



Address: 100 Marine Parkway | Suite 125
Redwood City, CA 94065
Phone: (650) 599-1234
Toll-Free: (800) 339-0761
Fax: (650) 591-1488
PONY: RET 141
Web: www.samcera.org
Email: samcera@samcera.org

June 30, 2012, Actuarial Valuation with October 9, 2012, Addendum and December 4, 2012, Analysis of Assembly Bill 340 and Assembly Bill 197

This PDF file contains SamCERA's June 30, 2012, actuarial valuation, along with an addendum dated October 9, 2012, and an Analysis of the California Public Employees' Pension Reform Act of 2013 (PEPRA), dated December 4, 2012.

The purpose of the addendum is to provide revised employer and member contribution rates for probation employees for the fiscal year beginning July 1, 2013.

The revised rates are provided because after the valuation report was completed and dated September 18, 2012, the San Mateo County Board of Supervisors and SamCERA Board of Retirement adopted a Memorandum of Understanding (MOU) in which probation employees under Plans 1, 2, and 4 will pay 25% of the retirement COLA cost effective in 2013.

The purpose of the analysis of PEPRA is to calculate the member and employer contribution rates effective January 1, 2013, for new SamCERA entrants.

The new entrant rates are provided because PEPRA, which was signed into law by Governor Jerry Brown on September 12, 2012, revises the benefits available to any member of a California public retirement system (with a few exceptions) who enters the system on or after January 1, 2013.

The full actuarial valuation immediately follows this page. The addendum has been attached at the end of the valuation. The analysis follows immediately after the addendum.

San Mateo County Employees' Retirement Association
Actuarial Valuation
June 30, 2012

By

Nick J. Collier

Associate, Society of Actuaries
Enrolled Actuary
Member, American Academy of Actuaries





1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
USA

Tel +1 206 624 7940
Fax +1 206 623 3485

milliman.com

September 18, 2012

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 valuation for the San Mateo County Employees' Retirement Association (*SamCERA*). The purpose of the valuation is to recommend the employer and member contribution rates for the fiscal year beginning July 1, 2013.

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 *SamCERA*, 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 *SamCERA's* 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."

This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Actuarial Certification – Milliman

The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2012. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by *SamCERA's* staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any data of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

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 a reasonable estimate of anticipated experience affecting *SamCERA*. We will next be reviewing the assumptions in 2014 as part of our triennial investigation.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Retirement has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A.

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 this report have been made on a basis consistent with our understanding of *SamCERA's* current funding requirements and of GASB Statements 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 is prepared solely for the internal business use of *SamCERA*. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.

This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



(b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Collier".

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

NJC/nlo

San Mateo County Employees' Retirement Association

Table of Contents

	Page
Section 1: Summary of the Findings	1
Exhibit 1a: Summary of Recommendations	3
Exhibit 1b: Summary of Recommendations (continued)	4
Exhibit 2: Summary of Significant Valuation Results.....	11
Section 2: Scope of the Report	13
Section 3: Assets.....	15
Exhibit 3: Statement of Plan Net Assets for the Years Ended June 30, 2011 and 2012..	18
Exhibit 4: Statement of Changes in Plan Net Assets	19
Exhibit 5: Allocation of Assets by Accounting Reserve Amounts	20
Exhibit 6: Five-Year Smoothing of Gains and Losses on Market Value – History.....	21
Exhibit 7: Five-Year Smoothing – Development of Valuation Assets.....	22
Exhibit 8: Allocation of Valuation Assets	23
Section 4: Actuarial Liabilities.....	25
Exhibit 9: Actuarial Balance Sheet – June 30, 2012	26
Section 5: Member Contributions	31
Exhibit 10: Sample Member Contribution Rates Effective July 1, 2013	34
Section 6: Employer Contributions.....	35
Exhibit 11: Calculated Employer Normal Cost Contribution Rates – June 30, 2012.....	37
Exhibit 12: Supplemental Detail on UAAL Payments	44
Section 7: Information for Comprehensive Annual Financial Report (CAFR)	45
Exhibit 13: Schedule of Funding Progress	47
Exhibit 14: Schedule of Contributions from the Employer	48
Exhibit 15: Solvency Test.....	49
Exhibit 16: History of Calculated Employer Contribution Rates ⁽⁴⁾	50
Exhibit 17: Actuarial Analysis of Financial Experience.....	51
Exhibit 18: Summary of Significant Actuarial Statistics and Measures	52
Exhibit 19: Summary of <i>SamCERA</i> Membership	53
Exhibit 20: Summary of Active Member Valuation Data.....	54
Exhibit 21: Summary of Demographic Activity of Retirees and Beneficiaries	55
Exhibit 22: Average Salary and Active Counts by Employer.....	56
Exhibit 23: Summary of Retired and Inactive Benefits	57
Exhibit 24a: Summary of Assumptions.....	58
Exhibit 24b: Summary of Assumptions.....	59

**Table of Contents
(continued)**

Appendices

Appendix A:	Actuarial Procedures and Assumptions	A-1
Appendix B:	Summary of Benefit Provisions	B-1
Appendix C:	Valuation Data and Schedules	C-1
Appendix D:	Member Contribution Rates	D-1
Appendix E:	Glossary	E-1



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Section 1: Summary of the Findings



2012 Valuation Results

	June 30, 2012	June 30, 2011
Employer Contribution Rate	35.49%	30.97% *
Funded Ratio	72.0%	74.1%

* Calculated rate from prior valuation. Actual rate being contributed is higher.

Overview

This report presents the results of the June 30, 2012 actuarial valuation. Several key points are summarized as follows:

- **Funding:** The Funded Ratio decreased from 74.1% to 72.0%. This decrease was primarily due to the recognition of asset losses under the asset smoothing method.
- **Contribution Rates:** The Employer Normal Cost rate of 11.52% increased from 11.25% reported in the prior year. This rate was influenced by the new investment return assumption of 7.50%, which was adopted effective with the June 30, 2012 valuation. Additionally, the rates will vary slightly from year to year as the average entry age of the membership changes and as a greater proportion of members enter Plans 3, 4, 5 & 6, which are less expensive than Plans 1 & 2.

The employer's required contribution rate to finance the Unfunded Actuarial Accrued Liability (UAAL) over 15 years increased from 19.72% to 23.97%. The overall result is an increase in the required total contribution rate from the prior valuation of 4.52% (from 30.97% to 35.49% of payroll).

- **Investment Returns:** *SamCERA's* investment return on the market value of assets for the prior year (-0.4%, based on Milliman's estimate) was less than the actuarial assumed rate of 7.75% (effective for the prior year). Combined with the recognition of net investment losses from prior years, the net result was a return on the actuarial value of assets of 0.7%, which is lower than the expected return. This actuarial loss on valuation assets caused a decrease in the system's funding status and an increase in the required employer contribution rate. The increase in the employer contribution rate due to the investment return (on an actuarial basis) was further increased by a change in economic assumptions, primarily a decrease in assumed future returns.

Note that currently a \$120 million net asset loss is being deferred. This is because the asset-smoothing method has not yet recognized a portion of the net asset losses from the current and prior four years. These deferred losses will be reflected in future valuations.

Overview (continued)

- **New Assumptions:** New economic assumptions were adopted effective with the June 30, 2012 actuarial valuation. The assumed rate of return was lowered to 7.50%, a decrease of 0.25% from the previous assumption. The CPI assumption and Wage Growth assumption were each lowered 0.25% to correspond to an unchanged real rate of return. Additionally, the assumed future COLA increases for each Plan were revised to reflect the lower CPI assumption. See Appendix A for details. The overall impact of the assumption changes was an increase in the required member and employer contribution rates and a decrease in the Funded Ratio.
- **New Benefits:** New benefit provisions and member contributions rates have been negotiated recently for certain employees.

Effective July 10, 2011, new Probation members enter Plan 5 or Plan 6. Effective August 7, 2011, new General members enter Plan 5. Effective January 8, 2012, new Safety members enter Plan 5 or Plan 6.

Effective January 8, 2012, all Plan 1, 2, and 4 members of the California Nurses Association (CNA) contribute 25% of the expected cost of post-retirement cost-of-living-adjustments (COLAs). This is in addition to their basic member contributions and non-COLA cost sharing.

See Appendix B for a more complete description of the provisions of these new Plans.

- **Legislation:** It should be noted that recent legislation was adopted that will impact nearly all California public retirement systems. Any potential changes to SamCERA have not been reflected in this valuation as the legislation is not effective until January 1, 2013. We would expect these legislative changes would initially have a small impact on the actuarial valuation results, but could ultimately have a significant impact.

Comparison with Prior Year

Note that for comparison purposes, the prior year employer contribution rates shown in this report are those from the June 30, 2011 actuarial valuation. All employers are currently contributing at a higher level than those calculated rates.

Summary of Recommendations

The following exhibit summarizes our recommendations to the Board.

San Mateo County Employees' Retirement Association

Exhibit 1a Summary of Recommendations

Recommendation #1: Adopt new employer contribution rates for fiscal year beginning July 1, 2013			
--	--	--	--

	June 30, 2012	June 30, 2011	Increase / (Decrease)
Gross Normal Cost	22.04%	21.57%	0.47%
Member Contributions	(10.52)%	(10.32)%	(0.20)%
Employer Normal Cost	11.52%	11.25%	0.27%
UAAL Amortization	23.97%	19.72%	4.25%
Total Employer Rate	35.49%	30.97%	4.52%

Notes:

- 1) Detailed contribution rates by plan are shown in Section 6, Exhibits 12a & 12b, and page 2 of the Addendum.
- 2) As of the 2011 actuarial valuation, the member contribution rates for current members of the California Nurses Association reflect 25% of the cost of COLA, in addition to previously effective member rates and cost sharing.
- 3) The member contribution rates this year reflect changes resulting from the 2011 Investigation of Experience and a revision to the timing adjustment.
- 4) The total Employer Rate shown for the prior year is the rate calculated in the June 30, 2011 actuarial valuation. The Employers are currently contributing at a higher rate.

Exhibit 1b Summary of Recommendations (continued)

Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2013

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	COLA Cost Sharing	Cost Sharing		Total as a % of Pay	
General Members - County & Courts ⁽¹⁾⁽²⁾							
Plans 1 & 2	25	6.19%	N/A	3.00%	9.19%	9.06%	101.4%
	35	7.42%	N/A	3.00%	10.42%	10.25%	101.7%
	45	8.91%	N/A	3.00%	11.91%	11.71%	101.7%
Plan 4	25	5.94%	N/A	3.00%	8.94%	8.80%	101.6%
	35	7.12%	N/A	3.00%	10.12%	9.94%	101.8%
	45	8.51%	N/A	3.00%	11.51%	11.29%	101.9%
Plan 5	25	5.12%	1.09%	0.00%	6.21%	6.10%	101.8%
	35	6.14%	1.31%	0.00%	7.45%	7.30%	102.0%
	45	7.37%	1.57%	0.00%	8.94%	8.76%	102.1%
General Members - SMCM&VCD							
Plans 1 & 2	25	6.19%	N/A	0.00%	6.19%	6.06%	102.1%
	35	7.42%	N/A	0.00%	7.42%	7.25%	102.3%
	45	8.91%	N/A	0.00%	8.91%	8.71%	102.3%
Plan 4	25	5.94%	N/A	0.00%	5.94%	5.80%	102.4%
	35	7.12%	N/A	0.00%	7.12%	6.94%	102.6%
	45	8.51%	N/A	0.00%	8.51%	8.29%	102.7%
Probation Members (Reflects Employer Pick-up) ⁽²⁾							
Plans 1 & 2	25	6.73%	N/A	3.50%	10.23%	10.07%	101.6%
	35	8.08%	N/A	3.50%	11.58%	11.38%	101.8%
	45	9.51%	N/A	3.50%	13.01%	12.77%	101.9%
Plan 4	25	6.46%	N/A	3.50%	9.96%	9.79%	101.7%
	35	7.75%	N/A	3.50%	11.25%	11.04%	101.9%
	45	8.96%	N/A	3.50%	12.46%	12.22%	102.0%
Plan 5	25	6.46%	2.39%	3.50%	12.35%	12.16%	101.6%
	35	7.75%	2.87%	3.50%	14.12%	13.88%	101.7%
	45	8.96%	3.32%	3.50%	15.78%	15.51%	101.7%
Plan 6	25	6.46%	2.16%	0.00%	8.62%	8.38%	102.8%
	35	7.75%	2.59%	0.00%	10.34%	10.04%	102.9%
	45	8.96%	2.99%	0.00%	11.95%	11.61%	102.9%
Safety Members - Other than Deputy Sheriff ⁽²⁾⁽³⁾							
Plans 1 & 2	25	8.41%	N/A	5.00%	13.41%	13.21%	101.5%
	35	10.09%	N/A	5.00%	15.09%	14.85%	101.6%
	45	11.89%	N/A	5.00%	16.89%	16.59%	101.8%
Plan 4	25	8.07%	N/A	5.00%	13.07%	12.86%	101.6%
	35	9.68%	N/A	5.00%	14.68%	14.43%	101.7%
	45	11.20%	N/A	5.00%	16.20%	15.90%	101.9%
Plan 5	25	8.07%	2.43%	4.00%	14.50%	14.26%	101.7%
	35	9.68%	2.91%	4.00%	16.59%	16.31%	101.7%
	45	11.20%	3.37%	4.00%	18.57%	18.22%	101.9%
Plan 6	25	8.07%	2.17%	0.00%	10.24%	9.97%	102.7%
	35	9.68%	2.60%	0.00%	12.28%	11.96%	102.7%
	45	11.20%	3.01%	0.00%	14.21%	13.83%	102.8%

(1) Does not include Plan 1, 2, or 4 members of the California Nurses Association, who will also contribute 25% of the cost of the COLA beginning with the 2011 actuarial valuation. See Appendix D of this report for a full schedule of rates.

(2) Does not include COLA sharing for rehires for Plans 1, 2, and 4 on or after August 7, 2011 (General County & Courts), on or after July 10, 2011 (Probation), on or after January 8, 2012 (Safety).

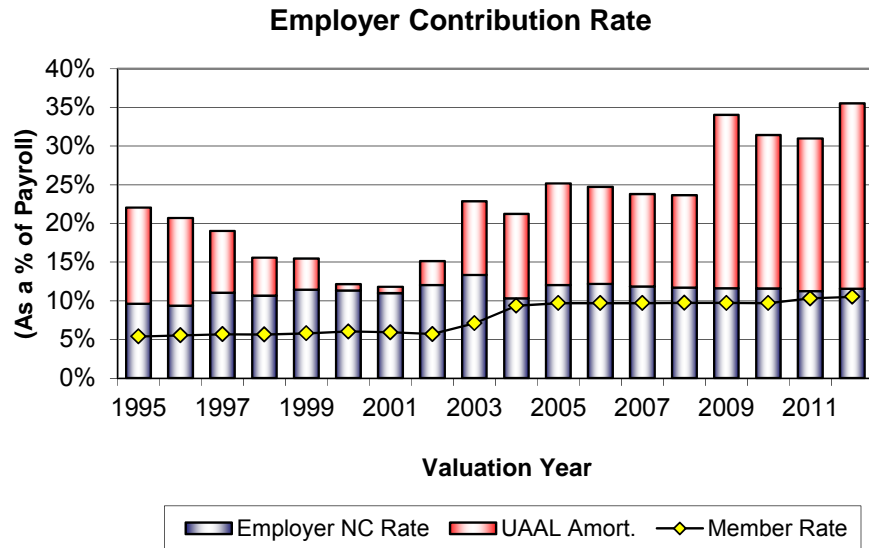
(3) Cost Sharing varies for Deputy Sheriffs as follows:
 3.0% if employee is less than 45 and has less than 5 years of service.
 3.5% if employee is less than 45 and has between 5 and 15 years of service.
 4.5% if employee is older than 45 or has at least 15 years of service.

Employer Contribution Rate

Under the Board’s current funding objectives, the calculated employer contribution rate for the fiscal year beginning July 1, 2013 is 35.49% of payroll. This is equal to the payment of the Employer Normal Cost rate plus a 15-year layered amortization of the UAAL for each year beginning with the UAAL as of June 30, 2008. It should be noted that the 35.49% is a weighted average for all *SamCERA* plans. The actual percent of payroll to be contributed by the employer varies by plan. See Exhibits 11 through 11f for the total employer contribution rates by plan.

The new rate is effective for the fiscal year beginning July 1, 2013. The 35.49% contribution rate is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions shown in Appendix A of this report.

A historical perspective of the total employer contribution rate is shown in the following graph.



Comparison with Last Year

A detailed analysis of the sources of the changes in both the employer contribution rate and the Funded Ratio was performed. The primary cause of the decrease in the Funded Ratio was the recognition of asset losses. There were several factors that influenced the employer contribution rate, with the overall impact of these additional factors being a significant increase over the calculated employer rates from the last valuation.

Comparison with Last Year (continued)

The following chart shows how the various factors affected the overall funding of *SamCERA*, as compared to the last valuation. The most significant factors are shown in bold.

Sources of Change	Employer Contribution Rate	Funded Ratio
June 30, 2011 Actuarial Valuation	30.97%	74.1%
Expected Year-to-Year Change	0.00%	2.0%
Recognized Asset Gain/Loss		
From Current Year	0.93%	-1.2%
From Prior Years	2.83%	-3.7%
Retiree COLAs Less than Expected	-0.26%	0.2%
Salary Increase < Assumed	-1.00%	1.0%
Payroll Decrease	1.02%	0.0%
Change in Average Entry Age and Plan	0.03%	0.0%
Economic Assumption Changes	1.15%	-0.8%
Employer Rate > Required	-0.29%	0.4%
Other Experience Changes	0.11%	0.0%
Total Change	4.52%	-2.1%
June 30, 2012 Actuarial Valuation	35.49%	72.0%

Funding Progress

Based on the 2011 valuation, the expected UAAL as of June 30, 2012 was \$802 million. The actual UAAL for the fiscal year ending June 30, 2012 is \$962 million. This was primarily caused by the recognition of asset losses and the change to the investment return assumption. Other factors somewhat offset this loss on the UAAL. These factors are shown in detail at the end of Section 4.

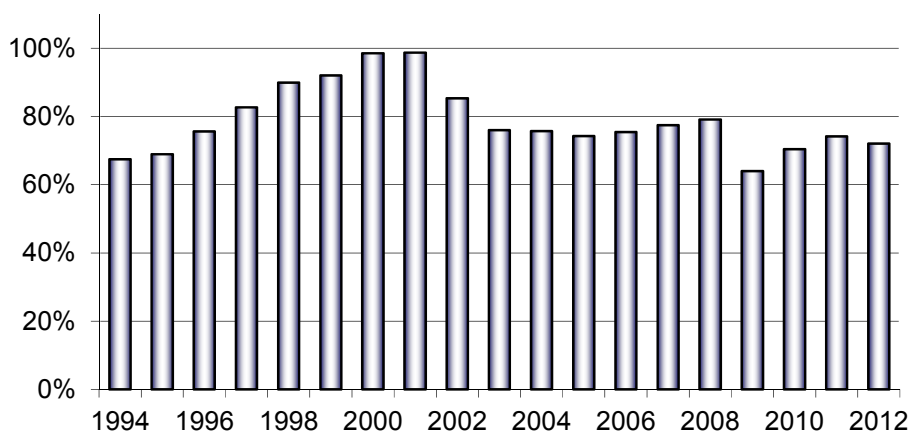
One measure of the funding adequacy of the system is the Funded Ratio, which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all *SamCERA* plans combined. *SamCERA*'s Funded Ratio increased rapidly in the last half of the 1990's, reaching almost 100% in 2001. However, due primarily to asset losses this decade, the Funded Ratio has decreased significantly since then. Currently, the Funded Ratio is 72.0%; that is, the actuarial value of assets of \$2,480 million is about 28% less than the actuarial accrued liabilities of \$3,443 million. Note that if the market value of assets was used, the Funded Ratio would be 68.6%.

**Funding Progress
(continued)**

(All dollar amounts in millions)

	Market Value of Total Assets	Actuarial Value		Actuarial Accrued Liability	Funded Ratio
		Valuation	Non-Valuation		
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
2006	1,790	1,769	0	2,345	75.4
2007	2,132	1,977	0	2,555	77.4
2008	2,011	2,219	0	2,806	79.1
2009	1,591	1,910	0	2,988	63.9
2010	1,816	2,179	0	3,098	70.3
2011	2,318	2,405	0	3,247	74.1
2012	2,360	2,480	0	3,443	72.0

Historical Funded Ratios



Assets

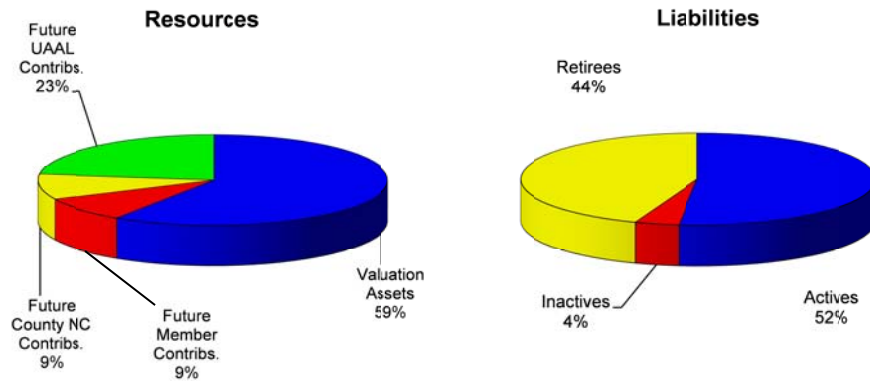
For the fiscal year ending June 30, 2012, we estimate that *SamCERA* earned -0.4%, net of investment expenses, on its market assets. Note that our return figure may be slightly different than that shown in the 2012 CAFR due to timing of contributions and benefit payments, as well as the treatment of expenses.

SamCERA uses an asset-smoothing method in the calculation of the UAAL contribution. Under this method, the market value returns are smoothed over a five-year period. Due to the recognition of current year and deferred prior year asset losses, the return on actuarial valuation assets, at 0.7%, net of expenses, was greater than the expected return of 7.75% for the prior year.

Actuarial Balance Sheet

The first step in the valuation process is to compare the total valuation assets of *SamCERA* with its total liabilities for all plans. In this analysis, *SamCERA*'s resources equal the actuarial assets plus the 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.

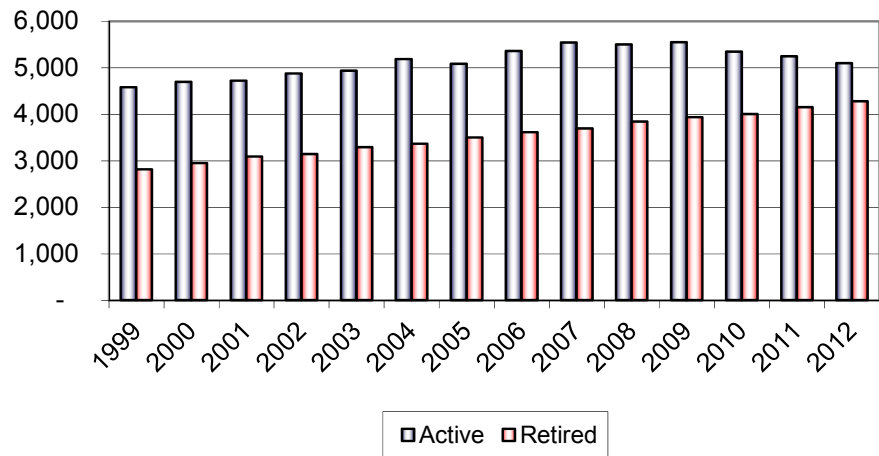


Member Information

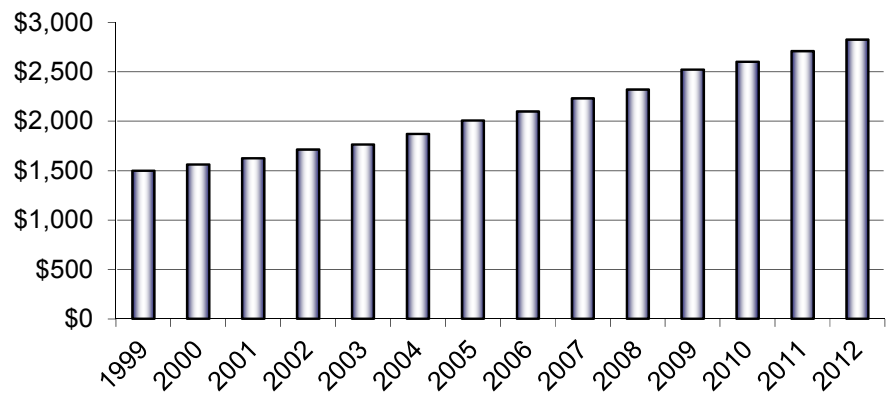
The number of active members included in the valuation decreased by 2.9% from 5,245 in 2011 to 5,095 in 2012.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2012, there were 4,275 retired members and beneficiaries with an average benefit of \$2,823 per month. This represents a 3.1% increase in count (up from 4,147 in 2011), and a 4.3% increase in the average monthly benefit (up from \$2,706 over the period).

Membership Count



Average Monthly Retirement Benefit



Analysis of Change in Member Population

The following table summarizes the year-to-year change in member population.

	Active Contributing Members	Deferred Members	Retirees, Disabilities, & Beneficiaries
June 30, 2011 Valuation	5,245	1,190	4,147
Termination without Refund	(204)	204	-
Termination with Refund	(91)	(18)	-
Active/Deferred Death with Annuity	(5)	(2)	7
Service Retirement	(167)	(71)	238
Disability Retirement	(6)	(3)	9
Retiree Death without Beneficiary	-	-	(126)
New Entrants	235	-	-
Rehires	88	(88)	-
Total Change	(150)	22	128
June 30, 2012 Valuation	5,095	1,212	4,275

Summary Valuation Results

The following Exhibit 2 presents a summary of key results from June 30, 2012 and June 30, 2011, 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, 2012	June 30, 2011	Relative Change
1. Total Membership			
A. Active Members	5,095	5,245	(2.9)%
B. Retired Members & Beneficiaries	4,275	4,147	3.1%
C. Vested Terminated Members	1,212	1,190	1.8%
D. Total	10,582	10,582	-
2. Pay Rate			
A. Annual Total (\$thousands)	\$ 427,650	\$ 432,542	(1.1)%
B. Monthly Average	\$ 6,995	\$ 6,872	1.8%
3. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 2,955	\$ 2,839	4.1%
B. Disability Retirement	\$ 2,927	\$ 2,797	4.6%
C. Surviving Spouse and Dependents	\$ 1,943	\$ 1,836	5.8%
D. Total	\$ 2,823	\$ 2,706	4.3%
4. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 1,419,762	\$ 1,380,509	2.8%
B. Retired Members	\$ 1,854,820	\$ 1,719,251	7.9%
C. Vested Terminated Members	\$ 167,971	\$ 146,967	14.3%
D. Total	\$ 3,442,553	\$ 3,246,727	6.0%
5. Assets			
A. Market Value of Fund (\$thousands)	\$ 2,360,304	\$ 2,317,776 *	1.8%
B. Return on Market Value*	-0.4%	23.7%	
C. Actuarial Value (\$thousands)	\$ 2,480,271	\$ 2,405,140	3.1%
D. Return on Actuarial Value*	0.7%	7.2%	
* May differ from return reported in CAFR due to timing of contributions and benefit payments and treatment of expenses.			
6. Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$ 962,282	\$ 841,587	14.3%
7. Required employer contribution rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	22.04%	21.57%	2.2%
B. Member Contributions	(10.52)%	(10.32)%	1.9%
C. Employer Normal Cost	11.52%	11.25%	2.4%
D. UAAL Amortization	23.97%	19.72%	21.6%
E. Total Employer Rate	35.49%	30.97%	14.6%
8. Funded Ratio (5C / 4D)	72.0%	74.1%	(2.7)%
9. Results Based on Market Value (No Asset Smoothing) -- For Informational Purposes Only			
A. Total Employer Rate	37.98%	33.30%	14.1%
B. Funded Ratio (5A / 4D)	68.6%	71.4%	(4.0)%

* The 2011 market value of assets reflects revision to assets by SamCERA following publication of the June 30, 2011 actuarial valuation.

This page intentionally left blank.

