

Actuarial Valuation Report

Sacramento County
Employees' Retirement System

As of June 30, 2000

December 2000

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December 7, 2000

Board of Retirement Sacramento County Employees' Retirement System 980 - 9th Street, Suite 750 Sacramento, California 95814

Dear Members of the Board:

We are pleased to present the actuarial valuation for the Sacramento County Employees' Retirement System 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 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.

This report conforms with the requirements of the governing state and local statutes, accounting rules, and generally accepted actuarial principles and practices.

This report reflects 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 Ventura decision.

We have calculated the employer and member contribution rates assuming:

- The Reserve for Interest Fluctuations is retained at 2.5%;
- \$5.1 million and \$71.1 million will be transferred from excess earnings so that member and employer contribution rates will be maintained at the level established at the June 30, 1999 valuation.



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 on December 21, 2000.

Sincerely,

Andy Yeung, ASA, EA, MAAA

Drew James ay

Drew James, FSA, EA, MAAA

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Actuarial Certification

The annual actuarial valuation required for the Sacramento County Employees' Retirement System 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 System's assets, liability and future contribution requirements. Our calculations are based upon member data and unaudited financial information provided to us by the System'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 years' data.

The contribution requirements are determined as a percentage of payroll. The primary funding objective of the System is to determine employer rates required to 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 22 years as of June 30, 2000. The contribution to the unfunded actuarial accrued liability (which is currently negative for the County, resulting in a rate credit) is calculated to remain level as a percentage of future payroll (including projected payroll for future members). Payments (credits) will increase with payroll at a rate of 4.25% per year. The period for amortizing the unfunded actuarial accrued liability is set by the Board of Retirement.

The County issued Pension Obligation Bonds on July 5, 1995 to fully fund its unfunded actuarial accrued liability calculated as of June 30, 1994. Districts did not participate in the bond issue.

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 decreased slightly from 110.4% to 110.1% during the year.

There were no other changes in the actuarial assumptions or methods used in the determination of actuarial present values this year. In our opinion, the combined operation of the assumptions and methods applied in this valuation fairly represent past and anticipated future experience of the System and meet the parameters required by GASB Statement 25.

A list of the supporting schedules we prepared for inclusion in the Actuarial and Financial Sections of the System's CAFR report is provided below:

- (1) Schedule of Active Member Valuation Data
- (2) Retirees and beneficiaries Added to and Removed From Retiree Payroll
- (3) Solvency Tests
- (4) Actuarial Analysis of Financial Experience
- (5) Schedule of Average Benefit Payments for Retirees and Beneficiaries

(6) Schedule of Funding Progress

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.

This report reflects 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 Ventura decision.

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

William M. Mercer, Incorporated

Andy Yeung, ASA, EA, MAAA

12/7/2000

Date

Drew James, FSA, EA, MAAA

12/7/2000

Date

Board Member Summary of Valuation Results

Summary of Recommendations

Employer Contributions Rates*	June 30, 2000	June 30, 1999	Increase/ (Decrease)
Normal Cost Rate:	10.52%	10.45%	0.07%
Rate of Contribution to Unfunded	-3.66%	-3.59%	-0.07%
Actuarial Accrued Liability:	• •	•	
Total Employer Rate:	6.86%	6.86%	0.00%
Estimated Annual Amount**:	\$38,375,000	\$38,375,000	\$0

Member Contribution Rates***	June 30, 2000	June 30, 1999	Increase/ (Decrease)	Average Change per Bi-Week
General Members		•		
Tier 1	6.65%	6.65%	0.00%	\$ -
Tier 2	5.78%	5.78%	0.00%	s -
Tier 3	6.12%	6.12%	0.00%	\$ -
Safety Members				
Tier 1	9.13%	9.13%	0.00%	S -
Tier 2	8.62%	8.62%	0.00%	\$ -
Estimated Annual Amount**:	\$ 30,295,000	\$ 30,295,000	\$ -	

Actuarial Assumptions	June 30, 2000	June 30, 1999	Increase/ (Decrease)	
Annual Inflation Rate:	4.25%	4.25%	0.00%	
Annual Investment Return:	8.00%	8.00%	0.00%	
Average Annual Salary Increases:	5.55%	5.55%	0.00%	

Other assumptions are based upon the June 30, 1998 experience analysis

^{*} Result based on recommended study (8.0% interest, 4.25% inflation and 1.30% average merit and longevity assumptions.)

^{**} June 30, 1999 and June 30, 2000 annual contributions are projected based on estimated payroll as of June 30, 2000

^{***} Based on single full-rates payable by member.

SACRAMENTO COUNTY EMPLOYEES' RETIREMENT SYSTEM Summary of Significant Actuarial Statistics and Measures

		June 30, 2000	June 30, 1999	Increase/ (Decrease)
Syst	em Membership			
Acti	ve Members			
1.	Number of Members	12,235	11.354	8%
2.	Total Active Payroll	\$559,047.000	\$502,325,000	11%
3.	Average Monthly Salary	\$3,808	\$3,687	3%
Reti	red Members		•	
1.	Number of Members			
	Service Retirement	3,937	. 3,811	3%
	Disability Retirement	675	669	1%
	Beneficiaries	876	823	6%
	Total	5,488	5,303	3%
2.	Total Retired Payroll	\$91,391,000	\$85,698,000	7%
3.	Average Monthly Pension	\$1,388	\$1.347	3%
Inac	tive Vested Members			
1.	Number of Members	1,828	1,739	5%
Ass	et Values (Net)			
	Market Value	\$3,679,913,000	\$3,395,406,934 *	8%
	Return on Market Value	9.18%	11.71%	(2.53%)
	Actuarial Value	\$3,427,348,000	\$3,017,639,000	14%
	Return on Actuarial Value	14.46%	16.52%	(2.06%)
Lia	bility Values	·		
~	Actuarial Accrued Liability	\$3,111,760,000	\$2,734,548,000	14%
	Unfunded Actuarial Accrued Liability (UAAL)	(\$315,588,000)	(\$283,091,000)	11%
Fur	iding Ratios		· · · · · · · · · · · · · · · · · · ·	
	GASB No. 25	110.1%	110.4%	0%

Explanation of Changes in Actuarial Values

Employer Contribution Rate

The average employer contribution rate remains unchanged at 6.86% of payroll after including the Board's transfer of \$71.1 million from excess earnings. A reconciliation of the employer's contribution rate from the June 30, 1999 to the June 30, 2000 valuation is as follows:

Summary of Gain/ Loss	Rate Impact 6.86%	£	Dollar Impact 38,375,000
June 30, 1999 Employer Rate	0.8070	J.	
Investment return greater than expected	-0.07%	\$	(391,000)
Transfer to Offset Future Employer Contributions	-0.83%	\$	(4,640,000)
Salary increase greater than expected	0.54%	\$	3,019,000
Change in Normal Cost	0.07%	\$	391,000
Dilution of Prefunded Actuarial Accrued Liability Credit	0.22%	\$	1,230,000
Miscellaneous (gains)/ losses	0.07%	\$.	391,000
Subtotal	0.00%	\$	•
June 30, 2000 Employer Rate	6.86%	\$	38,375,000

Explanation of Gain/ Loss Items

<u>Investment return greater than expected</u> - The System's actuarial valuation assets earned 0.24% in excess of the 8% return assumption.

<u>Transfer to offset future employer contributions</u> - A transfer of \$71.1 million in excess earnings is required to reduce employer contributions to the level determined in the June 30, 1999 valuation.

<u>Salary increase greater than expected</u> - The average salary for continuing actives increased by 8.08% and was higher than the expected increase of 5.55%.

<u>Change in Normal Cost</u> - There was an increase in the Normal Cost due to change in demographics of the group.

<u>Dilution of Prefunded Actuarial Accrued Liability Credit</u> - The aggregate payroll increased by 11.29% and was higher than the expected increase of 4.25%. The unexpected increase diluted the percentage of payrol credit drawn from the Prefunded Actuarial Accrued Liability.

Miscellaneous (gains)/ losses - Other actuarial gains or losses with untraced sources.

Member Contribution Rate

Members' contribution rates are unchanged after the Board's \$5.1 million transfer from excess earnings to maintain the rates at last year's level.

Funding Ratios

The change in funding ratio is due to actuarial experience as detailed under Employer Contribution Rate above.

Asset Valuation Method

There were no changes to the asset valuation method from the June 30, 1999 valuation.

Actuarial Assumptions

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 member 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 consists 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

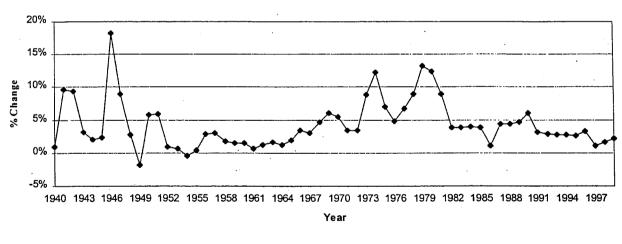
Recommendation

The Board has adopted our recommendation to keep the current inflation rate assumption at 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:

Annual Increase in CPI (1940 Through 1999)



___ % Change in CPI

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 12/31/1999:	<u>CPI</u>
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)

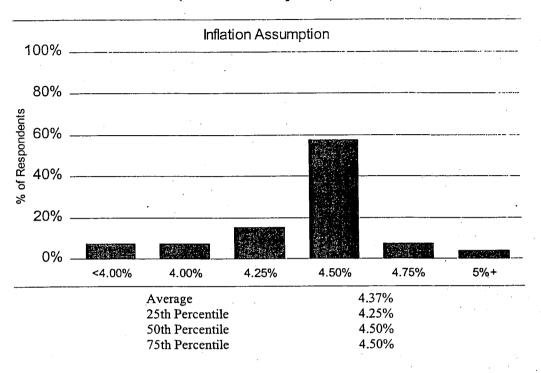
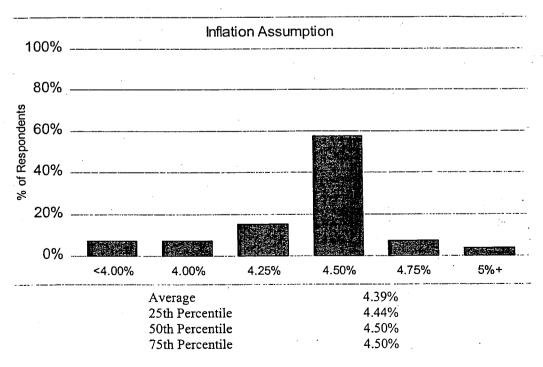


Chart 3 - Comparison of Economic Actuarial Assumptions 37 Act County Respondents (based on 16 responses)



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%.

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

Investment Return

Recommendation

The Board has adopted our recommendation to keep the current investment return assumption of 8.00%. 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 System 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)

	<u>(1926 – 1999)</u>
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 System'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 System 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 System'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 System 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 System's portfolio.

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

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

	Current	<u>Target</u>
Domestic Stocks*	41%	40%
International Stocks	20%	20%
Bonds and Fixed Income	30%	30%:
Real Estate	8%	10%
Cash Equivalents and Short-Term	1%	0%

^{*} Includes 5% in small cap.

Applying the target asset allocation (Table 4) to the information in Table 3 results in a real rate of return of approximately 5.72%. 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).

Table 5 provides the expenses of the fund as a percentage of assets for each of the 5 fiscal years preceding June 30, 2000.

Table 5

Expenses as a Percentage of Average Assets at Actuarial Value

Fiscal Year End	Administrative	Investment	Total
1996	0.11%	0.26%	0.37%
1997	0.11%	0.29%	0.40%
1998	0.12%	0.29%	0.41%
1999	0.12%	0.26%	0.38%
2000	0.10%	<u>0.33%</u>	0.43%
Average	0.11%	0.29%	0.40%

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

Risk Adjustment

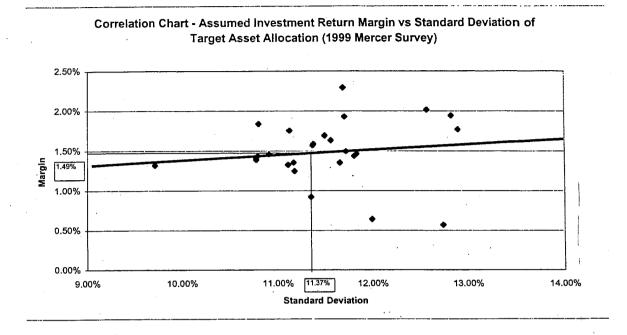
The net real rate of return assumption should reflect the risk associated with not achieving expectations. This is developed by considering:

- 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 3 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.



As you can see from the chart, the Association's risk adjustment so calculated would be approximately 1.49%, based on our calculation of the portfolio's annual standard deviation of 11.37% (based on the System's target asset allocation).

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)

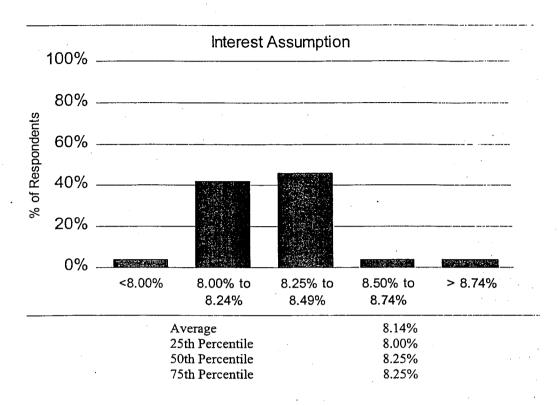
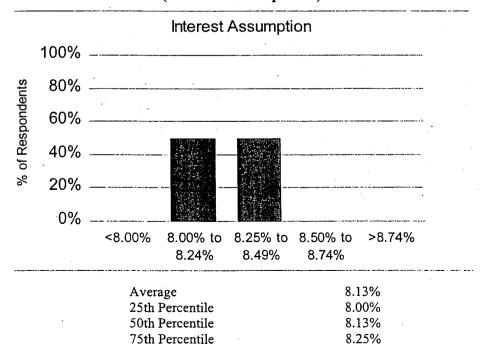


Chart 6 - Comparison of Economic Actuarial Assumptions 37 Act County Respondents (based on 16 responses)



The average investment return rates from the survey for both of these groups was approximately 8.1%. Exactly 50% of 1937 Act Systems were using a return assumption below 8.25%.

Development of Recommendation

Based on the above analysis, we arrive at a real rate of return assumption of 3.83% (average gross rate of return of 5.72% minus 0.40% expenses minus risk adjustment of 1.49%). Combining this rate and the inflation assumption of 4.25% results in an expected return of 8.08%. We recommend the Board consider an investment return assumption of 8.0%.

Although the combined return of 8.08% is higher than the recommended investment return assumption of 8%, the 8% recommendation is still reasonable. However, we believe the Board has flexibility to raise the assumption by 0.25% when such a move is deemed prudent. Before making such a move, the Board should consider any need to maintain additional conservatism as a contingency against future court interpretations requiring Earnable Compensation to include such items as accrued vacation time paid off at retirement or application of the Ventura Decision retroactively.

Salary Increase Assumptions

Recommendations

Salary Increase Assumptions

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

- Inflation Rate
- Salary Scale

Using an inflation rate of 4.25%, following are the total rates of annual salary increase:

Table 6 - Real Salary Increase Assumptions

	General Members	Safety Members
	Recommended Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 20-24	5.4%	5.3%
Ages 25-29	3.6%	3.8%
Ages 30-34	2.4%	2.3%
Ages 35-39	2.1%	1.3%
Ages 40-44	1.8%	1.1%
Ages 45-49	1.4%	0.9%
Ages 50-54	1.1%	0.9%
Ages 55-59	0.7%	0.9%
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Table 6 - Real Salary Increase Assumptions (continued)

	General Members	Safety Members
	Recommended Salary Increase Assumptions	Recommended Salary Increase Assumptions
Ages 60-64	0.6%	0.8%
Ages 65-69	0.6%	0.8%
Age 70+	.0.4%	0.8%

These salary increase assumptions were reviewed as part of the June 30, 1998 experience analysis.

Setting the Assumption

The Actuarial Standards Board specifies the following data be considered in setting the salary increase assumptions (Section 3.7.1):

- 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 Standard of Practice 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 inflation assumption is used as a base salary increase assumption. There is a sound economic reason for doing this. The inflation assumption represents our expected long-term annual increase in the cost of goods and services. In order for an employee 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, employees will suffer a continuously eroding standard of living, which in turn will increase employee 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 the 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

There 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 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 System.

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 recommended 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% recommended 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 was reviewed as part of our June 30, 1998 experience analysis. These increases are incorporated in Table 6.

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, 1998 triennial experience investigation. Adjustments to the current assumptions were 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 (while eligible for service retirement; before service retirement eligibility; 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

In the June 30, 1998 experience study, an analysis was carried out to determine the probability of members terminating from active service for various causes. The probabilities developed in that study are used as the basis of determining costs in this valuation.

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

Post-Retirement Mortality

In the June 30, 1998 experience study, the mortality of members after service and after disability retirement was also analyzed. The life expectancies based on tables developed from that study 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 and 31497.3 for General members, and Section 31664 for Safety members. The mortality table is the 1994 Group Annuity Mortality Table for males set back three years for General Members and no set back for Safety Members. 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 System 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 System 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 (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll of new members as they enter the System) 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 22 years 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.

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, 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), would accumulate to the amount necessary to fund an annuity at that age equal to 1/240 of Final Average Salary for General members (1/200 for Safety members). In addition to their basic contributions, members pay for one-quarter of the total contributions necessary to fund their cost-of-living benefits. Accumulation includes annual crediting of interest at the assumed investment earnings rate.

Actuarial Value of Assets

Background

Under the Entry Age Normal Actuarial Funding Method, a determination is made of the target value of assets the System would hold if current 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 investment return 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 July 1, 1995, the Board adopted an asset valuation method that smoothes the deviation of total market return (net of expenses) from the 8% return target. This method uses a 5 year period to smooth these deviations.

