

**San Mateo County Employees'
Retirement Association**

**ACTUARIAL AUDIT VALUATION
June 30, 2005**



By

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March 17, 2006

Board of Retirement
San Mateo County Employees' Retirement Association
100 Marine Parkway, Suite 125
Redwood Shores, CA 94065-5208

Dear Members of the Board:

As requested, we have completed an actuarial audit valuation for the San Mateo County Employees' Retirement Association (SamCERA). The purpose of the audit is to determine the appropriateness of the employer and member contributions for the fiscal year beginning July 1, 2006 recommended in the June 30, 2005 actuarial valuation prepared by Public Plan Professionals, Inc. (P3). As discussed in this report, we are recommending that revised contribution rates be adopted, based upon our audit work and recommended changes in the actuarial assumptions.

Actuarial Certification – Per SamCERA Consulting Contract

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27 and 35. In particular, it reflects the actuary's responsibility under Section 5.8 of ASOP No. 4 for assessing the implications of overall results, in terms of short- and long-range benefit security and expected cost progression.

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our best professional judgment, the assumptions and methodologies as adopted by the Board of Retirement, individually and in combination, are reasonably related to the experience of and the expectations for the Plan and will not, in and of themselves, expose the retirement system to 'unsound financial risk.' In this regard, we consider 'unsound financial risk' to mean the following:

- A substantial likelihood that future required contribution rates as a percentage of payroll will be dramatically higher than the rates shown in this report, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions; or
- A substantial likelihood that plan assets will be insufficient to pay benefit payments when due, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions.

In preparing this report, we have complied with all quality assurance procedures detailed on page 14 of our November 28, 2005 proposal titled "Response for Request for Actuarial Services."



Actuarial Certification - Milliman

The major findings of the audit valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2005. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the SamCERA's staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is materially inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors for SamCERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of SamCERA and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience affecting SamCERA. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The Board of Retirement has the final decision regarding the appropriateness of the assumptions.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for SamCERA. Actuarial computations under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations prepared for this purpose may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of SamCERA's current funding requirements and of GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work product was prepared exclusively for the use or benefit of SamCERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning SamCERA's operations, and uses SamCERA's data, which Milliman has not audited. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.



Board of Retirement
San Mateo County Employees' Retirement Association
March 17, 2006
Page Three

We would like to express our appreciation to Mr. David Bailey, Chief Executive Officer of SamCERA, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

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

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Karen I. Steffen, FSA, EA, MAAA
Consulting Actuary

Nick J. Collier, ASA, EA, MAAA
Consulting Actuary

KIS/NJC/nlo

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San Mateo County Employees' Retirement Association

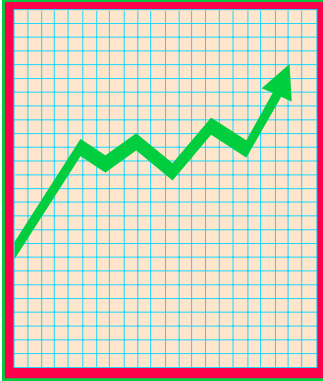
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San Mateo County Employees' Retirement Association

Section 1: Summary of the Findings



Overview:

We performed an independent audit valuation of SamCERA as of June 30, 2005. The purpose of the audit was to determine the appropriateness of the employer and member contribution rates for the fiscal year beginning July 1, 2006 recommended in the June 30, 2005 actuarial valuation prepared by Public Plan Professionals, Inc. (P3). For reasons described in this letter, we are recommending that revised employer contribution rates be adopted.

We are presenting a large amount of information in this report, much of it detailed. Before delving into the finer points, it may be instructive to take a high level look at the results. The following chart presents a summary of the calculated County contribution rate as of last year (the top line) and this year (the bottom line). The numbers in between explain the changes that have occurred during the year.

County Contribution Rate	
2004 Valuation	21.22%
Experience During Year*	-1.57%
P3 Assumption Changes*	<u>-2.50%</u>
P3 2005 Valuation	17.15%
Revised Milliman Calculations	4.48%
Revised Milliman Assumptions	<u>3.53%</u>
Milliman 2005 Valuation	25.16%

A brief summary of each of the changes is shown below.

- **Experience During Year:** Several factors caused a decrease in P3's initial calculation of the County contribution rates. Two examples are: 1) The final cost for the Ventura Decision was less than the reserve held; and 2) COLAs granted to retirees were less than assumed due to lower-than-expected CPI.
- **P3 Assumption Changes:** The assumptions recommended by P3 resulted in a lower County contribution rate (based on their calculations).

Overview (continued)

- **Revised Milliman Calculations:** We found there was a material understatement of the expected deferred benefit projected to be paid to current active members in the future. See “Actuarial Liabilities” in Section 9 for further details. The result of our revised calculation was an increase of about 4.5% of pay.
- **Revised Milliman Assumptions:** We are recommending revised assumptions. In particular, we believe it is appropriate to strengthen the mortality assumption (i.e., increase life expectancy). This recommended change is causing the majority of the 3.53% increase. Note that the changes that were adopted in August of 2005 shortened life expectancies, compared to the 2004 assumptions.

The remainder of this section, as well as Sections 2-8, discusses SamCERA’s financial status as of June 30, 2005. For more information on the actuarial audit, the reader is directed to Section 9. The recommended assumptions are discussed in further detail in Section 10.

Comparison with Prior Years

The focus of the above discussion is on what caused the change in employer rates from the 2004 valuation to the 2005 valuation. In that one-year period, there were two recommended changes in assumptions, as well as revised calculations. This is causing a lot of apparent fluctuation; however, looking back to 2003, we believe there has only been one significant change since then.

We believe the biggest difference between our calculated County contribution rate of 25.16% and the 22.84% calculated in the June 30, 2003 valuation is the investment return assumption. The return assumption was lowered from 8.00% to 7.75% as part of the assumptions previously adopted for the June 30, 2005 valuation. We estimate that this change caused a 2.62% increase in the calculated County contribution rate.

Since the total increase over the two-year period was 2.32% (from 22.84% to 25.16%), that means that all other factors combined caused a very small decrease in rates of 0.30% of pay. Thus, there has been very little overall change in the County rate since 2003, except for the change in the investment return assumption.

Summary of Recommendations

The following two-page exhibit summarizes our recommendations to the Board.

San Mateo County Employees' Retirement Association

Exhibit 1a: Summary of Recommendations

Recommendation #1: Adopt new assumptions for calculation of employer and member contribution rates.

The key assumptions we are recommending are as follows. See Section 10 and Appendix A for further details.

<i>Economic Assumptions</i>	<u>Milliman 2005</u>	<u>P3 2005</u>	<u>2004</u>
Price Inflation	3.50%	3.75%	4.00%
Wage Inflation	4.00%	3.75%	4.00%
Annual Investment Return	7.75%	7.75%	8.00%

Select Demographic Assumptions

<i>Select Demographic Assumptions</i>	<u>Recommendation</u>
Post-Retirement Mortality	RP2000 Healthy Annuitant Mortality Table with White Collar Adjustment Additional set-backs are applied (see Appendix A) resulting in longer life expectancies, particularly for Safety members.
Rates of Termination	Based on service, as shown in Appendix A.

Recommendation #2: Adopt new method -- Allocate valuation assets by classification instead of plan.

For reasons discussed in this section, we recommend allocating assets by classification for purposes of calculating the UAAL contribution percentage. Under this method, valuations assets are allocated as follows:

	General	Safety	Probation	Total
(in \$Millions)	\$ 1,227.7	\$ 313.6	\$ 74.3	\$ 1,615.6

Recommendation #3: Adopt new employer contribution rates for fiscal year beginning July 1, 2006 (Based on adoption of Recommendation #1)

	<u>June 30, 2005</u>	<u>June 30, 2004</u>	<u>Increase / (Decrease)</u>
County Normal Cost	12.03%	10.32%	1.71%
UAAL Amortization	13.13%	10.90%	2.23%
Total County Rate	25.16%	21.22%	3.94%
Estimated Annual County Contributions (in \$1,000's)	\$ 91,811	\$ 80,247	\$ 11,564

Recommendation #4: Adopt new employer contribution methodology for Mosquito Abatement District

Since the Mosquito Abatement District has a different formula than County General members, it is appropriate to calculate different contribution rates for both members and employers. The member rates are defined in the '37 Act; however, the method for determining employer contribution rates is not defined. Our recommendation is that the District contribute a percentage of the County contribution that is equal to:

District's Normal Cost Rate under their Current Formula (31676.14) - 2% @ 61.25

Divided by

District's Normal Cost Rate if calculated under the County General Formula (31676.1) - 2% @ 55.5

This ratio is equal to approximately 82%. Therefore, we recommend the District pay 82% of the County's contribution rate on a plan-by-plan basis. See Section 11a for further details.

San Mateo County Employees' Retirement Association

Exhibit 1b: Summary of Recommendations (continued)

Recommendation #5: Adopt new member contribution rates for fiscal year beginning July 1, 2006
(Based on adoption of Recommendation #1)

	Entry Age	June 30, 2005			June 30, 2004
		Basic	Cost Sharing	Total as a % of Pay	Total as a % of Pay
General Members - County					
Plans 1 & 2	25	5.97%	3.00%	8.97%	9.72%
	35	7.15%	3.00%	10.15%	10.09%
	45	8.59%	3.00%	11.59%	10.88%
Plan 4	25	5.72%	3.00%	8.72%	9.42%
	35	6.85%	3.00%	9.85%	9.77%
	45	8.18%	3.00%	11.18%	10.52%
General Members - Mosquito Abatement District					
Plans 1 & 2	25	5.13%	0.00%	5.13%	5.68%
	35	6.15%	0.00%	6.15%	6.06%
	45	7.37%	0.00%	7.37%	6.80%
Plan 4	25	4.91%	0.00%	4.91%	5.43%
	35	5.89%	0.00%	5.89%	5.79%
	45	7.06%	0.00%	7.06%	6.50%
Probation Members (Reflects Employer Pick-up)					
Plans 1 & 2	25	6.88%	3.50%	10.38%	10.64%
	35	8.25%	3.50%	11.75%	11.09%
	45	9.71%	3.50%	13.21%	12.05%
Plan 4	25	6.59%	3.50%	10.09%	10.31%
	35	7.90%	3.50%	11.40%	10.73%
	45	9.13%	3.50%	12.63%	11.65%
Safety Members - Other than Deputy Sheriff*					
Plans 1 & 2	25	8.09%	5.00%	13.09%	13.40%
	35	9.71%	5.00%	14.71%	13.93%
	45	11.42%	5.00%	16.42%	15.06%
Plan 4	25	7.75%	5.00%	12.75%	13.01%
	35	9.29%	5.00%	14.29%	13.51%
	45	10.74%	5.00%	15.74%	14.59%

* Cost Sharing varies for Deputy Sheriffs as follows:

3.0% if employee is less than 45 and has less than 5 years of service.

3.5% if employee is less than 45 and has between 5 and 15 years of service.

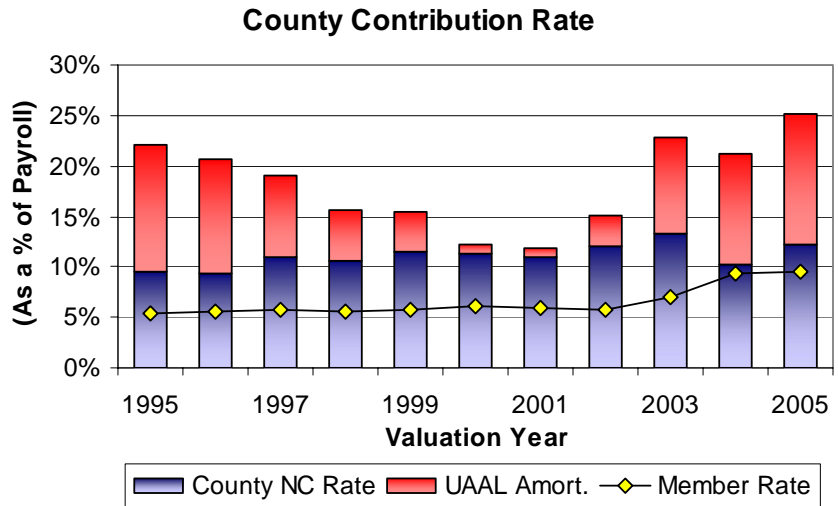
4.5% if employee is older than 45 or has at least 15 years of service.

County Contribution Rate

Under the Board's current funding objectives, the calculated County contribution rate is 25.16% of payroll. This is equal to the payment of the County normal cost rate plus a 16-year amortization of the Unfunded Actuarial Accrued Liability (UAAL). It should be noted that the 25.16% is a weighted average for all SamCERA plans. The actual percent of payroll to be contributed by the County varies by plan. See Exhibits 11a and 11b for normal cost rates by plan.

The new rate is effective for the fiscal year beginning July 1, 2006. The 25.16% contribution rate is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions recommended in this report and satisfies the current funding objectives that calls for the UAAL to be paid off by June 30, 2022. See Exhibits 12a and 12b for the total employer contribution rates.

A historical perspective of the County contribution rates is shown in the following graph.



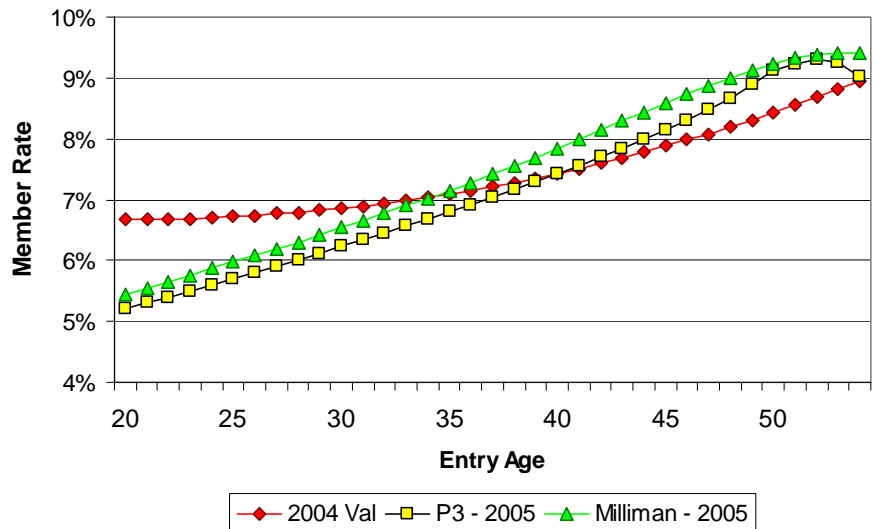
Member Contribution Rates

We have recommended changes in the assumptions that affect the member contribution rates. We have recalculated these rates based on the recommended assumptions. In general, these recommended rates are close to the P3-recommended rates. Both the P3 and Milliman member rates tend to be lower than the rates currently in effect at younger entry ages and higher at older entry ages. This is because of a significant change in the merit salary assumption that both P3 and Milliman are recommending. Note that current rates were calculated and adopted with the June 30, 2004 valuation.

Member Rates - General

The General member contribution rates are projected to average about 9.6% of pay for contributory plans, including cost-sharing. The basic rates (i.e., excluding cost-sharing) are shown graphically for General Plans 1 & 2.

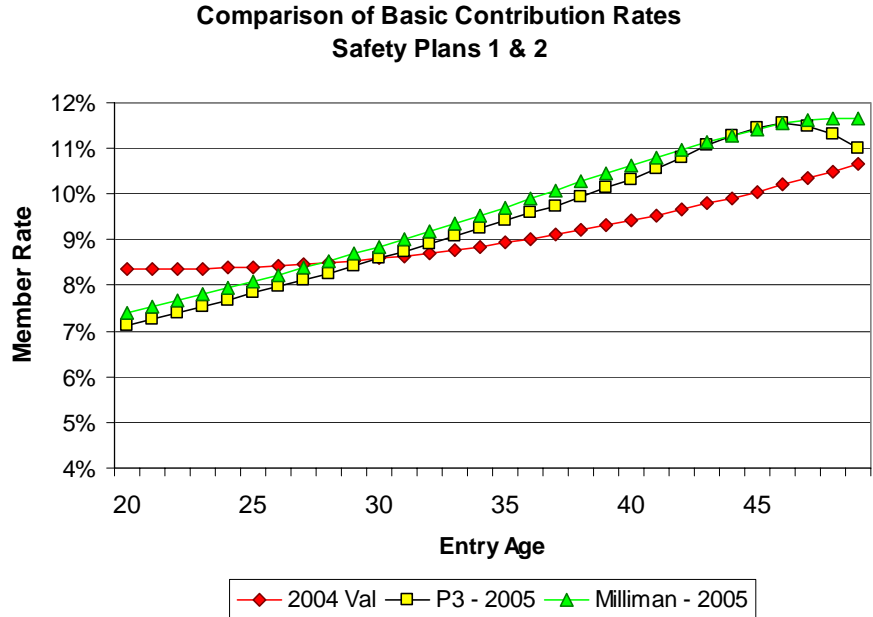
**Comparison of Basic Contribution Rates
General Plans 1 & 2**



The General Plan 4 member contributions are similar to those shown for General Plans 1 & 2. The only difference is that the individual Plan 4 rates are slightly lower, by about 0.30% of pay on average.

Member Rates - Safety

The Safety member contribution rates are projected to average about 12.2% of pay, including cost-sharing. The basic rates (i.e., excluding cost-sharing) are shown graphically for Safety Plans 1 & 2.



The Safety Plan 4 member contributions are similar to those shown for Safety Plans 1 & 2. The only difference is that the Plan 4 rates are slightly lower by about 0.35% of pay on average. The basic rates for Probation members, prior to any employer pick-up, are the same as for Safety. Additional discussion on the determination of member rates can be found in Section 5 of this report. A complete listing of recommended member rates can be found in Appendix D.

Funding Progress

Based on the 2004 valuation, the expected UAAL as of June 30, 2005 was \$470 million. The actual UAAL for the fiscal year ending June 30, 2005 is \$562 million. The increase was due primarily to an increase in liabilities of \$152 million attributable to the change in assumptions. These increases were somewhat offset by other factors which decreased the UAAL in total by about \$60 million.

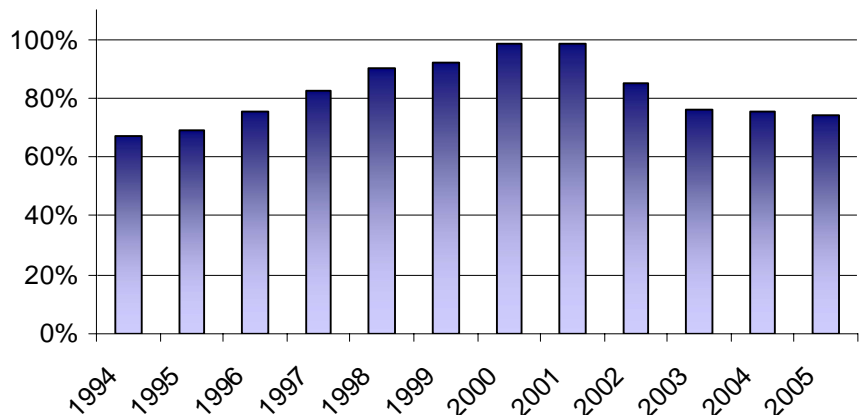
**Funding Progress
(continued)**

One measure of the funding adequacy of the plan is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all SamCERA plans combined. SamCERA's Funded ratio increased rapidly in the last half of the 1990's, reaching almost 100% in 2001. However, due primarily to asset losses early in this decade that are still being recognized, the Funded Ratio has decreased significantly since then. Currently, the Funded Ratio is 74.2%; that is, the actuarial value of assets of \$1,616 million is about 25% less than the actuarial accrued liabilities of \$2,178 million.

All dollar amounts in millions

	Market Value of Total Assets	Actuarial Value		Actuarial Accrued Liability	Funded Ratio
		Valuation	Non- Valuation		
1999	\$ 1,261	\$ 1,109	\$ 45	\$ 1,206	92.0%
2000	1,381	1,271	49	1,292	98.4
2001	1,308	1,385	51	1,404	98.6
2002	1,207	1,417	32	1,661	85.3
2003	1,233	1,354	34	1,782	76.0
2004	1,435	1,453	31	1,921	75.6
2005	1,599	1,616	0	2,178	74.2

Historical Funded Ratios



Assets

For the fiscal year ending June 30, 2005, we estimate that SamCERA earned 9.7%, net of investment expenses, on its market assets. Note that our return figure may be slightly different than that shown in the 2005 CAFR due to timing of contributions and benefit payments, as well as the treatment of expenses.

SamCERA uses an asset-smoothing method in the determination of valuation used in the calculation of UAAL contribution. Under this method, the market value returns are smoothed over a five-year period. Due to the recognition of prior losses, the return on valuation assets was somewhat lower, returning 7.5%.

Allocation of Assets

Currently, both the normal cost and UAAL portions of the employer contribution rate are calculated separately for each plan. To determine the UAAL amount by plan, the valuation assets are allocated by plan. Although the overall employer contribution rates may be reasonable, the current approach of allocating assets yields some distorted results on a plan-by-plan basis. In the future, this situation will deteriorate further, if not changed, due to the closed-off nature of some of the plans and this could affect the plan's funding.

P3's recommendation was to move to a level percent of pay by classification. In other words, the UAAL contribution rate would vary by General, Safety, and Probation, but within those classifications, the percentage would be the same. By assigning the UAAL by classification, instead of by plan, it avoids the pitfalls that are likely to occur under the current method.