San Mateo County Employees' Retirement Association

Section 2: Scope of the Report



This report presents the actuarial valuation of the San Mateo County Employees' Retirement Association as of June 30, 2012. This valuation was requested by the Board. Section 31453 of the County Employees Retirement Law of 1937 (the '37 Act) requires an actuarial valuation to be performed at least every three years for the purposes of setting contribution rates.

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, 2012.

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 employer 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).

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, 2012.
- Appendix C Schedules of valuation data classified by various categories of members by plan.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

This page left blank.

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, 2012. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the accrued and future 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 employer 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 *SamCERA's* assets is presented below:

	All dollar amounts in millions		
	Market Value of Total Assets	Actuarial Value	
		Non- Valuation Reserves	Valuation Assets
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
2006	1,790	0	1,769
2007	2,132	0	1,977
2008	2,011	0	2,219
2009	1,591	0	1,910
2010	1,816	0	2,179
2011	2,318	0	2,405
2012	2,360	0	2,480

On June 30, 2012, the total market value of the fund was about \$2.36 billion. The actuarial value of the fund was determined to be \$2.48 billion, 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.

Exhibits 3-5 are taken directly from data furnished to us by *SamCERA* for its 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. Note that the 2011 Market Value of Assets was revised by *SamCERA* subsequent to the publication of the 2011 actuarial valuation. We have reflected these revisions in the current report.

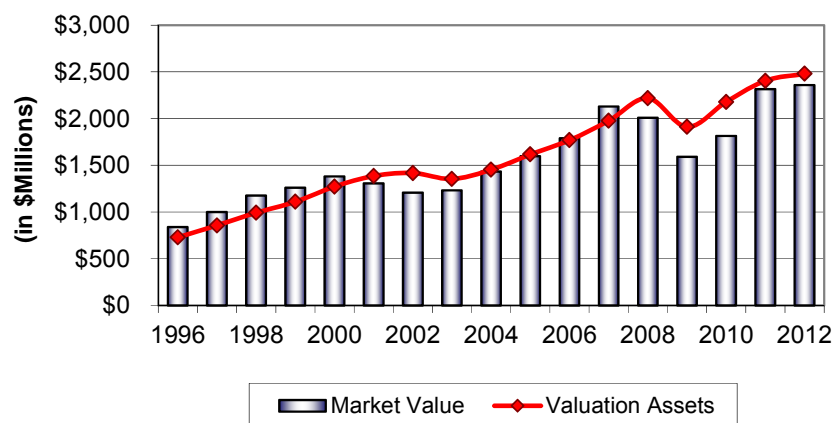
Actuarial Asset Method

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. For the current valuation, the assumed rate of return on the prior year's assets 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. Note that, because the investment return assumption was changed to 7.50% beginning June 30, 2012, the 2013 valuation will assume 7.50% earnings on the June 30, 2012 market value.

Actuarial Value of Assets

The development of the June 30, 2012 actuarial value of assets is shown in Exhibits 6 and 7. Note the smoothing process has recognized all of the investment gains and losses from 2007 and earlier over the last few years. However, there are still portions of investment losses that have not yet been recognized by the asset smoothing method, including the current year loss. The result is a market value of assets that is less than the actuarial 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 (if any) that are to be funded outside of the actuarially determined contribution rates.

Allocation of Assets

Valuation assets are allocated by classification (general, safety and probation) as shown in Exhibit 8. This is because UAAL contribution rates are determined separately by class.

In the calculation of the required contribution rate, the Normal Cost is determined separately for each plan. The UAAL portion of the rate is allocated proportionately to each classification. To determine the UAAL amount by classification, the valuation assets are allocated in proportion to the expected UAAL, after reflecting expected contributions from the prior year to pay down the UAAL.

San Mateo County Employees' Retirement Association

Exhibit 3: Statement of Plan Net Assets for the Years Ended June 30, 2011 and 2012

	2012	2011*
Assets		
Cash and Cash Equivalents	49,733,227	62,694,785
Securities Lending Cash Collateral	199,380,508	199,438,881
Total Cash	\$ 249,113,735	\$ 262,133,666
Receivables		
Contributions	3,702,233	10,470,382
Due from broker for investments sold	125,066,558	148,074,596
Investment Income	5,414,934	5,800,573
Other receivables	113,496	113,735
Securities Lending Income	97,138	67,915
Total Receivables	134,394,359	164,527,201
Prepaid Expense	7,669	7,669
Investments at Fair Value		
Domestic fixed income securities	554,504,406	585,292,402
Domestic equities	902,422,401	932,277,233
International equities	408,832,756	398,753,172
Real estate	146,917,122	135,475,106
Private Equities	19,404,901	3,740,976
Risk Parity	152,628,991	145,620,699
Hedge Funds	68,994,760	69,986,272
Commodities	69,902,427	-
Total Investments	2,323,607,764	2,271,145,860
Capital Assets Net of Depreciation	-	-
Total Assets	2,707,123,527	2,697,814,396
Liabilities		
Payables		
Investment management fees	2,533,960	1,869,336
Due to broker for investments purchased	141,487,676	175,192,142
Collateral Payable for Securities Lending	199,380,508	199,438,881
Mortgage Note Payable		
Due within one year	-	-
Due in more than one year	-	-
Other	3,417,729	3,538,208
Total Liabilities	346,819,873	380,038,567
Net Assets Held in Trust for Pension Benefits	\$ 2,360,303,654	\$ 2,317,775,829

*2011 results reflect revisions to assets by SamCERA following publication of June 30, 2011 actuarial valuation.

San Mateo County Employees' Retirement Association

Exhibit 4: Statement of Changes in Plan Net Assets for the Years Ended June 30, 2011 and 2012

	2012	2011 **
Additions		
Contributions		
Employer	\$ 150,949,761	\$ 150,474,872
Employee	49,687,136	49,013,027
Total Contributions	<u>200,636,897</u>	<u>199,487,899</u>
Investment Income/(Loss)		
Interest and dividends	61,653,951	50,758,044
Net appreciation/(depreciation) in Fair Value	(51,737,514)	403,496,528
	<u>9,916,437</u>	<u>454,254,572</u>
Less investment expense	20,940,955	16,600,673
Net Investment Income/(Loss)	<u>(11,024,519)</u>	<u>437,653,899</u>
Securities Lending Income		
Earnings	452,442	558,768
Less securities lending expense	(268,777)	28,457
Net Securities Lending Income	<u>721,219</u>	<u>530,311</u>
Other Additions	29,025	73,305
Total Additions/(Declines)	<u>190,362,623</u>	<u>637,745,414</u>
Deductions		
Association Benefits		
Service retirement allowances	122,541,648	114,422,667
Disability retirement allowances	15,532,365	14,552,927
Medical Benefits	-	-
Death and other death benefits	1,133,577	858,946
Total Association Benefits	<u>139,207,590</u>	<u>129,834,540</u>
Refunds of members' contributions	3,627,492	2,474,445
Administrative Expense	5,033,047	3,547,526
Other Expense	(33,331)	9,529
Total Deductions	<u>147,834,798</u>	<u>135,866,040</u>
Net Increase/(Decrease)	42,527,825	501,879,374
Net Assets Held in Trust for Pension Benefits:		
Beginning of Year	2,317,775,829	1,815,896,455
End of Year	<u>2,360,303,654</u>	<u>2,317,775,829</u>
Estimated Return, Net of Investment Expenses *	-0.4%	23.7%

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

**2011 results reflect revisions to assets by SamCERA following publication of June 30, 2011 actuarial valuation.

**San Mateo County Employees'
Retirement Association**

**Exhibit 5: Allocation of Assets by Accounting Reserve Amounts
for the Years Ended June 30, 2011 and 2012**

Valuation Reserves	2012	2011 *
1. Member Deposit Reserve	\$ 498,568,652	\$ 485,125,877
2. County Advance Reserve	361,197,981	310,568,622
3. Retiree Reserves	858,440,088	765,312,627
4. Cost of Living Reserve	<u>843,061,707</u>	<u>760,505,829</u>
5. Total Valuation Reserves	\$ 2,561,268,428	\$ 2,321,512,954
Non-Valuation Reserves	2012	2011 *
1. Contingency Reserve		
a. Reserves for Deficiencies in Interest Earnings	\$ -	\$ -
b. Unallocated Earnings / Loss Account	<u>(80,997,723)</u>	<u>83,655,373</u>
c. Total	\$ (80,997,723)	\$ 83,655,373
2. Market Stabilization Account	<u>(119,967,051)</u>	<u>(87,392,498)</u>
3. Total Non-Valuation Reserves	\$ (200,964,774)	\$ (3,737,125)
4. Total Reserves (Market Value of Assets)	\$ 2,360,303,654	\$ 2,317,775,829

**2011 results reflect revisions to assets by SamCERA following publication of June 30, 2011 actuarial valuation.*

Note: These amounts were determined by SamCERA for accounting purposes.

San Mateo County Employees' Retirement Association

Exhibit 6: Five-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)
6/30/2012	\$ 2,280,940,966	\$ 28,676,113	\$ 73,157,072	2,360,303,654	3.875%	\$ 87,461,531	\$ 123,843,647	\$ 36,382,116
12/31/2011	2,317,775,829	171,960,784	69,678,010	2,280,940,966	3.875%	91,600,467	(139,117,637)	(230,718,104)
6/30/2011 *	2,167,939,516	96,998,690	67,484,144	2,317,775,829	3.875%	85,497,449	120,321,766	34,824,317
12/31/2010	1,815,896,455	102,489,209	64,824,842	2,167,939,516	3.875%	72,262,382	314,378,695	242,116,312
6/30/2010	1,863,720,265	80,266,609	63,207,613	1,815,896,455	3.875%	73,179,765	(64,882,806)	(138,062,572)
12/31/2009	1,591,399,558	76,317,198	61,669,503	1,863,720,265	3.875%	61,835,437	257,673,013	195,837,576
6/30/2009	1,594,401,527	27,183,773	59,331,550	1,591,399,558	3.875%	61,167,136	29,145,808	(32,021,328)
12/31/2008	2,010,738,768	129,310,873	57,454,173	1,594,401,527	3.875%	80,910,069	(488,193,941)	(569,104,010)
6/30/2008	2,180,911,208	37,433,714	55,033,629	2,010,738,768	3.875%	84,025,724	(152,572,525)	(236,598,249)
12/31/2007	2,131,614,629	128,017,039	52,010,887	2,180,911,208	3.875%	85,498,735	(26,709,573)	(112,208,308)

*2011 "Market Value at End of Period" reflects revisions to assets by SamCERA following publication of the June 30, 2011 actuarial valuation.



This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit 7: Five-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
6/30/2012	90%	x \$ 36,382,116 =	\$ 32,743,904
12/31/2011	80%	x (230,718,104) =	(184,574,483)
6/30/2011	70%	x 34,824,317 =	24,377,022
12/31/2010	60%	x 242,116,312 =	145,269,787
6/30/2010	50%	x (138,062,572) =	(69,031,286)
12/31/2009	40%	x 195,837,576 =	78,335,030
6/30/2009	30%	x (32,021,328) =	(9,606,398)
12/31/2008	20%	x (569,104,010) =	(113,820,802)
6/30/2008	10%	x (236,598,249) =	(23,659,825)
12/31/2007	0%	x (112,208,308) =	0
Total Gain / (Loss) Excluded = Market Stabilization Reserve =			\$ (119,967,051)

Development of Valuation Assets

1. Market Value of Assets as of June 30, 2012		\$ 2,360,303,654
2. Preliminary Market Stabilization Reserve		(119,967,051)
3. Preliminary Actuarial Value of Assets (1) - (2)		2,480,270,705
4. Corridor Around Market Value		
a) Minimum = 80% of Market	1,888,242,923	
b) Maximum = 120% of Market	2,832,364,384	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	(119,967,051)	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 2,480,270,705
7. Non-Valuation Reserves and Designations		
a) Reserves for Interest Fluctuations	0	
b) Medicare Part B Reserve	0	
c) Total		0
8. Valuation Assets (6) - (7c)		\$ 2,480,270,705

**San Mateo County Employees'
Retirement Association**

Exhibit 8: Allocation of Valuation Assets
(Dollars in Thousands)

	General	Safety	Probation	Total
1. Prior Year UAAL	\$ 579,208	\$ 209,839	\$ 52,540	\$ 841,587
2. Expected UAAL Contribution for Preceding Year	(66,965)	(27,631)	(5,996)	(100,592)
3. Expected Interest at 7.75%	42,342	15,212	3,844	61,398
4. Expected UAAL Based on Prior Year Assumptions	554,585	197,420	50,388	802,393
5. Percentage of Total Expected UAAL	69.12%	24.60%	6.28%	100.00%
6. Actual UAAL Based on Prior Year Assumptions				925,405
7. Actual AAL Based on Prior Year Assumptions	\$ 2,510,760	\$ 691,100	\$ 203,816	\$ 3,405,676
8. Allocated UAAL Based on Prior Year Assumptions	639,606	227,686	58,113	925,405
9. Actuarial Value of Assets	\$ 1,871,154	\$ 463,414	\$ 145,703	\$ 2,480,271

This page left blank.

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, 2012. 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 employer 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 retired, deferred vested 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, 2012.

The actuarial assumptions used to determine the liabilities are based on the results of our investigation of experience report for the period ending April 30, 2011. These assumptions were adopted by the Board at their July 2011 meeting and are shown in Appendix A. The Board re-adopted the demographic assumptions with no changes at the May 2012 meeting. The economic assumptions, including an investment return assumption of 7.50%, were adopted at the May 2012 meeting for use in the June 30, 2012 actuarial valuation. The assumptions will next be reviewed in detail in 2014 as part of the triennial investigation.

San Mateo County Employees' Retirement Association

Exhibit 9: Actuarial Balance Sheet – June 30, 2012 (Dollars in Thousands)

Resources				
	General	Safety	Probation	Total
Valuation Assets (Actuarial)	\$ 1,871,154	\$ 463,414	\$ 145,703	\$ 2,480,271
Present Value of Future Member Contributions	\$ 288,386	\$ 53,431	\$ 23,488	\$ 365,305
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	\$ 265,544	\$ 71,867	\$ 44,016	\$ 381,427
b) Unfunded Actuarial Accrued Liability	\$ 666,247	\$ 234,517	\$ 61,518	\$ 962,282
Total Resources	\$ 3,091,331	\$ 823,229	\$ 274,725	\$ 4,189,285

Liabilities				
	General	Safety	Probation	Total
Present Value of Future Benefits				
1. Present Retired Members	\$ 1,319,816	\$ 442,974	\$ 92,030	\$ 1,854,820
2. Current Inactive Members	139,932	20,796	7,243	167,971
3. Current Active Members				
- Service Retirement	1,469,900	326,756	157,957	1,954,613
- Disability Retirement	57,423	16,505	8,554	82,482
- Death Benefits	24,066	6,826	3,378	34,270
- Deferred Vested Benefit	56,657	7,927	5,078	69,662
- Refund of Member Contributions	23,537	1,445	485	25,467
- Total Active	1,631,583	359,459	175,452	2,166,494
Total Actuarial Liabilities	\$ 3,091,331	\$ 823,229	\$ 274,725	\$ 4,189,285

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 employer.

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 employer. The basic member contribution rates are determined based upon requirements established in the '37 Act and the actuarial assumptions. Members may also make additional contributions as part of a cost sharing or COLA cost sharing arrangements. 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 employer'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)	2012	2011	Percent Change
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 4,189	\$ 3,994	4.9%
B. Actuarial present value of total future Normal Costs for current members	<u>747</u>	<u>747</u>	0.0%
C. Actuarial accrued liability [A-B]	\$ 3,442	\$ 3,247	6.0%
D. Valuation Assets	<u>2,480</u>	<u>2,405</u>	3.1%
E. UAAL or Surplus Funding [C-D]	\$ 962	\$ 842	14.3%
F. Funded Ratio [D/C]	72.0%	74.1%	(2.7)%

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 Unfunded Actuarial Accrued Liability (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 employer had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the 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 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 June 30, 2008 UAAL is amortized over a fixed period ending June 30, 2023. Changes in the UAAL in years following June 30, 2008 are being amortized separately over new 15-year periods from the valuation date at which the difference is calculated, including the change in UAAL as of June 30, 2012.

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 2012 actuarial valuation reflects an increase in the UAAL of \$120.7 million for the fiscal year just ended.

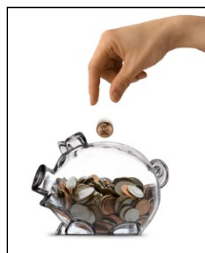
Unfunded Actuarial Accrued Liability - June 30, 2011	\$	841.6
Expected Increase / (Decrease) *		(39.6)
Expected UAAL - June 30, 2012	\$	802.0
Asset (Gains) and Losses		171.3
Retiree COLA Less than Expected		(11.8)
Salary Increases Less than Expected		(45.5)
Assumption Changes		36.4
Other Liability (Gain)/Loss		9.9
Total Changes		160.3
Actual UAAL - June 30, 2012	\$	962.3

* Based on actual contribution.

This page left blank.

San Mateo County Employees' Retirement Association

Section 5: Member Contributions



Basic Contributions

For *SamCERA*, member contributions are of three types: Basic contributions, Cost Sharing contributions, and COLA 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 Plans 1, 2 & 4	31621.9	1/120 th of FAC at age 55
General Plan 5	31621	1/120 th of FAC at age 60
Probation & Safety	31639.25	1/100 th 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

The basic member contribution rates were recalculated as of the June 30, 2012 valuation to reflect the investment return and wage growth assumptions adopted in the June 30, 2012 actuarial valuation. The rates are shown in Appendix D.

Cost-Sharing Contributions

In addition to the basic rate, Plan 1, 2 and 4 County employees, as well as Plan 5 Safety and Probation employees, make additional cost-sharing contributions as shown in Appendix B. For valuation purposes, cost-sharing contributions are assumed to be permanent. The cost-sharing contributions are fixed and not impacted by changes in assumptions.

Cost-of-Living Contributions

Members of the California Nurses Association (except Plan 5 members) contribute 25% of the cost of COLA, in addition to all basic and cost-sharing rates applicable.

All members of General Plan 5 contribute 50% of the cost of COLA. Additionally, General members rehired on or after August 7, 2011 contribute 50% of the cost of COLA for their current Plan.

Members of Safety and Probation Plan 5 and 6 contribute 50% of the cost of COLA. Additionally, Probation members rehired on or after July 10, 2011 and Safety members rehired on or after January 8, 2012 contribute 50% of the cost of COLA for their current Plan.

Other current members do not contribute towards the COLA benefit.

COLA member rates are determined by calculating and applying a load factor to the basic member rates. COLA load factors are determined for each class and plan of member separately, as shown in the following table:

Plan	COLA Share	COLA Load
General 1 (County & Courts)*	50%	41.75%
General 2 (County & Courts)*	50%	32.79%
General 4 (County & Courts)*	50%	22.36%
General 1 (CNA)	25%	20.87%
General 2 (CNA)	25%	16.40%
General 4 (CNA)	25%	11.18%
General 5	50%	21.30%
Safety 1*	50%	62.54%
Safety 2*	50%	50.00%
Safety 4*	50%	32.81%
Safety 5	50%	30.07%
Safety 6	50%	26.88%
Probation 1*	50%	62.57%
Probation 2*	50%	62.57%
Probation 4*	50%	40.78%
Probation 5	50%	37.02%
Probation 6	50%	33.36%

* Only applicable in cases where member rehires or transfers (if eligible).

Example: A member who enters General Plan 5 at age 35 has a basic member contribution rate of 6.14% (Exhibit 10). The General Plan 5 COLA load is 21.30% for a member COLA contribution of 1.31% (6.14% x 21.30%) of pay. The basic plus COLA member contribution rate is 7.45% (6.14% + 1.31%).

Member Contribution Rates

A sample of the current member contribution rates (basic plus cost sharing and COLA 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 employer 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 other classes, due to the differing treatment of contributions for refund purposes.

Full disclosure of the member rates, showing each of the basic, the basic plus cost sharing, and the basic plus cost sharing plus COLA cost sharing, can be found in Appendix D.

San Mateo County Employees' Retirement Association

Exhibit 10: Sample Member Contribution Rates Effective July 1, 2013

Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2013
--

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	COLA Cost Sharing	Cost Sharing		Total as a % of Pay	
General Members - County & Courts⁽¹⁾⁽²⁾							
Plans 1 & 2	25	6.19%	N/A	3.00%	9.19%	9.06%	101.4%
	35	7.42%	N/A	3.00%	10.42%	10.25%	101.7%
	45	8.91%	N/A	3.00%	11.91%	11.71%	101.7%
Plan 4	25	5.94%	N/A	3.00%	8.94%	8.80%	101.6%
	35	7.12%	N/A	3.00%	10.12%	9.94%	101.8%
	45	8.51%	N/A	3.00%	11.51%	11.29%	101.9%
Plan 5	25	5.12%	1.09%	0.00%	6.21%	6.10%	101.8%
	35	6.14%	1.31%	0.00%	7.45%	7.30%	102.0%
	45	7.37%	1.57%	0.00%	8.94%	8.76%	102.1%
General Members - SMCM&VCD							
Plans 1 & 2	25	6.19%	N/A	0.00%	6.19%	6.06%	102.1%
	35	7.42%	N/A	0.00%	7.42%	7.25%	102.3%
	45	8.91%	N/A	0.00%	8.91%	8.71%	102.3%
Plan 4	25	5.94%	N/A	0.00%	5.94%	5.80%	102.4%
	35	7.12%	N/A	0.00%	7.12%	6.94%	102.6%
	45	8.51%	N/A	0.00%	8.51%	8.29%	102.7%
Probation Members (Reflects Employer Pick-up)⁽²⁾							
Plans 1 & 2	25	6.73%	N/A	3.50%	10.23%	10.07%	101.6%
	35	8.08%	N/A	3.50%	11.58%	11.38%	101.8%
	45	9.51%	N/A	3.50%	13.01%	12.77%	101.9%
Plan 4	25	6.46%	N/A	3.50%	9.96%	9.79%	101.7%
	35	7.75%	N/A	3.50%	11.25%	11.04%	101.9%
	45	8.96%	N/A	3.50%	12.46%	12.22%	102.0%
Plan 5	25	6.46%	2.39%	3.50%	12.35%	12.16%	101.6%
	35	7.75%	2.87%	3.50%	14.12%	13.88%	101.7%
	45	8.96%	3.32%	3.50%	15.78%	15.51%	101.7%
Plan 6	25	6.46%	2.16%	0.00%	8.62%	8.38%	102.8%
	35	7.75%	2.59%	0.00%	10.34%	10.04%	102.9%
	45	8.96%	2.99%	0.00%	11.95%	11.61%	102.9%
Safety Members - Other than Deputy Sheriff⁽²⁾⁽³⁾							
Plans 1 & 2	25	8.41%	N/A	5.00%	13.41%	13.21%	101.5%
	35	10.09%	N/A	5.00%	15.09%	14.85%	101.6%
	45	11.89%	N/A	5.00%	16.89%	16.59%	101.8%
Plan 4	25	8.07%	N/A	5.00%	13.07%	12.86%	101.6%
	35	9.68%	N/A	5.00%	14.68%	14.43%	101.7%
	45	11.20%	N/A	5.00%	16.20%	15.90%	101.9%
Plan 5	25	8.07%	2.43%	4.00%	14.50%	14.26%	101.7%
	35	9.68%	2.91%	4.00%	16.59%	16.31%	101.7%
	45	11.20%	3.37%	4.00%	18.57%	18.22%	101.9%
Plan 6	25	8.07%	2.17%	0.00%	10.24%	9.97%	102.7%
	35	9.68%	2.60%	0.00%	12.28%	11.96%	102.7%
	45	11.20%	3.01%	0.00%	14.21%	13.83%	102.8%

- (1) Does not include Plan 1, 2, or 4 members of the California Nurses Association, who will also contribute 25% of the cost of the COLA beginning with the 2011 actuarial valuation. See Appendix D of this report for a full schedule of rates.
- (2) Does not include COLA sharing for rehires for Plans 1, 2, and 4 on or after August 7, 2011 (General County & Courts), on or after July 10, 2011 (Probation), on or after January 8, 2012 (Safety).
- (3) 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: Employer 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 11 through 11f 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 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 contributions 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 11 through 11f. These results are expressed as a percentage of payroll. Note that *SamCERA*’s UAAL is determined separately for each class. Thus, the employer funds the UAAL evenly as a percentage of pay over salaries for all members within a class.

The total calculated employer contribution rate was 30.97% for the fiscal year beginning July 1, 2012. For the fiscal year beginning in 2013, the calculated rate based on this report increased to 35.49%. This is equal to the aggregate Employer Normal Cost contribution rate of 11.52% based on Milliman’s 2012 valuation, plus appropriate amounts to amortize the UAAL according to the funding policy, over layered 15-year closed periods.

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

Employer Normal Cost	11.52%
Total Amortization of UAAL	<u>23.97%</u>
Total Employer Contribution	35.49%

Calculated Contribution Rate (continued)

The UAAL rate reflects a layered 15-year amortization beginning with the June 30, 2008 valuation. Gains and losses after that date are reflected over new 15-year periods starting with the valuation date. A one-year deferral in the implementation of the new rate is reflected. Therefore, the new employer contribution rate calculated in the 2012 valuation is paid over the remaining 14 years and is effective July 1, 2013.

Exhibit 12 shows detailed information on how the contribution rate is calculated using the layered method.

Note that in the following exhibits "SMCM&VCD" refers to the San Mateo County Mosquito and Vector Control District.

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. The 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 system benefit provisions, the aggregate Normal Cost rate is expected to decrease as a greater number of members are covered by Plans 5 and 6, instead of the slightly more expensive previous plans. However, the change will be fairly gradual.
- 2. Contribution Shut-Off:** For general members hired prior to March 7, 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 are equal to the cost sharing, resulting in a sizable increase in the employer's share of the Normal Cost contributions for the years when the member has more than 30 years of service. The employer'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.

Additionally, this year the Normal Cost changed due to the adoption of the new economic assumptions with the June 30, 2012 actuarial valuation.

San Mateo County Employees' Retirement Association

Exhibit 11: Calculated Employer Normal Cost Contribution Rates – June 30, 2012

	General - County (excl. CNA and Court members)	General - CNA members **	General - Courts members	General - SMCM&VCD members ***	Safety	Probation	Grand Total
	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>
A. <u>Gross Normal Cost</u>							
Service Retirement	15.91%	15.91%	15.91%	15.84%	27.42%	25.86%	17.80%
Disability Retirement	0.97%	0.97%	0.97%	0.24%	2.20%	1.97%	1.19%
Death while Active	0.31%	0.31%	0.31%	0.33%	0.93%	0.86%	0.42%
Termination (No Refund)	1.26%	1.26%	1.26%	1.22%	1.25%	1.34%	1.26%
Refund of Member Contributions	1.54%	1.54%	1.54%	1.06%	0.70%	0.56%	1.38%
Total	19.99%	19.99%	19.99%	18.69%	32.50%	30.59%	22.04%
B. Member Contributions	(10.01)%	(11.03)%	(10.01)%	(7.01)%	(13.45)%	(10.60)%	(10.52)%
C. Employer Normal Cost Rate (A) - (B)	9.98%	8.96%	9.98%	11.68%	19.05%	19.99%	11.52%
D. <u>Total Employer Contribution Rate</u>							
Basic Normal Cost	6.26%	5.62%	6.26%	8.26%	12.06%	13.48%	7.35%
COLA Normal Cost	3.72%	3.34%	3.72%	3.42%	6.99%	6.51%	4.17%
Employer Normal Cost Rate	9.98%	8.96%	9.98%	11.68%	19.05%	19.99%	11.52%
UAAL Contribution Rate	20.17%	20.17%	20.17%	20.17%	48.51%	26.71%	23.97%
Total Employer Contribution Rate	30.15%	29.13%	30.15%	31.85%	67.56%	46.70%	35.49%
E. Total Employer Contribution Rate (prior year)*	26.12%	25.11%	26.12%	28.38%	59.13%	41.14%	30.97%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	4.03%	4.02%	4.03%	3.47%	8.43%	5.56%	4.52%

* Prior year rates shown are those calculated in the June 30, 2011 actuarial valuation. The County elected to contribute higher rates than those shown.