As a transition to this method, the difference between the June 30, 1994 actuarial value of assets and market value of assets was "smoothed in" over the 5 years beginning on June 30, 1995. The difference between the 1995 market returns (approximately 15.2% net of expenses) and the 8% assumption were also smoothed in over that period.

Sacramento County Employees' Retirement System Actuarial Value of Assets as of June 30, 2000

	Deferred Return		•	•		101 FLC C3	77,247,464	101,062,073	07 218 750		32,036,908		
				64)	69	69	- 6	•	64	4	÷ .	₩.	
		Deferred	Factor	0	0	0		7.0	0.4	90	9.5	8.0	
	(1-2)	Investment	Gain (Loss)	34,243,920	84,030,932	172.980.782	100 100 100	201,237,422	252,655,181	112 021 265	507,150,211	40,046,135	
				6	64	64	•	•	₩.	6	9	69	
	(2)	expected Market	Return (Net)		90,153,128	147 067 388	000000000000000000000000000000000000000	174,614,767	209,002,724	345 354 001	170,456,041	272.141.586	
		ш			69	v	• •	64	64		4	64)
2000	Ξ	Total Market	Return (Net)		174.184.060	071 870 072	07101070	435,852,189	461 657 905	700 100 100	35/,385,280	117 187 721	
					Ç.		9	∽	4	€ €	A	G	9
Actual is a fue of Assets to of suite out the		Average Value		1 144 007.751	1 940 507 751	1,04,7,0,7,0	2,182,684,591	2 612 534 046	0+0,+00,410,4	3,066,925,269	2 401 760 825	2,401,104,0	
7				_	÷	• •	-	<u>ده</u>		9 1	69	6	9
A CCUALITA		Market Value		1.141.165.829	1 171 013 713	201100011201	2,100,004,778	2.598.645.719	105 050 5	3,030,0001,121	3,395,406,934	250 010 072 0	3,0/9,912,0,0
	Total Total Beneifits Contributions		6	270 808 27	70,000,00	08,900,790	75 264 340	0.00000	82,400,820	89.990.489	בטר רכד סס	99,723,387	
				6	9		5	4 [_	ی	, ,	×0	
			Collegionis	01 07 07	101,274,701	592,983.67	71 993 09	10,000 00	14,038,91	77 130 41		72,041,58	
		Fiscal Year Ending	0	40,007,2 th	100,000 or 200,000	1994-95	1995-96	10000	16-0661	1997-98	1008-00	17-0761	00-6661

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- 2. Market Value
- 3. Smoothed Market Value (Item 2 Item 1)
 - 4. Corridor Limit
- a. 80% of Net Market Value
- b. 120% of Net Market Value
- 5. Actuarial Value (item 3 after corridor applied)
- 6. Amounts Excluded from Valuation Reserves (Before Transfer)

(105,863,785) (12,920,085)

(407,403,135)

4,415,895,427

2,943,930,285

252,565,224 3,679,912,856

3,427,347,632

(7,133,000) \$ 2,849,704,823

\$ 2,920,804,823

(44,322,804)

2,901,160,627

- a. Contingency reserves
- b. Retiree health and death benefit reserve
- c. Amount over reserved benefits (Before Transfer)
- 7. Valuation Reserves (Before Transfer) (Item 5 + Item 6)
- 8. Balance of transfer to member COLA reserves (Before Transfer)
- 9. (Surplus)/ Deficit for Withdrawn Employers (Preliminary) 10. Net Valuation Reserve (Item 7 + Item 8 + Item 9)
- 11. Net Valuation Reserve After Transfers

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Sacramento County Employees' Retirement System

Actuarial Valuation Results

Employer and Member Contribution Rates

The following Table 10 provides a comparison of the Employer and Member contribution rates and estimated annual contribution amounts under the current and recommended actuarial assumption. The estimated annual contribution amounts are based upon annual payroll as of the actuarial valuation date.

Table 10 Contribution Rates and Estimated Annual Contributions									
Employe	er Contributions	Member Contributions							
Rate	Annual Amount*	<u>Rate</u>	Annual Amount*						
6.86%	\$38,375,000	5.42%	\$	30,295,000					
6.86%	\$38,375,000	5.42%	\$	30,295,000					
	Employe Rate 6.86%	Employer Contributions Rate Annual Amount* 6.86% \$38,375,000	Fate Annual Annual Contributions Rate Annual Amount* Rate 6.86% \$38,375,000 5.42%	Fon Rates and Estimated Annual Contributions Employer Contributions Rate Annual Amount* Rate Annual Amount* 6.86% \$38,375,000 5.42% \$					

Portion of Rates Due to Disability Retirements

We have been asked to provide the Board with a breakdown of the employer rate between costs associated with disability and those relating to other benefits. This breakdown is provided in the following table:

	% of Recommended
	Employer Rate for Disability
General Members	19%
Safety Members	<u>31%</u>
Total Group	22%

In developing these percentages we have assumed that the liabilities for all types of benefits are funded to the same degree.

Recommendation

Mercer recommends the adoption of the recommended rates and the assumptions which underlie those rates. The component parts of the current and recommended member and employer contribution rates broken down among the various member categories can be found in Tables 11 and 12, respectively.

These rates reflect all past transfers from unallocated reserves to provide for the funding of costof-living benefits.

Explanation of Changes in Actuarial Values

Employer Contribution Rate

The average employer contribution rate remains unchanged at 6.86% of payroll after including the Board's transfer of \$71.1 million from excess earnings. A reconciliation of the employer's contribution rate from the June 30, 1999 to the June 30, 2000 valuation is as follows:

Summary of Gain/ Loss June 30, 1999 Employer Rate	Rate Impact 6.86%	\$	Dollar Impact 38,375,000
Tune 30, 1999 Employer rate		•	30,313,000
Investment return greater than expected	-0.07%	\$	(391,000)
Transfer to Offset Future Employer Contributions	-0.83%	\$	(4,640,000)
Salary increase greater than expected	0.54%	\$	3,019,000
Change in Normal Cost	0.07%	\$	391,000
Dilution of Prefunded Actuarial Accrued Liability Credit	0.22%	\$	1,230,000
Miscellaneous (gains)/ losses	0.07%	\$	391,000
Subtotal	0.00%	\$	-
June 30, 2000 Employer Rate	6.86%	\$	38,375,000

Explanation of Gain/ Loss Items

<u>Investment return greater than expected</u> - The System's actuarial valuation assets earned 0.24% in excess of the 8% return assumption.

<u>Transfer to offset future employer contributions</u> - A transfer of \$71.1 million in excess earnings is required to reduce employer contributions to the level determined in the June 30, 1999 valuation.

<u>Salary increase greater than expected</u> - The average salary for continuing actives increased by 8.08% and was higher than the expected increase of 5.55%.

<u>Change in Normal Cost</u> - There was an increase in the Normal Cost due to change in demographics of the group.

<u>Dilution of Prefunded Actuarial Accrued Liability Credit</u> - The aggregate payroll increased by 11.29% and was higher than the expected increase of 4.25%. The unexpected increase diluted the percentage of payrol credit drawn from the Prefunded Actuarial Accrued Liability.

Miscellaneous (gains)/ losses - Other actuarial gains or losses with untraced sources.

Member Contribution Rate

Members' contribution rates are unchanged after the Board's \$5.1 million transfer from excess earnings to maintain the rates at last year's level.

Funding Ratios

The change in funding ratio is due to actuarial experience as detailed under Employer Contribution Rate above.

Asset Valuation Method

There were no changes to the asset valuation method from the June 30, 1999 valuation.

Table 11 Member Contribution Rates

Current Rates

8% Interest, 4.25% Inflation and 5.55% Salary Scale Assumption

General Members								Safety Mer	nbers		
	Tier 1 Tier 2/3			•	Tier 1				Tier 2		
Basic	COLA	Total	Basic	COLA	Total	Basic	COLA	Total	Basic	COLA	Total
6.06%	0.59%	6.65%	5.78%	0.34%	6.12%	8.32%	0.81%	9.13%	7.92%	0.70%	8.62%

Note:

These are the single full rates payable by members who entered the System after January 1, 1975.

These rates are applicable for monthly salary in excess of \$350. Contribution rates for the first \$350 of salary are one-third lower for members covered by Social Security.

Recommended Rates 8% Interest, 4.25% Inflation and 5.55% Salary Scale Assumption

General Members						Safety Members						
	Tier 1			Tier 2/3			Tier 1		Tier 2			
Basic	COLA	Total	Basic	COLA	Total	Basic	COLA	Total	Basic	COLA	Total	
6.06%	0.59%	6.65%	5.78%	0.34%	6.12%	8.32%	0.81%	9.13%	7.92%	0.70%	8.62%	

Note:

These are the single full rates payable by members who entered the System after January 1, 1975.

These rates are applicable for monthly salary in excess of \$350. Contribution rates for the first \$350 of salary are one-third lower for members covered by Social Security.

Table 12 Employer Contribution Rate Detail

8% Interest, 4.25% Inflation and 5.55% Salary Scale Assumptions

	[a]		Annual Amount (\$)	56,187,000 (21,134,000)	35,053,000		[a]		Annual Amount (\$)	2,240,000 1,082,000	3,322,000		536,509,549 22,538,758 559,048,307
	Total		% of Payroll	10.47%	6.53%	. `	Lotal		% of Payroll	9.94%	14.74%	·	.
•		r 2	Annual Amount (\$)	7,189,000 (2,833,000)	4,356,000				Annual Amount (\$)		•		42,340,279
		Tier 2	% of Payroll	16.98%	10.29%		Į,	Tier 2	% of Payroll	16.98%	20.02%		· .
•	Safety		Annual Amount (\$)	15,910,000 (5,008,000)	10,902,000		Safety		Annual Amount (\$)	128,000 22,000	150,000		74,861,535 728,145 75,589,680
/ Rates)		Tier I	% of Payroll	21.25%	14.56%		t Rates)	Tier I	% of Payroll	17.60%	20.64%		
Current Rates (County Rates)		Tier 3	Annual Amount (\$)	24,609,000 (10,088,000)	14,521,000		Current Rates (District Rates)	Tier 3	Annual Amount (\$)	1,923,000	2,889,000	98.9	30, 2000 (\$) 318,228,658 19,873,020 338,101,678
Curr	•	Ĕ	% of Payroll	7.73%	4.56%		Curr	Ĩ	% of Payroll	9.68%	14.54%	for the total group =	Annual Salary at June 30, 2000 (\$) 552,270 19,873,0 552,270 338,101,6
	General	r 2	Annual Amount (\$)	1,402,000 (728,000)	674,000		Conorol	Tier 2	Annual Amount (\$)		,		Annual S 22,952,270 22,952,270
	ä	Tier 2	% of Payroll	6.11%	2.94%		ď	בּן וּכּ	% of Payroll	6.11%	10.97%	Average weighted rate	I.
		Tier 1	Annual Amount (\$)	7,077,000 (2,477,000)	4,600,000			Tion	Annual Amount (\$)	189,000	283,000		78,126,807 1,937,593 80,064,400
			% of Payroll	9.06%	5.89%				% of Payroll	9.77%	14.63%		'
				Normal Cost UAAL	Total .					Normal Cost	Total		County District

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Table 12 Employer Contribution Rate Detail

8% Interest, 4.25% Inflation and 5.55% Salary Scale Assumptions

,	7	•	Annual Amount (\$)	56,547,000 (21,494,000)	35,053,000		1	. •	Annual Amount (\$)	2,288,000	3,322,000			536,509,549 22,538,758 559,048,307	
	Total	•	% of Payroll	10.54%	6.53%	Total			% of Payroll	10.15% 4.59%	14.74%				
			Annual Amount (\$)	7,249,000 (2,893,000)	4,356,000			.2	Annual Amount (\$)	1 3	1		·	42,340,279	
		Tier 2	% of Payroll	17.12%	10.29%	į		Ticr 2	% of Payroll	17.12% 2.90%	%000			• • .	
x	Safety	_	Annual Amount (\$)	16,001,000 (5,099,000)	14.56% 10,902,000	e.	Salety	- -	Annual Amount (\$)	129,000	000 051	0000		74,861,535 —728,145 75,589,680	
Rates)	i i	Tier	% of Payroll	21.37% -6.81%	14.56%	Rates)		Tier	% of Payroll	17.78% 2.86%	707700	7.0.07		; ·	
Recalculated (County Rates)		i.	Annual Amount (\$)	24,806,000 (10,285,000)	14,521,000	Recalculated (District Rates)		r 3	Annual Amount (\$)	1,970,000		7,888,000	6.86%	0, 2000 (\$) 318,228,658 19,873,020 338,101,678	
Recalcu		Tier 3	% of Payroll	7.80%	4.56%	Recalcu		Tier 3	% of Payroll	9.92%		14.54%	for the total group =	Annual Salary at June 30, 2000 (\$) ,952,270 318,228,6 19,873,0 ,952,270 338,101,6	
	erai	2	Annual Amount (\$)	1,386,000 (712,000)	674,000		General		Annual Amount (\$)	1 1		•	hted rate for the	Annual Sa 22,952,270 22,952,270	
	General	Tier 2	% of Payroll	6.04%	2.94%		ניים	Tier 7	% of Payroll	6.04%	4.00.4	10.97%	Average weighted rate		
			Annual Amount (\$)	7,105,000	5.89% 4,600,000	ı		•	Annual Amount (\$)	189,000	000,00	284,000		78,126,807 1,937,593 80,064,400	
		Tier	% of Payroll	9.09%	5.89%			Ė	lier I % of Payroll A	9.74%	4.89%	14.63%		·	
				Normal Cost UAAL	Total					Normal Cost	UAAL -	Total		County	

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Funding Status

Evaluation of Funding Status

Background

The evaluation of the System's funding status is simply the comparison of its actual value of assets to a target value of assets. The funding status measure which is required and calculated for the System:

Funding Status

Measure

Target Assets

Actuarial Accrued

Actual Assets

Purpose

GASB No. 25 Funding Method

Liability

Actuarial Value of

Assets

Progress toward funding UAAL

Progress

This section of the report provides the System's funding status required by GASB No. 25, followed by an exhibit which summarizes the System'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). Both of these statements effective in 1997 and 1996, respectively, require funding status to be measured based upon the actuarial funding method adopted by the Board of Retirement, i.e., for SCERS, the Entry Age Normal Funding Method. Thus, the target value of assets is equal to the Actuarial Accrued Liability (AAL) and is compared to the Actuarial Value of Assets developed earlier in this report.

The GASB Statement No. 25 liabilities and assets calculated for the last six years are as follows:

Actuarial Valuation Date	A	ctuarial Value of Assets ⁽ⁱ⁾ (a)		ctuarial Accrued iability (AAL) - Entry Age (ii) (b)	Ü	Infunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Co	overed Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
6/30/95	S	1,767,064,000	\$	1,835,864,000	\$	68,800,000	96.3%	\$	405,284,000	17.0%
6/30/96	S	1,956,715,000	S	1,987,230,000	S	30,515,000	98.5%	\$	417,603,000	7.3%
6/30/97	\$	2,238,557,000	\$	2,226,440,000	\$	(12,117,000)	100.5%	\$	419,467,000	-2.9%
6/30/98	\$	2,600,547,000	\$	2,409,642,000	\$	(190,905,000)	107.9%	\$	470,385,000	-40.6%
6/30/99	S	3,017,639,000	\$	2,734,548,000	\$	(283,091,000)	110.4%	\$	502,325,000	-56.4%
6/30/00	\$	3,427,348,000	\$	3,111,760,000	\$	(315,588,000)	110.1%	s	559,047,000	-56.5%

⁽i) Excludes accounts payable.

⁽ii) Includes reserve for interest fluctuations, retiree health benefit reserve, retiree death benefit reserve and amount over reserved benefits.

Funding History

It is informative to monitor the history of key actuarial and other financial results over time as a dynamic indicator of the System's ongoing funding progress. The following exhibit provides a 10-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 System
- (10) Benefit Payments
- (11) Aggregate Contributions minus Benefit Payments
- (12) Investment Income
- (13) Aggregate Contributions plus Investment Income minus Benefit Payments

Sacramento County Employees' Retirement System Funding History (All Dollars in 1,000's)

(E)	Prior Year	Free Cash	Flow	(61)-(6)			\$11,908	\$9,293	\$4,184				\$(3,271)	\$(9,422)	\$(12,860)	\$(27,681)	
		(i0)	Prior Year	Benefit	Payments		\$39,763	\$45,678	\$51,338	\$58,095	\$63,809	\$68,901	\$75,264	\$82,461	\$89,990	\$99,723	
	6)	Prior Year	Total	Contribu-	tions to	System	\$51,671	\$54,971	\$55,522	\$63,691	\$602,527	\$59,949	\$71,993	\$73,039	\$77,130	\$72,042	
٠		(8)	Average	Member	Contribu-	tion Rate	3.73%	4.47%	2.86%	6.16%	6.48%	6.43%	6.29%	5.52%	5.43%	5.42%	
								12.72%			10.81%	10.13%	9.83%	8.07%	6.77%	6.86%	
	9	Net Return	uo	Actuarial	Value of	Assets	%09'9	6.07%	7.83%	5.98%	7.68%	13.71%	14.50%	16.47%	16.52%	14.46%	
	,	(5)	Investment	Return	Assump-	tion	%00'6	8.75%	8.50%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	
	(4)	(2)/(1)	Funding	Method	Progress	Ratio	74.2%	72.3%	69.2%	67.7%		98.5%	100.5%	107.9%	110.4%	%1.011	
	•				(3)	UAAL	\$311,278	\$367,847	\$461,884	\$533,659	\$68,800	\$30,515	\$(12,117)	\$(190,905)	\$(283,091)	\$(315,588)	
			ć	(2) Actuarial	Value of	Assets	\$895,611	\$959,560	\$1,039,025	\$1,106,922	\$1,767,064	\$1,956,715	\$2,238,557	\$2,600,547			
•					Ξ	AAL	\$1,206,889	\$1,327,407	\$1,501,988	\$1,634,773	\$1.835.864	\$1,987,230	\$2,226,440	\$2,409,642	\$2.734.548	\$3,111,760	
		•			Actuarial	Valuation Date	June 30, 1991	June 30, 1992 ¹	June 30, 1993 ²	June 30, 1994 ³	Tune 30, 1995 ⁵	June 30, 1996	June 30, 1997	June 30, 1998	June 30, 1999	June 30, 2000	

Value basis were lower than expected, thereby causing the employer rate to increase. In addition, the continued grade-in of the rate adjustments which resulted from the valuation date change in 1990 from January 1 to July 1. Finally, the change in actuarial assumptions (both economic and noneconomic) caused the employer and member rates to increase. Partially offsetting this increase was a The increase in the employer contribution rates was primarily due to the new 2% cost of living benefit that was granted to Tier 2 members who moved to Tier 3. The carnings on an Accounting Book decrease due to a slightly higher percentage of Safety members paying full rates rather than half rates. Also offsetting the increase was a decrease due to changing the Unfunded Actuarial Accrued Liability amortization period from 17.5 years to 30 years. The decrease in the funding ratio was due to the 2% cost-of-living benefit granted to Tier 2 members who moved to Tier 3, as well as the changes in actuarial assumptions.