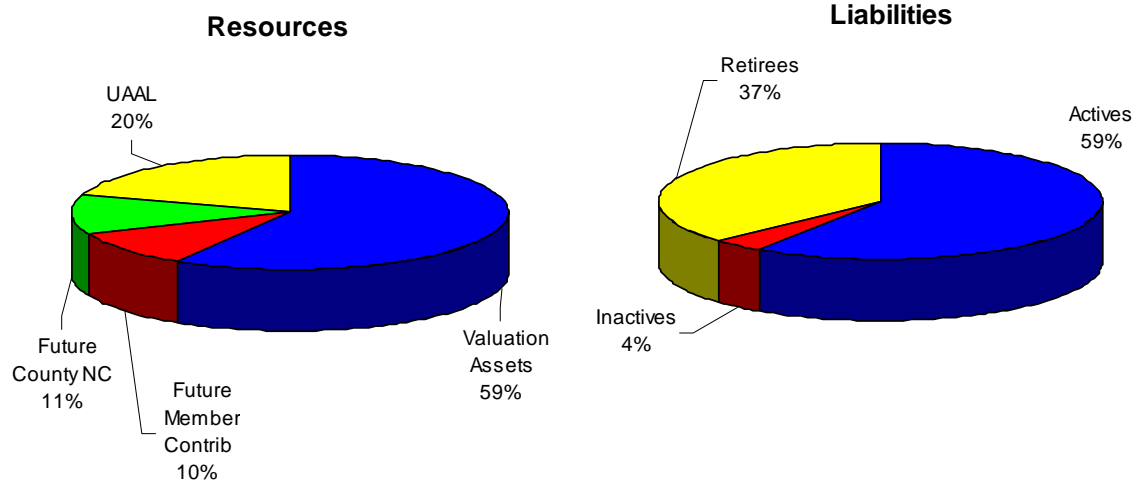
For example, it is likely that in just a few years, there will no longer be any active Safety Plan 1 members. The UAAL is funded as a percentage of future payroll (UAAL contribution percent equals UAAL divided by future payroll). Therefore, if there is no payroll for a given plan, the UAAL contribution percent would be infinite. This problem would not occur if the UAAL is funded over the entire Safety payroll.

Accordingly, we recommend that the UAAL contribution rate be calculated by classification. The Normal Cost contribution would continue to vary by plan. This will not impact the total County contribution rate calculated in this valuation.

Actuarial Balance Sheet

The first step in the valuation process is to compare the total actuarial assets of SamCERA with its total liabilities for all plans. In this analysis, SamCERA's resources equal the assets currently on hand, at the actuarial value, and also expected future contributions by both the employers and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The AAL is the total of these liabilities less expected future normal cost contributions.

Comparing the current and future resources to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.

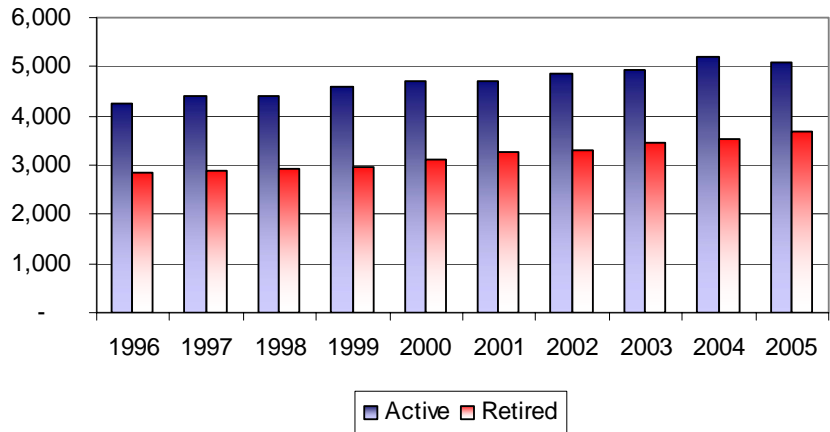


Member Information

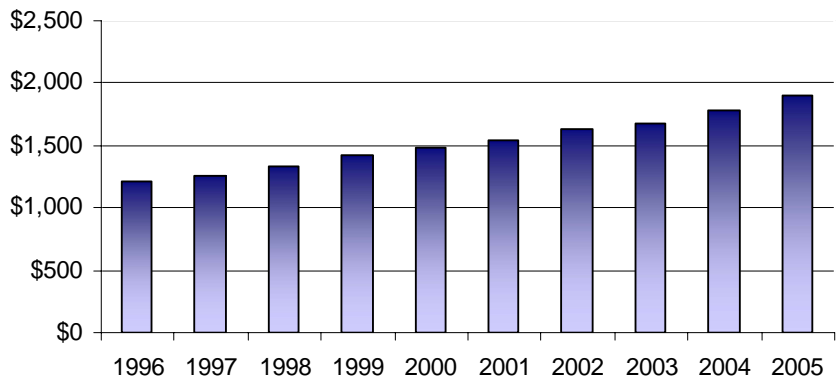
The number of active members included in the valuation dropped by about 2% from 2004 to 2005.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2005, there were 3,684 retired members and beneficiaries with an average benefit of \$1,903 per month. This represents a 4.1% increase in count and a 7.0% increase in the average monthly benefit.

Membership Count



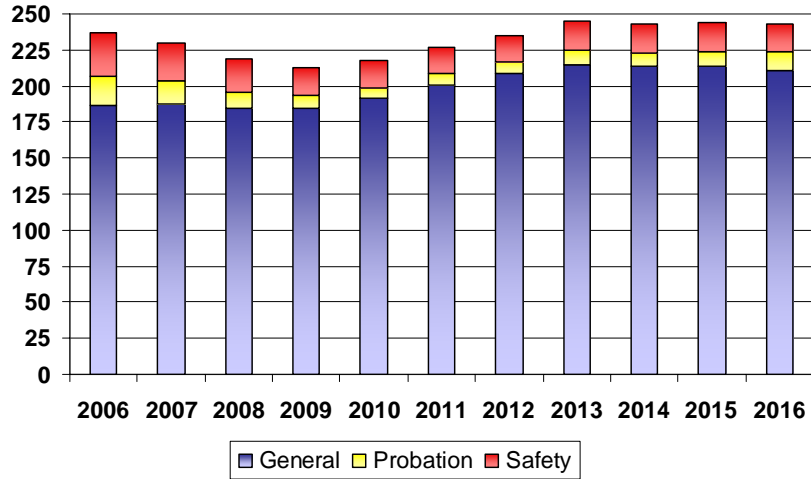
Average Monthly Retirement Benefit



Projection of Retirements and Other Turnover

Per SamCERA's request, we have projected the number of expected service retirements based on our valuation assumptions. Actual turnover will likely vary considerably more. For example, there may be a surge in retirements in the short term as people retire under the improved benefits, that is then followed by a lull. More detail can be found in Section 8.

Projected Retirements by Class



Summary Valuation Results

The following Exhibit 2 presents a summary of key data elements on June 30, 2005 and June 30, 2004, and how they changed over the past year. More detail on each of these elements can be found in the following Sections and Exhibits of this report.

San Mateo County Employees' Retirement Association

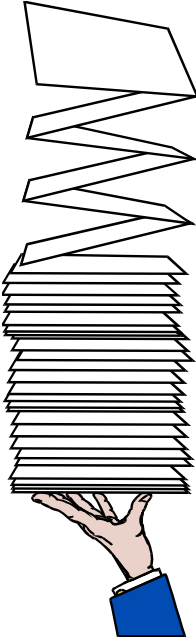
Exhibit 2: Summary of Significant Valuation Results

	June 30, 2005	June 30, 2004	Relative Change
I. Total Membership			
A. Active Members	5,082	5,186	(2.0)%
B. Retired Members & Beneficiaries	3,684	3,539	4.1%
C. Vested Terminated Members	<u>1,035</u>	<u>877</u>	18.0%
D. Total	9,801	9,602	2.1 %
II. Pay Rate as of June 30, 2005			
A. Annual Total (\$thousands)	\$ 341,001	\$ 363,581 *	(6.2)%
B. Monthly Average	\$ 5,592	\$ 5,842 *	(4.3)%
			<i>* Prior year reported on a different basis</i>
III. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 1,968	\$ 1,824	7.9%
B. Disability Retirement	\$ 2,153	\$ 2,049	5.0%
C. Surviving Spouse and Dependents	\$ 1,344	\$ 1,338	0.4%
D. Total	\$ 1,903	\$ 1,778	7.0%
IV. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 1,044,408	\$ 978,563	6.7%
B. Retired Members	\$ 1,022,039	\$ 856,388	19.3%
C. Vested Terminated Members	<u>\$ 111,312</u>	<u>\$ 86,377</u>	28.9%
D. Total	\$ 2,177,759	\$ 1,921,328	13.3%
V. Assets			
A. Market Value of Fund (\$thousands)	\$ 1,599,270	\$ 1,435,359	11.4%
B. Actuarial Value (\$thousands)	\$ 1,615,585	\$ 1,452,621	11.2%
VI. Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$ 562,174	\$ 468,707	19.9%
VII. Required County contribution rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	21.74%	19.69%	10.4%
B. Member Contributions	<u>(9.71)%</u>	<u>(9.37)%</u>	3.6%
C. County Normal Cost	12.03%	10.32%	16.6%
D. UAAL Amortization	<u>13.13%</u>	<u>10.90%</u>	20.5%
E. Total County Rate	25.16%	21.22%	18.6%
VIII. Funded Ratio	74.2%	75.6%	(1.9)%

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San Mateo County Employees' Retirement Association

Section 2: Scope of the Report



This report presents the actuarial audit of the San Mateo County Employees' Retirement Association as of June 30, 2005. This audit was requested by the Board to confirm the appropriateness of the employer rates recommended by P3 in their June 30, 2005 actuarial valuation report. In addition to independently performing the calculations, we also reviewed the actuarial assumptions.

In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of SamCERA. The assets and investment income are presented in Exhibits 3-5. Exhibits 6-8 develop the Actuarial Value of Assets as of June 30, 2005.

Section 4 describes the benefit obligations of SamCERA. Exhibit 9 is the Actuarial Balance Sheet. Additional analysis on the change in UAAL is also provided in this section.

Section 5 discusses the Member contribution rates.

Section 6 discusses the County contributions needed to fund the benefits under the actuarial cost method in use.

Section 7 discloses the information required under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Section 8 provides additional details regarding our retirement projection.

Section 9 provides additional details of the results of our actuarial audit.

Section 10 describes the results of our review of the actuarial assumptions.

This report includes several appendices:

- Appendix A A summary of the actuarial procedures, and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2005.
- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

San Mateo County Employees' Retirement Association

Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date which, for this valuation, is June 30, 2005. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are generally well in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and County are needed to pay all expected future benefits.

This section of the report deals with the determination of assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Sections 5 and 6 deal with the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities.

A historical summary of the SamCERA's assets is presented below:

	All dollar amounts in millions		
	Market Value of <u>Total Assets</u>	Actuarial Value	
		<u>Non- Valuation Reserves</u>	<u>Valuation Assets</u>
1999	\$ 1,261	\$ 45	\$ 1,109
2000	1,381	49	1,271
2001	1,308	51	1,385
2002	1,207	32	1,417
2003	1,233	34	1,354
2004	1,435	31	1,453
2005	1,599	0	1,616

**As reported in the Investment Section of the 2005 CAFR.*

On June 30, 2005, the total market value of the fund was about \$1.60 billion. The actuarial value of the fund was determined to be \$1.62 million, including the non-valuation reserves.

Financial Exhibits

Exhibit 3 presents a Statement of Plan Net Assets and Exhibit 4 presents a Statement of Changes in Plan Net Assets. Exhibit 5 describes the allocation of SamCERA's assets by the various reserve values determined for accounting purposes as disclosed in the 2005 Comprehensive Annual Financial Report (CAFR).

Exhibits 3-5 are taken directly from data furnished to us by SamCERA in their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

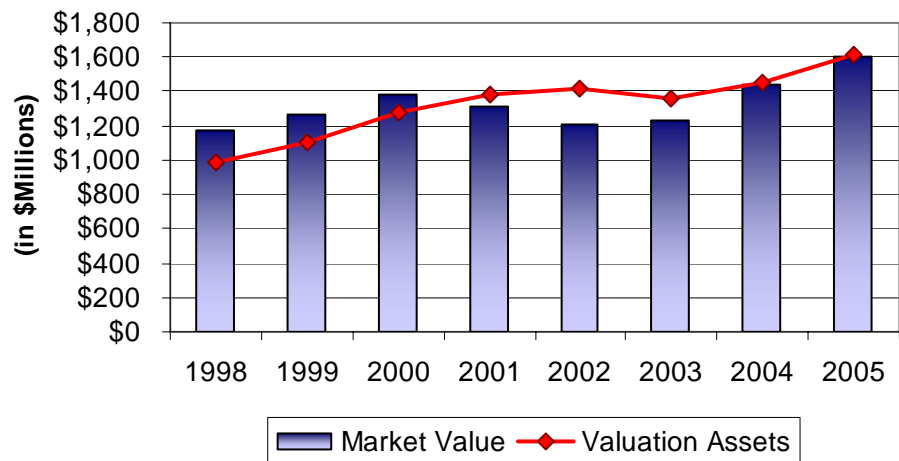
Actuarial Asset Method

The actuarial asset method computes the expected market value of assets based on the prior year's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. The current assumed rate of return, as recommended for this valuation, is 7.75%, net of all expenses. The difference between the actual market value and the computed expected market value is smoothed, or recognized over a five-year period.

Actuarial Value of Assets

The development of the June 30, 2005 actuarial value of assets is shown in Exhibits 6 and 7. Note the smoothing process has recognized much of the investment losses from 2002 and earlier over the last few years. The result is an actuarial value of assets that is approximately equal to the market value. The following graph shows a historical comparison of the actuarial and market assets used for valuation purposes.

Applicable Valuation Assets



Valuation Assets

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits that are to be funded outside of the actuarially determined contribution rates.

Allocation of Assets

As discussed in Section 1, we have recommended that the UAAL contribution rate be calculated by classification. The allocation of valuation assets by classification is shown in Exhibit 8.

**San Mateo County Employees'
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**Exhibit 3: Statement of Plan Net Assets
For the Years Ended June 30, 2004 and 2005**

	2005	2004
Assets		
Cash and Deposits	\$ 42,816,781	\$ 16,292,774
Receivables		
Contributions	3,869,081	2,652,536
Due from broker for investments sold	68,043,706	664,654
Investment Income	3,094,226	1,570,776
Other receivables	98,581	164,389
Total Receivables	<u>75,105,594</u>	<u>5,052,355</u>
Prepaid Expense	<u>7,669</u>	<u>98,929</u>
Investments at Fair Value		
Domestic fixed income securities	468,021,688	375,186,833
Domestic equities	803,519,587	768,511,724
International equities	248,764,405	226,683,026
Real estate	59,219,510	58,213,649
Total Investments	<u>1,579,525,190</u>	<u>1,428,595,232</u>
Capital Assets Net of Depreciation	<u>18,675</u>	<u>28,012</u>
Total Assets	<u>1,697,473,909</u>	<u>1,450,067,302</u>
Liabilities		
Payables		
Investment management fees	1,054,124	441,977
Due to broker for investments purchased	96,713,021	6,420,711
Mortgage Note Payable		
Due within one year	-	196,330
Due in more than one year	-	6,707,699
Other	437,063	941,162
Total Liabilities	<u>98,204,208</u>	<u>14,707,879</u>
Net Assets Held in Trust for Pension Benefits	<u>\$ 1,599,269,701</u>	<u>\$ 1,435,359,423</u>

San Mateo County Employees' Retirement Association

Exhibit 4: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2004 and 2005

	2005	2004
Additions		
Contributions		
Employer	\$ 76,930,928	\$ 60,041,821
Employee	33,647,561	27,094,196
Total Contributions	<u>110,578,489</u>	<u>87,136,017</u>
Investment Income/(Loss)		
Interest and dividends	23,503,153	12,673,292
Net appreciation/(depreciation) in Fair Value	123,910,381	184,592,243
	<u>147,413,534</u>	<u>197,265,535</u>
Less investment expense	7,282,330	4,158,687
Net Investment Income/(Loss)	<u>140,131,204</u>	<u>193,106,848</u>
Other Additions	79,472	226,318
Total Additions/(Declines)	<u>250,789,165</u>	<u>280,469,183</u>
Deductions		
Association Benefits		
Service retirement allowances	71,217,876	62,431,040
Disability retirement allowances	10,933,461	9,359,004
Medical Benefits	(345)	1,198,383
Death and other death benefits	1,031,495	1,027,904
Total Association Benefits	<u>83,182,487</u>	<u>74,016,331</u>
Refunds of members' contributions	1,458,257	1,734,439
Administrative Expense	2,234,610	1,911,755
Other Expense	3,533	718,772
Total Deductions	<u>86,878,887</u>	<u>78,381,297</u>
Net Increase/(Decrease)	163,910,278	202,087,886
Net Assets Held in Trust for Pension Benefits:		
Beginning of Year	1,435,359,423	1,233,271,537
End of Year	<u>1,599,269,701</u>	<u>1,435,359,423</u>
Estimated Return, Net of Investment Expenses	9.7%*	15.6%

* May differ from return reported in CAFR due to timing of contributions and benefit payments and treatment of expenses.

**San Mateo County Employees'
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**Exhibit 5: Allocation of Assets by Accounting Reserve Amounts
For the Years Ended June 30, 2004 and 2005**

Valuation Reserves	2005	2004
1. Member Deposit Reserve	\$ 281,230,984	\$ 259,731,818
2. County Advance Reserve	219,867,963	212,410,513
3. Retiree Reserves	554,684,637	449,574,515
4. Cost of Living Reserve	<u>581,174,967</u>	<u>539,641,932</u>
5. Total Valuation Reserves	\$ 1,636,958,551	\$ 1,461,358,778
Non-Valuation Reserves	2005	2004
1. Ventura Reserve	-	31,523,929
2. Contingency Reserve		
a. Reserves for Deficiencies in Interest Earnings	\$ -	\$ -
b. Unallocated Earnings / Loss Account	<u>(21,373,381)</u>	<u>(8,737,605)</u>
c. Total	\$ (21,373,381)	\$ (8,737,605)
3. Market Stabilization Account	<u>(16,315,469)</u>	<u>(48,785,679)</u>
4. Total Non-Valuation Reserves	\$ (37,688,850)	\$ (25,999,355)
4. Total Reserves	\$ 1,599,269,701	\$ 1,435,359,423

Note: These amounts were determined by SamCERA for accounting purposes and are reported in the June 30, 2005 CAFR.

San Mateo County Employees' Retirement Association

Exhibit 6: 5-Year Smoothing of Gains and Losses on Market Value - History

History of Unexpected Asset Gains and Losses								
Six-Month Period Ended	Market Value at Beginning of Period	Contributions	Benefit Payments	Market Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)
6/30/2005	\$ 1,600,553,433	\$ 22,834,864	\$ 41,871,612	1,599,269,701	3.920%	\$ 62,398,449	\$ 17,753,016	\$ (44,645,433)
12/31/2004	1,435,359,423	87,743,624	42,769,133	1,600,553,433	3.920%	58,350,752	120,219,519	61,868,767
6/30/2004	1,411,797,335	23,132,825	38,581,851	1,435,359,423	4.000%	56,040,580	39,011,114	(17,029,466)
12/31/2003	1,233,271,537	64,003,192	37,168,920	1,411,797,335	4.000%	50,651,708	151,691,526	101,039,818
6/30/2003	1,150,314,103	15,456,378	35,285,915	1,233,271,537	4.125%	46,952,400	102,786,971	55,834,571



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**San Mateo County Employees'
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Exhibit 7: 5-Year Smoothing – Development of Valuation Assets

Development of Market Stabilization Reserve

Six-Month Period Ended	Phase-Out of Gain / (Loss)		
	Percent Excluded	Unexpected Gain / (Loss)	Gain / (Loss) Excluded
6/30/2005	90%	x \$ (44,645,433) =	\$ (40,180,890)
12/31/2004	80%	x 61,868,767 =	49,495,014
6/30/2004	70%	x (17,029,466) =	(11,920,626)
12/31/2003	60%	x 101,039,818 =	60,623,891
6/30/2003	50%	x 55,834,571 =	27,917,286
Pre-2003	44.44%	x (230,062,821) =	<u>(102,250,143)</u>
Total Gain / (Loss) Excluded = Market Stabilization Reserve =			\$ (16,315,468)

Development of Valuation Assets

1. Market Value of Assets as of June 30, 2005	\$ 1,599,269,701
2. Market Stabilization Reserve	<u>(16,315,468)</u>
3. Preliminary Actuarial Value of Assets (1) - (2)	1,615,585,169
4. Corridor Around Market Value	
a) Minimum = 80% of Market	1,279,415,761
b) Maximum = 120% of Market	1,919,123,641
5. Gross Actuarial Value of Assets	1,615,585,169
6. Non-Valuation Reserves and Designations	
a) Reserves for Interest Fluctuations	0
b) Medicare Part B Reserve	0
c) Ventura Reserve	<u>0</u>
d) Total	0
7. Valuation Assets (5) - (6)	\$ 1,615,585,169

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**San Mateo County Employees'
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Exhibit 8: Allocation of Valuation Assets

	General	Safety	Probation	Total
1. Prior Year UAAL	\$ 305,449,804	\$ 124,534,299	\$ 38,723,230	\$ 468,707,333
2. Expected UAAL Contribution for Preceding Year	(22,414,196)	(8,217,175)	(2,755,692)	\$ (33,387,063)
3. Expected Interest at 8.00%	22,820,016	9,338,934	2,896,260	35,055,209
4. Expected UAAL Based on Prior Year Assumptions	305,855,623	125,656,058	38,863,798	470,375,479
5. Percentage of Total Expected UAAL	65.02%	26.71%	8.26%	100.00%
6. Actual UAAL Based on Prior Year Assumptions				\$ 390,008,326
7. Actual AAL Based on Prior Year Assumptions	\$ 1,481,296,686	\$ 417,808,904	\$ 106,487,905	\$ 2,005,593,495
8. Allocated UAAL	253,597,913	104,186,785	32,223,628	390,008,326
9. Actuarial Value of Assets	\$ 1,227,698,773	\$ 313,622,119	\$ 74,264,277	\$ 1,615,585,169

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San Mateo County Employees' Retirement Association

Section 4: Actuarial Liabilities



In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of SamCERA's assets as of the valuation date, June 30, 2005. In this section, the discussion will focus on the commitments of SamCERA for retirement benefits, which are referred to as its actuarial liabilities.

In an active system, the actuarial liabilities will almost always exceed the actuarial assets. This is usually expected in all but a fully closed down fund, where no further contributions of any sort are anticipated. This deficiency has to be provided by future contributions and investment returns. An actuarial valuation method sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

Actuarial Balance Sheet – Liabilities

First, we need to determine the amount of the deficiency. We compare the Actuarial Value of the Valuation Assets to the Actuarial Liabilities. The difference is the amount that needs to be funded by the Member and County contributions in the future. Both the current and future assets (contributions) are compared to the actuarial liabilities in the Actuarial Balance Sheet.