** General County members of Plans 1, 2, or 4 belonging to the California Nurses' Association (CNA) contribute 25% of the cost of the COLA, in addition to regular member rates and cost sharing. The Gross Normal Cost Rate shown is the aggregate rate by Plan for General County and General CNA members.

*** Normal Cost rates for Mosquito and Vector Control District reflect adoption of "enhanced" General County benefit formula beginning with 2010 actuarial valuation.

San Mateo County Employees' Retirement Association

Exhibit 11a: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	<u>General - County (excl. CNA and Court members)</u>					
	<u>Plan 1</u>	<u>Plan 2</u>	<u>Plan 3</u>	<u>Plan 4</u>	<u>Plan 5</u>	<u>Total</u>
A. <u>Gross Normal Cost</u>						
Service Retirement	16.50%	16.76%	7.44%	16.07%	13.88%	15.91%
Disability Retirement	0.83%	0.92%	0.00%	1.04%	1.10%	0.97%
Death while Active	0.29%	0.32%	0.00%	0.32%	0.29%	0.31%
Termination (No Refund)	1.38%	1.32%	0.50%	1.26%	0.95%	1.26%
Refund of Member Contributions	1.56%	1.56%	0.00%	1.59%	1.28%	1.54%
Total	20.56%	20.88%	7.94%	20.28%	17.50%	19.99%
B. Member Contributions	(9.81)%	(10.23)%	0.00%	(10.44)%	(8.15)%	(10.01)%
C. Employer Normal Cost Rate (A) - (B)	10.75%	10.65%	7.94%	9.84%	9.35%	9.98%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	4.86%	5.68%	7.94%	6.41%	6.51%	6.26%
COLA Normal Cost	5.89%	4.97%	0.00%	3.43%	2.84%	3.72%
Employer Normal Cost Rate	10.75%	10.65%	7.94%	9.84%	9.35%	9.98%
UAAL Contribution Rate	20.17%	20.17%	20.17%	20.17%	20.17%	20.17%
Total Employer Contribution Rate	30.92%	30.82%	28.11%	30.01%	29.52%	30.15%
E. Total Employer Contribution Rate (prior year)*	26.96%	26.79%	24.10%	25.94%	25.11%	26.12%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	3.96%	4.03%	4.01%	4.07%	4.41%	4.03%

* Prior year rates shown are those calculated in the June 30, 2011 actuarial valuation. The County elected to contribute higher rates than those shown.

San Mateo County Employees' Retirement Association

Exhibit 11b: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	General - CNA members *					
	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Total
A. <u>Gross Normal Cost</u>						
Service Retirement	16.50%	16.76%	7.44%	16.07%	13.88%	15.91%
Disability Retirement	0.83%	0.92%	0.00%	1.04%	1.10%	0.97%
Death while Active	0.29%	0.32%	0.00%	0.32%	0.29%	0.31%
Termination (No Refund)	1.38%	1.32%	0.50%	1.26%	0.95%	1.26%
Refund of Member Contributions	1.56%	1.56%	0.00%	1.59%	1.28%	1.54%
Total	20.56%	20.88%	7.94%	20.28%	17.50%	19.99%
B. Member Contributions	(11.24)%	(11.42)%	0.00%	(11.27)%	(8.15)%	(11.03)%
C. Employer Normal Cost Rate (A) - (B)	9.32%	9.46%	7.94%	9.01%	9.35%	8.96%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	4.21%	5.05%	7.94%	5.87%	6.51%	5.62%
COLA Normal Cost	5.11%	4.41%	0.00%	3.14%	2.84%	3.34%
Employer Normal Cost Rate	9.32%	9.46%	7.94%	9.01%	9.35%	8.96%
UAAL Contribution Rate	20.17%	20.17%	20.17%	20.17%	20.17%	20.17%
Total Employer Contribution Rate	29.49%	29.63%	28.11%	29.18%	29.52%	29.13%
E. Total Employer Contribution Rate (prior year)**	25.52%	25.61%	24.10%	25.10%	25.11%	25.11%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	3.97%	4.02%	4.01%	4.08%	4.41%	4.02%

* General County members of Plans 1, 2, or 4 belonging to the California Nurses' Association (CNA) contribute 25% of the cost of the COLA, in addition to regular member rates and cost sharing. The Gross Normal Cost Rate shown is the aggregate rate by Plan for all General members.

** Prior year rates shown are those calculated in the June 30, 2011 actuarial valuation. The County elected to contribute higher rates than those show.

San Mateo County Employees' Retirement Association

Exhibit 11c: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	General - Courts members					
	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Total
A. <u>Gross Normal Cost</u>						
Service Retirement	16.50%	16.76%	7.44%	16.07%	13.88%	15.91%
Disability Retirement	0.83%	0.92%	0.00%	1.04%	1.10%	0.97%
Death while Active	0.29%	0.32%	0.00%	0.32%	0.29%	0.31%
Termination (No Refund)	1.38%	1.32%	0.50%	1.26%	0.95%	1.26%
Refund of Member Contributions	1.56%	1.56%	0.00%	1.59%	1.28%	1.54%
Total	20.56%	20.88%	7.94%	20.28%	17.50%	19.99%
B. Member Contributions	(9.81)%	(10.23)%	0.00%	(10.44)%	(8.15)%	(10.01)%
C. Employer Normal Cost Rate (A) - (B)	10.75%	10.65%	7.94%	9.84%	9.35%	9.98%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	4.86%	5.68%	7.94%	6.41%	6.51%	6.26%
COLA Normal Cost	5.89%	4.97%	0.00%	3.43%	2.84%	3.72%
Employer Normal Cost Rate	10.75%	10.65%	7.94%	9.84%	9.35%	9.98%
UAAL Contribution Rate	20.17%	20.17%	20.17%	20.17%	20.17%	20.17%
Total Employer Contribution Rate	30.92%	30.82%	28.11%	30.01%	29.52%	30.15%
E. Total Employer Contribution Rate (prior year)*	26.96%	26.79%	24.10%	25.94%	25.11%	26.12%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	3.96%	4.03%	4.01%	4.07%	4.41%	4.03%

* Prior year rates shown are those calculated in the June 30, 2011 actuarial valuation. The County elected to contribute higher rates than those shown.

San Mateo County Employees' Retirement Association

Exhibit 11d: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	<u>General - SMCM&VCD members *</u>			
	<u>Plan 1**</u>	<u>Plan 2</u>	<u>Plan 4</u>	<u>Total</u>
A. <u>Gross Normal Cost</u>				
Service Retirement	0.00%	22.37%	14.24%	15.84%
Disability Retirement	0.00%	1.23%	0.87%	0.24%
Death while Active	0.00%	0.48%	0.31%	0.33%
Termination (No Refund)	0.00%	1.16%	1.23%	1.22%
Refund of Member Contributions	0.00%	1.23%	1.04%	1.06%
Total	0.00%	26.47%	17.69%	18.69%
B. Member Contributions	0.00%	(8.77)%	(6.79)%	(7.01)%
C. Employer Normal Cost Rate (A) - (B)	0.00%	17.70%	10.90%	11.68%
D. <u>Total Employer Contribution Rate</u>				
Basic Normal Cost	0.00%	11.46%	7.85%	8.26%
COLA Normal Cost	0.00%	6.24%	3.05%	3.42%
Employer Normal Cost Rate	0.00%	17.70%	10.90%	11.68%
UAAL Contribution Rate	0.00%	20.17%	20.17%	20.17%
Total Employer Contribution Rate	0.00%	37.87%	31.07%	31.85%
E. Total Employer Contribution Rate (prior year)***	33.34%	33.87%	27.30%	28.38%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	(33.34)%	4.00%	3.77%	3.47%

* Normal Cost rates for Mosquito and Vector Control District reflect adoption of "enhanced" General County benefit formula beginning with 2010 actuarial valuation.

** There are no longer any active members of Plan 1 for this group.

*** Prior year rates shown are those calculated in the June 30, 2011 actuarial valuation. The County elected to contribute higher rates than those shown.

San Mateo County Employees' Retirement Association

Exhibit 11e: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	<u>Safety</u>					<u>Total</u>
	<u>Plan 1</u>	<u>Plan 2</u>	<u>Plan 4</u>	<u>Plan 5</u>	<u>Plan 6*</u>	
A. <u>Gross Normal Cost</u>						
Service Retirement	32.71%	28.39%	26.67%	27.30%	N/A	27.42%
Disability Retirement	2.00%	2.02%	2.39%	2.87%	N/A	2.20%
Death while Active	1.02%	1.02%	0.94%	0.94%	N/A	0.93%
Termination (No Refund)	1.21%	1.35%	1.27%	0.87%	N/A	1.25%
Refund of Member Contributions	0.73%	0.64%	0.75%	1.02%	N/A	0.70%
Total	37.67%	33.42%	32.02%	33.00%	N/A	32.50%
B. Member Contributions	(10.98)%	(13.34)%	(13.37)%	(16.52)%	N/A	(13.45)%
C. Employer Normal Cost Rate (A) - (B)	26.69%	20.08%	18.65%	16.48%	15.98%	19.05%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	14.45%	11.14%	12.52%	10.35%	N/A	12.06%
COLA Normal Cost	12.24%	8.94%	6.13%	6.13%	N/A	6.99%
Employer Normal Cost Rate	26.69%	20.08%	18.65%	16.48%	15.98%	19.05%
UAAL Contribution Rate	48.51%	48.51%	48.51%	48.51%	48.51%	48.51%
Total Employer Contribution Rate	75.20%	68.59%	67.16%	64.99%	64.49%	67.56%
E. Total Employer Contribution Rate (prior year)	67.85%	59.99%	58.62%	55.37%	54.91%	59.13%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	7.35%	8.60%	8.54%	9.62%	9.58%	8.43%

*Safety Plan 6 had no active members as of the valuation date. Therefore, detailed breakout of Normal Cost was not available. The Normal Cost shown is based on our previous estimate for Safety Plan 6 with an adjustment for the change in economic assumptions.

San Mateo County Employees' Retirement Association

Exhibit 11f: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 (continued)

	Probation					
	Plan 1 *	Plan 2	Plan 4	Plan 5	Plan 6	Total
A. <u>Gross Normal Cost</u>						
Service Retirement	28.90%	28.20%	25.05%	23.39%	21.33%	25.86%
Disability Retirement	1.81%	1.99%	1.99%	2.13%	2.14%	1.97%
Death while Active	1.05%	0.91%	0.86%	0.96%	1.00%	0.86%
Termination (No Refund)	1.45%	1.37%	1.35%	1.17%	1.01%	1.34%
Refund of Member Contributions	0.49%	0.54%	0.57%	0.73%	0.54%	0.56%
Total	33.70%	33.01%	29.82%	28.38%	26.02%	30.59%
B. Member Contributions	(3.50)%	(10.53)%	(10.60)%	(13.46)%	(9.98)%	(10.60)%
C. Employer Normal Cost Rate (A) - (B)	30.20%	22.48%	19.22%	14.92%	16.04%	19.99%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	14.59%	13.66%	13.45%	9.54%	11.05%	13.48%
COLA Normal Cost	15.61%	8.82%	5.77%	5.38%	4.99%	6.51%
Employer Normal Cost Rate	30.20%	22.48%	19.22%	14.92%	16.04%	19.99%
UAAL Contribution Rate	26.71%	26.71%	26.71%	26.71%	26.71%	26.71%
Total Employer Contribution Rate	56.91%	49.19%	45.93%	41.63%	42.75%	46.70%
E. Total Employer Contribution Rate (prior year)	51.11%	43.19%	40.42%	35.59%	36.07%	41.14%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	5.80%	6.00%	5.51%	6.04%	6.68%	5.56%

* Only one active member remains in Probation Plan 1. The member is assumed to retire immediately; therefore, there is no normal cost calculated for the upcoming year. The Normal Cost Contribution Rate is set equal to the prior year's rate, with an adjustment for changes in assumptions. The member rate is set equal to the cost-sharing rate, since the basic member rate has been "shut off."

San Mateo County Employees' Retirement Association

Exhibit 12: Supplemental Detail on UAAL Payments (Dollars in Thousands)

General							
Date Established	Description ⁽⁴⁾	Balance as of June 30, 2012	Interest on Balance	Amort. Payment on June 30, 2013 ¹	Balance as of June 30, 2013 ²	Remaining Period as of June 30, 2013	July 1, 2013 Amortization Payment
June 30, 2008	Initial UAAL	\$ 368,951	\$ 27,671	\$ 42,791	\$ 353,832	10 Years	\$ 42,098
June 30, 2009	(Gain) / Loss	\$ 352,778	\$ 26,458	\$ 38,131	\$ 341,105	11 Years	\$ 37,514
June 30, 2010	(Gain) / Loss	\$ (129,979)	\$ (9,748)	\$ (13,183)	\$ (126,544)	12 Years	\$ (12,970)
June 30, 2011	(Gain) / Loss	\$ (38,719)	\$ (2,904)	\$ (3,707)	\$ (37,916)	13 Years	\$ (3,647)
June 30, 2012	(Gain) / Loss	\$ 113,216	\$ 8,491	\$ 4,741 ³	\$ 116,966	14 Years	\$ 10,618
Total Amortization Payment July 1, 2013:							\$ 73,613
Projected Payroll July 1, 2013:							\$ 364,939
UAAL as of June 30, 2012:		\$ 666,247		UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2013:		20.17%	

Safety							
Date Established	Description ⁽⁴⁾	Balance as of June 30, 2012	Interest on Balance	Amort. Payment on June 30, 2013 ¹	Balance as of June 30, 2013 ²	Remaining Period as of June 30, 2013	July 1, 2013 Amortization Payment
June 30, 2008	Initial UAAL	\$ 134,637	\$ 10,098	\$ 15,615	\$ 129,120	10 Years	\$ 15,362
June 30, 2009	(Gain) / Loss	\$ 129,379	\$ 9,703	\$ 13,985	\$ 125,097	11 Years	\$ 13,758
June 30, 2010	(Gain) / Loss	\$ (48,620)	\$ (3,647)	\$ (4,931)	\$ (47,336)	12 Years	\$ (4,851)
June 30, 2011	(Gain) / Loss	\$ (17,957)	\$ (1,347)	\$ (1,719)	\$ (17,585)	13 Years	\$ (1,691)
June 30, 2012	(Gain) / Loss	\$ 37,078	\$ 2,781	\$ 5,083 ³	\$ 34,776	14 Years	\$ 3,157
Total Amortization Payment July 1, 2013:							\$ 25,735
Projected Payroll July 1, 2013:							\$ 53,046
UAAL as of June 30, 2012:		\$ 234,517		UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2013:		48.51%	

Probation							
Date Established	Description ⁽⁴⁾	Balance as of June 30, 2012	Interest on Balance	Amort. Payment on June 30, 2013 ¹	Balance as of June 30, 2013 ²	Remaining Period as of June 30, 2013	July 1, 2013 Amortization Payment
June 30, 2008	Initial UAAL	\$ 33,732	\$ 2,530	\$ 3,912	\$ 32,350	10 Years	\$ 3,849
June 30, 2009	(Gain) / Loss	\$ 32,564	\$ 2,442	\$ 3,520	\$ 31,486	11 Years	\$ 3,463
June 30, 2010	(Gain) / Loss	\$ (11,866)	\$ (890)	\$ (1,203)	\$ (11,553)	12 Years	\$ (1,184)
June 30, 2011	(Gain) / Loss	\$ (4,120)	\$ (309)	\$ (394)	\$ (4,034)	13 Years	\$ (388)
June 30, 2012	(Gain) / Loss	\$ 11,207	\$ 841	\$ 321 ³	\$ 11,727	14 Years	\$ 1,065
Total Amortization Payment July 1, 2013:							\$ 6,805
Projected Payroll July 1, 2013:							\$ 25,475
UAAL as of June 30, 2012:		\$ 61,518		UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2013:		26.71%	

Explanatory Notes:

¹ Amortization Payments are based on a fixed schedule that increases by the payroll assumption each year.

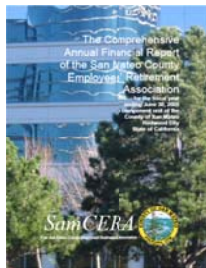
² The calculation of assets and liabilities used in the calculation of UAAL are as of June 30, 2012; whereas, the contribution rates are not effective until July 1, 2013. Therefore, the UAAL is adjusted to June 30, 2013 in the calculation of contribution rates.

³ The 15-year amortization of UAAL does not begin until July 1, 2013; however, the UAAL amount is adjusted based on the July 1, 2012 contribution rate.

⁴ (Gain)/Loss includes new assumptions adopted effective June 30, 2011 based on the Investigation of Experience report, and new economic assumptions effective June 30, 2012.

San Mateo County Employees' Retirement Association

Section 7: Information for Comprehensive Annual Financial Report (CAFR)



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).

It should be noted that GASB recently adopted Statements 67 and 68 dealing with accounting disclosure for public retirement systems. These new standards will have a material impact on pension accounting. The effective date for GASB Statement No. 67 is for periods beginning after June 15, 2013 and the effective date for GASB Statement No. 68 is for periods beginning after June 15, 2014.

**CAFR
(continued)**

In addition to the exhibits mentioned above, the following supporting information is supplied for inclusion in *SamCERA*'s CAFR:

- Exhibit 16 – History of employer contribution rates.
- Exhibit 17 – Actuarial analysis of financial experience.
- Exhibit 18 – Summary of significant actuarial statistics and measurements.
- Exhibit 19 – Summary of *SamCERA* membership. For more detailed information on the valuation data, see Appendix C.
- Exhibit 20 – Summary of active member valuation data.
- Exhibit 21 – Summary of demographic activity of retirees and beneficiaries.
- Exhibit 22 – Average salary and active counts by employer.
- Exhibit 23 – Summary of retired and inactive benefits.
- Exhibits 24a and 24b – Summary of actuarial assumptions and cost method. For more detailed information, see Appendix A.

San Mateo County Employees' Retirement Association

Exhibit 13: Schedule of Funding Progress
(Dollars In Thousands)

Actuarial Valuation Date*	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liabilities	(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
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%
June 30, 2006	1,769,021	2,345,149	576,128	75.4%	368,972	156.14%
June 30, 2007	1,976,731	2,555,504	578,773	77.4%	407,912	141.92%
June 30, 2008	2,218,937	2,806,222	587,285	79.1%	416,243	141.09%
June 30, 2009	1,909,679	2,987,712	1,078,033	63.9%	436,424	247.02%
June 30, 2010	2,179,076	3,098,453	919,377	70.3%	428,559	214.53%
June 30, 2011	2,405,140	3,246,727	841,587	74.1%	424,061	198.46%
June 30, 2012	2,480,271	3,442,553	962,282	72.0%	419,779	229.24%

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

**San Mateo County Employees'
Retirement Association**

**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
6/30/2003	36,070	36,070	100%
6/30/2004	60,042	60,042	100%
6/30/2005	76,931	76,931	100%
6/30/2006	76,090	76,090	100%
6/30/2007	100,550	100,550	100%
6/30/2008	105,340	105,340	100%
6/30/2009	106,123	106,123	100%
6/30/2010	106,265	106,265	100%
6/30/2011	150,475	150,475	100%
6/30/2012	150,950	150,950	100%

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

** GASB Annual Required Contribution (ARC) is set equal to actual employer contribution when the actual employer contribution meets GASB ARC criteria.

San Mateo County Employees' Retirement Association

Exhibit 15: Solvency Test (Dollars In Thousands)

Actuarial Valuation Date ⁽¹⁾	Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries ⁽²⁾ (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
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%
June 30, 2006	1,769,021	317,521	1,234,005	793,623	100%	100%	27%
June 30, 2007	1,976,731	359,484	1,348,013	848,007	100%	100%	32%
June 30, 2008	2,218,937	385,300	1,550,875	870,047	100%	100%	32%
June 30, 2009	1,909,679	412,147	1,670,547	905,018	100%	90%	0%
June 30, 2010	2,179,076	449,355	1,745,146	903,952	100%	99%	0%
June 30, 2011	2,405,140	485,126	1,866,219	895,382	100%	100%	6%
June 30, 2012	2,480,271	498,569	2,022,791	921,193	100%	98%	0%

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

(2) Includes deferred vested.



This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit 16: History of Calculated Employer Contribution Rates⁽⁴⁾ (Dollars In Thousands)

County Rates ⁽¹⁾⁽⁴⁾												
Valuation Year	General County & Court Members (excluding Nurses)			General Member (Nurses) ⁽³⁾			Safety Member			Probation Member		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2003	11.00%	4.60%	15.60%	Same as County General			21.99%	12.74%	34.73%	23.45%	8.10%	31.55%
2004	9.76%	8.25%	18.01%	Same as County General			15.34%	24.82%	40.16%	16.17%	15.28%	31.45%
2005	10.36%	10.38%	20.74%	Same as County General			20.43%	32.02%	52.45%	21.10%	16.43%	37.53%
2006	10.49%	9.97%	20.46%	Same as County General			20.18%	30.52%	50.70%	21.59%	14.85%	36.44%
2007	10.19%	9.46%	19.65%	Same as County General			19.94%	29.32%	49.26%	20.83%	14.06%	34.89%
2008	10.16%	9.81%	19.97%	Same as County General			19.32%	27.31%	46.63%	20.05%	12.81%	32.86%
2009	10.11%	18.40%	28.51%	Same as County General			19.21%	51.83%	71.04%	19.92%	23.84%	43.76%
2010	10.05%	16.35%	26.40%	Same as County General			19.01%	44.50%	63.51%	19.85%	21.62%	41.47%
2011	9.71%	16.41%	26.12%	8.70%	16.41%	25.11%	18.87%	41.75%	60.62%	19.50%	22.30%	41.80%
2012	9.98%	20.17%	30.15%	8.96%	20.17%	29.13%	19.05%	48.51%	67.56%	19.99%	26.68%	46.67%

Rates for Mosquito and Vector Control District ⁽²⁾			
Valuation Year	General Member		
	Normal	UAAL	Total
2006	8.76%	8.18%	16.94%
2007	8.50%	7.76%	16.26%
2008	8.55%	8.04%	16.59%
2009	8.25%	15.09%	23.34%
2010	11.70%	16.35%	28.05%
2011	11.97%	16.41%	28.38%
2012	11.68%	20.17%	31.85%

- (1) Information for years prior to 2005 reported by prior actuaries.
- (2) Beginning with the 2010 actuarial valuation, the Mosquito and Vector Control District adopted the same benefit formula and member contribution rates as Plan 1, 2 & 4 General County members (excluding cost sharing on member rates).
- (3) Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the California Nurses Association contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- (4) Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.

**San Mateo County Employees'
Retirement Association**

Exhibit 17: Actuarial Analysis of Financial Experience

<u>Summary of (Gains) / Losses</u>	<u>Change In Liability</u>				
	2012	2011	2010	2009	2008
Unfunded Liability as of July 1	\$ 841,587,000	\$ 919,377,000	\$ 1,078,033,000	\$ 587,285,000	\$ 578,773,000
Expected Change in UAAL	(39,621,000)	(31,508,000)	27,388,000	(11,786,000)	(31,649,000)
Salary (Gain) / Loss	(45,526,000)	(51,831,000)	(43,598,000)	(10,081,000)	(19,946,000)
Fewer Withdrawals than expected	0	0	0	0	0
Retiree COLA more / (less) than expected	(11,756,000)	(27,561,000)	(41,258,000)	1,080,000	937,000
Asset (Gain) / Loss	171,268,000	12,548,000	(88,485,000)	522,444,000	(20,078,000)
Change due to Assumption Changes	36,443,000	19,402,000	0	0	61,011,000
Miscellaneous Experience	9,887,000	1,160,000	(12,703,000)	(10,909,000)	18,237,000
Unfunded Liability as of June 30	\$ 962,282,000	\$ 841,587,000	\$ 919,377,000	\$ 1,078,033,000	\$ 587,285,000



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit 18: Summary of Significant Actuarial Statistics and Measures

	June 30th of		Relative
	2012	2011	Change
I. Active Members			
Number of Members	5,095	5,245	(2.9)%
Average Age	46.0	45.7	0.7%
Average Credited Service	10.9	10.6	2.8%
Total Active Payroll (\$thousands)	\$ 427,650	\$ 432,542	(1.1)%
Average Monthly Salary	\$ 6,995	\$ 6,872	1.8%
II. Retired Members			
Number of Members			
Service Retirement	3,355	3,242	3.5 %
Disability Retirement	374	370	1.1 %
Beneficiaries	546	535	2.1 %
Average Age	71.2	71.3	(0.1)%
Actual Retiree Benefits Paid (\$thousands)	\$ 139,208	\$ 129,835	7.2 %
Average Monthly Pension	\$ 2,823	\$ 2,706	4.3%
III. Inactive Vested Members			
	1,212	1,190	1.8 %
IV. Assets			
Market Value of Fund (\$thousands)	\$ 2,360,304	\$ 2,317,776	1.8%
Return on Market Value	-0.4%	23.7%	
Valuation Assets (\$thousands)	\$ 2,480,271	\$ 2,405,140	3.1%
Return on Valuation Assets	0.7%	7.2%	
V. Liability Values (\$thousands)			
Actuarial Accrued Liability	\$ 3,442,553	\$ 3,246,727	6.0%
Unfunded Actuarial Accrued Liability	\$ 962,282	\$ 841,587	14.3%
Deferred Asset (Gains) / Losses	\$ 119,967	\$ 87,363	
VI. Funded Ratio			
GASB 25 (based on valuation assets)	72.0%	74.1%	(2.7)%

San Mateo County Employees' Retirement Association

Exhibit 19: Summary of SamCERA Membership

Plan	One	Two	Three	Four	Five	Six	Total
Retirees and beneficiaries currently receiving benefits:							
General	1,910	1,489	110	210	-	-	3,719
Safety	285	126	-	17	-	-	428
Probation	72	46	-	10	-	-	128
Subtotal	2,267	1,661	110	237	-	-	4,275
Terminated employees entitled to but not currently receiving benefits (Deferred):							
General	26	449	117	508	-	-	1,100
Safety	1	30	-	36	-	-	67
Probation	-	20	-	25	-	-	45
Subtotal	27	499	117	569	-	-	1,212
Current employees:							
Vested:							
General	49	994	72	2,207	-	-	3,322
Safety	4	114	-	219	-	-	337
Probation	1	70	-	202	-	-	273
Non-Vested:							
General	-	1	67	817	154	-	1,039
Safety	-	-	-	84	14	-	98
Probation	-	-	-	22	3	1	26
Subtotal	54	1,179	139	3,551	171	1	5,095
Total SamCERA Membership	2,348	3,339	366	4,357	171	1	10,582

San Mateo County Employees' Retirement Association

Exhibit 20: Summary of Active Member Valuation Data

Valuation Date		Members	Annual Salary	Average Annual Salary	% Change Average Salary
2003	General	4,213	\$267,150,000	\$63,408	5.3%
	Safety	434	\$37,973,000	\$87,492	9.6%
	Probation	290	\$18,773,000	\$64,740	6.5%
	Total	4,937	\$323,896,000	\$65,964	5.9%
2004	General	4,487	\$303,786,879	\$67,700	6.8%
	Safety	411	\$40,796,852	\$99,202	13.4%
	Probation	288	\$20,800,813	\$72,225	11.6%
	Total	5,186	\$365,384,544	\$70,448	6.8%
2005	General	4,411	\$304,289,437	\$68,984	1.8%
	Safety	409	\$39,999,593	\$97,799	-1.4%
	Probation	278	\$20,123,863	\$72,388	0.2%
	Total	5,098	\$364,412,893	\$71,482	1.4%
2006*	General	4,614	\$312,934,324	\$67,823	-1.7%
	Safety	428	\$41,407,772	\$96,747	-1.1%
	Probation	313	\$22,009,210	\$70,317	-1.6%
	Total	5,355	\$376,351,306	\$70,280	-1.7%
2007	General	4,767	\$346,319,017	\$72,649	7.1%
	Safety	443	\$45,386,411	\$102,452	5.9%
	Probation	329	\$24,364,268	\$74,056	5.3%
	Total	5,539	\$416,069,696	\$75,116	6.9%
2008	General	4,743	\$353,518,525	\$74,535	2.6%
	Safety	432	\$46,326,906	\$107,238	4.7%
	Probation	325	\$24,741,003	\$76,126	2.8%
	Total	5,500	\$424,586,434	\$77,198	2.8%
2009	General	4,777	\$370,760,830	\$77,614	4.1%
	Safety	436	\$48,120,081	\$110,367	2.9%
	Probation	330	\$26,270,802	\$79,608	4.6%
	Total	5,543	\$445,151,713	\$80,309	4.0%
2010	General	4,609	\$363,305,740	\$78,825	1.6%
	Safety	425	\$48,576,912	\$114,299	3.6%
	Probation	313	\$25,247,595	\$80,663	1.3%
	Total	5,347	\$437,130,248	\$81,752	1.8%
2011	General	4,494	\$355,876,715	\$79,189	0.5%
	Safety	446	\$52,073,940	\$116,758	2.2%
	Probation	305	\$24,591,392	\$80,628	0.0%
	Total	5,245	\$432,542,046	\$82,468	0.9%
2012	General	4,361	\$351,965,689	\$80,708	1.9%
	Safety	435	\$51,129,267	\$117,539	0.7%
	Probation	299	\$24,554,583	\$82,122	1.9%
	Total	5,095	\$427,649,539	\$83,935	1.8%

*Numbers prior to 2006 were reported on a different basis.