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Sacramento County

Employees' Retirement System

The aggregate employer rate decreased due to a higher proportion of the contributions being paid by members at full rather than half-member rates. Offsetting this decrease was an increase due to the golden handshake that was offered during the year and lower than expected return on assets. Also, the change in economic assumptions caused the employer and member rates to increase. The decrease in the funding ratio was due to the change in economic assumptions.

The employer rate increase resulted from three sources: The change in economic actuarial assumptions, modification to the interest calculation and other miscellaneous changes. Member contribution rates and funding ratios were impacted by the change in economic assumptions. 'The County begins prepayment of contribution during this year.

Considering \$533,034,360 of pension obligation bonds issued on July 5, 1995

Historical Rates of Return

The annual investment returns as well as the rates of return assumed by the System over the past twelve and one-half years are as follows:

SCERS Actual and Assumed Rate of Investment Returns (Net of Expenses)

Year-Ended	Actuarial Value	Market Value	Assumed Rate of Return
December 31, 1988		13.9%	9.50%
December 31, 1989		18.3%	9.00%
June 30, 1990 ⁽²⁾		1.2%(1)	4.50%(1)
June 30, 1991 ⁽²⁾	6.6%	6.9%	9.00%
June 30, 1992 ⁽²⁾	6.1%	8.7%	9.00%
June 30, 1993	7.8%	8.1%	8.75%
June 30, 1994	6.0%	1.5%	8.50%
June 30, 1995	7.7%	15.4%	8.00%
June 30, 1996	13.7%	17.2%	8.00%
June 30, 1997	14.5%	20.1%	8.00%
June 30, 1998	16.5%	17.6%	8.00%
June 30, 1999	16.5%	11.7%	8.00%
June 30, 2000	14.5%	9.2%	8.00%
Annualized average over 10 years	10.9%	11.5%	8.32%
Annualized average over 12-1/2 years	. <u>-</u>	11.9%	8.51%

⁽¹⁾ Six month period only.

Reserves credited with 9% interest from the Unreserved account. For the year ended June 30, 1992, reserves were credited with 4.5% interest for the first 6 months, and 4.0% for the second 6 months.

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.

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

System 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 System. 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 System members. For this valuation, the Normal Costs are:

Member Category	Contribution Rate	Annual Amount
County		
General Tier 1	9.09%	\$7,105,000
General Tier 2	6.04%	\$1,386,000
General Tier 3	7.80%	\$24,806,000
Safety Tier 1	21.37%	\$16,001,000
Safety Tier 2	17.12%	\$7,249,000
Special Districts		
General Tier 1	9.74%	\$189,000
General Tier 3	9.92%	\$1,970,000
Safety Tier 1	17.78%	\$129,000

- 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. If the UAAL is negative, it is used (on an amortized basis) to reduce future normal cost contributions.

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

Member Category	Contribution Rate	Annual Amount*
County		
General Tier 1	(3.21%)	(\$2,505,000)
General Tier 2	(3.10%)	(\$712,000)
General Tier 3	(3.23%)	(\$10,285,000)
Safety Tier 1	(6.81%)	(\$5,099,000)
Safety Tier 2	(6.83%)	(\$2,893,000)
Special Districts		
General Tier 1	4.89%	\$95,000
General Tier 3	4.62%	\$918,000
Safety Tier 1	2.86%	\$21,000

^{*} Increases with inflation rate to remain as a level percentage of payroll for current and future members.

ACTUARIAL BALANCE SHEET* AS OF JUNE 30, 2000

		AS	SETS	
	·	Basic	COL	Total
	Total Assets at Actuarial Value	\$2,799,449,027	\$1,182,645,334	\$3,982,094,361
2.	Present Value of Future Member			
_	Contributions	\$261,279,633	\$17,318,898	\$278,598,531
3.	Present Value of Future Employer		•	
	Contributions on Account of:	P415 072 100	#102.400.070°	
	a) Normal Cost	\$415,072,108	\$103,499,870	\$518,571,978
	b) Unfunded Actuarial Accrued Liability	(\$28,879,677)	(\$286,708,692)	(\$315,588,369)
4	Total Actuarial Assets	\$3,446,921,091	\$1,016,755,410	\$4.462.676.501
-T	Total Netdallal Assets	55,770,921,091	\$1,010,733,410	\$4,463,676,501
		LIAB	ILITIES	······································
		Basic	COL	Total
5.	Present Value of Retirement		•	· · · · · · · ·
	Allowances Payable to			
	Present Retired Members	\$673,524,873	\$486,050,835	\$1,159,575,708
6.	Present Value of Retirement			
	Allowances to be Granted for:			
	a) Service Retirement	\$1,538,906,149	\$468,725,606	\$2,007,631,755
	b) Disability Retirement	\$152,337,678	\$48,922,069	\$201,259,747
7.	Present Value of Death			
	Benefits to be Granted for:	•		
	a) Duty Deaths	\$2,386,964	\$829,895	\$3,216,859
_	b) Non-duty Death	\$36,233,194	\$8,869,600	\$45,102,794
8.	Present Value of Members'			
	Contributions to be Returned			
	Upon Withdrawal Before Retirement	\$31,810,196	\$3,357,405	\$35,167,601
۵	Amount over Reserved Benefits	\$331,166,627	•••	\$221 1 <i>CC (</i> 22
	Retiree Health Insurance Reserve	\$1,363,451	\$0 \$0	\$331,166,627
	Retiree Death Benefit Reserve	\$1,556,635	\$0 \$0	\$1,363,451
	Reserve for Interest Fluctuation	\$105,863,785	\$0 \$0	\$11,556,635 \$105,863,785
	Surplus for Withdrawn Employers	\$7,133,000	\$0 \$0	\$7,133,000
	Payables	\$554,638,540	\$0 \$0	\$554,638,540
	Total Actuarial Liabilities	\$3,446,921,091	\$1,016,755,410	\$4,463,676,50

Based on 8.0% interest rate and 5.55% salary scale assumptions.

System Assets

System Assets - Reserve Accounting

The Board of Retirement adopted an excess earnings policy on July 25, 1996. This policy governs the allocation of excess earnings for particular statutory and Board designations.

In previous years, excess earnings which remained after establishing the Reserve for Interest Fluctuations and reserving for future 401(h) contribution offsets were used to reduce employer contributions and member COLA contributions. The allocation of available excess earnings between employer and member offsets was based upon the relative size of reserves held for these two categories.

However, starting with the June 30, 1999 valuation, a portion of these remaining excess earnings will be retained in the Reserve for Interest Fluctuations rather than used for contribution offsets.

The process we used to establish the additional excess earnings allocation this year was as follows:

- Adjust earnings for the change in the market stabilization Reserve;
- Increase the Reserve for Interest Fluctuations to 2.5% of the System's gross assets before any other excess earnings transfers;
- Allocate excess earnings to provide for the 2000-2001 and 2001-2002 retiree health and dental benefits;
- Allocate a portion of remaining excess earnings towards employer and member contribution offsets so that the employer and the member contribution rates calculated in the June 30, 2000 valuation will be at the same level as those calculated in the June 30,1999 valuation.
- Allocate the remaining excess earnings to the Amount over Reserve Benefits.

Current and past years' amounts transferred to offset member COLA contributions are considered member reserves even though they are not included in member's accounts. The amounts available to offset employer and member contributions have been used to reduce the contribution rates that appear earlier in this report.

The following tables provide the specific amounts allocated for various purposes and the reserve balances as of June 30, 2000.

Sacramento County Employees' Retirement System

Summary of Earnings for 1999-2000 Fiscal Year

RECOMMENDED BASED ON 2.5% CONTINGENCY RESERVE

	E	Per Excess arnings Policy
Total Earnings	\$	312,187,721
Amounts Credited For:		
Market Stabilization Reserve	\$	125,202,572
Regular Interest Crediting*	<u>s</u>	(217,490,619)
Net Earnings	\$	219,899,674
Amount Credited Under Excess Earnings Policy For:		
Reserve for Interest Fluctuation (2.5%)	\$	(17,553,918)
Retiree Health/ Dental Insurance Reserve for 2000-2001	\$	(8,346,181)
Replenish 2001-2002 Health Benefits Reserve**	\$	(2,490,400)
Net Excess Earnings	\$	191,509,175
Amount Transferred Under Excess Earnings Policy For***:	٠.	
Employer Reserves	\$	71,100,000
Member Future COL Contribution Offset	\$	5,136,509
Subtotal	<u>-</u>	76,236,509
Remaining Excess Earnings	\$	115,272,666

^{*} Includes interest credit for Death Benefit Reserve

^{**} Equals \$10,466,500 for 2001-2002 net of \$7,976,100 available as of June 30, 1999 to cover second year health/dental insurance reserve.

^{***} Based on amounts required to maintain employer and member contribution rates at the same level determined in the June 30, 2000 actuarial valuation.

Sacramento County Employees' Retirement System

Statement of Reserves June 30, 2000 and 1999

Market Value Accounting/ Smoothed Market Value of Reserves (Net of Liabilities)

RECOMMENDED BASED ON 2.5% CONTINGENCY RESERVE

		06/30/2000		06/30/2000		06/30/1999
		(After Transfer)	-	efore Transfer)		(W/ Mkt Adj.)
Employee Reserves	.\$	392,113,512	\$	392,113,512	\$.	362,074,223
Employer Reserves		1,411,149,062		1,334,912,554		1,289,944,499
Retiree Reserve	·	1,174,134,562		1,174,134,562		1,052,758,241
Subtotal (Valuation Reserves)	\$	2,977,397,136	\$	2,901,160,628	\$	2,704,776,963
Reserve for Interest Fluctuations	\$	105,863,785	S	105,863,785		88,309,867
Retiree Health Benefit Reserve		1,363.451		1,363,451		638,351
Death Benefit Reserve		11,556,635		11,556,635		5,585,828
Amount over Reserved Benefits		331,166,627		407,403,135		218,328,130
Subtotal	\$	449,950,497	\$	526,187,006	\$	312,862,176
Total Allocated Reserves	\$	3,427,347,633	\$.	3,427,347,633	\$	3,017,639,138
Market Stabilization Reserve	<u>\$</u>	252.565.224	\$	252,565,224	<u>s</u>	377,767,796
Net Assets Held In Trust for Pension Benefits		3,679,912,857	s	3,679,912,857	S	3.395,406,934
Liabilities netted from above	S	554,638,540	\$	554,638,540	\$	136,932,767
Gross Assets	\$	4,234,551,397	\$	4,234,551,397	\$	3,532,339,701
Net Actuarial Value Assets	\$	3,427,347,633	\$	3,427,347,633	\$	3,017,639,138
Net Valuation Assets:			•		·	•
From Above	\$	2,977,397,136	\$	2,901,160,628	\$	2,704,776,963
For Member Contribution Offset*	<u>s</u>	(49,459,313)	\$	(44,322,804)	\$	
Net		2,927,937,823		2,856,837,824		2,654,671,420
ESTIMATED (Surplus)/ Deficit for		•				
Withdrawn Employers	\$	(7,133,000)		•		• • • • • • • • • • • • • • • • • • •
Final Valuation Assets	\$	2,920,804,823		•		
* Balance remaining from prior year:	\$	44,322,804				



Sacramento County Employees' Retirement System

Change in Reserves

1999 - 2000 Fiscal Year

Market Value Accounting/ Smoothed Market Value of Reserves

			30-Jun-00					
	RECOM	RECOMMENDED BASE	BASED ON 2.5% CONTINGENCY RESERVE	TINGENCY RES	ERVE	•	RECOMMENDED	
	٠.						Application of	Adjusted
	Balance at	1999 - 2000	1999 - 2000	1999 - 2000	1999 - 2000	Balance at	30-Jun-00	Balance at
	6/30/99	Interest	Contributions	Benefits	Transfers	00/02/9	Transfer Policy	6/30/00
Employee Reserves	362,074,223	28,594,018	30,017,703	(3,181,009)	(25,391,423)	392,113,512	ı	392,113,512
Employer Reserves	1,289,944,499	101,095,995	34,547,766	(278,472)	(90,397,234)	1,334,912,554	76,236,509 **	1,411,149,062
Retiree Reserve	1,052,758,241	87,136,799	•	(89,025,254)	123,264,776	1,174,134,562		1,174,134,562
Subtotal	2,704,776,963	216,826,812	64,565,469	(92,484,735)	7,476,119	2,901,160,628	76,236,509	2,977,397,136
						105 623 705	•	287 578 201
Reserve for Interest Fluctuations	88,309,867	816,500,1	•	•	•	107,600,101	•	CO/'CNO'COI
Retiree Health Benefit Reserve	638,351	194,632	7,476,119	(6,945,651)	•	1,363,451	8,151,549 ***	1,363,451
Death Benefit Reserve	5.585.828	663.807	,	(293,000)	5,600,000	11,556,635	1	11,556,635
Amount over Reserved Benefits	218,328,130	202,151,124	•	•	(13,076,119)	407,403,135	(84,388,058)	331,166,627
Subtotal	312,862,176	220,563,481	7,476,119	(7,238,651)	(7,476,119)	526,187,006	(76,236,509)	449,950,497
Total Allocated Reserves	3,017,639,138	437,390,293	72,041,588	(99,723,386)	•	3,427,347,633	ı	3,427,347,633
Market Stabilization Reserve	377,767,796	(125,202,572)	,		,	252,565,224	•	252,565,224
Net Assets	3,395,406,934	312,187,721	72,041,588	(99,723,386)		3,679,912,857		3,679,912,857

^{*} Includes beginning of year transfers reflected in actuarial valuation. ** Preliminary portion to offset future member contributions:

388,785,086

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Sacramento County Employees' Retirement System

^{***} Held in Amount over Reserved Benefits to offset employer contribution to 401(h) Account. Total required 401(h) balance at 6/30/00 is: \$ 5,136,509 ; Employer:

Balance: 71,100,000 ;

^{312,548,577} 9,515,000

⁶⁰

System Assets - Return On Investment

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

	June 30, 2000	June 30, 1999	Percent Change
Actuarial Value	\$3,427,347,633	\$3,017,639,138	13.6%
Market Value	\$3,679,912,856	\$3,395,406,934	8.4%

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

	l	Market Value	A	Actuarial Value	V	aluation Assets
Value of Assets at 6/30/99	\$	3,395,406,934	\$	3,017,639,138	\$	2,650,271,420
Contributions:						
Employer		42,023,885		42,023,885		42,023,885
Members		30,017,703		30,017,703		30,017,703
Benefits Paid to Participants		99,723,387		99,723,387		92,484,735
Expenses Paid		15,278,159		15,278,159		15,278,159
Investment Earnings		327,465,880		452,668,453		235,154,709
Value of Assets at 6/30/00	\$	3,679,912,856	\$	3,427,347,633	\$	2,849,704,823
NET RATE OF RETURN		9.18%		14.46%		8.24%
(Net of Expenses)						

^{*} Before Transfer

SYSTEM ACCOUNTING ASSETS, RESERVES AND OTHER LIABILITIES

As of June 30, 2000

Assets

Cash	\$672,891
Short-term Investments	137,328,285
Accounts Receivable	36,401,115
Investments @ Market Value	3,637,162,747
Real estate mortgage loans	117,734,533
Real estate equity	304,991,038
Equipment and fixtures (net of depreciation)	133,679
Prepaid Dental	127,108
Total Assets	\$4,234,551,396
Accounts Payable & Other Current Liabilities	554,638,540
Assets Net of Payable and Current Liabilities	3,679,912,856
	ı

Reserves and Liabilities

	Before Transfer	After Transfer
Employee Reserves	\$392,113,512	\$ 392,113,512
Employer Reserves	1,334,912,554	1,411,149,062
Retiree Reserve	1,174,134,562	1,174,134,562
Subtotal (Valuation Reserves)	\$2,901,160,628	2,977,397,136
Reserve for Interest Fluctuations	105,863,785	105,863,785
Retiree Health Benefit Reserve	1,363,451	1,363,451
Retiree Death Benefit Reserve	11,556,635	11,556,635
Amount over Reserved Benefits	407,403,135	331,166,627
Subtotal	526,187,006	449,950,497
Total Allocated Reserves (Total Actuarial Value)	3,427,347,633	3,427,347,633
Market Stabilization Reserve	252,565,224	252,565,224
Accounts Payable & Other Current	554,638,540	554,638,540
Liabilities		
Total Reserves & Liabilities	4,234,551,397	4,234,551,397
Amounts Transferred to:	•	
Member COL Contributions	•	\$ 5,136,509
Employer Reserves		71,100,000
		, .,

Appendices

A. Major Provisions of the Present System

MAJOR PROVISIONS OF THE PRESENT SYSTEM

Benefit Sections 31676.1 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 that are applicable to Sacramento County Employees' Retirement System.

Membership

General employees entering after September 27, 1981 become members of Tier 2 or Tier 3. Safety members entering after June 24, 1995 become members of Tier 2. All others are covered by Tier 1 provisions.

