### ACTUARIAL VALUATION June 30, 2008



Ву

Karen I. Steffen

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

and

Nick J. Collier

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



1301 Fifth Avenue Suite 3800 Seattle, WA 98101-2605

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

milliman.com

September 15, 2008

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, 2009.

### 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."



Board of Retirement San Mateo County Employees' Retirement Association September 15, 2008 Page 2

#### 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, 2008. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the SamCERA's staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is materially inaccurate or incomplete, our calculations may need to be revised.

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

We further certify that all costs, liabilities, rates of interest, and other factors for SamCERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of SamCERA and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience affecting SamCERA. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The Board of Retirement has the final decision regarding the appropriateness of the assumptions. These assumptions are based on our investigation of experience report for the period ended April 30, 2008. They were adopted by the Board in August 2008 and are shown in detail in Appendix D of this report.

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; 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.

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



**Board of Retirement** San Mateo County Employees' Retirement Association September 15, 2008 Page 3

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

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

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

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

Sincerely,

Karen I. Steffen, FSA, EA, MAAA

Kan D. Steffe

Consulting Actuary

KIS/NJC/nlo

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

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### **Table of Contents**

		Page
Section 1:	Summary of the Findings	1
Exhibit 1	Summary of Recommendations	2
Exhibit 1b	Summary of Recommendations (continued)	3
Exhibit 2:	Summary of Significant Valuation Results	9
Section 2:	Scope of the Report	11
Section 3:	Assets	13
Exhibit 3:	Statement of Plan Net Assets For the Years Ended June 30, 2007 and 200	
Exhibit 4:	Statement of Changes in Plan Net Assets	
	For the Years Ended June 30, 2007 and 2008	17
Exhibit 5:	Allocation of Assets by Accounting Reserve Amounts	18
Exhibit 6:	5-Year Smoothing of Gains and Losses on Market Value – History	19
Exhibit 7:	5-Year Smoothing – Development of Valuation Assets	20
Exhibit 8:	Allocation of Valuation Assets (Dollars in Thousands)	21
Section 4:	Actuarial Liabilities	23
Exhibit 9:	Actuarial Balance Sheet – June 30, 2008	
Section 5:	Member Contributions	29
Exhibit 10:	Sample Member Contribution Rates Effective July 1, 2009	31
Section 6:	County Contributions	33
	Calculated Employer Normal Cost Contribution Rates – June 30, 2008	
	Calculated Employer Normal Cost Contribution Rates – June 30, 2008	
	(continued)	36
Exhibit 12a:	Total Employer Contributions	37
Exhibit 12b:	Total Employer Contributions (continued)	38
Section 7:	Information for Comprehensive Annual Financial Report (CAFR)	39
Exhibit 13:	Schedule of Funding Progress	41
Exhibit 14:	Schedule of Contributions from the Employer	42
Exhibit 15:	Solvency Test	
Exhibit 16:	History of Employer Contribution Rates	44
Exhibit 17:	Actuarial Analysis of Financial Experience	45
Exhibit 18:	Summary of Significant Actuarial Statistics and Measures	46
Exhibit 19:	Summary of SamCERA Membership	47
Exhibit 20:	Summary of Active Member Valuation Data	48
Exhibit 21:	Summary of Demographic Activity of Retirees and Beneficiaries	49
Exhibit 22:	Average Salary and Active Counts by Employer	50
Exhibit 23:	Summary of Retired and Inactive Benefits	51
Exhibit 24a:	Summary of Assumptions	52
Exhibit 24b:	Summary of Assumptions	53



### Table of Contents (continued)

Section 8:	Supplemental Information – Projection of Retirements	55
Exhibit 25	Projection of Service Retirements	56
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 F	Glossary	F-1



### **Section 1: Summary of the Findings**



#### Overview

#### 2008 Valuation Results

	June 30, 2008	June 30, 2007
County Contribution Rate	23.62%	23.76%
Funded Ratio	79.1%	77.4%

We are pleased to present the results of the June 30, 2008 actuarial valuation. Several key points are summarized as follows:

- Funding: The Funded Ratio increased from 77.4% to 79.1%. This increase was primarily due to employer contributions made to pay off the Unfunded Actuarial Accrued Liability (UAAL) and the recognition of deferred investment gains in the actuarial value of assets. These factors were somewhat offset by changes in the actuarial assumptions that increased liabilities, and therefore decreased the Funded Ratio.
- Contribution Rates: The County Normal Cost rate (11.69%) decreased from 11.82% due to the changes in the membership being valued and the actuarial assumptions. These changes were within an expected range for year-toyear changes. The rates will vary as the average entry age of the membership changes and as a greater proportion of members enter Plans 3 & 4 which are less expensive than Plans 1 & 2.

The County's required contribution rate to finance the UAAL over 15 years decreased slightly from 11.94% to 11.93%. The overall result is a decrease in the required total contribution rate from the prior valuation of 0.14% (from 23.76% to 23.62% of payroll). There were several offsetting factors that resulted in the small decrease in the amount necessary to fund the UAAL. The change in the method used to finance the UAAL and the return on actuarial value of assets caused a decrease; this was offset by changes in the actuarial assumptions which caused an increase in the UAAL contribution rate.

- Member Contribution Rates: Members' rates increased slightly due to the new mortality assumption. See Appendix D for complete member contribution rates by age.
- Investment Returns: SamCERA's investment return for the prior year (-8.2%) was significantly less than the actuarial assumed rate of 7.75%; however, only a portion of this loss is recognized in this valuation. The loss was more than



offset by deferred gains recognized from prior years in the valuation assets. Overall, the valuation assets increased at a rate slightly greater than expected; this resulted in an increase in the system's funding status and a decrease in the required County contribution rate.

Note that currently a \$208 million net asset loss is being deferred. This is because the asset-smoothing method has not yet recognized a portion of the net losses from the prior four years. These deferred losses will be reflected in future valuations.

- Updated Actuarial Assumptions: The new actuarial assumptions that were adopted in August of 2008 have been reflected in this valuation. The most significant of these changes was updated mortality tables that reflect longer life expectancies. Overall, the impact of the new actuarial assumptions was to increase the County contribution rate and decrease the Funded Ratio.
- Revised UAAL Financing Method: Under the new method, the UAAL as of June 30, 2008 is amortized over 15 years in payments that are level as a percentage of payroll. Actuarial gains and losses in successive years are amortized over new 15-year layers. This change resulted in a small decrease in the County contribution rate, since under the old method, the UAAL would have been funded over a slightly shorter period (14 years). This change had no impact on the Funded Ratio.

### Summary of Recommendations

The following exhibit summarizes our recommendations to the Board.

Exhibit 1 Summary of Recommendations

Recommendation #1: Adopt new employer contribution rates for fiscal year beginning July 1, 2009

	June 30, 2008	June 30, 2007	Increase / (Decrease)
Gross Normal Cost	21.43%	21.52%	(0.09)%
Member Contributions	(9.74)%	(9.70)%	(0.04)%
County Normal Cost	11.69%	11.82%	(0.13)%
UAAL Amortization	11.93%_	11.94%_	(0.01)%
Total County Rate	23.62%	23.76%	(0.14)%

#### Notes:

- 1) Detailed contribution rates by plan are shown in Section 6, Exhibits 12a & 12b.
- 2) The contribution rates for the Mosquito and Vector Control District are based on the methodology adopted for the 2005 valuation and are shown in Exhibit 12a.



### Exhibit 1b Summary of Recommendations (continued)

Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2009

		Recommended			Current	
	Entry			Total as a %	Total as a % of	
	Age	Basic	Cost Sharing	of Pay	Pay	
General Members - Co	ounty					
Plans 1 & 2	25	6.03%	3.00%	9.03%	8.97%	
	35	7.22%	3.00%	10.22%	10.15%	
	45	8.67%	3.00%	11.67%	11.59%	
Plan 4	25	5.78%	3.00%	8.78%	8.72%	
	35	6.91%	3.00%	9.91%	9.85%	
	45	8.26%	3.00%	11.26%	11.18%	
General Members - Sa	an Mateo Mosqu	ito Abatement & V	ector Control Distric	et .		
Plans 1 & 2	25	5.20%	0.00%	5.20%	5.13%	
	35	6.23%	0.00%	6.23%	6.15%	
	45	7.48%	0.00%	7.48%	7.37%	
Plan 4	25	4.98%	0.00%	4.98%	4.91%	
	35	5.97%	0.00%	5.97%	5.89%	
	45	7.16%	0.00%	7.16%	7.06%	
Probation Members (F	Reflects Employ	er Pick-up)				
Plans 1 & 2	25	6.53%	3.50%	10.03%	9.97%	
	35	7.83%	3.50%	11.33%	11.27%	
	45	9.21%	3.50%	12.71%	12.64%	
Plan 4	25	6.25%	3.50%	9.75%	9.70%	
	35	7.49%	3.50%	10.99%	10.93%	
	45	8.66%	3.50%	12.16%	12.09%	
Safety Members - Oth	er than Deputy	Sheriff*				
Plans 1 & 2	25	8.16%	5.00%	13.16%	13.09%	
	35	9.78%	5.00%	14.78%	14.71%	
	45	11.52%	5.00%	16.52%	16.42%	
Plan 4	25	7.81%	5.00%	12.81%	12.75%	
	35	9.37%	5.00%	14.37%	14.29%	
	45	10.83%	5.00%	15.83%	15.74%	

<sup>\*</sup> Cost Sharing varies for Deputy Sheriffs as follows:



<sup>3.0%</sup> if employee is less than 45 and has less than 5 years of service.

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

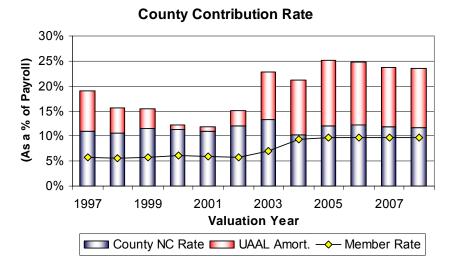
<sup>4.5%</sup> if employee is older than 45 or has at least 15 years of service.

### County Contribution Rate

Under the Board's current funding objectives, the calculated County contribution rate for the fiscal year beginning July 1, 2009 is 23.62% of payroll. This is equal to the payment of the County Normal Cost rate plus a 15-year amortization of the UAAL. It should be noted that the 23.62% is a weighted average for all SamCERA plans. The actual percent of payroll to be contributed by the County varies by plan. See Exhibits 11a and 11b for Normal Cost rates by plan.

The new rate is effective for the fiscal year beginning July 1, 2009. The 23.62% contribution rate is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions shown in this report, and satisfies the current funding objective that calls for the current UAAL to be paid off by June 30, 2023. See Exhibits 12a and 12b for the total employer contribution rates by plan.

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



### Comparison with Last Year

A detailed analysis of the sources of the changes in both the County contribution rate and the funded ratio was performed. As discussed earlier, there were several offsetting factors which caused a small decrease in the contribution rate. The most significant reason for the increase in the funded ratio was employer contributions made to pay off the UAAL and the recognition of prior years' investment gains. This is partially offset by the change in actuarial assumptions which caused an increase in the liabilities.



### Comparison with Last Year (continued)

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

Sources of Change	County Contribution Rate	Funded Ratio
June 30, 2007 Actuarial Valuation	23.76%	77.4%
Expected Year-to-Year Change Recognized Asset Gain/Loss	0.00%	2.4%
From Current Year	0.65%	-1.2%
From Prior Years	-1.23%	2.2%
Retiree COLAs Greater than Expected	0.02%	0.0%
Salary / Payroll Variation	-0.19%	0.6%
Change in Average Entry Age and Plan	-0.13%	0.0%
Assumption Changes	1.24%	-1.8%
Change in Amortization Method	-0.69%	0.0%
Plan Changes	0.00%	0.0%
Other Experience Changes	0.19%	-0.5%
Total Change	-0.14%	1.7%
June 30, 2008 Actuarial Valuation	23.62%	79.1%

### Member Contribution Rates

Member contribution rates have been revised to reflect the new mortality assumption. The relative increase in basic rates is about 1%. Member rates for all plans are discussed in Section 5 and are shown in detail in Appendix D.

