Age Normal Method with an Unfunded Actuarial Accrued Liability (UAAL). The current amortization period for the UAAL is 11½ years from the valuation date.

In our June 30, 1999 valuation, we were directed by the Retirement Board to establish a reserve of $32,145,000 in order to offset any future contingent Ventura liabilities and to maintain the employer's contribution rates at level established at the June 30, 1998 valuation.

In this report, we have calculated employer contribution rates under two scenarios assuming:

1. No additional amount will be transferred to the contingent Ventura liability reserve.

2. The Board will continue with the policy established last year to transfer additional amount to the reserve account established to help fund contingent Ventura liabilities so as to keep this year's County contribution rates at the same level as last year.

The results under this scenario are presented in the Special Study section of this report. Please note that with the exception of the Special Study section, all of the results in this report reflect no additional transfer to the contingent Ventura liability reserve.

No Additional Transfer to Contingent Ventura Liability

Under this scenario, the UAAL rates for June 30, 2000 were calculated by taking the UAAL rates calculated last year for the ten plans and adjusting them proportionally by the change in actuarial experience during the 1999/2000 plan year.

In other words, the plan with the larger UAAL rate last year was allocated a larger absolute reduction to the UAAL rate this year. Under this approach, if SamCERA experiences actuarial losses in the future, the plan with the larger UAAL rate will also be allocated with a larger absolute increase to fund for the new UAAL.

With Additional Transfer to Contingent Ventura Liability

The "same" employer contribution rates provided in the Special Study section were developed using the following steps:

1. Employer normal cost contribution rates were calculated as of June 30, 2000.

2. Employer's contribution rates to the unfunded actuarial accrued liability were calculated by taking the difference between the total employer contribution rates established at the June 30, 1999 valuation and the normal cost rates as of June 30, 2000 determined in item 1.

The result of this approach is to distribute assets among the membership categories. The assets allocated to a particular category are such that the unfunded actuarial accrued liability created for that category, when amortized over 11½ years equals the difference between last year's rate and the new normal cost.