Final Average Salary (FAS)

Final average salary is defined as the highest 12 consecutive months of compensation earnable for Tier 1 and highest 36 consecutive months for Tier 2 and Tier 3.

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 or more 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

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 expressed as a percentage of monthly FAS per year of service, depending on age at retirement, is illustrated below for typical ages. For members integrated with Social Security, the benefit is reduced by one-third of the percentage shown below times the first \$350 of monthly FAS per year of service after January 1, 1956.

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

Disability Benefit

Members with five years of service, regardless of age, are eligible for nonservice connected disability.

For Tier 1 General members, the benefit is 1.5% (1.8% for Tier 1 Safety members) of FAS for each year of service. If this benefit does not equal one-third of FAS, the benefit is increased by the same percentage of FAS for the years which would have been credited to age 65 (age 55 for Safety members), but the total benefit in this case cannot be more than one-third of FAS.

For Tier 2 and Tier 3 members, the benefit is 20% of FAS for the first five years of service plus 2% for each additional year for a maximum of 40% of FAS.

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

Death Benefit (Before Retirement)

In addition to the return of contributions, a 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 system, based on the final year's average salary, but not to exceed six (6) 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 final average salary.

Death Benefit (After Retirement)

If a member dies after retirement, a lump sum amount of \$2,000 is paid to the beneficiary or estate. The Board is considering as a part of this valuation to provide for an increase in the \$2,000 death benefit.

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.

Maximum Benefit

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

Cost of Living

The maximum increase in retirement allowance is 4% per year for Tier 1 General and Safety members, 2% for Tier 2 Safety members and, effective April 1, 1993, 2% for Tier 3 members. Tier 2 General members have no cost of living benefit. The cost of living increases are based on the change in the Consumer Price Index for the calendar year prior to the April 1 effective date.

Contribution Rates

Basic member contribution rates are based on the age nearest birthday at entry into the System (single rate for entrants after January 1, 1975). The rates are such as to provide an average annuity at age 60 equal to 1/240 of FAS for General members and at age 50 equal to 1/200 of FAS for Safety members. For members integrated with Social Security, the above contributions are reduced by one-third of that portion of such contribution payable with respect to the first \$350 of monthly salary. Cost of living rates are designed to pay for one quarter of the future cost of living costs. Member contributions are refundable upon termination from the System.

The Employer rates are actuarially determined to provide for the balance of the contributions needed to fund the benefits promised under the Retirement System.

B. Summary of Assumptions and Funding Method

Assumptions

Valuation Interest Rate

8%

Post-Retirement Mortality

(a) Service

Males 1994 Male Group Annuity Mortality Table set back one year

Females 1994 Female Group Annuity Mortality Table with no set

back

Safety 1994 Male Group Annuity Mortality Table with no set back

(b) Disability

General 1981 General Disability Mortality Table with no set back

Safety 1981 Safety Disability Mortality Table set back one year

(c) For Employee Contribution

Rate Purposes

General 1994 Male Group Annuity Mortality Table with a three year

set back

Safety 1994 Male Group Annuity Mortality Table with no set back

Pre-Retirement Mortality Based upon the 6/30/98 Experience Analysis

Withdrawal Rates Based upon the 6/30/98 Experience Analysis

Disability Rates Based upon the 6/30/98 Experience Analysis

Service Retirement Rates Based upon the 6/30/98 Experience Analysis

Salary Scales Total increases of 5.55% per year reflecting 4.25% for

inflation and approximately 1.30% for merit and longevity

Assets Valued at Smoothed Actuarial Value as described in

Actuarial Valuation Methods Section of this report

Percentage of Members

Married at Retirement 70% for male members and 50% for female members

Terminated Members

Eligible for Reciprocal Benefits 60%

Funding Method The County's liability is being funded on the Entry Age

Normal Method. The amortization period for the Unfunded

Actuarial Accrued Liability is 22 years from the

June 30, 2000 valuation date.

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NEW PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT GENERAL TIER 1 MALE MEMBERS

Age	SVC RET	WITH	WITH	WITH	WITH	WITH	WITH	TERM	Non-Dury	Duty	Non-Dury	Duty
		0 < = X < 1	1 < = X < 2	2 < = X < 3	3 < = X < 4	4 < = X < 5	5 < = X	Vested	Disab.	Disab.	Death	Death
20	0.000000	0.104000	0.104000	0.104000	0.104000	0.104000	0.104000	0.015000	0.000000	0.000100	0.000545	0.000100
21	0.000000	0.101000	0.101000	0.101000	0.101000	0.101000	0.096536	0.015000	0.000000	0.000100	0.000570	0.000100
22	0.000000	0.098000	0.098000	0.098000	0.098000	0.098000	0.089072		0.000000	0.000100	0.000598	0.000100
23	0.000000	0.095000	0.095000	0.095000	0.095000	0.095000	0.079619	0.015000	0.000000	0.000100	0.000633	0.000100
24	0.000000	0.092000	0.092000	0.092000	0.092000	0.092000	0.070529	0.015000	0.000000	0.000100		
25	0.000000	0.090000	0.090000	0.090000	0.090000	0.090000	0.061803		0.002500	0.000100		0.000100
26	0.000000	0.085000	0.085000	0.085000	0.085000	0.085000	0.053441	0.015000	0.002500	0.000100		0.000100
27	0.000000	0.080000	0.080000	0.080000	0.080000	0.080000	0.045444		0.002500	0.000100		0.000100
28	0.000000	0.075000	0.075000	0.075000	0.075000	0.075000	0.039881	0.015000	0.002500	0.000100		0.000100
29	0.000000	0.070000	0.070000	0.070000	0.070000	0.070000	0.033985	0.015000	0.002500		0.000811	0.000100
30	0.000000	0.066000	0.066000	0.066000	0.066000	0.066000	0.034344	0.015000	0.002500			0.000100
- 31	0.000000	0.062000	0.062000	0.062000	0.062000	0.062000	0.034703	0.015000	0.002500	0.000100		0.000100
32	0.000000	0.057000	0:057000	0.057000	0.057000	0.057000	0.035063	0.015000	0.002500		0.000902	
33	0.000000	0.053000	0.053000	0.053000	0.053000.	0.053000	0.035422	0.015000	0.002500	0.000100	0.000902	
34	0.000000	0.048000	0.048000	0.048000	0.048000	0.048000	0.035781	0.015000	0.002500		0.000912	
35	0.000000	0.046000	0.046000	0.046000	0.046000	0.046000	0.036141	0.012500	0.002500		0.000915	
36	0.000000	0.044000	0.044000	0.044000	0.044000	0.044000	0.040065	0.012500	0.002500	0.000199		
37	0.000000	0.041000	0.041000	0.041000	0.041000	0.041000	0.042453	0.012500	0.002500		0.000927	0.000098
38	0.000000	0.038000	0.038000	0.038000	0.038000	0.038000	0.034675	0.012500	0.002500		0.000938	0.000098
39	0.000000	0.035000	0.035000	0.035000	0.035000	0.035000	0.027634	0.012500	0.002500		0.001010	0.000097
40	0.000000	0.028955	0.028955	0.028955	0.028955	0.028955	0.020604	0.012500	0.002500	0.000516	0.001073	0.000097
41	0.000000	0.026240	0.026240	0.026240	0.026240	0.026240	0.014579	0.012500	0.002500	0.000656		0.000092
42	0.000000	0.023526	0.023526	0.023526	0.023526	0.023526	0.009561	0.012500	0.002500	0.00030		0.000091
43	0.000000	0.020811	0.020811	0.020811	0.020811	0.020811	0.007443	0.012500	0.002500	0.000730	0.001346	0.000090
44	0.000000	0.018097	0.018097	0.018097	0.018097	0.018097	0.005500	0.012500	0.002500	0.000883		0.000090
45	0.000000	0.016616	0.016616	0.016616	0.016616	0.016616		0.012300	0.002500	0.000977	0.001568 0.001697	0.000089
46	0.000000	0.014770	0.014770	0.014770	0.014770	0.014770	0.003508	0.009167	0.002300	0.001143		0.000085 0.000084
47	0.000000	0.012924	0.012924	0.012924	0.012924	0.012924		0.007500	0.002363	0.001319	0.001832	0.000084
48	0.000000	0.011077	0.011077	0.011077	0.011077	0.011077	0.002725	0.005833	0.003563	0.001423		0.000084
49	0.000000	0.010154	0.010154	0.010154	0.010154	0.010154	0.002415	0.003033	0.003084	0.001080	0.002200	0.000083
50	0.041766	0.010190	0.010190	0.010190	0.010190	0.010190	0.002119	0.002500	0.003330	0.001933		0.000083
51	0.035907	0.009704	0.009704	0.009704	0.009704	0.009704	0.001839	0.002000	0.004773	0.002100		0.000083
52	0.026016	0.009219	0.009219	0.009219	0.009219	0.009219	0.001574		0.005215	0.002470	0.003088	0.000083
53	0.021441	0.008734	0.008734	0.008734	0.008734	0.008734	0.001352	0.001000	0.005270	0.002900	-	
54	0.025442	0.008249	0.008249	0.008249	0.008249	0.008249	0.001137	0.000500	0.005276	0.002300		0.000083
55	0.056044	0.007842	0.007842	0.007842	0.007842	0.007842	0.000000	0.000000	0.005389	0.003100	_	0.000084
56	0.066486	0.007351	0.007351	0.007351	0.007351	0.007351	0.000000	0.000000		0.003500		0.000087
57	0.076671	0.006861	0.006861	0.006861	0.006861	0.006861	0.000000	0.000000		0.003800	0.005322	0.000089
58	0.097931	0.006371	0.006371	0.006371	0.006371	0.006371	0.000000	0.000000		0.003000		, 0.000089
59	0.120894	0.005881	0.005881	0.005881	0.005881	0.005881	0.000000	0.000000		0.004400		0.000089
60	0.152506	0.005500	0.005500	0.005500	0.005500	0.005500	0.000000	0.000000	0.006036	0.004800		0.000094
61	0.260757	0.005000	0.005000	0.005000	0.005000	0.005000	0.000000	0.000000		0.005300		0.000095
62	0.347504	0.005000	0.005000	0.005000	0.005000	0.005000	0.000000	0.000000		0.005900		0.000095
63	0.347628	0.004500	0.004500	0.004500	0.004500	0.004500	0.000000	0.000000		0.005500		0.000096
64	0.359971	0.004500	0.004500	0.004500	0.004500	0.004500	0.000000	0.000000		0.003300		
65	0.416859	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.007700		0.000099
66	0.447836	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.007700		0.000099
67	0.478813	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.009000		0.000100
68	0.547215	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.009000		0.000100
69	0.684018	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000			0.021334	0.000100
70	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000					0.023304	
					_			50000	5.555500	0.000000	A.000000	0.000000

NEW PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT GENERAL TIER 1 FEMALE MEMBERS

Age	SVC RET	WITH	WITH	WITH	WITH	WITH	WITH	TERM	Non-Duty	Duty	Non-Duty	Duty
		0 < = X < 1	1 < = X < 2	2 < = X < 3	3 < = X < 4	4 < = X < 5	5 < = X	Vested	Disab.	Disab.	Death	Death
20	0.000000	0.125000	0.125000	0.125000	0.125000	0.125000	0.125000	0.015000	0.000000	0.000000	0.000305	0.000000
21	0.000000	0.115000	0.115000	0.115000	0.115000	0.115000	0.115000	0.015000	0.000000	0.000000	0.000308	0.000000
22	0.000000	0.106000	0.106000	0.106000	0.106000	0.106000	0.106000	0.015000	0.000000	0.000000	0.000311	0.000000
23	0.000000	0.098000	0.098000	0.098000	0.098000	0.098000	0.098000	0.015000	0.000000		0.000313	
24	0.000000	0.093000	0.093000	0.093000	0.093000	0.093000	0.093000	0.015000	0.000000		0.000313	
25	0.000000	0.090000	0.090000	0.090000	0.090000	0.090000	0.085803	0.015000	0.000100		0.000313	
26	0.000000	0.088000	0.088000	0.088000	0.088000	0.088000	0.078606	0.015000	0.000100		0.000316	
27	0.000000	0.086000	0.086000	0.086000	0.086000	0.086000	0.071409	0.015000	0.000100		0.000324	
28	0.000000	0.084000	0.084000	0.084000	0.084000	0.084000	0.061371	0.015000	0.000100	0.000100		
29	0.000000	0.082000	0.082000	0.082000	0.082000	0.082000	0.051970	0.015000	0.000100	0.001000		0.000000
. 30	0.000000	0.075902	0.075902	0.075902	0.075902	0.075902	0.043205	0.015000	0.000196	0.000100		0.000000
31	0.000000	0.071098	0.071098	0.071098	0.071098	0.071098	0.035078	0.015000	0.000196	0.000100	0.000401	
32	0.000000	0.066294	0.066294	0.066294	0.066294	0.066294	0.027587	0.015000	0.000196	0.000100		0.000000
33	0.000000	0.061491	0.061491	0.061491	0.061491	0.061491	0.020996	0.015000	0.000289	0.000099		0.000000
34	0.000000	0.056687	0.056687	0.056687	0.056687	0.056687	0.014907	0.015000	0.000285	0.000098		0.000000
35	0.000000	0.047894	0.047894	0.047894	0.047894	0.047894	0.009322	0.012500	0.000239	0.000182	0.000514	
36	0.000000	0.045233	0.045233	0.045233	0.045233	0.045233	0.008347	0.012500		0.000180		0.000000
37	0.000000	0.040798	0.040798	0.040798	0.040798	0.040798	0.007117	0.012500	0.000386	0.000179	0.000593	0.000000
38	0.000000	0.036364	0.036364	0.036364	0.036364	0.036364	0.006039	0.012500	0.000447	0.000175	0.000643	0.000000
39	0.000000	0.032816	0.032816	0.032816	0.032816	0.032816	0.005174	0.012500	0.000504	0.000171	0.000701	0.000000
40	0.000000	0.029264	0.029264	0.029264	0.029264	0.029264		0.012500	0.000951	0.000198	0.000763	0.000000
41	0.000000	0.027543	0.027543	0.027543	0.027543	0.027543	0.003779	0.012500	0.001363	0.000194	0.000826	0.000000
42	0.000000	0.025821	0.025821	0.025821	0.025821	0.025821	0.003158	0.012500	0.001740	0.000252	0.000888	0.000000
43 44	0.000000	0.024100	0.024100	0.024100	0.024100	0.024100	0.002766	0.012500	0.002296	0.000286	0.000943	0.000000
45	0.000000	0.022378	0.022378	0.022378	0.022378	0.022378	0.002373	0.012500	0.002901	0.000306	0.000992	0.000000
43 46	0.000000	0.021500	0.021500	0.021500	0.021500	0.021500	0.001979	0.011193		0.000383	0.001046	0.000000
47	0.000000	0.020604	0.020604	0.020604	0.020604	0.020604	0.001979	0.009886	0.004387	0.000430	0.001111	0.000000
48	0.000000	0.019708	0.019708	0.019708	0.019708	0.019708	0.001979	0.008580	0.005280	0.000446		0.000000
49	0.000000	0.018813 0.017917	0.018813	0.018813	0.018813	0.018813		0.007273	0.005492	0.000567		0.000000
50	0.070172	0.017917	0.017917	0.017917	0.017917	0.017917	0.001979	0.005966	0.005654	0.000698		0.000000
51	0.049065	0.016438	0.018438 0.017468	0.018438	0.018438	0.018438	0.001979	0.004659	0.005764	0.000842		0.000000
52	0.040816	0.017408	0.017408	0.017468	0.017468	0.017468	0.001979	0.003778	0.005824	0.001024		0.000000
53	0.047218	0.015527	0.015527	0.016498	0.016498	0.016498	0.001979	0.002979	0.005832	0.001175		0.000000
54	0.053994	0.013527	0.013527	0.015527 0.014557	0.015527	0.015527	0.001979	0.002914		0.001327		0.000000
55	0.085279	0.013723	0.014337	0.014337	0.014557	0.014557	0.001979	0.002816	0.005958	0.001486		0.000000
56	0.121555	0.012743	0.013723	0.013723	0.013723 0.012743	0.013723	0.000000	0.002687		0.001651		0.000000
57	0.148736	0.011772	0.012743	0.012743	0.012743	0.012743	.0.000000	0.002705	0.006085	0.001821		0.000000
58	0.142848	0.009802	0.009802	0.011272	0.009802	0.011272	0.000000	0.002708	0.005000	0.001998		0.000000
59	0.158030	0.008822	0.008822	0.003802	0.009802	0.009802	0.000000	0.002445	0.005000		0.003612	
60	0.150332	0.008000	0.008000	0.008022	0.008000	0.008822	0.000000	0.002195	0.005000	0.001799		0.000000
61	0.215369	0.007000	0.007000	0.007000		0.008000	0.000000	0.001728	0.005000	0.001690		
62	0.314700	0.006000	0.006000	0.006000	0.007000	0.007000	0.000000	0.001301	0.005000		0.005476	0.000000
63	0.279036	0.004950	0.004950	0.004950		0.006000	0.000000	0.000915	0.005000	0.001451		0.000000
64	0.284421	0.003960	0.003960	0.004950	0.004950	0.004950	0.000000	0.000656		0.001645		0.000000
65	0.600000	0.000000	0.000000	0.000000	0.003960	0.003960	0.000000	0.000351	0.005000	0.001846		
66	0.472883	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.002054		0.000000
67	0.561759	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.002224		0.000000
68	0.642011	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005000	0.002395	0.011574	0.000000
69	0.802513	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000		0.002395	0.012648	0.000000
70	1.000000	0.000000	0.000000		0.000000	0.000000	0.000000	0.000000		0.002395	0.013665	0.000000
, 0	1.000000	0.000000	0.00000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

NEW PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT GENERAL TIER 2 AND 3 MALE MEMBERS