### **Funding Progress**

Based on the 2007 valuation, the expected UAAL as of June 30, 2008 was \$547.1 million. The actual UAAL for the fiscal year ending June 30, 2008 is \$587.3 million. There were several factors that had an impact on the UAAL, both individually and in total. These factors are shown in detail at the end of Section 4.

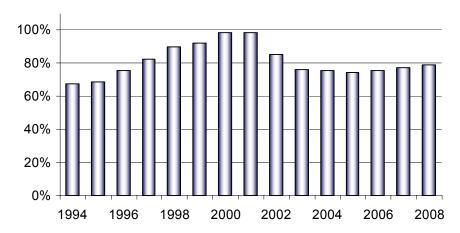
One measure of the funding adequacy of the system is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all SamCERA plans combined. SamCERA's Funded Ratio increased rapidly in the last half of the 1990's, reaching almost 100% in 2001. However, due primarily to asset losses early in this decade, the Funded Ratio has decreased significantly since then. Currently, the Funded Ratio is 79.1%; that is, the actuarial value of assets of \$2,219 million is about 21% less than the actuarial accrued liabilities of \$2,806 million. Note that if the market value of assets was used, the Funded Ratio would be significantly less at 71.7%.



#### All dollar amounts in millions

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

### **Historical Funded Ratios**



#### **Assets**

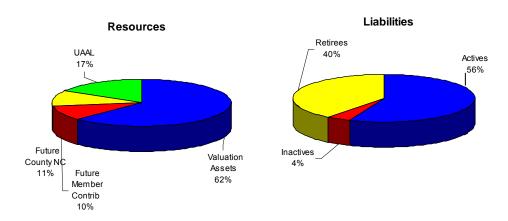
For the fiscal year ending June 30, 2008, we estimate that SamCERA lost 8.2%, net of investment expenses, on its market assets. Note that our return figure may be slightly different than that shown in the 2008 CAFR due to timing of contributions and benefit payments, as well as the treatment of expenses.

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 deferred recognition of recent gains, the return on valuation assets, at 9.4%, was higher than the market return.

### 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.

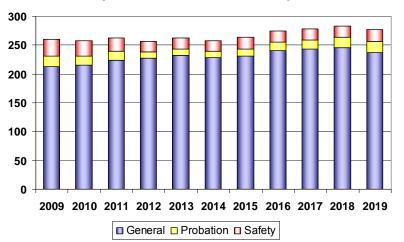
Comparing the current and future resources to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.



### Projection of Service Retirements

We projected the number of expected service retirements based on the valuation assumptions. Actual retirements will vary due to a numbers of factors.





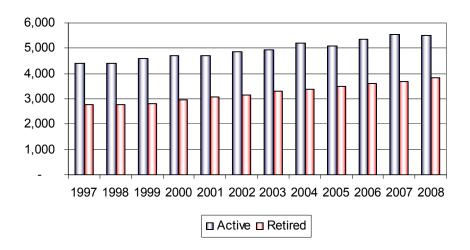


### **Member Information**

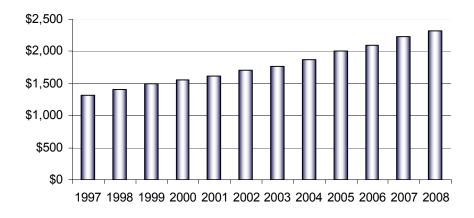
The number of active members included in the valuation decreased by 0.7% from 5,539 in 2007 to 5,500 in 2008.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2008, there were 3,842 retired members and beneficiaries with an average benefit of \$2,378 per month. This represents a 4.0% increase in count from 3,694 in 2007 to 3,842 in 2008, and a 6.7% increase in the average monthly benefit from \$2,229 to \$2,378 over the period.

### **Membership Count**



### **Average Monthly Retirement Benefit**



### Summary Valuation Results

The following Exhibit 2 presents a summary of key data elements on June 30, 2008 and June 30, 2007, 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.



**Exhibit 2:** Summary of Significant Valuation Results

		ل	lune 30, 2008	J	June 30, 2007	Relative Change
1.	Total Membership					
	A. Active Members		5,500		5,539	(0.7)%
	B. Retired Members & Beneficiaries		3,842		3,694	4.0%
	C. Vested Terminated Members	-	1,225		1,151	6.4%
	D. Total		10,567		10,384	1.8 %
2.	Pay Rate					
	A. Annual Total (\$thousands)	\$	424,586	\$	416,070	2.0%
	B. Monthly Average	\$	6,433	\$	6,260	2.8%
3.	Average Monthly Benefit to Current Retirees and Beneficiaries					
	A. Service Retirement	\$	2,479	\$	2,324	6.7%
	B. Disability Retirement	\$	2,553	\$	2,407	6.1%
	C. Surviving Spouse and Dependents	\$	1,683	\$	1,572	7.1%
	D. Total	\$	2,378	\$	2,229	6.7%
4.	Actuarial Accrued Liability (\$thousands)					
	A. Active Members	\$	1,255,347	\$	1,207,491	4.0%
	B. Retired Members	\$	1,400,458	\$	1,214,885	15.3%
	C. Vested Terminated Members	\$	150,417	\$	133,128	13.0%
	D. Total	\$	2,806,222	\$	2,555,504	9.8%
5.	Assets					
	A. Market Value of Fund (\$thousands)	\$	2,010,739	\$	2,131,615	(5.7)%
	B. Return on Market Value*	æ	-8.2%	Φ.	16.5%	40.20/
	C. Actuarial Value (\$thousands) D. Return on Actuarial Value*	\$	2,218,937 9.4%	\$	1,976,731 9.2%	12.3%
	* May differ from return reported in CAFR du treatment of expenses.	ıe to timin		and be		and
6.	Unfunded Actuarial Accrued Liability					
	or Surplus Funding (\$thousands)	\$	587,285	\$	578,773	1.5%
7.	Required County contribution rate for all tiers combined as a percent of total payroll					
	A. Gross Normal Cost		21.43%		21.52%	(0.4)%
	B. Member Contributions		(9.74)%		(9.70)%	0.4%
	C. County Normal Cost		11.69%		11.82%	(1.1)%
	D. UAAL Amortization		11.93%		11.94%	(0.1)%
	E. Total County Rate		23.62%		23.76%	(0.6)%
8.	Funded Ratio (5C / 4D)		79.1%		77.4%	2.2%





### Section 2: Scope of the Report



This report presents the actuarial valuation of the San Mateo County Employees' Retirement Association as of June 30, 2008. 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, 2008.

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

Section 5 discusses the Member contribution rates.

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

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

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, 2008.

- 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.





#### 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, 2008. 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 County are needed to pay all expected future benefits.

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

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

A 11	_1 _ 11 _		4	: 111 :
AΙΙ	aolia	ar amo	unts ir	n millions

		Actuaria	al Value
	Market Value of <u>Total Assets</u>	Non- Valuation Reserves	Valuation <u>Assets</u>
1999	\$ 1,261	\$ 45	\$ 1,109
2000	1,381	49	1,271
2001	1,308	51	1,385
2002	1,207	32	1,417
2003	1,233	34	1,354
2004	1,435	31	1,453
2005	1,599	0	1,616
2006	1,790	0	1,769
2007	2,132	0	1,977
2008	2,011	0	2,219

On June 30, 2008, the total market value of the fund was about \$2.01 billion. The actuarial value of the fund was determined to be \$2.22 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 their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

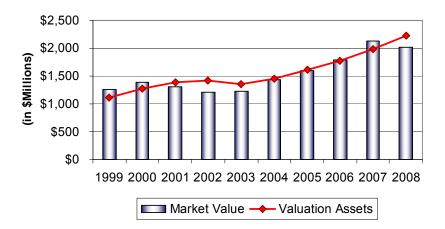
### Actuarial Asset Method

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

### Actuarial Value of Assets

The development of the June 30, 2008 actuarial value of assets is shown in Exhibits 6 and 7. Note the smoothing process has recognized all of the investment losses from 2003 and earlier over the last few years. However, a large portion of the investment loss from last year has not yet been recognized by the asset smoothing method. 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 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.



Exhibit 3: Statement of Plan Net Assets
For the Years Ended June 30, 2007 and 2008

		2008	2007
Assets			
Cash and Cash Equivalents		64 334 999	60,996,157
Securities Lending Cash Collateral		64,334,888	00,990,137
•	\$	234,500,134	60 006 157
Total Cash	<u> </u>	298,835,022 \$	60,996,157
Receivables			
Contributions		6,357,986	5,547,335
Due from broker for investments sold		103,095,295	56,373,355
Investment Income		4,902,481	4,275,585
Other receivables		249,895	182,570
Securities Lending Income		193,166	-
Total Receivables		114,798,824	66,378,846
Prepaid Expense		7,669	60,512
Investments at Fair Value			
Domestic fixed income securities		597,506,052	592,394,013
Domestic equities		818,989,347	944,261,933
International equities		405,738,858	451,951,391
Real estate		169,974,878	156,610,221
Total Investments		1,992,209,134	2,145,217,557
Capital Assets Net of Depreciation		-	-
Total Assets		2,405,850,649	2,272,653,072
Liabilities			
Payables			
Investment management fees		1,502,950	1,511,285
Due to broker for investments purchased		158,454,659	138,826,805
Collateral Payable for Securities Lending		234,500,134	
Mortgage Note Payable			
Due within one year		-	-
Due in more than one year		- CE4 120	700.353
Other		654,138	700,353
Total Liabilities		395,111,881	141,038,442
Net Assets Held in Trust for Pension Benefits	\$	2,010,738,768 \$	2,131,614,629



Exhibit 4: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2007 and 2008

	2008	2007
Additions		
Contributions Employer Employee Total Contributions	\$ 105,339,570 60,111,183 165,450,753	42,696,034
Investment Income/(Loss) Interest and dividends Net appreciation/(depreciation) in Fair Value	47,565,116 (214,563,618 (166,998,502	) 269,049,248
Less investment expense Net Investment Income/(Loss)	10,924,162 (177,922,664	
Securities Lending Income Earnings Less securities lending expense Net Securities Lending Income	10,083,125 8,384,558 1,698,567	-
Other Additions  Total Additions/(Declines)	181,048 <b>(10,592,296</b>	
Deductions		
Association Benefits Service retirement allowances Disability retirement allowances Medical Benefits Death and other death benefits Total Association Benefits	90,306,503 12,760,602 - 902,959 103,970,063	11,348,855 - 784,479
Refunds of members' contributions Administrative Expense Other Expense	3,074,453 3,231,136 7,913	2,582,026
Total Deductions	110,283,566	99,815,173
Net Increase/(Decrease)	(120,875,861	) 341,716,813
Net Assets Held in Trust for Pension Benefits:		
Beginning of Year	2,131,614,629	1,789,897,817
End of Year	2,010,738,768	2,131,614,629
Estimated Return, Net of Investment Expenses *	-8.2%	16.5%

<sup>\*</sup> May differ from return reported in CAFR due to timing of contributions and benefit payments and



Exhibit 5: Allocation of Assets by Accounting Reserve Amounts For the Years Ended June 30, 2007 and 2008

Valuation Reserves	2008	2007
Member Deposit Reserve	\$ 385,300,221	\$ 359,484,306
2. County Advance Reserve	279,375,884	267,208,723
3. Retiree Reserves	784,613,246	662,143,559
Cost of Living Reserve	 769,647,607	 692,471,430
5. Total Valuation Reserves	\$ 2,218,936,958	\$ 1,981,308,018
Non-Valuation Reserves	2008	2007
Contingency Reserve		
a. Reserves for Deficiencies in Interest Earnings	\$ -	\$ -
b. Unallocated Earnings / Loss Account	 	 (4,577,107)
c. Total	\$ -	\$ (4,577,107)
Market Stabilization Account	(208,198,190)	154,883,718
3. Total Non-Valuation Reserves	\$ (208,198,190)	\$ 150,306,611
4. Total Reserves	\$ 2,010,738,768	\$ 2,131,614,629