San Mateo County Employees' Retirement Association

Exhibit 21: Summary of Demographic Activity of Retirees and Beneficiaries

Year Ended	Added to Rolls ⁽¹⁾		Removed from Rolls		Rolls end of year		% Increase in Payroll	Average Monthly Allowances
	No.	Annual Allowances in Thousands	No.	Annual Allowances in Thousands	No. ⁽²⁾	Total Retiree Payroll in Thousands		
June 30, 2003	128	\$ N/A	115	\$ N/A	3,322	\$ 69,451	3.7 %	\$ 1,676
June 30, 2004	193	N/A	120	N/A	3,539	75,943	8.7	1,778
June 30, 2005	238	N/A	95	N/A	3,682	84,183	11.5	1,905
June 30, 2006	206	N/A	112	N/A	3,613	91,006	8.1	2,099
June 30, 2007	155	N/A	74	N/A	3,694	98,790	8.6	2,229
June 30, 2008	218	N/A	70	N/A	3,842	109,616	11.0	2,378
June 30, 2009	159	12,717	66	3,281	3,935	119,052	8.6	2,521
June 30, 2010	163	9,076	96	3,240	4,002	124,888	4.9	2,601
June 30, 2011 ⁽³⁾	209	12,703	64	2,916	4,147	134,675	7.8	2,706
June 30, 2012	218	14,379	90	4,209	4,275	144,845	7.6	2,823

⁽¹⁾ Amount added to rolls includes COLAs granted in year to continuing retirees and beneficiaries.

⁽²⁾ For 6/30/2004 and 6/30/2005, retirees/beneficiaries who are entitled to multiple benefits are counted more than once. Starting 6/30/2006, the counts reflect only one benefit per retiree.

⁽³⁾ Revised from June 30, 2011 valuation for corrections.

**San Mateo County Employees'
Retirement Association**

Exhibit 22: Average Salary and Active Counts by Employer

**Schedule of Average Monthly Salary of Active Members*
(By Plan and Membership Type)**

	2012	2011	2010	2009	2008
General Plan 1	\$7,843	\$7,630	\$7,543	\$7,534	\$7,252
General Plan 2	\$7,340	\$7,208	\$7,193	\$7,120	\$6,872
General Plan 3	\$6,138	\$5,968	\$5,818	\$5,791	\$5,619
General Plan 4	\$6,580	\$6,398	\$6,348	\$6,212	\$5,914
General Plan 5	\$5,799	N/A	N/A	N/A	N/A
General Plan Total	\$6,726	\$6,599	\$6,569	\$6,468	\$6,211
Safety Plan 1	\$12,624	\$12,073	\$11,578	\$10,889	\$11,113
Safety Plan 2	\$10,892	\$10,789	\$10,548	\$10,135	\$9,612
Safety Plan 4	\$9,351	\$9,230	\$8,931	\$8,610	\$8,349
Safety Plan 5	\$9,667	N/A	N/A	N/A	N/A
Safety Plan 6	N/A	N/A	N/A	N/A	N/A
Safety Plan Total	\$9,795	\$9,730	\$9,525	\$9,197	\$8,937
Probation Plan 1	\$6,618	\$7,533	\$8,922	\$9,751	\$9,791
Probation Plan 2	\$7,454	\$7,349	\$7,393	\$7,341	\$6,960
Probation Plan 4	\$6,686	\$6,505	\$6,456	\$6,291	\$5,978
Probation Plan 5	\$4,949	N/A	N/A	N/A	N/A
Probation Plan 6	\$5,239	N/A	N/A	N/A	N/A
Probation Plan Total	\$6,844	\$6,719	\$6,722	\$6,634	\$6,344
Grand Total	\$6,995	\$6,872	\$6,813	\$6,692	\$6,433

* Numbers prior to 2006 were reported on a different basis.

Participating Employers and Active Members

	2012	2011	2010	2009	2008
--	------	------	------	------	------

*County of San Mateo**

General Members	4,078	4,476	4,589	4,758	4,718
Safety Members	435	446	425	436	432
Probation Members	299	305	313	330	325
Total	4,812	5,227	5,327	5,524	5,475

Mosquito and Vector

General Members Total	15	18	20	19	25
-----------------------	----	----	----	----	----

*Courts**

General Members Total	268	N/A	N/A	N/A	N/A
-----------------------	-----	-----	-----	-----	-----

Total Active Membership	5,095	5,245	5,347	5,543	5,500
-------------------------	-------	-------	-------	-------	-------

* Courts not split out for years prior to 2012. County of San Mateo counts exclude Courts in 2012.

San Mateo County Employees' Retirement Association

Exhibit 23: Summary of Retired and Inactive Benefits

Retired Members	2012	2011	2010	2009	2008
Service Retirement					
Number	3,355	3,242	3,108	3,032	2,958
Annual Allowance					
Basic Only	\$ 94,234,000	\$ 87,254,000	\$ 79,007,000	\$ 73,038,000	\$ 66,704,000
COLA	\$ 24,748,000	\$ 23,212,000	\$ 22,542,000	\$ 22,964,000	\$ 21,289,000
Total	\$ 118,982,000	\$ 110,466,000	\$ 101,549,000	\$ 96,002,000	\$ 87,993,000
Average Monthly Payment	\$ 2,955	\$ 2,839	\$ 2,723	\$ 2,639	\$ 2,479
Disability Retirement					
Number	374	370	365	369	361
Annual Allowance					
Basic Only	\$ 9,909,000	\$ 9,414,000	\$ 8,988,000	\$ 8,722,000	\$ 8,214,000
COLA	\$ 3,225,000	\$ 3,005,000	\$ 2,926,000	\$ 3,070,000	\$ 2,847,000
Total	\$ 13,134,000	\$ 12,419,000	\$ 11,914,000	\$ 11,792,000	\$ 11,061,000
Average Monthly Payment	\$ 2,927	\$ 2,797	\$ 2,720	\$ 2,663	\$ 2,553
Beneficiaries					
Number	546	535	529	534	523
Annual Allowance					
Basic Only	\$ 7,235,000	\$ 6,672,000	\$ 6,309,000	\$ 6,052,000	\$ 5,757,000
COLA	\$ 5,494,000	\$ 5,118,000	\$ 5,116,000	\$ 5,206,000	\$ 4,805,000
Total	\$ 12,729,000	\$ 11,790,000	\$ 11,425,000	\$ 11,258,000	\$ 10,562,000
Average Monthly Payment	\$ 1,943	\$ 1,836	\$ 1,800	\$ 1,757	\$ 1,683
Total Retired Members					
Number	4,275	4,147	4,002	3,935	3,842
Annual Allowance					
Basic Only	\$ 111,378,000	\$ 103,340,000	\$ 94,304,000	\$ 87,812,000	\$ 80,675,000
COLA	\$ 33,467,000	\$ 31,335,000	\$ 30,584,000	\$ 31,240,000	\$ 28,941,000
Total	\$ 144,845,000	\$ 134,675,000	\$ 124,888,000	\$ 119,052,000	\$ 109,616,000
Average Monthly Payment	\$ 2,823	\$ 2,706	\$ 2,601	\$ 2,521	\$ 2,378
Inactive Members	1,212	1,190	1,207	1,230	1,225

The data in the table above originates from PensionGold, SamCERA's retirement benefit administration system.

San Mateo County Employees' Retirement Association

Exhibit 24a: Summary of Assumptions

Assumptions & Methods for Most Recent Actuarial Valuation

Actuarial Methods	
Valuation Date	June 30, 2012
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Payroll
Remaining Amortization Period	Original unfunded amount (UAAL) as of June 30, 2008 is amortized over 15 years as of the valuation date. Future actuarial gains and losses are amortized over new 15-year periods (including the change in UAAL as of June 30, 2012). This is referred to as 15-year layered amortization.
Asset Valuation Method	5-year smoothed market with 20% corridor
Actuarial Assumptions	
Rate of Investment Return	7.50%
Price Inflation (CPI)	3.25%
Payroll Increases	3.75%
Average Projected Salary Increases	4.95%
Attributable to Wage Inflation	3.75%
Attributable to Merit and Longevity	1.20% (actual rates vary by service)
Sample Rates of Separation	Shown on following page
Additional Assumptions	Shown in Appendix A

San Mateo County Employees' Retirement Association

Exhibit 24b: Summary of Assumptions

Probability of Separation During Active Service

Years of Service	Other Terminations		Age	Disability		Death while Active		Service Retirement
	Ordinary	Vested		Ordinary	Service	Ordinary	Service	
General Plan 1, 2, 4, & 5 Male Members								
0	0.1300	0.0000	20	0.0002	0.0004	0.0003	0.0000	0.0000
5	0.0285	0.0348	30	0.0003	0.0004	0.0004	0.0000	0.0000
10	0.0172	0.0238	40	0.0006	0.0010	0.0009	0.0000	0.0000
15	0.0099	0.0191	50	0.0010	0.0016	0.0017	0.0000	0.0500
20	0.0040	0.0150	60	0.0015	0.0022	0.0036	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 1, 2, 4 & 5 Female Members								
0	0.1200	0.0000	20	0.0002	0.0003	0.0002	0.0000	0.0000
5	0.0285	0.0348	30	0.0002	0.0004	0.0002	0.0000	0.0000
10	0.0153	0.0212	40	0.0004	0.0007	0.0006	0.0000	0.0000
15	0.0088	0.0172	50	0.0012	0.0017	0.0013	0.0000	0.0400
20	0.0040	0.0150	60	0.0019	0.0029	0.0030	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Male Members								
0	0.1300	0.0000	20	0.0000	0.0000	0.0003	0.0000	0.0000
5	0.0285	0.0348	30	0.0000	0.0000	0.0004	0.0000	0.0000
10	0.0172	0.0238	40	0.0000	0.0000	0.0009	0.0000	0.0000
15	0.0099	0.0191	50	0.0000	0.0000	0.0017	0.0000	0.0000
20	0.0040	0.0150	60	0.0000	0.0000	0.0036	0.0000	0.0300
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
General Plan 3 Female Members								
0	0.1200	0.0000	20	0.0000	0.0000	0.0002	0.0000	0.0000
5	0.0285	0.0348	30	0.0000	0.0000	0.0002	0.0000	0.0000
10	0.0153	0.0212	40	0.0000	0.0000	0.0006	0.0000	0.0000
15	0.0088	0.0172	50	0.0000	0.0000	0.0013	0.0000	0.0000
20	0.0040	0.0150	60	0.0000	0.0000	0.0030	0.0000	0.0400
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 1, 2, 4, & 5 Male Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0003	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0018	0.0004	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0028	0.0009	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0044	0.0017	0.0010	0.1500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0036	0.0010	1.0000
			70	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 1, 2, 4, & 5 Female Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0002	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0018	0.0003	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0028	0.0007	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0044	0.0017	0.0010	0.1500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0039	0.0010	1.0000
			70	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 6 Male Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0003	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0018	0.0004	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0028	0.0009	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0044	0.0017	0.0010	0.0500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0036	0.0010	1.0000
			70	0.0000	0.0000	0.0000	0.0000	1.0000
Safety and Probation Plan 6 Female Members								
0	0.0700	0.0000	20	0.0000	0.0015	0.0002	0.0010	0.0000
5	0.0082	0.0151	30	0.0000	0.0018	0.0003	0.0010	0.0000
10	0.0050	0.0105	40	0.0000	0.0028	0.0007	0.0010	0.0000
15	0.0016	0.0094	50	0.0000	0.0044	0.0017	0.0010	0.0500
20 & Above	0.0000	0.0000	60	0.0000	0.0000	0.0039	0.0010	1.0000
			70	0.0000	0.0000	0.0000	0.0000	1.0000

This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Appendix A: Actuarial Procedures and Assumptions



The actuarial procedures and assumptions used in the valuation are described in this section. The demographic assumptions were reviewed and changed as a result of the 2011 Investigation of Experience Study. New economic assumptions were adopted for use in the 2012 actuarial valuation.

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 present 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 from Plan 3 to another General plan, entry age is based on the transfer date.

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 as of June 30, 2008 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, 2023. This is commonly referred to as a "closed amortization method". Actuarial gains and losses after the June 30, 2008 valuation are amortized over new closed 15-year periods from their respective valuation dates.

Beginning with the June 30, 2010 actuarial valuation, the San Mateo County Mosquito and Vector Control District adopted the same "enhanced" benefit formula that applies to Plan 1, 2 & 4 County General members and the same member rates currently being paid by County General members from those plans. However, because the Mosquito and Vector Control District does not participate in cost sharing on the member rates, it will have a separate normal cost rate and expected member contribution rate from the County General group.

The normal cost rate is calculated separately for County General and for the Mosquito and Vector Control District. These normal cost rates will differ from each other for two reasons:

- 1) The demographics within the two groups will vary (specifically, the groups will have different average entry ages), and
- 2) The expected refund of contributions, which is a component of the normal cost, will differ between the County and the Mosquito and Vector Control District, since the District does not participate in cost sharing on the member rates.

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 <i>SamCERA</i> 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 <i>SamCERA</i> 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.
Employer Contributions	The employer 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 7.50% compounded annually, net of both investment and administrative expenses. This rate was adopted effective June 30, 2012.

Postretirement Benefit Increases

Postretirement increases are described in Appendix B. Assumed increases for valuation purposes are:

	General	Safety	Probation
Plan 1	3.25%	3.25%	2.90%
Plan 2	2.65%	2.65%	2.65%
Plan 3	0.00%	N/A	N/A
Plan 4	1.90%	1.90%	1.90%

Assumed Plan 1 General and Safety COLAs are set at the inflation (CPI) assumption of 3.75% 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 7.50% compounded semi-annually for an annualized rate of 7.64%. This rate was adopted effective June 30, 2012 for valuation purposes, although the change in member crediting is not effective until July 1, 2013.

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 3.75% per annum rate of increase in the general wage level of the membership.

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 recent 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 3.25% per year. Note, statutory provisions describe how to compute 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, except Plans 5 and 6)
- Age 55 with 33 years of service (Safety & Probation Plan 5)
- Age 55 with 38 years of service (Safety & Probation Plan 6)

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)

The retirement rates were adopted June 30, 2011.

Disablement

The rates of disablement used in the valuation are also illustrated in Tables A-6 through A-11.

The disability rates were adopted June 30, 2011.

Mortality – Other Than Disabled Members

The same postretirement 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 as for healthy members. Beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members.

General Males RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers. Ages are set back three years.

Safety Males Same as General.

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

Safety Females Same as General.

The rates of retired mortality were adopted June 30, 2011.

Mortality – Disabled Members

For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3.

<i>General Males</i>	Average of RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Males, both set back three years.
<i>Safety Males</i>	RP-2000 Healthy Combined Mortality Table for Males with adjustment for White Collar workers (minimum is 1.0%).
<i>General Females</i>	Average of RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers and the RP-2000 Disabled Annuitant Mortality Table for Females, both set back three years.
<i>Safety Females</i>	RP-2000 Healthy Combined Mortality Table for Females with adjustment for White Collar workers (minimum is 1.0%).

The rates of mortality were adopted June 30, 2011.

Other Employment Terminations

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.

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.

The rates of termination were adopted June 30, 2011.

Probability of Refund

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.

The probability of refund assumptions were adopted June 30, 2011.

Probability of Eligible Survivor

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.

Valuation of Current Deferred Members

Current non-vested members who have terminated active employment are assumed to take a refund of their contributions.

Current vested members who have terminated active employment are assumed to keep their accounts with *SamCERA* and retire as specified in this section. An adjustment is made to the salary data provided for these individuals, as it is our understanding that the salary data may not be complete in many cases. The adjustment is based on the average pay for all members of the active group divided by average pay for the deferred group. The average pay for the active group is based on the average pay over the last five-year period using the information supplied in the CAFR.

Reciprocal Benefits

35% of future deferred vested General members and 45% of future deferred vested Safety members are assumed to immediately join a reciprocal agency. For future reciprocal members, salaries are assumed to increase at the same rate as if they had remained in active employment with *SamCERA*. For current deferred vested members, eligibility is based on the data supplied by *SamCERA* and future salaries are assumed to increase at 4.27% annually.

Part-Time Employees

For valuation purposes, part-time employees are assumed to continue working the same number of hours in the future.

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:

- A. The 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 an 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 7.50%.

**Member Contribution
Rate Assumptions
(continued)**

- 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 salary for age 54.

- D. For purposes of calculating the value of the member's future contribution, interest is assumed to be credited at 7.50% semiannually (7.64% 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.
- F. Member Rates for members of the California Nurses Association in Plans 1, 2, and 4 are loaded to account for a 25% COLA share. The COLA loads are applied to the otherwise applicable basic member rates, prior to the addition of cost-sharing. The loads were determined based on 2012 information and were applied as follows:

Plan 1 CNA members: 20.87% load
Plan 2 CNA members: 16.40% load
Plan 4 CNA members: 11.18% load

- G. Member rates for members in Plans 5 and 6 are loaded to account for 50% COLA share. The COLA loads are applied to the otherwise applicable basic member rates, prior to the addition of cost-sharing where applicable. The loads were determined based on 2012 information and were applied as follows:

Plan 5 General members: 21.30% load

Plan 5 Probation members: 37.02% load
Plan 6 Probation members: 33.36% load

Plan 5 Safety members: 30.07% load
Plan 6 Safety members: 26.88% load

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

San Mateo County Employees' Retirement Association

Table A-1: Summary of Valuation Assumptions as of June 30, 2012

I.	Economic assumptions	
	A. General wage increases	3.75%
	B. Investment earnings	7.50%
	C. Growth in active membership	0.00%
	D. CPI inflation assumption	3.25%
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 prior to termination*	Tables A-6 to A-11

Basis-- RP-2000 Employees Table with age adjustments:

<u>Class of Members</u>	<u>Age Adjustment</u>
General – Males	-3 years
General – Females	-3 years
Safety – Males	-3 years
Safety – Females	-3 years

E.	Mortality for active members after termination and service retired members*	Table A-2
----	---	-----------

Basis – RP-2000 Healthy Combined Mortality Table with adjustment for White Collar workers:

<u>Class of Members</u>	<u>Age Adjustment</u>
General – Males	-3 years
General – Females	-3 years
Safety – Males	-3 years
Safety – Females	-3 years

**Table A-1: Summary of Valuation Assumptions as of June 30, 2012
(continued)**

F. Mortality among disabled members* Table A-3

Basis – Average of RP-2000 Healthy Combined Mortality Table with adjustment for White Collar workers and RP-2000 Disabled Annuitant Mortality Table:

<u>Class of Members</u>	<u>Age Adjustment</u>	<u>Minimum Rate</u>
General – Males	-3 years	None
General – Females	-3 years	None

Basis – RP-2000 Healthy Combined Mortality Table with adjustment for White Collar workers:

<u>Class of Members</u>	<u>Age Adjustment</u>	<u>Minimum Rate</u>
Safety – Males	none	1.00%
Safety – Females	none	0.40%

G. Mortality for beneficiaries* Table A-2

Basis – Beneficiaries are assumed to be of the opposite sex and have the same mortality as General members.

H. Other terminations of employment Tables A-6 to A-11

I. Refund of contributions on vested termination Table A-4

* *The current mortality assumptions contain a margin to account for expected future mortality improvement. Refer to the 2011 Investigation of Experience Report for details.*

San Mateo County Employees' Retirement Association

Table A-2: Mortality for Members Retired for Service

Age	General Male	General Female	Safety Male	Safety Female
20	0.030%	0.018%	0.030%	0.018%
25	0.037%	0.019%	0.037%	0.019%
30	0.038%	0.022%	0.038%	0.022%
35	0.043%	0.036%	0.043%	0.036%
40	0.071%	0.053%	0.071%	0.053%
45	0.103%	0.076%	0.103%	0.076%
50	0.158%	0.123%	0.158%	0.123%
55	0.250%	0.192%	0.250%	0.192%
60	0.409%	0.332%	0.409%	0.332%
65	0.731%	0.599%	0.731%	0.599%
70	1.404%	1.094%	1.404%	1.094%
75	2.387%	1.878%	2.387%	1.878%
80	4.236%	3.155%	4.236%	3.155%
85	7.493%	5.337%	7.493%	5.337%
90	13.019%	9.248%	13.019%	9.248%

**San Mateo County Employees'
Retirement Association**

Table A-3: Mortality for Members Retired for Disability

Age	General Male	General Female	Safety Male	Safety Female
20	1.144%	0.382%	1.000%	0.400%
25	1.147%	0.382%	1.000%	0.400%
30	1.148%	0.384%	1.000%	0.400%
35	1.150%	0.391%	1.000%	0.400%
40	1.164%	0.399%	1.000%	0.400%
45	1.180%	0.411%	1.000%	0.400%
50	1.335%	0.509%	1.000%	0.400%
55	1.703%	0.769%	1.000%	0.400%
60	2.106%	1.099%	1.000%	0.468%
65	2.615%	1.503%	1.106%	0.865%
70	3.424%	2.114%	1.928%	1.519%
75	4.664%	3.082%	3.363%	2.572%
80	6.725%	4.555%	5.941%	4.308%
85	9.840%	6.783%	10.467%	7.419%
90	14.271%	10.350%	17.827%	12.615%

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	45%	35%
6	45%	35%
7	45%	35%
8	44%	34%
9	43%	33%
10	42%	32%
11	41%	31%
12	40%	30%
13	38%	25%
14	36%	20%
15	34%	15%
16	32%	10%
17	30%	5%
18	27%	4%
19	24%	3%
20	21%	0%
21	18%	0%
22	15%	0%
23	12%	0%
24	9%	0%
25	6%	0%
26	3%	0%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

San Mateo County Employees' Retirement Association

Table A-5: Annual Increase in Salary

Years of Service	Due to Promotion and Longevity	Total Annual Increase*
<1	6.00%	9.97%
1	4.00%	7.90%
2	3.00%	6.86%
3	2.50%	6.34%
4	2.00%	5.82%
5	1.75%	5.57%
6	1.50%	5.31%
7	1.25%	5.05%
8	1.05%	4.84%
9	0.90%	4.68%
10	0.80%	4.58%
11	0.70%	4.48%
12	0.60%	4.37%
13	0.50%	4.27%
14	0.50%	4.27%
15	0.50%	4.27%
16	0.50%	4.27%
17	0.50%	4.27%
18	0.50%	4.27%
19	0.50%	4.27%
20 or More	0.50%	4.27%

** The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed 3.75% 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 & 5 Males	A-10: Safety and Probation Plans 1, 2, 4, 5, & 6 Males
A-7: General Plan 1, 2, 4 & 5 Females	A-11: Safety and Probation Plans 1, 2, 4, 5, & 6 Females
A-8: General Plan 3 Males	
A-9: General Plan 3 Females	

San Mateo County Employees' Retirement Association

**Table A-6: Rate of Separation From Active Service
General Plans 1, 2, 4 & 5 – Male**

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0004	0.0002	N/A	0.0003	0	0.1300
19	0.0000	0.0004	0.0002	N/A	0.0003	1	0.1100
20	0.0000	0.0004	0.0002	N/A	0.0003	2	0.0900
21	0.0000	0.0004	0.0002	N/A	0.0003	3	0.0800
22	0.0000	0.0004	0.0002	N/A	0.0003	4	0.0700
23	0.0000	0.0004	0.0002	N/A	0.0003	5	0.0633
24	0.0000	0.0004	0.0002	N/A	0.0004	6	0.0567
25	0.0000	0.0004	0.0002	N/A	0.0004	7	0.0500
26	0.0000	0.0004	0.0002	N/A	0.0004	8	0.0470
27	0.0000	0.0004	0.0002	N/A	0.0004	9	0.0440
28	0.0000	0.0004	0.0002	N/A	0.0004	10	0.0410
29	0.0000	0.0004	0.0003	N/A	0.0004	11	0.0380
30	0.0000	0.0004	0.0003	N/A	0.0004	12	0.0350
31	0.0000	0.0005	0.0003	N/A	0.0004	13	0.0330
32	0.0000	0.0005	0.0003	N/A	0.0004	14	0.0310
33	0.0000	0.0005	0.0004	N/A	0.0004	15	0.0290
34	0.0000	0.0006	0.0004	N/A	0.0005	16	0.0270
35	0.0000	0.0006	0.0004	N/A	0.0006	17	0.0250
36	0.0000	0.0007	0.0004	N/A	0.0006	18	0.0230
37	0.0000	0.0007	0.0005	N/A	0.0007	19	0.0210
38	0.0000	0.0008	0.0005	N/A	0.0008	20	0.0190
39	0.0000	0.0008	0.0006	N/A	0.0008	21	0.0170
40	0.0000	0.0010	0.0006	N/A	0.0009	22	0.0150
41	0.0000	0.0010	0.0007	N/A	0.0010	23	0.0140
42	0.0000	0.0011	0.0007	N/A	0.0010	24	0.0130
43	0.0000	0.0011	0.0008	N/A	0.0011	25	0.0120
44	0.0000	0.0012	0.0008	N/A	0.0011	26	0.0110
45	0.0000	0.0013	0.0009	N/A	0.0012	27	0.0100
46	0.0000	0.0014	0.0009	N/A	0.0013	28	0.0100
47	0.0000	0.0014	0.0010	N/A	0.0014	29	0.0100
48	0.0000	0.0015	0.0010	N/A	0.0015	30 & Above	0.0000
49	0.0000	0.0016	0.0010	N/A	0.0016		
50	0.0500	0.0016	0.0010	N/A	0.0017		
51	0.0450	0.0016	0.0011	N/A	0.0019		
52	0.0450	0.0017	0.0011	N/A	0.0020		
53	0.0500	0.0017	0.0012	N/A	0.0021		
54	0.0500	0.0018	0.0012	N/A	0.0023		
55	0.0600	0.0018	0.0012	N/A	0.0024		
56	0.0600	0.0019	0.0012	N/A	0.0026		
57	0.0800	0.0019	0.0013	N/A	0.0028		
58	0.1200	0.0020	0.0014	N/A	0.0030		
59	0.1200	0.0021	0.0014	N/A	0.0033		
60	0.1500	0.0022	0.0015	N/A	0.0036		
61	0.2000	0.0023	0.0015	N/A	0.0040		
62	0.3250	0.0024	0.0016	N/A	0.0044		
63	0.2500	0.0025	0.0017	N/A	0.0049		
64	0.2500	0.0026	0.0018	N/A	0.0054		
65	0.2500	0.0028	0.0018	N/A	0.0059		
66	0.3500	0.0029	0.0019	N/A	0.0065		
67	0.3500	0.0030	0.0020	N/A	0.0070		
68	0.3000	0.0031	0.0021	N/A	0.0076		
69	0.3000	0.0032	0.0022	N/A	0.0081		
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.