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLAN 1 MALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1460	0.1460	0.1460	0.1460	0.1460	0.1460	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.1440	0.1440	0.1440	0.1440	0.1440	0.1440	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.1420	0.1420	0.1420	0.1420	0.1420	0.1420	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.1400	0.1400	0.1400	0.1400	0.1400	0.1400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.1370	0.1370	0.1370	0.1370	0.1370	0.1370	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.1340	0.1340	0.1340	0.1340	0.1340	0.1340	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
26	0.1310	0.1310	0.1310	0.1310	0.1310	0.1310	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
27	0.1280	0.1280	0.1280	0.1280	0.1280	0.1280	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
28	0.1250	0.1250	0.1250	0.1250	0.1250	0.1250	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
29	0.1210	0.1210	0.1210	0.1210	0.1210	0.1210	0.0095	0.0003	0.0001	0.0003	0.0001	0.0000
30	0.1170	0.1170	0.1170	0.1170	0.1170	0.1170	0.0098	0.0003	0.0002	0.0003	0.0001	0.0000
31	0.1120	0.1120	0.1120	0.1120	0.1120	0.1120	0.0103	0.0003	0.0002	0.0004	0.0001	0.0000
32	0.1050	0.1050	0.1050	0.1050	0.1050	0.1050	0.0108	0.0004	0.0002	0.0004	0.0001	0.0000
33	0.0960	0.0960	0.0960	0.0960	0.0960	0.0927	0.0113	0.0004	0.0003	0.0005	0.0001	0.0000
34	0.0860	0.0860	0.0860	0.0860	0.0860	0.0800	0.0123	0.0005	0.0003	0.0005	0.0001	0.0000
35	0.0760	0.0760	0.0760	0.0760	0.0760	0.0727	0.0130	0.0006	0.0003	0.0005	0.0001	0.0000
36	0.0650	0.0650	0.0650	0.0650	0.0650	0.0597	0.0137	0.0007	0.0004	0.0006	0.0001	0.0000
37	0.0550	0.0550	0.0550	0.0550	0.0550	0.0485	0.0144	0.0008	0.0005	0.0006	0.0001	0.0000
38	0.0460	0.0460	0.0460	0.0460	0.0460	0.0386	0.0152	0.0009	0.0006	0.0006	0.0001	0.0000
39	0.0380	0.0380	0.0380	0.0380	0.0380	0.0301	0.0159	0.0010	0.0007	0.0006	0.0001	0.0000
40	0.0300	0.0300	0.0300	0.0300	0.0300	0.0176	0.0166	0.0010	0.0008	0.0006	0.0001	0.0000
41	0.0240	0.0240	0.0240	0.0240	0.0240	0.0133	0.0170	0.0011	0.0009	0.0007	0.0001	0.0000
42	0.0200	0.0200	0.0200	0.0200	0.0200	0.0103	0.0170	0.0013	0.0010	0.0008	0.0001	0.0000
43	0.0180	0.0180	0.0180	0.0180	0.0180	0.0088	0.0168	0.0014	0.0010	0.0009	0.0001	0.0000
44	0.0160	0.0160	0.0160	0.0160	0.0160	0.0074	0.0165	0.0016	0.0011	0.0010	0.0002	0.0000
45	0.0140	0.0140	0.0140	0.0140	0.0140	0.0050	0.0157	0.0018	0.0012	0.0012	0.0002	0.0000
46	0.0120	0.0120	0.0120	0.0120	0.0120	0.0040	0.0150	0.0020	0.0012	0.0014	0.0002	0.0000
47	0.0100	0.0100	0.0100	0.0100	0.0100	0.0031	0.0142	0.0021	0.0013	0.0016	0.0002	0.0000
48	0.0090	0.0090	0.0090	0.0090	0.0090	0.0027	0.0134	0.0023	0.0013	0.0018	0.0002	0.0000
49	0.0080	0.0080	0.0080	0.0080	0.0080	0.0023	0.0126	0.0025	0.0013	0.0020	0.0002	0.0000
50	0.0070	0.0070	0.0070	0.0070	0.0070	0.0000	0.0000	0.0026	0.0013	0.0022	0.0002	0.0107
51	0.0060	0.0060	0.0060	0.0060	0.0060	0.0000	0.0000	0.0028	0.0013	0.0024	0.0002	0.0082
52	0.0050	0.0050	0.0050	0.0050	0.0050	0.0000	0.0000	0.0030	0.0013	0.0026	0.0003	0.0056
53	0.0040	0.0040	0.0040	0.0040	0.0040	0.0000	0.0000	0.0031	0.0013	0.0028	0.0003	0.0065
54	0.0040	0.0040	0.0040	0.0040	0.0040	0.0000	0.0000	0.0033	0.0013	0.0030	0.0003	0.0088
55	0.0030	0.0030	0.0030	0.0030	0.0030	0.0000	0.0000	0.0035	0.0014	0.0032	0.0003	0.0336
56	0.0020	0.0020	0.0020	0.0020	0.0020	0.0000	0.0000	0.0036	0.0015	0.0034	0.0003	0.0446
57	0.0020	0.0020	0.0020	0.0020	0.0020	0.0000	0.0000	0.0038	0.0016	0.0036	0.0004	0.0562
58	0.0010	0.0010	0.0010	0.0010	0.0010	0.0000	0.0000	0.0040	0.0019	0.0038	0.0004	0.0663
59	0.0010	0.0010	0.0010	0.0010	0.0010	0.0000	0.0000	0.0042	0.0022	0.0040	0.0004	0.0762
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043	0.0025	0.0042	0.0004	0.0835
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0045	0.0028	0.0044	0.0004	0.0863
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0032	0.0046	0.0005	0.2500
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0048	0.0038	0.0048	0.0005	0.1809
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0044	0.0050	0.0005	0.2248
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.5000
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.5000
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.7500
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.8500
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.9500
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLAN 1 FEMALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1540	0.1540	0.1540	0.1540	0.1540	0.1540	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
21	0.1471	0.1471	0.1471	0.1471	0.1471	0.1471	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
22	0.1401	0.1401	0.1401	0.1401	0.1401	0.1401	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
23	0.1332	0.1332	0.1332	0.1332	0.1332	0.1332	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
24	0.1263	0.1263	0.1263	0.1263	0.1263	0.1263	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
25	0.1194	0.1194	0.1194	0.1194	0.1194	0.1194	0.0035	0.0001	0.0000	0.0003	0.0000	0.0000
26	0.1124	0.1124	0.1124	0.1124	0.1124	0.1124	0.0040	0.0001	0.0000	0.0003	0.0000	0.0000
27	0.1055	0.1055	0.1055	0.1055	0.1055	0.1055	0.0045	0.0002	0.0001	0.0003	0.0000	0.0000
28	0.0986	0.0986	0.0986	0.0986	0.0986	0.0986	0.0055	0.0002	0.0001	0.0003	0.0000	0.0000
29	0.0916	0.0916	0.0916	0.0916	0.0916	0.0916	0.0070	0.0002	0.0001	0.0003	0.0000	0.0000
30	0.0847	0.0847	0.0847	0.0847	0.0847	0.0847	0.0080	0.0002	0.0002	0.0003	0.0000	0.0000
31	0.0762	0.0762	0.0762	0.0762	0.0762	0.0762	0.0094	0.0002	0.0002	0.0003	0.0000	0.0000
32	0.0676	0.0676	0.0676	0.0676	0.0676	0.0676	0.0113	0.0002	0.0002	0.0003	0.0000	0.0000
33	0.0591	0.0591	0.0591	0.0591	0.0591	0.0565	0.0132	0.0003	0.0003	0.0004	0.0000	0.0000
34	0.0520	0.0520	0.0520	0.0520	0.0520	0.0474	0.0151	0.0003	0.0003	0.0004	0.0000	0.0000
35	0.0461	0.0461	0.0461	0.0461	0.0461	0.0400	0.0180	0.0004	0.0003	0.0005	0.0000	0.0000
36	0.0402	0.0402	0.0402	0.0402	0.0402	0.0331	0.0190	0.0004	0.0004	0.0005	0.0000	0.0000
37	0.0344	0.0344	0.0344	0.0344	0.0344	0.0268	0.0200	0.0005	0.0005	0.0005	0.0000	0.0000
38	0.0285	0.0285	0.0285	0.0285	0.0285	0.0202	0.0200	0.0006	0.0006	0.0005	0.0000	0.0000
39	0.0227	0.0227	0.0227	0.0227	0.0227	0.0145	0.0190	0.0006	0.0007	0.0006	0.0000	0.0000
40	0.0168	0.0168	0.0168	0.0168	0.0168	0.0096	0.0188	0.0006	0.0008	0.0005	0.0000	0.0000
41	0.0157	0.0157	0.0157	0.0157	0.0157	0.0079	0.0172	0.0006	0.0009	0.0005	0.0000	0.0000
42	0.0145	0.0145	0.0145	0.0145	0.0145	0.0063	0.0156	0.0007	0.0010	0.0006	0.0000	0.0000
43	0.0138	0.0138	0.0138	0.0138	0.0138	0.0067	0.0144	0.0010	0.0010	0.0006	0.0000	0.0000
44	0.0134	0.0134	0.0134	0.0134	0.0134	0.0071	0.0132	0.0014	0.0011	0.0007	0.0000	0.0000
45	0.0126	0.0126	0.0126	0.0126	0.0126	0.0073	0.0119	0.0022	0.0012	0.0005	0.0000	0.0000
46	0.0118	0.0118	0.0118	0.0118	0.0118	0.0075	0.0107	0.0030	0.0012	0.0006	0.0000	0.0000
47	0.0107	0.0107	0.0107	0.0107	0.0107	0.0073	0.0094	0.0039	0.0013	0.0007	0.0000	0.0000
48	0.0099	0.0099	0.0099	0.0099	0.0099	0.0075	0.0089	0.0037	0.0013	0.0007	0.0000	0.0000
49	0.0092	0.0092	0.0092	0.0092	0.0092	0.0076	0.0080	0.0034	0.0013	0.0008	0.0000	0.0000
50	0.0084	0.0084	0.0084	0.0084	0.0084	0.0000	0.0079	0.0030	0.0013	0.0009	0.0000	0.0327
51	0.0076	0.0076	0.0076	0.0076	0.0076	0.0000	0.0076	0.0021	0.0013	0.0010	0.0000	0.0269
52	0.0069	0.0069	0.0069	0.0069	0.0069	0.0000	0.0075	0.0011	0.0013	0.0012	0.0000	0.0210
53	0.0061	0.0061	0.0061	0.0061	0.0061	0.0000	0.0074	0.0012	0.0013	0.0013	0.0000	0.0233
54	0.0054	0.0054	0.0054	0.0054	0.0054	0.0000	0.0072	0.0013	0.0013	0.0015	0.0000	0.0308
55	0.0046	0.0046	0.0046	0.0046	0.0046	0.0000	0.0071	0.0014	0.0014	0.0016	0.0000	0.0331
56	0.0038	0.0038	0.0038	0.0038	0.0038	0.0000	0.0068	0.0015	0.0015	0.0018	0.0000	0.0425
57	0.0031	0.0031	0.0031	0.0031	0.0031	0.0000	0.0061	0.0015	0.0016	0.0019	0.0000	0.0458
58	0.0023	0.0023	0.0023	0.0023	0.0023	0.0000	0.0054	0.0016	0.0019	0.0021	0.0000	0.0561
59	0.0019	0.0019	0.0019	0.0019	0.0019	0.0000	0.0047	0.0018	0.0022	0.0022	0.0000	0.0766
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0032	0.0019	0.0025	0.0024	0.0000	0.0804
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0026	0.0020	0.0028	0.0025	0.0000	0.0892
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0021	0.0032	0.0027	0.0000	0.2449
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0016	0.0025	0.0038	0.0028	0.0000	0.2266
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0011	0.0029	0.0044	0.0030	0.0000	0.2083
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0031	0.0000	0.3505
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0033	0.0000	0.2641
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0035	0.0000	0.2832
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0036	0.0000	0.4484
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0038	0.0000	0.5765
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLANS 2 AND 4 MALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
26	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0085	0.0003	0.0000	0.0003	0.0001	0.0000
27	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
28	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0090	0.0003	0.0001	0.0003	0.0001	0.0000
29	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0095	0.0003	0.0001	0.0003	0.0001	0.0000
30	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0100	0.0003	0.0002	0.0003	0.0001	0.0000
31	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0105	0.0003	0.0002	0.0004	0.0001	0.0000
32	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0110	0.0004	0.0002	0.0004	0.0001	0.0000
33	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0115	0.0004	0.0003	0.0005	0.0001	0.0000
34	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0125	0.0005	0.0003	0.0005	0.0001	0.0000
35	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0135	0.0005	0.0003	0.0005	0.0001	0.0000
36	0.1323	0.0900	0.0800	0.0700	0.0400	0.0400	0.0160	0.0006	0.0004	0.0006	0.0001	0.0000
37	0.1323	0.0900	0.0800	0.0700	0.0400	0.0350	0.0180	0.0006	0.0005	0.0006	0.0001	0.0000
38	0.1323	0.0900	0.0800	0.0700	0.0400	0.0300	0.0195	0.0007	0.0006	0.0006	0.0001	0.0000
39	0.1323	0.0900	0.0800	0.0700	0.0400	0.0250	0.0205	0.0009	0.0007	0.0006	0.0001	0.0000
40	0.1323	0.0900	0.0800	0.0700	0.0400	0.0200	0.0210	0.0010	0.0008	0.0006	0.0001	0.0000
41	0.1323	0.0900	0.0800	0.0700	0.0400	0.0175	0.0215	0.0011	0.0009	0.0007	0.0001	0.0000
42	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0215	0.0012	0.0010	0.0008	0.0001	0.0000
43	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0220	0.0013	0.0011	0.0009	0.0001	0.0000
44	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0230	0.0014	0.0012	0.0010	0.0002	0.0000
45	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0240	0.0015	0.0013	0.0012	0.0002	0.0000
46	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0250	0.0016	0.0014	0.0014	0.0002	0.0000
47	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0260	0.0017	0.0015	0.0016	0.0002	0.0000