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

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

		ı	History of Une	expected 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)
06/30/2008 \$	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)
06/30/2007	2,035,751,839	29,280,037	49,671,897	2,131,614,629	3.875%	78,382,391	116,254,650	37,872,259
12/31/2006	1,789,897,817	113,965,567	47,360,082	2,035,751,839	3.875%	72,065,900	179,248,537	107,182,637
06/30/2006	1,787,576,077	23,551,946	45,624,067	1,789,897,817	4.000%	71,011,738	24,393,861	(46,617,877)
12/31/2005	1,599,269,700	92,500,269	44,548,346	1,787,576,077	4.000%	66,058,258	140,354,454	74,296,197
06/30/2005	1,600,553,433	22,834,864	41,871,612	1,599,269,700	3.920%	62,398,448	17,753,015	(44,645,433)
12/31/2004	1,435,359,423	87,743,624	42,769,133	1,600,553,433	3.920%	58,350,752	120,219,519	61,868,767
06/30/2004	1,411,797,335	23,132,825	38,581,851	1,435,359,423	4.000%	56,040,580	39,011,114	(17,029,466)



Exhibit 7: 5-Year Smoothing – Development of Valuation Assets

### **Development of Market Stabilization Reserve**

	Phase-Out of Gain / (Loss)									
Six-Month	Percent		Unexpected				Gain / (Loss)			
Period Ended	Excluded	<b>.</b> ,		Gain / (Loss)			Excluded			
06/30/2008	90%	x	\$	(236,598,249)	=	\$	(212,938,424)			
12/31/2007	80%	х		(112,208,308)	=		(89,766,646)			
06/30/2007	70%	х		37,872,259	=		26,510,581			
12/31/2006	60%	х		107,182,637	=		64,309,582			
06/30/2006	50%	х		(46,617,877)	=		(23,308,938)			
12/31/2005	40%	х		74,296,197	=		29,718,479			
06/30/2005	30%	х		(44,645,433)	=		(13,393,630)			
12/31/2004	20%	х		61,868,767	=		12,373,753			
06/30/2004	10%	х		(17,029,466)	=		(1,702,947)			
Total Gain / (Loss	) Excluded = Mar	ket S	tab	ilization Reserve	=	\$	(208,198,190)			

)evel	OI	pment	t of	Va	luati	ion <i>l</i>	Asset	S

	•			
1.	Market Value of Assets as of June 30, 200	08		\$ 2,010,738,768
2.	Market Stabilization Reserve			 (208,198,190)
3.	Preliminary Actuarial Value of Assets (1) -	(2)		2,218,936,958
4.	Corridor Around Market Value a) Minimum = 80% of Market b) Maximum = 120% of Market			1,608,591,014 2,412,886,522
5.	Gross Actuarial Value of Assets			2,218,936,958
6.	Non-Valuation Reserves and Designations a) Reserves for Interest Fluctuations b) Medicare Part B Reserve c) Total	S	0 0	0
7.	Valuation Assets (5) - (6)			\$ 2,218,936,958



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

	General		Safety Probation		Total		
Prior Year UAAL	\$	383,328	\$ 155,258	\$	40,188	\$	578,773
2. Expected UAAL Contribution for Preceding Year		(35,201)	(14,126)		(3,690)		(53,018)
3. Expected Interest at 7.75%		28,369	11,495		2,974		42,839
4 Expected UAAL Based on Prior Year Assumptions		376,496	152,627		39,472		568,594
5. Percentage of Total Expected UAAL		66.22%	26.84%		6.94%		100.00%
6. Actual UAAL Based on Prior Year Assumptions							526,275
7. Actual AAL Based on Prior Year Assumptions	\$	2,023,505	\$ 569,007	\$	152,700	\$	2,745,212
8. Allocated UAAL		348,474	141,267		36,534		526,275
9. Actuarial Value of Assets	\$	1,675,031	\$ 427,740	\$	116,166	\$	2,218,937



#### 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, 2008. In this section, the discussion will focus on the commitments of SamCERA for retirement benefits, which are referred to as its actuarial liabilities.

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

### Actuarial Balance Sheet – Liabilities

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

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

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries. All liabilities reflect the benefits effective through June 30, 2008.

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, 2008. These assumptions were adopted by the Board at their August 2008 meeting and are shown in Appendix A.

Exhibit 9: Actuarial Balance Sheet – June 30, 2008 (Dollars in Thousands)

Resources									
Valuation Assets (Actuarial)	\$	<b>General</b> 1,675,031	\$	<b>Safety</b> 427,740	<b>P</b>	robation 116,166	\$	<b>Total</b> 2,218,937	
Present Value of Future Member Contributions		288,077		48,058		24,138		360,272	
Present Value of Future Employer Contributions to Fund: a) Normal Cost b) Unfunded Actuarial Accrued Liability		266,057 401,749		64,721 148,211		44,486 37,326		375,264 587,285	
Total Resources	\$	2,630,913	\$	688,729	\$	222,116	\$	3,541,758	

		Liabilities	,						
	General			Safety Probation			Total		
Present Value of Future Benefits									
1. Present Retired Members	\$	1,016,607	\$	324,128	\$	59,723	\$	1,400,458	
2. Current Inactive Members		116,786		25,836		7,795		150,417	
3. Current Active Members									
- Service Retirement		1,343,021		309,631		137,976		1,790,628	
- Disability Retirement		44,457		13,833		7,388		65,678	
- Death Benefits		22,460		6,375		3,195		32,030	
- Deferred Vested Benefit		58,789		7,433		5,185		71,406	
- Refund of Member Contributions		28,794		1,493		854		31,141	
- Total Active		1,497,520		338,765		154,598		1,990,883	
Total Actuarial Liabilities	\$	2,630,913	\$	688,729	\$	222,116	\$	3,541,758	

### Actuarial Balance Sheet – Resources

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

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

### Actuarial Cost Method

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

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

#### **Normal Cost**

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

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

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



### Normal Cost (continued)

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

### Actuarial Accrued Liability

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

(Dollars in millions)	2008	2007	Percent Change
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 3,542	\$ 3,266	8.5%
<ul> <li>B. Actuarial present value of total future Normal Costs for current members</li> </ul>	<u>736</u>	<u>710</u>	3.7%
C. Actuarial accrued liability [A-B]	\$ 2,806	\$ 2,556	9.8%
D. Valuation Assets	<u>2,219</u>	<u>1,977</u>	12.2%
E. UAAL or Surplus Funding [C-D]	\$ 587	\$ 579	1.4%
F. Funded Ratio [D/C]	79.1%	77.4%	2.2%

# 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 County had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

Exhibit 9 shows how the UAAL 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. Any change in UAAL in future years will be amortized separately over new 15-year periods from the valuation date at which the difference is calculated.

### 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 2008 actuarial valuation reflects an increase in the UAAL of \$8.5 million for the fiscal year just ended.

Unfunded Actuarial Accrued Liability - June 30, 2007	\$ 578.8
Expected Increase / (Decrease) *	(23.4)
Expected UAAL - June 30, 2008	\$ 555.4
Asset (Gains) and Losses	(28.4)
Retiree COLA Less than Expected	0.9
Salary Increases Greater than Expected	(19.9)
Assumption Changes	61.0
Other Liability (Gain)/Loss	 18.3
Total Changes	31.9
Actual UAAL - June 30, 2008	\$ 587.3

<sup>\*</sup> Based on actual contribution.





#### **Section 5: Member Contributions**



Basic Contributions

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

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

Plan	Code Section	Contribution Provides  Average Annuity of
General – County	31621.9	1/120 <sup>th</sup> of FAC at age 55
General – SMCMVCD	31621	1/120 <sup>th</sup> of FAC at age 60
Probation & Safety	31639.25	1/100 <sup>th</sup> 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 member contribution rates were recalculated to reflect the assumptions adopted in the April 30, 2008 investigation of experience report. The rates are shown in Appendix D.

### Cost-Sharing Contributions

In addition to the basic rate, members make additional costsharing contributions as shown in Appendix B. For valuation purposes, cost-sharing contributions are assumed to be permanent. The cost-sharing contributions are not impacted by changes in assumptions.

### Cost-of-Living Contributions

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

### Member Contribution Rates

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

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

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



Exhibit 10: Sample Member Contribution Rates Effective July 1, 2009

	Entry		Cost	Total as a
-	Age	Basic	Sharing	% of Pay
General Members	- County			
Plans 1 & 2	25	6.03%	3.00%	9.03%
	35	7.22%	3.00%	10.22%
	45	8.67%	3.00%	11.67%
Plan 4	25	5.78%	3.00%	8.78%
	35	6.91%	3.00%	9.91%
	45	8.26%	3.00%	11.26%
General Members	s - Mosquito	Abatement Dis	trict	
Plans 1 & 2	25	5.20%	0.00%	5.20%
	35	6.23%	0.00%	6.23%
	45	7.48%	0.00%	7.48%
Plan 4	25	4.98%	0.00%	4.98%
	35	5.97%	0.00%	5.97%
	45	7.16%	0.00%	7.16%
Probation Member	ers (Reflects	Employer Pick	r-up)	
Plans 1 & 2	25	6.53%	3.50%	10.03%
	35	7.83%	3.50%	11.33%
	45	9.21%	3.50%	12.71%
Plan 4	25	6.25%	3.50%	9.75%
	35	7.49%	3.50%	10.99%
	45	8.66%	3.50%	12.16%
Safety Members -	Other than	Deputy Sheriff	*	
Plans 1 & 2	25	8.16%	5.00%	13.16%
	35	9.78%	5.00%	14.78%
	45	11.52%	5.00%	16.52%
Plan 4	25	7.81%	5.00%	12.81%
	35	9.37%	5.00%	14.37%
	45	10.83%	5.00%	15.83%

<sup>\*</sup> Cost Sharing varies for Deputy Sheriffs as follows:



<sup>3.0%</sup> if employee is less than 45 and has less than 5 years of service.

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

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



### **Section 6: County Contributions**



Calculated Contribution Rate

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

It should be noted that when we use the term "Gross Normal Cost rate," we are referring to the value of benefits earned by active members allocated to the valuation year. The employer (or County) Normal Cost is the portion of the annual benefit that the employer is responsible for. This is simply the Gross Normal Cost rate less the 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 12a & 12b. These results are expressed as a percentage of payroll and annual contribution dollars. Note that SamCERA's UAAL is determined separately for each class. Thus, the County funds the UAAL evenly as a percentage of pay over salaries for all members within a class.

The total County contribution rate was 23.76% for the fiscal year beginning July 1, 2008. For the fiscal year beginning in 2009, the calculated rate based on this report decreased to 23.62%. This is equal to the aggregate County Normal Cost contribution rate of 11.69% based on Milliman's 2008 valuation, plus a 15-year amortization payment of the UAAL as measured from the valuation date.

## **County Contribution Rate**

(all values as a % of Payroll)

County Normal Cost 11.69% 15-year Amortization of UAAL 11.94 Total County Contribution 23.62%

The UAAL rate reflects a 15-year amortization from the valuation date and the one-year deferral in the implementation of the new County contribution rate effective July 1, 2009.

Note that in the following exhibits "SMCM&VCD" refers to the San Mateo County Mosquito and Vector Control District (formerly the Mosquito Abatement 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 3 and 4, instead of the slightly more expensive Plans 1 and 2. However, the change will be fairly gradual.
- (2) Contribution Shut-Off: For general members hired prior to April 1973 and all Safety members, basic member contributions are not collected after the member has 30 years of service. Thereafter, the member contributions towards the total annual Normal Cost is equal to the costsharing, resulting in a sizable increase in the County's share of the Normal Cost contributions for the years when the member has more than 30 years of service. The County's share of the Normal Cost rates for those groups can be expected to increase rather than remain level, as otherwise expected under the entry age cost method. As most general members hired prior to April 1973 have now attained 30 years of service, this statement applies mainly to Safety groups.