Exhibit 9 contains an analysis of the actuarial present value of all future benefits for inactive members, (both retired and deferred vested members), and active members. The analysis is given by class of membership and by type of benefit.

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries. All liabilities reflect the benefits effective through June 30, 2005.

The actuarial assumptions used to determine the liabilities are based on the results of our analysis of experience as discussed in Section 10. If the Board adopts different assumptions than those recommended in this report, the results will vary.

San Mateo County Employees' Retirement Association

Exhibit 9: Actuarial Balance Sheet – June 30, 2005 (Dollars in Thousands)

Resources				
	General	Safety	Probation	Total
Valuation Assets (Actuarial)	\$ 1,227,699	\$ 313,622	\$ 74,264	\$ 1,615,585
Present Value of Future Member Contributions	229,008	38,424	18,749	286,181
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	217,110	54,995	34,177	306,282
b) Unfunded Actuarial Accrued Liability	372,194	150,447	39,533	562,174
Total Resources	\$ 2,046,010	\$ 557,488	\$ 166,724	\$ 2,770,222

Liabilities				
	General	Safety	Probation	Total
Present Value of Future Benefits				
1. Present Retired Members	\$ 719,871	\$ 256,210	\$ 45,958	\$ 1,022,039
2. Current Inactive Members	89,372	14,083	7,857	111,312
3. Current Active Members				
- Service Retirement	1,096,543	260,971	98,961	1,456,476
- Disability Retirement	52,222	15,182	7,551	74,956
- Death Benefits	19,910	3,675	1,804	25,389
- Deferred Vested Benefit	46,246	6,283	3,955	56,484
- Refund of Member Contributions	21,845	1,083	639	23,567
- Total Active	1,236,767	287,195	112,909	1,636,871
Total Actuarial Liabilities	\$ 2,046,010	\$ 557,488	\$ 166,724	\$ 2,770,222

Actuarial Balance Sheet – Resources

For the purpose of the Actuarial Balance Sheet, SamCERA's resources are equal to the sum of:

- (a) assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
- (b) the present value of future contributions expected to be made by current active Members, and
- (c) the present value of future contributions expected to be made by the County.

Actuarial Cost Method

The Actuarial Balance sheet determines the amount of future contributions that are needed, but the method used to determine the incidence of when those future contributions are yet to be made in future years is called the "actuarial cost method". For this valuation, the entry age actuarial cost method has been used. Under this method – or essentially any actuarial cost method – the contributions required to meet the difference between current assets and current actuarial liabilities are allocated each year between two elements:

- A normal cost amount; and
- Whatever amount is left over, which is used to amortize what is called the UAAL.

Normal Cost

The two items described above – the normal cost and UAAL – are the keys to understanding the actuarial cost method.

The normal cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid.

Under the entry age actuarial cost method, the normal cost contribution rate maintains the funding of benefits as a level percentage of pay. If experience follows the actuarial assumptions precisely, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

**Normal Cost
(continued)**

By applying the normal cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future normal cost contributions. Future contributions are expected to be made by both the Members and the County. The member contribution rates are determined based upon requirements established in the 37 Act and the actuarial assumptions. Based on these member contribution rates, we determine the present value of future member contributions. We subtract that value from the total future normal cost contributions expected, based on the entry age cost method. The remaining difference is the County's portion of the future normal cost contributions.

Actuarial Accrued Liability

The difference between the present value of all future obligations and the present value of the future normal cost contributions is referred to as the "actuarial accrued liability". The AAL is then compared to the value of assets available to fund benefits, and the difference is referred to as the UAAL. The results for SamCERA for all plans are summarized below:

(Dollars in millions)	2005	2004	Percent Change
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 2,770	\$ 2,506	10.8%
B. Actuarial present value of total future normal costs for current members	<u>592</u>	<u>585</u>	3.6%
C. Actuarial accrued liability [A-B]	\$ 2,178	\$ 1,921	13.0%
D. Valuation Assets	<u>1,616</u>	<u>1,452</u>	8.4%
E. UAAL or Surplus Funding [C-D]	\$ 556	\$ 469	18.3%
F. Funded Ratio [D/C]	74.2%	75.6%	1.6%

Unfunded Actuarial Accrued Liability/ Surplus Funding

The portion allocated to service already rendered or accrued is called the Actuarial Accrued Liability. The difference between the Actuarial Accrued Liability and the Valuation Assets is called the UAAL. If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the County 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 present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

Exhibit 9 shows how the UAAL, or Surplus Funding, was derived for each classification. In the Actuarial Balance sheet, the total actuarial accrued liability for all future benefits must be equal to the current and future assets.

Funding Adequacy

A key consideration in determining the adequacy of the funding of SamCERA is how the UAAL is being funded. If the UAAL amount is positive, that is, the actuarial accrued liability to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under the current funding method, the UAAL is amortized over a fixed period ending June 30, 2022. Thus, the UAAL contribution rate is funding the UAAL over 17 years from the valuation date – actually 16 years with the new employer rates not going into effect until one year after the valuation.

Analysis of Change in UAAL

The UAAL, at any date after establishment of a system, is affected by any actuarial gains or losses arising when the actual experience of the system varies from the experience anticipated by the actuarial assumptions used in the valuations. To the extent actual experience, as it develops, differs from that expected according to the assumptions used, so also will the emerging costs differ from the estimated costs.

The 2005 actuarial valuation reflects an increase in the UAAL of \$93.5 million for the fiscal year just ended. The increase was due to a \$152.5 million increase in liabilities as a result of the recommended changes in assumptions. This was offset somewhat by other factors.

Analysis of UAAL Change (All Dollar Values in \$Millions)

Unfunded Actuarial Accrued Liability - June 30, 2004		\$	468.7
Expected Increase / (Decrease)			1.7
Expected UAAL - June 30, 2005		\$	470.4
Asset (Gains) and Losses			8.9
Finalization of Ventura			(21.8) *
Retiree COLA Less than Expected			(26.2) *
Salary Increases Less than Expected			(34.3)
Assumption Changes			
P3 Changes Adopted	32.4	*	
Milliman Changes Recommended	120.1		
Total Assumption Changes			152.5
Other Liability Loss			12.7
Total Changes			91.8
Actual UAAL - June 30, 2005		\$	562.2

* These are P3 calculations. The rest are Milliman estimates.

San Mateo County Employees' Retirement Association

Section 5: Member Contributions

Basic Contributions

For SamCERA, member contributions are of two types: Basic contributions and Cost Sharing contributions.

Basic contributions for each plan are defined in the following sections of the County Employees' Retirement Law:

Plan	Code Section	Contribution Provides Average Annuity of
General – County	31621.9	1/120th of FAC at age 55
General – Mosquito AD	31621	1/120th of FAC at age 60
Probation & Safety	31639.25	1/100th of FAC at age 50

FAC = Final Average Compensation

There are no member contributions under General Plan 3.

Basic member contributions are determined using the Entry Age Normal Funding Method and the following actuarial assumptions:

1. Expected rate of return on assets
2. Individual salary increase rate (wage growth + merit)
3. Mortality for members on service retirement
4. No COLAs are assumed

Cost-Sharing Contributions

In addition to the basic rate, members make additional cost-sharing contributions as shown in Appendix B. For valuation purposes, cost-sharing contributions are assumed to be permanent.

Cost-of-Living Contributions

Members do not contribute towards the cost-of-living benefit.

Member Contribution Rates

A sample of the current and recommended member contribution rates (basic plus cost-sharing) can be found in Exhibit 10.

Note that a portion of some of the member contribution rates is paid for (“picked up”) by the County and may or may not be considered part of the member’s contribution account for refund purposes. Consistent with past practice, we have reflected the pick-up for Probation members, but not Safety members, due to the differing treatment of contributions for refund purposes.

Full disclosure of the member rates, showing both the basic and the total (basic plus cost-sharing) contribution rates, can be found in Appendix D.

San Mateo County Employees' Retirement Association

Exhibit 10: Sample Member Contribution Rates

<u>Recommended Rates (Based on 2005 Valuation)</u>						
	<u>Entry Age</u>	<u>Basic</u>	<u>Cost Sharing</u>	<u>Total as a % of Pay</u>	<u>2004 Val Rate (Total)</u>	<u>Ratio (2005/2004)</u>
General Members - County						
Plans 1 & 2	25	5.97%	3.00%	8.97%	9.72%	92%
	35	7.15%	3.00%	10.15%	10.09%	101%
	45	8.59%	3.00%	11.59%	10.88%	107%
Plan 4	25	5.72%	3.00%	8.72%	9.42%	93%
	35	6.85%	3.00%	9.85%	9.77%	101%
	45	8.18%	3.00%	11.18%	10.52%	106%
General Members - Mosquito Abatement District						
Plans 1 & 2	25	5.13%	0.00%	5.13%	5.68%	90%
	35	6.15%	0.00%	6.15%	6.06%	101%
	45	7.37%	0.00%	7.37%	6.80%	108%
Plan 4	25	4.91%	0.00%	4.91%	5.43%	90%
	35	5.89%	0.00%	5.89%	5.79%	102%
	45	7.06%	0.00%	7.06%	6.50%	109%
Probation Members (Reflects Employer Pick-up)						
Plans 1 & 2	25	6.88%	3.50%	10.38%	10.64%	98%
	35	8.25%	3.50%	11.75%	11.09%	106%
	45	9.71%	3.50%	13.21%	12.05%	110%
Plan 4	25	6.59%	3.50%	10.09%	10.31%	98%
	35	7.90%	3.50%	11.40%	10.73%	106%
	45	9.13%	3.50%	12.63%	11.65%	108%
Safety Members - Other than Deputy Sheriff*						
Plans 1 & 2	25	8.09%	5.00%	13.09%	13.40%	98%
	35	9.71%	5.00%	14.71%	13.93%	106%
	45	11.42%	5.00%	16.42%	15.06%	109%
Plan 4	25	7.75%	5.00%	12.75%	13.01%	98%
	35	9.29%	5.00%	14.29%	13.51%	106%
	45	10.74%	5.00%	15.74%	14.59%	108%

* Cost Sharing varies for Deputy Sheriffs as follows:

- 3.0% if employee is less than 45 and has less than 5 years of service.
- 3.5% if employee is less than 45 and has between 5 and 15 years of service.
- 4.5% if employee is older than 45 or has at least 15 years of service.

San Mateo County Employees' Retirement Association

Section 6: County Contributions



Contributions to SamCERA are determined using the Entry Age Normal Cost Funding Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibits 11a & 11b illustrate the Normal Cost Rates by type of benefit and for each plan based on this valuation. A comparison with last year is also shown.

Calculated Contribution Rate

It should be noted that when we use the term “Gross Normal Cost rate,” we are referring to the value of benefits earned by active members allocated to the valuation year. The employer (or County) Normal Cost is the portion of the annual benefit that the employer is responsible for. This is simply the Gross Normal Cost rate less the contribution made by the members.

The total calculated employer contribution rates for each plan, along with a comparison to the prior year’s computed rates, can be found in Exhibits 12a & 12b. These results are expressed as a percentage of payroll and annual contribution dollars. Note that SamCERA’s UAAL is determined separately for each class. Thus, the County funds the UAAL evenly as a percentage of pay over salaries for all members within a class.

The total County contribution rate was 21.22% for the fiscal year beginning July 1, 2005. For the fiscal year beginning in 2006, the calculated rate based on this report increased to 25.16%. This is equal to the aggregate County normal cost contribution rate, of 12.03% based on Milliman’s 2005 valuation, plus a 16-year amortization payment of the UAAL.

County Contribution Rate (all values as a % of Payroll)

County Normal Cost	12.03%
16-year Amortization of UAAL	<u>13.13</u>
Total County Contribution	25.16%

The increase in the total County contribution rate was primarily due to the increased normal cost and liabilities. This increase was a result of the correction to the treatment of future deferred benefits for current active members and the recommended changes in actuarial assumptions. The UAAL rate reflects a 17-year amortization from the valuation date and the one-year deferral in the implementation of the new County contribution rate effective July 1, 2006.

Changes in the Normal Cost Rate

The change in the calculated normal cost contribution rates from year-to-year is generally due to two factors. In addition to these factors, the correction to the treatment of future deferred benefits for current active members resulted in a significant increase in the normal cost rate. The other two factors are:

- (1) **Experience:** Normal experience from year-to-year, reflecting differences in both the weighting between membership groups and in their characteristics, as well as on what was assumed to occur during the past fiscal year and what actually occurred, particularly with respect to salary increases and turnover experience. Based on current plan provisions, the aggregate normal cost rate is expected to decrease as a greater number of members are covered by Plan 4, instead of the slightly more expensive Plans 1 and 2. However, the change will be fairly gradual.
- (2) **Contribution Shut-Off:** For general members hired prior to April 1973 and all Safety members, basic member contributions are not collected after the member has 30 years of service. Thereafter, the member contributions towards the total annual normal cost is equal to the cost-sharing, resulting in a sizable increase in the County's share of the normal cost contributions for the years when the member has more than 30 years of service. The County's share of the normal cost rates for those groups can be expected to increase rather than remain level, as otherwise expected under the entry age cost method. As most general members hired prior to April 1973 have now attained 30 years of service, this statement applies mainly to Safety groups.

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Exhibit 11a: Calculated Employer Normal Cost Contribution Rates – June 30, 2005

A. Normal Cost Contribution Rate	General - County					General - Mosquito Abatement District			
	Plan 1	Plan 2	Plan 3	Plan 4	Total	Plan 1	Plan 2	Plan 4	Total
Service Retirement	15.23%	16.32%	6.99%	15.08%	15.38%	12.49%	13.38%	12.37%	12.85%
Disability Retirement	0.99%	1.19%	0.00%	1.20%	1.15%	0.81%	0.98%	0.98%	0.95%
Death while Active	0.31%	0.35%	0.00%	0.34%	0.33%	0.25%	0.29%	0.28%	0.28%
Termination (No Refund)	1.33%	1.22%	0.60%	1.19%	1.20%	1.09%	1.00%	0.98%	1.01%
Refund of Member Contributions	1.64%	1.67%	0.00%	1.70%	1.64%	1.34%	1.37%	1.39%	1.37%
Total	19.50%	20.75%	7.59%	19.51%	19.70%	15.98%	17.02%	16.00%	16.46%
B. Member Contributions	(8.58)%	(9.57)%	0.00%	(9.73)%	(9.34)%	(7.04)%	(7.85)%	(7.98)%	(7.77)%
C. Net Employer Normal Cost as of June 30, 2005 (A) - (B)	10.92%	11.18%	7.59%	9.78%	10.36%	8.94%	9.17%	8.02%	8.69%
D. Net Employer Normal Cost as of June 30, 2004	11.78%	10.04%	10.56%	9.08%	9.76%	*	*	*	*
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.86)%	1.14%	(2.97)%	0.70%	0.60%	N/A	N/A	N/A	N/A

* Not reported in prior year

**San Mateo County Employees'
Retirement Association**

Exhibit 11b: Calculated Employer Normal Cost Contribution Rates – June 30, 2005 (continued)

A. Normal Cost Contribution Rate	Safety				Probation				All Plans
	Plan 1	Plan 2	Plan 4	Total	Plan 1	Plan 2	Plan 4	Total	
Service Retirement	29.32%	28.30%	25.75%	27.28%	29.31%	28.07%	24.93%	26.34%	17.26%
Disability Retirement	2.25%	2.48%	2.62%	2.52%	2.48%	2.44%	2.46%	2.46%	1.37%
Death while Active	0.84%	0.80%	0.75%	0.78%	0.80%	0.74%	0.69%	0.72%	0.40%
Termination (No Refund)	1.16%	1.35%	1.24%	1.29%	1.38%	1.34%	1.29%	1.32%	1.21%
Refund of Member Contributions	0.68%	0.76%	0.85%	0.79%	0.68%	0.68%	0.70%	0.69%	1.50%
Total	34.25%	33.69%	31.21%	32.66%	34.65%	33.27%	30.07%	31.53%	21.74%
B. Member Contributions	(10.93)%	(12.33)%	(12.35)%	(12.23)%	(9.08)%	(10.35)%	(10.62)%	(10.43)%	(9.71)%
C. Net Employer Normal Cost as of June 30, 2005 (A) - (B)	23.32%	21.36%	18.86%	20.43%	25.57%	22.92%	19.45%	21.10%	12.03%
D. Net Employer Normal Cost as of June 30, 2004	15.56%	16.83%	13.24%	15.34%	19.58%	17.41%	14.77%	16.17%	10.32%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	7.76%	4.53%	5.62%	5.09%	5.99%	5.51%	4.68%	4.93%	1.71%

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Exhibit 12a: Total Employer Contributions (Dollars In Thousands)

	General - County					General - Mosquito Abatement District			
	Plan 1	Plan 2	Plan 3	Plan 4	Total	Plan 1	Plan 2	Plan 4	Total
A. Basic Employer Normal Cost Rate	5.27%	6.42%	7.59%	6.57%	6.45%	4.33%	5.27%	5.39%	5.29%
B. COLA Normal Cost Rate	5.65%	4.76%	0.00%	3.21%	3.91%	4.61%	3.90%	2.63%	3.40%
C. Employer Normal Cost Rate	10.92%	11.18%	7.59%	9.78%	10.36%	8.94%	9.17%	8.02%	8.69%
D. UAAL Contribution Rate	10.38%	10.38%	10.38%	10.38%	10.38%	8.51%	8.51%	8.51%	8.51%
E. Total June 30, 2005 Contribution Rate (C) + (D)	21.30%	21.56%	17.97%	20.16%	20.74%	17.45%	17.68%	16.53%	17.20%
F. Total June 30, 2004 Contribution Rate	30.32%	18.92%	17.39%	15.02%	18.01%	24.42%	13.92%	17.39%	10.69%
G. Estimated Payroll for fiscal year beginning July 1, 2006	\$ 21,334	\$ 122,030	\$ 7,862	\$ 152,530	\$ 303,756	\$ 88	\$ 251	\$ 851	\$ 1,190
H. Estimated Annual Contribution (E x G)*	\$ 4,544	\$ 26,310	\$ 1,413	\$ 30,750	\$ 62,999	\$ 15	\$ 44	\$ 141	\$ 205
I. Last Year's Estimated Annual Contribution	\$ 7,959	\$ 25,059	\$ 1,857	\$ 21,852	\$ 56,727	**	**	**	**
J. Increase / (Decrease) in Annual Contribution	\$ (3,415)	\$ 1,251	\$ (444)	\$ 8,898	\$ 6,272	N/A	N/A	N/A	N/A

* Estimated contributions shown for illustrative purposes based on monthly contributions. Actual contributions will vary depending on actual payroll and timing.

** Not reported in prior year

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Exhibit 12b: Total Employer Contributions (continued) (Dollars In Thousands)

	Safety				Probation				All Plans
	Plan 1	Plan 2	Plan 4	Total	Plan 1	Plan 2	Plan 4	Total	
A. Basic Employer Normal Cost Rate	11.70%	12.27%	12.74%	12.43%	15.39%	13.96%	13.51%	13.79%	7.49%
B. COLA Normal Cost Rate	11.62%	9.09%	6.12%	8.00%	10.18%	8.96%	5.94%	7.31%	4.54%
C. Employer Normal Cost Rate	23.32%	21.36%	18.86%	20.43%	25.57%	22.92%	19.45%	21.10%	12.03%
D. UAAL Contribution Rate	32.02%	32.02%	32.02%	32.02%	16.43%	16.43%	16.43%	16.43%	13.13%
E. Total June 30, 2005 Contribution Rate (C) + (D)	55.34%	53.38%	50.88%	52.45%	42.00%	39.35%	35.88%	37.53%	25.16%
F. Total June 30, 2004 Contribution Rate	68.05%	39.91%	31.41%	40.16%	42.36%	34.48%	27.63%	31.45%	21.22%
G. Estimated Payroll for fiscal year beginning July 1, 2006	\$ 4,242	\$ 18,906	\$ 17,207	\$ 40,355	\$ 1,275	\$ 7,422	\$ 11,725	\$ 20,422	\$ 365,723
H. Estimated Annual Contribution (E x G)*	\$ 2,348	\$ 10,092	\$ 8,755	\$ 21,166	\$ 536	\$ 2,921	\$ 4,207	\$ 7,664	\$ 92,016
I. Last Year's Estimated Annual Contribution	\$ 3,442	\$ 8,454	\$ 4,874	\$ 16,770	\$ 779	\$ 2,760	\$ 3,211	\$ 6,750	\$ 80,247
J. Increase / (Decrease) in Annual Contribution	\$ (1,094)	\$ 1,638	\$ 3,881	\$ 4,396	\$ (243)	\$ 161	\$ 996	\$ 914	\$ 11,769

* Estimated contributions shown for illustrative purposes based on monthly contributions. Actual contributions will vary depending on actual payroll and timing.

San Mateo County Employees' Retirement Association

Section 7: Accounting Information



The Governmental Accounting Standards Board (GASB) sets standards for defined benefit pension plan reporting and disclosures (Statement No. 25). The reporting requirements for Statement No. 25 include certain supplementary information that must be added to the financial statements. These include:

- (1) A Schedule of Funding Progress
- (2) A Schedule of Employer Contributions

The Schedule of Funding Progress, Exhibit 13, compares actuarial assets and liabilities of SamCERA, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 14, compares the employer contributions required based on the actuarial valuation (the actuarial required contribution, or ARC) with the employer contributions actually made. The ARC must be calculated based on certain parameters required for disclosure purposes.

We believe the actuarial methods and assumptions used in this valuation to determine the employer's contribution for funding purposes satisfy the GASB reporting requirements.

GASB Statement No. 27 specifies required reporting for pension accounting by state and local governmental employers.

The comparability of the data from year-to-year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc.

Exhibit 15 compares the Actuarial Value of Valuation Assets to the types of Actuarial Accrued Liabilities, applying them first to Active Member contributions, then to retirees and beneficiaries, and then the remaining amount to the Active Members benefits. This is referred to as the Solvency Test. Although not required under GASB, this test is part of the CAFR guidelines specified by the Government Finance Officers Association (GFOA).