Age	SVC RET	WITH	WITH	WITH	WITH	WITH	WITH		Non-Duty	Duty	Non-Dury	Duty
		0<=X<1	1 < = X < 2	2 < = X < 3	3 < = X < 4	4 < = X < 5	5<=X	Vested	Disab.	Disab.	Death	Death
20	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.085148	0.181681	0.000000	0.000100	0.000545	0.000100
21	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.082692	0.164748	0.000000	0.000100	0.000570	0.000100
22	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.080236	0.147815	0.0000000	0.000100	0.000598	0.000100
23	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.076349	0.130882	0.000000	0.000099	0.000633	0.000100
24	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.072553	0.113949	0.000000	0.000098	0.000671	0.000100
25	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.060899	0.097016	0.000100	0.000097	0.000711	0.000100
26	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.049644	0.080083	0.000100	0.000096	0.000749	0.000100
27	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.038789	0.063150		0.000095	0.000782	0.000100
28	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.033903	0.046217	0.000097	0.000201	0.000811	0.000100
29	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500 -	0.025615	0.040000	0.000095	0.000308		0.000100
30	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.020000	0.030000	0.000184	0.000414	0.000862	0.000100
31	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.019000	0.030000	0.000179	0.000521	0.000883	0.000100
32	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.018000	0.030000	0.000174	0.000500	0.000902	
33	0.000000	. 0.093194	0.074641	0.055000	0.047500	0.027500	0.018000	0.030000		0.000500	0.000912	
34	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.018000	0.030000		0.000500		0.000100
35	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.018000	0.020000		0.000500	1	
36	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.017971	0.020000		0.000500	0.000927	0.000100
37	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.018191	0.020000	0.000291	0.000500		0.000100
38	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.017523		0.000763	0.000500	1	
39	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.016855	0.020000			0.001075	
40	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.016187		0.001561		0.001153	
41	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.015519	0.020000	0.001749		0.001243	0.000100
42	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.014851		0.001937	0.000500		0.000100
43	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.014071	0.020000		0.000500		
44	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.013292	0.020000		0.000500		0.000100
. 45	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.012512		0.002500		0.001697	
46	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.011733	0.020000			0.001852	
47	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.010953	0.020000	0.003273	0.000626		0.000100
. 48	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.010953	0.020000		0.000715	0.002260	0.000100
· 49	0.000000	0.093194	0.074641	0.055000	0.047500	0.027500	0.010953	0.020000	0.003622		0.002501	0.000100
50	0.017772	0.093194	0.074641	0.055000	0.047500	0.027500	0.010500	0.020000	0.003901		0.002773	0.000100
51	0.019366	0.093194	0.074641	0.055000	0.047500	0.027500	0.010000	0.020000		0.000974	-	0.000100
52	0.017201	0.093194	0.074641	0.055000	0.047500	0.027500	0.009500	0.020000		0.001081		0.000100
53	0.012452	0.093194	0.074641	0.055000	0.047500	0.027500	0.009000	0.020000			0.003854	0.000100
54	0.012683	0.093194	0.074641	0.055000	0.047500	0.027500	0.008500	0.020000			0.004278	0.000100
55	0.061350	0.093194	0.074641	0.055000	0.047500	0.027500	0.008000	0.020000			0.004758	0.000100
56	0.057670	0.093194	0.074641	0.055000	0.047500	0.027500	0.007500		0.005052		0.005322	
57	0.048674	0.093194	0.074641	0.055000	0.047500	0.027500	0.007000	0.020000		0.001875		0.000100
58	0.061315	0.093194	0.074641	0.055000	0.047500	0.027500	0.006500	0.020000		0.002069		0.000100
59	0.074737	0.093194	0.074641	0.055000	0.047500	0.027500	0.006000	0.020000		0.002271		0.000100
60	0.104188	0.093194	0.074641	0.055000	0.047500	0.027500	0.005500	0.020000	•	0.002531		0.000100
61	0.176226	0.093194	0.074641	0.055000	0.047500	0.027500	0.005000			0.002855		0.000100
62	0.232506	0.093194	0.074641	0.055000	0.047500	0.027500	0.005000			0.003245		
63	0.197703	0.093194	0.074641	0.055000	0.047500	0.027500	0.004500	0.020000		0.003552		
64	0.174398	0.093194	0.074641	0.055000	0.047500	0.027500		0.020000		0.003352		
65	0.647439	0.093194	0.074641	0.055000	0.047500	0.027500	0.000000	0.020000		0.003856		0.000100
66	0.591409	0.093194	0.074641	0.055000	0.047500	0.027500	0.000000	0.020000		0.004133		
67	0.535379	. 0.093194	0.074641	0.055000	0.047500	0.027500	0.000000	0.020000		0.004793		
68	0.611862	0.093194	0.074641	0.055000	0.047500	0.027500	0.000000	0.020000		0.004793		
69	0.764828	0.093194	0.074641	0.055000	0.047500	0.027500	0.000000		0.007301	0.005100		0.000100
70	1.000000	0.093194	0.074641	0.000000	0.000000	0.000000			0.000000		0.000000	
. •	,	0.0,0.7	0.07,071	0.000000	0.000000	0.000000	0.00000	v.000000	v.000000	0.00000	ú.uuuuu	0.000000

NEW PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT GENERAL TIER 2 AND 3 FEMALE MEMBERS

Age	SVC RET	WITH	WITH	with	WITH	WITH	WITH	TERM	Non-Dury	Duni	Non Dun.	Б.
		0 < = X < 1	1 < = X < 2	2<=X<3	3<=X<4	4<=X<5	5<=X	Vested	Disab.	Duty	Non-Duty	Duty
20	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.125000	0.140000		Disab.	Death	Death
21	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.114000	0.130000	0.000000	0.000000	0.000305	0.000000
22	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.103000		0.000000	0.000000	0.000308	0.000000
23	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000		0.120000	0.000000	0.000000	0.000311	0.000000
24	0.000000	0.105000	0.085000	0.053750	0.050000		0.095440	0.103580	0.000000	0.000000		0.000000
25	0.000000	0.105000	0.085000	0.053750		0.035000	0.087057	0.087160	0.000000	0.000000	0.000313	0.000000
26	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.077852	0.070740	0.000099	0.000090	0.000313	0.000000
27	0.000000	0.105000	0.085000		0.050000	0.035000	0.074771	0.054320	0.000098	0.000090		0.000000
28	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.071320	0.037900		0.000090	0.000324	0.000000
29	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.060013	0.035504	0.000094	0.000090	0.000338	0.000000
30	0.000000	0.105000		0.053750	0.050000	0.035000	0.049681	0.033109	0.000090	0.000090	0.000356	0.000000
31	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.040324	0.030713	0.000173	0.000082	0.000377	0.000000
32	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.031943	0.028317	0.000165	0.000082	0.000401	0.000000
33	0.000000		0.085000	0.053750	0.050000	0.035000	0.024537	0.025921		0.000082	0.000427	0.000000
		0.105000	0.085000	0.053750	0.050000	0.035000	0.023831	0.026214		0.000082	0.000454	0.000000
34	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.022230		0.000301	0.000082	0.000482	0.000000
35	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.019735		0.000333	0.000200	0.000514	0.000000
36	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.020380	0.020000	0.000487	0.000200	0.000550	0.000000
37	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.019953	0.020000	0.000663	0.000200	0.000593	0.000000
38	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.020000	0.020000	0.000739	0.000200	0.000643	0.000000
39	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.020000	0.020000	0.000796	0.000200	0.000701	0.000000
40	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.020000	0.020000	0.000835	0.000145	0.000763	0.000000
41	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.020000	0.020000	0.000855	0.000145	0.000826	0.000000
42	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.019649	0.020000	0.000941	0.000193	0.000888	0.000000
43	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.017321	0.020000	0.001011	0.000241	0.000943	0.000000
44	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.014993	0.020000	0.001050	0.000289	0.000992	0.000000
45	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.012666	0.015000	0.001057	0.000123	0.001046	0.000000
46	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.010338	0.015000	0.001088	0.000158	0.001111	0.000000
47	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.008011	0.015000	0.001072	0.000193	0.001196	0.000000
48	0.000000	0.105000	0.085000	0.053750	0.050000	0.035000	0.007461	0.015000	0.001372	0.000246	0.001297	0.000000
49	0.000000	.0.105000	0.085000	0.053750	0.050000	0.035000	0.006912	0.015000	0.001652	0.000298	0.001408	0.000000
50	0.053412	0.105000	0.085000	0.053750	0.050000	0.035000	0.006363	0.015000	0.001956	0.000605		0.000000
51	0.034547	0.105000	0.085000	0.053750	0.050000	0.035000	0.006000	0.015000	0.002286	0.000912	0.001686	0.000000
52	0.026487	0.105000	0.085000	0.053750	0.050000	0.035000	0.006000	0.015000	0.002641	0.001219	0.001864	0.000000
53	0.029899	0.105000	0.085000	0.053750	0.050000	0.035000	0.006000	0.015000	0.003081	0.001526	0.002051	0.000000
54	0.033405	0.105000	0.085000	0.053750	0.050000	0.035000	0.006000	0.015000	0.003555	0.001833	0.002241	0.000000
55	0.062389	0.105000	0.085000	0.053750	0.050000	0.035000	0.006000	0.015000	0.004147	0.002140	0.002466	0.000000
56	0.087090	0.105000	0.085000	0.053750	0.050000	0.035000	0.006021	0.015000	0.004784	0.002216		0.000000
57	0.104467	0.105000	0.085000	0.053750	0.050000	0.035000	0.005577	0.015000	0.005467	0.002293		0.000000
58	0.120436	0.105000	0.085000	0.053750	0.050000	0.035000	0.005408	0.015000	0.005839	0.002293		0.000000
59	0.157390	0.105000	0.085000	0.053750	0.050000	0.035000	0.005370	0.015000	0.006208	0.002293		0.000000
60	0.123163	0.105000	0.085000	0.053750	0.050000	0.035000	0.004833	0.010000	0.006577	0.002339	0.004773	0.000000
6I -	0.204107	0.105000	0.085000	0.053750	0.050000	0.035000	0.004591	0.010000	0.006944	0.002385		0.000000
62	0.400000	0.105000	0.085000	0.053750	0.050000	0.035000	0.004246	0.010000	0.007404	0.002430		0.000000
63	0.313004	0.105000	0.085000	0.053750	0.050000	0.035000	0.003756	0.010000	0.008345	0.002476		0.000000
64	0.328051	0.105000	0.085000	0.053750	0.050000	0.035000	0.003180	0.010000	0.009342	0.002572		0.000000
65	0.750000	0.105000	0.085000	0.053750	0.050000	0.035000	0.000000	0.010000	0.010395	0.002568	0.009286	0.000000
66	0.498575	0.105000	0.085000	0.053750	0.050000	0.035000	0.000000	0.010000	0.011505	0.002568	0.009280	0.000000
67	0.606109	0.105000	0.085000	0.053750	0.050000	0.035000	0.000000	0.010000	0.011505		. 0.010423	
68	0.692696	0.105000	0.085000	0.053750	0.050000	0.035000	0.000000	0.010000	0.012070	0.002568		0.000000
69	0.865870	0.105000	0.085000	0.053750	0.050000	0.035000	0.000000	0.010000	0.013280		0.012648 0.013665	0.000000
70	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000				0.000000	0.000000
					2.23000	0.00000	0.000000	3.00000	0.00000	0.000000	U.UUUUUU	0.000000