Exhibit 11a: Calculated Employer Normal Cost Contribution Rates – June 30, 2008

	General - County					General - SMCM&VCD				
A. Normal Cost Contribution Rate	Plan 1	Plan 2	Plan 3	Plan 4	<u>Total</u>	Plan 1	Plan 2	Plan 4	<u>Total</u>	
Service Retirement	15.53%	16.57%	7.19%	15.58%	15.66%	12.73%	13.59%	12.78%	13.10%	
Disability Retirement	0.62%	0.75%	0.00%	0.82%	0.77%	0.51%	0.62%	0.67%	0.63%	
Death while Active	0.29%	0.32%	0.00%	0.31%	0.31%	0.24%	0.26%	0.25%	0.25%	
Termination (No Refund)	1.37%	1.29%	0.56%	1.27%	1.26%	1.12%	1.06%	1.04%	1.06%	
Refund of Member Contributions	1.36%	1.56%	0.00%	1.62%	1.55%	1.12%	1.28%	1.33%	1.28%	
Total	19.17%	20.49%	7.75%	19.60%	19.55%	15.72%	16.81%	16.07%	16.32%	
B. Member Contributions	(8.47)%	(9.48)%	0.00%	(9.78)%	(9.39)%	(6.95)%	(7.77)%	(8.02)%	(7.77)%	
C. Net Employer Normal Cost as of June 30, 2008 (A) - (B)	10.70%	11.01%	7.75%	9.82%	10.16%	8.77%	9.04%	8.05%	8.55%	
D. Net Employer Normal Cost as of June 30, 2007	10.58%	11.04%	7.58%	9.78%	10.19%	8.68%	9.05%	8.00%	8.50%	
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	0.12%	(0.03)%	0.17%	0.04%	(0.03)%	0.09%	(0.01)%	0.05%	0.05%	



Exhibit 11b: Calculated Employer Normal Cost Contribution Rates – June 30, 2008 (continued)

		Safe	etv			Proba	tion		All Plans
A. Normal Cost Contribution Rate	Plan 1	Plan 2	Plan 4	Total	Plan 1	Plan 2	Plan 4	Total	
Service Retirement	29.67%	27.91%	25.67%	26.77%	28.63%	27.48%	24.59%	25.53%	17.40%
Disability Retirement	1.66%	1.77%	1.99%	1.88%	1.79%	1.74%	1.75%	1.75%	0.94%
Death while Active	1.02%	0.99%	0.92%	0.96%	1.04%	0.90%	0.83%	0.85%	0.40%
Termination (No Refund)	1.13%	1.34%	1.22%	1.27%	1.49%	1.33%	1.29%	1.30%	1.26%
Refund of Member Contributions	0.60%	0.74%	0.83%	0.78%	0.63%	0.62%	0.65%	0.64%	1.42%
Total	34.08%	32.75%	30.63%	31.66%	33.58%	32.07%	29.11%	30.07%	21.43%
B. Member Contributions	(11.09)%	(12.29)%	(12.46)%	(12.34)%	(8.71)%	(9.85)%	(10.12)%	(10.02)%	(9.74)%
C. Net Employer Normal Cost as of June 30, 2008 (A) - (B)	22.99%	20.46%	18.17%	19.32%	24.87%	22.22%	18.99%	20.05%	11.69%
D. Net Employer Normal Cost as of June 30, 2007	23.23%	21.14%	18.72%	19.94%	27.36%	22.95%	19.63%	20.83%	11.82%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.24)%	(0.68)%	(0.55)%	(0.62)%	(2.49)%	(0.73)%	(0.64)%	(0.78)%	(0.13)%



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

		General - County			General - SMCM&VCD				
	Plan 1	Plan 2	Plan 3	Plan 4	<u>Total</u>	Plan 1	Plan 2	Plan 4	<u>Total</u>
A. Basic Employer Normal Cost Rate	5.00%	6.22%	7.75%	6.52%	6.41%	4.10%	5.10%	5.35%	5.26%
B. COLA Normal Cost Rate	5.70%	4.79%	0.00%	3.30%	3.75%	4.67%	3.94%	2.70%	3.29%
C. Employer Normal Cost Rate	10.70%	11.01%	7.75%	9.82%	10.16%	8.77%	9.04%	8.05%	8.55%
D. UAAL Contribution Rate	9.81%	9.81%	9.81%	9.81%	9.81%	8.04%	8.04%	8.04%	8.04%
E. Total June 30, 2008 Contribution Rate (C) + (D)	20.51%	20.82%	17.56%	19.63%	19.97%	16.81%	17.08%	16.09%	16.59%
F. Total June 30, 2007 Contribution Rate	20.04%	20.50%	17.04%	19.24%	19.65%	16.44%	16.81%	15.76%	16.26%
G. Estimated Payroll for fiscal year beginning July 1, 2009	\$ 12,177 \$	115,956	\$ 9,925 \$	235,349	\$ 373,407	\$ 99	\$ 277	\$ 913	\$ 1,289
H. Estimated Annual Contribution (E x G)*	\$ 2,498 \$	24,142	\$ 1,743 \$	46,199	\$ 74,569	\$ 17	\$ 47	\$ 147	\$ 214
I. Last Year's Estimated Annual Contribution	\$ 3,312 \$	25,251	\$ 1,493 \$	41,841	\$ 71,905	\$ 15	\$ 42	\$ 146	\$ 206
J. Increase / (Decrease) in Annual Contribution	\$ (814) \$	(1,109)	\$ 250 \$	4,358	\$ 2,664	\$ 2	\$ 5	\$ 1	\$ 8

<sup>\*</sup> Estimated contributions shown for illustrative purposes based on monthly contributions. Actual contributions will vary depending on actual payroll and timing.



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

		Safe	etv					Prob	ation		All Plans
	Plan 1	Plan 2		Plan 4	Total	P	lan 1	Plan 2	Plan 4	Total	
A. Basic Employer Normal Cost Rate	11.36%	11.60%		12.14%	11.88%	1	14.97%	13.54%	13.20%	13.32%	7.38%
B. COLA Normal Cost Rate	 11.63%	8.86%		6.03%	7.44%	_	9.90%	8.68%	5.79%	6.73%	4.31%
C. Employer Normal Cost Rate	22.99%	20.46%		18.17%	19.32%	2	24.87%	22.22%	18.99%	20.05%	11.69%
D. UAAL Contribution Rate	27.31%	27.31%		27.31%	27.31%	1	2.81%	12.81%	12.81%	12.81%	11.93%
E. Total June 30, 2008 Contribution Rate (C) + (D)	50.30%	47.77%		45.48%	46.63%	3	37.68%	35.03%	31.80%	32.86%	23.62%
F. Total June 30, 2007 Contribution Rate	52.55%	50.46%		48.04%	49.26%	2	11.42%	37.01%	33.69%	34.89%	23.76%
G. Estimated Payroll for fiscal year beginning July 1, 2009	\$ 2,263	\$ 20,308	\$	26,563	\$ 49,134	\$	997	\$ 7,973	\$ 17,270	\$ 26,240	\$450,070
H. Estimated Annual Contribution (E x G)*	\$ 1,138	\$ 9,701	\$	12,081	\$ 22,911	\$	376	\$ 2,793	\$ 5,492	\$ 8,622	\$106,307
I. Last Year's Estimated Annual Contribution	\$ 1,366	\$ 10,272	\$	12,097	\$ 23,712	\$	494	\$ 2,957	\$ 5,612	\$ 9,016	\$104,822
J. Increase / (Decrease) in Annual Contribution	\$ (228)	\$ (571)	\$	(16)	\$ (801)	\$	(118)	\$ (164)	\$ (120)	\$ (394)	\$ 1,485

<sup>\*</sup> Estimated contributions shown for illustrative purposes based on monthly contributions. Actual contributions will vary depending on actual payroll and timing.



### 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).



# CAFR (continued)

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

- 1. Exhibit 16 History of employer contribution rates.
- 2. Exhibit 17 Actuarial analysis of financial experience.
- 3. 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.
- 5. Exhibit 20 Summary of active member valuation data.
- 6. Exhibit 21 Summary of demographic activity of retirees and beneficiaries.
- 7. Exhibit 22 Average salary and active counts by employer
- 8. Exhibit 23 Summary of retired and inactive benefits.
- Exhibit 24 Summary of actuarial assumptions and cost method. For more detailed information, see Appendix A.



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

Actuarial Valuation Date*	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liabilities	A	(b-a) nfunded actuarial Accrued lities (UAAL)	(a/b) Funded Ratio	Cove	(c) ered Payroll	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 1999	\$ 1,109,417	\$ 1,205,554	\$	96,137	92.0%	\$	238,864	40.25%
June 30, 2000	1,271,565	1,291,694		20,129	98.4%		259,075	7.77%
June 30, 2001	1,384,586	1,404,060		19,474	98.6%		274,318	7.10%
June 30, 2002	1,416,821	1,660,566		243,745	85.3%		301,891	80.74%
June 30, 2003	1,353,941	1,781,544		427,603	76.0%		323,896	132.02%
June 30, 2004	1,452,621	1,921,328		468,707	75.6%		365,385	128.28%
June 30, 2005	1,615,585	2,177,759		562,174	74.2%		334,315	168.16%
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%

<sup>\*</sup>Information for years prior to 2005 reported by prior actuaries.



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

Fiscal Year Ending*	Annual Required Contribution (ARC)	Actual Employer Contributions	Percentage of ARC Contributed
6/30/2000	\$ 38,695	\$ 38,695	100%
6/30/2001	39,482	39,482	100%
6/30/2002	33,541	33,541	100%
6/30/2003	36,070	36,070	100%
6/30/2004	60,042	60,042	100%
6/30/2005	76,931	76,931	100%
6/30/2006	76,090	76,090	100%
6/30/2007	100,550	100,550	100%
6/30/2008	105,340	105,340	100%

<sup>\*</sup>Information for years prior to 2005 reported by prior actuaries.

Exhibit 15: **Solvency Test** (Dollars In Thousands)

		Actu	arial Accrued Liab	lities for			
		Active Member	Retirees and	Active Members (Employer Financed		on of Actuarial Ac abilities Covered Assets	
Actuarial Valuation Date <sup>(1)</sup>	Valuation Assets	Contributions (A)	Beneficiaries <sup>(2)</sup> (B)	Portion) (C)	(A)	(B)	(C)
June 30, 1999	\$ 1,104,833	\$ 157,826	\$ 629,653	\$ 416,489	100%	100%	76%
June 30, 2000	1,271,565	158,314	689,356	444,024	100%	100%	95%
June 30, 2001	1,384,586	174,066	789,104	440,890	100%	100%	96%
June 30, 2002	1,416,821	190,450	866,985	785,082	100%	100%	46%
June 30, 2003	1,353,941	202,551	858,273	915,108	100%	100%	32%
June 30, 2004	1,452,621	259,731	942,765	718,832	100%	100%	35%
June 30, 2005	1,615,585	281,231	1,133,351	763,177	100%	100%	26%
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%

<sup>(1)</sup> Information for years prior to 2005 reported by prior actuaries.(2)Includes deferred vested.