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**San Mateo County Employees'
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**Exhibit 13: Schedule of Funding Progress
(Dollars In Thousands)**

<u>Actuarial Valuation Date</u>	<u>(a) Actuarial Value of Valuation Assets</u>	<u>(b) Actuarial Accrued Liabilities</u>	<u>(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)</u>	<u>(a/b) Funded Ratio</u>	<u>(c) Covered Payroll</u>	<u>[(b-a)/c] UAAL as a Percentage of Covered Payroll</u>
June 30, 1996	\$ 728,369	\$ 963,162	\$ 234,792	75.6%	\$ 187,926	124.94%
June 30, 1997	856,679	1,037,431	180,752	82.6%	196,391	92.04%
June 30, 1998	992,314	1,104,070	111,756	89.9%	211,259	52.90%
June 30, 1999	1,109,417	1,205,554	96,137	92.0%	238,864	40.25%
June 30, 2000	1,271,565	1,291,694	20,129	98.4%	259,075	7.77%
June 30, 2001	1,384,586	1,404,060	19,474	98.6%	274,318	7.10%
June 30, 2002	1,416,821	1,660,566	243,745	85.3%	301,891	80.74%
June 30, 2003	1,353,941	1,781,544	427,603	76.0%	323,896	132.02%
June 30, 2004	1,452,621	1,921,328	468,707	75.6%	365,385	128.28%
June 30, 2005	1,615,585	2,177,759	562,174	74.2%	334,315	168.16%

**Information for years prior to 2005 reported by prior actuaries.*

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**Exhibit 14: Schedule of Contributions from the Employer
(All Dollars In Thousands)**

Fiscal Year Ending*	Annual Required Contribution (ARC)	Actual Employer Contributions	Percentage of ARC Contributed
6/30/2000	\$ 38,695	\$ 38,695	100%
6/30/2001	39,482	39,482	100%
6/30/2002	33,541	33,541	100%
6/30/2003	36,070	36,070	100%
6/30/2004	60,042	60,042	100%
6/30/2005	76,931	76,931	100%

**Information for years prior to 2005 reported by prior actuaries.*

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**San Mateo County Employees'
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**Exhibit 15: Solvency Test
(Dollars In Thousands)**

Actuarial Valuation Date	Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries ⁽¹⁾ (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 1996	\$ 752,110	\$ 115,910	\$ 537,129	\$ 333,863	100%	100%	30%
June 30, 1997	1,047,575	130,736	565,593	351,246	100%	100%	100%
June 30, 1998	992,314	148,753	601,473	353,844	100%	100%	68%
June 30, 1999	1,104,833	157,826	629,653	416,489	100%	100%	76%
June 30, 2000	1,271,565	158,314	689,356	444,024	100%	100%	95%
June 30, 2001	1,384,586	174,066	789,104	440,890	100%	100%	96%
June 30, 2002	1,416,821	190,450	866,985	785,082	100%	100%	46%
June 30, 2003	1,353,941	202,551	858,273	915,108	100%	100%	32%
June 30, 2004	1,452,621	259,731	942,765	718,832	100%	100%	35%
June 30, 2005	1,615,585	281,231	1,133,351	763,177	100%	100%	26%

(1) Information for years prior to 2005 reported by prior actuaries.

(2) Includes deferred vested members.



This work product was prepared solely for the SamCERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

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San Mateo County Employees' Retirement Association

Section 8: Supplemental Information – Projection of Retirements

Projection of Retirements



Per SamCERA's request, we have projected the number of expected service retirements based on our valuation assumptions. Actual turnover will likely vary considerably more. For example, there may be a surge in retirements in the short term as people retire under the improved benefits and this may be followed by a lull.

Currently, there are a number of Safety and Probation members who are at or close to age 60. Under the valuation assumptions, a 100% probability of retirement is assumed at age 60. This is causing a bulge in the expected number of service retirements over the next few years, followed by a leveling off.

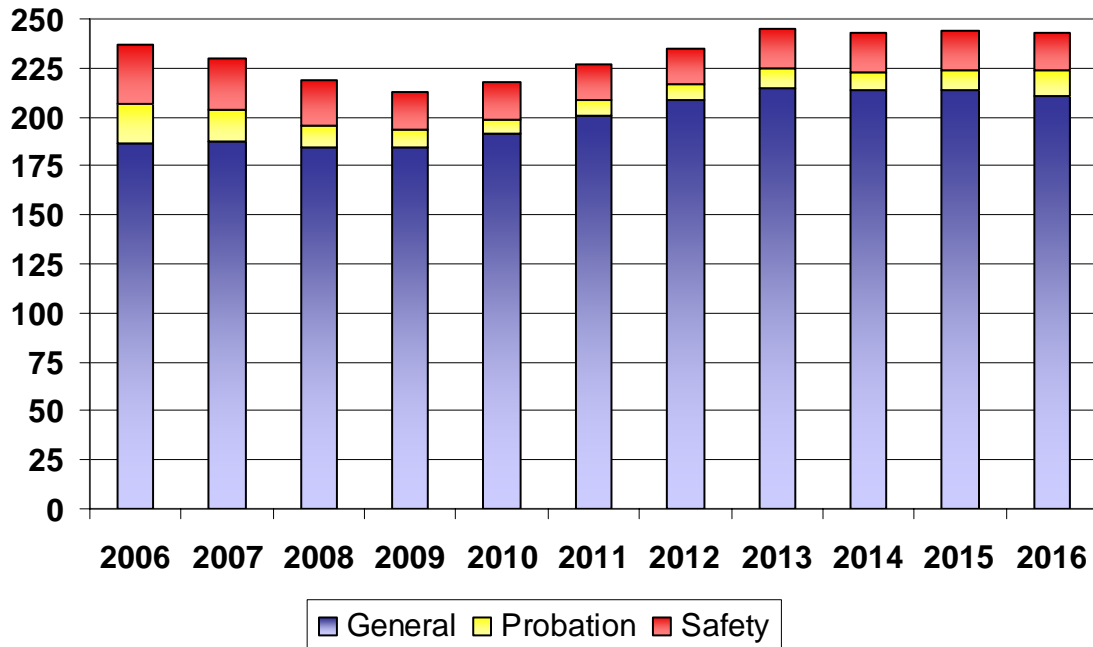
For General members, the number of service retirements is projected to remain fairly level over the next few years. As more General members move to ages with high probabilities of retirement (ages 60 and above), we then see a rise in the projected number of retirements. Numerically, the results are shown on the following Exhibit.

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Exhibit 16 Projection of Retirements

Projection of Retirements				
Year				
Ending	General	Safety	Probation	Total
2006	186.9	30.2	19.4	236.6
2007	187.1	25.9	16.7	229.7
2008	184.9	22.5	11.1	218.5
2009	184.8	19.2	8.4	212.4
2010	191.8	19.2	6.5	217.6
2011	200.6	18.6	7.9	227.1
2012	208.4	18.0	8.2	234.5
2013	214.9	19.9	10.0	244.9
2014	213.7	19.8	9.2	242.6
2015	213.3	19.9	10.9	244.1
2016	210.9	19.3	12.4	242.6

Projected Retirements by Class



San Mateo County Employees' Retirement Association

Section 9: Results of Actuarial Audit



Overview

We performed an independent audit valuation of SamCERA as of June 30, 2005. The purpose of the audit was to determine the appropriateness of the employer and member contribution rates for the fiscal year beginning July 1, 2006 recommended in the June 30, 2005 actuarial valuation prepared by Public Plan Professionals, Inc. (P3).

We found there was a material understatement of the expected deferred benefit attributable to current active members. This resulted in a significant understatement of the County normal cost rate and a somewhat smaller understatement of the actuarial accrued liabilities. Note that we believe the changes in assumptions recommended by P3 in 2005 increased the impact of the understatement of the deferred benefit as compared to what may have occurred in the 2004 valuation.

We performed an independent valuation of SamCERA's liabilities. The results under two key measurements are shown below. Although we noticed some other issues, we believe that the issue with the deferred vested benefits caused the majority of the differences we encountered.

	June 30, 2005 Valuation	
	Milliman*	P3
Calculated County Contribution Rate	21.63%	17.15%
Funded Ratio	78.5%	79.3%

* Based on P3 assumptions.

We also reviewed the assumptions recommended in P3's analysis of plan experience for the five-year period ended June 30, 2005. As discussed in Section 10, we have recommended a different set of assumptions be adopted by the Board. Thus, we are recommending a different employer contribution rate than the one shown above (21.63%). Note that all values reported in this section will be based on P3's assumptions. These assumptions were adopted by the Board for use in the June 30, 2005 valuation.

Data

We performed tests on the raw data and the valuation data. Based on this review, we feel the data used in the valuation was appropriate. The only area where we noted a discrepancy between our approach and that of P3 was in the inactive group.

**Data
(continued)**

SamCERA staff provided us with several valuation data files.

- Active members
- Inactive members
- Retirees
- Beneficiaries

The active file included active members, members on leave-of-absence, and members who refunded or became inactive during the year. We added both the leave-of-absence and the new inactives to the main inactive file. Based on P3 counts, it appears that they omitted these individuals from the valuation. We do not believe this had a material effect on the valuation.

A summary our data compared to P3's is presented below.

	Milliman	P3	M/P3
Active Members			
Count	5,082	5,098	99.7%
Average Age	44.8	44.8	100.0%
Average Service	9.7	9.9	98.6%
Average Salary*	67,853	71,482	94.9%
<i>* Salary reported on a different basis. We would expect P3's to be higher.</i>			
Retired Members & Benficiaries			
Count	3,684	3,682	100.1%
Average Age	70.9	70.9	100.1%
Average Monthly Benefit	1,903	1,905	99.9%
Inactive Members			
Count	1,035	872	118.7%

Assets

We have reviewed P3's calculation of the actuarial value of valuation assets used in the June 30, 2005 valuation. We found the methodology to be reasonable. In particular, we agree with their recommendation to allocate the assets by classification instead of by plan.

We independently performed the allocation of assets and came very close to P3's results.

Actuarial Valuation of Assets (in \$Millions)				
	General	Safety	Probation	Total
Milliman	\$ 1,227.7	\$ 313.6	\$ 74.3	\$ 1,615.6
P3	1,227.6	313.7	74.3	1,615.6
M/P3 Ratio	100.0%	100.0%	100.0%	100.0%

Actuarial Liabilities

We independently calculated the costs and liabilities of SamCERA. We believe that a majority of the benefit provisions are being valued correctly; however, the projected deferred benefit for active members was significantly undervalued. This resulted in a material understatement of the County Normal Cost rate.

After performing our calculations, we noticed differences in the liabilities in several plans and the Normal Cost rate for all plans. We requested and received from P3 detailed output from their valuation program for four active members.

In preparing a valuation, actuaries use assumptions to project the future behavior of current members. For active members, this depends on a number of variables:

- When will the member terminate, retire, become disabled, or die?
- What type of benefit will the member receive?
- How much will the benefit be?
- How long will the member receive the benefit?

For just one individual, this involves a myriad of calculations. At each future age, we must calculate a benefit amount for each benefit type.

Based on our review of the P3 output, we concluded that the projected deferred vested benefit for active members used in their system's calculations was equal to zero for ages at termination ages less than 50. This resulted in the understatement in the associated liabilities. Note that this did not affect current deferred vested (inactive) members.

Our calculations used in the audit valuation were based on the following:

- ✓ **Data** – We used the data provided by SamCERA. We then performed a number of edits to prepare the data for the valuation. As discussed earlier in this section, we believe that our data was generally consistent with the data used by P3 in their valuation.
- ✓ **Assumptions & Methods** – We used the assumptions and methods disclosed in P3's June 30, 2005 actuarial valuation report.
- ✓ **Benefits** – We incorporated the benefits for all plans into our valuation system. We obtained this information from member handbooks, SamCERA's website and the relevant law ('37 Act).

**Actuarial Liabilities
(continued)**

We did a detailed comparison by plan and type of benefit for the actuarial present value of benefits computed in our parallel valuation with those calculated by P3. The following exhibit shows a summary of this analysis for each classification. Our liabilities are somewhat greater than P3's, likely due to the issue with the deferred vested benefits. There was somewhat more deviation on a plan-by-plan basis.

The greatest difference can clearly be seen in the County Normal Cost rate.

June 30, 2005 Valuation Results (2005 P3 Assumptions)				
	Milliman	P3	M/P3	
Actuarial Present Value of Benefits (in \$Millions)				
General	\$ 1,855	\$ 1,776	104.4%	
Safety	521	503	103.6%	
Probation	151	151	100.0%	
Total	<u>\$ 2,527</u>	<u>\$ 2,430</u>	104.0%	
County Normal Cost Rate				
General	9.53%	5.85%	162.9%	
Safety	20.13%	14.80%	136.0%	
Probation	20.42%	15.62%	130.7%	
Total	11.27%	7.37%	152.9%	

County Contribution Rate

Primarily due to the difference in the County Normal Cost rate, we calculate a County contribution rate that is about 4.5% percent of pay higher (21.63% vs. 17.15%).

	Milliman	P3
County Normal Cost	11.27%	7.37%
16-year Amortization of UAAL	<u>10.36</u>	<u>9.78</u>
Total County Contribution	21.63%	17.15%

Member Contribution Rates

We independently calculated member contribution rates. See section 5 for a discussion on how member rates are calculated. We matched the rates calculated by P3 within an acceptable tolerance. A comparison of sample rates is shown on the following page.

Summary of Significant Audit Results

The exhibit that follows the member contribution rates (Exhibit 18) presents a summary of key elements. Milliman's and P3's June 30, 2005 valuation results are compared.

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Exhibit 17: Sample Member Contribution Rates

	Entry Age	Milliman			P3 Rate (Total)	Ratio (M/P3)
		Basic	Cost Sharing	Total as a % of Pay		
General Members - County						
Plans 1 & 2	25	5.77%	3.00%	8.77%	8.70%	101%
	35	6.87%	3.00%	9.87%	9.80%	101%
	45	8.19%	3.00%	11.19%	11.14%	100%
	55	9.33%	3.00%	12.33%	12.01%	103%
Plan 4	25	5.52%	3.00%	8.52%	8.46%	101%
	35	6.57%	3.00%	9.57%	9.51%	101%
	45	7.84%	3.00%	10.84%	10.80%	100%
	55	9.16%	3.00%	12.16%	12.01%	101%
General Members - Mosquito Abatement District						
Plans 1 & 2	25	4.95%	0.00%	4.95%	4.87%	102%
	35	5.91%	0.00%	5.91%	5.82%	102%
	45	7.04%	0.00%	7.04%	6.94%	101%
	55	8.34%	0.00%	8.34%	8.30%	100%
Plan 4	25	4.74%	0.00%	4.74%	4.66%	102%
	35	5.66%	0.00%	5.66%	5.57%	102%
	45	6.73%	0.00%	6.73%	6.64%	101%
	55	7.95%	0.00%	7.95%	7.89%	101%
Probation Members (Reflects Employer Pick-up)						
Plans 1 & 2	25	6.48%	3.50%	9.98%	10.02%	100%
	35	7.83%	3.50%	11.33%	11.38%	100%
	45	9.35%	3.50%	12.85%	12.98%	99%
Plan 4	25	6.22%	3.50%	9.72%	9.75%	100%
	35	7.48%	3.50%	10.98%	11.03%	100%
	45	8.78%	3.50%	12.28%	12.35%	99%
Safety Members - Other than Deputy Sheriff*						
Plans 1 & 2	25	7.78%	5.00%	12.78%	12.83%	100%
	35	9.33%	5.00%	14.33%	14.41%	99%
	45	11.28%	5.00%	16.28%	16.44%	99%
Plan 4	25	7.45%	5.00%	12.45%	12.49%	100%
	35	8.91%	5.00%	13.91%	13.99%	99%
	45	10.48%	5.00%	15.48%	15.56%	99%

* Cost Sharing varies for Deputy Sheriffs as follows:
 3.0% if employee is less than 45 and has less than 5 years of service.
 3.5% if employee is less than 45 and has between 5 and 15 years of service.
 4.5% if employee is older than 45 or has at least 15 years of service.

San Mateo County Employees' Retirement Association

Exhibit 18: Summary of Significant Audit Results

	June 30, 2005		Relative Change
	Using P3 Assumptions		
	Milliman	P3	
I. Total Membership			
A. Active Members	5,082	5,098	(0.3)%
B. Retired Members & Beneficiaries	3,684	3,682	0.1%
C. Vested Terminated Members	<u>1,035</u>	<u>872</u>	18.7%
D. Total	9,801	9,652	1.5 %
II. Pay Rate as of June 30, 2005			
A. Annual Total (\$thousands)	\$ 341,732	\$ 361,162 *	(5.4)%
B. Monthly Average	\$ 5,604	\$ 5,904 *	(5.1)%
			<i>* P3 pay reported on a different basis</i>
III. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 1,968	\$ 1,969	(0.1)%
B. Disability Retirement	\$ 2,153	\$ 2,191	(1.7)%
C. Surviving Spouse and Dependents	\$ 1,344	\$ 1,355	(0.8)%
D. Total	\$ 1,903	\$ 1,905	(0.1)%
IV. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 970,060	\$ 955,210	1.6%
B. Retired Members	\$ 979,776	\$ 981,684	(0.2)%
C. Vested Terminated Members	<u>\$ 107,805</u>	<u>\$ 101,099</u>	6.6%
D. Total	\$ 2,057,641	\$ 2,037,993	1.0%
V. Assets			
A. Market Value of Fund (\$thousands)	\$ 1,599,270	\$ 1,599,270	-
B. Actuarial Value (\$thousands)	\$ 1,615,585	\$ 1,615,585	-
VI. Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$ 442,056	\$ 422,434	4.6%
VII. Required County contribution rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	20.59%	15.88%	29.7%
B. Member Contributions	<u>(9.32)%</u>	<u>(8.51)%</u>	9.6%
C. County Normal Cost	11.27%	7.37%	52.9%
D. UAAL Amortization	<u>10.36%</u>	<u>9.78%</u>	5.9%
E. Total County Rate	21.63%	17.15%	26.1%
VIII. Funded Ratio	78.5%	79.3%	(1.0)%

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San Mateo County Employees' Retirement Association

Section 10: Review of Actuarial Assumptions



Overview

The Board requested that we certify to the calculated County contribution rate. To have confidence that the calculated rate is reasonable, we must first have confidence that the underlying assumptions are reasonable. Accordingly, we performed a detailed review of the assumptions based on SamCERA's experience for the five-year period from July 1, 2000 to June 30, 2005.

At the August, 2005 Board meeting, P3 recommended new assumptions to be used in the June 30, 2005 valuation. The Board adopted these assumptions as recommended. Note that we will refer to these assumptions as P3 assumptions.

For our study, we compared actual experience to those P3 assumptions. Where appropriate we also looked at the prior assumptions. We will refer to the prior assumptions at the 2004 Val assumptions.

Selecting actuarial assumptions is the most subjective portion of the valuation process, so different actuaries will invariably recommend a different set of assumptions. Although, we agree that the P3-recommended assumptions are generally reasonable, we did feel there were a few areas for improvement. Accordingly, we have proposed some changes.

Financial Impact

The most significant of these changes we are recommending is strengthening the mortality assumption (i.e., increasing the life expectancy). The impact of these changes on some of the key financial measurements is shown below. Note that almost the entire increase in the County contribution rate (3.42% out of a total increase of 3.53%) is attributable to the revised mortality assumption.

	County Contribution Rate	Funded Ratio
Milliman - P3 Assumptions	21.63%	78.5%
Milliman Mortality	3.42%	-3.9%
All Milliman Assumptions	<u>0.11%</u>	<u>-0.4%</u>
Final Milliman Results	25.16%	74.2%

Economic Assumptions

In this section, we discuss the economic assumptions: price inflation, general wage growth (includes price inflation and productivity), payroll growth, and the investment return assumption. For the reasons outlined in this section, we are recommending that the Board adopt the following changes in the economic assumptions:

- ✓ Price Inflation: Lower rate to 3.5% (was 3.75%).
- ✓ General Wage Growth: Increase rate to 4.00% (was 3.75%).
- ✓ Payroll Growth: Set equal to general wage growth.
- ✓ Investment Return: Retain assumption of 7.75%.

These recommendations reflect recent changes in the national and global economies. We believe it is appropriate for the Board to make these changes at this time.

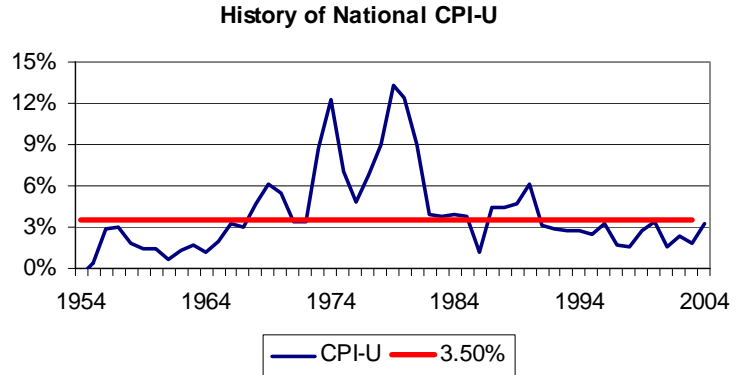
PRICE INFLATION (CPI):

We have recommended lowering the current inflation assumption from 3.75% to 3.5%. Note that this assumption is used to estimate the COLA amounts paid to retirees in the future. These assumptions are disclosed in Appendix A. Our reasons for this recommendation are as follows:

- Historical Rates: Over the last 75 years, inflation has averaged approximately 3.4%, somewhat less than the current assumption of 3.75%.
- Forecasts: Economists, in general, are predicting inflation somewhat lower than the 3.75% assumption. Most of these projections are for shorter time periods than desired when looking at the funding of a pension plan. To find an economic forecast with a time frame long enough to suit our purposes, we looked at the expected increase in the CPI by the Office of the Chief Actuary for the Social Security Administration. Their intermediate projection is for 2.8% inflation over the next 30 years, with the expected range between 1.8% and 3.8%.

**PRICE INFLATION (CPI):
(continued)**

- Conclusion: Based on historical rates and forecasts for inflation, we feel that it is appropriate to reduce the inflation assumption. As shown in the following chart, we see how there have been periods of high and low inflation; however, in the long-term the 3.5% assumption provides a reasonable estimate.