NEW PROBABILITIES OF SEPARATION PRIOR TO RETIREMENT SAFETY MEMBERS

	Age	SVC RET	WITH	WITH	WITH	WITH	WITH	WITH	TERM	Non-Duty	D	Mon Dun.	D
20	-		0 < = X < I	1 < = X < 2						-	•	•	
221 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.007000 0.050000 0.000000 0.0	20	0.000000	0.060000				· -						
22 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.000000 0.050000 0.000000 0.000000 0.000000 0.025000 0.020000 0.020000 0.010000 0.000000 0.050000 0.000000 0.000000 0.000000 0.025000 0.025000 0.025000 0.025000 0.025000 0.000000 0.000000 0.000000 0.000000 0.000000	21	0.000000	0.060000	0.025000	0.020000	0.020000							
23 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.000000 0.060000 0.000000 0.000000 0.000000 0.025000 0.020000 0.020000 0.010000 0.000000 0.060000 0.000000 0.000000 0.000000 0.025000 0.020000 0.020000 0.010000 0.000000 0.050000 0.000000 0.000000 0.000000 0.025000 0.000000 0.000000	22	0.000000	0.060000	0.025000	0.020000	0.020000	-						
24 0.000000 0.060000 0.025000 0.025000 0.025000 0.010000 0.0007000 0.050000 0.000200 0.000120 0.000717 0.000671 0.000200	23	0.000000	0.060000	0.025000	0.020000								
25 0.000000 0.060000 0.025000 0.025000 0.025000 0.010000 0.000000 0.050000 0.000200 0.000113 0.0000711 0.000200 27 0.000000 0.060000 0.025000 0.025000 0.020000 0.0110000 0.000792 0.014180 0.000300 0.001333 0.000782 0.000202 28 0.000000 0.060000 0.025000 0.025000 0.020000 0.0110000 0.006591 0.014180 0.000300 0.001339 0.000811 0.000200 29 0.000000 0.060000 0.025000 0.025000 0.020000 0.0110000 0.006591 0.013533 0.000400 0.001394 0.000330 0.001333 30 0.000000 0.060000 0.025000 0.025000 0.020000 0.0110000 0.006691 0.013533 0.000400 0.001394 0.000383 0.000200 31 0.00000 0.060000 0.025000 0.025000 0.020000 0.0110000 0.006600 0.013239 0.000400 0.002033 0.000203 32 0.00000 0.060000 0.025000 0.020000 0.020000 0.0110000 0.066000 0.012926 0.000500 0.002493 0.000882 0.000200 33 0.000000 0.060000 0.025000 0.020000 0.020000 0.0110000 0.006000 0.012926 0.000500 0.002493 0.000882 0.000200 34 0.000000 0.060000 0.025000 0.020000 0.020000 0.0110000 0.006000 0.011594 0.000500 0.002662 0.000200 35 0.000000 0.060000 0.025000 0.020000 0.020000 0.0110000 0.006000 0.011594 0.000500 0.003411 0.000901 0.000000 0.060000 0.050000 0.000000 0.000000 0.000000 0.000000	24	0.000000	0.060000	0.025000	0.020000	0.020000	0.010000						
27 0.000000 0.060000 0.025000 0.025000 0.025000 0.020000 0.0100000 0.006679 0.010386 0.000300 0.001332 0.000782 0.000200 28 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006679 0.013866 0.000300 0.001332 0.000782 0.000200 29 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006631 0.003636 0.000330 0.001639 0.000811 0.000200 30 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006608 0.013239 0.000400 0.001974 0.000838 0.000200 31 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.012926 0.000500 0.002359 0.000881 0.000230 32 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.012926 0.000500 0.002359 0.000882 0.000200 33 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.012926 0.000500 0.002862 0.000200 34 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.015604 0.006600 0.003864 0.000200 34 0.000000 0.060000 0.025000 0.025000 0.020000 0.020000 0.010000 0.006000 0.015600 0.005600 0.003864 0.000200 35 0.000000 0.060000 0.025000 0.025000 0.020000 0.020000 0.010000 0.006000 0.010000 0.006600 0.003866 0.000349 36 0.000000 0.060000 0.025000 0.025000 0.020000 0.020000 0.010000 0.006600 0.006882 0.000366 0.000349 37 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.006882 0.000866 0.000347 38 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.006882 0.000968 0.000346 0.000977 0.000200 39 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.003666 0.000347 0.000991 0.000983 0.000000 40 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.005600 0.003666 0.000991 0.000985 0.000020 40 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.005600 0.003666 0.000991 0.000985 0.000020 41 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.003666 0.000376 0.001000 0.005560 0.000000 0.000000 0.000000 0.000000 0.000000	25	0.000000	0.060000	0.025000	0.020000			-					
27 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006792 0.014180 0.000300 0.001332 0.000782 0.000200 28 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006531 0.013853 0.000400 0.001639 0.000811 0.000200 30 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006600 0.013553 0.000400 0.001395 0.000381 0.000200 31 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.012612 0.000500 0.002003 0.000200 32 0.00000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.012612 0.000500 0.002493 0.000883 0.000200 33 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.012612 0.000500 0.002493 0.000883 0.000200 34 0.000000 0.060000 0.025000 0.025000 0.020000 0.010000 0.006000 0.0116004 0.006600 0.001391 0.000500 0.025000 0.025000 0.025000 0.025000 0.020000 0.010000 0.006000 0.0116000 0.006000 0.01395 0.000600 0.003111 0.000600 0.05000 0.05000 0.005000 0.005000 0.005000 0.005000 0.025000 0.025000 0.025000 0.025000 0.020000 0.010000 0.006000 0.006000 0.006000 0.005000 0.	26	0.000000	0.060000	0.025000	0.020000								
28	27	0.000000	0.060000	0.025000	0.020000					_			
29	28	0.000000	0.060000	0.025000	-								
30 0.000000 0.060000 0.025000 0.020000 0.020000 0.0100000 0.006000 0.013239 0.000400 0.002035 0.000862 0.000200 0.000000 0.000000 0.025000 0.020000 0.020000 0.0100000 0.006000 0.012226 0.000500 0.002493 0.000833 0.000200 0.000000 0.000000 0.000000 0.000000 0.010000 0.006000 0.012510 0.000500 0.002493 0.000833 0.000200 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.010000 0.066000 0.011594 0.000600 0.003111 0.000912 0.000200 0.000200 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.010000 0.066000 0.011594 0.000600 0.003111 0.000912 0.000200 0.000000 0.	29	0.000000	0.060000	0.025000	-								
31 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.006000 0.0112925 0.000500 0.002493 0.0000200 0.000200 0.020000 0.020000 0.0100000 0.006000 0.0115014 0.000500 0.002626 0.000200 0.000200 0.000200 0.010000 0.006000 0.0115014 0.000600 0.003661 0.000200 0.000020 0.000200	30	0.000000	0.060000	0.025000			-						
32 0.000000 0.056000 0.025000 0.020000 0.010000 0.012612 0.000500 0.002862 0.000020 0.000200 33 0.000000 0.060000 0.025000 0.020000 0.010000 0.006000 0.011504 0.000500 0.003111 0.000200 0.000200 34 0.000000 0.060000 0.025000 0.020000 0.010000 0.006000 0.011305 0.000000 0.003866 0.000200 36 0.000000 0.060000 0.025000 0.020000 0.010000 0.008882 0.000860 0.003866 0.000927 0.002000 37 0.000000 0.060000 0.025000 0.020000 0.010000 0.008882 0.000800 0.04991 0.000227 38 0.000000 0.060000 0.025000 0.020000 0.010000 0.003533 0.001000 0.003533 0.001100 0.005333 0.001100 0.003540 0.001000 0.003540 0.001000 0.003540 0.001000 0.003540 0.001000 0.003540	31	0.000000	0.060000	0.025000	0.020000								
33 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.006000 0.010395 0.000600 0.003492 0.000913 0.000200 36 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.006000 0.009639 0.000700 0.003466 0.003411 0.000913 0.000200 37 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.006000 0.009639 0.000700 0.003466 0.003466 0.000913 0.000200 38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000800 0.004991 0.000927 0.000200 39 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004991 0.000928 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004991 0.000958 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004991 0.000958 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005564 0.001075 0.000200 42 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004271 0.005856 0.001200 0.005540 0.001153 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.0001400 0.00598 0.000140 0.00598 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.003106 0.001400 0.004593 0.001434 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.003434 0.001400 0.004993 0.001445 0.000200 45 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.000000 0.002000 0.00586 0.00348 0.001446 0.000200 0.060000 0.060000 0.050000 0.025000 0.000000 0.000000 0.000000 0.000000 0.000000	32	0.000000	0.060000	0.025000	0.020000								
34 0.000000 0.060000 0.025000 0.020000 0.010000 0.006000 0.003492 0.000913 0.000200 35 0.000000 0.060000 0.025000 0.020000 0.020000 0.000600 0.009639 0.000700 0.003866 0.000915 0.000200 37 0.000000 0.060000 0.025000 0.022000 0.010000 0.006000 0.009639 0.000466 0.004866 0.000915 0.000200 38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005812 0.000900 0.04991 0.000958 0.000200 39 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.001000 0.005364 0.00100 0.005353 0.001010 0.005364 0.001000 0.005364 0.00100 0.005564 0.00100 0.005564 0.00100 0.005464 0.00100 0.005464 0.001100 0.005464 0.001100 0.005464 0.001153 0.001153 0.00115	33	0.000000	0.060000	0.025000			-						
35 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.006000 0.008882 0.000800 0.004366 0.000915 0.000200 36 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004366 0.000915 0.000200 38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004366 0.000915 0.000200 39 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005366 0.007369 0.001000 0.005533 0.001100 0.005533 0.001100 0.005540 0.000000 0.000000 0.025000 0.025000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005544 0.001075 0.000220 0.000000 0.000000 0.025000 0.025000 0.020000 0.020000 0.000000 0.00471 0.005856 0.001200 0.005540 0.001153 0.000220 0.000000 0.000000 0.055000 0.025000 0.020000 0.020000 0.010000 0.003724 0.005100 0.001300 0.005540 0.001153 0.000220 0.00540 0.000000 0.055000 0.025000 0.020000 0.010000 0.003724 0.005100 0.001300 0.005598 0.001200 0.005540 0.001300 0.00540 0.001300 0.005540 0.001300 0.005540 0.001300 0.005540 0.001300 0.005540 0.001300 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.001500 0.005540 0.005540 0.001500 0.005540 0.0	34	0.000000	0.060000	0.025000	0.020000								
36 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008882 0.000800 0.004366 0.000927 0.000200 38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004991 0.000958 0.000200 39 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005866 0.007369 0.001000 0.005533 0.001010 0.000574 0.001075 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005540 0.001153 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.00471 0.005856 0.001200 0.055540 0.001153 0.000200 42 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.004343 0.001400 0.00593 0.001434 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.004343 0.001400 0.004953 0.001434 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003553 0.003587 0.001500 0.005188 0.001243 0.000200 45 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.002553 0.003587 0.001500 0.005813 0.001464 0.000200 46 0.004000 0.060000 0.000000 0.020000 0.020000 0.000000 0.000000 0.002503 0.001700 0.005823 0.001568 0.000200 47 0.007500 0.060000 0.000000 0.000000 0.000000 0.000000	35	0.000000	0.060000	0.025000									
37 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005913 0.008126 0.000900 0.004991 0.000958 0.000200 38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.005366 0.007369 0.001000 0.005353 0.001010 0.000200 39 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005764 0.001075 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004271 0.005856 0.001200 0.05540 0.001153 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003724 0.005100 0.001300 0.005540 0.001153 0.000200 42 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003724 0.005100 0.001300 0.005198 0.001233 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.004343 0.001400 0.004953 0.001343 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.003587 0.001500 0.005418 0.001444 0.000200 45 0.002000 0.060000 0.025000 0.020000 0.020000 0.010000 0.001930 0.002803 0.001700 0.005823 0.001568 0.000200 46 0.004000 0.060000 0.005000 0.000000 0.000000 0.000000 0.000000 0.000000	36	0.000000	0.060000	0.025000									
38 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005534 0.001075 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004818 0.006613 0.001100 0.005540 0.001075 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.00471 0.005856 0.001200 0.005540 0.001153 0.000200 42 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003776 0.00434 0.005100 0.005540 0.001153 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.00434 0.001400 0.004953 0.001346 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003587 0.001500 0.005418 0.001434 0.000200 45 0.002000 0.060000 0.025000 0.020000 0.020000 0.010000 0.001930 0.002283 0.001700 0.005823 0.001568 0.000200 46 0.004000 0.060000 0.000000 0.000000 0.000000 0.000000	37	0.000000	0.060000										
39 0.000000 0.050000 0.025000 0.020000 0.010000 0.004818 0.006613 0.001100 0.0005764 0.001075 0.000200 40 0.000000 0.060000 0.025000 0.020000 0.010000 0.004271 0.005856 0.001200 0.005540 0.001153 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.010000 0.003774 0.005100 0.001300 0.001598 0.001243 0.000200 42 0.000000 0.056000 0.025000 0.020000 0.010000 0.003176 0.00433 0.001400 0.00453 0.001464 0.000200 44 0.000000 0.056000 0.022000 0.020000 0.010000 0.001593 0.001500 0.005418 0.001464 0.000200 45 0.002000 0.060000 0.020000 0.000000 0.000000 0.002000 0.000200 0.000200 0.000200 0.000200 0.000200 0.000200 0.000200 0.000260 0.000260 0.000260	38	0:000000	0.060000	0.025000									
40 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.004271 0.005856 0.001200 0.005540 0.001153 0.000200 41 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003724 0.005100 0.001300 0.005198 0.001243 0.000200 42 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003176 0.004343 0.001400 0.004953 0.001340 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.003553 0.003587 0.001500 0.00548 0.001454 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.020000 0.010000 0.001930 0.002830 0.001700 0.005823 0.001568 0.000200 45 0.002000 0.060000 0.000000 0.000000 0.000000 0.000000	39	0.000000 -	0.060000	0.025000								1	
41 0.000000 0.060000 0.025000 0.020000 0.010000 0.03724 0.005100 0.005108 0.001330 0.001243 0.000200 42 0.000000 0.066000 0.025000 0.020000 0.010000 0.003176 0.004343 0.001400 0.004953 0.001346 0.000200 43 0.000000 0.066000 0.025000 0.020000 0.010000 0.002553 0.001500 0.005418 0.001454 0.000200 44 0.000000 0.066000 0.025000 0.020000 0.010000 0.001500 0.005418 0.001454 0.000200 45 0.002000 0.066000 0.000000 0.000000 0.000000 0.000000 0.000207 0.001697 0.001697 0.001697 0.000300 46 0.004000 0.060000 0.000000 0.000000 0.000000 0.000200 0.002764 0.001697 0.001892 0.001892 0.001697 0.003300 48 0.014579 0.060000 0.000000 0.000000 0.	40	0.000000	0.060000	0.025000									
42 0.000000 0.060000 0.025000 0.020000 0.010000 0.003176 0.004343 0.001400 0.004953 0.001346 0.000200 43 0.000000 0.060000 0.025000 0.020000 0.010000 0.002553 0.001500 0.005418 0.001454 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.010000 0.001930 0.002830 0.001700 0.005823 0.001568 0.000200 45 0.002000 0.060000 0.000000	41	0.000000	0.060000	0.025000	0.020000								
43 0.000000 0.060000 0.025000 0.020000 0.010000 0.002553 0.003587 0.001500 0.005418 0.001454 0.000200 44 0.000000 0.060000 0.025000 0.020000 0.010000 0.001930 0.002830 0.001700 0.005823 0.001568 0.000200 45 0.002000 0.060000 0.000000 0.000000 0.000000 0.000000 0.002074 0.001900 0.006644 0.001697 0.00300 46 0.004000 0.066000 0.000000 0.000000 0.000000 0.000000 0.002262 0.002100 0.007735 0.001852 0.000300 47 0.007500 0.066000 0.000000 0.000000 0.000000 0.000000 0.002262 0.002100 0.008737 0.002042 0.00300 48 0.014579 0.060000 0.000000 0.000000 0.000000 0.002260 0.002500 0.002600 0.002300 49 0.028317 0.060000 0.000000 0.000000 0.0	42	0.000000	0.060000	0.025000	0.020000								
44 0.000000 0.060000 0.025000 0.020000 0.010000 0.011930 0.002830 0.001700 0.005823 0.001568 0.000200 45 0.002000 0.060000 0.000000 0.000000 0.000000 0.000000 0.001568 0.001568 0.000200 46 0.004000 0.060000 0.000000 0.000000 0.000000 0.000000 0.002000 0.00274 0.001900 0.007500 0.007500 0.060000 0.000000 0.000000 0.000000 0.002460 0.002300 0.008737 0.002422 0.000300 48 0.014579 0.060000 0.000000 0.000000 0.000000 0.000000 0.002500 0.009500 0.002300 49 0.028317 0.060000 0.000000 0.000000 0.000000 0.000000 0.002500 0.003900 0.002500 0.00300 50 0.05891 0.000000 0.000000 0.000000 0.000000 0.000000 0.00300 0.00300 0.00300 0.00300 0.00300	43	0.000000	0.060000	0.025000	0.020000								
45 0.002000 0.060000 0.000000 0	44	0.000000	0.060000	0.025000	0.020000	0.020000							
46 0.004000 0.060000 0.000000 0.000000 0.000000 0.000000	45	0.002000	0.060000	0.000000	0.000000								
47 0.007500 0.060000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.002300 0.002300 0.008737 0.00242 0.000300 48 0.014579 0.060000 0.000000 0.000000 0.000000 0.000000 0.002460 0.002500 0.009500 0.00260 0.000300 49 0.028317 0.060000 0.000000 0.000000 0.000000 0.000000 0.002470 0.002800 0.010000 0.002501 0.00300 50 0.050891 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.003100 0.010000 0.00300 51 0.049332 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.003400 0.010000 0.003308 0.003300 52 0.052117 0.000000 0.000000 0.000000 0.000000 0.000000 0.003400 0.010000 0.003455 0.003300 54 0.062414 0.000	46	0.004000	0.060000	0.000000	0.000000								
48 0.014579 0.060000 0.000000 0	47	0.007500	0.060000	0.000000	0.000000	0.000000	0.000000						
49 0.028317 0.060000 0.000000 0	48	0.014579	0.060000	0.000000	0.000000	0.000000	0.000000						
50 0.050891 0.000000 0	49	0.028317	0.060000	0.000000	0.000000	0.000000			T.				
51 0.049332 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.003088 0.000300 52 0.052117 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.003700 0.010000 0.003455 0.000300 53 0.063780 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.004100 0.010000 0.003854 0.000300 54 0.062414 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.004400 0.010000 0.004278 0.000300 55 0.325482 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.00400 0.00400 0.004400 0.010000 0.004278 0.000400 56 0.331457 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.005200 0.012993 0.005322 0.000400 57 0.2	50	0.050891	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000					
52 0.052117 0.000000 0		0.049332	0.000000	0.000000	0.000000	0.000000	0.000000						
53 0.063780 0.000000 0		0.052117	0.000000	0.000000	0.000000	0.000000	0.000000					-	
54 0.062414 0.000000 0		0.063780	0.000000	0.000000	0.000000	0.000000	0.000000						
55 0.325482 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.004800 0.010000 0.004788 0.000400 56 0.331457 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.012993 0.005322 0.000400 57 0.233186 0.000000 0.000000 0.000000 0.000000 0.000000 0.002500 0.012993 0.00601 0.000400 58 0.205955 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.006000 0.016390 0.00601 0.00490 59 0.217589 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.006000 0.023851 0.007623 0.00400			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002500				
56 0.331457 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.0005200 0.012993 0.005322 0.000400 57 0.233186 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.005600 0.016390 0.006001 0.000400 58 0.205955 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.006000 0.016390 0.006001 0.000400 59 0.217589 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000600 0.0023851 0.007623 0.000400			0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.002500				
57 0.233186 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.0005600 0.016390 0.006001 0.000400 58 0.205955 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.006000 0.016390 0.006774 0.000400 59 0.217589 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.006400 0.023851 0.007623 0.000400 60 1.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000500 0.006400 0.023851 0.007623 0.000400				0.000000	0.000000	0.000000	0.000000	0.000000	0.002500				
58 0.205955 0.000000 0.000000 0.000000 0.000000 0.000000		_	0.000000		0.000000	0.000000	0.000000	0.000000					
59 0.217589 0.000000 0.000000 0.000000 0.000000 0.000000				0.000000	0.000000	0.000000	0.000000	0.000000					
60 1,000000 0,000000 0,000000 0,000000 0,000000					0.000000	0.000000	0.000000	0.000000					
	60	1.000000	0.000000	0.000000	0.0000000	0.000000	0.000000	0.000000	0.000000	0.000000			

RATIO OF CURRENT COMPENSATION TO COMPENSATION ANTICIPATED AT RETIREMENT AGE

Age	General	Safety
20	0.376	().442
21	0.398	0.468
22	0.421	0.494
23	0.444	0.520
24	0.466	0.545
25	0.488	0.571
26	0.509	0.596
27	0.529	0.620
28	0.548	0.644
29	0.567	0.666
30	0.584	0.688
31	0.601	0.708
32	0.617 .	0.727
33	0.632	0.744
34	0.647	0.759
35	0.662	0.774 .
36	0.676	0.787
37	0.691	0.799
38	0.706	0.810
39	0.721	0.820
40	0.735	0.830
41	0.749	0.840
42	0.763	0.850
43	0.777	0.859
44	0.790	0.869
45	0.803	0.878
46	0.816	0.886
47	0.828	0.895
48	0.840	0.903
49	0.851	0.911
50	0.863	0.919
51	0.873	0.927
52	0.883	0.936
53	0,893	0.945
54	0.902	0.953
55	0.910	0.962
56	0.918	0.971
57	0.925	0.979
58	0.931	0.988
59	0.938	0.995
60	0.944	1.000
61	0.950	
62	0.957	
63	0.963	
64	0.969	
65	0.975	1
66	0.981	•
67	0.986	
68	0.992	
	V.//2	
69	0.997	

YEARS OF LIFE EXPECTANCY AFTER SERVICE RETIREMENT

	Gen er	ral	Safet	у		Gen ei	ral	Safet	v
Age	Male	Female	Male	Female	Age	Male	Female	Male	Female
50	30.94	34.24	30.01	34.24	80	8.46	9.88	7.97	9.88
51	30.01	33.29	29.09	33.29	81	7.97	9.30	7.51	9.30
52	29.09	32.34	28.18	32.34	82	7.51	8.74	7.07	8.74
53	28.18	31.40	27.28	31.40	83	7.07	8.20	6.65	8.20
54	27.28	30.47	26.38	30.47	84	6.65	7.68	6.24	7.68
55	26.38	29.53	25.49	29.53	85	6.24	7.18	5.86	7.18
56	25.49	28.61	24.61	28.61	. 86	5.86	6.71	5.48	6.71
57	24.61	27.68	23.74	27.68	87	5.48	6.25	5.12	6.25
58	23.74	26.77	22.88	26.77	88	5.12	5.83	4.78	5.83
59	22.88	25.86	22.04	25.86	89	4.78	5.42	4.45	5.42
60	22.04	24.97	21.20	24.97	90	4.45	5.05	4.15	5.05
61	21.20	24.09	20.38	24.09	91	4.15	4.70	3.87	4.70
62	20.38	23.22	19.57	23.22	92	3.87	4.37	3.61	4.37
63	19.57	22.36	18.78	22.36	93	3.61	4.07	3.37	4.07
64	18.78	21.52	18.01	21.52	94	3.37	3.79	3.15	3.79
65	18.01	20.69	17.26	20.69	95	3.15	3.53	2.95	3.53
66	17.26	19.88	16.53	19.88	96	2.95	3.28	2.77	3.28
67	16.53	19.09	15.81	19.09	97	2.77	3.06	2.61	3.06
68	15.81	18.30	15.11	18.30	98	2.61	2.85	2.46	2.85
69	15.11	17.53	14.43	17.53	99	2.46	2.65	2.33	2.65
70	14.43	16.77	13.77	16.77	100	2.33	2.48	2.21	2.48
71	13.77	16.01	13.11	16.01	101	2.21	2.31	2.09	2.31
72	13.11	15.26	12.48	15.26	102	2.09	2.16	1.98	2.16
73	12.48	14.53	11.85	14.53	103	1.98	2.02	1.87	2.02
74	11.85	13.81	11.25	13.81	104	1.87	1.89	1.77	1.89
75	11.25	13.11	10.66	13.11	105	1.77	1.78	1.68	1.78
76	10.66	12.43	10.08	12.43	106	1.68	1.69	1.62	1.69
77	10.08	11.76	9.52	11.76	107	1.62	1.62	1.57	1.62
78	9.52	11.11	8.98	11.11	108	1.57	1.56	1.53	1.56
79	8.98	10.49	8.46	10.49	109	1.53	1.51	1.50	1.51
	N/-1-				110	1.50	1.48	1.47	1.48