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

	County Rates <sup>(1)</sup>											
	Ge	eneral Memb	per	S	afety Memb	er	Probation Member					
Year	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total			
1999	9.28%	4.36%	13.64%	17.51%	7.85%	25.36%	19.48%	6.06%	25.54%			
2000	9.85%	3.60%	13.45%	17.70%	7.24%	24.94%	19.26%	5.53%	24.79%			
2001	9.95%	0.71%	10.66%	17.81%	1.51%	19.32%	17.94%	1.16%	19.10%			
2002	9.71%	0.70%	10.41%	17.22%	1.50%	18.72%	16.76%	1.17%	17.93%			
2003	11.00%	4.60%	15.60%	21.99%	12.74%	34.73%	23.45%	8.10%	31.55%			
2004	9.76%	8.25%	18.01%	15.34%	24.82%	40.16%	16.17%	15.28%	31.45%			
2005	10.36%	10.38%	20.74%	20.43%	32.02%	52.45%	21.10%	16.43%	37.53%			
2006	10.49%	9.97%	20.46%	20.18%	30.52%	50.70%	21.59%	14.85%	36.44%			
2007	10.19%	9.46%	19.65%	19.94%	29.32%	49.26%	20.83%	14.06%	34.89%			
2008	10.16%	9.81%	19.97%	19.32%	27.31%	46.63%	20.05%	12.81%	32.86%			

Rates for Mosquito and Vector Control District									
	General Member								
Year Normal UAAL Total									
2005	8.69%	17.20%							
2006	8.76%	8.18%	16.94%						
2007	8.50%	7.76%	16.26%						
2008	8.55%	8.04%	16.59%						

<sup>(1)</sup> Information for years prior to 2005 reported by prior actuaries.



**Actuarial Analysis of Financial Experience** Exhibit 17:

Summary of (Gains) / Losses<sup>(1)</sup> **Change In Liability** 2008 2007 2006 2005 2004 \$ 578,773,000 \$ 576,128,000 \$ 562,174,000 \$ 468,707,000 \$ 427,603,000 Unfunded Liability as of July 1 **Expected Change in UAAL** (31,649,000)(16,745,000)2,980,000 (1,700,000)(419,000)(34,300,000)Salary (Gain) / Loss (19,946,000)45,157,000 19,671,000 Fewer Withdrawals than expected Retiree COLA more / (less) than expected 937,000 (3,380,000)(13,862,000)(26,197,000)(1,363,000)Asset (Gain) / Loss (20.078,000)(22,639,000)8,934,000 25,062,000 Change due to Assumption Changes 61,011,000 152,500,000 (13,989,000)Change due to Actuarial Asset Corridor Ventura Benefits & Asset transfers (21,801,000)Miscellaneous Experience 18,237,000 253,000 6,528,000 16,031,000 30,450,000 Change Due to New Formula

\$ 578,773,000

\$ 576,128,000

\$ 562,174,000

\$ 468,707,000

\$ 587,285,000



Unfunded Liability as of June 30

<sup>(1)</sup> Information for years prior to 2005 reported by prior actuaries.

**Exhibit 18:** Summary of Significant Actuarial Statistics and Measures

		_	June 30th of		of	Relative	
			2008		2007	Change	
ı.	Active Members						
١.	Number of Members		5,500		5,539	(0.7)%	
	Average Age		5,500 44.5		5,559 44.5	(0.7)%	
	Average Credited Service		9.3		9.3	_	
	Total Active Payroll (\$thousands)	\$	424,586	\$	416,070	2.0%	
	Average Monthly Salary	\$	6,433	\$	6,260	2.8%	
II.	Retired Members						
	Number of Members						
	Service Retirement		2,958		2,835	4.3 %	
	Disability Retirement		361		351 500	2.8 %	
	Beneficiaries		523 71.2		508 71.2	3.0 %	
	Average Age Total Retiree Payroll (\$thousands)	\$	109,616	\$	98,790	11.0 %	
	Average Monthly Pension	\$	2,378	\$	2,229	6.7%	
	Average Monthly Fension	Ψ	2,070	Ψ	2,220	0.1 70	
III.	Inactive Vested Members		1,225		1,151	6.4 %	
IV.	Assets						
	Market Value of Fund (\$thousands)	\$	2,010,739	\$	2,131,615	(5.7)%	
	Return on Market Value		-8.2%		16.5%		
	Valuation Assets (\$thousands)	\$	2,218,937	\$	1,976,731	12.3%	
	Return on Valuation Assets		9.4%		9.2%		
V.	Liability Values (\$thousands)						
	Actuarial Accrued Liability	\$	2,806,222	\$	2,555,504	9.8%	
	Unfunded Actuarial Accrued Liability	\$	587,285	\$	578,773	1.5%	
	Deferred Asset (Gains) / Losses	\$	208,198	\$	(154,884)		
VI.	Funded Ratio						
	GASB Number 25 (based on valuation assets)		79.1%		77.4%	2.2%	

Exhibit 19: Summary of SamCERA Membership

Plan	One	Two	Three	Four	Total
Retirees and beneficiaries curre	ently receiving	p benefits:			
General	2,132	1,130	77	46	3,385
Safety	283	78	-	6	367
Probation	66	24			90
Subotal	2,481	1,232	77	52	3,842
Terminated employees entitled	to but not cur	rently receiving	j benefits (Deferi	·ed):	
General	55	539	127	391	1,112
Safety	8	36	-	29	73
Probation		15	<u> </u>	25	40
Subotal	63	590	127	445	1,225
Current employees:					
Vested:					
General	132	1,327	56	1,258	2,773
Safety	16	166	-	140	322
Probation	8	90	-	130	228
Non-Vested:					
General	1	2	83	1,884	1,970
Safety	-	-	-	110	110
Probation	-	-	-	97	97
Subotal	157	1,585	139	3,619	5,500
Total SamCERA Membership	2,701	3,407	343	4,116	10,567

Exhibit 20: Summary of Active Member Valuation Data

Valu	ation Date	Members	Annual Salary	Average Annual Salary	% Change Average Salary
1999	General	3,908	\$ 196,936,000	\$50,393	8.2%
	Safety	425	\$ 29,862,000	\$70,264	16.9%
	Probation	245	\$ 12,067,000	\$49,253	3.4%
	Total	4,578	\$ 238,865,000	\$52,176	9.0%
2000	General	4,018	\$ 214,625,000	\$53,412	6.0%
	Safety	423	\$ 31,180,000	\$73,716	4.9%
	Probation	249	\$ 13,270,000	\$53,292	8.2%
	Total	4,690	\$ 259,075,000	\$55,236	5.9%
2001	General	4,040	\$ 227,848,000	\$56,400	5.6%
	Safety	416	\$ 31,611,000	\$75,984	3.1%
	Probation	261	\$ 14,859,000	\$56,928	6.8%
	Total	4,717	\$ 274,318,000	\$58,152	5.3%
2002	General	4,159	\$ 250,344,000	\$60,192	6.7%
	Safety	431	\$ 34,405,000	\$79,824	5.1%
	Probation	282	\$ 17,142,000	\$60,792	6.8%
	Total	4,872	\$ 301,891,000	\$61,968	6.6%
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	\$ 323,896,00	\$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%

<sup>\*</sup>Numbers prior to 2006 were reported on a different basis.



Exhibit 21: Summary of Demographic Activity of Retirees and Beneficiaries

	Retiree Me	mbership *					
Year	At Beginning Of Year	Additions	With- drawals	At End of Year	Total Retiree Payroll	Percent Increase In Payroll	Average Monthly Allowance
6/30/98	2,900	149	118	2,931	\$46,845,000	10.65%	\$1,332
6/30/99	2,931	238	210	2,959	\$50,491,000	7.80%	\$1,422
6/30/00	2,959	219	76	3,102	\$55,192,000	9.31%	\$1,483
6/30/01	3,102	233	82	3,253	\$62,416,000	13.1%	\$1,543
6/30/02	3,253	194	138	3,309	\$66,974,000	7.3%	\$1,627
6/30/03	3,309	128	115	3,322	\$69,451,000	3.7%	\$1,676
6/30/04	3,466	193	120	3,539	\$75,943,000	8.7%	\$1,778
6/30/05	3,539	238	95	3,682	\$84,183,000	11.5%	\$1,905
6/30/06	3,519	206	112	3,613	\$91,006,000	8.1%	\$2,099
6/30/07	3,613	155	74	3,694	\$98,790,000	8.6%	\$2,229
6/30/08	3,694	218	70	3,842	\$109,616,000	11.0%	\$2,378

<sup>\*</sup> 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.

**Exhibit 22:** Average Salary and Active Counts by Employer

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

	2008	2007	2006	2005	2004
General Plan 1	\$ 7,252	\$ 7,175	\$ 6,749	\$ 6,582	\$ 6,514
General Plan 2	\$ 6,872	\$ 6,688	\$ 6,148	\$ 6,045	\$ 5,980
General Plan 3	\$ 5,619	\$ 5,287	\$ 4,988	\$ 5,216	\$ 5,101
General Plan 4	\$ 5,914	\$ 5,714	\$ 5,315	\$ 5,476	\$ 5,281
General Plan Total	\$ 6,211	\$ 6,054	\$ 5,652	\$ 5,747	\$ 5,642
Safety Plan 1	\$11,113	\$10,212	\$10,019	\$ 9,701	\$ 9,516
Safety Plan 2	\$ 9,612	\$ 9,299	\$ 8,585	\$ 8,482	\$ 8,530
Safety Plan 4	\$ 8,349	\$ 7,882	\$ 7,403	\$ 7,564	\$ 7,582
Safety Plan Total	\$ 8,937	\$ 8,538	\$ 8,062	\$ 8,150	\$ 8,267
Probation Plan 1	\$ 9,791	\$ 8,522	\$ 7,735	\$ 7,216	\$ 6,856
Probation Plan 2	\$ 6,960	\$ 6,899	\$ 6,479	\$ 6,390	\$ 6,291
Probation Plan 4	\$ 5,978	\$ 5,766	\$ 5,444	\$ 5,741	\$ 5,711
Probation Plan Total	\$ 6,344	\$ 6,171	\$ 5,860	\$ 6,032	\$ 6,019
Grand Total	\$ 6,433	\$ 6,260	\$ 5,857	\$ 5,955	\$ 5,871

<sup>\*</sup>Numbers prior to 2006 were reported on a different basis.

## **Participating Employers and Active Members**

	2008	2007	2006	2005	2004
County of San Mateo					
General Members	4,718	4,742	4,594	4,391	4,474
Safety Members	432	443	428	409	411
Probation Members	325	329	313	278	288
Total	5,475	5,514	5,335	5,078	5,173
San Mateo County Mosquito and Vector Control District					
General Members Total	25	25	20	20	13
Total Active Membership	5,500	5,539	5,355	5,098	5,186