48	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0250	0.0018	0.0016	0.0018	0.0002	0.0000
49	0.1323	0.0900	0.0800	0.0700	0.0400	0.0150	0.0245	0.0020	0.0017	0.0020	0.0002	0.0000
50	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0245	0.0022	0.0018	0.0022	0.0002	0.0200
51	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0225	0.0024	0.0019	0.0024	0.0002	0.0200
52	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0200	0.0026	0.0020	0.0026	0.0003	0.0200
53	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0175	0.0028	0.0021	0.0028	0.0003	0.0200
54	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0140	0.0030	0.0022	0.0030	0.0003	0.0200
55	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0120	0.0032	0.0024	0.0032	0.0003	0.0200
56	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0110	0.0034	0.0027	0.0034	0.0003	0.0211
57	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0100	0.0036	0.0030	0.0036	0.0004	0.0221
58	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0090	0.0038	0.0033	0.0038	0.0004	0.0241
59	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0080	0.0040	0.0036	0.0040	0.0004	0.0256
60	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0070	0.0045	0.0039	0.0042	0.0004	0.0750
61	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0060	0.0049	0.0042	0.0044	0.0004	0.1000
62	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0050	0.0052	0.0046	0.0046	0.0005	0.1500
63	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0040	0.0055	0.0050	0.0048	0.0005	0.1000
64	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0030	0.0058	0.0054	0.0050	0.0005	0.2500
65	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.3000
66	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.1000
67	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.1500
68	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.2000
69	0.1323	0.0900	0.0800	0.0700	0.0400	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.2500
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLANS 2 AND 4 FEMALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
21	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
22	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
23	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
24	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
25	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0085	0.0001	0.0000	0.0003	0.0000	0.0000
26	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0085	0.0001	0.0000	0.0003	0.0000	0.0000
27	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0090	0.0002	0.0001	0.0003	0.0000	0.0000
28	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0090	0.0002	0.0001	0.0003	0.0000	0.0000
29	0.1153	0.1097	0.0882	0.0600	0.0493	0.0493	0.0095	0.0002	0.0001	0.0003	0.0000	0.0000
30	0.1153	0.1097	0.0882	0.0600	0.0493	0.0476	0.0125	0.0003	0.0001	0.0003	0.0000	0.0000
31	0.1153	0.1097	0.0882	0.0600	0.0493	0.0468	0.0150	0.0003	0.0001	0.0003	0.0000	0.0000
32	0.1153	0.1097	0.0882	0.0600	0.0493	0.0450	0.0160	0.0003	0.0001	0.0003	0.0000	0.0000
33	0.1153	0.1097	0.0882	0.0600	0.0493	0.0395	0.0170	0.0007	0.0003	0.0004	0.0000	0.0000
34	0.1153	0.1097	0.0882	0.0600	0.0493	0.0349	0.0175	0.0010	0.0006	0.0004	0.0000	0.0000
35	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0200	0.0016	0.0010	0.0005	0.0000	0.0000
36	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0200	0.0020	0.0012	0.0005	0.0000	0.0000
37	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0200	0.0028	0.0015	0.0005	0.0000	0.0000
38	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0175	0.0029	0.0018	0.0005	0.0000	0.0000
39	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0150	0.0030	0.0020	0.0006	0.0000	0.0000
40	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0125	0.0030	0.0020	0.0005	0.0000	0.0000
41	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0125	0.0030	0.0020	0.0005	0.0000	0.0000
42	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0125	0.0030	0.0020	0.0006	0.0000	0.0000
43	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0125	0.0030	0.0020	0.0006	0.0000	0.0000
44	0.1153	0.1097	0.0882	0.0600	0.0493	0.0240	0.0125	0.0030	0.0020	0.0007	0.0000	0.0000
45	0.1153	0.1097	0.0882	0.0600	0.0493	0.0227	0.0125	0.0030	0.0020	0.0005	0.0000	0.0000
46	0.1153	0.1097	0.0882	0.0600	0.0493	0.0211	0.0125	0.0036	0.0020	0.0006	0.0000	0.0000
47	0.1153	0.1097	0.0882	0.0600	0.0493	0.0195	0.0125	0.0042	0.0020	0.0007	0.0000	0.0000
48	0.1153	0.1097	0.0882	0.0600	0.0493	0.0180	0.0125	0.0042	0.0020	0.0007	0.0000	0.0000
49	0.1153	0.1097	0.0882	0.0600	0.0493	0.0166	0.0125	0.0042	0.0020	0.0008	0.0000	0.0000
50	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0125	0.0042	0.0020	0.0009	0.0000	0.0160
51	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0125	0.0042	0.0021	0.0010	0.0000	0.0160
52	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0125	0.0042	0.0022	0.0012	0.0000	0.0160
53	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0125	0.0042	0.0023	0.0013	0.0000	0.0160
54	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0125	0.0042	0.0024	0.0015	0.0000	0.0193
55	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0120	0.0045	0.0025	0.0016	0.0000	0.0329
56	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0110	0.0049	0.0030	0.0018	0.0000	0.0398
57	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0100	0.0053	0.0035	0.0019	0.0000	0.0406
58	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0050	0.0057	0.0037	0.0021	0.0000	0.0416
59	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0025	0.0061	0.0040	0.0022	0.0000	0.0484
60	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0073	0.0056	0.0024	0.0000	0.0568
61	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0090	0.0071	0.0025	0.0000	0.0533
62	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0109	0.0085	0.0027	0.0000	0.1244
63	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0110	0.0097	0.0028	0.0000	0.1311
64	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0115	0.0107	0.0030	0.0000	0.1377
65	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0000	0.0000	0.0031	0.0000	0.2500
66	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0000	0.0000	0.0033	0.0000	0.1545
67	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0000	0.0000	0.0035	0.0000	0.1935
68	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0000	0.0000	0.0036	0.0000	0.2046
69	0.1153	0.1097	0.0882	0.0600	0.0493	0.0000	0.0000	0.0000	0.0000	0.0038	0.0000	0.2630
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLAN 3 MALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
21	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
22	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
23	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
24	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000
25	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0085	0.0002	0.0000	0.0003	0.0001	0.0000
26	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0085	0.0002	0.0000	0.0003	0.0001	0.0000
27	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0090	0.0002	0.0000	0.0003	0.0001	0.0000
28	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0090	0.0002	0.0000	0.0003	0.0001	0.0000
29	0.3000	0.1387	0.1394	0.1394	0.0600	0.0400	0.0095	0.0002	0.0000	0.0003	0.0001	0.0000
30	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0100	0.0002	0.0000	0.0003	0.0001	0.0000
31	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0105	0.0002	0.0000	0.0004	0.0001	0.0000
32	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0110	0.0002	0.0000	0.0004	0.0001	0.0000
33	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0115	0.0002	0.0000	0.0005	0.0001	0.0000
34	0.3000	0.1387	0.1396	0.1396	0.0600	0.0400	0.0125	0.0002	0.0000	0.0005	0.0001	0.0000
35	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0135	0.0003	0.0001	0.0005	0.0001	0.0000
36	0.3000	0.1387	0.1387	0.1387	0.0600	0.0400	0.0160	0.0004	0.0001	0.0006	0.0001	0.0000
37	0.3000	0.1387	0.1387	0.1387	0.0600	0.0350	0.0180	0.0004	0.0001	0.0006	0.0001	0.0000
38	0.3000	0.1387	0.1387	0.1387	0.0600	0.0300	0.0195	0.0005	0.0001	0.0006	0.0001	0.0000
39	0.3000	0.1387	0.1380	0.1380	0.0600	0.0250	0.0205	0.0005	0.0001	0.0006	0.0001	0.0000
40	0.3000	0.1387	0.1387	0.1387	0.0600	0.0200	0.0210	0.0006	0.0001	0.0006	0.0001	0.0000
41	0.3000	0.1387	0.1387	0.1387	0.0600	0.0175	0.0215	0.0006	0.0001	0.0007	0.0001	0.0000
42	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0215	0.0007	0.0001	0.0008	0.0001	0.0000
43	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0220	0.0008	0.0001	0.0009	0.0001	0.0000
44	0.3000	0.1387	0.1379	0.1379	0.0600	0.0150	0.0230	0.0009	0.0001	0.0010	0.0002	0.0000
45	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0240	0.0010	0.0002	0.0012	0.0002	0.0000
46	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0250	0.0011	0.0002	0.0014	0.0002	0.0000
47	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0260	0.0012	0.0002	0.0016	0.0002	0.0000
48	0.3000	0.1387	0.1387	0.1387	0.0600	0.0150	0.0250	0.0014	0.0002	0.0018	0.0002	0.0000
49	0.3000	0.1387	0.1400	0.1400	0.0600	0.0150	0.0245	0.0015	0.0002	0.0020	0.0002	0.0000
50	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0245	0.0016	0.0002	0.0022	0.0002	0.0000
51	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0225	0.0018	0.0003	0.0024	0.0002	0.0000
52	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0200	0.0019	0.0004	0.0026	0.0003	0.0000
53	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0175	0.0021	0.0004	0.0028	0.0003	0.0000
54	0.3000	0.1387	0.1400	0.1400	0.0600	0.0000	0.0140	0.0023	0.0005	0.0030	0.0003	0.0000
55	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0120	0.0025	0.0005	0.0032	0.0003	0.0513
56	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0110	0.0027	0.0006	0.0034	0.0003	0.0660
57	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0100	0.0029	0.0006	0.0036	0.0004	0.0806
58	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0090	0.0032	0.0007	0.0038	0.0004	0.0953
59	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0080	0.0034	0.0008	0.0040	0.0004	0.1099
60	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0070	0.0038	0.0009	0.0042	0.0004	0.1200
61	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0060	0.0040	0.0010	0.0044	0.0004	0.1250
62	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0050	0.0042	0.0011	0.0046	0.0005	0.2500
63	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0040	0.0045	0.0012	0.0048	0.0005	0.2000
64	0.3000	0.1387	0.1414	0.1414	0.0600	0.0000	0.0030	0.0047	0.0013	0.0050	0.0005	0.2000
65	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0052	0.0005	0.2553
66	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0056	0.0005	0.2553
67	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0060	0.0006	0.2918
68	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0065	0.0006	0.3283
69	0.3000	0.1387	0.1387	0.1387	0.0600	0.0000	0.0000	0.0000	0.0000	0.0070	0.0006	0.3647
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