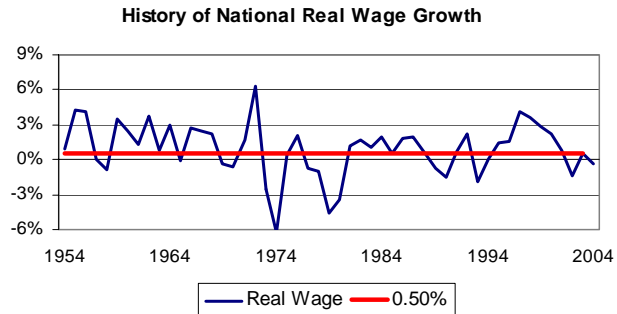
WAGE GROWTH:

The wage growth assumption is the sum of CPI inflation and real wage growth, where real wage growth is the excess of increase in wages over inflation. We have recommended increasing the general wage growth assumption from 3.75% to 4.0%, the sum of a 3.5% inflation and a 0.5% real wage growth, for the following reasons:

- Historical Rates: Over the past 50 years, general wage growth has exceeded CPI inflation by about 1.0%; however, recently this difference has been somewhat less. We studied the last 10 years for SamCERA and found that wages had increased significantly faster than prices.
- Forecasts: Economists, in general, expect wages to exceed inflation by a small margin. Looking at Social Security, their intermediate projection is a real wage growth of 1.1% over the next 30 years.

**WAGE GROWTH:
(continued)**

- **Conclusion:** The current assumption provides for no real wage growth. This is contrary to both historical rates and future forecasts. We recommend increasing the real wage growth assumption to 0.5%, for a total wage growth assumption of 4.0%. As shown in the following chart, there have been periods of high and low real wage growth. The current assumption of 0.5% is shown for comparison purposes.



PAYROLL INCREASE:

We are recommending that the payroll increase be set equal to the 4.0%, the general wage growth assumption.

INVESTMENT RETURN:

We have recommended retaining the current investment assumption of 7.75%. Our recommendation is based on the following:

- **Forecasts:** We have modeled future investment returns based on SamCERA's current asset mix and Milliman's capital market assumptions. Based on this analysis and the recommended inflation assumption, the median long-term return is expected to be 7.89%.
- **Historical Returns:** For this assumption we have not looked directly at historical investment returns. However, capital market assumptions do take historical returns into account, so they have been indirectly reflected.
- **Other Systems:** Valuation assumptions should not be set based on what other systems are doing. However, it is useful to see a comparison against other systems. If the assumption is outside of the norm, it should be understood why. The SamCERA investment return assumption is within the norm for other systems. The recent decrease of the assumption is also consistent with what other systems are doing.
- **Conclusion:** We do not see a compelling reason to make a change. The capital market assumptions project a return that is approximately 7.75%. We recommend retaining the current investment return assumption.

Demographic Assumptions

Summary results from our analysis of plan experience is shown in Exhibits 19 and 20 at the end of this section.

Retiree Mortality

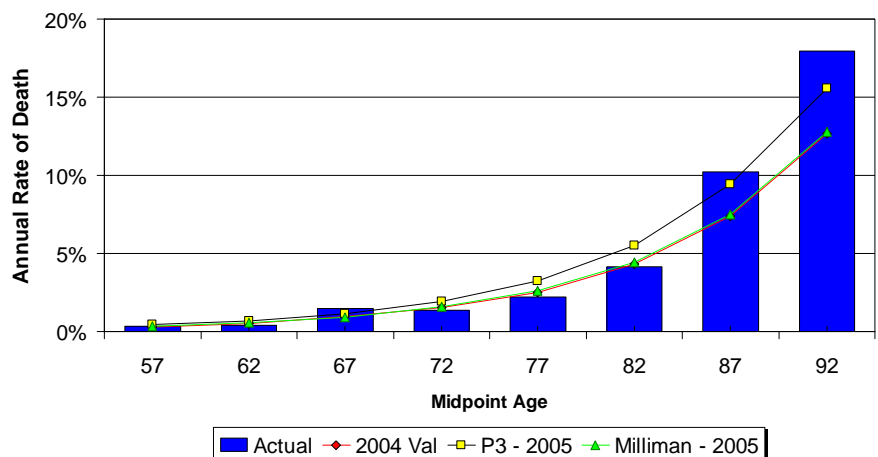
We studied the probability of death at each age for retired members. There were 451 retiree deaths (service retirement and disability combined) during the period as compared to 494 expected based on the P3 assumptions, resulting in a total Actual-to-Expected ratio of 91%. That is, there were about 10% fewer deaths than the assumptions predicted.

When fewer deaths are occurring than expected, it means that people are living longer than our assumptions would predict. If this continues in the future, it means that our current assumptions are understating the liabilities.

We have recommended strengthening the assumptions for both healthy and disabled retirees (i.e., lowering the probabilities of death and increasing the life expectancies) to provide a margin for the expected future improvements in mortality. Note that this change results in mortality rates that are fairly comparable with those used in the 2004 valuation.

The following graph shows the actual experience for General females (blue bars) and the proposed assumptions (green line) compared to both the P3 assumptions (yellow line) and the assumptions from the 2004 valuation (red line). Note that the Milliman-recommended assumptions are almost exactly the same as those used in the 2004 valuation, as the green line sits right on top of the red line.

Rates of Mortality for General Female Retirees



Retiree Mortality (continued)

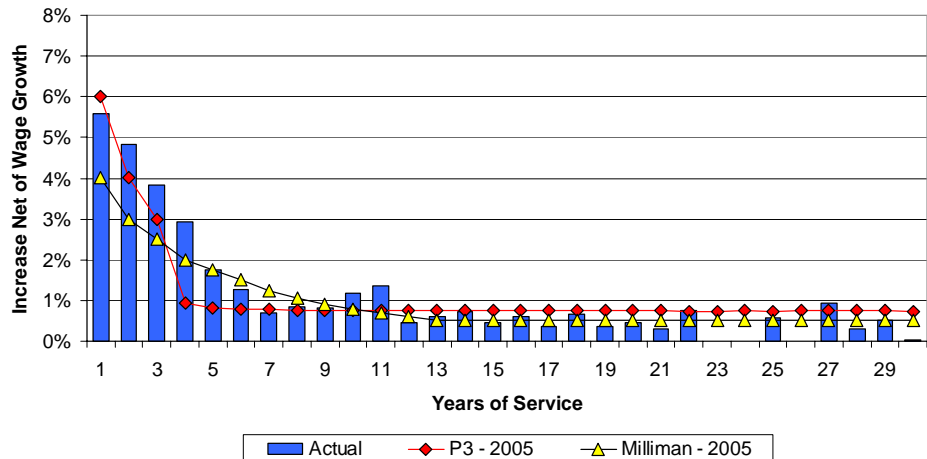
The following chart shows how long a service retiree is expected to live under the P3 and Milliman assumptions.

<i>P3 Assumptions</i>	Sample Expected Lifetimes for Service Retirement			
	General		Safety	
	Male	Female	Male	Female
Age at Retirement	60.0	60.0	55.0	55.0
Expected Future Lifetime	<u>22.5</u>	<u>25.1</u>	<u>24.7</u>	<u>28.2</u>
Average Age at Death	82.5	85.1	79.7	83.2
<i>Milliman Assumptions</i>				
Age at Retirement	60.0	60.0	55.0	55.0
Expected Future Lifetime	<u>23.5</u>	<u>26.8</u>	<u>28.0</u>	<u>31.4</u>
Average Age at Death	83.5	86.8	83.0	86.4
<i>Increase in Expected Lifetime</i>	1.0	1.7	3.3	3.2

Merit Salary Increases

We studied the individual salary increases due to promotion and longevity – the merit component of salaries. Overall, the results of our salary study were fairly consistent with the P3 rates. We have recommended making some minor adjustments to these rates. The following graph shows the actual experience from our analysis (blue bars) and the proposed assumptions (yellow line) compared to the P3 assumptions (red line). Note that these assumed annual pay increases are in addition to the general wage growth assumption of 4.0%.

Merit Salary Increase for All Members



Merit Salary Increases (continued)

We also studied the actual salary increases by classification. We do not believe the differences by classification were significant enough to justify separate assumptions. According, we have recommended using one merit salary scale for all classifications.

Death from Active Status

This assumption has a very minor impact on the valuation. The current assumption appeared reasonable. We do not recommend any changes to this assumption.

Service Retirement From Active Status

We studied the probability an eligible active member takes a service retirement. The results of our study showed far less actual retirements than the assumptions predicted. There were 507 service retirements from active status during the period compared to 892 the P3 assumptions predicted.

Note that this is a somewhat unusual period, given the benefit improvements that have recently occurred. We have recommended lowering the rates slightly. Milliman's recommended assumptions would have predicted 756 retirements during the period.

Also note that an adjustment is made to the probability of retirement if a member's benefit is equal to or greater than the 100% of compensation limit. Immediate retirement is assumed if the member's age and service is such that he is likely to reach the 100% of compensation limit during the year. The criteria for 100% probability of retirement is:

- Age 62 with 38 years of service (General, except Plan 3)
- Any age with 33 years of service (Safety & Probation)

For Plan 3 there was virtually no experience. We have recommended using the same rates as those used for LACERA's non-contributory plan with some minor modifications.

Disability Retirement

We studied both service-connected disability (no service requirement) and nonservice-connected disability (requires vested status).

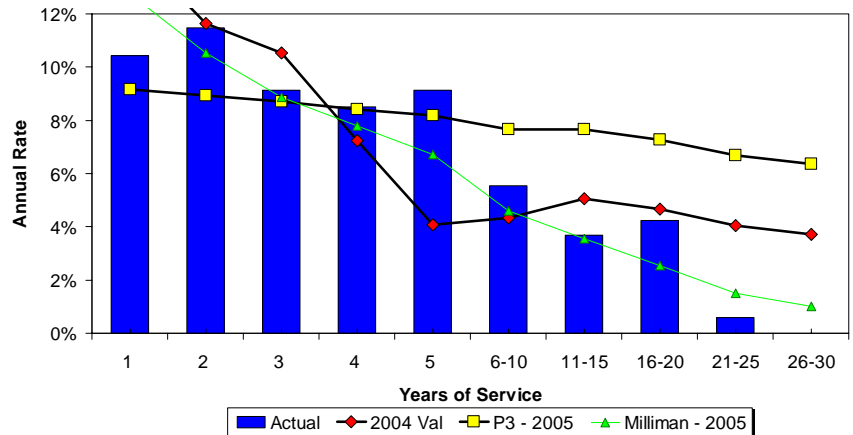
Under the current assumptions, 190 total disablements were expected and 97 actually occurred, resulting in a total Actual-to-Expected ratio of 51%. We have recommended lowering the disability retirement assumption.

Termination

We also studied terminations of employment for reasons other than death, service retirement, or disability. We are recommending changing the assumption to be based on a member's service instead of his age. Based on our experience, service is the best predictor, particularly during the first few years of employment. The overall impact of this is to reduce the expected number of terminations.

The following graph shows the actual experience for General males (blue bars) and the proposed assumptions (green line) compared to both the P3-2005 assumptions (yellow line) and the assumptions from the 2004 valuation (red line). Note how the Milliman proposed assumptions are significantly lower than the P3 assumptions for members with service of five or more years.

Termination Rates for General Male Members



Probability of Refund

The current assumptions predict that very few members with five or more years of service will elect a refund of contributions upon termination. Based on our study of plan experience, there are still quite a few vested members electing a refund, at least those with less than 10 years of service. Accordingly, we are recommending higher rates that are based on the member's years of service at termination.

Miscellaneous Assumptions

Additional assumptions we studied are summarized below.

- ✓ **Commencement Age for Deferred Vested Members:** We recommend retaining the current assumption. Deferred vested members are assumed to retire at the later of their current age and:
 - Age 55 (General Members, except Plan 3)
 - Age 65 (General Plan 3 Members)
 - Age 50 (Probation and Safety members)

- ✓ **Percent Married:** We studied the percentage of recent retirees who had an eligible spouse. When setting this assumption, we allowed some margin to account for eligible domestic partners and children's benefits. Based on this study we recommend the following:
 - Males – Retain current 80% assumption
 - Females – Increase assumption from 50% to 55%.

- ✓ **Reciprocity Percentage:** We studied the percentage of deferred vested members who are currently active in a reciprocal agency. Based on this study we recommend reducing the percentage assumed to join a reciprocal agency from 66.7% to 40.0%.

**San Mateo County Employees'
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**Exhibit 19: Investigation of Plan Experience – Retired
July 1, 2000 through June 30, 2005**

Summary of Results

Retiree Mortality							
<i>Service Retirement</i>	Deaths				Actual to Expected (or Proposed)		
	Actual	2004 Val.	P3 Proposed	Milliman Proposed	2004 Val.	P3 Proposed	Milliman Proposed
General Male	138	139	138	121	99%	100%	114%
General Female	235	205	260	208	115%	90%	113%
Safety Male	20	24	24	16	83%	83%	125%
Safety Female	1	1	1	1	100%	100%	100%
Total Svc Ret	394	369	423	346	107%	93%	114%
<i>Disability Retirement</i>	Deaths				Actual to Expected (or Proposed)		
	Actual	2004 Val.	P3 Proposed	Milliman Proposed	2004 Val.	P3 Proposed	Milliman Proposed
General Male	21	15	24	17	140%	88%	124%
General Female	31	33	30	32	94%	103%	97%
Safety Male	5	8	16	7	63%	31%	71%
Safety Female	-	1	1	1	0%	0%	0%
Total Dis Ret	57	57	71	57	100%	80%	100%
Grand Total	451	426	494	403	106%	91%	112%

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Exhibit 20: Investigation of Plan Experience – Active July 1, 2000 through June 30, 2005

Summary of Results

Service Retirement from Active Service							
Group	Retirements				Actual to Expected (or Proposed)		
	Actual	2004	P3	Milliman	2004	P3	Milliman
		Val.	Proposed	Proposed	Val.	Proposed	Proposed
General Male	158	188	229	197	84%	69%	80%
General Female	251	283	382	352	89%	66%	71%
Safety Male & Female	98	281	281	207	35%	35%	47%
Total Svc Ret*	507	752	892	756	67%	57%	67%

* Ages 50-69 for General; ages 50-59 for Safety

Termination from Active Service							
Group	Retirements				Actual to Expected (or Proposed)		
	Actual	2004	P3	Milliman	2004	P3	Milliman
		Val.	Proposed	Proposed	Val.	Proposed	Proposed
General Male	380	394	420	360	96%	90%	106%
General Female	961	856	1,181	904	112%	81%	106%
Safety Male & Female	101	98	101	94	103%	100%	107%
Total Termination	1,442	1,348	1,702	1,358	107%	85%	106%

Probability of Refund							
Group	Refunds				Actual to Expected (or Proposed)		
	Actual	2004	P3	Milliman	2004	P3	Milliman
		Val.	Proposed	Proposed	Val.	Proposed	Proposed
General M&F	197	212	24	166	93%	821%	119%
Safety M&F	13	18	3	9	72%	433%	144%
Total Refund	210	230	27	175	91%	778%	120%

Disability Retirement from Active Service							
Group	Disabilities				Actual to Expected (or Proposed)		
	Actual	2004	P3	Milliman	2004	P3	Milliman
		Val.	Proposed	Proposed	Val.	Proposed	Proposed
General Male	24	68	54	33	35%	44%	73%
General Female	51	119	107	65	43%	48%	78%
Safety Male & Female	22	48	29	29	46%	76%	76%
Total Disability	97	235	190	127	41%	51%	76%

San Mateo County Employees' Retirement Association

Appendix A: Actuarial Procedures and Assumptions



The assumptions were studied for the period July 1, 2000 to June 30, 2005. As a result of this study, we have recommended new assumptions be adopted for use in the June 30, 2005 actuarial valuation. The actuarial procedures and assumptions used in this valuation are described in this section.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of SamCERA and of SamCERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits.

Table A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Tables A-2 and A-3 show how members are expected to leave retired status due to death.

Table A-4 presents the probability of refund of contributions upon termination of employment while vested.

Table A-5 presents the expected annual percentage increase in salaries.

Tables A-6 to A-11 were developed from the experience as measured by our study of plan experience described in Section 10 of this report. The rates are the probabilities a member will leave the system for various reasons.

NOTE: Assumptions for Probation members are assumed to be the same as Safety members unless otherwise noted.

Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

For members who transferred between plans, entry age is based on original entry into the system.

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL (or Surplus Funding) is amortized as a level percentage of the projected salaries of present and future members of SamCERA over the remaining period from the valuation date to June 30, 2022. This is commonly referred to as a "fixed amortization method".

Records and Data

The data used in this valuation consist of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by SamCERA and are accepted for valuation purposes without audit.

Replacement of Terminated Members

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants.

Growth in Membership

For benefit determination purposes, no growth in the membership of SamCERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

County Contributions

The County contribution rate is set by the Retirement Board based on actuarial valuations.

Member Contributions

The member contribution rates vary by entry age and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.

The individual member rates by entry age, plan and class are illustrated in Appendix D of the valuation report.

Valuation of Assets

The assets are valued using a five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption.

Investment Earnings and Expenses

The future investment earnings of the assets of SamCERA are assumed to accrue at an annual rate of 7.75% compounded annually, net of both investment and administrative expenses. This rate was adopted June 30, 2005.

Post-retirement Benefit Increases

Post-retirement increases are described in Appendix B. Assumed increases for valuation purposes are:

	General	Safety	Probation
Plan 1	3.50%	3.50%	3.00%
Plan 2	2.75%	2.75%	2.75%
Plan 3	0.00%	N/A	N/A
Plan 4	2.00%	2.00%	2.00%

Assumed Plan 1 General and Safety COLAs are set at the inflation (CPI) assumption of 3.5% per year. Since Plan 2 does not have a COLA bank, it is expected that increases will be limited in some years. This reduces the overall expected rate and is reflected in a lower assumed increase.

Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 7.61% compounded semi-annually for an annualized rate of 7.75%. This rate was adopted June 30, 2005.

Future Salaries

The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Table A-5. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 4.00% per annum rate of increase in the general wage level of the membership. This is a recommended change in the assumptions.

Increases are assumed to occur mid-year. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.

SamCERA supplied two types of compensation data: 1) pensionable pay from the most weekly bi-weekly pay period; and 2) pensionable pay from the prior year. We annualized by bi-weekly pay (by multiplying by 26) and then used the greater of the two amounts.

**Social Security
Wage Base**

Plan 3 members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 3.5% per year. Note, statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement.

Retirement

The retirement rates vary by age and are shown by plan in Tables A-6 through A-11.

All general members who attain or who have attained age 70 and all safety members who have attained age 60 are assumed to retire immediately. Additionally, if a member's benefit is equal to or greater than the 100% of compensation limit, they are also assumed to retire immediately. For purposes of the valuation, immediate retirement is assumed at:

- Age 62 with 38 years of service (General, except Plan 3)
- Any age with 33 years of service (Safety & Probation)

Deferred vested members are assumed to retire at the later of current age and:

- Age 55 (General Members, except Plan 3)
- Age 65 (General Plan 3 Members)
- Age 50 (Probation and Safety members)

We have recommended changes in the retirement probabilities.

Disablement

The rates of disablement used in the valuation are also illustrated in Tables A-6 through A-11. We have recommended changes in these rates.

Mortality – Other Than Disabled Members

The same post-retirement mortality rates are used in the valuation for active members, members retired for service, and beneficiaries. These rates are illustrated in Table A-2. Beneficiary mortality is assumed to be the same assumption as healthy members. Beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members. We have recommended changes in these rates.

General Males RP-2000 Healthy Annuitant Mortality Table for Males with adjustment for White Collar workers. Ages are set back one year.

Safety Males Same as General.

General Females RP-2000 Healthy Annuitant Mortality Table for Females with adjustment for White Collar workers. Ages are set back two years.

Safety Females Same as General.

Mortality – Disabled Members

For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3. We have recommended changes in these rates.

General Males RP-2000 Healthy Annuitant Mortality Table for Males with adjustment for White Collar workers and minimum rate of 1.5%. Ages are set forward 6 years.

Safety Males Same as General except minimum is 1.0% and set forward is 3 years.

General Females RP-2000 Healthy Annuitant Mortality Table for Females with adjustment for White Collar workers and minimum rate of 1.25%. Ages are set forward 6 years.

Safety Females Same as General except minimum is 1.0% and set forward is 3 years.

Other Employment Terminations	<p>Tables A-6 to A-11 show, for all ages, the rates assumed in this valuation for future termination from active service other than for death, disability or retirement. These rates do not apply to members eligible for service retirement. We have recommended changes in these rates.</p> <p>Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions with SamCERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work or may remain inactive until becoming eligible to receive a retirement benefit under either SamCERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately.</p>
Probability of Refund	<p>Table A-4 gives the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. For Plan 3, 100% of members are assumed to elect a vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions.</p>
Probability of Eligible Survivor	<p>For members not currently in pay status, 80% of all males and 55% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be three years younger than male members and three years older than female members. Survivors are assumed to be of the opposite sex as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.</p>
Reciprocal Benefits	<p>40% of future deferred vested members are assumed to immediately join a reciprocal agency. For current deferred vested members, eligibility is based on the data supplied by SamCERA.</p>
Adjustment to Plan 3 Normal Cost Rate	<p>Plan 3 members are eligible to transfer to Plan 2 or Plan 4 (depending on entry date) after 5 years of service. We have adjusted the Plan 3 Normal Cost to account for this. The adjusted Plan 3 Normal Cost rate is 50% of the unadjusted Plan 3 Normal Cost rate and 50% of the Plan 4 Normal Cost rate.</p>
Part-Time Employees	<p>For valuation purposes, part-time employees are treated the same as full-time employees.</p>

**Member Contribution
Rate Assumptions**

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL, the:

- A. Annuity factor used for general members is based on a 33% / 67% blend of the male and female annuity factors using current valuation assumptions and no COLA. For Safety members it is based on a 83% / 17% blend of the male and female annuity factors using current valuation assumptions.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.75%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.

Example: For a Plan 4 Member who enters at age 54 or earlier, the Final Compensation at retirement (age 55) will be the monthly average of the annual salaries during age 54.
- D. For purposes of calculating the value of the member's future contribution, interest is assumed to be credited at 7.61% semiannually (7.75% annual rate).
- E. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

For purposes of determining cost-sharing, 85% of Safety members were assumed to be deputy sheriffs.