**Exhibit 23:** Summary of Retired and Inactive Benefits

Retired Members	2008	2007	2006	2005	2004	2003
Service Retirement						
Number Annual Allowance	2,958	2,835	2,783	2,865	2,706	2,637
Basic Only	\$ 66,704,000	\$ 59,687,000	\$ 54,942,000	\$ 49,760,000	\$ 41,723,000	\$ 36,929,000
COLA	\$ 21,289,000	\$ 19,382,000	\$ 18,188,000	\$ 17,759,000	\$ 17,502,000	\$ 17,185,000
Total	\$ 87,993,000	\$ 79,069,000	\$ 73,130,000	\$ 67,519,000	\$ 59,225,000	\$ 54,114,000
Average Monthly Payment	\$ 2,479	\$ 2,324	\$ 2,190	\$ 1,964	\$ 1,824	\$ 1,710
Disability Retirement						
Number	361	351	342	334	339	329
Annual Allowance	<b>6</b> 0.044.000	ф 7.574.000	Ф C 04E 000	¢ 0.575.000	£ C4C4.000	Ф <b>Г Г Г О О О О</b>
Basic Only COLA	\$ 8,214,000 \$ 2,847,000	\$ 7,571,000 \$ 2,569,000	\$ 6,915,000 \$ 2,356,000	\$ 6,575,000 \$ 2,205,000	\$ 6,164,000 \$ 2,172,000	\$ 5,588,000 \$ 2,130,000
Total	\$ 11,061,000	\$ 10,140,000	\$ 9,271,000	\$ 8,780,000	\$ 8,336,000	\$ 7,718,000
Average Monthly Payment	\$ 11,061,000	\$ 10,140,000	\$ 9,271,000	\$ 0,760,000	\$ 0,330,000	\$ 7,710,000
Beneficiaries						
Number	523	508	488	483	494	488
Annual Allowance						
Basic Only	\$ 5,757,000	\$ 5,220,000	\$ 4,659,000	\$ 4,084,000	\$ 4,250,000	\$ 4,065,000
COLA	\$ 4,805,000	\$ 4,361,000	\$ 3,946,000	\$ 3,800,000	\$ 3,682,000	\$ 3,554,000
Total	\$ 10,562,000	\$ 9,581,000	\$ 8,605,000	\$ 7,884,000	\$ 7,932,000	\$ 7,619,000
Average Monthly Payment	\$ 1,683	\$ 1,572	\$ 1,469	\$ 1,360	\$ 1,338	\$ 1,301
Total Retired Members						
Number Annual Allowance	3,842	3,694	3,613	3,682	3,539	3,454
Basic Only	\$ 80,675,000	\$ 72,478,000	\$ 66,516,000	\$ 60,419,000	\$ 52,137,000	\$ 46,582,000
COLA	\$ 28,941,000	\$ 26,312,000	\$ 24,490,000	\$ 23,764,000	\$ 23,356,000	\$ 22,869,000
Total	\$ 109,616,000	\$ 98,790,000	\$ 91,006,000	\$ 84,183,000	\$ 75,493,000	\$ 69,451,000
Average Monthly Payment	\$ 2,378	\$ 2,229	\$ 2,099	\$ 1,905	\$ 1,778	\$ 1,676
Inactive Members	1,225	1,151	1,089	872	877	855

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



**Exhibit 24a:** Summary of Assumptions

#### **Assumptions & Methods for Most Recent Actuarial Valuation**

**Actuarial Methods** 

Valuation Date June 30, 2008 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 will be amortized over new 15-year periods. This is referred to

as 15-year layered amortization.

Asset Valuation Method 5-year smoothed market

**Actuarial Assumptions** 

Rate of Investment Return 7.75%
Price Inflation (CPI) 3.50%
Payroll Increases 4.00%
Average Projected Salary Increases 5.20%

Attributable to Wage Inflation 4.00%

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



## Exhibit 24b: Summary of Assumptions

## **Probability of Separation During Active Service**

Years of	Other Terr	minations		Disal	oility	Death wh	ile Active	Service
Service	Ordinary	Vested	Age	Ordinary	Service	Ordinary	Service	Retirement
General Plan	1, 2 & 4 Male M	lembers						
0	0.1300	0.0000	20	0.0002	0.0003	0.0003	0.0000	0.0000
5	0.0285	0.0348	30	0.0002	0.0004	0.0004	0.0000	0.0000
10	0.0172	0.0238	40	0.0004	0.0007	0.0010	0.0000	0.0000
15	0.0099	0.0191	50	0.0009	0.0013	0.0019	0.0000	0.0600
20	0.0040	0.0150	60	0.0015	0.0022	0.0040	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0091	0.0000	1.0000
General Plan	1, 2 & 4 Female	Members						
0	0.1300	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	0.0172	0.0238	40	0.0004	0.0007	0.0006	0.0000	0.0000
15	0.0099	0.0191	50	0.0009	0.0013	0.0013	0.0000	0.0600
20	0.0040	0.0150	60	0.0015	0.0022	0.0030	0.0000	0.1500
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0066	0.0000	1.0000
General Plan	3 Male Member	'S						
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	0.0010	0.0000	0.0000
15	0.0099	0.0191	50	0.0000	0.0000	0.0019	0.0000	0.0000
20	0.0040	0.0150	60	0.0000	0.0000	0.0040	0.0000	0.0300
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0091	0.0000	1.0000
General Plan	3 Female Memb	bers						
0	0.1300	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	0.0172	0.0238	40	0.0000	0.0000	0.0006	0.0000	0.0000
15	0.0099	0.0191	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	0.0066	0.0000	1.0000
	obation Male Me							
0	0.0800	0.0000	20	0.0003	0.0012	0.0003	0.0010	0.0000
5	0.0105	0.0128	30	0.0004	0.0014	0.0004	0.0010	0.0000
10	0.0071	0.0099	40	0.0006	0.0022	0.0010	0.0010	0.0000
15	0.0041	0.0079	50	0.0009	0.0035	0.0019	0.0010	0.2000
20	0.0008	0.0032	60	0.0017	0.0067	0.0040	0.0010	1.0000
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0091	0.0010	1.0000
,	obation Female							
0	0.0800	0.0000	20	0.0003	0.0012	0.0002	0.0010	0.0000
5	0.0105	0.0128	30	0.0004	0.0014	0.0002	0.0010	0.0000
10	0.0071	0.0099	40	0.0006	0.0022	0.0006	0.0010	0.0000
15	0.0041	0.0079	50	0.0009	0.0035	0.0013	0.0010	0.2000
20	0.0008	0.0032	60	0.0017	0.0067	0.0030	0.0010	1.0000
30 & Above	0.0000	0.0000	70	0.0000	0.0000	0.0066	0.0010	1.0000



### Section 8: Supplemental Information – Projection of Retirements



We projected the number of expected service retirements based on the valuation assumptions. Actual retirements will vary due to a numbers of factors.

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

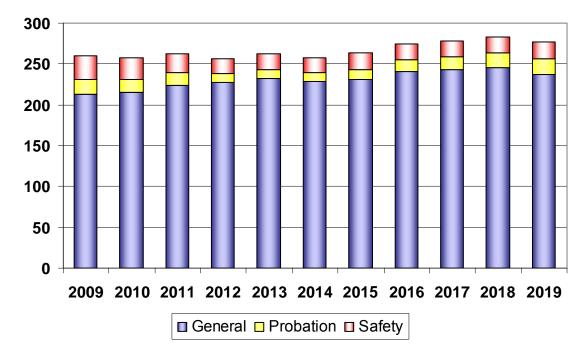
For General members, the number of service retirements is projected to gradually increase over the next few years. As more General members move to ages with high probabilities of retirement (ages 60 and above), we then see a rise in the projected number of retirements. Numerically, the results are shown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

Exhibit 25 Projection of Service Retirements

Projection	of Serv	vice R	etireme	ents

Year Ending	General	Safety	Probation	Total
Litaling	General	Jaiety	Tiobation	Iotai
2009	213	30	17	261
2010	216	27	15	258
2011	223	22	17	262
2012	228	19	10	257
2013	232	20	11	263
2014	228	18	12	258
2015	231	21	12	264
2016	241	19	15	274
2017	243	19	16	278
2018	245	19	19	283
2019	237	20	20	277

## **Projected Service Retirements by Class**





#### Appendix A: Actuarial Procedures and Assumptions



The actuarial procedures and assumptions used in the valuation are described in this section. The assumptions were reviewed and changed as a result of the 2008 Investigation of Experience Study.

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 between plans, entry age is based on original entry into the system.

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL 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.

Since the San Mateo County Mosquito and Vector Control District has a different formula than County General members, it is appropriate to calculate different contribution rates for both members and employers. The member rates are defined in the 37 Act; however, the method for determining employer contribution rates is not defined. The methodology adopted by the Board in 2006 is that the District contribute a percentage of the County contribution that is equal to:

District's Normal Cost Rate under their Current Formula (31676.14)-2%@61.25
Divided by
District's Normal Cost Rate if Calculated under the County
General Formula
(31676.1)-2%@55.5

This ratio is equal to approximately 82%. The District pays 82% of the County's contribution rate on a plan-by-plan basis.

See exhibit 12 for further details.

#### **Records and Data**

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



#### Replacement of Terminated Members

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

# Growth in Membership

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

#### Internal Revenue Code Section 415 Limit

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

### Internal Revenue Code Section 401(a)(17)

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

# County Contributions

The County contribution rate is recommend by the Retirement Board and adopted by the Board of Supervisors 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 (actually 10 six-month periods) based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption.

# Investment Earnings and Expenses

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

#### Postretirement Benefit Increases

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

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

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

## Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 7.75% compounded semi-annually for an annualized rate of 7.90%. This rate was adopted June 30, 2005.

#### **Future Salaries**

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

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 3.5% per year. Note, statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement.

#### Retirement

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

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

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

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

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

The retirement rates were adopted June 30, 2008.



#### **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, 2008.

#### 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 assumption as healthy members. Beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members.

General Males RP-2000 Healthy Annuitant Mortality Table for

Males with adjustment for White Collar workers. Ages are set back two years.

Safety Males Same as General.

General Females RP-2000 Healthy Annuitant Mortality Table for

Females with adjustment for White Collar workers. Ages are set back three years.

Safety Females Same as General.

The rates of retired mortality were adopted June 30, 2008.

## Mortality – Disabled Members

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

General Males RP-2000 Healthy Annuitant Mortality Table for

Males with adjustment for White Collar workers and minimum rate of 1.5%.

Safety Males Same as General except minimum is 1.0%.

General Females RP-2000 Healthy Annuitant Mortality Table for

Females with adjustment for White Collar workers and minimum rate of 1.25%.

Safety Females Same as General except minimum is 1.0%.

The rates of disabled mortality were adopted June 30, 2008.



## 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, 2008.

#### **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, 2008.

## 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.

#### **Reciprocal Benefits**

40% of future deferred vested members are assumed to immediately join a reciprocal agency. For current deferred vested members, eligibility is based on the data supplied by SamCERA.

# Adjustment to Plan 3 Normal Cost Rate

Plan 3 members are eligible to transfer to Plan 2 or Plan 4 (depending on entry date) after five years of service. We have adjusted the Plan 3 Normal Cost to account for this. The adjusted Plan 3 Normal Cost rate is 50% of the unadjusted Plan 3 Normal Cost rate and 50% of the Plan 4 Normal Cost rate.



#### **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, the:

- A. Annuity factor used for General members is based on a 33% / 67% blend of the male and female annuity factors using current valuation assumptions and no COLA. For Safety members it is based on 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 7.75%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.
  - Example: For a Plan 4 Member who enters at age 54 or earlier, the Final Compensation at retirement (age 55) will be the monthly average of the annual salary for age 54.
- D. For purposes of calculating the value of the member's future contribution, interest is assumed to be credited at 7.75% semiannually (7.90% annual rate).
- E. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

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



#### Table A-1: Summary of Valuation Assumptions as of June 30, 2008

1	Economic	accumn	tione
1.		assump	ינוטווס

A.	General wage increases	4.00%
В.	Investment earnings	7.75%
C.	Growth in active membership	0.00%
D.	CPI inflation assumption	3.50%

#### II. Demographic assumptions

Α.	Salary increases due to service	Table A-5

B. Retirement Tables A-6 to A-11
C. Disablement Tables A-6 to A-11

 D. Mortality for active members after termination and service retired members

Table A-2

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

Class of Members	Age <u>Adjustment</u>
General – Males	-2 years
General – Females	-3 years
Safety – Males	-2 years
Safety – Females	-3 years

#### E. Mortality among disabled members

Table A-3

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

Class of Members	Age <u>Adjustment</u>	Minimum <u>Rate</u>
General – Males	none	1.50%
General – Females	none	1.25%
Safety – Males	none	1.00%
Safety – Females	none	1.00%

#### F. Mortality for beneficiaries

Table A-2

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

G. Other terminations of employment

Tables A-6 to A-11

H. Refund of contributions on vested termination

Table A-4



Table A-2: Mortality for Members Retired for Service

	General	General	Safety	Safety
Age	Male	Female	<u>Male</u>	Female
20	0.032%	0.018%	0.032%	0.018%
25	0.037%	0.019%	0.037%	0.019%
30	0.039%	0.022%	0.039%	0.022%
35	0.048%	0.036%	0.048%	0.036%
40	0.077%	0.053%	0.077%	0.053%
45	0.112%	0.076%	0.112%	0.076%
50	0.171%	0.123%	0.171%	0.123%
55	0.271%	0.192%	0.271%	0.192%
60	0.449%	0.332%	0.449%	0.332%
65	0.848%	0.599%	0.848%	0.599%
70	1.557%	1.094%	1.557%	1.094%
75	2.671%	1.878%	2.671%	1.878%
80	4.748%	3.155%	4.748%	3.155%
85	8.398%	5.337%	8.398%	5.337%
90	14.487%	9.248%	14.487%	9.248%

Table A-3: Mortality for Members Retired for Disability

_	General	General	Safety	Safety
Age	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	1.500%	1.250%	1.000%	1.000%
25	1.500%	1.250%	1.000%	1.000%
30	1.500%	1.250%	1.000%	1.000%
35	1.500%	1.250%	1.000%	1.000%
40	1.500%	1.250%	1.000%	1.000%
45	1.500%	1.250%	1.000%	1.000%
50	1.500%	1.250%	1.000%	1.000%
55	1.500%	1.250%	1.000%	1.000%
60	1.500%	1.250%	1.000%	1.000%
65	1.500%	1.250%	1.106%	1.000%
70	1.928%	1.519%	1.928%	1.519%
75	3.363%	2.572%	3.363%	2.572%
80	5.941%	4.308%	5.941%	4.308%
85	10.467%	7.419%	10.467%	7.419%
90	17.827%	12.615%	17.827%	12.615%

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%	45%
6	45%	45%
7	45%	45%
8	44%	42%
9	43%	39%
10	42%	36%
11	41%	33%
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%



Table A-5: Annual Increase in Salary

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



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

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

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

Service Retirement: Member retires after meeting age and service

requirements for reasons other than disability.