Note: No withdrawal is assumed after a member has 10 years of service.

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
GENERAL PLAN 3 FEMALE MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1500	0.1500	0.1000	0.1000	0.0400	0.1687	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
21	0.1500	0.1500	0.1000	0.1000	0.0400	0.1603	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
22	0.1500	0.1500	0.1000	0.1000	0.0400	0.1527	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
23	0.1500	0.1500	0.1000	0.1000	0.0400	0.1460	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
24	0.1500	0.1500	0.1000	0.1000	0.0400	0.1400	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000
25	0.1500	0.1500	0.1000	0.1000	0.0400	0.1254	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
26	0.1500	0.1500	0.1000	0.1000	0.0400	0.1214	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
27	0.1500	0.1500	0.1000	0.1000	0.0400	0.1183	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
28	0.1500	0.1500	0.1000	0.1000	0.0400	0.1160	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
29	0.1500	0.1500	0.1000	0.1000	0.0400	0.1136	0.0000	0.0000	0.0000	0.0003	0.0000	0.0000
30	0.1500	0.1500	0.1000	0.1000	0.0400	0.1080	0.0085	0.0001	0.0000	0.0003	0.0000	0.0000
31	0.1500	0.1500	0.1000	0.1000	0.0400	0.1024	0.0100	0.0001	0.0000	0.0004	0.0000	0.0000
32	0.1500	0.1500	0.1000	0.1000	0.0400	0.0968	0.0120	0.0001	0.0000	0.0004	0.0000	0.0000
33	0.1500	0.1500	0.1000	0.1000	0.0400	0.0911	0.0140	0.0001	0.0000	0.0005	0.0000	0.0000
34	0.1500	0.1500	0.1000	0.1000	0.0400	0.0855	0.0160	0.0001	0.0000	0.0005	0.0000	0.0000
35	0.1500	0.1500	0.1000	0.1000	0.0400	0.0799	0.0180	0.0002	0.0001	0.0005	0.0000	0.0000
36	0.1500	0.1500	0.1000	0.1000	0.0400	0.0743	0.0200	0.0002	0.0001	0.0006	0.0000	0.0000
37	0.1500	0.1500	0.1000	0.1000	0.0400	0.0687	0.0215	0.0002	0.0001	0.0006	0.0000	0.0000
38	0.1500	0.1500	0.1000	0.1000	0.0400	0.0631	0.0230	0.0002	0.0001	0.0006	0.0000	0.0000
39	0.1500	0.1500	0.1000	0.1000	0.0400	0.0574	0.0240	0.0002	0.0001	0.0006	0.0000	0.0000
40	0.1500	0.1500	0.1000	0.1000	0.0400	0.0518	0.0240	0.0002	0.0001	0.0006	0.0000	0.0000
41	0.1500	0.1500	0.1000	0.1000	0.0400	0.0462	0.0220	0.0002	0.0001	0.0007	0.0000	0.0000
42	0.1500	0.1500	0.1000	0.1000	0.0400	0.0406	0.0200	0.0003	0.0001	0.0008	0.0000	0.0000
43	0.1500	0.1500	0.1000	0.1000	0.0400	0.0350	0.0190	0.0004	0.0001	0.0009	0.0000	0.0000
44	0.1500	0.1500	0.1000	0.1000	0.0400	0.0294	0.0180	0.0005	0.0001	0.0010	0.0000	0.0000
45	0.1500	0.1500	0.1000	0.1000	0.0400	0.0238	0.0175	0.0006	0.0002	0.0012	0.0000	0.0000
46	0.1500	0.1500	0.1000	0.1000	0.0400	0.0211	0.0170	0.0006	0.0002	0.0014	0.0000	0.0000
47	0.1500	0.1500	0.1000	0.1000	0.0400	0.0188	0.0165	0.0008	0.0002	0.0016	0.0000	0.0000
48	0.1500	0.1500	0.1000	0.1000	0.0400	0.0166	0.0155	0.0008	0.0002	0.0018	0.0000	0.0000
49	0.1500	0.1500	0.1000	0.1000	0.0400	0.0143	0.0140	0.0009	0.0002	0.0020	0.0000	0.0000
50	0.1500	0.1500	0.1000	0.1000	0.0400	0.0157	0.0130	0.0010	0.0003	0.0022	0.0000	0.0000
51	0.1500	0.1500	0.1000	0.1000	0.0400	0.0160	0.0125	0.0011	0.0003	0.0024	0.0000	0.0000
52	0.1500	0.1500	0.1000	0.1000	0.0400	0.0170	0.0120	0.0012	0.0004	0.0026	0.0000	0.0000
53	0.1500	0.1500	0.1000	0.1000	0.0400	0.0180	0.0115	0.0014	0.0004	0.0028	0.0000	0.0000
54	0.1500	0.1500	0.1000	0.1000	0.0400	0.0190	0.0110	0.0017	0.0005	0.0030	0.0000	0.0000
55	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0105	0.0018	0.0005	0.0032	0.0000	0.0229
56	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0100	0.0021	0.0006	0.0034	0.0000	0.0204
57	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0090	0.0022	0.0006	0.0036	0.0000	0.0137
58	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0080	0.0023	0.0006	0.0038	0.0000	0.0166
59	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0070	0.0025	0.0007	0.0040	0.0000	0.0225
60	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0060	0.0027	0.0008	0.0042	0.0000	0.0317
61	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0050	0.0028	0.0008	0.0044	0.0000	0.0350
62	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0040	0.0029	0.0008	0.0046	0.0000	0.0957
63	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0030	0.0031	0.0009	0.0048	0.0000	0.0886
64	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0020	0.0033	0.0009	0.0050	0.0000	0.2000
65	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0000	0.0000	0.0000	0.0052	0.0000	0.2500
66	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0000	0.0000	0.0000	0.0056	0.0000	0.1158
67	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0000	0.0000	0.0000	0.0060	0.0000	0.1244
68	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0000	0.0000	0.0000	0.0065	0.0000	0.4540
69	0.1500	0.1500	0.1000	0.1000	0.0400	0.0200	0.0000	0.0000	0.0000	0.0070	0.0000	0.5837
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

Note: No withdrawal is assumed after a member has 10 years of service.

EXHIBIT 1

PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT
SAFETY AND PROBATION MEMBERS

Age	Withdrawal 0 <= X < 1	Withdrawal 1 <= X < 2	Withdrawal 2 <= X < 3	Withdrawal 3 <= X < 4	Withdrawal 4 <= X < 5	Withdrawal X >= 5	Terminated Vested	Non-Duty Disability	Duty Disability	Non-Duty Death	Duty Death	Service Retirement
<= 20	0.1000	0.0799	0.0799	0.0799	0.0799	0.0130	0.0500	0.0000	0.0008	0.0002	0.0005	0.0000
21	0.1000	0.0754	0.0754	0.0754	0.0754	0.0130	0.0500	0.0000	0.0009	0.0002	0.0005	0.0000
22	0.1000	0.0709	0.0709	0.0709	0.0709	0.0130	0.0500	0.0000	0.0010	0.0002	0.0005	0.0000
23	0.1000	0.0663	0.0663	0.0663	0.0663	0.0130	0.0500	0.0000	0.0011	0.0002	0.0005	0.0000
24	0.1000	0.0618	0.0618	0.0618	0.0618	0.0130	0.0500	0.0000	0.0012	0.0002	0.0005	0.0000
25	0.1000	0.0474	0.0474	0.0474	0.0474	0.0130	0.0500	0.0002	0.0010	0.0003	0.0005	0.0000
26	0.1000	0.0449	0.0449	0.0449	0.0449	0.0130	0.0500	0.0002	0.0011	0.0003	0.0005	0.0000
27	0.1000	0.0424	0.0424	0.0424	0.0424	0.0130	0.0500	0.0002	0.0011	0.0004	0.0005	0.0000
28	0.1000	0.0411	0.0411	0.0411	0.0411	0.0130	0.0500	0.0002	0.0012	0.0004	0.0004	0.0000
29	0.1000	0.0399	0.0399	0.0399	0.0399	0.0130	0.0450	0.0002	0.0013	0.0004	0.0004	0.0000
30	0.1000	0.0369	0.0369	0.0369	0.0369	0.0130	0.0400	0.0003	0.0011	0.0003	0.0005	0.0000
31	0.1000	0.0357	0.0357	0.0357	0.0357	0.0130	0.0300	0.0003	0.0011	0.0004	0.0005	0.0000
32	0.1000	0.0345	0.0345	0.0345	0.0345	0.0129	0.0250	0.0004	0.0012	0.0003	0.0005	0.0000
33	0.1000	0.0333	0.0333	0.0333	0.0333	0.0129	0.0250	0.0004	0.0012	0.0004	0.0005	0.0000
34	0.1000	0.0321	0.0321	0.0321	0.0321	0.0129	0.0250	0.0005	0.0012	0.0004	0.0005	0.0000
35	0.1000	0.0310	0.0310	0.0310	0.0310	0.0129	0.0225	0.0004	0.0012	0.0004	0.0005	0.0000
36	0.1000	0.0299	0.0299	0.0299	0.0299	0.0128	0.0200	0.0005	0.0016	0.0004	0.0005	0.0000
37	0.1000	0.0289	0.0289	0.0289	0.0289	0.0128	0.0200	0.0006	0.0020	0.0004	0.0005	0.0000
38	0.1000	0.0278	0.0278	0.0278	0.0278	0.0128	0.0200	0.0007	0.0023	0.0004	0.0005	0.0000
39	0.1000	0.0267	0.0267	0.0267	0.0267	0.0128	0.0175	0.0008	0.0026	0.0004	0.0006	0.0000
40	0.1000	0.0257	0.0257	0.0257	0.0257	0.0127	0.0150	0.0009	0.0047	0.0004	0.0006	0.0000
41	0.1000	0.0214	0.0214	0.0214	0.0214	0.0127	0.0125	0.0010	0.0057	0.0004	0.0006	0.0000
42	0.1000	0.0172	0.0172	0.0172	0.0172	0.0127	0.0100	0.0010	0.0070	0.0005	0.0007	0.0000
43	0.1000	0.0129	0.0129	0.0129	0.0129	0.0110	0.0100	0.0011	0.0081	0.0005	0.0007	0.0000
44	0.1000	0.0086	0.0086	0.0086	0.0086	0.0102	0.0100	0.0011	0.0092	0.0006	0.0007	0.0000
45	0.1000	0.0025	0.0025	0.0025	0.0025	0.0093	0.0100	0.0012	0.0100	0.0006	0.0007	0.0000
46	0.1000	0.0019	0.0019	0.0019	0.0019	0.0085	0.0100	0.0012	0.0105	0.0007	0.0007	0.0000
47	0.1000	0.0019	0.0019	0.0019	0.0019	0.0077	0.0100	0.0012	0.0110	0.0008	0.0007	0.0000
48	0.1000	0.0013	0.0013	0.0013	0.0013	0.0069	0.0100	0.0012	0.0115	0.0008	0.0007	0.0000
49	0.1000	0.0013	0.0013	0.0013	0.0013	0.0060	0.0100	0.0012	0.0120	0.0008	0.0007	0.0000
50	0.1000	0.0013	0.0013	0.0013	0.0013	0.0000	0.0075	0.0012	0.0125	0.0009	0.0007	0.0362
51	0.1000	0.0013	0.0013	0.0013	0.0013	0.0000	0.0065	0.0012	0.0130	0.0009	0.0007	0.0239
52	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0055	0.0015	0.0135	0.0009	0.0007	0.0261
53	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0050	0.0020	0.0150	0.0010	0.0007	0.0384
54	0.1000	0.0007	0.0007	0.0007	0.0007	0.0000	0.0050	0.0030	0.0167	0.0012	0.0010	0.0527
55	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0035	0.0175	0.0013	0.0011	0.2500
56	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0036	0.0200	0.0014	0.0011	0.2500
57	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0038	0.0225	0.0015	0.0012	0.2500
58	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0040	0.0250	0.0017	0.0015	0.1500
59	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0050	0.0041	0.0275	0.0019	0.0000	0.1000
60	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
61	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
62	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
63	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
64	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
65	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
66	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
67	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
68	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
69	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000
70	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000