This work product was prepared solely for SamCera for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Table A-7: Rate of Separation From Active Service
General Plans 1, 2, 4 & 5 – Female**

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0003	0.0002	N/A	0.0002	0	0.1200
19	0.0000	0.0003	0.0002	N/A	0.0002	1	0.1000
20	0.0000	0.0003	0.0002	N/A	0.0002	2	0.0850
21	0.0000	0.0003	0.0002	N/A	0.0002	3	0.0750
22	0.0000	0.0003	0.0002	N/A	0.0002	4	0.0700
23	0.0000	0.0003	0.0002	N/A	0.0002	5	0.0633
24	0.0000	0.0003	0.0002	N/A	0.0002	6	0.0567
25	0.0000	0.0003	0.0002	N/A	0.0002	7	0.0500
26	0.0000	0.0003	0.0002	N/A	0.0002	8	0.0455
27	0.0000	0.0003	0.0002	N/A	0.0002	9	0.0410
28	0.0000	0.0003	0.0002	N/A	0.0002	10	0.0365
29	0.0000	0.0003	0.0002	N/A	0.0002	11	0.0320
30	0.0000	0.0004	0.0002	N/A	0.0002	12	0.0275
31	0.0000	0.0004	0.0002	N/A	0.0002	13	0.0270
32	0.0000	0.0004	0.0002	N/A	0.0002	14	0.0265
33	0.0000	0.0004	0.0003	N/A	0.0003	15	0.0260
34	0.0000	0.0004	0.0003	N/A	0.0003	16	0.0255
35	0.0000	0.0005	0.0003	N/A	0.0003	17	0.0250
36	0.0000	0.0005	0.0003	N/A	0.0004	18	0.0230
37	0.0000	0.0005	0.0004	N/A	0.0004	19	0.0210
38	0.0000	0.0006	0.0004	N/A	0.0005	20	0.0190
39	0.0000	0.0006	0.0004	N/A	0.0005	21	0.0170
40	0.0000	0.0007	0.0004	N/A	0.0006	22	0.0150
41	0.0000	0.0007	0.0004	N/A	0.0006	23	0.0140
42	0.0000	0.0007	0.0005	N/A	0.0006	24	0.0130
43	0.0000	0.0008	0.0005	N/A	0.0007	25	0.0120
44	0.0000	0.0008	0.0006	N/A	0.0008	26	0.0110
45	0.0000	0.0010	0.0006	N/A	0.0009	27	0.0100
46	0.0000	0.0010	0.0007	N/A	0.0009	28	0.0100
47	0.0000	0.0011	0.0007	N/A	0.0010	29	0.0100
48	0.0000	0.0013	0.0009	N/A	0.0011	30 & Above	0.0000
49	0.0000	0.0015	0.0010	N/A	0.0012		
50	0.0400	0.0017	0.0012	N/A	0.0013		
51	0.0400	0.0019	0.0013	N/A	0.0014		
52	0.0400	0.0022	0.0014	N/A	0.0016		
53	0.0400	0.0023	0.0015	N/A	0.0017		
54	0.0500	0.0023	0.0016	N/A	0.0018		
55	0.0600	0.0025	0.0016	N/A	0.0020		
56	0.0600	0.0025	0.0017	N/A	0.0021		
57	0.0800	0.0026	0.0018	N/A	0.0023		
58	0.1200	0.0027	0.0018	N/A	0.0025		
59	0.1200	0.0028	0.0018	N/A	0.0028		
60	0.1500	0.0029	0.0019	N/A	0.0030		
61	0.2000	0.0029	0.0020	N/A	0.0033		
62	0.3000	0.0030	0.0020	N/A	0.0036		
63	0.2500	0.0030	0.0020	N/A	0.0039		
64	0.2500	0.0030	0.0020	N/A	0.0043		
65	0.3000	0.0030	0.0020	N/A	0.0047		
66	0.4000	0.0030	0.0020	N/A	0.0050		
67	0.4000	0.0030	0.0020	N/A	0.0054		
68	0.3000	0.0030	0.0020	N/A	0.0058		
69	0.3000	0.0030	0.0020	N/A	0.0062		
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**

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	0.0004	6	0.0567
25	0.0000	N/A	N/A	N/A	0.0004	7	0.0500
26	0.0000	N/A	N/A	N/A	0.0004	8	0.0470
27	0.0000	N/A	N/A	N/A	0.0004	9	0.0440
28	0.0000	N/A	N/A	N/A	0.0004	10	0.0410
29	0.0000	N/A	N/A	N/A	0.0004	11	0.0380
30	0.0000	N/A	N/A	N/A	0.0004	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	0.0004	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	0.0006	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	0.0007	19	0.0210
38	0.0000	N/A	N/A	N/A	0.0008	20	0.0190
39	0.0000	N/A	N/A	N/A	0.0008	21	0.0170
40	0.0000	N/A	N/A	N/A	0.0009	22	0.0150
41	0.0000	N/A	N/A	N/A	0.0010	23	0.0140
42	0.0000	N/A	N/A	N/A	0.0010	24	0.0130
43	0.0000	N/A	N/A	N/A	0.0011	25	0.0120
44	0.0000	N/A	N/A	N/A	0.0011	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	0.0013	28	0.0100
47	0.0000	N/A	N/A	N/A	0.0014	29	0.0100
48	0.0000	N/A	N/A	N/A	0.0015	30 & Above	0.0100
49	0.0000	N/A	N/A	N/A	0.0016		
50	0.0000	N/A	N/A	N/A	0.0017		
51	0.0000	N/A	N/A	N/A	0.0019		
52	0.0000	N/A	N/A	N/A	0.0020		
53	0.0000	N/A	N/A	N/A	0.0021		
54	0.0000	N/A	N/A	N/A	0.0023		
55	0.0300	N/A	N/A	N/A	0.0024		
56	0.0300	N/A	N/A	N/A	0.0026		
57	0.0300	N/A	N/A	N/A	0.0028		
58	0.0300	N/A	N/A	N/A	0.0030		
59	0.0300	N/A	N/A	N/A	0.0033		
60	0.0300	N/A	N/A	N/A	0.0036		
61	0.0600	N/A	N/A	N/A	0.0040		
62	0.1500	N/A	N/A	N/A	0.0044		
63	0.1000	N/A	N/A	N/A	0.0049		
64	0.1500	N/A	N/A	N/A	0.0054		
65	0.3000	N/A	N/A	N/A	0.0059		
66	0.3000	N/A	N/A	N/A	0.0065		
67	0.3000	N/A	N/A	N/A	0.0070		
68	0.3000	N/A	N/A	N/A	0.0076		
69	0.3000	N/A	N/A	N/A	0.0081		
70	1.0000	N/A	N/A	N/A	0.0000		

This work product was prepared solely for *SamCera* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



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	0.0002	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	0.0700
23	0.0000	N/A	N/A	N/A	0.0002	5	0.0633
24	0.0000	N/A	N/A	N/A	0.0002	6	0.0567
25	0.0000	N/A	N/A	N/A	0.0002	7	0.0500
26	0.0000	N/A	N/A	N/A	0.0002	8	0.0455
27	0.0000	N/A	N/A	N/A	0.0002	9	0.0410
28	0.0000	N/A	N/A	N/A	0.0002	10	0.0365
29	0.0000	N/A	N/A	N/A	0.0002	11	0.0320
30	0.0000	N/A	N/A	N/A	0.0002	12	0.0275
31	0.0000	N/A	N/A	N/A	0.0002	13	0.0270
32	0.0000	N/A	N/A	N/A	0.0002	14	0.0265
33	0.0000	N/A	N/A	N/A	0.0003	15	0.0260
34	0.0000	N/A	N/A	N/A	0.0003	16	0.0255
35	0.0000	N/A	N/A	N/A	0.0003	17	0.0250
36	0.0000	N/A	N/A	N/A	0.0004	18	0.0230
37	0.0000	N/A	N/A	N/A	0.0004	19	0.0210
38	0.0000	N/A	N/A	N/A	0.0005	20	0.0190
39	0.0000	N/A	N/A	N/A	0.0005	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	0.0006	23	0.0140
42	0.0000	N/A	N/A	N/A	0.0006	24	0.0130
43	0.0000	N/A	N/A	N/A	0.0007	25	0.0120
44	0.0000	N/A	N/A	N/A	0.0008	26	0.0110
45	0.0000	N/A	N/A	N/A	0.0009	27	0.0100
46	0.0000	N/A	N/A	N/A	0.0009	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	0.0016		
53	0.0000	N/A	N/A	N/A	0.0017		
54	0.0000	N/A	N/A	N/A	0.0018		
55	0.0400	N/A	N/A	N/A	0.0020		
56	0.0400	N/A	N/A	N/A	0.0021		
57	0.0400	N/A	N/A	N/A	0.0023		
58	0.0400	N/A	N/A	N/A	0.0025		
59	0.0400	N/A	N/A	N/A	0.0028		
60	0.0400	N/A	N/A	N/A	0.0030		
61	0.0600	N/A	N/A	N/A	0.0033		
62	0.1500	N/A	N/A	N/A	0.0036		
63	0.1000	N/A	N/A	N/A	0.0039		
64	0.1500	N/A	N/A	N/A	0.0043		
65	0.3000	N/A	N/A	N/A	0.0047		
66	0.3000	N/A	N/A	N/A	0.0050		
67	0.3000	N/A	N/A	N/A	0.0054		
68	0.3000	N/A	N/A	N/A	0.0058		
69	0.3000	N/A	N/A	N/A	0.0062		
70	1.0000	N/A	N/A	N/A	0.0000		

This work product was prepared solely for SamCera for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



San Mateo County Employees' Retirement Association

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

Age	Plans 1, 2, 4 Service Retirement*	Plans 5, 6 Service Retirement**	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	0	0.0700
19	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	1	0.0650
20	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	2	0.0450
21	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	3	0.0300
22	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	4	0.0250
23	0.0000	0.0000	0.0015	0.0000	0.0010	0.0003	5	0.0233
24	0.0000	0.0000	0.0015	0.0000	0.0010	0.0004	6	0.0217
25	0.0000	0.0000	0.0015	0.0000	0.0010	0.0004	7	0.0200
26	0.0000	0.0000	0.0015	0.0000	0.0010	0.0004	8	0.0185
27	0.0000	0.0000	0.0015	0.0000	0.0010	0.0004	9	0.0170
28	0.0000	0.0000	0.0016	0.0000	0.0010	0.0004	10	0.0155
29	0.0000	0.0000	0.0017	0.0000	0.0010	0.0004	11	0.0140
30	0.0000	0.0000	0.0018	0.0000	0.0010	0.0004	12	0.0125
31	0.0000	0.0000	0.0019	0.0000	0.0010	0.0004	13	0.0120
32	0.0000	0.0000	0.0020	0.0000	0.0010	0.0004	14	0.0115
33	0.0000	0.0000	0.0021	0.0000	0.0010	0.0004	15	0.0110
34	0.0000	0.0000	0.0022	0.0000	0.0010	0.0005	16	0.0105
35	0.0000	0.0000	0.0023	0.0000	0.0010	0.0006	17	0.0100
36	0.0000	0.0000	0.0024	0.0000	0.0010	0.0006	18	0.0080
37	0.0000	0.0000	0.0025	0.0000	0.0010	0.0007	19	0.0060
38	0.0000	0.0000	0.0026	0.0000	0.0010	0.0008	20 & Above	0.0000
39	0.0000	0.0000	0.0027	0.0000	0.0010	0.0008		
40	0.0000	0.0000	0.0028	0.0000	0.0010	0.0009		
41	0.0000	0.0000	0.0029	0.0000	0.0010	0.0010		
42	0.0000	0.0000	0.0030	0.0000	0.0010	0.0010		
43	0.0000	0.0000	0.0031	0.0000	0.0010	0.0011		
44	0.0000	0.0000	0.0032	0.0000	0.0010	0.0011		
45	0.0000	0.0000	0.0033	0.0000	0.0010	0.0012		
46	0.0000	0.0000	0.0034	0.0000	0.0010	0.0013		
47	0.0000	0.0000	0.0035	0.0000	0.0010	0.0014		
48	0.0000	0.0000	0.0038	0.0000	0.0010	0.0015		
49	0.0000	0.0000	0.0041	0.0000	0.0010	0.0016		
50	0.1500	0.0500	0.0044	0.0000	0.0010	0.0017		
51	0.1500	0.0500	0.0047	0.0000	0.0010	0.0019		
52	0.1500	0.0500	0.0050	0.0000	0.0010	0.0020		
53	0.2000	0.0500	0.0064	0.0000	0.0010	0.0021		
54	0.1300	0.1000	0.0078	0.0000	0.0010	0.0023		
55	0.3000	0.3000	0.0092	0.0000	0.0010	0.0024		
56	0.2500	0.3000	0.0106	0.0000	0.0010	0.0026		
57	0.2000	0.3000	0.0120	0.0000	0.0010	0.0028		
58	0.2500	0.3000	0.0108	0.0000	0.0010	0.0030		
59	0.2500	0.3000	0.0096	0.0000	0.0010	0.0033		
60	1.0000	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 for Safety and Probation Plans 1, 2, and 4.

** 100% probability of retirement is assumed at ages 55 and above with 33 or more years of service for Safety and Probation Plan 5, and at ages 55 and above with 38 or more years of service for Safety and Probation Plan 6.

San Mateo County Employees' Retirement Association

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

Age	Plans 1, 2, 4 Service Retirement*	Plans 5, 6 Service Retirement**	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	0	0.0700
19	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	1	0.0650
20	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	2	0.0450
21	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	3	0.0300
22	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	4	0.0250
23	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	5	0.0233
24	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	6	0.0217
25	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	7	0.0200
26	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	8	0.0185
27	0.0000	0.0000	0.0015	0.0000	0.0010	0.0002	9	0.0170
28	0.0000	0.0000	0.0016	0.0000	0.0010	0.0002	10	0.0155
29	0.0000	0.0000	0.0017	0.0000	0.0010	0.0002	11	0.0140
30	0.0000	0.0000	0.0018	0.0000	0.0010	0.0002	12	0.0125
31	0.0000	0.0000	0.0019	0.0000	0.0010	0.0002	13	0.0120
32	0.0000	0.0000	0.0020	0.0000	0.0010	0.0002	14	0.0115
33	0.0000	0.0000	0.0021	0.0000	0.0010	0.0003	15	0.0110
34	0.0000	0.0000	0.0022	0.0000	0.0010	0.0003	16	0.0105
35	0.0000	0.0000	0.0023	0.0000	0.0010	0.0003	17	0.0100
36	0.0000	0.0000	0.0024	0.0000	0.0010	0.0004	18	0.0080
37	0.0000	0.0000	0.0025	0.0000	0.0010	0.0004	19	0.0060
38	0.0000	0.0000	0.0026	0.0000	0.0010	0.0005	20 & Above	0.0000
39	0.0000	0.0000	0.0027	0.0000	0.0010	0.0005		
40	0.0000	0.0000	0.0028	0.0000	0.0010	0.0006		
41	0.0000	0.0000	0.0029	0.0000	0.0010	0.0006		
42	0.0000	0.0000	0.0030	0.0000	0.0010	0.0006		
43	0.0000	0.0000	0.0031	0.0000	0.0010	0.0007		
44	0.0000	0.0000	0.0032	0.0000	0.0010	0.0008		
45	0.0000	0.0000	0.0033	0.0000	0.0010	0.0009		
46	0.0000	0.0000	0.0034	0.0000	0.0010	0.0009		
47	0.0000	0.0000	0.0035	0.0000	0.0010	0.0010		
48	0.0000	0.0000	0.0038	0.0000	0.0010	0.0011		
49	0.0000	0.0000	0.0041	0.0000	0.0010	0.0012		
50	0.1500	0.0500	0.0044	0.0000	0.0010	0.0013		
51	0.1500	0.0500	0.0047	0.0000	0.0010	0.0014		
52	0.1500	0.0500	0.0050	0.0000	0.0010	0.0016		
53	0.2000	0.0500	0.0064	0.0000	0.0010	0.0017		
54	0.1300	0.1000	0.0078	0.0000	0.0010	0.0018		
55	0.3000	0.3000	0.0092	0.0000	0.0010	0.0020		
56	0.2500	0.3000	0.0106	0.0000	0.0010	0.0021		
57	0.2000	0.3000	0.0120	0.0000	0.0010	0.0023		
58	0.2500	0.3000	0.0108	0.0000	0.0010	0.0025		
59	0.2500	0.3000	0.0096	0.0000	0.0010	0.0028		
60	1.0000	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.

** 100% probability of retirement is assumed at ages 55 and above with 33 or more years of service for Safety and Probation Plan 5, and at ages 55 and above with 38 or more years of service for Safety and Probation Plan 6.

San Mateo County Employees' Retirement Association

Appendix B: Summary of Benefit Provisions



All actuarial calculations are based on our understanding of the statutes governing the *SamCERA* as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the *SamCERA* Board, effective through June 30, 2010. 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 and Vector Control 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 and before August 7, 2011 (General members, except Plan 5 transfers; see below); before July 10, 2012 (Probation members); and before January 8, 2012 (Safety members).
- Plan 5:** General members hired on or after August 7, 2011, and Deputy Sheriffs hired on or after January 8, 2012. Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) hired on or after January 8, 2012 may elect this Plan.
After 10 years of service, General Plan 5 members can elect to transfer to Plan 4 and must pay the total actuarial equivalent cost of the increase in past service benefits at the date of transfer.
- Plan 6:** Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) hired on or after January 8, 2012 may elect this Plan.

MEMBER CONTRIBUTIONS

<u>Basic:</u> All Plans Except 3:	<p>Contributions are based on the entry age and class of each member and are required of all members in all plans except Plan 3. See section 5 for details on this calculation. Current member rates are shown in Appendix D.</p> <p>Contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of <i>SamCERA</i> 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.</p> <p>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.</p>	<p>(31625.2, 31664.1)</p> <p>(31591, 31700)</p>
Plan 3:	No member contributions are required under Plan 3.	
<u>Cost-of-Living:</u> Plans 1, 2, & 4:	<p>Members of the California Nurses Association in Plans 1, 2, and 4 contribute 25% of the cost of the COLA, in addition to other current member rates and cost sharing.</p> <p>General members (County and Courts) who rehire on or after August 7, 2011, Probation members who rehire on or after July 10, 2011, and Safety members who rehire on or after January 8, 2012 into Plans 1, 2, and 4 contribute 50% of the cost of COLA, in addition to other current member rates and cost sharing.</p> <p>No other Plan 1, 2 & 4 members contribute towards the COLA benefit.</p>	
Plans 5 & 6:	All members of Plans 5 and 6 contribute 50% of the cost of the COLA, in addition to other current member rates and cost sharing.	
<u>Cost Sharing:</u> All Plans Except 3:	<p>General members: Members of Plans 1, 2, and 4 (except SMCM&VCD) contribute an additional 3.0% cost sharing rate.</p> <p>SMCM&VCD and General Plan 5 members do not participate in cost sharing.</p>	<p>(31678.2)</p>

MEMBER CONTRIBUTIONS (Continued)

Safety members (except Deputy Sheriffs):

Members of Plans 1, 2, and 4 contribute an additional 5.0% cost sharing rate.

Members of Plan 5 contribute an additional 4.0% cost sharing rate.

Safety Plan 6 members do not participate in cost sharing.

Safety members (Deputy Sheriffs only):

Members of all Plans contribute the following additional 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 of all Plans except Plan 6 contribute an additional 3.5% cost sharing rate.

**Employer Pick-Up:
General members:**

The County provides a variety of refundable service-based employer pick-up of contribution programs for members in several of its unions. (31581.2)

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.

Safety members:

The County provides a variety of refundable service-based employer pick-up of contribution 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.

MEMBER CONTRIBUTIONS (Continued)

Probation members:	The County provides a variety of refundable service-based employer pick-up of contribution programs for members in several of its unions.	(31639.85)
	Employer rates have been adjusted to reflect the 20% non-refundable County pick-up, effective April 2006.	

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

<u>Eligibility:</u> All Plans Except 3*:	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)
	<i>* For part-time employees, age 50 is replaced with age 55.</i>	(31672.1)
Plan 3:	Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.	(31496)
<u>Final Compensation:</u> Plans 1 & 2:	Monthly average of a member's highest 12 consecutive months of compensation.	(31462.1)
Plans 3, 4, 5, & 6:	Monthly average of a member's highest compensation during any three years. Years do not have to be consecutive.	[31462, 31496.3(d)]
<u>Compensation Limit:</u> All Plans:	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)

SERVICE RETIREMENT ALLOWANCE (Continued)

Monthly

Allowance:	General members:	(31676.14)
Plans 1, 2, 4, & 5:	1/60 x Final Compensation x General age factor x years of service.	(31676.1)
	Safety & Probation members:	
	3% x Final Compensation x Safety age factor x years of service.	(31664.1) (31664.2)
Plan 6:	Safety & Probation members:	
	2% x Final Compensation x Safety age factor x years of service.	(31664)
Plan 3:	General members: (a)+(b)-(c) where:	(31496)
	(a) 2% x Final Compensation x (Years of Service, (up to 35 years), plus	
	(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)
SMCM&VCD*	1.475%	1.948%	2.440%	2.611%	(31676.14)
General Plan 3**	N/A	0.780%	1.220%	2.000%	(31496)
General Plan 5	1.182%	1.492%	1.917%	2.432%	(31676.1)
Safety/Probation 1,2,&4	3.000%	3.000%	3.000%	3.000%	(31664.1)
Safety/Probation Plan 5	2.290%	3.000%	3.000%	3.000%	(31664.2)
Safety/Probation Plan 6	2.000%	2.620%	2.620%	2.620%	(31664)

* As of the June 30, 2010 actuarial valuation, SMCM&VCD has adopted the same benefit structure as County General.

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



This work product was prepared solely for SamCera for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

SERVICE RETIREMENT ALLOWANCE (Continued)

Maximum

Allowance:

All Plans Except 3: 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. (31496)

Unmodified Retirement Allowance (Normal Form):

All Plans Except 3: 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 an eligible survivor or beneficiary having an insurable interest in the life of the member. (31762)

Option 3: 50% of member's reduced allowance is payable to an eligible survivor or beneficiary having an insurable interest in the life of the member. (31763)

Option 4: Other % of member's reduced allowance is payable to an eligible survivor or beneficiary(ies) having an insurable interest in the life of the member. (31764)

For Options 2, 3 or 4, the continuance will not be paid if the member revokes their election and names another beneficiary after retirement. (31782)

All Allowances: 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. (31600)

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

<u>Eligibility:</u>		
All Plans Except 3:	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.	(31720, 31720.5, 31720.6, 31720.7, 31720.9)
Plan 3:	Not available under Plan 3.	(31487)
<u>Monthly Allowance:</u>	Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire.	(31727.4)
<u>Normal Form Of Payment:</u>	Life Annuity with 100% continuance to a surviving spouse (or eligible children).	(31760, 31786)

RECIPROCAL SERVICE-CONNECTED DISABILITY ALLOWANCE

<u>Eligibility:</u>		
All Plans Except 3:	Any member regardless of age or years of service who leaves their accumulated contributions on deposit and receives a disability retirement allowance from CalPERS or another '37 Act system. The member must be eligible for a reciprocal benefit and the disability must be service-connected.	(31837)
Plan 3:	Not available under Plan 3.	
<u>Monthly Allowance:</u>	Same as nonservice-connected disability, but in no case shall the allowance be greater than if all service was with one entity.	(31837, 31838.5)
<u>Normal Form of Payment:</u>	Life Annuity with 100% continuance to a surviving spouse (or eligible children).	(31760, 31786)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

All Plans Except 3: Any age with five years of service and permanently incapacitated for the performance of duty. (31720, 31836)

Plan 3: Not available under Plan 3. (31487)

Monthly Allowance: 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 1/60th 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. (31727(a))

(b) 90% of 1/60th of Final Compensation x years of service projected to age 65, not to exceed 1/3 of Final Compensation. (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)

Normal Form Of Payment: Life Annuity with 60% continuance to a surviving spouse (or eligible children). (31760.1)

SERVICE-CONNECTED DEATH BENEFITS

Eligibility

All Plans Except 3: 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)

Monthly Allowance: 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, an eligible survivor 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 eligible survivor.

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.

Additional Amount for Spouse of Safety Member: (31787.6)

An eligible survivor 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:

All Plans Except 3: 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.

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, several optional death benefits are available to provide flexibility to survivors, as follows.

First Optional Death Benefit: (31781.1)

If a member who would have been entitled to a nonservice-connected disability retirement allowance dies prior to retirement as a result of such disability, the eligible survivor (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.

Second Optional Death Benefit: (31781.2, 31765.2)

If a member dies prior to reaching the minimum retirement age but has 10 or more years of service, an eligible survivor (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).

Third Optional Death Benefit:

An eligible survivor 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 would have been entitled if the member retired or had been retired for a nonservice-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 the eligible survivor. (31781.1)

NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Fourth Optional Death Benefit:

If a member dies while eligible for a service retirement and the eligible survivor 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)

Note for Third and Fourth Optional Death Benefits: In order to leave the eligible survivor the greatest benefit, the member is assumed to have retired for nonservice-connected disability, elected the Option 2 retirement allowance, and then died the next day.

Fifth Optional Death Benefit:

If a member dies while eligible for a service retirement and the eligible survivor 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 receive an annuity or a lump-sum, whichever is more valuable. The annuity is equal to the Option 2-100% Continuation calculation for the larger of either (1) a non-service connected disability benefit or (2) the member's earned service retirement benefit (if eligible).

DEFERRED VESTED BENEFITS

Eligibility:

All Plans Except 3: Age 50 with 10 years of membership. Member contributions must be left on deposit and the member must have terminated with five years of service or entered a reciprocal agency. 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. (31496)

Monthly Allowance:

All Plans Except 3: 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. (31496)

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, 5, & 6: All members (31870)
Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.

COLA Bank

Plan 1: 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. (31870.1, 31870.2)

Plans 2,4,5,&6: Plans 2, 4, 5, and 6 do not have a COLA bank. (31874.4)

San Mateo County Employees' Retirement Association

Appendix C: Valuation Data and Schedules



Data on *SamCERA* membership as of June 30, 2012 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, 2012 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, total prior year earnings were used.