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Table A-1: Summary of Valuation Assumptions as of June 30, 2005

I.	Economic assumptions		
	A. General wage increases	4.00%	
	B. Investment earnings	7.75%	
	C. Growth in membership	0.00%	
	D. CPI inflation assumption	3.50%	
II.	Demographic assumptions		
	A. Salary increases due to service	Table A-5	
	B. Retirement	Tables A-6 to A-11	
	C. Disablement	Tables A-6 to A-11	
	D. Mortality for active members after termination and service retired members.	Table A-2	
	Basis – RP-2000 Healthy Annuitant Mortality Table with adjustment for White Collar workers:		
	<u>Class of Members</u>	<u>Age Adjustment</u>	
	General – Males	-1 year	
	General – Females	-2 years	
	Safety – Males	-1 year	
	Safety – Females	-2 years	
E.	Mortality among disabled members	Table A-3	
	Basis – RP-2000 Healthy Annuitant Mortality Table with adjustment for White Collar workers:		
	<u>Class of Members</u>	<u>Age Adjustment</u>	<u>Minimum Rate</u>
	General – Males	+6 years	1.50%
	General – Females	+6 years	1.25%
	Safety – Males	+3 years	1.00%
	Safety – Females	+3 years	1.00%
F.	Mortality for beneficiaries.	Table A-2	
	Basis – Beneficiaries are assumed to have the same mortality as a general member of the opposite sex who has taken a service retirement.		
G.	Other terminations of employment	Tables A-6 to A-11	
H.	Refund of contributions on vested termination	Table A-4	

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Table A-2: Mortality for Members Retired for Service

Age	General Male	General Female	Safety Male	Safety Female
20	0.033%	0.019%	0.033%	0.019%
25	0.038%	0.020%	0.038%	0.020%
30	0.041%	0.023%	0.041%	0.023%
35	0.053%	0.040%	0.053%	0.040%
40	0.083%	0.056%	0.083%	0.056%
45	0.123%	0.084%	0.123%	0.084%
50	0.184%	0.134%	0.184%	0.134%
55	0.295%	0.210%	0.295%	0.210%
60	0.497%	0.372%	0.497%	0.372%
65	0.969%	0.681%	0.969%	0.681%
70	1.719%	1.216%	1.719%	1.216%
75	2.997%	2.090%	2.997%	2.090%
80	5.318%	3.496%	5.318%	3.496%
85	9.379%	5.951%	9.379%	5.951%
90	16.109%	10.301%	16.109%	10.301%

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Table A-3: Mortality for Members Retired for Disability

Age	General Male	General Female	Safety Male	Safety Female
20	1.500%	1.250%	1.000%	1.000%
25	1.500%	1.250%	1.000%	1.000%
30	1.500%	1.250%	1.000%	1.000%
35	1.500%	1.250%	1.000%	1.000%
40	1.500%	1.250%	1.000%	1.000%
45	1.500%	1.250%	1.000%	1.000%
50	1.500%	1.250%	1.000%	1.000%
55	1.500%	1.250%	1.000%	1.000%
60	1.500%	1.250%	1.000%	1.000%
65	2.140%	1.687%	1.557%	1.216%
70	3.778%	2.849%	2.671%	2.090%
75	6.678%	4.794%	4.748%	3.496%
80	11.678%	8.283%	8.398%	5.951%
85	19.498%	13.853%	14.487%	10.301%
90	28.390%	20.538%	22.946%	16.344%

San Mateo County Employees' Retirement Association

**Table A-4: Immediate Refund of Contributions Upon Termination of Employment
(Excludes Plan 3)**

Years of Service	General	Safety
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	50%	45%
6	50%	45%
7	50%	45%
8	49%	42%
9	48%	39%
10	47%	36%
11	46%	33%
12	45%	30%
13	43%	25%
14	41%	20%
15	39%	15%
16	37%	10%
17	35%	5%
18	32%	4%
19	29%	3%
20	26%	0%
21	23%	0%
22	20%	0%
23	16%	0%
24	12%	0%
25	8%	0%
26	4%	0%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

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Table A-5: Annual Increase in Salary*

Years of Service	Due to Promotion and Longevity	Total Annual Increase*
<1	6.00%	10.24%
1	4.00%	8.16%
2	3.00%	7.12%
3	2.50%	6.60%
4	2.00%	6.08%
5	1.75%	5.82%
6	1.50%	5.56%
7	1.25%	5.30%
8	1.05%	5.09%
9	0.90%	4.94%
10	0.80%	4.83%
11	0.70%	4.73%
12	0.60%	4.62%
13	0.50%	4.52%
14	0.50%	4.52%
15	0.50%	4.52%
16	0.50%	4.52%
17	0.50%	4.52%
18	0.50%	4.52%
19	0.50%	4.52%
20 or More	0.50%	4.52%

* The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed 4.00% per annum increase in the general wage level of the membership. The total result is compounded rather than additive.

San Mateo County Employees' Retirement Association

Appendix A: Rates of Separation From Active Service Tables A-6 to A-11

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred vested retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each rate represents the probability that a member will separate from service at each age due to the particular cause. For example, a rate of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each table represents the detailed rates needed for each SamCERA plan by sex:

Table A-6: General Plan 1, 2 & 4 Males	A-10: Safety Plans 1, 2 & 4 Males
A-7: General Plan 1, 2 & 4 Females	A-11: Safety Plans 1, 2 & 4 Females
A-8: General Plan 3 Males	
A-9: General Plan 3 Females	

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**Table A-6: Rate of Separation From Active Service
General Plans 1, 2 & 4 – Male**

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0005	0.0003	N/A	0.0002	0	0.1200
19	0.0000	0.0005	0.0003	N/A	0.0002	1	0.1000
20	0.0000	0.0005	0.0003	N/A	0.0002	2	0.0850
21	0.0000	0.0005	0.0003	N/A	0.0002	3	0.0750
22	0.0000	0.0005	0.0003	N/A	0.0002	4	0.0650
23	0.0000	0.0005	0.0003	N/A	0.0002	5	0.0583
24	0.0000	0.0005	0.0003	N/A	0.0002	6	0.0517
25	0.0000	0.0005	0.0003	N/A	0.0003	7	0.0450
26	0.0000	0.0005	0.0003	N/A	0.0003	8	0.0430
27	0.0000	0.0005	0.0003	N/A	0.0003	9	0.0410
28	0.0000	0.0005	0.0003	N/A	0.0003	10	0.0390
29	0.0000	0.0005	0.0004	N/A	0.0003	11	0.0370
30	0.0000	0.0005	0.0004	N/A	0.0003	12	0.0350
31	0.0000	0.0006	0.0004	N/A	0.0004	13	0.0330
32	0.0000	0.0006	0.0004	N/A	0.0004	14	0.0310
33	0.0000	0.0007	0.0004	N/A	0.0005	15	0.0290
34	0.0000	0.0007	0.0005	N/A	0.0005	16	0.0270
35	0.0000	0.0008	0.0005	N/A	0.0005	17	0.0250
36	0.0000	0.0008	0.0006	N/A	0.0006	18	0.0230
37	0.0000	0.0009	0.0006	N/A	0.0006	19	0.0210
38	0.0000	0.0010	0.0006	N/A	0.0006	20	0.0190
39	0.0000	0.0010	0.0007	N/A	0.0006	21	0.0170
40	0.0000	0.0011	0.0007	N/A	0.0006	22	0.0150
41	0.0000	0.0011	0.0008	N/A	0.0007	23	0.0140
42	0.0000	0.0012	0.0008	N/A	0.0008	24	0.0130
43	0.0000	0.0013	0.0009	N/A	0.0009	25	0.0120
44	0.0000	0.0014	0.0010	N/A	0.0010	26	0.0110
45	0.0000	0.0016	0.0010	N/A	0.0012	27	0.0100
46	0.0000	0.0017	0.0011	N/A	0.0014	28	0.0100
47	0.0000	0.0018	0.0012	N/A	0.0016	29	0.0100
48	0.0000	0.0019	0.0013	N/A	0.0018	30 & Above	0.0100
49	0.0000	0.0020	0.0014	N/A	0.0020		
50	0.0600	0.0022	0.0014	N/A	0.0022		
51	0.0500	0.0023	0.0015	N/A	0.0024		
52	0.0500	0.0024	0.0016	N/A	0.0026		
53	0.0500	0.0025	0.0017	N/A	0.0028		
54	0.0500	0.0026	0.0018	N/A	0.0030		
55	0.0600	0.0028	0.0018	N/A	0.0032		
56	0.0600	0.0029	0.0019	N/A	0.0034		
57	0.0800	0.0030	0.0020	N/A	0.0036		
58	0.1200	0.0031	0.0021	N/A	0.0038		
59	0.1200	0.0032	0.0022	N/A	0.0040		
60	0.1500	0.0034	0.0022	N/A	0.0042		
61	0.2000	0.0035	0.0023	N/A	0.0044		
62	0.3500	0.0036	0.0024	N/A	0.0046		
63	0.2500	0.0037	0.0025	N/A	0.0048		
64	0.2500	0.0038	0.0026	N/A	0.0050		
65	0.4000	0.0000	0.0000	N/A	0.0052		
66	0.3000	0.0000	0.0000	N/A	0.0056		
67	0.3000	0.0000	0.0000	N/A	0.0060		
68	0.3000	0.0000	0.0000	N/A	0.0065		
69	0.3000	0.0000	0.0000	N/A	0.0070		
70	1.0000	0.0000	0.0000	N/A	0.0000		

* 100% probability of retirement is assumed at ages 62 and above with 38 or more years of service.



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San Mateo County Employees' Retirement Association

**Table A-7: Rate of Separation From Active Service
General Plans 1, 2 & 4 - Female**

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0005	0.0003	N/A	0.0003	0	0.1300
19	0.0000	0.0005	0.0003	N/A	0.0003	1	0.1100
20	0.0000	0.0005	0.0003	N/A	0.0003	2	0.0900
21	0.0000	0.0005	0.0003	N/A	0.0003	3	0.0800
22	0.0000	0.0005	0.0003	N/A	0.0003	4	0.0700
23	0.0000	0.0005	0.0003	N/A	0.0003	5	0.0633
24	0.0000	0.0005	0.0003	N/A	0.0003	6	0.0567
25	0.0000	0.0005	0.0003	N/A	0.0003	7	0.0500
26	0.0000	0.0005	0.0003	N/A	0.0003	8	0.0480
27	0.0000	0.0005	0.0003	N/A	0.0003	9	0.0460
28	0.0000	0.0005	0.0003	N/A	0.0003	10	0.0440
29	0.0000	0.0005	0.0004	N/A	0.0003	11	0.0420
30	0.0000	0.0005	0.0004	N/A	0.0003	12	0.0400
31	0.0000	0.0006	0.0004	N/A	0.0004	13	0.0380
32	0.0000	0.0006	0.0004	N/A	0.0004	14	0.0360
33	0.0000	0.0007	0.0004	N/A	0.0004	15	0.0340
34	0.0000	0.0007	0.0005	N/A	0.0004	16	0.0320
35	0.0000	0.0008	0.0005	N/A	0.0005	17	0.0300
36	0.0000	0.0008	0.0006	N/A	0.0005	18	0.0280
37	0.0000	0.0009	0.0006	N/A	0.0005	19	0.0260
38	0.0000	0.0010	0.0006	N/A	0.0006	20	0.0240
39	0.0000	0.0010	0.0007	N/A	0.0006	21	0.0220
40	0.0000	0.0011	0.0007	N/A	0.0006	22	0.0200
41	0.0000	0.0011	0.0008	N/A	0.0007	23	0.0180
42	0.0000	0.0012	0.0008	N/A	0.0008	24	0.0160
43	0.0000	0.0013	0.0009	N/A	0.0008	25	0.0140
44	0.0000	0.0014	0.0010	N/A	0.0009	26	0.0120
45	0.0000	0.0016	0.0010	N/A	0.0009	27	0.0100
46	0.0000	0.0017	0.0011	N/A	0.0010	28	0.0100
47	0.0000	0.0018	0.0012	N/A	0.0010	29	0.0100
48	0.0000	0.0019	0.0013	N/A	0.0011	30 & Above	0.0100
49	0.0000	0.0020	0.0014	N/A	0.0012		
50	0.0600	0.0022	0.0014	N/A	0.0013		
51	0.0500	0.0023	0.0015	N/A	0.0014		
52	0.0500	0.0024	0.0016	N/A	0.0015		
53	0.0500	0.0025	0.0017	N/A	0.0017		
54	0.0500	0.0026	0.0018	N/A	0.0019		
55	0.0600	0.0028	0.0018	N/A	0.0021		
56	0.0600	0.0029	0.0019	N/A	0.0022		
57	0.0800	0.0030	0.0020	N/A	0.0025		
58	0.1200	0.0031	0.0021	N/A	0.0028		
59	0.1200	0.0032	0.0022	N/A	0.0031		
60	0.1500	0.0034	0.0022	N/A	0.0036		
61	0.2000	0.0035	0.0023	N/A	0.0042		
62	0.3500	0.0036	0.0024	N/A	0.0048		
63	0.2500	0.0037	0.0025	N/A	0.0055		
64	0.2500	0.0038	0.0026	N/A	0.0063		
65	0.4000	0.0000	0.0000	N/A	0.0072		
66	0.3000	0.0000	0.0000	N/A	0.0082		
67	0.3000	0.0000	0.0000	N/A	0.0093		
68	0.3000	0.0000	0.0000	N/A	0.0104		
69	0.3000	0.0000	0.0000	N/A	0.0116		
70	1.0000	0.0000	0.0000	N/A	0.0000		

* 100% probability of retirement is assumed at ages 62 and above with 38 or more years of service.

San Mateo County Employees' Retirement Association

**Table A-8: Rate of Separation From Active Service
General Plan 3 - Male**

<u>Age</u>	<u>Service Retirement</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>	<u>Years of Service</u>	<u>Other Terminations</u>
18	0.0000	N/A	N/A	N/A	0.0002	0	0.1200
19	0.0000	N/A	N/A	N/A	0.0002	1	0.1000
20	0.0000	N/A	N/A	N/A	0.0002	2	0.0850
21	0.0000	N/A	N/A	N/A	0.0002	3	0.0750
22	0.0000	N/A	N/A	N/A	0.0002	4	0.0650
23	0.0000	N/A	N/A	N/A	0.0002	5	0.0583
24	0.0000	N/A	N/A	N/A	0.0002	6	0.0517
25	0.0000	N/A	N/A	N/A	0.0003	7	0.0450
26	0.0000	N/A	N/A	N/A	0.0003	8	0.0430
27	0.0000	N/A	N/A	N/A	0.0003	9	0.0410
28	0.0000	N/A	N/A	N/A	0.0003	10	0.0390
29	0.0000	N/A	N/A	N/A	0.0003	11	0.0370
30	0.0000	N/A	N/A	N/A	0.0003	12	0.0350
31	0.0000	N/A	N/A	N/A	0.0004	13	0.0330
32	0.0000	N/A	N/A	N/A	0.0004	14	0.0310
33	0.0000	N/A	N/A	N/A	0.0005	15	0.0290
34	0.0000	N/A	N/A	N/A	0.0005	16	0.0270
35	0.0000	N/A	N/A	N/A	0.0005	17	0.0250
36	0.0000	N/A	N/A	N/A	0.0006	18	0.0230
37	0.0000	N/A	N/A	N/A	0.0006	19	0.0210
38	0.0000	N/A	N/A	N/A	0.0006	20	0.0190
39	0.0000	N/A	N/A	N/A	0.0006	21	0.0170
40	0.0000	N/A	N/A	N/A	0.0006	22	0.0150
41	0.0000	N/A	N/A	N/A	0.0007	23	0.0140
42	0.0000	N/A	N/A	N/A	0.0008	24	0.0130
43	0.0000	N/A	N/A	N/A	0.0009	25	0.0120
44	0.0000	N/A	N/A	N/A	0.0010	26	0.0110
45	0.0000	N/A	N/A	N/A	0.0012	27	0.0100
46	0.0000	N/A	N/A	N/A	0.0014	28	0.0100
47	0.0000	N/A	N/A	N/A	0.0016	29	0.0100
48	0.0000	N/A	N/A	N/A	0.0018	30 & Above	0.0100
49	0.0000	N/A	N/A	N/A	0.0020		
50	0.0000	N/A	N/A	N/A	0.0022		
51	0.0000	N/A	N/A	N/A	0.0024		
52	0.0000	N/A	N/A	N/A	0.0026		
53	0.0000	N/A	N/A	N/A	0.0028		
54	0.0000	N/A	N/A	N/A	0.0030		
55	0.0300	N/A	N/A	N/A	0.0032		
56	0.0300	N/A	N/A	N/A	0.0034		
57	0.0300	N/A	N/A	N/A	0.0036		
58	0.0300	N/A	N/A	N/A	0.0038		
59	0.0300	N/A	N/A	N/A	0.0040		
60	0.0300	N/A	N/A	N/A	0.0042		
61	0.0600	N/A	N/A	N/A	0.0044		
62	0.1500	N/A	N/A	N/A	0.0046		
63	0.1000	N/A	N/A	N/A	0.0048		
64	0.1500	N/A	N/A	N/A	0.0050		
65	0.3000	N/A	N/A	N/A	0.0052		
66	0.3000	N/A	N/A	N/A	0.0056		
67	0.3000	N/A	N/A	N/A	0.0060		
68	0.3000	N/A	N/A	N/A	0.0065		
69	0.3000	N/A	N/A	N/A	0.0070		
70	1.0000	N/A	N/A	N/A	0.0000		

San Mateo County Employees' Retirement Association

**Table A-9: Rate of Separation From Active Service
General Plan 3 – Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.0003	0	0.1300
19	0.0000	N/A	N/A	N/A	0.0003	1	0.1100
20	0.0000	N/A	N/A	N/A	0.0003	2	0.0900
21	0.0000	N/A	N/A	N/A	0.0003	3	0.0800
22	0.0000	N/A	N/A	N/A	0.0003	4	0.0700
23	0.0000	N/A	N/A	N/A	0.0003	5	0.0633
24	0.0000	N/A	N/A	N/A	0.0003	6	0.0567
25	0.0000	N/A	N/A	N/A	0.0003	7	0.0500
26	0.0000	N/A	N/A	N/A	0.0003	8	0.0480
27	0.0000	N/A	N/A	N/A	0.0003	9	0.0460
28	0.0000	N/A	N/A	N/A	0.0003	10	0.0440
29	0.0000	N/A	N/A	N/A	0.0003	11	0.0420
30	0.0000	N/A	N/A	N/A	0.0003	12	0.0400
31	0.0000	N/A	N/A	N/A	0.0004	13	0.0380
32	0.0000	N/A	N/A	N/A	0.0004	14	0.0360
33	0.0000	N/A	N/A	N/A	0.0004	15	0.0340
34	0.0000	N/A	N/A	N/A	0.0004	16	0.0320
35	0.0000	N/A	N/A	N/A	0.0005	17	0.0300
36	0.0000	N/A	N/A	N/A	0.0005	18	0.0280
37	0.0000	N/A	N/A	N/A	0.0005	19	0.0260
38	0.0000	N/A	N/A	N/A	0.0006	20	0.0240
39	0.0000	N/A	N/A	N/A	0.0006	21	0.0220
40	0.0000	N/A	N/A	N/A	0.0006	22	0.0200
41	0.0000	N/A	N/A	N/A	0.0007	23	0.0180
42	0.0000	N/A	N/A	N/A	0.0008	24	0.0160
43	0.0000	N/A	N/A	N/A	0.0008	25	0.0140
44	0.0000	N/A	N/A	N/A	0.0009	26	0.0120
45	0.0000	N/A	N/A	N/A	0.0009	27	0.0100
46	0.0000	N/A	N/A	N/A	0.0010	28	0.0100
47	0.0000	N/A	N/A	N/A	0.0010	29	0.0100
48	0.0000	N/A	N/A	N/A	0.0011	30 & Above	0.0100
49	0.0000	N/A	N/A	N/A	0.0012		
50	0.0000	N/A	N/A	N/A	0.0013		
51	0.0000	N/A	N/A	N/A	0.0014		
52	0.0000	N/A	N/A	N/A	0.0015		
53	0.0000	N/A	N/A	N/A	0.0017		
54	0.0000	N/A	N/A	N/A	0.0019		
55	0.0400	N/A	N/A	N/A	0.0021		
56	0.0400	N/A	N/A	N/A	0.0022		
57	0.0400	N/A	N/A	N/A	0.0025		
58	0.0400	N/A	N/A	N/A	0.0028		
59	0.0400	N/A	N/A	N/A	0.0031		
60	0.0400	N/A	N/A	N/A	0.0036		
61	0.0600	N/A	N/A	N/A	0.0042		
62	0.1500	N/A	N/A	N/A	0.0048		
63	0.1000	N/A	N/A	N/A	0.0055		
64	0.1500	N/A	N/A	N/A	0.0063		
65	0.3000	N/A	N/A	N/A	0.0072		
66	0.3000	N/A	N/A	N/A	0.0082		
67	0.3000	N/A	N/A	N/A	0.0093		
68	0.3000	N/A	N/A	N/A	0.0104		
69	0.3000	N/A	N/A	N/A	0.0116		
70	1.0000	N/A	N/A	N/A	0.0000		

San Mateo County Employees' Retirement Association

**Table A-10: Rate of Separation From Active Service
Safety & Probation Plans - Male**

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0012	0.0003	0.0010	0.0002	0	0.0800
19	0.0000	0.0012	0.0003	0.0001	0.0002	1	0.0650
20	0.0000	0.0012	0.0003	0.0001	0.0002	2	0.0500
21	0.0000	0.0012	0.0003	0.0001	0.0002	3	0.0350
22	0.0000	0.0012	0.0003	0.0001	0.0002	4	0.0250
23	0.0000	0.0012	0.0003	0.0001	0.0002	5	0.0233
24	0.0000	0.0012	0.0003	0.0001	0.0002	6	0.0217
25	0.0000	0.0012	0.0003	0.0001	0.0003	7	0.0200
26	0.0000	0.0012	0.0003	0.0001	0.0003	8	0.0190
27	0.0000	0.0012	0.0003	0.0001	0.0004	9	0.0180
28	0.0000	0.0013	0.0003	0.0001	0.0004	10	0.0170
29	0.0000	0.0014	0.0003	0.0001	0.0004	11	0.0160
30	0.0000	0.0014	0.0004	0.0001	0.0003	12	0.0150
31	0.0000	0.0015	0.0004	0.0001	0.0004	13	0.0140
32	0.0000	0.0016	0.0004	0.0001	0.0003	14	0.0130
33	0.0000	0.0018	0.0005	0.0001	0.0004	15	0.0120
34	0.0000	0.0021	0.0005	0.0001	0.0004	16	0.0110
35	0.0000	0.0023	0.0006	0.0001	0.0004	17	0.0100
36	0.0000	0.0026	0.0006	0.0001	0.0004	18	0.0080
37	0.0000	0.0028	0.0007	0.0001	0.0004	19	0.0060
38	0.0000	0.0030	0.0008	0.0001	0.0004	20 & Above	0.0000
39	0.0000	0.0033	0.0008	0.0001	0.0004		
40	0.0000	0.0035	0.0009	0.0001	0.0004		
41	0.0000	0.0038	0.0009	0.0001	0.0004		
42	0.0000	0.0040	0.0010	0.0001	0.0005		
43	0.0000	0.0042	0.0011	0.0001	0.0005		
44	0.0000	0.0045	0.0011	0.0001	0.0006		
45	0.0000	0.0047	0.0012	0.0001	0.0006		
46	0.0000	0.0050	0.0012	0.0001	0.0007		
47	0.0000	0.0052	0.0013	0.0001	0.0008		
48	0.0000	0.0054	0.0014	0.0001	0.0008		
49	0.0000	0.0057	0.0014	0.0001	0.0008		
50	0.2500	0.0059	0.0015	0.0001	0.0009		
51	0.1900	0.0062	0.0015	0.0001	0.0009		
52	0.1900	0.0064	0.0016	0.0001	0.0009		
53	0.2500	0.0066	0.0017	0.0001	0.0010		
54	0.2500	0.0069	0.0017	0.0001	0.0012		
55	0.4000	0.0071	0.0018	0.0001	0.0013		
56	0.4000	0.0074	0.0018	0.0001	0.0014		
57	0.4000	0.0076	0.0019	0.0001	0.0015		
58	0.4000	0.0070	0.0018	0.0001	0.0017		
59	0.4000	0.0065	0.0016	0.0001	0.0019		
60	1.0000	0.0000	0.0000	0.0000	0.0000		

* 100% probability of retirement is assumed at ages 50 and above with 33 or more years of service.