Exhibit II

RATIO OF CURRENT COMPENSATION TO COMPENSATION ANTICIPATED AT RETIREMENT AGE

Age	General Members	Safety and Probation Members
20	0.038	0.071
21	0.042	0.078
22	0.046	0.085
23	0.051	0.093
24	0.056	0.101
25	0.061	0.111
26	0.067	0.121
27	0.073	0.132
28	0.079	0.143
29	0.086	0.156
30	0.094	0.169
31	0.102	0.184
32	0.110	0.199
33	0.120	0.215
34	0.130	0.231
35	0.140	0.249
36	0.151	0.267
37	0.162	0.285
38	0.174	0.305
39	0.186	0.325
40	0.199	0.346
41	0.213	0.367
42	0.227	0.390
43	0.241	0.413
44	0.257	0.438
45	0.273	0.463
46	0.290	0.490
47	0.308	0.517
48	0.326	0.545
49	0.345	0.575
50	0.365	0.606
51	0.385	0.639
52	0.406	0.672
53	0.428	0.708
54	0.451	0.745
55	0.474	0.783
56	0.499	0.823
57	0.525	0.864
58	0.552	0.908
59	0.581	0.953
60	0.611	1.000
61	0.642	
62	0.675	
63	0.710	
64	0.746	
65	0.784	
66	0.823	
67	0.864	
68	0.908	
69	0.953	
70	1.000	

Salary Scale of merit and longevity plus 4.25% inflation

Exhibit III

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT

Age	General Members Male	Female	Safety	Age	General Members Male	Female	Safety
50	29.09	35.19	29.09	80	7.51	10.49	7.51
51	28.18	34.24	28.18	81	7.07	9.88	7.07
52	27.28	33.29	27.28	82	6.65	9.30	6.65
53	26.38	32.34	26.38	83	6.24	8.74	6.24
54	25.49	31.40	25.49	84	5.86	8.20	5.86
55	24.61	30.47	24.61	85	5.48	7.68	5.48
56	23.74	29.53	23.74	86	5.12	7.18	5.12
57	22.88	28.61	22.88	87	4.78	6.71	4.78
58	22.04	27.68	22.04	88	4.45	6.25	4.45
59	21.20	26.77	21.20	89	4.15	5.83	4.15
60	20.38	25.86	20.38	90	3.87	5.42	3.87
61	19.57	24.97	19.57	91	3.61	5.05	3.61
62	18.78	24.09	18.78	92	3.37	4.70	3.37
63	18.01	23.22	18.01	93	3.15	4.37	3.15
64	17.26	22.36	17.26	94	2.95	4.07	2.95
65	16.53	21.52	16.53	95	2.77	3.79	2.77
66	15.81	20.69	15.81	96	2.61	3.53	2.61
67	15.11	19.88	15.11	97	2.46	3.28	2.46
68	14.43	19.09	14.43	98	2.33	3.06	2.33
69	13.77	18.30	13.77	99	2.21	2.85	2.21
70	13.11	17.53	13.11	100	2.09	2.65	2.09
71	12.48	16.77	12.48	101	1.98	2.48	1.98
72	11.85	16.01	11.85	102	1.87	2.31	1.87
73	11.25	15.26	11.25	103	1.77	2.16	1.77
74	10.66	14.53	10.66	104	1.68	2.02	1.68
75	10.08	13.81	10.08	105	1.62	1.89	1.62
76	9.52	13.11	9.52	106	1.57	1.78	1.57
77	8.98	12.43	8.98	107	1.53	1.69	1.53
78	8.46	11.76	8.46	108	1.51	1.62	1.51
79	7.97	11.11	7.97	109	1.49	1.56	1.49
				110	1.47	1.51	1.47

General — Male Members - 1994 GAM Male Set Forward 1 Year
Female Members - 1994 GAM Female Table Set back 1 Year

Safety — All Members - 1994 GAM Male Set Forward 1 Year

Exhibit III

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT
General Members

Age	Male & Female	Age	Male & Female	Age	Male & Female
20	41.73	50	22.56	80	8.28
21	40.73	51	22.06	81	7.83
22	39.73	52	21.57	82	7.41
23	38.73	53	21.08	83	7.00
24	37.98	54	20.59	84	6.63
25	37.26	55	20.11	85	6.27
26	36.56	56	19.63	86	5.94
27	35.87	57	19.16	87	5.63
28	35.19	58	18.68	88	5.34
29	34.53	59	18.21	89	5.06
30	33.87	60	17.75	90	4.80
31	33.23	61	17.29	91	4.55
32	32.60	62	16.83	92	4.31
33	31.98	63	16.37	93	4.09
34	31.37	64	15.91	94	3.87
35	30.76	65	15.45	95	3.66
36	30.17	66	14.99	96	3.46
37	29.58	67	14.53	97	3.26
38	29.00	68	14.07	98	3.07
39	28.43	69	13.60	99	2.89
40	27.87	70	13.13	100	2.71
41	27.31	71	12.66	101	2.54
42	26.76	72	12.18	102	2.37
43	26.21	73	11.70	103	2.20
44	25.67	74	11.21	104	2.04
45	25.14	75	10.72	105	1.88
46	24.61	76	10.22	106	1.72
47	24.09	77	9.73	107	1.55
48	23.57	78	9.24	108	1.38
49	23.06	79	8.76	109	1.21
				110	1.21

General 1981 General Disability Table Set Back 3 Years

Exhibit III

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT
Safety Members

Age	Male & Female	Age	Male & Female	Age	Male & Female
20	50.29	50	24.38	80	7.41
21	49.29	51	23.59	81	7.00
22	48.39	52	22.80	82	6.63
23	47.48	53	22.03	83	6.27
24	46.58	54	21.26	84	5.94
25	45.68	55	20.50	85	5.63
26	44.79	56	19.77	86	5.34
27	43.89	57	19.06	87	5.06
28	43.01	58	18.40	88	4.80
29	42.12	59	17.78	89	4.55
30	41.24	60	17.20	90	4.31
31	40.36	61	16.64	91	4.09
32	39.48	62	16.11	92	3.87
33	38.61	63	15.59	93	3.66
34	37.74	64	15.08	94	3.46
35	36.88	65	14.58	95	3.26
36	36.02	66	14.09	96	3.07
37	35.16	67	13.61	97	2.89
38	34.31	68	13.13	98	2.71
39	33.45	69	12.66	99	2.54
40	32.61	70	12.18	100	2.37
41	31.77	71	11.70	101	2.20
42	30.93	72	11.21	102	2.04
43	30.09	73	10.72	103	1.88
44	29.26	74	10.22	104	1.72
45	28.43	75	9.73	105	1.55
46	27.61	76	9.24	106	1.38
47	26.80	77	8.76	107	1.21
48	25.98	78	8.28	108	1.04
49	25.18	79	7.83	109	0.88
				110	0.88

Safety 1981 Safety Disability Table Set Back 1 Year

Appendix C Summary of Membership and Benefit Statistics

Association Membership and Benefit Statistics

Summary of Active Membership

		June 30, 2000	June 30, 1999	Percent Change
Active General Members				
General Plan 1				
A.	Number	452	470	-3.8%
B.	Average Age	54.42	53.85	1.1%
C.	Average Years of Service	25.10	25.09	0.0%
D.	Annual Salary			
	i. Total	$ 27,894,000	$ 27,691,000	0.7%
	ii. Average Monthly Salary	$ 5,143	$ 4,910	4.7%
General Plan 2				
A.	Number	2,247	2,485	-9.6%
B.	Average Age	45.25	44.55	1.6%
C.	Average Years of Service	9.97	9.23	8.0%
D.	Annual Salary			
	i. Total	$ 125,004,000	$ 128,241,000	-2.5%
	ii. Average Monthly Salary	$ 4,636	$ 4,301	7.8%
General Plan 3				
A.	Number	248	291	-14.8%
B.	Average Age	40.94	40.22	1.8%
C.	Average Years of Service	7.71	7.43	3.8%
D.	Annual Salary			
	i. Total	$ 12,490,000	$ 13,339,000	-6.4%
	ii. Average Monthly Salary	$ 4,197	$ 3,820	9.9%
General Plan 4				
A.	Number	1,071	662	61.8%
B.	Average Age	37.13	36.70	1.2%
C.	Average Years of Service	0.74	0.40	85.0%
D.	Annual Salary			
	i.	$ 49,237,000	$ 27,665,000	78.0%
	ii.	$ 3,831	$ 3,483	10.0%
General Total				
A.	Number	4,018	3,908	2.8%
B.	Average Age	43.85	44.02	-0.4%
C.	Average Years of Service	9.07	9.51	-4.6%
D.	Annual Salary			
	i. Total	$ 214,625,000	$ 196,936,000	9.0%
	ii. Average Monthly Salary	$ 4,451	$ 4,199	6.0%

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Association Membership and Benefit Statistics