Male

94 GAM Male - 1

Female

General 94 GAM M

94 GAM Female

Member

Beneficiary

Safety

94 GAM Male

94 GAM Female

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT Safety Members

Αg	Male & Fernale	Age	Male & Female	Age	Male & Female
2	0 50.19	50	24.38	80	7.41
2	1 49.29	51	23.59	81	7.00
2		52	22.80	. 82	6.63
2	3 47.48	53	22.03	83	6.27
2	4 46.58	. 54	21.26	84	5.94
2	5 45.68	55	20.50	85	5.63
2		56	19.77	86	5.34
2		. 57	19.06	87.	5.06
2		58	18.40	88	4.80
2	9 42.12	59	17.78	89	4.55
3		60	17.20	90	4.31
3		61	16.64	91	4.09
3		62	16.11	92	3.87
3		63	15.59	93	3.66
3	4 37.74	64	15.08	94	3.46
3		65	14.58	95	3.26
3		66	14.09	96	3.07
3		67	13.61	97	2.89
3		68	13.13	98	2.71
3	9 33.45	69	12.66	99	2.54
· 4		70	12.18	100	2.37
4		71	11.70	101	2.20
4		72	11.21	. 102	2.04
4		73	10.72	103	1.88
4	4 29.26	, 74	10.22	104	1.72
4		75	9.73	105	1.55
4		76	9.24	106	1.38
4	7 26.80	77	8.76	107	1.21
4		78	8.28	108	1.04
4	9 25.18	79	7.83	109	0.88
				110	0.71

1981 Disability Table (Safety) - 1

YEARS OF LIFE EXPECTANCY AFTER DISABILITY RETIREMENT General Members

	Male &			Male &		Male &
Age	Female		Age	Female	Age	Female
			•		S	
20	38.73		50	21.08	80	7.00
21	37.98		51	20.59	81	6.63
22	37.26		52	20.11	82	6.27
23	36.56		53	19.63	83	5.94
24	35.87		54	19.16	84	5.63
25	25 10			10 60		. 5 24
25 26	35.19	•	55	18.68	85	5.34
26 27	34.53		56 57	18.21	86	5.06
27	33.87		57 58	17.75	. 87	4.80
28	33.23		58	17.29	88	4.55
29	32.60	•	59	16.83	89	4.31
30	31.98		60	16.37	90	4.09
31	31.37		61	15.91	91	3.87
32	30.76		62	15.45	92	3.66
33	30.17		63	14.99	93	3.46
34	29.58		64	14.53	. 94	3.26
25	20.00			14.05	0.5	
35	29.00		65	14.07	. 95	3.07
36	28.43		66	13.60	96	2.89
37	27.87		67	13.13	97	2.71
38	27.31		68	12.66	98	2.54
39	26.76		69	12.18	. 99	2.37
40	26.21		70	11.70	100	2.20
41	25.67		71	11.21	. 101	2.04
42	25.14		72	10.72	102	1.88
.43	24.61		73	10.22	103	1.72
44	24.09		74	9.73	104	1.55
45	23.57		75	9.24	105	1.38
46	23.06		76	8.76	. 106	1.38
40 47	22.56		76 77	8.76	100	1.21
48	22.06		77 78	7.83	107	
46 49 .	22.00		78 79	7.83 7.41	109	0.88
43.	. 41.31		19	7.41	109	0.71
					110	0.50

1981 Disability Table (General)

C. Summary of Membership and Benefit Statistics

ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION OF ACTIVE GENERAL TIER 1 MEMBERS AS OF JUNE 30, 2000

٧FA	DC	UE.	CED	VII	~⊏

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19			-							
20-24										
25-29										
20.24							•			
30-34									i	
35-39				14	1					15
				41,825	27,495					40,869
40-44			6	46	61	8			١	121
			33,724	44,972	47,651	53,583				46,334
45-49	2	3	11	75	196	52	, 5			344
	29,171	52,072	39,901	50,832	55,176	51,262	45,430			52.829
50-54	2 24 306	3	7	80	205	189	58	6	,	550
	34,396	40,214	49,535	52,639	56,993	58.268	56,216	58,104		56.459
55-59	2 29,266	2 70 . 663	9 58,224	32 47,040	75 53,477	110 57.675	86 56,909	25 55,299	1 36,713	342 55,256
60-64		1	1	5	32	31	21	8	3	102
		56,469	45,462	42,334	46,115	47,303	52,968	51,161	45,928	48,187
65-69					6	6	3			15
					39,468	46,417	40,313			42,417
70-74						1			,	. 1
						33,771				33,771
75+				2		1				3
			· · · · · · · · · · · · · · · · · · ·	37,251	<u> </u>	61,973				45,491
Total	6	9	34	254	576	398	173	39	4	1,493
	30,944	52,739	45,808	49,091	54,089	56,010	55,579	54,882	43,624	53,626
			Total Salary		\$	80,064,400				
			Average Serv			51.89 23.72				

ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION OF ACTIVE GENERAL TIER 2 & 3 MEMBERS AS OF JUNE 30, 2000

YEARS OF SERVICE

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	13									13
	25,270									25,270
20-24	257	1								258
	25,000	49.695								25,096
25-29	621	59	4						•	684
	31,719	39,904	33,086						•	32,434
30-34	702	284	101	2		•				1,089
	35,425	41,870	41,486	41,522						37,679
35-39	630	426	352	44						1,452
	36,326	44,374	45,722	43,445						41,181
40-44	590	461	390	153	1					1,595
	35,748	47,261	49,717	51,137	46,709					43,974
45-49	520	372	376	150	2		•			1,420
	36,511	45,615	48,705	53,234	65,049					43,931
50-54	395	315	341	153	-6					1,210
	38,025	48,532	48,757	54,539	63,276	-				45,998
55-59	194	162	171	87	3		1			618
	38,886	45,322	47,128	46,833	39,677		51,813			43,997
60-64	86	83	97	39	1					306
	37,433	39,859	43,847	47,789	45,458					41,470
65-69	. 20	19	14	4	1					58
	32,914	48,829	46,722	33,264	35,592					41,531
70-74	8	4	2	2	1					17
	22,417	38,380	44,842	30,463	61,114					32,034
75+	1	1	2					•		4
	25,309	56,279	72,767	·						56,781
Total	4,037	2,187	1.850	634	15	0	1	0	0	8,724
	34,909	45,281	47,539	50,915	54,511	0	51,813	0	0	41,386
			Total Salary Average Age		\$ 36	61,053,949				,

 Total Salary
 \$ 361,053,949

 Average Age
 42.30

 Average Service
 6.03

ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION OF ACTIVE SAFETY TIER 1 MEMBERS AS OF JUNE 30, 2000

YEARS OF SERVICE

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19				,					· · · · · · · · · · · · · · · · · · ·	
20-24										
25-29	8	28	1							. 37
	44.527	57,468	59,392							54,722
30-34	9	87	66							162
	54,059	59,924	61,723	•						60,331
35-39	. 10	71	150	31	. 1					263
	61,076	60,199	62,804	67,768	58,436					62,604
40-44	9	20	•	100	26					243
	54,209	58,999	63,746	67,423	74,569				٠	65,673
45-49	5	.10	33	54	80	16	1			199
	64,967	62,350	58,723	63,855	71,634	74,872	70,121			67,001
50-54	4	6	16	16	46	104	18		•	210
	69,427	56,264	70,308	60,688	63,590	72,269	78,379			69,349
55-59	2	1	3	3	7	16	5			. 37
	62,868	96,391	62,997	54.899	62,228	71,965	94,292			71,198
60-64		l 72 167	2	1	1	1	1	1		8
CE (O		73,167	67,595	69,355	65,046	92,136	94,669	129,405		82,371
65-69			2 ⁻ 57,546							2
70-74			27,340	•						57,546
70-74							•			
75+	•									
			1 63,071							63,071
Total	47	224	362	205	161	137	25	· 1	0	
	56,801	59,854	62,786	65,836	69,278	72,683	81,883	129,405	0	1,162 65,051
			Total Salary			75,589,681			•	22,021
			Average Age			42.38				
			Average Serv	ice		14.75				

ANNUAL SALARY AND MEMBERSHIP DISTRIBUTION OF ACTIVE SAFETY TIER 2 MEMBERS AS OF JUNE 30, 2000

YEARS OF SERVICE .

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19										
20-24	50	1								. 51
	44,492	50,877								44,617
25-29	265	11								276
	46,405	51,933								46,625
30-34	176	40	6.							222
	48,570	51,440	51,588							49,168
35-39	59	23	28	1						, 111
	47,186	50,237	55,672	51,371						49,997
40-44	30	10	13	14						67
	45,048	52,065	52,297	56,632						49,922
45-49	14	5	11	8	13	3				54
	46,111	56,964	54.427	53,805	53,175	65,770				52,743
50-54	6	2	4	5	9	13	5			44
	53.549	58,314	54,070	52,689	55,904	60,608	68,106			57,937
55-59	2		2	2	4	5	. 8	1		24
	64,659		59,561	85,682	61,300	55,934	66.931	64,271	,	64,350
60-64	. 2			1		1	2	1		7
	57,819			45,341		66,840	80,545	55,834		63,535
65-69										
70-74										
				•		·				
75+										
Total	604	.92	64	31	. 26	22	15	2	. 0	856
	47,049	51,710	54,411	56,607	55.370	60,533	69,138	60,053	0	49,463
		7	otal Salary		\$	42 240 270				,
			verage Age		Ф	42,340,279 34.14				
			Average Serv		•	5.37				

ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION OF RETIRED GENERAL MEMBERS AND BENEFICIARIES AS OF JUNE 30, 2000

VEADO	OF	DET	TOTAL CONTRACTOR
IEARS	Ur	KE I	IREMENT

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	5	1	1							7
	5.459	6,927	1.947							5.167
20-24		2	2							4
		8,952	4,076							6,514
25-29	1	1	. 4							6
	5,234	8,284	4,666							5,364
30-34	3		•	. 2	1					6
	10,414			8,996	3,453					8,781
35-39	3	2		1		•				6
	1,973	7,341		3,705						4,051
40-44	11	11	. 3		1					26
	12,068	11,016	7,586		4,900					10,830
45-49	21	13	. 8	2	2				• .	46
	10,293	12,138	8,080	4,122	10,144					10,154
50-54	186	43	18	7	2					256
	11,154	10,435	12,306	12,599	3,884	•		•		11,097
55-59	296	168	27	14	8	. 3	2	>		518
	15,648	10,949	10,315	11,444	9,618	9,247	7,275			13,570
60-64	347	246	124	16	6	5	2	1		747
	19,185	16,105	10,848	10,027	9,176	5,692	8,736	7,515		16,376
65-69	276	309	170	83	21	13	3	2	1	878
	18.302	19,338	13,376	9,274	9,842	9,843	12,422	6,366	20,341	16,487
70-74	47	192	249	159	66	15	. 1	1		730
	15,242	20,406	15,902	9,568	10,500	8,351	14,956	5,091		15.005
75-79	11	41	179	261	147	31	5	. 1	1	677
	20,531	14,908	16,450	13,195	9,916	7,196	10,123	8,162	8,142	13,255
80-84	3	8	39	162	145	73	3	2	. 1	436
	19,863	16,165	12,915	13,836	10,444	6,892	16,160	10,547	9,778	11,539
85-89	2	. 2	1	- 25	. 78	67	13	3		191
	9,866	11,322	767	15,432	11,735	7,678	6,301	6,754		10,266
90+					15	41	13	8		77
					7,427	9,084	8,870	6,914		8,500
otal	1,212 16,382	1,039 16,587	825	732	492	248	42	18	3	4,611
	10,202	10,567	14,114	12,023	10,298	7,752	9,061	7,232	12,754	14,112

Total Retired Benefit \$ 65.071,820
Average Age . 68.55
Average Years Retired 11.08

ANNUAL BENEFIT AND MEMBERSHIP DISTRIBUTION OF RETIRED SAFETY MEMBERS AND BENEFICIARIES AS OF JUNE 30, 2000

YEARS OF RETIREM	FNT

Age Group	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	TOTAL
0-19	•			* -						•
				*						
20-24		1	1							
		2,885	16,852							9,86
25-29			1						•	
			34,186							
30-34	3	2								
	23,949	9,368				•				18,11
35-39	7	2								
	18,475	13,138				•				17.28
10-44	6	5	2	2						1
	23,138	22,962	27,844	13,159						22,37
45-49	23	7	8.	4	1					1
	25,366	13,422	18,207	23,351	10,831	-				21,50
50-54	67	11	15	6	2					10
	29,460	19,094	25,357	11,824	13,505		•			26,3
55-59	145	46	14	11	4	2		•		2:
	42.845	29,444	21,581	25,345	18,138	7,500				37,0
60-64	48	109	32	14	7	2				2
	74,047	47,031	27,808	26,479	18,095	10,063				39,1
65-69	14	19	51	34	9	•			,	1
	56,845	34,291	40,739	28,443	19,686					33,69
70-74	. 3	5	12	28	1,8	6				
	23,991	46,808	32,167	35,096	18,377	12,527				28,8
75-79		. 3	4	8	23	10				
		14,572	15,619	35,906	20,553	17,198				21,6
80-84				1	4	4				
				16,070	23,525	16,947			•	19,7
85-89					1	7				
						19,284				19,1
90+						3				
						19,850				19.8
Total	316 42,823	210 37,508	140 31,078	108 28,641	69 19,012	34 16,017		•		8 3 <i>5</i> ,0

Total Retired Benefit \$ 28,548,654 Average Age 60.87 Average Years Retired 9.02

System Membership and Benefit Statistics

	Active General Members										
		June 30, 2000	June 30, 1999	Percent							
				Change							
1.	Tier 1			,							
A.	Number	1,493	1,627	-8.2%							
В.	Average Age	51.89	51.37	1.0%							
C.	Average Years of Service	23.72	23.51	0.9%							
D,	Annual Salary		· .								
	i. Total	\$80,064,000	\$81,124,000	-1.3%							
	ii. Average	\$53,626	·\$49,861	7.6%							
2.	Tier 2	,	***								
Α.	Number	505	537	-6.0%							
В.	Average Age	44.69	43.54	2.6%							
C.	Average Years of Service	10.27	9.39	9.4%							
D.	Annual Salary										
	i. Total	\$22,952,000	\$23,020,000	-0.3%							
	ii. Average	\$45,450	\$42,868	6.0%							
3.	Tier 3										
Α.	Number	8,221	7,186	14.4%							
В.	Average Age	42.14	42.46	-0.8%							
C.	Average Years of Service	5.77	6.18	-6.6%							
D.	Annual Salary			i							
	i. Total	\$338,102,000	\$296,143,000	14.2%							
	ii. Average	\$41,127	\$41,211	-0.2%							
4.	Total										
A.	Number	10,217	9,350	9.3%							
В.	Average Age	43.70	44.07	-0.8%							
C.	Average Years of Service	8.62	9.38	-8.1%							
D.	Annual Salary										
	i. Total	\$441,118,000	\$400,287,000	10.2%							
	ii. Average	\$43,175	\$42,811	0.9%							

System Membership and Benefit Statistics

		Active Safety Member	ers	
		June 30, 2000	June 30, 1999	Percent Change
1.	Tier 1			
A.	Number	1,162	1,220	-4.8%
B.	Average Age	34.14	41.64	-18.0%
C. D.	Average Years of Service Annual Salary	14.75	14.24	3.6%
	i. Total	\$75,590,000	\$67,159,000	12.6%
	ii. Average	\$65,052	\$55,048	18.2%
2.	Tier 2	· · · · · · · · · · · · · · · · · · ·		
A.	Number	856	784	9.2%
В.	Average Age	34.14	34.60	-1.3%
C.	Average Years of Service	5.37	6.13	-12.4%
D.	Annual Salary			,
	i. Total	\$42,340,000	\$34,879,000	21.4%
	ii. Average	\$49,463	\$44,489	11.2%
3.	Total	•		
A.	Number	2,018	2,004	0.7%
В.	Average Age	34.14	38.89	-12.2%
C. D.	Average Years of Service Annual Salary	10.77	11.07	-2.7%
	i. Total	\$117,930,000	\$102,038,000	15.6%
1	ii. Average	\$58,439	\$50,917	14.8%

	Retired	and Inactive Vested	Members	
		June 30, 2000	June 30, 1999	Percent Change
Reti	ired Members			
A.	Service Retirement			,
1	i. Number	3,937	3,811	3.3%
l	ii. Annual Allowance			
	Basic Only	\$56,229,664	\$51,127,171	10.0%
	COLA	<u>16,849,994</u>	<u>14,919,652</u>	12.9%
	Total	\$73,079,657	\$66,046,823	10.6%
}	Average Monthly Amount	\$1,547	\$1,444.21	7.1%
В.	Disability Retirement			٠.
	i. Number	675	669	0.9%
	ii. Annual Allowance ·	·	,	
	Basic Only	\$8,387,187	\$7,873,296	6.5%
	COLA	3,505,395	3,226,676	8.6%
	Total	\$11,892,582	\$11,099,972	7.1%
	Average Monthly Amount	\$1,468.22	\$1,382.66	6.2%
C.	Beneficiaries			·
-	i. Number	876	823	6.4%
	ii. Annual Allowance			•
Ì	Basic Only	\$5,599,196	\$5,019,758	11.5%
	COLA	3,049,039	<u>3.531.705</u>	-13.7%
1	Total	\$8,648,236	\$8,551,463	1.1%
	Average Monthly Amount	\$823	\$865.88	-5.0%
Ina	ctive Vested Members			
A.	Number	1,828	1,739	, 5.1%