San Mateo County Employees' Retirement Association

**Table A-11: Rate of Separation From Active Service
Safety & Probation Plans – Female**

<u>Age</u>	<u>Service Retirement*</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>	<u>Years of Service</u>	<u>Other Terminations</u>
18	0.0000	0.0012	0.0003	0.0010	0.0002	0	0.0800
19	0.0000	0.0012	0.0003	0.0001	0.0002	1	0.0650
20	0.0000	0.0012	0.0003	0.0001	0.0002	2	0.0500
21	0.0000	0.0012	0.0003	0.0001	0.0002	3	0.0350
22	0.0000	0.0012	0.0003	0.0001	0.0002	4	0.0250
23	0.0000	0.0012	0.0003	0.0001	0.0002	5	0.0233
24	0.0000	0.0012	0.0003	0.0001	0.0002	6	0.0217
25	0.0000	0.0012	0.0003	0.0001	0.0003	7	0.0200
26	0.0000	0.0012	0.0003	0.0001	0.0003	8	0.0190
27	0.0000	0.0012	0.0003	0.0001	0.0004	9	0.0180
28	0.0000	0.0013	0.0003	0.0001	0.0004	10	0.0170
29	0.0000	0.0014	0.0003	0.0001	0.0004	11	0.0160
30	0.0000	0.0014	0.0004	0.0001	0.0003	12	0.0150
31	0.0000	0.0015	0.0004	0.0001	0.0004	13	0.0140
32	0.0000	0.0016	0.0004	0.0001	0.0003	14	0.0130
33	0.0000	0.0018	0.0005	0.0001	0.0004	15	0.0120
34	0.0000	0.0021	0.0005	0.0001	0.0004	16	0.0110
35	0.0000	0.0023	0.0006	0.0001	0.0004	17	0.0100
36	0.0000	0.0026	0.0006	0.0001	0.0004	18	0.0080
37	0.0000	0.0028	0.0007	0.0001	0.0004	19	0.0060
38	0.0000	0.0030	0.0008	0.0001	0.0004	20 & Above	0.0000
39	0.0000	0.0033	0.0008	0.0001	0.0004		
40	0.0000	0.0035	0.0009	0.0001	0.0004		
41	0.0000	0.0038	0.0009	0.0001	0.0004		
42	0.0000	0.0040	0.0010	0.0001	0.0005		
43	0.0000	0.0042	0.0011	0.0001	0.0005		
44	0.0000	0.0045	0.0011	0.0001	0.0006		
45	0.0000	0.0047	0.0012	0.0001	0.0006		
46	0.0000	0.0050	0.0012	0.0001	0.0007		
47	0.0000	0.0052	0.0013	0.0001	0.0008		
48	0.0000	0.0054	0.0014	0.0001	0.0008		
49	0.0000	0.0057	0.0014	0.0001	0.0008		
50	0.2500	0.0059	0.0015	0.0001	0.0009		
51	0.1900	0.0062	0.0015	0.0001	0.0009		
52	0.1900	0.0064	0.0016	0.0001	0.0009		
53	0.2500	0.0066	0.0017	0.0001	0.0010		
54	0.2500	0.0069	0.0017	0.0001	0.0012		
55	0.4000	0.0071	0.0018	0.0001	0.0013		
56	0.4000	0.0074	0.0018	0.0001	0.0014		
57	0.4000	0.0076	0.0019	0.0001	0.0015		
58	0.4000	0.0070	0.0018	0.0001	0.0017		
59	0.4000	0.0065	0.0016	0.0001	0.0019		
60	1.0000	0.0000	0.0000	0.0000	0.0000		

* 100% probability of retirement is assumed at ages 50 and above with 33 or more years of service.

San Mateo County Employees' Retirement Association

Appendix B: Summary of Plan Provisions

All actuarial calculations are based on our understanding of the statutes governing the SamCERA as contained in the County Employees Retirement Plan (CERL) of 1937, with provisions adopted by the SamCERA Board, effective through June 30, 2005. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the State Code. This summary does not attempt to cover all the detailed provisions of the law.

**Government
Code Section**

MEMBERSHIP IN RETIREMENT PLANS

The County has established ten defined benefit plans based on a member's date of entry into SamCERA. Plans 1, 2 & 4 are open to all members depending on their date of entry. Only General members are eligible for Plan 3.

Employees of the Mosquito Abatement District are eligible for participation in all General retirement plans, except for Plan 3.

- Plan 1:** Employees hired on July 6, 1980 and earlier.
- Plan 2:** Employees hired after July 6, 1980, but on or before July 12, 1997.
- Plan 3:** General members may elect to participate in Plan 3. After five years of service, Plan 3 members can elect membership under the open contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service. (31496)
- Plan 4:** Employees hired after July 12, 1997 (if Plan 3 not elected).

MEMBER CONTRIBUTIONS

Basic:

Plans 1, 2 & 4:

Contributions are based on the entry age and class of each member and are required of all members in Plans 1, 2 and 4. See section 5 for details on this calculation. Current member rates are shown in Appendix D.

Contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of SamCERA or a reciprocal system on March 7, 1973, and continuously thereafter. All safety members are eligible for the 30-year cessation of contributions. This provision does not apply to cost-sharing contributions. (31625.2, 31664.1)

Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Retirement on amounts that have been on deposit for at least six months. (31591, 31700)

Plan 3:

No member contributions are required under Plan 3

Cost-of-Living:

Plans 1, 2 & 4:

Members do not contribute towards the cost-of-living benefit.

Cost-Sharing:

Plans 1, 2 & 4:

General members: (31678.2)

Members contribute basic rate plus 3.0%

Safety members (except Deputy Sheriffs):

Members contribute basic rate plus 5.0%

Safety members (Deputy Sheriffs only):

Members contribute basic rate plus varying cost-sharing rates based on age and service:

- If age 45 or older 4.5%
- If age is less than 45
 - Service is less than 5 years: 3.0%
 - Service between 5 & 15 years: 3.5%
 - Service is more than 15 years 4.5%

Probation members:

Members contribute basic rate plus 3.5%

MEMBER CONTRIBUTIONS (Continued)

Employer Pick-Up: (31581.2)

General members: The County provides a variety of refundable service-based employer pick-up of service programs for members in several of its unions.

Employer rates have not been adjusted to reflect the payment of the refundable employer pick-up of member contributions programs because the County payroll system captures these costs on a pay-as-you-go basis while processing each individual's biweekly pay.

Safety members: The County provides a variety of refundable service-based employer pick-up of service programs for members in several of its unions. (31678.2)

Employer rates have not been adjusted to reflect the payment of the refundable employer pick-up of member contributions programs because the County payroll system captures these costs on a pay-as-you-go basis while processing each individual's biweekly pay.

Probation members: The County provides a variety of refundable service-based employer pick-up of service programs for members in several of its unions. (31639.85)

Employer rates have been adjusted to reflect the 15% non-refundable County pick-up.

EMPLOYER CONTRIBUTIONS

The employer (County or district) contributes to the retirement fund a percent of the total compensation provided for all members based on an actuarial investigation, valuation and recommendation of the actuary. (31453, 31453.5, 31453.6, 31454 31581)

SERVICE RETIREMENT ALLOWANCE

Eligibility:

Plans 1, 2 & 4

General members:

Age 50 with 10 years of service;
Any age with 30 years of service; or
Age 70 regardless of service.

(31672)

All Safety & Probation members:

Age 50 with 10 years of service;
Any age with 20 years of service.

(31663.25)

Plan 3:

Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.

(31497.3)

Final Compensation:

Plans 1 & 2:

Monthly average of a member's highest 12 consecutive months of compensation.

(31462)

Plane 3 & 4:

Monthly average of a member's highest 36 consecutive months of compensation.

(31462.1)

Compensation Limit:

Plans 1 & 2:

The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code.

(31671)

Monthly Allowance:

Plans 1, 2 & 4:

General members:

$1/60 \times \text{Final Compensation} \times \text{General age factor} \times \text{years of service.}$

(31676.1)

(31676.14)

All Safety & Probation members:

$3\% \times \text{Final Compensation} \times \text{Safety age factor} \times \text{Years of service.}$

(31664.1)

SERVICE RETIREMENT ALLOWANCE (Continued)

- Plan 3:**
- General members: (a)+(b)-(c) where:**
- (a) 2% x Final Compensation x (Years of Service, (up to 35 years), plus (31497.3)
 - (b) 1 % x Final Compensation x Years of Service in excess of 35 (up to 10)
 - (c) Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35) divided by 35.

The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 65.

If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).

Percentage of Final Average Compensation at Sample Ages

Plan	Age 50	Age 55	Age 60	Age 65 & Up	
County General 1,2&4	1.475%	1.948%	2.440%	2.611%	(31676.14)
Mosquito A.D.	1.182%	1.492%	1.971%	2.432%	(31676.1)
General Plan 3*	N/A	0.780%	1.220%	2.000%	(31497.3(f))
Safety & Probation	3.000%	3.000%	3.000%	3.000%	(31664.1)

* Prior to reduction for PIA benefit. Actual percentage will be less.

Maximum Allowance:

Plans 1, 2 & 4:

Allowance may not exceed 100% of final compensation.

Plan 3:

The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation if service exceeds 35 years. (31497.3)

SERVICE RETIREMENT ALLOWANCE (Continued)

Unmodified Retirement Allowance (Normal Form):

Plans 1, 2 & 4:	Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children).	(31760.1)
Plan 3:	Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children).	(31497.71)
	Eligible survivor includes certain domestic partners.	(31780.2)

Optional Retirement Allowance:

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional survivor allowance.

Option 1:	Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member.	(31761)
Option 2:	100% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31762)
Option 3:	50% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31763)
Option 4:	Other % of member's reduced allowance is payable to a surviving spouse or beneficiary(ies) having an insurable interest in the life of the member.	(31764)

SERVICE RETIREMENT ALLOWANCE (Continued)

A member may not revoke and name another beneficiary if the member elects Option 2, 3 or 4. (31782)

All Allowances: (31600)
All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that occur mid-month, the full month's payment is made.

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility: (31720, 31720.5, 31720.6, 31720.7, 31720.9)
Plans 1, 2 & 4: Any age or years of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.
Plan 3: Not available under Plan 3. (31487)
Monthly Allowance: Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire. (31727.4)
Normal Form Of Payment: Life Annuity with 100% continuance to a surviving spouse (or eligible children). (31760, 31786)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

<u>Eligibility:</u>		
Plans 1, 2 & 4:	Any age with 5 years of service and permanently incapacitated for the performance of duty.	(31720, 31836)
Plan 3:	Not available under Plan 3.	(31487)
<u>Monthly Allowance:</u>		
	The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:	(31726, 31726.5)
General Members:	(a) 90% of 1/60 of Final Compensation x years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation. (b) 90% 1/60 of Final Compensation x years of service projected to age 65, not to exceed 1/3 of Final Compensation.	(31727(a)) (31727(b))
Safety Members:	1/60 is replaced by 1/50 and age 65 is replaced by age 55 in (a) and (b) above.	(31727.2)
<u>Normal Form Of Payment:</u>	Life Annuity with 60% continuance to a surviving spouse (or eligible children).	(31760.1)

SERVICE-CONNECTED DEATH BENEFITS

<u>Eligibility:</u>		
Plans 1, 2 & 4:	Active members who die in service as a result of injury or disease arising out of and in the course of employment.	(31787)
Plan 3:	Not available under Plan 3.	(31487)
<u>Monthly Allowance:</u>		
	An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to 50% of the member's Final Compensation.	(31787)

SERVICE-CONNECTED DEATH BENEFITS (Continued)

Optional Combined Benefit: (31781.3)

In lieu of the monthly allowance above, a surviving spouse may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of surviving spouse.

Death Benefit (Lump Sum): (31781)

The member's normal contributions and interest, plus 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation).

Additional Allowance for Children: (31787.5)

25% of death allowance (whether or not the monthly allowance or combined benefit is chosen) for one child, 40% for two children, and 50% for three or more children.

(31787.6)

Additional Amount for Spouse of Safety Member:

A surviving spouse of a safety member is also entitled to receive a lump-sum death benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other benefits.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility:

Plans 1, 2 & 4: Active members who die while in service or while physically or mentally incapacitated for the performance of duty. (31780)

Plan 3: Not available under Plan 3.

NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Death Benefit (Lump Sum): (31781)

The member's normal contributions and interest, plus 1/12 of the Compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

Optional Death Benefit:

In lieu of the lump-sum death benefit, the following several optional death benefits are available to provide flexibility to survivors.

First Optional Death Benefit:

If a member who would have been entitled to a non-service-connected disability retirement allowance dies prior to retirement as a result of such disability, the surviving spouse (or eligible children) may elect to receive an optional death allowance equal to 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31781.1)

Second Optional Death Benefit:

If a member dies prior to reaching the minimum retirement age but has 10 or more years of service, a surviving spouse (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in 31765.2 (a 60% continuance). (31781.2, 31765.2)

Third Optional Death Benefit:

A surviving spouse of a member who dies after five years of service may elect a combined benefit equal to:

(a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus (31781.3)

(b) A monthly payment equal to 60% of the monthly retirement allowance to which the member have been entitled if the member retired or been retired for a non-service-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of surviving spouse. (31781.1)

NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Fourth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary, the spouse (or eligible children) may elect to receive 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31765.1)

Fifth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary and survives the member by not less than 30 days the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3. (31765)

Note: *For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the first optional death benefit or the lump sum, whichever is more valuable.*

DEFERRED VESTED BENEFITS

Eligibility:

Plans 1, 2 & 4: 5 years of service. Member contributions must be left on deposit. Members are eligible for service retirement when they would have reached eligibility if they would have remained in an active position. (31700)

Plan 3: Age 55 with 10 years of service. (31497.3)

Monthly Allowance:

Plans 1, 2 & 4: Same as service retirement allowance; payable anytime after the member would have been eligible for service retirement. (31703, 31704, 31705)

If a terminated member dies before the effective date of the deferred retirement allowance, the member's accumulated contributions are paid to the estate or to the named beneficiary. (31702)

Plan 3: Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55. (31497.3)

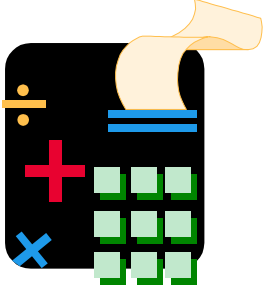
No benefit is paid for death while deferred.

COST-OF-LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%.	(31870, 31870.1, 31870.2, 31874.4)
Plan 1:	
General & Safety	(31870.2)
Members (and their beneficiaries) are limited to a maximum 5% cost-of-living increase.	
Probation	(31870.1)
Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	
Plan 2:	
All members	(31870.1)
Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	
Plan 3:	
Plan 3 does not have a COLA.	(31487)
Plan 4:	
All members	
Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.	(31870)
COLA Bank:	
Plan 1	(31870.1, 31870.2)
When the CPI exceeds the applicable percentage (3% or 5%), the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation (COLA Bank). It may be used in future years to provide cost-of-living increases when the CPI falls below the applicable percentage.	
Plans 2 & 4	(31874.4)
Plans 2 & 4 do not have a COLA bank.	

San Mateo County Employees' Retirement Association

Appendix C: Valuation Data and Schedules



Data on SamCERA membership as of June 30, 2005 was supplied to us by the system staff. On the following table, Exhibit C-1, we present a summary of SamCERA membership at June 30, 2005 for active members. Similar information is shown in Exhibit C-2 for deferred vested members and Exhibits C-3a and C-3b for retired members.

Note that salary amounts shown are annualized amounts based on the biweekly pay for the period prior to the valuation date. If the annualized amount was less than the total prior earnings, used total prior year earnings.

Additional statistical data on both active and retired members is shown in the following tables.

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members

Exhibits C-4 and C-5 are shown for all plans combined as well as for classification separately.

**San Mateo County Employees'
Retirement Association**

Exhibit C-1: SAMCERA Membership – Active Members as of June 30, 2005

	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
General Members					
Plan 1	263	\$ 20,198,017	57.8	\$ 6,400	29.2
Plan 2	1,644	115,295,251	49.8	5,844	15.3
Plan 3	123	7,413,062	44.9	5,022	9.7
Plan 4	2,361	144,618,079	40.8	5,104	3.5
Total	4,391	\$ 287,524,409	45.3	\$ 5,457	9.6
Safety Members					
Plan 1	37	\$ 3,999,360	54.8	\$ 9,008	28.4
Plan 2	182	17,825,917	45.3	8,162	16.1
Plan 4	192	16,224,288	37.2	7,042	4.2
Total	411	\$ 38,049,564	42.4	\$ 7,715	11.6
Probation Members					
Plan 1	14	\$ 1,202,321	55.1	\$ 7,157	26.3
Plan 2	95	6,997,625	43.4	6,138	14.3
Plan 4	171	11,055,382	36.8	5,388	4.4
Total	280	\$ 19,255,328	40.0	\$ 5,731	8.9
Grand Total	5,082	\$ 344,829,301	44.8	\$ 5,654	9.7

San Mateo County Employees' Retirement Association

Exhibit C-2: SAMCERA Membership – Deferred Vested Members as of June 30, 2005

	Number	Average Age
<i>General Members</i>		
Plan 1	80	56.5
Plan 2	534	46.5
Plan 3	128	50.9
Plan 4	194	41.6
Total	936	46.9
<i>Safety Members</i>		
Plan 1	-	-
Plan 2	40	42.0
Plan 4	17	35.8
Total	57	40.1
<i>Probation Members</i>		
Plan 1	3	63.3
Plan 2	21	40.2
Plan 4	18	33.7
Total	42	39.1
<i>Grand Total</i>	1,035	46.2

**San Mateo County Employees'
Retirement Association**

Exhibit C-3a: SAMCERA Membership – Retired Members as of June 30, 2005

	Number	Average Age	Monthly Allowance	Average Monthly Benefit
General Members				
Plan 1	2,234	75.5	\$ 4,158,528	\$ 1,861
Plan 2	868	63.7	1,074,298	1,238
Plan 3	113	66.4	37,189	329
Plan 4	9	58.8	5,439	604
Total	3,224	72.0	\$ 5,275,454	\$ 1,636
Safety Members				
Plan 1	287	65.6	\$ 1,289,416	\$ 4,493
Plan 2	57	54.6	180,098	3,160
Plan 4	-	-	-	-
Total	344	63.8	\$ 1,469,514	\$ 4,272
Probation Members				
Plan 1	94	64.2	\$ 233,044	\$ 2,479
Plan 2	21	58.8	33,583	1,599
Plan 4	1	58.0	333	333
Total	116	63.2	\$ 266,960	\$ 2,301
Grand Total	3,684	70.8	\$ 7,011,928	\$ 1,903

**San Mateo County Employees'
Retirement Association**

**Exhibit C-3b: SAMCERA Membership – Retired Members as of June 30, 2005
Subtotaled by Class and Retirement Type**

<u>Plan</u>	<u>Retirement Type</u>	<u>Number</u>	<u>Monthly Benefit</u>	<u>Average Monthly Benefit</u>
General Plans:				
	Healthy	2,665	\$ 4,468,694	\$ 1,677
	Disabled	130	279,750	2,152
	Beneficiaries	<u>429</u>	<u>527,010</u>	<u>1,228</u>
	Total	3,224	\$ 5,275,454	\$ 1,636
Safety Plans:				
	Healthy	220	\$ 1,057,650	\$ 4,807
	Disabled	76	276,783	3,642
	Beneficiaries	<u>48</u>	<u>135,081</u>	<u>2,814</u>
	Total	344	\$ 1,469,514	\$ 4,272
Probation Plans:				
	Healthy	107	\$ 253,686	\$ 2,371
	Disabled	1	2,035	2,035
	Beneficiaries	<u>8</u>	<u>11,239</u>	<u>1,405</u>
	Total	116	\$ 266,960	\$ 2,301
Grand Totals				
	Healthy	2,992	\$ 5,780,029	\$ 1,932
	Disabled	207	558,568	2,698
	Beneficiaries	<u>485</u>	<u>673,330</u>	<u>1,388</u>
	Total	3,684	\$ 7,011,928	\$ 1,903