		June 30, 2000	June 30, 1999	Percent Change
Active Safety Members				
Safety Plan 1				
A.	Number	106	113	-6.2%
B.	Average Age	52.04	51.32	1.4%
C.	Average Years of Service	25.54	25.04	2.0%
D.	Annual Salary			
	i. Total	$ 8,847,000	$ 8,679,000	1.9%
	ii. Average Monthly Salary	$ 6,955	$ 6,400	8.7%
Safety Plan 2				
A.	Number	229	236	-3.0%
B.	Average Age	40.60	39.77	2.1%
C.	Average Years of Service	10.71	9.88	8.4%
D.	Annual Salary			
	i. Total	$ 16,767,000	$ 16,661,000	0.6%
	ii. Average Monthly Salary	$ 6,102	$ 5,883	3.7%
Safety Plan 4				
A.	Number	88	76	15.8%
B.	Average Age	31.67	30.46	4.0%
C.	Average Years of Service	1.27	0.50	154.0%
D.	Annual Salary			
	i.	$ 5,566,000	$ 4,521,000	23.1%
	ii.	$ 5,271	$ 4,957	6.3%
Safety Total				
A.	Number	423	425	-0.5%
B.	Average Age	41.61	41.18	1.1%
C.	Average Years of Service	12.46	12.23	1.9%
D.	Annual Salary			
	i. Total	$ 31,180,000	$ 29,861,000	4.4%
	ii. Average Monthly Salary	$ 6,143	$ 5,855	4.9%

Association Membership and Benefit Statistics

		June 30, 2000	June 30, 1999	Percent Change
Active Probation Members				
Probation Plan 1				
A.	Number	44	50	-12.0%
B.	Average Age	53.98	53.28	1.3%
C.	Average Years of Service	25.91	26.40	-1.9%
D.	Annual Salary			
	i. Total	$ 2,883,000	$ 3,060,000	-5.8%
	ii. Average Monthly Salary	$ 5,460	$ 5,100	7.1%
Probation Plan 2				
A.	Number	116	127	-8.7%
B.	Average Age	39.26	38.80	1.2%
C.	Average Years of Service	9.71	8.69	11.7%
D.	Annual Salary			
	i. Total	$ 6,478,000	$ 6,462,000	0.2%
	ii. Average Monthly Salary	$ 4,654	$ 4,240	9.8%
Probation Plan 4				
A.	Number	89	68	30.9%
B.	Average Age	31.03	30.00	3.4%
C.	Average Years of Service	0.99	0.37	167.6%
D.	Annual Salary			
	i. Total	$ 3,909,000	$ 2,545,000	53.6%
	ii. Average Monthly Salary	$ 3,660	$ 3,119	17.3%
Probation Total				
A.	Number	249	245	1.6%
B.	Average Age	38.92	39.31	-1.0%
C.	Average Years of Service	9.46	10.00	-5.4%
D.	Annual Salary			
	i. Total	$ 13,270,000	$ 12,067,000	10.0%
	ii. Average Monthly Salary	$ 4,441	$ 4,104	8.2%
Total				
	Number	4,690	4,578	2.4%
	Annual Payroll	$ 259,075,000	$ 238,864,000	8.5%
	Average Monthly Salary	$ 4,603	$ 4,348	5.9%

RETIRED AND INACTIVE VESTED MEMBERS

	June 30, 2000	June 30, 1999	Percent Change
Retired Members			
A. Service Retirement			
i. Number	2,383	2,295	3.8%
ii. Annual Allowance			
Basic Only	$ 30,059,000	$ 27,966,000	7.5%
COLA	$ 13,692,000	$ 12,343,000	10.9%
Total	$ 43,751,000	$ 40,309,000	8.5%
Average Monthly Amount	$ 1,530	$ 1,464	4.5%
B. Disability Retirement			
i. Number	280	263	6.5%
ii. Annual Allowance			
Basic Only	$ 4,014,000	$ 3,517,000	14.1%
COLA	$ 1,591,000	$ 1,402,000	13.5%
Total	$ 5,605,000	$ 4,919,000	13.9%
Average Monthly Amount	$ 1,668	$ 1,559	7.0%
C. Beneficiaries			
i. Number	439	401	9.5%
ii. Annual Allowance			
Basic Only	$ 2,950,000	$ 2,819,000	4.6%
COLA	$ 2,886,000	$ 2,444,000	18.1%
Total	$ 5,836,000	$ 5,263,000	10.9%
Average Monthly Amount	$ 1,108	$ 1,094	1.3%
Total			
i. Number	3,102	2,959	4.8%
ii. Annual Allowance			
Basic Only	$ 37,023,000	$ 34,302,000	7.9%
COLA	$ 18,169,000	$ 16,189,000	12.2%
Total	$ 55,192,000	$ 50,491,000	9.3%
Average Monthly Amount	$ 1,483	$ 1,422	4.3%
Inactive Vested Members			
A. Number	646	613	5.4%

ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE GENERAL PLAN 1 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39				1	1					2
				35,690	50,276					42,983
40-44			1	1	10					12
			39,163	34,177	61,578					57,427
45-49		1		9	33	27	1			71
		66,150		65,270	60,038	55,408	58,038			58,999
50-54		1	4	8	51	58	15			137
		66,350	41,553	66,238	63,081	66,024	57,297			63,273
55-59		2	4	10	41	52	36	9		154
		47,007	47,337	57,765	67,020	63,424	59,494	52,820		61,844
60-64				3	16	17	19	10		65
				52,214	61,490	69,918	61,455	62,677		63,438
65-69				2	4	1				7
				58,848	54,464	63,608				57,023
70-74			1		2			1		4
			58,949		53,628			48,654		53,715
75+										0
Total	-	4	10	34	158	155	71	20	0	452
	0	56,629	45,367	59,976	62,792	63,714	59,534	57,540	0	61,712

Total Salary	$27,893,960
Average Age	54.42
Average Service	25.10

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE GENERAL PLAN 2 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	4									4
	42,769									42,769
25-29	42	26	1							69
	50,004	44,934	37,663							47,914
30-34	62	130	31							223
	54,765	52,207	51,073							52,760
35-39	67	137	116	29	1					350
	54,750	52,763	53,195	54,462	49,790					53,419
40-44	60	121	137	82	7					407
	53,493	53,066	57,308	57,281	56,013					55,457
45-49	55	128	167	77	9	5				441
	61,325	53,250	58,036	62,673	83,640	60,515				58,417
50-54	48	99	127	88	12	10				384
	56,138	57,393	58,687	56,997	73,796	65,399				58,294
55-59	21	60	85	60	9	4	1			240
	59,837	52,499	53,910	55,055	63,172	70,125	74,228			55,064
60-64	4	16	41	27	3	1				92
	61,193	49,814	51,095	55,993	60,118	50,737				53,039
65-69	1	11	8	5						25
	66,350	69,710	48,260	58,363						60,442
70-74		5	3	3						11
		70,860	80,279	36,915						64,171
75+				1						1
				34,771						34,771
Total	364	733	716	372	41	20	1	0	0	2,247
	55,439	53,439	55,995	57,447	69,002	64,390	74,228	0	0	55,631

Total Salary	$125,004,033
Average Age	45.25
Average Service	9.97

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE GENERAL PLAN 3 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	6									6
	38,628									38,628
25-29	26	7								33
	46,018	46,610								46,144
30-34	22	16								38
	46,260	46,393								46,316
35-39	13	11	10	2						36
	45,488	56,612	63,629	50,550						54,207
40-44	10	12	12	8	1					43
	46,502	58,087	50,194	47,724	42,141					50,891
45-49	7	12	11	5	4					39
	55,632	59,930	51,868	76,683	57,623					58,796
50-54	2	8	13	5		1				29
	62,592	47,580	50,795	42,392		69,842				49,930
55-59	4	1	6	3	2	1	1			18
	32,521	41,413	51,788	51,525	64,935	41,943	34,771			46,855
60-64		2	2							4
		35,666	40,406							38,036
65-69				2						2
				49,596						49,596
70-74										0
75+										0
Total	90	69	54	25	7	2	1	0	0	248
	46,078	52,187	52,982	53,281	57,500	55,893	34,771	0	0	50,363

Total Salary	$12,490,022
Average Age	40.94
Average Service	7.71

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE GENERAL PLAN 4 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	3									3
	26,798									26,798
20-24	82									82
	34,466									34,466
25-29	201									201
	42,185									42,185
30-34	218	2	1							221
	47,899	39,417	41,734							47,795
35-39	160									160
	45,588									45,588
40-44	111									111
	45,010									45,010
45-49	149	1								150
	48,791	45,917								48,772
50-54	89									89
	57,060									57,060
55-59	37	1								38
	49,094	36,155								48,753
60-64	14									14
	46,739									46,739
65-69	2									2
	48,800									48,800
70-74										0
75+										0
Total	1,066	4	1	0	0	0	0	0	0	1,071
	45,999	40,227	41,734	0	0	0	0	0	0	45,973

Total Salary	$49,237,238
Average Age	37.13
Average Service	.74

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE SAFETY PLAN 1 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44				2	5					7
				89,587	83,420					85,182
45-49				1	14	3				18
				70,746	80,631	95,042				82,484
50-54			1		15	25	11			52
			92,511		80,065	80,772	82,325			81,122
55-59				1	4	14	5			24
				72,596	74,836	91,282	94,781			88,491
60-64						3		2		5
						82,403		88,262		84,747
65-69										0
70-74										0
75+										0
Total	0	0	1	4	38	45	16	2	0	106
	0	0	92,511	80,629	80,165	85,102	86,218	88,262	0	83,461