Withdrawal: Member terminates and elects a refund of member

contributions, or a deferred vested retirement

benefit.

Service Disability: Member receives disability retirement; disability is

service related.

Ordinary Disability: Member receives disability retirement; disability is

not service related.

Service Death: Member dies before retirement; death is service

related.

Ordinary Death: Member dies before retirement; death is not

service related.

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

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

Table A-6: General Plan 1, 2 & 4 Males A-10: Safety Plans 1, 2 & 4 Males

A-7: General Plan 1, 2 & 4 Females A-11: Safety Plans 1, 2 & 4 Females

A-8: General Plan 3 Males A-9: General Plan 3 Females



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

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0003	0.0002	N/A	0.0003	0	0.1300
19	0.0000	0.0003	0.0002	N/A	0.0003	1	0.1100
20	0.0000	0.0003	0.0002	N/A	0.0003	2	0.0900
21	0.0000	0.0003	0.0002	N/A	0.0003	3	0.0800
22	0.0000	0.0003	0.0002	N/A	0.0003	4	0.0700
23	0.0000	0.0003	0.0002	N/A	0.0004	5	0.0633
24	0.0000	0.0003	0.0002	N/A	0.0004	6	0.0567
25	0.0000	0.0003	0.0002	N/A	0.0004	7	0.0500
26	0.0000	0.0003	0.0002	N/A	0.0004	8	0.0470
27	0.0000	0.0003	0.0002	N/A	0.0004	9	0.0440
28	0.0000	0.0003	0.0002	N/A	0.0004	10	0.0410
29	0.0000	0.0003	0.0002	N/A	0.0004	11	0.0380
30	0.0000	0.0004	0.0002	N/A	0.0004	12	0.0350
31	0.0000	0.0004	0.0002	N/A	0.0004	13	0.0330
32	0.0000	0.0004	0.0002	N/A	0.0004	14	0.0310
33	0.0000	0.0004	0.0003	N/A	0.0005	15	0.0290
34	0.0000	0.0004	0.0003	N/A	0.0006	16	0.0270
35	0.0000	0.0005	0.0003	N/A	0.0006	17	0.0250
36	0.0000	0.0005	0.0003	N/A	0.0007	18	0.0230
37	0.0000	0.0005	0.0004	N/A	0.0008	19	0.0210
38	0.0000	0.0006	0.0004	N/A	0.0008	20	0.0190
39	0.0000	0.0006	0.0004	N/A	0.0009	21	0.0170
40	0.0000	0.0007	0.0004	N/A	0.0010	22	0.0150
41	0.0000	0.0007	0.0004	N/A	0.0010	23	0.0140
42	0.0000	0.0007	0.0005	N/A	0.0011	24	0.0130
43	0.0000	0.0008	0.0005	N/A	0.0011	25	0.0120
44	0.0000	0.0008	0.0006	N/A	0.0012	26	0.0110
45	0.0000	0.0010	0.0006	N/A	0.0013	27	0.0100
46	0.0000	0.0010	0.0007	N/A	0.0014	28	0.0100
47	0.0000	0.0011	0.0007	N/A	0.0015	29	0.0100
48	0.0000	0.0011	0.0008	N/A	0.0016	30 & Above	0.0000
49	0.0000	0.0012	0.0008	N/A	0.0017		
50	0.0600	0.0013	0.0009	N/A	0.0019		
51	0.0500	0.0014	0.0009	N/A	0.0020		
52	0.0500	0.0014	0.0010	N/A	0.0021		
53	0.0500	0.0016	0.0010	N/A	0.0023		
54	0.0500	0.0016	0.0011	N/A	0.0024		
55	0.0600	0.0017	0.0012	N/A	0.0026		
56	0.0600	0.0018	0.0012	N/A	0.0028		
57	0.0800	0.0019	0.0013	N/A	0.0030		
58	0.1200	0.0020	0.0014	N/A	0.0033		
59	0.1200	0.0021	0.0014	N/A	0.0036		
60	0.1500	0.0022	0.0015	N/A	0.0040		
61	0.2000	0.0023	0.0015	N/A	0.0044		
62	0.3500	0.0024	0.0016	N/A	0.0049		
63	0.2500	0.0025	0.0017	N/A	0.0054		
64	0.2500	0.0026	0.0018	N/A	0.0059		
65	0.4000	0.0028	0.0018	N/A	0.0065		
66 67	0.3000	0.0029	0.0019	N/A	0.0070		
67	0.3000	0.0030	0.0020	N/A	0.0076		
68	0.3000	0.0031	0.0021	N/A	0.0081		
69 70	0.3000	0.0032	0.0022	N/A	0.0086		
70	1.0000	0.0000	0.0000	N/A	0.0091		

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



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

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0003	0.0002	N/A	0.0002	0	0.1300
19	0.0000	0.0003	0.0002	N/A	0.0002	1	0.1100
20	0.0000	0.0003	0.0002	N/A	0.0002	2	0.0900
21	0.0000	0.0003	0.0002	N/A	0.0002	3	0.0800
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	0.0470
27	0.0000	0.0003	0.0002	N/A	0.0002	9	0.0440
28	0.0000	0.0003	0.0002	N/A	0.0002	10	0.0410
29	0.0000	0.0003	0.0002	N/A	0.0002	11	0.0380
30	0.0000	0.0004	0.0002	N/A	0.0002	12	0.0350
31	0.0000	0.0004	0.0002	N/A	0.0002	13	0.0330
32	0.0000	0.0004	0.0002	N/A	0.0002	14	0.0310
33	0.0000	0.0004	0.0003	N/A	0.0003	15	0.0290
34	0.0000	0.0004	0.0003	N/A	0.0003	16	0.0270
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	0.0011	0.0008	N/A	0.0011	30 & Above	0.0000
49	0.0000	0.0012	0.0008	N/A	0.0012		
50 51	0.0600 0.0500	0.0013 0.0014	0.0009	N/A N/A	0.0013 0.0014		
		0.0014	0.0009				
52 53	0.0500 0.0500	0.0014	0.0010 0.0010	N/A N/A	0.0016 0.0017		
54	0.0500	0.0016	0.0010	N/A N/A	0.0017		
55	0.0600	0.0016	0.0011	N/A N/A	0.0018		
56	0.0600	0.0017	0.0012	N/A	0.0020		
57	0.0800	0.0018	0.0012	N/A N/A	0.0021		
58	0.1200	0.0019	0.0013	N/A	0.0025		
59	0.1200	0.0020	0.0014	N/A	0.0028		
60	0.1500	0.0021	0.0014	N/A	0.0020		
61	0.2000	0.0022	0.0015	N/A	0.0033		
62	0.3500	0.0024	0.0016	N/A	0.0036		
63	0.2500	0.0025	0.0017	N/A	0.0039		
64	0.2500	0.0026	0.0018	N/A	0.0043		
65	0.4000	0.0028	0.0018	N/A	0.0047		
66	0.3000	0.0029	0.0019	N/A	0.0050		
67	0.3000	0.0030	0.0020	N/A	0.0054		
68	0.3000	0.0031	0.0021	N/A	0.0058		
69	0.3000	0.0032	0.0022	N/A	0.0062		
70	1.0000	0.0000	0.0000	N/A	0.0066		

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



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	0.0004	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	0.0005	15	0.0290
34	0.0000	N/A	N/A	N/A	0.0006	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	0.0007	18	0.0230
37	0.0000	N/A	N/A	N/A	0.0007	19	0.0230
38	0.0000	N/A	N/A	N/A	0.0008	20	0.0190
39	0.0000	N/A	N/A	N/A	0.0009	21	0.0170
40	0.0000	N/A	N/A	N/A	0.0009	22	0.0170
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	0.0120
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	0.0016	30 & Above	0.0100
49	0.0000	N/A	N/A	N/A	0.0017	00 Q 7 100VC	0.0100
50	0.0000	N/A	N/A	N/A	0.0017		
51	0.0000	N/A	N/A	N/A	0.0020		
52	0.0000	N/A	N/A	N/A	0.0020		
53	0.0000	N/A	N/A	N/A	0.0023		
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	0.0028		
57	0.0300	N/A	N/A	N/A	0.0020		
58	0.0300	N/A	N/A	N/A	0.0033		
59	0.0300	N/A	N/A	N/A	0.0036		
60	0.0300	N/A	N/A	N/A	0.0040		
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	0.0059		
65	0.3000	N/A N/A	N/A	N/A N/A	0.0059		
66	0.3000	N/A N/A	N/A N/A	N/A	0.0003		
67	0.3000	N/A N/A	N/A	N/A N/A	0.0076		
68	0.3000	N/A N/A	N/A N/A	N/A	0.0076		
69	0.3000	N/A N/A	N/A N/A	N/A N/A	0.0086		
70	1.0000	N/A	N/A	N/A	0.0000		
7.0	1.0000	1 1/7	14/7	1 1/7	0.0001		



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	0.1300
19	0.0000	N/A	N/A	N/A	0.0002	1	0.1100
20	0.0000	N/A	N/A	N/A	0.0002	2	0.0900
21	0.0000	N/A	N/A	N/A	0.0002	3	0.0800
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	0.0470
27	0.0000	N/A	N/A	N/A	0.0002	9	0.0440
28	0.0000	N/A	N/A	N/A	0.0002	10	0.0410
29	0.0000	N/A	N/A	N/A	0.0002	11	0.0380
30	0.0000	N/A	N/A	N/A	0.0002	12	0.0350
31	0.0000	N/A	N/A	N/A	0.0002	13	0.0330
32	0.0000	N/A	N/A	N/A	0.0002	14	0.0310
33	0.0000	N/A	N/A	N/A	0.0003	15	0.0290
34	0.0000	N/A	N/A	N/A	0.0003	16	0.0270
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	0.0010	30 & Above	0.0100
49	0.0000	N/A	N/A	N/A	0.0012	00 07 10010	0.0100
50	0.0000	N/A	N/A	N/A	0.0012		
51	0.0000	N/A	N/A	N/A	0.0014		
52	0.0000	N/A	N/A	N/A	0.0014		
53	0.0000	N/A	N/A	N/A	0.0017		
54	0.0000	N/A	N/A	N/A	0.0017		
55	0.0400	N/A	N/A	N/A	0.0010		
56	0.0400	N/A	N/A	N/A	0.0020		
57	0.0400	N/A	N/A	N/A	0.0021		
58	0.0400	N/A	N/A	N/A	0.0025		
59	0.0400	N/A	N/A	N/A	0.0023		
60	0.0400	N/A	N/A	N/A	0.0020		
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	0.0039		
65	0.3000	N/A N/A	N/A N/A	N/A N/A	0.0043		
66	0.3000	N/A	N/A	N/A	0.0047		
67	0.3000	N/A N/A	N/A N/A	N/A N/A	0.0054		
68	0.3000	N/A N/A	N/A N/A	N/A N/A	0.0054		
69	0.3000	N/A N/A	N/A N/A	N/A N/A	0.0058		
70		N/A N/A	N/A N/A	N/A N/A	0.0062		
70	1.0000	IN/A	IN/A	IN/A	0.000		