San Mateo County Employees' Retirement Association

**Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005
All Members**

Count										
Age	Years of Service									Total Count
	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	43	35	1	0	0	0	0	0	0	79
25-29	79	213	50	0	0	0	0	0	0	342
30-34	104	306	194	24	0	0	0	0	0	628
35-39	75	261	243	123	14	1	0	0	0	717
40-44	43	194	188	127	130	26	0	0	0	708
45-49	43	168	156	121	149	85	19	2	0	743
50-54	39	153	137	112	158	101	41	26	1	768
55-59	20	124	107	79	112	83	61	63	11	660
60-64	6	59	56	41	63	43	32	34	15	349
65 & Over	3	11	15	10	16	13	8	7	5	88
Total Count	455	1,524	1,147	637	642	352	161	132	32	5,082

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	45,700	43,462	80,136	-	-	-	-	-	-	45,144
25-29	50,877	56,354	56,226	-	-	-	-	-	-	55,070
30-34	56,717	64,034	66,841	64,828	-	-	-	-	-	63,720
35-39	59,864	65,568	69,699	69,769	71,872	118,375	-	-	-	67,289
40-44	53,774	63,526	70,442	69,417	75,793	67,036	-	-	-	68,208
45-49	53,674	63,768	67,748	70,364	77,722	75,750	85,065	47,988	-	69,765
50-54	58,075	67,037	72,696	70,287	74,603	82,854	91,558	73,639	65,957	73,233
55-59	66,430	65,263	71,581	72,140	74,770	74,428	83,090	84,627	69,561	73,479
60-64	58,703	61,282	68,694	66,151	64,768	66,469	75,881	88,518	78,481	68,998
65 & Over	36,935	44,246	65,979	46,423	58,982	66,987	57,746	76,912	70,790	59,321
Avg. Annual Compensation	55,054	62,809	68,930	69,412	74,183	75,497	82,787	82,501	73,822	67,853

San Mateo County Employees' Retirement Association

**Exhibit C-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005
General Members**

Count										
Age	Years of Service									Total Count
	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	37	35	0	0	0	0	0	0	0	72
25-29	72	184	43	0	0	0	0	0	0	299
30-34	86	256	134	18	0	0	0	0	0	494
35-39	71	221	176	90	12	0	0	0	0	570
40-44	43	172	156	106	93	22	0	0	0	592
45-49	41	156	148	112	117	65	12	2	0	653
50-54	33	146	132	104	135	75	28	26	1	680
55-59	18	114	105	79	105	75	52	54	10	612
60-64	6	55	52	41	62	43	30	30	15	334
65 & Over	3	11	14	10	16	13	8	5	5	85
Total Count	410	1,350	960	560	540	293	130	117	31	4,391

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	41,915	43,462	-	-	-	-	-	-	-	42,667
25-29	49,619	54,245	52,993	-	-	-	-	-	-	52,951
30-34	55,360	62,569	63,169	59,142	-	-	-	-	-	61,352
35-39	58,899	64,375	66,392	63,067	68,344	-	-	-	-	64,192
40-44	53,774	62,319	68,066	66,830	69,576	63,574	-	-	-	65,207
45-49	52,687	62,391	66,957	68,665	72,774	69,650	72,702	47,988	-	66,621
50-54	52,744	66,442	71,850	69,243	71,928	76,907	83,962	73,639	65,957	70,495
55-59	64,900	64,179	71,406	72,140	73,913	71,261	82,009	80,672	65,235	71,993
60-64	58,703	60,313	66,877	66,151	64,562	66,469	75,001	84,805	78,481	67,939
65 & Over	36,935	44,246	65,152	46,423	58,982	66,987	57,746	64,853	70,790	57,984
Avg. Annual Compensation	53,440	61,496	67,008	67,128	70,783	70,879	78,460	78,934	72,564	65,480



This work product was prepared solely for SamCERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

San Mateo County Employees' Retirement Association

**Exhibit C-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005
Safety Members**

Count										
Age	Years of Service									Total Count
	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	5	0	1	0	0	0	0	0	0	6
25-29	3	14	5	0	0	0	0	0	0	22
30-34	10	22	27	3	0	0	0	0	0	62
35-39	3	19	33	22	1	1	0	0	0	79
40-44	0	12	20	12	26	2	0	0	0	72
45-49	2	7	5	7	23	16	6	0	0	66
50-54	6	2	4	5	16	20	11	0	0	64
55-59	2	7	1	0	4	5	6	6	0	31
60-64	0	1	0	0	0	0	2	4	0	7
65 & Over	0	0	0	0	0	0	0	2	0	2
Total Count	31	84	96	49	70	44	25	12	0	411

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	72,341	-	80,136	-	-	-	-	-	-	73,640
25-29	77,387	80,558	76,338	-	-	-	-	-	-	79,167
30-34	69,835	84,336	85,004	88,441	-	-	-	-	-	82,487
35-39	87,863	85,970	91,030	95,343	112,742	118,375	-	-	-	91,515
40-44	-	80,043	86,755	93,856	99,158	90,230	-	-	-	91,395
45-49	73,907	89,704	88,947	94,630	103,178	99,671	107,872	-	-	98,454
50-54	87,399	106,831	99,409	87,511	99,429	105,315	108,790	-	-	101,049
55-59	80,205	86,219	82,035	-	95,249	113,353	91,776	114,721	-	97,830
60-64	-	86,220	-	-	-	-	89,076	116,365	-	104,262
65 & Over	-	-	-	-	-	-	-	107,059	-	107,059
Avg. Annual Compensation	77,046	84,625	87,713	93,655	100,511	103,787	102,909	113,992	-	92,578

San Mateo County Employees' Retirement Association

**Exhibit C-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005
Probation Members**

Count										
Age	Years of Service									Total Count
	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	1	0	0	0	0	0	0	0	0	1
25-29	4	15	2	0	0	0	0	0	0	21
30-34	8	28	33	3	0	0	0	0	0	72
35-39	1	21	34	11	1	0	0	0	0	68
40-44	0	10	12	9	11	2	0	0	0	44
45-49	0	5	3	2	9	4	1	0	0	24
50-54	0	5	1	3	7	6	2	0	0	24
55-59	0	3	1	0	3	3	3	3	1	17
60-64	0	3	4	0	1	0	0	0	0	8
65 & Over	0	0	1	0	0	0	0	0	0	1
Total Count	14	90	91	28	32	15	6	3	1	280

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	52,520	-	-	-	-	-	-	-	-	52,520
25-29	53,643	59,634	75,446	-	-	-	-	-	-	59,999
30-34	54,910	61,475	66,891	75,332	-	-	-	-	-	63,805
35-39	44,422	59,663	66,118	73,457	73,341	-	-	-	-	65,099
40-44	-	64,458	74,141	67,304	73,132	81,916	-	-	-	70,643
45-49	-	70,399	71,438	80,591	76,994	79,192	96,568	-	-	76,407
50-54	-	68,496	77,551	77,784	69,454	82,329	103,117	-	-	76,657
55-59	-	57,571	79,560	-	77,444	88,730	84,446	95,625	112,814	82,578
60-64	-	70,725	92,306	-	77,551	-	-	-	-	82,369
65 & Over	-	-	77,551	-	-	-	-	-	-	77,551
Avg. Annual Compensation	53,628	62,141	69,387	72,653	73,962	82,717	92,690	95,625	112,814	68,769

San Mateo County Employees' Retirement Association

**Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005
All Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-05		
Under 35	-	-	-	-	-	-	6	-	6	\$ 685
35-39	-	-	-	-	1	-	1	6	8	2,260
40-44	-	-	-	-	-	-	7	9	16	2,136
45-49	-	-	-	-	-	3	11	22	36	2,037
50-54	-	-	-	-	1	10	12	103	126	1,912
55-59	-	1	-	3	8	28	89	248	377	2,211
60-64	-	1	1	5	16	73	186	310	592	2,376
65-69	-	8	2	6	55	139	178	223	611	2,019
70-74	2	2	13	35	61	132	167	52	464	1,762
75-79	-	4	37	89	123	161	58	14	486	1,740
80-84	6	18	81	144	181	58	4	-	492	1,712
85-89	6	33	93	138	47	2	2	-	321	1,442
90-94	6	31	60	26	1	-	-	1	125	1,343
95-99	1	7	9	3	1	-	-	-	21	1,359
100 & Over	2	-	1	-	-	-	-	-	3	847
Total Count	23	105	297	449	495	606	721	988	3,684	
Avg Monthly Benefit	\$ 1,324	\$ 1,359	\$ 1,533	\$ 1,388	\$ 1,796	\$ 1,784	\$ 1,788	\$ 2,532		\$ 1,903

San Mateo County Employees' Retirement Association

**Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005
General Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-05		
Under 35	-	-	-	-	-	-	6	-	6	\$ 685
35-39	-	-	-	-	1	-	-	4	5	1,641
40-44	-	-	-	-	-	-	5	5	10	1,807
45-49	-	-	-	-	-	2	9	14	25	1,538
50-54	-	-	-	-	1	8	10	88	107	1,422
55-59	-	1	-	2	3	16	76	180	278	1,525
60-64	-	1	-	2	8	54	121	253	439	1,795
65-69	-	4	2	6	43	115	153	207	530	1,766
70-74	1	1	10	33	54	124	156	49	428	1,704
75-79	-	4	30	85	115	160	57	13	464	1,681
80-84	3	12	74	140	181	58	4	-	472	1,618
85-89	4	29	90	138	46	2	2	-	311	1,399
90-94	6	31	60	26	1	-	-	1	125	1,343
95-99	1	7	9	3	1	-	-	-	21	1,359
100 & Over	2	-	1	-	-	-	-	-	3	847
Total Count	17	90	276	435	454	539	599	814	3,224	
Avg Monthly Benefit	\$ 1,186	\$ 1,096	\$ 1,395	\$ 1,342	\$ 1,665	\$ 1,595	\$ 1,455	\$ 2,090		\$ 1,636

San Mateo County Employees' Retirement Association

**Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005
Safety Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-05		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	1	2	3	3,293
40-44	-	-	-	-	-	-	2	3	5	2,966
45-49	-	-	-	-	-	1	2	5	8	3,820
50-54	-	-	-	-	-	2	2	11	15	5,122
55-59	-	-	-	1	5	11	9	53	79	4,611
60-64	-	-	1	3	8	19	44	36	111	4,407
65-69	-	4	-	-	12	18	15	5	54	4,444
70-74	1	1	3	2	7	3	-	1	18	4,062
75-79	-	-	7	4	8	1	-	1	21	3,080
80-84	3	6	7	4	-	-	-	-	20	3,915
85-89	2	4	3	-	1	-	-	-	10	2,783
90-94	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	6	15	21	14	41	55	75	117	344	
Avg Monthly Benefit	\$ 1,715	\$ 2,935	\$ 3,343	\$ 2,809	\$ 3,253	\$ 3,740	\$ 4,239	\$ 5,544		\$ 4,272



This work product was prepared solely for SamCERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

San Mateo County Employees' Retirement Association

**Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005
Probation Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-05		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	1	1	1,284
45-49	-	-	-	-	-	-	-	3	3	1,440
50-54	-	-	-	-	-	-	-	4	4	2,979
55-59	-	-	-	-	-	1	4	15	20	2,265
60-64	-	-	-	-	-	-	21	21	42	3,082
65-69	-	-	-	-	-	6	10	11	27	2,149
70-74	-	-	-	-	-	5	11	2	18	863
75-79	-	-	-	-	-	-	1	-	1	1,138
80-84	-	-	-	-	-	-	-	-	-	-
85-89	-	-	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	-	-	-	12	47	57	116	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,305	\$ 2,121	\$ 2,660		\$ 2,301

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Appendix D: Member Contribution Rates

This section illustrates the member basic contribution rates and the basic plus cost-sharing contribution rates by entry age.

San Mateo County Employees' Retirement Association

Exhibit D-1: Basic Member Contribution Rates

Entry Age *	General (County)		General (Mosq. Dist.)		Probation		Safety	
	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4
16	5.07%	4.85%	4.34%	4.16%	5.85%	5.60%	6.88%	6.58%
17	5.16%	4.94%	4.43%	4.24%	5.95%	5.70%	7.00%	6.71%
18	5.26%	5.03%	4.51%	4.32%	6.06%	5.80%	7.13%	6.83%
19	5.35%	5.13%	4.59%	4.40%	6.17%	5.91%	7.26%	6.95%
20	5.45%	5.22%	4.68%	4.48%	6.29%	6.02%	7.40%	7.08%
21	5.55%	5.32%	4.77%	4.56%	6.40%	6.13%	7.53%	7.21%
22	5.66%	5.42%	4.86%	4.65%	6.52%	6.24%	7.67%	7.34%
23	5.76%	5.51%	4.95%	4.74%	6.64%	6.35%	7.81%	7.47%
24	5.87%	5.62%	5.04%	4.82%	6.76%	6.47%	7.95%	7.61%
25	5.97%	5.72%	5.13%	4.91%	6.88%	6.59%	8.09%	7.75%
26	6.08%	5.82%	5.23%	5.00%	7.00%	6.70%	8.24%	7.89%
27	6.19%	5.93%	5.32%	5.09%	7.13%	6.83%	8.39%	8.03%
28	6.30%	6.04%	5.42%	5.19%	7.26%	6.95%	8.54%	8.18%
29	6.42%	6.15%	5.52%	5.28%	7.39%	7.08%	8.70%	8.33%
30	6.54%	6.26%	5.62%	5.38%	7.53%	7.21%	8.85%	8.48%
31	6.65%	6.37%	5.72%	5.48%	7.66%	7.34%	9.02%	8.63%
32	6.77%	6.49%	5.83%	5.58%	7.81%	7.47%	9.18%	8.79%
33	6.90%	6.60%	5.93%	5.68%	7.95%	7.61%	9.35%	8.95%
34	7.02%	6.72%	6.04%	5.78%	8.10%	7.75%	9.53%	9.12%
35	7.15%	6.85%	6.15%	5.89%	8.25%	7.90%	9.71%	9.29%
36	7.28%	6.97%	6.26%	5.99%	8.41%	8.04%	9.89%	9.46%
37	7.42%	7.10%	6.37%	6.10%	8.57%	8.19%	10.08%	9.63%
38	7.55%	7.23%	6.49%	6.21%	8.73%	8.33%	10.27%	9.80%
39	7.69%	7.37%	6.61%	6.33%	8.88%	8.47%	10.45%	9.97%
40	7.84%	7.50%	6.73%	6.44%	9.04%	8.61%	10.63%	10.13%
41	7.99%	7.64%	6.85%	6.56%	9.19%	8.74%	10.81%	10.28%
42	8.14%	7.78%	6.98%	6.68%	9.34%	8.86%	10.98%	10.42%
43	8.29%	7.92%	7.11%	6.80%	9.47%	8.96%	11.14%	10.55%
44	8.44%	8.05%	7.24%	6.93%	9.60%	9.06%	11.29%	10.66%
45	8.59%	8.18%	7.37%	7.06%	9.71%	9.13%	11.42%	10.74%
46	8.73%	8.30%	7.52%	7.19%	9.81%	9.17%	11.54%	10.79%
47	8.87%	8.41%	7.66%	7.32%	9.88%	9.17%	11.62%	10.79%
48	9.00%	8.52%	7.80%	7.45%	9.91%	9.49%	11.66%	11.17%
49	9.12%	8.61%	7.94%	7.57%	9.91%	9.85%	11.66%	11.58%
50	9.23%	8.67%	8.08%	7.69%	9.91%	9.85%	11.66%	11.58%
51	9.32%	8.71%	8.21%	7.81%	9.91%	9.85%	11.66%	11.58%
52	9.39%	8.71%	8.34%	7.92%	9.91%	9.85%	11.66%	11.58%
53	9.41%	9.02%	8.47%	8.01%	9.91%	9.85%	11.66%	11.58%
54	9.41%	9.35%	8.58%	8.10%	9.91%	9.85%	11.66%	11.58%
55	9.41%	9.35%	8.68%	8.16%	9.91%	9.85%	11.66%	11.58%
56	9.41%	9.35%	8.77%	8.20%	9.91%	9.85%	11.66%	11.58%
57	9.41%	9.35%	8.83%	8.20%	9.91%	9.85%	11.66%	11.58%
58	9.41%	9.35%	8.86%	8.49%	9.91%	9.85%	11.66%	11.58%
59	9.41%	9.35%	8.86%	8.80%	9.91%	9.85%	11.66%	11.58%
60	9.41%	9.35%	8.86%	8.80%	9.91%	9.85%	11.66%	11.58%

**For General members entering after age 55 , the rate equals the rate at age 55. Likewise, for Safety and Probation members entering after age 50, the rate equals the rate at age 50. Only Probation rates reflect employer pick-up.*

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Exhibit D-2: Basic Plus Cost-Sharing Member Contribution Rates

Entry Age *	General (County)		General (Mosq. Dist.)		Probation		Safety**	
	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4
16	8.07%	7.85%	7.34%	7.16%	9.35%	9.10%	11.88%	11.58%
17	8.16%	7.94%	7.43%	7.24%	9.45%	9.20%	12.00%	11.71%
18	8.26%	8.03%	7.51%	7.32%	9.56%	9.30%	12.13%	11.83%
19	8.35%	8.13%	7.59%	7.40%	9.67%	9.41%	12.26%	11.95%
20	8.45%	8.22%	7.68%	7.48%	9.79%	9.52%	12.40%	12.08%
21	8.55%	8.32%	7.77%	7.56%	9.90%	9.63%	12.53%	12.21%
22	8.66%	8.42%	7.86%	7.65%	10.02%	9.74%	12.67%	12.34%
23	8.76%	8.51%	7.95%	7.74%	10.14%	9.85%	12.81%	12.47%
24	8.87%	8.62%	8.04%	7.82%	10.26%	9.97%	12.95%	12.61%
25	8.97%	8.72%	8.13%	7.91%	10.38%	10.09%	13.09%	12.75%
26	9.08%	8.82%	8.23%	8.00%	10.50%	10.20%	13.24%	12.89%
27	9.19%	8.93%	8.32%	8.09%	10.63%	10.33%	13.39%	13.03%
28	9.30%	9.04%	8.42%	8.19%	10.76%	10.45%	13.54%	13.18%
29	9.42%	9.15%	8.52%	8.28%	10.89%	10.58%	13.70%	13.33%
30	9.54%	9.26%	8.62%	8.38%	11.03%	10.71%	13.85%	13.48%
31	9.65%	9.37%	8.72%	8.48%	11.16%	10.84%	14.02%	13.63%
32	9.77%	9.49%	8.83%	8.58%	11.31%	10.97%	14.18%	13.79%
33	9.90%	9.60%	8.93%	8.68%	11.45%	11.11%	14.35%	13.95%
34	10.02%	9.72%	9.04%	8.78%	11.60%	11.25%	14.53%	14.12%
35	10.15%	9.85%	9.15%	8.89%	11.75%	11.40%	14.71%	14.29%
36	10.28%	9.97%	9.26%	8.99%	11.91%	11.54%	14.89%	14.46%
37	10.42%	10.10%	9.37%	9.10%	12.07%	11.69%	15.08%	14.63%
38	10.55%	10.23%	9.49%	9.21%	12.23%	11.83%	15.27%	14.80%
39	10.69%	10.37%	9.61%	9.33%	12.38%	11.97%	15.45%	14.97%
40	10.84%	10.50%	9.73%	9.44%	12.54%	12.11%	15.63%	15.13%
41	10.99%	10.64%	9.85%	9.56%	12.69%	12.24%	15.81%	15.28%
42	11.14%	10.78%	9.98%	9.68%	12.84%	12.36%	15.98%	15.42%
43	11.29%	10.92%	10.11%	9.80%	12.97%	12.46%	16.14%	15.55%
44	11.44%	11.05%	10.24%	9.93%	13.10%	12.56%	16.29%	15.66%
45	11.59%	11.18%	10.37%	10.06%	13.21%	12.63%	16.42%	15.74%
46	11.73%	11.30%	10.52%	10.19%	13.31%	12.67%	16.54%	15.79%
47	11.87%	11.41%	10.66%	10.32%	13.38%	12.67%	16.62%	15.79%
48	12.00%	11.52%	10.80%	10.45%	13.41%	12.99%	16.66%	16.17%
49	12.12%	11.61%	10.94%	10.57%	13.41%	13.35%	16.66%	16.58%
50	12.23%	11.67%	11.08%	10.69%	13.41%	13.35%	16.66%	16.58%
51	12.32%	11.71%	11.21%	10.81%	13.41%	13.35%	16.66%	16.58%
52	12.39%	11.71%	11.34%	10.92%	13.41%	13.35%	16.66%	16.58%
53	12.41%	12.02%	11.47%	11.01%	13.41%	13.35%	16.66%	16.58%
54	12.41%	12.35%	11.58%	11.10%	13.41%	13.35%	16.66%	16.58%
55	12.41%	12.35%	11.68%	11.16%	13.41%	13.35%	16.66%	16.58%
56	12.41%	12.35%	11.77%	11.20%	13.41%	13.35%	16.66%	16.58%
57	12.41%	12.35%	11.83%	11.20%	13.41%	13.35%	16.66%	16.58%
58	12.41%	12.35%	11.86%	11.49%	13.41%	13.35%	16.66%	16.58%
59	12.41%	12.35%	11.86%	11.80%	13.41%	13.35%	16.66%	16.58%
60	12.41%	12.35%	11.86%	11.80%	13.41%	13.35%	16.66%	16.58%

* For general members entering after age 60, the rate equals the rate at age 60. Likewise, for Safety members entering after age 50, the rate equals the rate at age 50. Only Probation rates reflect employer pick-up.

**Cost sharing is less for deputy sheriffs.

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Appendix E: Glossary

The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to SamCERA and include terms used exclusively by SamCERA. Defined terms are capitalized throughout this Appendix.

Accrued Benefit	The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.
Actuarial Accrued Liability	That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.
Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.
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.
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.
Actuarial Value of Assets	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
Actuarially Equivalent	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
Amortization Payment	That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Employer Reserve	The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.
Entry Age Actuarial Cost Method	A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.
Funded Ratio	A measurement of the funded status of the system. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.
Member Reserve	The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.
Non-Valuation Reserves	Reserves excluded from the calculation of contribution rates.
Normal Cost	That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
Plan Year	A twelve-month period beginning July 1 and ending June 30.
Projected Benefits	Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
Unfunded Actuarial Accrued Liability	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
Valuation Date	The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.
Valuation Reserves	All reserves excluding the Non-Valuation Reserves.