Total Salary	$8,846,864
Average Age	52.04
Average Service	25.54

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE SAFETY PLAN 2 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29	3	4								7
	66,243	64,835								65,439
30-34	7	24	10							41
	61,546	69,070	71,711							68,429
35-39	4	15	33	3						55
	60,299	71,750	73,815	72,693						72,208
40-44	3	9	26	18						56
	64,174	68,985	73,918	76,122						73,311
45-49	3	6	17	23						49
	63,592	82,568	74,122	79,302						76,943
50-54	1		8	11						20
	90,203		73,093	83,326						79,577
55-59										0
60-64										0
65-69			1							1
			64,953							64,953
70-74										0
75+										0
Total	21	58	95	55	0	0	0	0	0	229
	64,012	70,854	73,523	78,706	0	0	0	0	0	73,219

Total Salary	$16,767,243
Average Age	40.60
Average Service	10.71

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE SAFETY PLAN 4 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	1									1
	48,230									48,230
20-24	5									5
	55,164									55,164
25-29	27									27
	61,377									61,377
30-34	33	1								34
	63,726	51,353								63,362
35-39	15									15
	65,732									65,732
40-44	3									3
	69,363									69,363
45-49	2									2
	76,234									76,234
50-54	1									1
	83,866									83,866
55-59										0
60-64										0
65-69										0
70-74										0
75+										0
Total	87	1	0	0	0	0	0	0	0	88
	63,386	51,353	0	0	0	0	0	0	0	63,249

Total Salary	$5,565,946
Average Age	31.67
Average Service	1.27

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE PROBATION PLAN 1 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44				2						2
				69,799						69,799
45-49			2	1	2					5
			30,465	45,012	74,513					50,993
50-54				2	4	7	4			17
				69,799	58,590	68,076	74,954			67,665
55-59					5	2	6	2		15
					65,364	62,678	67,113	78,082		67,401
60-64						1	2	1		4
						69,799	64,426	64,426		65,770
65-69								1		1
								64,426		64,426
70-74										0
75+										0
Total	0	0	2	5	11	10	12	4	0	44
	0	0	30,465	64,842	64,564	67,169	69,279	71,254	0	65,532

Total Salary	$2,883,392
Average Age	53.98
Average Service	25.91

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE PROBATION PLAN 2 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29	11	3								14
	47,151	59,089								49,709
30-34	12	12	1							25
	50,369	59,002	60,930							54,935
35-39	5	6	15	2						28
	55,108	49,195	54,649	61,532						54,054
40-44	1	3	11	5						20
	42,205	59,983	60,611	60,647						59,606
45-49		3	4	6	1					14
		52,366	62,407	62,561	91,738					62,417
50-54	1	1	2	2		1				7
	51,482	30,465	61,532	65,365		69,799				57,934
55-59		1	2	1	1	1	1			7
		34,564	60,930	62,135	60,930	65,631	79,226			60,621
60-64				1						1
				62,135						62,135
65-69										0
70-74										0
75+										0
Total	30	29	35	17	2	2	1	0	0	116
	49,744	54,570	58,341	62,157	76,334	67,715	79,226	0	0	55,834

Total Salary	$6,478,000
Average Age	39.26
Average Service	9.71

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ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION
OF ACTIVE PROBATION PLAN 4 MEMBERS

Age Group	YEARS OF SERVICE 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24	7									7
	38,173									38,173
25-29	44									44
	42,186									42,186
30-34	25									25
	42,431									42,431
35-39	3									3
	41,686									41,686
40-44	2									2
	54,141									54,141
45-49	1	1								2
	46,147	60,930								53,539
50-54	3									3
	78,715									78,715
55-59	2									2
	45,462									45,462
60-64	1									1
	57,566									57,566
65-69										0
70-74										0
75+										0
Total	88	1	0	0	0	0	0	0	0	89
	43,731	60,930	0	0	0	0	0	0	0	43,924

Total Salary	$3,909,229
Average Age	31.03
Average Service	.99

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED GENERAL MEMBERS

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44										0
45-49										0
50-54	81	1								82
	9,267	6,135								9,229
55-59	115	61								176
	11,352	9,677								10,771
60-64	148	102	44	1						295
	17,851	14,830	12,494	8,086						15,974
65-69	146	128	54	41	1					370
	18,657	19,245	16,016	9,442	7,112					17,422
70-74	37	146	133	80	33					429
	16,554	20,678	18,892	13,128	9,276					17,484
75+	6	36	208	292	262	100	17	3		924
	25,054	14,202	19,334	15,773	15,666	12,492	9,798	3,940		16,040
Total	533	474	439	414	296	100	17	3	0	2,276
	15,356	17,094	18,107	14,616	14,925	12,492	9,798	3,940	0	15,876

Total Annual Benefit	$36,132,609
Average Age	71.62
Average Years Retired	11.56

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF NON-SERVICE CONNECTED DISABILITY RETIRED GENERAL MEMBERS

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44	5									5
	15,121									15,121
45-49	5	3								8
	16,955	13,722								15,743
50-54	7	3								10
	12,883	13,773								13,150
55-59	3	6	3	1						13
	10,900	13,048	13,574	21,603						13,332
60-64	7	9	6	1	1	2				26
	11,656	10,045	14,592	7,102	10,312	10,364				11,450
65-69	2	3	4	1	1		1			12
	14,828	8,293	14,209	9,941	12,461		12,797			12,214
70-74		4	5	4	4	1				18
		8,099	7,177	11,232	10,508	9,936				9,177
75+			2	4	16	14	1			37
			6,628	8,333	14,661	9,518	7,538			11,404
Total	29	28	20	11	22	17	2	0	0	129
	13,604	11,016	11,713	10,628	13,608	9,642	10,168	0	0	11,921

Total Annual Benefit	$1,537,764
Average Age	65.93
Average Years Retired	13.12

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF SERVICE CONNECTED DISABILITY RETIRED GENERAL MEMBERS

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34	1									1
	21,676									21,676
35-39	4									4
	20,661									20,661
40-44	1									1
	35,604									35,604
45-49	5	4								9
	25,229	20,260								23,021
50-54	7	3	2							12
	21,001	35,491	23,398							25,023
55-59	8	6	1							15
	18,966	20,694	23,041							19,929
60-64	7	6	2			1				16
	18,250	21,563	22,331			20,459				20,141
65-69	4	3	1	1	2					11
	22,251	24,774	19,020	14,989	16,696					20,975
70-74		3		1	2					6
		16,289		47,504	19,537					22,574
75+			1	1	5	5	1			13
			16,729	18,958	27,376	17,246	11,864			20,820
Total	37	25	7	3	9	6	1	0	0	88
	21,123	22,570	21,464	27,150	23,261	17,782	11,864	0	0	21,652

Total Annual Benefit	$1,905,408
Average Age	61.07
Average Years Retired	8.64

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF GENERAL BENEFICIARIES

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	4									4
	4,620									4,620
20-24	1									1
	1,538									1,538
25-29										0
30-34	1									1
	10,173									10,173
35-39	2									2
	10,531									10,531
40-44	1	1								2
	6,436	6,528								6,482
45-49	3	1	1							5
	8,969	8,000	17,064							10,394
50-54	16	3	2	1		1				23
	11,993	7,846	3,094	7,565		2,319				10,065
55-59	10	1	4							15
	13,813	12,864	7,224							11,993
60-64	11	5	4			1				21
	10,812	10,444	10,398			9,346				10,575
65-69	22	8	9	4	1				1	45
	11,773	9,914	8,564	8,422	6,840				42,431	11,075
70-74	17	13	8	7	6	2			2	55
	15,106	13,006	17,266	14,902	2,551	1,675			21,811	13,284
75+	84	38	43	36	35	19	4		3	262
	9,746	14,370	8,592	8,901	11,486	9,507	8,862		13,997	10,362
Total	172	70	71	48	42	23	4	0	6	436
	10,861	12,823	9,555	9,708	10,099	8,507	8,862	0	21,341	10,765

Total Annual Benefit	$4,693,316
Average Age	74.37
Average Years Retired	10.77

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED SAFETY AND PROBATION MEMBERS

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44										0
45-49	1									1
	13,659									13,659
50-54	12	2								14
	28,478	13,315								26,312
55-59	62	17	3							82
	42,845	32,622	26,096							40,113
60-64	15	27	8	1						51
	32,939	42,204	29,624	22,392						37,117
65-69	4	13	8	2						27
	10,265	17,118	50,050	23,925						26,365
70-74	1	1	4	3	6					15
	12,312	70,152	47,923	23,473	28,032					34,184
75+			1	1	10	7	1			20
			7,708	43,934	54,828	29,620	22,063			41,466
Total	95	60	24	7	16	7	1	0	0	210
	37,466	33,557	38,128	26,371	44,780	29,620	22,063	0	0	36,277

Total Annual Benefit	$7,618,177
Average Age	66.42
Average Years Retired	15.29

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED SAFETY AND PROBATION MEMBERS NON-SERVICE DISABILITY

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44										0
45-49										0
50-54			1							1
			4,045							4,045
55-59		1								1
		23,454								23,454
60-64		1								1
		1,968								1,968
65-69										0
70-74										0
75+					1	1				2
					31,320	27,692				29,506
Total	0	2	1	0	1	1	0	0	0	5
	0	12,711	4,045	0	31,320	27,692	0	0	0	17,696

Total Annual Benefit	$88,479
Average Age	66.20
Average Years Retired	15.20

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OF RETIRED SAFETY AND PROBATION MEMBERS SERVICE CONNECTED DISABILITY