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, 2012

	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
General Members					
Plan 1	49	\$ 4,611,484	60.6	\$ 7,843	32.0
Plan 2	995	87,636,375	53.4	7,340	21.4
Plan 3	139	10,237,776	44.7	6,138	9.1
Plan 4	3,024	238,762,712	44.5	6,580	7.6
Plan 5	154	10,717,342	38.6	5,799	0.4
Total	4,361	\$ 351,965,689	46.5	\$ 6,726	10.8
Safety Members					
Plan 1	4	\$ 605,963	62.3	\$ 12,624	33.5
Plan 2	114	14,899,778	49.7	10,892	21.1
Plan 4	303	33,999,539	42.1	9,351	7.8
Plan 5	14	1,623,987	38.4	9,667	0.3
Total	435	\$ 51,129,267	44.1	\$ 9,795	11.3
Probation Members					
Plan 1	1	\$ 79,420	61.0	\$ 6,618	29.9
Plan 2	70	6,261,679	47.1	7,454	19.4
Plan 4	224	17,972,462	39.3	6,686	9.4
Plan 5	3	178,148	31.7	4,949	0.4
Plan 6	1	62,874	33.0	5,239	0.0
Total	299	\$ 24,554,583	41.1	\$ 6,844	11.7
Grand Total	5,095	\$ 427,649,539	46.0	\$ 6,995	10.9

San Mateo County Employees' Retirement Association

Exhibit C-2: SamCERA Membership – Deferred Vested Members as of June 30, 2012

	Number	Average Age
<i>General Members</i>		
Plan 1	26	59.8
Plan 2	449	51.2
Plan 3	117	52.0
Plan 4	508	45.1
Total	1,100	48.7
<i>Safety Members</i>		
Plan 1	1	61.0
Plan 2	30	47.7
Plan 4	36	44.9
Total	67	46.4
<i>Probation Members</i>		
Plan 1	-	-
Plan 2	20	45.2
Plan 4	25	40.1
Total	45	42.4
<i>Grand Total</i>	1,212	48.3

**San Mateo County Employees'
Retirement Association**

Exhibit C-3a: SamCERA Membership – Retired Members as of June 30, 2012

	<u>Number</u>	<u>Average Age</u>	<u>Monthly Allowance</u>	<u>Average Monthly Benefit</u>
General Members				
Plan 1	1,910	77.6	\$ 5,265,578	\$ 2,757
Plan 2	1,489	66.5	3,281,542	2,204
Plan 3	110	69.3	98,725	897
Plan 4	210	63.2	331,482	1,578
Total	3,719	72.1	\$ 8,977,328	\$ 2,414
Safety Members				
Plan 1	285	70.1	\$ 1,731,739	\$ 6,076
Plan 2	126	58.2	759,587	6,028
Plan 4	17	51.4	52,492	3,088
Total	428	65.8	\$ 2,543,818	\$ 5,944
Probation Members				
Plan 1	72	68.5	\$ 349,159	\$ 4,849
Plan 2	46	60.5	179,083	3,893
Plan 4	10	66.2	21,068	2,107
Total	128	65.4	\$ 549,311	\$ 4,291
Grand Total	4,275	71.2	\$ 12,070,457	\$ 2,823

**San Mateo County Employees'
Retirement Association**

**Exhibit C-3b: SamCERA Membership – Retired Members as of June 30, 2012
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	2,963	\$ 7,538,833	\$ 2,544
	Disabled	278	640,139	2,303
	Beneficiaries	478	798,355	1,670
	Total	3,719	\$ 8,977,328	\$ 2,414
Safety Plans:				
	Healthy	273	\$ 1,862,004	\$ 6,821
	Disabled	92	443,111	4,816
	Beneficiaries	63	238,703	3,789
	Total	428	\$ 2,543,818	\$ 5,944
Probation Plans:				
	Healthy	119	\$ 514,346	\$ 4,322
	Disabled	4	11,278	2,820
	Beneficiaries	5	23,686	4,737
	Total	128	\$ 549,311	\$ 4,291
Grand Totals				
	Healthy	3,355	\$ 9,915,184	\$ 2,955
	Disabled	374	1,094,529	2,927
	Beneficiaries	546	1,060,744	1,943
	Total	4,275	\$ 12,070,457	\$ 2,823

San Mateo County Employees' Retirement Association

**Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2012
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	12	6	0	0	0	0	0	0	0	18
25-29	39	135	55	3	0	0	0	0	0	232
30-34	54	205	239	57	0	0	0	0	0	555
35-39	30	166	308	232	20	0	0	0	0	756
40-44	29	133	257	253	108	20	1	0	0	801
45-49	23	87	169	212	106	110	26	0	0	733
50-54	15	88	170	182	102	119	71	22	0	769
55-59	12	74	172	127	75	100	69	36	5	670
60-64	7	35	117	83	40	42	28	25	15	392
65 & Over	4	9	41	41	23	25	16	5	5	169
Total Count	225	938	1,528	1,190	474	416	211	88	25	5,095

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	51,260	52,673	-	-	-	-	-	-	-	51,731
25-29	61,536	65,437	66,353	52,031	-	-	-	-	-	64,825
30-34	79,064	76,200	77,644	69,534	-	-	-	-	-	76,416
35-39	76,319	80,350	83,492	82,741	80,068	-	-	-	-	82,196
40-44	88,981	83,038	86,282	87,787	92,240	90,006	98,550	-	-	87,228
45-49	71,823	85,213	82,201	89,373	90,492	95,174	89,364	-	-	87,707
50-54	84,379	81,988	83,895	82,484	93,797	94,935	87,856	92,674	-	86,991
55-59	79,871	83,007	81,890	81,240	95,212	93,446	87,867	91,804	80,175	86,206
60-64	67,617	83,310	84,761	81,777	95,511	95,406	94,507	96,086	78,190	87,098
65 & Over	141,189	103,123	72,208	81,546	86,927	78,131	89,796	68,080	129,306	83,864
Avg. Annual Compensation	75,860	78,644	81,946	83,977	92,159	93,441	89,126	91,890	88,810	83,935



This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2012
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	11	6	0	0	0	0	0	0	0	17
25-29	35	114	46	3	0	0	0	0	0	198
30-34	48	188	185	48	0	0	0	0	0	469
35-39	27	150	253	163	16	0	0	0	0	609
40-44	22	120	221	186	71	16	1	0	0	637
45-49	23	76	154	158	79	81	22	0	0	593
50-54	12	78	162	157	90	102	58	20	0	679
55-59	12	64	163	123	68	88	65	36	5	624
60-64	7	33	111	78	37	41	26	22	15	370
65 & Over	4	9	41	39	23	25	16	5	3	165
Total Count	201	838	1,336	955	384	353	188	83	23	4,361

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	49,313	52,673	-	-	-	-	-	-	-	50,499
25-29	57,408	61,263	61,774	52,031	-	-	-	-	-	60,560
30-34	80,024	75,146	74,181	63,617	-	-	-	-	-	74,084
35-39	71,204	78,458	81,191	78,600	73,546	-	-	-	-	79,181
40-44	83,849	79,293	83,528	83,390	84,927	83,006	98,550	-	-	82,867
45-49	71,823	81,507	80,775	85,668	82,331	85,454	81,167	-	-	82,686
50-54	75,475	77,084	82,649	79,321	92,046	90,829	80,371	88,296	-	83,560
55-59	79,871	77,736	80,270	80,383	93,483	88,833	85,213	91,804	80,175	83,852
60-64	67,617	81,023	83,314	80,220	94,315	94,985	91,934	89,941	78,190	85,346
65 & Over	141,189	103,123	72,208	80,443	86,927	78,131	89,796	68,080	123,795	82,980
Avg. Annual Compensation	73,205	75,770	79,855	80,422	88,127	88,327	84,637	89,036	84,570	80,708



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2012
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	1	0	0	0	0	0	0	0	0	1
25-29	4	12	6	0	0	0	0	0	0	22
30-34	2	9	25	6	0	0	0	0	0	42
35-39	3	12	26	25	2	0	0	0	0	68
40-44	7	13	23	32	18	3	0	0	0	96
45-49	0	10	8	31	16	17	3	0	0	85
50-54	3	10	5	14	8	14	8	2	0	64
55-59	0	10	8	1	4	9	3	0	0	35
60-64	0	2	6	4	2	1	1	2	0	18
65 & Over	0	0	0	2	0	0	0	0	2	4
Total Count	20	78	107	115	50	44	15	4	2	435

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	72,684	-	-	-	-	-	-	-	-	72,684
25-29	97,656	100,396	99,627	-	-	-	-	-	-	99,688
30-34	93,649	103,312	106,979	109,891	-	-	-	-	-	105,975
35-39	122,346	108,024	111,412	110,780	123,292	-	-	-	-	111,414
40-44	105,107	117,607	117,187	118,068	125,338	127,115	-	-	-	118,495
45-49	-	114,361	115,096	114,292	133,873	140,288	148,725	-	-	124,476
50-54	119,992	120,234	128,323	113,946	116,412	123,282	135,890	136,448	-	122,132
55-59	-	116,744	115,688	172,283	124,429	141,090	141,627	-	-	127,361
60-64	-	121,047	111,519	112,172	106,647	112,667	176,492	131,342	-	118,058
65 & Over	-	-	-	103,054	-	-	-	-	137,572	120,313
Avg. Annual Compensation	105,669	111,734	112,348	114,543	125,739	133,515	142,311	133,895	137,572	117,539

San Mateo County Employees' Retirement Association

**Exhibit C-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2012
Probation Members**

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	0	0	0	0	0	0	0	0	0	0
25-29	0	9	3	0	0	0	0	0	0	12
30-34	4	8	29	3	0	0	0	0	0	44
35-39	0	4	29	44	2	0	0	0	0	79
40-44	0	0	13	35	19	1	0	0	0	68
45-49	0	1	7	23	11	12	1	0	0	55
50-54	0	0	3	11	4	3	5	0	0	26
55-59	0	0	1	3	3	3	1	0	0	11
60-64	0	0	0	1	1	0	1	1	0	4
65 & Over	0	0	0	0	0	0	0	0	0	0
Total Count	4	22	85	120	40	19	8	1	0	299

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	-	-	-	-	-	-	-	-	-	-
25-29	-	71,694	70,019	-	-	-	-	-	-	71,275
30-34	60,256	70,460	74,446	83,503	-	-	-	-	-	73,049
35-39	-	68,281	78,531	82,150	89,027	-	-	-	-	80,293
40-44	-	-	78,433	83,465	88,211	90,682	-	-	-	83,935
45-49	-	75,440	75,987	81,239	86,007	96,870	91,603	-	-	85,018
50-54	-	-	77,105	87,573	87,963	102,257	97,827	-	-	90,092
55-59	-	-	75,669	86,059	95,434	85,843	99,044	-	-	88,793
60-64	-	-	-	81,579	117,519	-	79,420	160,763	-	109,820
65 & Over	-	-	-	-	-	-	-	-	-	-
Avg. Annual Compensation	60,256	70,795	76,529	82,983	88,895	95,654	94,900	160,763	-	82,122



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2012
All Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1979	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	1	-	-	4	2	-	-	7	\$ 1,291
35-39	-	-	-	-	-	1	4	2	7	2,287
40-44	-	-	1	1	-	4	6	4	16	2,388
45-49	-	-	1	1	5	6	10	1	24	3,014
50-54	1	-	1	2	11	15	39	82	151	2,810
55-59	-	-	1	5	10	52	162	118	348	3,143
60-64	-	2	6	23	49	136	277	173	666	3,456
65-69	3	5	9	39	124	210	354	117	861	3,569
70-74	5	3	29	111	173	205	136	37	699	2,780
75-79	13	23	60	111	148	80	22	4	461	2,415
80-84	13	61	81	143	75	18	6	4	401	2,052
85-89	66	90	129	62	13	2	2	-	364	1,889
90-94	55	87	56	11	-	-	-	-	209	1,841
95-99	34	18	-	1	1	-	-	-	54	1,375
100 & Over	6	-	-	-	-	1	-	-	7	1,316
Total Count	196	290	374	510	613	732	1,018	542	4,275	
Avg Monthly Benefit	\$ 1,700	\$ 1,564	\$ 2,037	\$ 2,145	\$ 2,297	\$ 2,982	\$ 3,817	\$ 3,602		\$ 2,823



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2012
General Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1979	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	1	-	-	4	2	-	-	7	\$ 1,291
35-39	-	-	-	-	-	1	2	2	5	3,201
40-44	-	-	1	1	-	2	4	3	11	1,786
45-49	-	-	1	1	2	3	5	-	12	1,972
50-54	1	-	1	1	10	11	29	59	112	1,628
55-59	-	-	1	3	9	44	125	95	277	2,305
60-64	-	1	2	13	41	112	238	158	565	2,908
65-69	2	3	6	29	97	142	330	108	717	3,146
70-74	2	2	16	88	123	184	134	34	583	2,369
75-79	8	22	53	104	143	74	22	4	430	2,278
80-84	12	57	75	142	74	18	6	4	388	1,949
85-89	57	85	129	62	13	2	2	-	350	1,810
90-94	49	86	56	11	-	-	-	-	202	1,765
95-99	33	18	-	1	1	-	-	-	53	1,375
100 & Over	6	-	-	-	-	1	-	-	7	1,316
Total Count	170	275	341	456	517	596	897	467	3,719	
Avg Monthly Benefit	\$ 1,404	\$ 1,461	\$ 1,876	\$ 1,871	\$ 1,815	\$ 2,406	\$ 3,396	\$ 3,052		\$ 2,414



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2012
Safety Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1979	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	2	-	2	-
40-44	-	-	-	-	-	2	2	1	5	3,713
45-49	-	-	-	-	3	2	5	-	10	4,132
50-54	-	-	-	1	1	4	7	18	31	6,805
55-59	-	-	-	2	1	5	31	14	53	7,082
60-64	-	1	4	10	6	23	25	10	79	6,948
65-69	1	2	3	10	22	51	13	4	106	6,133
70-74	3	1	13	21	37	10	1	-	86	5,141
75-79	5	1	7	7	2	-	-	-	22	4,709
80-84	1	4	6	1	-	-	-	-	12	5,190
85-89	9	5	-	-	-	-	-	-	14	3,856
90-94	6	1	-	-	-	-	-	-	7	4,047
95-99	1	-	-	-	-	-	-	-	1	1,383
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	26	15	33	52	72	97	86	47	428	
Avg Monthly Benefit	\$ 3,629	\$ 3,443	\$ 3,702	\$ 4,330	\$ 4,995	\$ 6,363	\$ 8,003	\$ 8,200		\$ 5,944



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

**Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2012
Probation Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1979	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	1	-	1	2	3,680
50-54	-	-	-	-	-	-	3	5	8	3,872
55-59	-	-	-	-	-	3	6	9	18	4,449
60-64	-	-	-	-	2	1	14	5	22	4,985
65-69	-	-	-	-	5	17	11	5	38	4,391
70-74	-	-	-	2	13	11	1	3	30	3,992
75-79	-	-	-	-	3	6	-	-	9	3,352
80-84	-	-	-	-	1	-	-	-	1	4,423
85-89	-	-	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	-	2	24	39	35	28	128	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ 7,777	\$ 4,582	\$ 3,372	\$ 4,310	\$ 5,051		\$ 4,291



This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

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: General Member Basic Contribution Rates

Entry Age ⁽¹⁾	County & Courts			California Nurses Association			SMCM&VCD	
	Plans 1&2	Plan 4	Plan 5	Plans 1&2	Plan 4	Plan 5	Plans 1&2	Plan 4
16	5.25%	5.04%	4.34%	5.25%	5.04%	4.34%	5.25%	5.04%
17	5.35%	5.14%	4.42%	5.35%	5.14%	4.42%	5.35%	5.14%
18	5.45%	5.23%	4.50%	5.45%	5.23%	4.50%	5.45%	5.23%
19	5.55%	5.33%	4.59%	5.55%	5.33%	4.59%	5.55%	5.33%
20	5.66%	5.43%	4.67%	5.66%	5.43%	4.67%	5.66%	5.43%
21	5.76%	5.53%	4.76%	5.76%	5.53%	4.76%	5.76%	5.53%
22	5.87%	5.63%	4.85%	5.87%	5.63%	4.85%	5.87%	5.63%
23	5.97%	5.73%	4.94%	5.97%	5.73%	4.94%	5.97%	5.73%
24	6.08%	5.84%	5.03%	6.08%	5.84%	5.03%	6.08%	5.84%
25	6.19%	5.94%	5.12%	6.19%	5.94%	5.12%	6.19%	5.94%
26	6.31%	6.05%	5.22%	6.31%	6.05%	5.22%	6.31%	6.05%
27	6.42%	6.16%	5.31%	6.42%	6.16%	5.31%	6.42%	6.16%
28	6.54%	6.28%	5.41%	6.54%	6.28%	5.41%	6.54%	6.28%
29	6.66%	6.39%	5.51%	6.66%	6.39%	5.51%	6.66%	6.39%
30	6.78%	6.51%	5.61%	6.78%	6.51%	5.61%	6.78%	6.51%
31	6.90%	6.62%	5.71%	6.90%	6.62%	5.71%	6.90%	6.62%
32	7.03%	6.75%	5.82%	7.03%	6.75%	5.82%	7.03%	6.75%
33	7.16%	6.87%	5.93%	7.16%	6.87%	5.93%	7.16%	6.87%
34	7.29%	6.99%	6.03%	7.29%	6.99%	6.03%	7.29%	6.99%
35	7.42%	7.12%	6.14%	7.42%	7.12%	6.14%	7.42%	7.12%
36	7.56%	7.25%	6.25%	7.56%	7.25%	6.25%	7.56%	7.25%
37	7.70%	7.39%	6.37%	7.70%	7.39%	6.37%	7.70%	7.39%
38	7.84%	7.52%	6.48%	7.84%	7.52%	6.48%	7.84%	7.52%
39	7.99%	7.66%	6.60%	7.99%	7.66%	6.60%	7.99%	7.66%
40	8.14%	7.81%	6.72%	8.14%	7.81%	6.72%	8.14%	7.81%
41	8.29%	7.95%	6.85%	8.29%	7.95%	6.85%	8.29%	7.95%
42	8.45%	8.10%	6.97%	8.45%	8.10%	6.97%	8.45%	8.10%
43	8.61%	8.24%	7.10%	8.61%	8.24%	7.10%	8.61%	8.24%
44	8.76%	8.38%	7.24%	8.76%	8.38%	7.24%	8.76%	8.38%
45	8.91%	8.51%	7.37%	8.91%	8.51%	7.37%	8.91%	8.51%
46	9.06%	8.64%	7.51%	9.06%	8.64%	7.51%	9.06%	8.64%
47	9.21%	8.76%	7.64%	9.21%	8.76%	7.64%	9.21%	8.76%
48	9.34%	8.86%	7.78%	9.34%	8.86%	7.78%	9.34%	8.86%
49	9.47%	8.96%	7.91%	9.47%	8.96%	7.91%	9.47%	8.96%
50	9.58%	9.03%	8.04%	9.58%	9.03%	8.04%	9.58%	9.03%
51	9.68%	9.07%	8.16%	9.68%	9.07%	8.16%	9.68%	9.07%
52	9.75%	9.07%	8.27%	9.75%	9.07%	8.27%	9.75%	9.07%
53	9.78%	9.38%	8.37%	9.78%	9.38%	8.37%	9.78%	9.38%
54	9.78%	9.72%	8.46%	9.78%	9.72%	8.46%	9.78%	9.72%
55	9.78%	9.72%	8.52%	9.78%	9.72%	8.52%	9.78%	9.72%
56	9.78%	9.72%	8.56%	9.78%	9.72%	8.56%	9.78%	9.72%
57	9.78%	9.72%	8.56%	9.78%	9.72%	8.56%	9.78%	9.72%
58	9.78%	9.72%	8.85%	9.78%	9.72%	8.85%	9.78%	9.72%
59	9.78%	9.72%	9.17%	9.78%	9.72%	9.17%	9.78%	9.72%
60	9.78%	9.72%	9.17%	9.78%	9.72%	9.17%	9.78%	9.72%

⁽¹⁾ For County General members (except plan 5 members) entering after age 55, the rate equals the rate at age 55. For County General plan 5 members entering after age 60, the rate equals the rate at age 60.

San Mateo County Employees' Retirement Association

Exhibit D-2: General Member Basic Contribution Rates (Including Cost Sharing)

Entry Age ⁽¹⁾	County & Courts			California Nurses Association			SMCM&VCD ⁽²⁾	
	Plans 1&2	Plan 4	Plan 5 ⁽²⁾	Plans 1&2	Plan 4	Plan 5 ⁽²⁾	Plans 1&2	Plan 4
16	8.25%	8.04%	4.34%	8.25%	8.04%	4.34%	5.25%	5.04%
17	8.35%	8.14%	4.42%	8.35%	8.14%	4.42%	5.35%	5.14%
18	8.45%	8.23%	4.50%	8.45%	8.23%	4.50%	5.45%	5.23%
19	8.55%	8.33%	4.59%	8.55%	8.33%	4.59%	5.55%	5.33%
20	8.66%	8.43%	4.67%	8.66%	8.43%	4.67%	5.66%	5.43%
21	8.76%	8.53%	4.76%	8.76%	8.53%	4.76%	5.76%	5.53%
22	8.87%	8.63%	4.85%	8.87%	8.63%	4.85%	5.87%	5.63%
23	8.97%	8.73%	4.94%	8.97%	8.73%	4.94%	5.97%	5.73%
24	9.08%	8.84%	5.03%	9.08%	8.84%	5.03%	6.08%	5.84%
25	9.19%	8.94%	5.12%	9.19%	8.94%	5.12%	6.19%	5.94%
26	9.31%	9.05%	5.22%	9.31%	9.05%	5.22%	6.31%	6.05%
27	9.42%	9.16%	5.31%	9.42%	9.16%	5.31%	6.42%	6.16%
28	9.54%	9.28%	5.41%	9.54%	9.28%	5.41%	6.54%	6.28%
29	9.66%	9.39%	5.51%	9.66%	9.39%	5.51%	6.66%	6.39%
30	9.78%	9.51%	5.61%	9.78%	9.51%	5.61%	6.78%	6.51%
31	9.90%	9.62%	5.71%	9.90%	9.62%	5.71%	6.90%	6.62%
32	10.03%	9.75%	5.82%	10.03%	9.75%	5.82%	7.03%	6.75%
33	10.16%	9.87%	5.93%	10.16%	9.87%	5.93%	7.16%	6.87%
34	10.29%	9.99%	6.03%	10.29%	9.99%	6.03%	7.29%	6.99%
35	10.42%	10.12%	6.14%	10.42%	10.12%	6.14%	7.42%	7.12%
36	10.56%	10.25%	6.25%	10.56%	10.25%	6.25%	7.56%	7.25%
37	10.70%	10.39%	6.37%	10.70%	10.39%	6.37%	7.70%	7.39%
38	10.84%	10.52%	6.48%	10.84%	10.52%	6.48%	7.84%	7.52%
39	10.99%	10.66%	6.60%	10.99%	10.66%	6.60%	7.99%	7.66%
40	11.14%	10.81%	6.72%	11.14%	10.81%	6.72%	8.14%	7.81%
41	11.29%	10.95%	6.85%	11.29%	10.95%	6.85%	8.29%	7.95%
42	11.45%	11.10%	6.97%	11.45%	11.10%	6.97%	8.45%	8.10%
43	11.61%	11.24%	7.10%	11.61%	11.24%	7.10%	8.61%	8.24%
44	11.76%	11.38%	7.24%	11.76%	11.38%	7.24%	8.76%	8.38%
45	11.91%	11.51%	7.37%	11.91%	11.51%	7.37%	8.91%	8.51%
46	12.06%	11.64%	7.51%	12.06%	11.64%	7.51%	9.06%	8.64%
47	12.21%	11.76%	7.64%	12.21%	11.76%	7.64%	9.21%	8.76%
48	12.34%	11.86%	7.78%	12.34%	11.86%	7.78%	9.34%	8.86%
49	12.47%	11.96%	7.91%	12.47%	11.96%	7.91%	9.47%	8.96%
50	12.58%	12.03%	8.04%	12.58%	12.03%	8.04%	9.58%	9.03%
51	12.68%	12.07%	8.16%	12.68%	12.07%	8.16%	9.68%	9.07%
52	12.75%	12.07%	8.27%	12.75%	12.07%	8.27%	9.75%	9.07%
53	12.78%	12.38%	8.37%	12.78%	12.38%	8.37%	9.78%	9.38%
54	12.78%	12.72%	8.46%	12.78%	12.72%	8.46%	9.78%	9.72%
55	12.78%	12.72%	10.33%	12.78%	12.72%	10.33%	9.78%	9.72%
56	12.78%	12.72%	10.38%	12.78%	12.72%	10.38%	9.78%	9.72%
57	12.78%	12.72%	10.38%	12.78%	12.72%	10.38%	9.78%	9.72%
58	12.78%	12.72%	10.74%	12.78%	12.72%	10.74%	9.78%	9.72%
59	12.78%	12.72%	11.12%	12.78%	12.72%	11.12%	9.78%	9.72%
60	12.78%	12.72%	11.12%	12.78%	12.72%	11.12%	9.78%	9.72%

⁽¹⁾ For County General members (except plan 5 members) entering after age 55, the rate equals the rate at age 55. For County General plan 5 members entering after age 60, the rate equals the rate at age 60.

⁽²⁾ SMCM&VCD and General plan 5 members do not participate in cost sharing.

San Mateo County Employees' Retirement Association

Exhibit D-3: General Member Basic Contribution Rates (Including COLA Sharing and Cost Sharing)

Entry Age ⁽¹⁾	County & Courts ⁽³⁾				California Nurses Association ⁽³⁾				SMCM&VCD ⁽²⁾	
	Plan 1	Plan 2	Plan 4	Plan 5 ⁽²⁾	Plan 1	Plan 2	Plan 4	Plan 5 ⁽²⁾	Plans 1&2	Plan 4
16	10.44%	9.97%	9.17%	5.26%	9.35%	9.11%	8.60%	5.26%	5.25%	5.04%
17	10.58%	10.10%	9.29%	5.36%	9.47%	9.23%	8.71%	5.36%	5.35%	5.14%
18	10.73%	10.24%	9.40%	5.46%	9.59%	9.34%	8.81%	5.46%	5.45%	5.23%
19	10.87%	10.37%	9.52%	5.57%	9.71%	9.46%	8.93%	5.57%	5.55%	5.33%
20	11.02%	10.52%	9.64%	5.66%	9.84%	9.59%	9.04%	5.66%	5.66%	5.43%
21	11.16%	10.65%	9.77%	5.77%	9.96%	9.70%	9.15%	5.77%	5.76%	5.53%
22	11.32%	10.79%	9.89%	5.88%	10.10%	9.83%	9.26%	5.88%	5.87%	5.63%
23	11.46%	10.93%	10.01%	5.99%	10.22%	9.95%	9.37%	5.99%	5.97%	5.73%
24	11.62%	11.07%	10.15%	6.10%	10.35%	10.08%	9.49%	6.10%	6.08%	5.84%
25	11.77%	11.22%	10.27%	6.21%	10.48%	10.21%	9.60%	6.21%	6.19%	5.94%
26	11.94%	11.38%	10.40%	6.33%	10.63%	10.34%	9.73%	6.33%	6.31%	6.05%
27	12.10%	11.53%	10.54%	6.44%	10.76%	10.47%	9.85%	6.44%	6.42%	6.16%
28	12.27%	11.68%	10.68%	6.56%	10.90%	10.61%	9.98%	6.56%	6.54%	6.28%
29	12.44%	11.84%	10.82%	6.68%	11.05%	10.75%	10.10%	6.68%	6.66%	6.39%
30	12.61%	12.00%	10.97%	6.80%	11.19%	10.89%	10.24%	6.80%	6.78%	6.51%
31	12.78%	12.16%	11.10%	6.93%	11.34%	11.03%	10.36%	6.93%	6.90%	6.62%
32	12.97%	12.34%	11.26%	7.06%	11.50%	11.18%	10.50%	7.06%	7.03%	6.75%
33	13.15%	12.51%	11.41%	7.19%	11.65%	11.33%	10.64%	7.19%	7.16%	6.87%
34	13.33%	12.68%	11.55%	7.31%	11.81%	11.49%	10.77%	7.31%	7.29%	6.99%
35	13.52%	12.85%	11.71%	7.45%	11.97%	11.64%	10.92%	7.45%	7.42%	7.12%
36	13.72%	13.04%	11.87%	7.58%	12.14%	11.80%	11.06%	7.58%	7.56%	7.25%
37	13.91%	13.22%	12.04%	7.73%	12.31%	11.96%	11.22%	7.73%	7.70%	7.39%
38	14.11%	13.41%	12.20%	7.86%	12.48%	12.13%	11.36%	7.86%	7.84%	7.52%
39	14.33%	13.61%	12.37%	8.01%	12.66%	12.30%	11.52%	8.01%	7.99%	7.66%
40	14.54%	13.81%	12.56%	8.15%	12.84%	12.47%	11.68%	8.15%	8.14%	7.81%
41	14.75%	14.01%	12.73%	8.31%	13.02%	12.65%	11.84%	8.31%	8.29%	7.95%
42	14.98%	14.22%	12.91%	8.45%	13.21%	12.84%	12.01%	8.45%	8.45%	8.10%
43	15.20%	14.43%	13.08%	8.61%	13.41%	13.02%	12.16%	8.61%	8.61%	8.24%
44	15.42%	14.63%	13.25%	8.78%	13.59%	13.20%	12.32%	8.78%	8.76%	8.38%
45	15.63%	14.83%	13.41%	8.94%	13.77%	13.37%	12.46%	8.94%	8.91%	8.51%
46	15.84%	15.03%	13.57%	9.11%	13.95%	13.55%	12.61%	9.11%	9.06%	8.64%
47	16.06%	15.23%	13.72%	9.27%	14.13%	13.72%	12.74%	9.27%	9.21%	8.76%
48	16.24%	15.40%	13.84%	9.44%	14.29%	13.87%	12.85%	9.44%	9.34%	8.86%
49	16.42%	15.58%	13.96%	9.59%	14.45%	14.02%	12.96%	9.59%	9.47%	8.96%
50	16.58%	15.72%	14.05%	9.75%	14.58%	14.15%	13.04%	9.75%	9.58%	9.03%
51	16.72%	15.85%	14.10%	9.90%	14.70%	14.27%	13.08%	9.90%	9.68%	9.07%
52	16.82%	15.95%	14.10%	10.03%	14.78%	14.35%	13.08%	10.03%	9.75%	9.07%
53	16.86%	15.99%	14.48%	10.15%	14.82%	14.38%	13.43%	10.15%	9.78%	9.38%
54	16.86%	15.99%	14.89%	10.26%	14.82%	14.38%	13.81%	10.26%	9.78%	9.72%
55	16.86%	15.99%	14.89%	10.33%	14.82%	14.38%	13.81%	10.33%	9.78%	9.72%
56	16.86%	15.99%	14.89%	10.38%	14.82%	14.38%	13.81%	10.38%	9.78%	9.72%
57	16.86%	15.99%	14.89%	10.38%	14.82%	14.38%	13.81%	10.38%	9.78%	9.72%
58	16.86%	15.99%	14.89%	10.74%	14.82%	14.38%	13.81%	10.74%	9.78%	9.72%
59	16.86%	15.99%	14.89%	11.12%	14.82%	14.38%	13.81%	11.12%	9.78%	9.72%
60	16.86%	15.99%	14.89%	11.12%	14.82%	14.38%	13.81%	11.12%	9.78%	9.72%

- ⁽¹⁾ For County General members (except plan 5 members) entering after age 55, the rate equals the rate at age 55. For County General plan 5 members entering after age 60, the rate equals the rate at age 60.
- ⁽²⁾ SMCM&VCD and General plan 5 members do not participate in cost sharing. SMCM&VCD does not participate in COLA sharing.
- ⁽³⁾ Rehired County and Courts members on or after August 7, 2011, and all plan 5 members participate in COLA sharing at a 50% level. All California Nurses Association members (except plan 5 members) participate in COLA sharing at a 25% level.