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

General Members

	Count	Mor	nthiy Allowance	
		Basic	COL	Total
Service Retirement				
Unmodified	2,947	2,914,195	976,086	3,890,281
Option 1	215	185,593	48,155	233,748
Option 2, 3 & 4	. 219	171,802	38,297	210,099
Total	3,381	3,271,590	1,062,538	4,334,128
Ordinary Disability				
Unmodified	291	194,062	82,992	277,053
Option 1	23	11,437	5,385	16,823
Option 2, 3 & 4	12	7,110	2,786	9,896
Total	326	212,608	91,163	303,772
Duty Disability			•	
Unmodified	168	170,645	83,681	254,326
Option 1	6	7,873	1,592	9,464
Option 2, 3 & 4	4	3,958	1,824	5,781
Total	178	182,475	87,097	269,572
Beneficiary			•	
Total	726	333,284	181,898	515,182
Total (All Groups)	4,611	3,999,957	1,422,696	5,422,653

Safety Memebers

	Count	Mor	nthly Allowance	
		Basic	COL	Total
Service Retirement	_			
Unmodified	519	1,224,628	248,263	1,472,891
Option 1	18	43,258	11,897	55,154
Option 2, 3 & 4	19	40,495	9,907	50,402
Total	556	1,308,380	270,067	1,578,448
Ordinary Disability				
Unmodified	19	21,687	11,839	33,526
Option 1	-	- ·	-	
Option 2, 3 & 4	1	1,434	228	1,662
Total	20	23,121	12,067	35,188
Duty Disability				
Unmodified	143	264,606	98,203	362,809
Option 1	6	10,284	2,940	13,224
Option 2, 3 & 4	2	2,850	471	3,322
Total	151	277,741	101,614	379,355
Beneficiary				
Total	150	131,641	68,670	200,311
Total (All Groups)	877	1,740,883	452,418	2,193,301

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D. Members' Contribution Rates

RECOMMENDED GENERAL MEMBERS' CONTRIBUTION RATES

	Basic			·	COI	L **		Basic and COL				
	First \$350 of Monthly Salary		Salary In Excess of \$350		First \$350 of Monthly Salary		Salary in Excess of \$350		First \$350 of Monthly Salary		Salary In Excess of \$350	
<u>Age</u>	<u>Tier 1</u>	Tier 2 & 3	Tier 1	<u>Tier 2 & 3</u>	Tier 1	Tier 3	Tier I	Tier 3	Tier 1	Tier 3	Tier 1	Tier 3
20	3.64%		5.46%		0.36%		0.53%	•	4.00%		5.99%	
21	3.65%		5.48%		0.36%		0.53%		4.01%		6.01%	
22	3.67%		5.50%		0.36%		0.54%		4.03%		6.04%	
23	3.68%	•	5.52%		0.36%		0.54%		4.04%		6.06%	
24	3.71%		5.56%	•	0.36%		0.54%		4.07%		6.10%	
25	3.72%		5.58%	•	0.36%		0.54%		4.08%		6.12%	
26	3.75%		5.62%		0.37%		0.55%		4.12%		6.17%	
27	3.77%		5.66%		0.37%		0.55%		4.14%		6.21%	
28	3.80%		5.70%		0.37%		0.56%		4.17%		6.26%	
29	3.83%	• •	5.74%		0.37%		0.56%		4.20%		6.30%	
30	3.85%		5.78%		0.38%		0.56%		4.23%		6.34%	
31	3.89%		5.84%		0.38%		0.57%		4.27%		6.41%	
32	3.93%		5.90%		0.38%		0.58%		4.31%		6.48%	
33	3.96%		5.94%		0.39%		0.58%		4.35%		6.52%	
34	4.00%		6.00%		0.39%	•	0.59%		4.39%		6.59%	
35	4.04%	3.85%	6.06%	5.78%	0.39%	0.23%	0.59%	0.34%	4.43%	4.08%		6.12%
36	4.08%		6.12%		0.40%		0.60%		4.48%		6.72%	
37	4.12%		6.18%	•	0.40%		0.60%		4.52%		6.78%	
38	4.17%		6.26%		0.41%		0.61%		4.58%		6.87%	
39	4.21%	ı	6.32%	. ,	0.41%		0.62%		4.62%		6.94%	
40	4.27%	ı	6.40%		0.42%		0.62%		4.69%		7.02%	
41	4.31%	,	6.46%		0.42%		0.63%		4.73%		7.09%	
42	4.36%		6.54%		0.43%		0.64%		4.79%		7.18%	
43	4.41%	٠.	6.62%	•	0.43%		0.65%		4.84%		7.27%	
44	4.47%	•	6.70%		0.44%		0.65%		4.91%		7.35%	
45			6.78%		0.44%		0.66%		4.96%		7.44%	
46	4.57%	1	6.86%		0.45%		0.67%		5.02%		7.53%	
47	4.63%		6.94%		0.45%		0.68%		5.08%		7.62%	
48	4.68%		7.02%		0.46%		0.69%		5.14%		7.71%	
49	4.75%		7.12%	•	0.46%		0.69%		5.21%		7.81%	
50	4.81%	'n	7.22%	i	0.47%		0.70%		5.28%		7.92%	
51	4.87%	ı	7.30%	ı	0.48%		0.71%		5.35%		8.01%	
52	4.93%		7.40%	1	0.48%		0.72%		5.41%		8.12%	
53	5.00%		7.50%		0.49%		0.73%		5.49%		8.23%	
54	5.08%		7.62%)	0.50%		0.74%		5.58%		8.36%	
55	5.15%	h ·	7.72%		0.50%		. 0.75%		5.65%		8.47%	
56	5.23%	ú	7.84%	,	0.51%		0.77%		5.74%		8.61%	
57	5.29%	iı	7.94%	1	0.52%		0.77%		5.81%		8.71%	
58	5.37%	i.	8.06%	j	0.52%		0.79%		5.89%		8,85%	
59	5.45%	6	8.18%	i	0.53%		0.80%		5.98%		8.98%	

[•] Full contribution rates expressed as a percentage of salary based upon 8.00% interest and 5.55% salary scale assumptions. Members who enter prior to 1/1/75 contribute as indicated above and all others contribute on the basis of a single entry age of 35.

** COL fraction:

Tier 1:

9.76%

Tier 3:

5.87%

RECOMMENDED SAFETY MEMBERS' CONTRIBUTION RATES

		Ва	ısic			CO	L **		Basic and COL			
	First \$350 of Monthly Salary		alary In Excess of \$350	TT 0	First \$350 of Monthly Salary	7 77 - 2	Salary In Excess of \$350		First \$350 of Monthly Salary		Salary In Excess of \$350	99 v. 3
<u>Age</u>	<u>Tier 1</u>	Tier 2	<u>Tier 1</u>	Tier 2	<u>Tier 1</u>	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
20	5.36%		8.04%		0.52%		0.78%		5.88%		8.82%	
21	5.36%		8.04%		0.52%		0.78%		5.88%		8.82%	
22	5.37%		8.06%		0.52%		0.79%		5.89%		8.85%	
23	5.40%		8.10%		0.53%		0.79%		5.93%		8.89%	
24	5.41%		8.12%		0.53%		0.79%		5.94%		8.91%	
25	5.44%		8.16%		0.53%		0.80%		. 5.97%		8.96%	
26	5.48%		8.22%		0.53%		0.80%		6.01%		9.02%	
27	5.51%		8.26%		0.54%		0.81%		6.05%		9,07%	
28	5.55%	5.28%	8.32%	7.92%	0.54%	0.46%	0.81%	0.70%	6.09%	5.74%	9.13%	8.62%
29	5.60%		8.40%		0.55%		0.82%		6.15%		9.22%	
30	5.64%		8.46%		0.55%		0.83%		6.19%		9.29%	
31	5.69%		8.54%		0.56%		0.83%		6.25%		9.37%	
32	5.76%		8.64%		0.56%	•	0.84%		6.32%		9.48%	,
33	5.83%		8.74%		0.57%		0.85%	*	6.40%		. 9.59%	
34	5.88%		8.82%		0.57%		0.86%		6.45%		9.68%	
35	5.96%		8.94%		0.58%		0.87%		6.54%		9.81%	
36	6.03%		9.04%		0.59%		0.88%		6.62%		9.92%	
37	6.11%		9.16%		0.60%		0.89%		6.71%		10.05%	
38	6.19%		9.28%		0.60%		0.91%		6.79%		10.19%	
39	6.27%		9.40%		0.61%		0.92%		6.88%		10.32%	
40	6.35%		9.52%		0.62%		0.93%		6.97%		10.45%	
41	6.43%		9.64%		0.63%		0.94%		7.06%		10.58%	
42	6.51%		9.76%		0.64%		0.95%		7.15%		10.71%	
43	6.60%		9.90%		0.64%		0.97%		7.24%		10.87%	
44	6.68%		10.02%		0.65%		0.98%		7.33%		11.00%	
45	6.77%		10.16%		0.66%		0.99%		7.43%		11.15%	
46	6.87%		10.30%		0.67%		1.01%		7.54%		11.31%	
47	6.96%		10.44%		0.68%		1.02%		7.64%		11.46%	*
48	7.05%		10.58%		0.69%		1.03%		7.74%		11.61%	
49	7.15%		10.72%		0.70%		1.05%		7.85%		11.77%	

[•] Full contribution rates expressed as a percentage of salary based upon 8.00% interest and 5.55% salary scale assumptions. Members who enter prior to 1/1/75 contribute as indicated above and all others contribute on the basis of a single entry age of 28.

** COL fraction:

Tier 1:

9.76%

Tier 2:

8.78%

E. CAFR Schedules

Schedule of Active Member Valuation Data

Schedule of Active Member Valuation Data

		Schedule C	I A	tive Member v	aiuati	IOII Data		
					P	Annual	% Increase in	
Valuation Date	Plan Type	Number	A	nnual Payroll	Ave	erage Pay	Average Pay *	
		0.704	•	212 (02 000		25.015	2 (29)	
06/30/1994		8,704	\$	312,603,000	\$	35,915	2.63%	
	Safety	1,406		62,667,000		44,571	0.83%	
	Total	10,110	\$	375,270,000	\$	37,119	2.21%	
06/30/1995	General	8,973	\$	335,175,000	\$	37,354	4.01%	
	Safety	1,488		70,108,000		47,116	5.71%	
	Total	10,461	\$	405,283,000	. \$	38,742	4.37%	
06/30/1996	General	8,860	\$	329,019,000	\$.	37,135	-0.58%	
00/30/1990	Safety	1,896	Ψ	88,584,000	Ψ.	46,722	-0.84%	
	Total	10,756	\$	417,603,000	\$	38,825	0.21%	
06/30/1997	General	8,684	\$	328,676,000	\$	37,848	1.92%	
00/30/1997	Safety	1,863	J	90,791,000	Ψ	48,734	4.31%	
	Total	. 10,547	\$	419,467,000	\$	39,771	2.44%	
06/30/1998	General	8,866	\$	367,781,000	\$	41,482	9.60%	
00/30/1998	Safety	1,935	Ψ	102,604,000	ų.	53,025	8.81%	
	Total	10,801	\$	470,385,000	\$	43,550	9.50%	
06/30/1999	Ganaral	9,350	\$	400,287,000	\$	42,811	3.20%	
00/30/1999	Safety	2,004	J	102,038,000	Φ	50,917	-3.98%	
	Total	11,354	\$	502,325,000	\$	44,242	1.59%	
		-						
06/30/2000	General	10,217		441,118,000	\$	43,175	0.85%	
	Safety	2,018		117,930,000		58,439	14.77%	
	Total	12,235	\$	559,048,000	\$	45,693	3.28%	

^{*} Reflects the increase in average salary for members at the beginning of the year versus those at the end of the year, it does not reflect the average salary increases received by members who worked the full year.

Retirees and Beneficiaries Added To and Removed From Retiree Payroll

Average	Annual	Mowance	13,326	13,937	14,460	15,221	16,127	16,160	16,653
						-	50		6.0
% Increase in	Annual Retiree	Payroll	11.30% \$	11.09%	6.47%	8.63%	11.38%	8.81%	6.64%
Annual Retiree	Payroll (In	Thousands)	55,035	61,140	65,098	70,716	78,762	869,88	91,391
4		L	↔	₩	₩	₩	₩	₩	↔
		At End of Year		4,387	4,502	4,646	4,884	5,303	5,488
	Removed	During Year	N/A	N/A	N/A	176	. 156	154	192
	Added During	Year	N/A	N/A	N/A	320	394	573	377
	At Beginning	of Year	3,935	4,130			4.646	4.884	5,303
	Plan Year	Ending	06/30/1994	06/30/1995	06/30/1996	06/30/1997	06/30/1998	06/30/1999	06/30/2000

N/A - Not Available

Sacramento County Employees' Retirement System

Solvency Test

(amounts in thousands)

Portion of Accrued Liabilities Covered by Reported Assets

Aggregate Accrued Liabilities for

Active Active Active Members I Value Member Retired/Vested (Employer Financed sets Contributions Members	06,922 100% 100% 26% 67,064 100% 100% 91% 156,715 100% 100% 100% 138,57 100% 100% 100%
Actuarial Value of Assets Co	1,106,922 1,767,064 1,956,715
Act	&9
Total	1,634,773 1,835,864 1,987,230

Total

Financed Portion)

(Employer

Retired/Vested Members

Active Member

Valuation

Contributions

Active Members

709,921 773,194 850,817 990,447

732,203 848,904 892,185 975,206

192,649 213,766 244,228

> 06/30/1995 06/30/1996 06/30/1997 06/30/1998 06/30/1999 06/30/2000

06/30/1994

100% 100% 100%

100% %001 %00I

100% 100% 100%

2,600,547 3,017,639 3,427,348

> 2,734,548 3,111,760

2,409,642

,080,349

,043,514 ,122,054

,285,147

,526,801

,239,894

327,347 345,065

285,779

260,787

Events affecting year to year comparability:

Investment return assumption reduced from 8.50% to 8.00%; Inflation assumption dropped from 5% to 4.50%; 06/30/94 -

Salary increase assumption decreased from 6.00% to 5.50%.

Inflation assumption decreased from 4.50% to 4.25%. Modification in non-economic assumptions. - 56/08/90

Included \$533,034 of Pension Obligation Bonds issued on July 5, 1995.

Salary increase assumption increased from 5.50% to 5.55%. Modification in non-economic assumptions. Liability as a result of Ventura Court Decision was included. - 86/08/90

Sacramento County

Employees' Retirement System

Sacramento County Employees' Retirement System -- 2000 CAFR

Actuarial Analysis of Financial Experience

(Amounts in millions)

					Z	Plan Years Endii	Inding 6/30				
		2000		6661		8661	1997		9661		1995
Prior Valuation Unfunded Actuarial Accrued Liability	⇔ ,	(283)	₩.	(191)	∽	(12) \$	31	\$9	69	\$	533
Salary Increase Greater (Less) than Expected	69	46	€9	(93)	69	(29)					
Asset Return Less (Greater) than Expected	↔	9)	69	(11)	69	(202)					
Other Experience	\$	(2)	59	(18)	€9	55					
Liability from Ventura Court Decision	€9	. •	8	•	€9	95					
Economic and Non-Economic Assumption Changes	₩	, 1	€9		\$	21					
Data Corrections	69	1	€9	30	S	1					
Transfer from Excess Earnings	€9	(71)	89	1	€9	(116)					
Ending Unfunded Actuarial Accrued Liability	∨ 3	(316)	€	(283)	€	\$ (161)	(12)	€	31	€9	69

^{*} Includes \$24 million in Recognition of Sick Leave Service in Valuation and \$6 million in Loss from Retirements.

SCHEDULE OF AVERAGE BENEFIT PAYMENTS

3.7	C:	TO 12	
Years	Since	Retirement	

Retirement Effective Dates							
7/1/93-6/30/99	0-4	5-9	10-14	15-19	20-24	25-29	30 & OVER
Period 7/1/93-6/30/94:							
Average Monthly Benefit	\$1,469	\$1,184	\$979	\$759	\$628	S535	\$396
Number of Active Retirants	1,225	1,074	862	. 571	301	68	29
Period 7/1/94-6/30/95:							
Average Monthly Benefit	\$1,505	\$1,248	\$1,037	\$823	\$652	\$573	\$610
Number of Active Retirants	1,337	1,103	877	627	328	82	33
Period 7/1/95-6/30/96:			• .				
Average Monthly Benefit	\$1.501	\$1,283	\$1,114	\$893	\$697	\$633	\$478
Number of Active Retirants	1,430	1,121	875	649	317	82	28
Period 7/1/96-6/30/97:			+,				
Average Monthly Benefit	\$1,539	\$1,404	\$1,151	\$950	\$760	\$651	\$485
Number of Active Retirants	1.501	1,092	902	683	337	104	. 27
Period 7/1/97-6/30/98:						• .	
Average Monthly Benefit	\$1.659	\$1,472	\$1,228	\$1,007	\$858	\$698	\$482
Number of Active Retirants	1,633	1,043	962	700	366	147	33
Period 7/1/98-6/30/99:						*	
Average Monthly Benefit	\$1.639	\$1,552	\$1,313	\$1,079	\$923	\$727	\$579
Number of Active Retirants	1,667	1,262	979	744	432	179	40
Period 7/1/99-6/30/00:							
Average Monthly Benefit	\$1,821	\$1,675	\$1,381	\$1.180	\$947	\$729	\$2,125
Number of Active Retirants	1,528	1,249	965	840	561	282	75

F. Glossary of Actuarial Terminology

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. Under the Entry Age Normal Funding Method, changes in Actuarial Accrued Liability due to experience different from our assumptions increase or decrease the Actuarial Accrued Liability.

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. 5: A set of disclosures promulgated by GASB to provide users of financial statements information as to the funding status of a public retirement system. GASB No. 5 specifies the Pension Benefit Obligation as a standardized target level of the accounting value of assets.

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 system. GASB No. 25 specifies the Actuarial Accrued Liability as a standardized level of the Actuarial Value 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.