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34	1									1
	30,469									30,469
35-39	2									2
	32,568									32,568
40-44	2									2
	29,560									29,560
45-49	3	3								6
	32,822	28,368								30,595
50-54	2	6	1							9
	33,127	30,403	24,365							30,338
55-59	11	6	4	2	1					24
	49,234	35,186	28,988	31,512	27,472					39,964
60-64	2	1	3		1	3				10
	51,324	42,281	32,607		26,553	26,781				34,965
65-69						1	2			3
						25,239	18,823			20,962
70-74					1					1
					34,089					34,089
75+					1	1		1		3
					25,975	18,259		11,755		18,663
Total	23	16	8	2	4	5	2	1	0	61
	41,899	32,557	29,767	31,512	28,522	24,768	18,823	11,755	0	33,985

Total Annual Benefit	$2,073,084
Average Age	56.84
Average Years Retired	9.90

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ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION
OF RETIRED SAFETY AND PROBATION BENEFICIARIES

Age Group	YEARS RETIRED 0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										0
20-24										0
25-29										0
30-34										0
35-39										0
40-44	1	1								2
	8,912	39,071								23,992
45-49	1									1
	4,233									4,233
50-54	4	3	1	2						10
	25,190	16,166	9,606	8,636						17,614
55-59	1	4	1							6
	5,734	13,772	7,680							11,417
60-64	2	1	3							6
	16,013	34,001	32,079							27,044
65-69	4	3	1		1					9
	30,233	43,599	22,473		14,990					32,132
70-74	1	1		2			1			5
	12,781	6,796		36,251			17,384			21,893
75+	1	1	2	2	2	2		3		13
	14,814	14,055	21,836	17,088	17,697	29,016		13,196		18,441
Total	15	14	8	6	3	2	1	3	0	52
	20,013	23,450	22,459	20,658	16,795	29,016	17,384	13,196	0	21,106

Total Annual Benefit	$1,097,500
Average Age	65.19
Average Years Retired	10.98

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SUMMARY OF MONTHLY ALLOWANCES BEING PAID AS OF JUNE 30, 2000

General Members

Service	Number	Monthly Allowance Basic	Cost of Living	Total
Unmodified	2,076	$ 1,874,433	$ 937,137	$ 2,811,570
Option 1	95	75,743	39,109	114,852
Option 2,3, & 4	105	65,518	19,111	84,629
Total	2,276	$ 2,015,694	$ 995,357	$ 3,011,051
Ordinary Disability				
Unmodified	118	$ 75,327	$ 44,648	$ 119,975
Option 1	7	2,886	2,033	4,919
Option 2,3, & 4	4	2,436	817	3,253
Total	129	$ 80,649	$ 47,498	$ 128,147
Duty Disability				
Unmodified	83	$ 113,826	$ 36,296	$ 150,122
Option 1	4	4,378	2,770	7,148
Option 2,3, & 4	1	1,111	403	1,514
Total	88	$ 119,315	$ 39,469	$ 158,784
Beneficiaries				
Total	436	$ 196,026	$ 195,084	$ 391,110

Safety and Probation Members

Service	Number	Monthly Allowance Basic	Cost of Living	Total
Unmodified	199	$ 471,840	$ 140,636	$ 612,476
Option 1	4	5,870	2,150	8,020
Option 2,3, & 4	7	11,532	2,821	14,353
Total	210	$ 489,242	$ 145,607	$ 634,849
Ordinary Disability				
Unmodified	5	$ 3,404	$ 3,969	$ 7,373
Option 1	-	-	-	-
Option 2,3, & 4	-	-	-	-
Total	5	$ 3,404	$ 3,969	$ 7,373
Duty Disability				
Unmodified	59	$ 127,227	$ 40,920	$ 168,147
Option 1	-	-	-	-
Option 2,3, & 4	2	3,850	760	4,610
Total	61	$ 131,077	$ 41,680	$ 172,757
Beneficiaries				
Total	52	$ 47,839	$ 43,619	$ 91,458

Appendix D Members' Contribution Rates

MEMBERS' CONTRIBUTION RATES

ENTRY AGE	GENERAL Plan 1 & 2	GENERAL Plan 4	SAFETY Plan 1 & 2	SAFETY Plan 4	PROBATION Plan 1, 2 & 4
16	5.39%	5.14%			
17	5.39%	5.14%			
18	5.39%	5.14%	6.75%	6.42%	7.56%
19	5.39%	5.14%	6.75%	6.42%	7.56%
20	5.39%	5.14%	6.76%	6.43%	7.57%
21	5.40%	5.15%	6.77%	6.44%	7.58%
22	5.41%	5.16%	6.78%	6.46%	7.60%
23	5.42%	5.17%	6.80%	6.47%	7.61%
24	5.44%	5.19%	6.82%	6.49%	7.64%
25	5.46%	5.21%	6.84%	6.51%	7.66%
26	5.48%	5.23%	6.87%	6.54%	7.69%
27	5.51%	5.25%	6.90%	6.57%	7.73%
28	5.54%	5.28%	6.94%	6.60%	7.77%
29	5.57%	5.31%	6.98%	6.64%	7.82%
30	5.60%	5.34%	7.03%	6.69%	7.87%
31	5.64%	5.38%	7.08%	6.74%	7.93%
32	5.68%	5.41%	7.14%	6.79%	7.99%
33	5.72%	5.46%	7.20%	6.85%	8.06%
34	5.77%	5.50%	7.27%	6.92%	8.14%
35	5.82%	5.55%	7.34%	6.99%	8.22%
36	5.88%	5.60%	7.42%	7.06%	8.31%
37	5.94%	5.66%	7.50%	7.14%	8.40%
38	6.00%	5.72%	7.59%	7.22%	8.50%
39	6.07%	5.79%	7.68%	7.31%	8.60%
40	6.14%	5.85%	7.78%	7.40%	8.71%
41	6.21%	5.92%	7.88%	7.50%	8.82%
42	6.29%	6.00%	7.99%	7.60%	8.94%
43	6.37%	6.07%	8.09%	7.70%	9.06%
44	6.45%	6.15%	8.21%	7.81%	9.19%
45	6.54%	6.24%	8.32%	7.92%	9.32%
46	6.63%	6.32%	8.44%	8.03%	9.45%
47	6.72%	6.41%	8.56%	8.15%	9.59%
48	6.82%	6.50%	8.69%	8.48%	9.97%
49	6.92%	6.60%	8.82%	8.82%	10.37%
50	7.03%	6.70%			
51	7.14%	6.81%			
52	7.25%	6.91%			
53	7.36%	7.02%			
54	7.48%	7.13%			
55	7.60%	7.25%			
56	7.72%	7.36%			
57	7.84%	7.48%			
58	7.97%	7.78%			
59 & Over	8.09%	8.09%			

The following sections are also used in deriving the contribution rates.

	General		Safety		Probation Officers
	Plan 1 & 2	Plan 4	Plan 1 & 2	Plan 4	Plan 1, 2 & 4
Section	31676.1	31676.1	31664	31664	31664
Years of Final Average Salary	1	3	1	3	3
Percent of Full Rates	100%	100%	85%*	85%*	100%

* For Safety management and sergeants, their rates should be calculated by taking the above rates and dividing by 85%.

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Appendix E Glossary of Actuarial Terminology

AAL: See Actuarial (Accrued Liability)

Accrued Benefit: The amount of an individual's benefit (whether or not vested) as of a specified date, determined in accordance with the terms of a pension plan and based on compensation (if applicable) and service to that date.

Actuarial Accrued Liability: "Target assets" which would be on hand were the Association's current level of benefits to have been funded as a level percentage of pay each year from date of entry into the Association by all current members and interest at the current investment return assumption were credited each year. It also includes the actuarial present value of all retired members and beneficiaries future benefits.

Actuarial Asset Value: The value of Assets used by the actuary in the actuarial valuation. In order to reduce the impact of assets value fluctuation and to capture the long term intrinsic value of the Association's assets, actuaries sometimes use smoothing methods. These methods usually reflect the current market value of assets in some manner.

Actuarial Assumptions: Those assumptions such as interest (investment return), salary increases, termination from service and mortality needed by the actuary to complete an actuarial valuation.

Actuarial Gain (Loss): The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

(a) adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.)

(b) multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

(c) discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuary: A business mathematician trained in mathematics, risk analysis and finance. An actuary is assigned the task of determining the contribution required to maintain financial balance as to inflow and outflow from a retirement Association.
Assets: Underlying funds available to provide for the Association's benefits. It reflects the accumulation of all contributions and investment earnings.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL): That annual contribution rate which, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution is calculated to remain as a level percentage of future active member payroll (including payroll of new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments are scheduled to increase at the annual inflation rate.

Entry Age Normal Actuarial Funding Method: An actuarial method for pre-funding future retirement benefits. Under this method which the member contribution stream plus the employer contribution stream is determined as that level of percentage of payroll sufficient to finance benefits and employee contribution refunds for new entrant.

GASB: The Government Accounting Standards Board which promulgates financial reporting and disclosure requirements for governmental entities, including public retirement Associations.

GASB Statement No. 25: A set of disclosures promulgated by GASB to provide users of financial statements information as to the funding status of a public retirement Association. GASB No. 25 specifies the Actuarial Accrued Liability as a standardized target level of assets.

Investment Return Assumption: The average rate of investment earnings which is assumed will be earned by Association funds.

Normal Cost: That annual contribution rate which, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate. The contribution rate is expressed as a level percentage of the member's compensation.

Pension Benefit Obligation: A standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date.

UAAL: (See Unfunded Actuarial Accrued Liability).

Unfunded Actuarial Accrued Liability: Actuarial Accrued Liability minus the Actuarial Value of Assets.