This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit D-4: Safety and Probation Member Basic Rates

Entry Age ⁽¹⁾	Probation		Safety	
	Plans 1&2	Plans 4&5&6	Plans 1&2	Plans 4&5&6
16	5.72%	5.49%	7.14%	6.86%
17	5.82%	5.59%	7.28%	6.98%
18	5.93%	5.69%	7.41%	7.11%
19	6.04%	5.79%	7.55%	7.24%
20	6.15%	5.90%	7.68%	7.37%
21	6.26%	6.01%	7.82%	7.51%
22	6.37%	6.12%	7.97%	7.65%
23	6.49%	6.23%	8.11%	7.79%
24	6.61%	6.34%	8.26%	7.93%
25	6.73%	6.46%	8.41%	8.07%
26	6.85%	6.57%	8.56%	8.22%
27	6.98%	6.69%	8.72%	8.37%
28	7.10%	6.82%	8.88%	8.52%
29	7.23%	6.94%	9.04%	8.68%
30	7.36%	7.07%	9.21%	8.83%
31	7.50%	7.20%	9.37%	9.00%
32	7.64%	7.33%	9.55%	9.16%
33	7.78%	7.47%	9.72%	9.33%
34	7.93%	7.61%	9.91%	9.51%
35	8.08%	7.75%	10.09%	9.68%
36	8.23%	7.89%	10.29%	9.86%
37	8.39%	8.03%	10.48%	10.04%
38	8.54%	8.17%	10.68%	10.22%
39	8.69%	8.31%	10.87%	10.39%
40	8.85%	8.45%	11.06%	10.56%
41	9.00%	8.57%	11.24%	10.72%
42	9.14%	8.69%	11.42%	10.86%
43	9.27%	8.80%	11.59%	11.00%
44	9.40%	8.89%	11.74%	11.11%
45	9.51%	8.96%	11.89%	11.20%
46	9.60%	9.00%	12.00%	11.25%
47	9.67%	9.00%	12.09%	11.25%
48	9.70%	9.31%	12.13%	11.63%
49	9.70%	9.64%	12.13%	12.05%
50	9.70%	9.64%	12.13%	12.05%

⁽¹⁾ For Safety and Probation members entering after age 50, the rate equals the rate at age 50.

San Mateo County Employees' Retirement Association

Exhibit D-5: Safety and Probation Member Contribution Rates (Including Cost Sharing)

Entry Age ⁽¹⁾	Probation			Safety ⁽²⁾			
	Plans 1&2	Plans 4&5	Plan 6 ⁽³⁾	Plans 1&2	Plan 4	Plan 5	Plan 6 ⁽³⁾
16	9.22%	8.99%	5.49%	12.14%	11.86%	10.86%	6.86%
17	9.32%	9.09%	5.59%	12.28%	11.98%	10.98%	6.98%
18	9.43%	9.19%	5.69%	12.41%	12.11%	11.11%	7.11%
19	9.54%	9.29%	5.79%	12.55%	12.24%	11.24%	7.24%
20	9.65%	9.40%	5.90%	12.68%	12.37%	11.37%	7.37%
21	9.76%	9.51%	6.01%	12.82%	12.51%	11.51%	7.51%
22	9.87%	9.62%	6.12%	12.97%	12.65%	11.65%	7.65%
23	9.99%	9.73%	6.23%	13.11%	12.79%	11.79%	7.79%
24	10.11%	9.84%	6.34%	13.26%	12.93%	11.93%	7.93%
25	10.23%	9.96%	6.46%	13.41%	13.07%	12.07%	8.07%
26	10.35%	10.07%	6.57%	13.56%	13.22%	12.22%	8.22%
27	10.48%	10.19%	6.69%	13.72%	13.37%	12.37%	8.37%
28	10.60%	10.32%	6.82%	13.88%	13.52%	12.52%	8.52%
29	10.73%	10.44%	6.94%	14.04%	13.68%	12.68%	8.68%
30	10.86%	10.57%	7.07%	14.21%	13.83%	12.83%	8.83%
31	11.00%	10.70%	7.20%	14.37%	14.00%	13.00%	9.00%
32	11.14%	10.83%	7.33%	14.55%	14.16%	13.16%	9.16%
33	11.28%	10.97%	7.47%	14.72%	14.33%	13.33%	9.33%
34	11.43%	11.11%	7.61%	14.91%	14.51%	13.51%	9.51%
35	11.58%	11.25%	7.75%	15.09%	14.68%	13.68%	9.68%
36	11.73%	11.39%	7.89%	15.29%	14.86%	13.86%	9.86%
37	11.89%	11.53%	8.03%	15.48%	15.04%	14.04%	10.04%
38	12.04%	11.67%	8.17%	15.68%	15.22%	14.22%	10.22%
39	12.19%	11.81%	8.31%	15.87%	15.39%	14.39%	10.39%
40	12.35%	11.95%	8.45%	16.06%	15.56%	14.56%	10.56%
41	12.50%	12.07%	8.57%	16.24%	15.72%	14.72%	10.72%
42	12.64%	12.19%	8.69%	16.42%	15.86%	14.86%	10.86%
43	12.77%	12.30%	8.80%	16.59%	16.00%	15.00%	11.00%
44	12.90%	12.39%	8.89%	16.74%	16.11%	15.11%	11.11%
45	13.01%	12.46%	8.96%	16.89%	16.20%	15.20%	11.20%
46	13.10%	12.50%	9.00%	17.00%	16.25%	15.25%	11.25%
47	13.17%	12.50%	9.00%	17.09%	16.25%	15.25%	11.25%
48	13.20%	12.81%	9.31%	17.13%	16.63%	15.63%	11.63%
49	13.20%	13.14%	9.64%	17.13%	17.05%	16.05%	12.05%
50	13.20%	13.14%	9.64%	17.13%	17.05%	16.05%	12.05%

⁽¹⁾ For Safety and Probation members entering after age 50, the rate equals the rate at age 50.

⁽²⁾ Safety members (except Deputy Sheriffs) participate in cost sharing at a rate of 5% (plans 1,2 and 4) and 4% (plan 5). Deputy Sheriffs participate in cost sharing at a lower variable level, as described in Appendix B.

⁽³⁾ Safety and Probation plan 6 members do not participate in cost sharing.

San Mateo County Employees' Retirement Association

Exhibit D-6: Safety and Probation Member Contribution Rates (Including COLA Sharing and Cost Sharing)

Entry Age ⁽¹⁾	Probation ⁽⁴⁾				Safety ^{(2) (4)}				
	Plans 1&2	Plan 4	Plan 5	Plan 6 ⁽³⁾	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6 ⁽³⁾
16	12.80%	11.23%	11.02%	7.32%	16.61%	15.71%	14.11%	12.92%	8.70%
17	12.96%	11.37%	11.16%	7.45%	16.83%	15.92%	14.27%	13.08%	8.86%
18	13.14%	11.51%	11.30%	7.59%	17.04%	16.12%	14.44%	13.25%	9.02%
19	13.32%	11.65%	11.43%	7.72%	17.27%	16.33%	14.62%	13.42%	9.19%
20	13.50%	11.81%	11.58%	7.87%	17.48%	16.52%	14.79%	13.59%	9.35%
21	13.68%	11.96%	11.73%	8.01%	17.71%	16.73%	14.97%	13.77%	9.53%
22	13.86%	12.12%	11.89%	8.16%	17.95%	16.96%	15.16%	13.95%	9.71%
23	14.05%	12.27%	12.04%	8.31%	18.18%	17.17%	15.35%	14.13%	9.88%
24	14.25%	12.43%	12.19%	8.46%	18.43%	17.39%	15.53%	14.31%	10.06%
25	14.44%	12.59%	12.35%	8.62%	18.67%	17.62%	15.72%	14.50%	10.24%
26	14.64%	12.75%	12.50%	8.76%	18.91%	17.84%	15.92%	14.69%	10.43%
27	14.85%	12.92%	12.67%	8.92%	19.17%	18.08%	16.12%	14.89%	10.62%
28	15.04%	13.10%	12.84%	9.10%	19.43%	18.32%	16.32%	15.08%	10.81%
29	15.25%	13.27%	13.01%	9.26%	19.69%	18.56%	16.53%	15.29%	11.01%
30	15.47%	13.45%	13.19%	9.43%	19.97%	18.82%	16.73%	15.49%	11.20%
31	15.69%	13.64%	13.37%	9.60%	20.23%	19.06%	16.95%	15.71%	11.42%
32	15.92%	13.82%	13.54%	9.78%	20.52%	19.33%	17.17%	15.91%	11.62%
33	16.15%	14.02%	13.74%	9.96%	20.80%	19.58%	17.39%	16.14%	11.84%
34	16.39%	14.21%	13.93%	10.15%	21.11%	19.87%	17.63%	16.37%	12.07%
35	16.64%	14.41%	14.12%	10.34%	21.40%	20.14%	17.86%	16.59%	12.28%
36	16.88%	14.61%	14.31%	10.52%	21.73%	20.44%	18.10%	16.82%	12.51%
37	17.14%	14.80%	14.50%	10.71%	22.03%	20.72%	18.33%	17.06%	12.74%
38	17.38%	15.00%	14.69%	10.90%	22.36%	21.02%	18.57%	17.29%	12.97%
39	17.63%	15.20%	14.89%	11.08%	22.67%	21.31%	18.80%	17.51%	13.18%
40	17.89%	15.40%	15.08%	11.27%	22.98%	21.59%	19.02%	17.74%	13.40%
41	18.13%	15.56%	15.24%	11.43%	23.27%	21.86%	19.24%	17.94%	13.60%
42	18.36%	15.73%	15.41%	11.59%	23.56%	22.13%	19.42%	18.13%	13.78%
43	18.57%	15.89%	15.56%	11.74%	23.84%	22.39%	19.61%	18.31%	13.96%
44	18.78%	16.02%	15.68%	11.86%	24.08%	22.61%	19.76%	18.45%	14.10%
45	18.96%	16.11%	15.78%	11.95%	24.33%	22.84%	19.87%	18.57%	14.21%
46	19.11%	16.17%	15.83%	12.00%	24.50%	23.00%	19.94%	18.63%	14.27%
47	19.22%	16.17%	15.83%	12.00%	24.65%	23.14%	19.94%	18.63%	14.27%
48	19.27%	16.61%	16.26%	12.42%	24.72%	23.20%	20.45%	19.13%	14.76%
49	19.27%	17.07%	16.71%	12.86%	24.72%	23.20%	21.00%	19.67%	15.29%
50	19.27%	17.07%	16.71%	12.86%	24.72%	23.20%	21.00%	19.67%	15.29%

⁽¹⁾ For Safety and Probation members entering after age 50, the rate equals the rate at age 50.

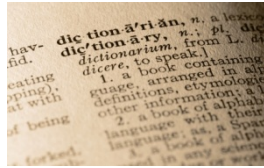
⁽²⁾ Safety members (except Deputy Sheriffs) participate in cost sharing at a rate of 5% (plans 1,2 and 4) and 4% (plan 5). Deputy Sheriffs participate in cost sharing at a lower variable level, as described in Appendix B.

⁽³⁾ Safety and Probation plan 6 members do not participate in cost sharing.

⁽⁴⁾ Rehired Safety members on or after January 8, 2012 and Probation members on or after July 10, 2011, and all plans 5 and 6 members participate in COLA sharing at a 50% level.

San Mateo County Employees' Retirement Association

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.
COLA	Cost of living adjustments to benefit payments are made each April 1. See full description in Appendix B.

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 12-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.



1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
USA

Tel +1 206 624 7940
Fax +1 206 623 3485

milliman.com

October 9, 2012

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

Re: June 30, 2012 Actuarial Valuation Addendum – Revised Probation Contribution Rates

Dear Members of the Board:

We have previously provided you an actuarial valuation report for the San Mateo County Employees' Retirement Association (*SamCERA*) as of June 30, 2012. Our valuation report was completed and dated September 18, 2012. Subsequent to that date, we were informed of changes that were recently bargained that affect probation member contribution rates. The purpose of this addendum to the valuation is to recommend revised employer and member contribution rates for the fiscal year beginning July 1, 2013 for probation members that reflects the change.

Change Reflected in the Addendum

Under the Memorandum of Understanding (MOU), all current probation employees under Plans 1, 2 and 4 will pay 25% of the retirement COLA cost effective in 2013 (for purposes of this addendum, we have assumed the effective date will be July 1, 2013). Our valuation report assumed these members made no contributions toward the COLA cost, except for in special cases of transfers and rehires.

Member Contribution Rates

Probation member contribution rates are shown on the attached Exhibit D-7. The exhibit shows the total member contribution rate (basic plus cost-sharing plus COLA) for probation employees. Note that only Plans 1, 2 and 4 have been revised from the valuation. In each case, the difference is the addition of the 25% COLA cost sharing. For example, the contribution rate for a probation Plan 4 member who entered *SamCERA* at age 30 increases from 10.57% to 12.01% of pay with the addition of the 25% COLA cost sharing.

We have also included a new Exhibit D-6 which shows member contribution rates for safety members. There have been no changes to safety member contribution rates. The only change to the exhibit is that we have removed probation member rates from this exhibit and put them on the new Exhibit D-7.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Results – Employer Contribution Rates Effective July 1, 2013

Employer contribution rates for probation members are shown in the attached Exhibit 11f. The exhibit shows the total Normal Cost rate, the members' share of the Normal Cost and the employer's contribution to the Unfunded Actuarial Accrued Liability (UAAL). Note that only Plans 2 and 4 have been revised from the valuation. In each case the difference is the addition of the 25% COLA cost sharing, which affects both the total Normal Cost rate and the members' contribution. Overall, the employer contribution rate for the fiscal year beginning July 1, 2013 for all probation members decreases from 46.70% to 45.18% of pay due to the majority of probation members participating in the 25% COLA cost sharing. Note that there is no change to Plan 1, as there is only one member left in this plan, and since the member has more than 30 years of service, the only contributions being made are for cost sharing.

We are also providing a revised Exhibit 16, which shows a summary of historical contribution rates for the Comprehensive Annual Financial Report (CAFR).

***De minimus* Impact Excluded**

We are only providing revised exhibits for situations where we felt there was a material impact on the valuation due to the inclusion of the 25% COLA sharing for probation members. For example, in the valuation report we show an aggregate employer contribution rate of 35.49%. If the change had been reflected, this figure would be slightly lower. However, contribution rates are made by plan, so reflecting the change in the aggregate rate would not affect the amount the employers or members actually pay.

The increase in the contribution rate for probation members would also have a small impact on the Actuarial Accrued Liability (AAL) and therefore would also have a small impact on the UAAL. We do not believe the impact is material, so we have made no change in the AAL, UAAL or the UAAL contribution rate reported in the valuation.

Certification

This addendum is based on our valuation report dated September 18, 2012, and all caveats disclosed in that valuation continue to apply. All plan provisions, assumptions and method are the same as that valuation, except for the addition of the 25% COLA sharing for current probation members as specified in this letter.

Milliman's work is prepared solely for the internal business use of *SamCERA*. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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

Sincerely,

A handwritten signature in black ink that reads "Nick Collier".

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

NJC/nlo

Enclosures

San Mateo County Employees' Retirement Association

Exhibit 11f: Employer Contributions - June 30, 2012

	Probation **					
	Plan 1 *	Plan 2	Plan 4	Plan 5	Plan 6	Total
A. <u>Gross Normal Cost</u>						
Service Retirement	28.90%	28.19%	25.05%	23.39%	21.33%	25.86%
Disability Retirement	1.81%	1.99%	1.99%	2.13%	2.14%	1.97%
Death while Active	1.05%	0.93%	0.87%	0.96%	1.00%	0.88%
Termination (No Refund)	1.45%	1.37%	1.35%	1.17%	1.01%	1.34%
Refund of Member Contributions	0.49%	0.66%	0.65%	0.73%	0.54%	0.64%
Total	33.70%	33.14%	29.91%	28.38%	26.02%	30.69%
B. Member Contributions	(3.50)%	(12.73)%	(12.04)%	(13.46)%	(9.98)%	(12.22)%
C. Employer Normal Cost Rate (A) - (B)	30.20%	20.41%	17.87%	14.92%	16.04%	18.47%
D. <u>Total Employer Contribution Rate</u>						
Basic Normal Cost	14.59%	11.60%	12.09%	9.54%	11.05%	11.97%
COLA Normal Cost	15.61%	8.81%	5.78%	5.38%	4.99%	6.50%
Employer Normal Cost Rate	30.20%	20.41%	17.87%	14.92%	16.04%	18.47%
UAAL Contribution Rate	26.71%	26.71%	26.71%	26.71%	26.71%	26.71%
Total Employer Contribution Rate	56.91%	47.12%	44.58%	41.63%	42.75%	45.18%
E. Total Employer Contribution Rate (prior year)	51.11%	43.19%	40.42%	35.59%	36.07%	41.14%
F. Change in Total Employer Contribution Rate as a percentage of payroll (D) - (E)	5.80%	3.93%	4.16%	6.04%	6.68%	4.04%

* Only one active member remains in Probation Plan 1. The member is assumed to retire immediately; therefore, there is no normal cost calculated for the upcoming year. The Normal Cost Contribution Rate is set equal to the prior year's rate, with an adjustment for changes in assumptions. The member rate is set equal to the cost-sharing rate, since the basic member rate has been "shut off."

** Probation members of Plans 1, 2, or 4 hired before July 10, 2011 contribute 25% of the cost of COLA, in addition to regular member rates and cost sharing. All other Probation members contribute 50% of the cost of COLA.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit 16: History of Employer Contribution Rates (Dollars in Thousands)

County Rates ⁽¹⁾⁽⁵⁾												
Valuation Year	General County & Court Members (excluding Nurses)			General Member (Nurses) ⁽³⁾			Safety Member			Probation Member		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2003	11.00%	4.60%	15.60%	Same as County General			21.99%	12.74%	34.73%	23.45%	8.10%	31.55%
2004	9.76%	8.25%	18.01%	Same as County General			15.34%	24.82%	40.16%	16.17%	15.28%	31.45%
2005	10.36%	10.38%	20.74%	Same as County General			20.43%	32.02%	52.45%	21.10%	16.43%	37.53%
2006	10.49%	9.97%	20.46%	Same as County General			20.18%	30.52%	50.70%	21.59%	14.85%	36.44%
2007	10.19%	9.46%	19.65%	Same as County General			19.94%	29.32%	49.26%	20.83%	14.06%	34.89%
2008	10.16%	9.81%	19.97%	Same as County General			19.32%	27.31%	46.63%	20.05%	12.81%	32.86%
2009	10.11%	18.40%	28.51%	Same as County General			19.21%	51.83%	71.04%	19.92%	23.84%	43.76%
2010	10.05%	16.35%	26.40%	Same as County General			19.01%	44.50%	63.51%	19.85%	21.62%	41.47%
2011	9.71%	16.41%	26.12%	8.70%	16.41%	25.11%	18.87%	41.75%	60.62%	19.50%	22.30%	41.80%
2012	9.98%	20.17%	30.15%	8.96%	20.17%	29.13%	19.05%	48.51%	67.56%	18.47%	26.71%	45.18%

Rates for Mosquito and Vector Control District ⁽²⁾			
Valuation Year	General Member		
	Normal	UAAL	Total
2006	8.76%	8.18%	16.94%
2007	8.50%	7.76%	16.26%
2008	8.55%	8.04%	16.59%
2009	8.25%	15.09%	23.34%
2010	11.70%	16.35%	28.05%
2011	11.97%	16.41%	28.38%
2012	11.68%	20.17%	31.85%

- (1) Information for years prior to 2005 reported by prior actuaries.
- (2) Beginning with the 2010 actuarial valuation, the Mosquito and Vector Control District adopted the same benefit formula and member contribution rates as Plans 1, 2 & 4 General County members (excluding cost sharing on member rates).
- (3) Beginning with the 2011 actuarial valuation, Plans 1, 2, and 4 members of the California Nurses Association contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- (4) Beginning with the 2012 actuarial valuation, Plans 1, 2, and 4 Probation members contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- (5) Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

**San Mateo County Employees'
Retirement Association**

Exhibit D-6: Safety Member Contribution Rates (Including COLA Sharing and Cost Sharing)

Entry Age ⁽¹⁾	Safety ^{(2) (4)}				
	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6 ⁽³⁾
16	16.61%	15.71%	14.11%	12.92%	8.70%
17	16.83%	15.92%	14.27%	13.08%	8.86%
18	17.04%	16.12%	14.44%	13.25%	9.02%
19	17.27%	16.33%	14.62%	13.42%	9.19%
20	17.48%	16.52%	14.79%	13.59%	9.35%
21	17.71%	16.73%	14.97%	13.77%	9.53%
22	17.95%	16.96%	15.16%	13.95%	9.71%
23	18.18%	17.17%	15.35%	14.13%	9.88%
24	18.43%	17.39%	15.53%	14.31%	10.06%
25	18.67%	17.62%	15.72%	14.50%	10.24%
26	18.91%	17.84%	15.92%	14.69%	10.43%
27	19.17%	18.08%	16.12%	14.89%	10.62%
28	19.43%	18.32%	16.32%	15.08%	10.81%
29	19.69%	18.56%	16.53%	15.29%	11.01%
30	19.97%	18.82%	16.73%	15.49%	11.20%
31	20.23%	19.06%	16.95%	15.71%	11.42%
32	20.52%	19.33%	17.17%	15.91%	11.62%
33	20.80%	19.58%	17.39%	16.14%	11.84%
34	21.11%	19.87%	17.63%	16.37%	12.07%
35	21.40%	20.14%	17.86%	16.59%	12.28%
36	21.73%	20.44%	18.10%	16.82%	12.51%
37	22.03%	20.72%	18.33%	17.06%	12.74%
38	22.36%	21.02%	18.57%	17.29%	12.97%
39	22.67%	21.31%	18.80%	17.51%	13.18%
40	22.98%	21.59%	19.02%	17.74%	13.40%
41	23.27%	21.86%	19.24%	17.94%	13.60%
42	23.56%	22.13%	19.42%	18.13%	13.78%
43	23.84%	22.39%	19.61%	18.31%	13.96%
44	24.08%	22.61%	19.76%	18.45%	14.10%
45	24.33%	22.84%	19.87%	18.57%	14.21%
46	24.50%	23.00%	19.94%	18.63%	14.27%
47	24.65%	23.14%	19.94%	18.63%	14.27%
48	24.72%	23.20%	20.45%	19.13%	14.76%
49	24.72%	23.20%	21.00%	19.67%	15.29%
50	24.72%	23.20%	21.00%	19.67%	15.29%

- ⁽¹⁾ For Safety members entering after age 50, the rate equals the rate at age 50.
- ⁽²⁾ Safety members (except Deputy Sheriffs) participate in cost sharing at a rate of 5% (Plans 1, 2 and 4) and 4% (Plan 5). Deputy Sheriffs participate in cost sharing at a lower variable level, as described in Appendix B.
- ⁽³⁾ Safety Plan 6 members do not participate in cost sharing.
- ⁽⁴⁾ Rehired Safety members on or after January 8, 2012, and all Safety Plans 5 and 6 members participate in COLA sharing at a 50% level.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

**San Mateo County Employees'
Retirement Association**

Exhibit D-7: Probation Member Contribution Rates (Including COLA Sharing and Cost Sharing)

Entry Age ⁽¹⁾	Probation before July 10, 2011 ⁽²⁾		Probation on or after July 10, 2011 ⁽³⁾			
	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plan 5	Plan 6 ⁽⁴⁾
16	11.01%	10.11%	12.80%	11.23%	11.02%	7.32%
17	11.14%	10.23%	12.96%	11.37%	11.16%	7.45%
18	11.28%	10.35%	13.14%	11.51%	11.30%	7.59%
19	11.43%	10.47%	13.32%	11.65%	11.43%	7.72%
20	11.57%	10.60%	13.50%	11.81%	11.58%	7.87%
21	11.72%	10.74%	13.68%	11.96%	11.73%	8.01%
22	11.86%	10.87%	13.86%	12.12%	11.89%	8.16%
23	12.02%	11.00%	14.05%	12.27%	12.04%	8.31%
24	12.18%	11.13%	14.25%	12.43%	12.19%	8.46%
25	12.34%	11.28%	14.44%	12.59%	12.35%	8.62%
26	12.49%	11.41%	14.64%	12.75%	12.50%	8.76%
27	12.66%	11.55%	14.85%	12.92%	12.67%	8.92%
28	12.82%	11.71%	15.04%	13.10%	12.84%	9.10%
29	12.99%	11.86%	15.25%	13.27%	13.01%	9.26%
30	13.16%	12.01%	15.47%	13.45%	13.19%	9.43%
31	13.35%	12.17%	15.69%	13.64%	13.37%	9.60%
32	13.53%	12.32%	15.92%	13.82%	13.54%	9.78%
33	13.71%	12.49%	16.15%	14.02%	13.74%	9.96%
34	13.91%	12.66%	16.39%	14.21%	13.93%	10.15%
35	14.11%	12.83%	16.64%	14.41%	14.12%	10.34%
36	14.30%	13.00%	16.88%	14.61%	14.31%	10.52%
37	14.51%	13.17%	17.14%	14.80%	14.50%	10.71%
38	14.71%	13.34%	17.38%	15.00%	14.69%	10.90%
39	14.91%	13.50%	17.63%	15.20%	14.89%	11.08%
40	15.12%	13.67%	17.89%	15.40%	15.08%	11.27%
41	15.32%	13.82%	18.13%	15.56%	15.24%	11.43%
42	15.50%	13.96%	18.36%	15.73%	15.41%	11.59%
43	15.67%	14.09%	18.57%	15.89%	15.56%	11.74%
44	15.84%	14.20%	18.78%	16.02%	15.68%	11.86%
45	15.98%	14.29%	18.96%	16.11%	15.78%	11.95%
46	16.10%	14.34%	19.11%	16.17%	15.83%	12.00%
47	16.19%	14.34%	19.22%	16.17%	15.83%	12.00%
48	16.23%	14.71%	19.27%	16.61%	16.26%	12.42%
49	16.23%	15.11%	19.27%	17.07%	16.71%	12.86%
50	16.23%	15.11%	19.27%	17.07%	16.71%	12.86%

⁽¹⁾ For Probation members entering after age 50, the rate equals the rate at age 50.

⁽²⁾ Probation members hired before July 10, 2011 will participate in COLA sharing at a 25% level, effective in 2013.

⁽³⁾ Rehired Probation members on or after July 10, 2011, and all Plans 5 and 6 members participate in COLA sharing at a 50% level.

⁽⁴⁾ Probation Plan 6 members do not participate in cost sharing.

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
USA

Tel +1 206 624 7940
Fax +1 206 623 3485

milliman.com

December 4, 2012

Board of Retirement
San Mateo County Employees' Retirement Association

Re: Analysis of Assembly Bill 340 and Assembly Bill 197

Dear Members of the Board:

As requested, we are providing an actuarial analysis of Assembly Bill 340 (AB 340), which includes the California Public Employees' Pension Reform Act of 2013 (PEPRA). This legislation, which was recently signed into law, revises the benefits available to any member of a California public retirement system (with a few exceptions) who enters the system on or after January 1, 2013. Under the provisions of this legislation, post-2012 new entrants will be placed into "new" plans with PEPRA-compliant benefit formulas, compensation limitations and specific employee cost-sharing provisions. Assembly Bill 197 (AB 197) contains additional information regarding the definition of compensation earnable applied in AB 340.

The purpose of this analysis is to calculate the member and employer contribution rates effective January 1, 2013 for new entrants. Note that in certain cases, such as when a new hire has reciprocity, the member may be eligible to enter the applicable current plan and not be subject to PEPRA.

Our analysis is based on our review of the legislation and conversations with *SamCERA* staff. We strongly recommend that our understanding, as presented in this letter, is reviewed by *SamCERA* staff and legal counsel for consistency with the legislation.

Summary Results

The following chart shows the recommended contribution rates for the new plans effective January 1, 2013. Note that the contribution rate for the Unfunded Actuarial Accrued Liability is consistent with the rate being paid for the current fiscal year (see our September 26, 2011 letter for details). A comparison of the normal cost and contribution rates is shown later in this letter in the section titled Comparison of New Plan Costs with Current Open Plans.

Contribution Rates Effective January 1, 2013 for New Entrants					
	General County & Courts		General		
	PEPRA Formula	Plan 3 Formula	SMCM&VCD	Safety	Probation
Basic Normal Cost Rate	12.86%	7.00%	13.07%	21.27%	19.93%
COLA Normal Cost Rate	<u>2.54%</u>	<u>0.00%</u>	<u>2.58%</u>	<u>4.95%</u>	<u>4.63%</u>
Total Normal Cost Rate	15.40%	7.00%	15.65%	26.22%	24.56%
Member Contribution Rate	<u>(7.75)%</u>	<u>(3.50)%</u>	<u>(7.75)%</u>	<u>(13.00)%</u>	<u>(12.25)%</u>
Employer Normal Cost Rate	7.65%	3.50%	7.90%	13.22%	12.31%
UAAL Contribution Rate*	<u>16.41%</u>	<u>16.41%</u>	<u>16.41%</u>	<u>40.16%</u>	<u>21.62%</u>
Employer Contribution Rate	24.06%	19.91%	24.31%	53.38%	33.93%

* UAAL Contribution Rates shown are the recommended rates based on the June 30, 2011 actuarial valuation report.

The following chart shows the recommended contribution rates for the new plans for the fiscal year 2013 - 2014.

Contribution Rates Effective July 1, 2013 for New Entrants					
	General County & Courts		General		
	PEPRA Formula	Plan 3 Formula	SMCM&VCD	Safety	Probation
Basic Normal Cost Rate	12.86%	7.00%	13.07%	21.27%	19.93%
COLA Normal Cost Rate	<u>2.54%</u>	<u>0.00%</u>	<u>2.58%</u>	<u>4.95%</u>	<u>4.63%</u>
Total Normal Cost Rate	15.40%	7.00%	15.65%	26.22%	24.56%
Member Contribution Rate	<u>(7.75)%</u>	<u>(3.50)%</u>	<u>(7.75)%</u>	<u>(13.00)%</u>	<u>(12.25)%</u>
Employer Normal Cost Rate	7.65%	3.50%	7.90%	13.22%	12.31%
UAAL Contribution Rate*	<u>20.17%</u>	<u>20.17%</u>	<u>20.17%</u>	<u>48.51%</u>	<u>26.71%</u>
Employer Contribution Rate	27.82%	23.67%	28.07%	61.73%	39.02%

* UAAL Contribution Rates shown are the recommended rates based on the June 30, 2012 actuarial valuation report.

Note that the General Plan 3 Formula reflects the current General Plan 3 formula with revisions required by PEPRA. We will refer to this plan as General Plan 3 (PEPRA). As allowed under PEPRA, since the total normal cost rate of the existing General Plan 3 formula is less than the comparable plan with the PEPRA formula, it may be offered to new entrants with certain modifications required by PEPRA. All other new plans reflect all applicable PEPRA provisions and the PEPRA formula. For new Safety and Probation members, this is the formula referred to as the "Option 2" formula for Safety members in AB 340.

Also, our analysis found that except for General Plan 3, all the current SamCERA formulas have a higher normal cost rate than the PEPRA formulas. Therefore, these formulas are not allowed for new members under PEPRA.

Member Contribution Rates

For new members, we have calculated the applicable member contribution rate for each new plan equal to one half of the total normal cost rate as specified in the Section 7522.30(c) of the legislation. Note that we have rounded the member rate to the “nearest quarter of 1 percent” as also required by the legislation. In some cases, rounding the rates will result in member rates that are slightly less than 50% of the total normal cost rate. The calculated values are single rates (shown previously in contribution rate chart) payable by all new entrant members of the respective plan. The legislation is silent regarding the issue of whether all new entrant members must pay a single rate, or if member contribution rates may vary by entry age as they do for current members; however, it seems to imply that the single rate would apply. To address both possible interpretations, we have also provided alternative member rates which vary by entry age, rounded to the nearest one-quarter percent, in Exhibit 1.

These rates are the normal member rates used for the corresponding General and Safety plans increased by a common factor, so the total expected member contributions are equivalent to the single rate (i.e., the member pays half the total normal cost rate). There is no guidance in PEPRA on how member rates by entry age should be determined, so we have attempted to maintain consistency with the current '37 Act requirements. Note that since the current General Plan 3 is non-contributory, there is no corresponding formula for member contribution rates; therefore, for Plan 3 Formula (with PEPRA adjustments) we have used the same formula for member contribution rates as the Current General Plan 5. The specific formulas used, along with the corresponding adjustment factors (to achieve equivalence with the single rate), are:

Plan	'37 Act Reference	Formula for Normal Member Rate	Adjustment Factor
Plan 3 Formula	31621	1/120th of FAC at age 60	0.5487
General (County & Courts)	31621	1/120th of FAC at age 60	1.2112
General (SMCM&VCD)	31621	1/120th of FAC at age 60	1.2297
Safety	31639.25	1/100th of FAC at age 50	1.4462
Probation	31639.25	1/100th of FAC at age 50	1.3932

Impact of Legislation on Current Members

There are a number of provisions in AB 340 that apply to existing members. These include limitations on members returning to work after retirement, the prohibition of nonqualified service purchases, and the prohibition of retroactive benefit increases, among others. Although these changes could ultimately affect *SamCERA*'s costs, there are no assumptions for these events in the valuation, so **there will be no impact on the current valuation based on the assumptions used in our analysis.** Our understanding is that there are two potential changes to current members that could impact the valuation. However, as discussed below, we are not presently recommending any changes to the valuation.

1. Employers may require current members to pay half of the normal cost effective January 1, 2018. Since it is not known whether this will occur, we have assumed there will be no change in current member contribution rates for purposes of this analysis.

2. The definition of “compensation earnable” is restricted to limit additional payments over what would normally be paid over each 12-month period. Our understanding is that this is not expected to affect current member compensation earnable for *SamCERA* due to current compensation practices.

Comparison of Current Formulas with PEPRA Formulas

Under Section 7522.02(d) of the legislation, a public employer may continue to offer their current plan formula, without a compensation cap, as described later, if the following criteria hold:

1. The employer’s current benefit formula has a lower benefit factor at normal retirement age than the PEPRA benefit formula, and;
2. It is determined that the current formula with certain partial required PEPRA revisions has a “lower normal cost” than the PEPRA benefit formula.

Based on our analysis, the only current *SamCERA* formula that satisfies the above conditions is General Plan 3. Therefore, the General Plan 3 formula could be offered to new entrants; however, certain modifications would still be required by PEPRA. We will refer to this plan as General Plan 3 (PEPRA) to distinguish it from the current General Plan 3. The changes that would apply for General Plan 3 (PEPRA) are listed below under “Changes Applying for All New Plans (New Entrants Only)”.

The other option for new members is to create entirely new *SamCERA* Plans which contain all of the PEPRA modifications, including new benefit formulas. For these new PEPRA plans, all changes listed below apply.

Note that we have assumed there are no changes to death and disability benefits (except where noted) or Cost-of-Living Adjustments (COLAs) for this study. We have also assumed that the members with an eligible spouse or domestic partner would continue to be eligible for the standard beneficiary continuance at no cost.

Description of AB340 Provisions Applicable to New Members (PEPRA)

The following changes in plan provisions would be required by PEPRA:

Changes Applying for All New Plans (New Entrants Only)

- The member contribution rate is set equal to one-half the normal cost rate. Pensionable compensation is restricted under PEPRA. Specific pay elements to be included in compensation earnable have been adopted by the *SamCERA* Board of Retirement. Based on current compensation data, *SamCERA* estimates the impact of this change as approximately a 1.5% decrease in pensionable compensation for General and Safety members and a 0.5% decrease for Probation members.
- Compensation for purposes of determining retirement benefit amounts is limited to either 100% or 120% of the Social Security Taxable Wage Base (SSTWB) in 2013, depending on whether the plan is covered by Social Security. This limit is subject to annual indexing based on changes in the Consumer Price Index for All Urban Consumers. For County and Court General members, the 100% SSTWB limit applies, since these

members are covered by Social Security; for Safety, Probation and Mosquito & Vector Control District members, 120% of the limit is used, as these members are not covered by Social Security. Note that this limit does not apply to the General Plan 3 (PEPRA) formula.

- No benefits in excess of the Internal Revenue Code (IRC) Section 415 limits would be paid. Currently, these benefits may be paid via a replacement benefit plan. Note that the 100%/120% of SSTWB compensation limit makes it unlikely that new entrants will be subject to the 415 limit. Similarly, the lower benefit formula and the \$250,000 compensation limit under IRC Section 401(a)(17) make it unlikely that future members subject to the Plan 3 formula would be subject to the 415 limit. For purposes of this analysis, we have assumed there is no cost or savings due to these provisions.
- PEPRA requires that the calculation of final compensation be averaged over the highest consecutive 36-month period for all new members. Currently, all new hires have a three-year highest final average period, although the three years do not have to be consecutive. For purposes of this analysis, we have assumed there is no cost or savings due to these provisions.
- Additional provisions apply to retroactive benefits, retired members who return to work, service purchases, pension contribution holidays, and public officials convicted of a felony. For purpose of this analysis, we have assumed there is no cost or savings due to these provisions.

Changes for the New General Plan

- The earliest eligibility for retirement is at age 52 with 5 years of service. Currently, Plan 5 members are eligible for service retirement with 30 years of service or age 50 with 10 years of membership. Note that there is no change in eligibility for new Plan 3 (PEPRA) plan.
- New retirement age factors replace the current formula factors. These factors are lower than the current Plan 5 factors at all ages less than age 67. A comparison is shown following this section. Note that there is no change in factors for the Plan 3 (PEPRA) plan.

Changes for the New Safety and Probation Plans

- The earliest eligibility for retirement is at age 50 with 5 years of service. Currently, Safety and Probation members are eligible for service retirement with 20 years of service or age 50 with 10 years of membership.
- New retirement age factors replace the current formula factors. These factors are lower than the current Plan 5 factors at all ages and lower than or equal to the current Plan 6 factors at all ages less than age 57. A comparison is shown following this section.

Revised Age Factors

As mentioned above, the legislation will result in a revised set of age factors for new members hired after January 1, 2013 for at least some of the *SamCERA* plans. The following chart shows a comparison of the new age factors with the age factors in place under the current plans.

Comparison of Formula Percentages (General)					
Retirement at Age	PEPRA	General Plan 3		General Plan 5	
		Percent	Compare	Percent	Compare
52	1.00%	na	na	1.30%	Higher
53	1.10%	na	na	1.36%	Higher
54	1.20%	na	na	1.43%	Higher
55	1.30%	0.78%	Lower	1.49%	Higher
56	1.40%	0.86%	Lower	1.56%	Higher
57	1.50%	0.94%	Lower	1.64%	Higher
58	1.60%	1.02%	Lower	1.73%	Higher
59	1.70%	1.12%	Lower	1.82%	Higher
60	1.80%	1.22%	Lower	1.92%	Higher
61	1.90%	1.34%	Lower	1.99%	Higher
62	2.00%	1.48%	Lower	2.09%	Higher
63	2.10%	1.64%	Lower	2.20%	Higher
64	2.20%	1.80%	Lower	2.31%	Higher
65	2.30%	2.00%	Lower	2.43%	Higher
66	2.40%	2.00%	Lower	2.43%	Higher
67	2.50%	2.00%	Lower	2.43%	Lower

Note that we have not shown separate benefit factors for new members of the Mosquito & Vector Control District. For the district formula, all current benefit factors are greater than those specified under PEPRA; therefore, new members of the district will only be eligible for the PEPRA factors.

For Safety plans (including Probation), the legislation provides for three separate benefit formulas – a base formula and two options. We have used Option 2 for new Safety and Probation members as it has the percentage factor that is closest and provides a lower benefit factor at age 55, consistent with the guidance in the legislation.

Comparison of Formula Percentages (Safety & Probation)					
Retirement at Age	PEPRA Option 2	Plan 5		Plan 6	
		Percent	Compare	Percent	Compare
50	2.00%	2.29%	Higher	2.00%	Same
51	2.10%	2.41%	Higher	2.10%	Higher
52	2.20%	2.54%	Higher	2.22%	Higher
53	2.30%	2.68%	Higher	2.34%	Higher
54	2.40%	2.83%	Higher	2.47%	Higher
55	2.50%	3.00%	Higher	2.62%	Higher
56	2.60%	3.00%	Higher	2.62%	Higher
57	2.70%	3.00%	Higher	2.62%	Lower

This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Plan Options

Our understanding is that new entrants may have the following potential options of plans to enter.

Group	Current Plan Options	Potential PEPRA Options
General Members (County & Courts)	General Plan 3 or Plan 5	Plan 3 Formula with PEPRA Revisions, or PEPRA General Formula with 100% Limit*
General SMCM&VCD	General Plan 5	PEPRA General Formula with 120% Limit*
Safety Members	Safety Plan 5 or Plan 6	PEPRA Option 2 Safety Formula with 120% Limit*
Probation Members	Probation Plan 5 or Plan 6	PEPRA Option 2 Safety Formula with 120% Limit*

*Pensionable compensation limit based on Social Security Taxable Wage Base.

Comparison of New Plan Costs with Current Open Plans

The new plans using the PEPRA formulas are expected to result in lower total costs than the current open plan that corresponds with each group. These cost savings are primarily due to the lower benefit formula. Note the one exception is that the total normal cost rate for PEPRA version of Plan 3 is higher than the current Plan 3 due to the addition of member contributions which can be refunded and are therefore included as part of the cost of the benefits; however, the employer's share of the normal cost is still less. The following chart shows a comparison of the total normal cost rate for each group. Note that decreases are indicated by negative values (those in parentheses) in the "Increase" column.

NOTE: We have shown a comparison to the current plans, which have active populations ranging from a relatively small number of active members down to no active members for Safety Plan 6. We based our analysis on larger groups, as described in the Actuarial Certification section, to provide a more stable estimate of the future population. Therefore, the measurements shown are based on different populations which may cause some additional differences.

	Total Normal Cost Rate		
	Current Plan	PEPRA Version	Increase / (Decrease)
General County & Courts (Current Plan = 3)	7.94%	7.00%	(0.94)%
General County & Courts (Current Plan = 5)	17.50%	15.40%	(2.10)%
General SMCM&VCD	17.69%	15.65%	(2.04)%
Safety (Current Plan = 5)	33.00%	26.22%	(6.78)%
Safety (Current Plan = 6)	28.48%	26.22%	(2.26)%
Probation (Current Plan = 5)	28.38%	24.56%	(3.82)%
Probation (Current Plan = 6)	26.02%	24.56%	(1.46)%

The average member contribution rate may be more or less under PEPRA than the current open plan depending on the specific plan. In particular, for new employees who would have otherwise entered a plan which currently has cost-sharing, the average member contribution rate will likely be less under PEPRA.

	Average Member Contribution Rate		
	Current Plan	PEPRA Version	Increase / (Decrease)
General County & Courts (Current Plan = 3)	0.00%	3.50%	3.50%
General County & Courts (Current Plan = 5)	8.15%	7.65%	(0.50)%
General SMCM&VCD	6.79%	7.90%	1.11%
Safety (Current Plan = 5)	16.52%	13.22%	(3.30)%
Safety (Current Plan = 6)	12.50%	13.22%	0.72%
Probation (Current Plan = 5)	13.46%	12.31%	(1.15)%
Probation (Current Plan = 6)	9.98%	12.31%	2.33%

The employer's share of the total normal cost rate is lower for all plans under PEPRA as shown in the following chart. Note that this comparison is for the rates effective July 1, 2013.

	Employer Normal Cost Rate		
	Current Plan	PEPRA Version	Increase / (Decrease)
General County & Courts (Current Plan = 3)	7.94%	3.50%	(4.44)%
General County & Courts (Current Plan = 5)	9.35%	7.65%	(1.70)%
General SMCM&VCD	10.90%	7.90%	(3.00)%
Safety (Current Plan = 5)	16.48%	13.22%	(3.26)%
Safety (Current Plan = 6)	15.98%	13.22%	(2.76)%
Probation (Current Plan = 5)	14.92%	12.31%	(2.61)%
Probation (Current Plan = 6)	16.04%	12.31%	(3.73)%

Use of Percentage of Pay in this Analysis

Limiting pensionable pay, whether by applying the definition of pensionable compensation or by directly limiting pay for benefit calculation purposes to 100% or 120% of the SSTWB, would result in lower dollar costs; however, each change would also reduce the payroll on which future contributions could be collected. Our understanding is that future contributions would only be collected on the reduced payroll. Since these provisions would change the value of the benefits earned (the numerator in the calculation of the normal cost rate), as well as alter the pensionable compensation (the denominator in the calculation), these compensation-limiting provisions should have a relatively small impact on the Normal Cost rate as a percentage of pay, because both the numerator and the denominator in the calculation decrease by

This work product was prepared solely for *SamCERA* for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

approximately the same amount. For this analysis, we have shown the new normal cost rates as a percent of the new (limited) payroll, since this will be the ultimate rate for new members.

Potential Adjustment to Employer Contribution Rates

In the Summary Results section we show the recommended employer contribution rates. It should be noted that these are theoretical contribution rates assuming that all new members pay the recommended member rate immediately and that future pensionable payroll increases 3.75% per year. Given certain provisions of PEPRA as detailed below, we expect the actual contributions will fall short of the calculated actuarial rate even if all assumptions are met in the future. These shortfalls are expected to be small, but we recommend the Board consider approaches to address this difference.

The definition of pensionable compensation for PEPRA members is more restrictive than the definition of compensation earnable for current members. This is expected to reduce the total pensionable payroll. Additionally, pensionable payroll will be reduced to the extent individual members' compensation exceeds the PEPRA SSTWB-based limit. If employer contributions to pay off the UAAL are based on this more restrictive pensionable compensation, the contributions received will be less than under the current plans, since the UAAL contribution rates are the same and pensionable compensation is less. The short-term impact of this should not be material to the overall funding of *SamCERA*. Per discussions with *SamCERA* staff, this issue will be studied with the next investigation of experience.

There is one other issue that potentially could impact the employer rates. The recommended Employer Normal Cost rate assumes that the calculated member rate is paid by all members. Note that new members covered by an existing MOU may still have negotiated County "pick-ups" applied to their rates, which would result in reduced member contributions. It is our understanding the County will continue to make the payments for these pick-ups, if required by the MOU. Therefore, no adjustment to the Employer rate should be necessary.

Sensitivity to Assumptions

The assumptions used have a material impact on the anticipated cost of the benefits. For the demographic (relating to member behavior) and economic assumptions, we have used the June 30, 2012 valuation assumptions in our comparison of the value of benefits. The following are some of the key assumptions that were made in this analysis and our comments on their potential impact:

- **Investment Return:** The cost analysis assumes that *SamCERA*'s current and future assets earn 7.50%. If the actual returns in the future are greater, this would reduce the ultimate cost of PEPRA benefits. Conversely, if actual returns are less than 7.50%, it would increase the ultimate cost of PEPRA benefits.
- **Rates of Retirement:** The age at which members retire can have a material impact on costs. Under the legislation, the retirement behavior of future *SamCERA* members will likely change. In particular, the change in retirement eligibility and the new percentage factors will likely impact members' retirement choices. Note that we have used the retirement rates used in the June 30, 2012 actuarial valuation for the lower cost plans (e.g., Safety Plan 5 retirement rates for the new Safety PEPRA plan). Since the PEPRA

benefit factors are fairly close to the factors for the current lower cost plans, we believe these retirement rates are reasonable to use for this analysis. As described below, we have made one modification to the certain retirement age to be consistent with the new PEPRA formulas.

Assumptions Specific to this Analysis

The data, assumptions and methods used in this analysis are based on the June 30, 2012 actuarial valuation. We have made the following additions to and modifications of the current valuation assumptions to reflect the provisions of PEPRA:

- **Refund of Contributions upon Termination:** Currently all Plan 3 members are assumed to elect a deferred service retirement benefit upon vested termination, as current Plan 3 members do not make contributions. Therefore, a deferred retirement is always more valuable than a refund of contributions. Since under PEPRA all members would contribute, the refund of contributions benefit may be more valuable in many cases than the deferred service retirement benefit. Therefore, for vested members who terminate in the future, we have assumed that if the value of the deferred vested benefit is less than the value of the contributions with interest, the member elects a refund. 100% of non-vested terminations are assumed to elect a refund. This applies to General Plan 3 (PEPRA).
- **Death Benefit:** Currently there is no benefit available at death to Plan 3 members. However, because General Plan 3 (PEPRA) would be a contributory plan, members would have a contribution balance at death. We have assumed that the beneficiaries of members who die before retirement would receive a refund of these contributions at death.
- **Termination Rate Assumptions:** Currently, there is no termination assumed after 30 years of service for General Plan 5 members (20 years for Safety and Probation members), as active members would be eligible for service retirement. Under the new PEPRA formulas, active members would no longer be automatically eligible for service retirement at these thresholds. Therefore, we believe it is more likely that a member may terminate while not being eligible to retire at these service levels. We have proposed new termination assumptions for service greater than or equal to 30 years of service for General members (1.0% probability of termination each year) and greater than or equal to 20 years for Safety and Probation members (0.4% probability of termination each year). We have used our actuarial judgment to propose these rates based on our experience working with *SamCERA* and other large retirement systems.
- **Safety Disability Benefit:** PEPRA provides for an “industrial” disability benefit for Safety members (50% of final compensation plus an annuity based on the members contribution account) that would be greater in many cases than *SamCERA*'s current service-connected disability benefit. However, it is our understanding is that this benefit is not intended to apply to '37 Act county retirement systems. Therefore, we have retained the current Safety disability benefit for both Safety and Probation members for this analysis.

- **Certain Retirement Age:** Currently, General members are assumed to have 100% probability of retirement at age 70, and Safety members at age 60, unless the members reach an age/service combination at which the benefit amount is approximately equal to 100% of Final Compensation. For the new PEPPRA formulas, these thresholds are reached at a different age/service combination than under the previous '37 act applicable formulas. Therefore, for the new General PEPPRA plan, we have assumed certain retirement at age 67 with 40 years of service (or age 70 if earlier), and for the new Safety and Probation PEPPRA plans we have assumed certain retirement at age 57 with 37 years of service (or age 60 if earlier).

Actuarial Certification

All data, methods, and assumptions are the same as those used in our June 30, 2012 actuarial valuation for *SamCERA*, except where noted. It should be noted that member behavior may change as a result of plan changes. We have not anticipated any changes in member behavior in the assumptions used in our analysis (except where noted).

In determining the normal cost rate for new members, we have used the following populations.

- General Plan 3 (PEPPRA) – Current full-time General Plan 3, 4 and 5 members.
- New General PEPPRA Plan – Current full-time General Plan 3, 4 and 5 members.
- New Safety PEPPRA Plan – Current full-time Safety Plan 4, 5 and 6 members.
- New Probation PEPPRA Plan – Current full-time Probation Plan 4, 5 and 6 members.

The cost estimates presented in this letter reflect changes in the benefits provided to *SamCERA* members, as described in this letter and in Assembly Bills 340 and 197. These cost estimates are subject to the uncertainties of a regular actuarial valuation; the costs are inexact because they are based on assumptions that are themselves necessarily inexact, even though we consider them reasonable.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. These possible changes should be reviewed by counsel. Note that we have not explored these or any other legal issues with respect to the proposed plan changes.

In preparing the valuation upon which this letter was based, we relied without audit, on information (some oral and some in writing) supplied by *SamCERA* 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.

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 a reasonable estimate of anticipated experience affecting *SamCERA*.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Retirement has the final decision regarding the appropriateness of the assumptions and adopted as shown in Appendix B of the June 30, 2012 actuarial valuation report.

Actuarial computations presented in this letter are for purposes of determining the member and employer contribution rates for new members. The calculations in this letter have been made on a basis consistent with our understanding of *SamCERA*'s current funding requirements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this letter. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of *SamCERA*. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) *SamCERA* may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) *SamCERA* may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this cost study letter is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. 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 this analysis and we look forward to discussing it with you.

If you have any questions, please contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Collier".

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

NJC/nlo

cc: Mr. David Bailey

Exhibit 1 Member Contribution Rates by Entry Age

Entry Age	General Members				
	Plan 3 (PEPRA)	County & Courts	SMCM&VCD	Safety	Probation
16	2.50%	5.25%	5.25%	10.00%	9.50%
17	2.50%	5.25%	5.50%	10.00%	9.75%
18	2.50%	5.50%	5.50%	10.25%	10.00%
19	2.50%	5.50%	5.75%	10.50%	10.00%
20	2.50%	5.75%	5.75%	10.75%	10.25%
21	2.50%	5.75%	5.75%	10.75%	10.50%
22	2.75%	5.75%	6.00%	11.00%	10.75%
23	2.75%	6.00%	6.00%	11.25%	10.75%
24	2.75%	6.00%	6.25%	11.50%	11.00%
25	2.75%	6.25%	6.25%	11.75%	11.25%
26	2.75%	6.25%	6.50%	12.00%	11.50%
27	3.00%	6.50%	6.50%	12.00%	11.75%
28	3.00%	6.50%	6.75%	12.25%	11.75%
29	3.00%	6.75%	6.75%	12.50%	12.00%
30	3.00%	6.75%	7.00%	12.75%	12.25%
31	3.25%	7.00%	7.00%	13.00%	12.50%
32	3.25%	7.00%	7.25%	13.25%	12.75%
33	3.25%	7.25%	7.25%	13.50%	13.00%
34	3.25%	7.25%	7.50%	13.75%	13.25%
35	3.25%	7.50%	7.50%	14.00%	13.50%
36	3.50%	7.50%	7.75%	14.25%	13.75%
37	3.50%	7.75%	7.75%	14.50%	14.00%
38	3.50%	7.75%	8.00%	14.75%	14.25%
39	3.50%	8.00%	8.00%	15.00%	14.50%
40	3.75%	8.25%	8.25%	15.25%	14.75%
41	3.75%	8.25%	8.50%	15.50%	15.00%
42	3.75%	8.50%	8.50%	15.75%	15.25%
43	4.00%	8.50%	8.75%	16.00%	15.25%
44	4.00%	8.75%	9.00%	16.00%	15.50%
45	4.00%	9.00%	9.00%	16.25%	15.50%
46	4.00%	9.00%	9.25%	16.25%	15.75%
47	4.25%	9.25%	9.50%	16.25%	15.75%
48	4.25%	9.50%	9.50%	16.75%	16.25%
49	4.25%	9.50%	9.75%	17.50%	16.75%
50	4.50%	9.75%	10.00%	17.50%	16.75%
51	4.50%	10.00%	10.00%	17.50%	16.75%
52	4.50%	10.00%	10.25%	17.50%	16.75%
53	4.50%	10.25%	10.25%	17.50%	16.75%
54	4.75%	10.25%	10.50%	17.50%	16.75%
55	4.75%	10.25%	10.50%	17.50%	16.75%
56	4.75%	10.25%	10.50%	17.50%	16.75%
57	4.75%	10.25%	10.50%	17.50%	16.75%
58	4.75%	10.75%	11.00%	17.50%	16.75%
59	5.00%	11.00%	11.25%	17.50%	16.75%
60 & Up	5.00%	11.00%	11.25%	17.50%	16.75%

This work product was prepared solely for SamCERA for the purposes described herein and 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. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