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

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0012	0.0003	0.0010	0.0003	0	0.0800
19	0.0000	0.0012	0.0003	0.0010	0.0003	1	0.0650
20	0.0000	0.0012	0.0003	0.0010	0.0003	2	0.0500
21	0.0000	0.0012	0.0003	0.0010	0.0003	3	0.0350
22	0.0000	0.0012	0.0003	0.0010	0.0003	4	0.0250
23	0.0000	0.0012	0.0003	0.0010	0.0004	5	0.0233
24	0.0000	0.0012	0.0003	0.0010	0.0004	6	0.0217
25	0.0000	0.0012	0.0003	0.0010	0.0004	7	0.0200
26	0.0000	0.0012	0.0003	0.0010	0.0004	8	0.0190
27	0.0000	0.0012	0.0003	0.0010	0.0004	9	0.0180
28	0.0000	0.0013	0.0003	0.0010	0.0004	10	0.0170
29	0.0000	0.0014	0.0003	0.0010	0.0004	11	0.0160
30	0.0000	0.0014	0.0004	0.0010	0.0004	12	0.0150
31	0.0000	0.0015	0.0004	0.0010	0.0004	13	0.0140
32	0.0000	0.0016	0.0004	0.0010	0.0004	14	0.0130
33	0.0000	0.0017	0.0004	0.0010	0.0005	15	0.0120
34	0.0000	0.0018	0.0004	0.0010	0.0006	16	0.0110
35	0.0000	0.0018	0.0005	0.0010	0.0006	17	0.0100
36	0.0000	0.0019	0.0005	0.0010	0.0007	18	0.0080
37	0.0000	0.0020	0.0005	0.0010	0.0008	19	0.0060
38	0.0000	0.0021	0.0005	0.0010	0.0008	20 & Above	0.0000
39	0.0000	0.0022	0.0005	0.0010	0.0009		
40	0.0000	0.0022	0.0006	0.0010	0.0010		
41	0.0000	0.0023	0.0006	0.0010	0.0010		
42	0.0000	0.0024	0.0006	0.0010	0.0011		
43	0.0000	0.0025	0.0006	0.0010	0.0011		
44	0.0000	0.0026	0.0006	0.0010	0.0012		
45	0.0000	0.0026	0.0007	0.0010	0.0013		
46	0.0000	0.0027	0.0007	0.0010	0.0014		
47	0.0000	0.0028	0.0007	0.0010	0.0015		
48	0.0000	0.0030	0.0008	0.0010	0.0016		
49	0.0000	0.0033	0.0008	0.0010	0.0017		
50	0.2000	0.0035	0.0009	0.0010	0.0019		
51	0.1500	0.0038	0.0009	0.0010	0.0020		
52	0.1500	0.0040	0.0010	0.0010	0.0021		
53	0.2000	0.0051	0.0013	0.0010	0.0023		
54	0.2000	0.0062	0.0016	0.0010	0.0024		
55	0.3000	0.0074	0.0018	0.0010	0.0026		
56	0.3000	0.0085	0.0021	0.0010	0.0028		
57	0.3000	0.0096	0.0024	0.0010	0.0030		
58	0.3000	0.0086	0.0022	0.0010	0.0033		
59	0.3000	0.0077	0.0019	0.0010	0.0036		
60	1.0000	0.0067	0.0000	0.0010	0.0040		

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



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

Age	Service Retirement*	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0012	0.0003	0.0010	0.0002	0	0.0800
19	0.0000	0.0012	0.0003	0.0010	0.0002	1	0.0650
20	0.0000	0.0012	0.0003	0.0010	0.0002	2	0.0500
21	0.0000	0.0012	0.0003	0.0010	0.0002	3	0.0350
22	0.0000	0.0012	0.0003	0.0010	0.0002	4	0.0250
23	0.0000	0.0012	0.0003	0.0010	0.0002	5	0.0233
24	0.0000	0.0012	0.0003	0.0010	0.0002	6	0.0217
25	0.0000	0.0012	0.0003	0.0010	0.0002	7	0.0200
26	0.0000	0.0012	0.0003	0.0010	0.0002	8	0.0190
27	0.0000	0.0012	0.0003	0.0010	0.0002	9	0.0180
28	0.0000	0.0013	0.0003	0.0010	0.0002	10	0.0170
29	0.0000	0.0014	0.0003	0.0010	0.0002	11	0.0160
30	0.0000	0.0014	0.0004	0.0010	0.0002	12	0.0150
31	0.0000	0.0015	0.0004	0.0010	0.0002	13	0.0140
32	0.0000	0.0016	0.0004	0.0010	0.0002	14	0.0130
33	0.0000	0.0017	0.0004	0.0010	0.0003	15	0.0120
34	0.0000	0.0018	0.0004	0.0010	0.0003	16	0.0110
35	0.0000	0.0018	0.0005	0.0010	0.0003	17	0.0100
36	0.0000	0.0019	0.0005	0.0010	0.0004	18	0.0080
37	0.0000	0.0020	0.0005	0.0010	0.0004	19	0.0060
38	0.0000	0.0021	0.0005	0.0010	0.0005	20 & Above	0.0000
39	0.0000	0.0022	0.0005	0.0010	0.0005		
40	0.0000	0.0022	0.0006	0.0010	0.0006		
41	0.0000	0.0023	0.0006	0.0010	0.0006		
42	0.0000	0.0024	0.0006	0.0010	0.0006		
43	0.0000	0.0025	0.0006	0.0010	0.0007		
44	0.0000	0.0026	0.0006	0.0010	0.0008		
45	0.0000	0.0026	0.0007	0.0010	0.0009		
46	0.0000	0.0027	0.0007	0.0010	0.0009		
47	0.0000	0.0028	0.0007	0.0010	0.0010		
48	0.0000	0.0030	0.0008	0.0010	0.0011		
49	0.0000	0.0033	0.0008	0.0010	0.0012		
50	0.2000	0.0035	0.0009	0.0010	0.0013		
51	0.1500	0.0038	0.0009	0.0010	0.0014		
52	0.1500	0.0040	0.0010	0.0010	0.0016		
53	0.2000	0.0051	0.0013	0.0010	0.0017		
54	0.2000	0.0062	0.0016	0.0010	0.0018		
55	0.3000	0.0074	0.0018	0.0010	0.0020		
56	0.3000	0.0085	0.0021	0.0010	0.0021		
57	0.3000	0.0096	0.0024	0.0010	0.0023		
58	0.3000	0.0086	0.0022	0.0010	0.0025		
59	0.3000	0.0077	0.0019	0.0010	0.0028		
60	1.0000	0.0067	0.0000	0.0010	0.0030		

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



### **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, 2008. 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 (31496)

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.

**Plan 4:** Employees hired after July 12, 1997 (if Plan 3 not elected).



#### **MEMBER CONTRIBUTIONS**

#### Basic:

Plans 1, 2 & 4:

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

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

(31591, 31700)

(31625.2,

31664.1)

Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Retirement on amounts that have been on

deposit for at least six months.

**Plan 3:** No member contributions are required under Plan 3.

Cost-of-Living:

Plans 1, 2 & 4: Members do not contribute towards the cost-of-living

benefit.

**Cost-Sharing:** 

Plans 1, 2 & 4: General members: (31678.2)

Members contribute basic rate plus 3.0%.

Safety members (except Deputy Sheriffs):

Members contribute basic rate plus 5.0%.

Safety members (Deputy Sheriffs only):

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

If age 45 or older 4.5%

If age is less than 45

Service is less than 5 years: 3.0%
Service between 5 & 15 years: 3.5%
Service is more than 15 years 4.5%

#### **Probation members:**

Members contribute basic rate plus 3.5%.



### **MEMBER CONTRIBUTIONS** (Continued)

Employer Pick-Up: (31581.2)

**General members:** The County provides a variety of refundable service-based

employer pick-up of contribution programs for members in

several of its unions.

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

processing each individual's biweekly pay.

Safety members: The County provides a variety of refundable service-based (31678.2)

employer pick-up of contribution programs for members in

several of its unions.

Employer rates have not been adjusted to reflect the payment of the refundable employer pick-up of member contributions programs because the County payroll system

captures these costs on a pay-as-you-go basis while processing each individual's biweekly pay.

**Probation** The County provides a variety of refundable service-based (31639.85)

**members:** employer pick-up of contribution programs for members in

several of its unions.

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**

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Plans 1, 2 & 4\* General members: (31672)

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

All Safety & Probation members: (31663.25)

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

\* For part-time employees age 50 is replaced with age 55. (31672.1)

Plan 3: Age 65 with 10 years of service. A reduced benefit (31497.3)

is also payable at age 55 with 10 years of service.

**Final Compensation:** 

Plans 1 & 2: Monthly average of a member's highest (31462)

12 consecutive months of compensation.

Plans 3 & 4: Monthly average of a member's highest (31462.1)

36 consecutive months of compensation.

**Compensation Limit:** 

Plans 1 & 2: The amount of compensation that is taken into (31671)

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.

<u>Monthly Allowance</u>: (31676.1) (31676.14)

Plans 1, 2 & 4: General members:

1/60 x Final Compensation x General age

factor x years of service.

All Safety & Probation members: (31664.1)

3% x Final Compensation x Safety age factor x

Years of service.



(31497.3)

#### **SERVICE RETIREMENT ALLOWANCE** (Continued)

Plan 3: General members: (a)+(b)-(c) where:

- (a) 2% x Final Compensation x (Years of Service, (up to 35 years), plus
- (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:

<u>Plan</u>	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	1.182%	1.492%	1.971%	2.432%	(31676.1)
General Plan 3*	N/A	0.780%	1.220%	2.000%	(31497.3(f))
Safety & Probation	3.000%	3.000%	3.000%	3.000%	(31664.1)

<sup>\*</sup> Prior to reduction for PIA benefit. Actual percentage will be less.

#### **Maximum Allowance:**

Plans 1, 2 & 4: Allowance may not exceed 100% of final

compensation.

**Plan 3:** The sum of the normal retirement allowance and (31497.3)

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.



(31760.1)

(31497.71)

### **SERVICE RETIREMENT ALLOWANCE (Continued)**

<u>Unmodified Retirement Allowance (Normal Form):</u>

Plans 1, 2 & 4: Life Annuity payable to retired member with 60%

continuance to an eligible survivor (or eligible

children).

Plan 3: Life Annuity payable to retired member with 50%

continuance to an eligible survivor (or eligible

children).

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 (31761)

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.

Option 2: 100% of member's reduced allowance is payable (31762)

> to an eligible survivor or beneficiary having an insurable interest in the life of the member.

Option 3: 50% of member's reduced allowance is payable to (31763)

> an eligible survivor or beneficiary having an insurable interest in the life of the member.

Option 4: Other % of member's reduced allowance is (31764)

> payable to an eligible survivor or beneficiary(ies) having an insurable interest in the life of the

member.



### **SERVICE RETIREMENT ALLOWANCE** (Continued)

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

All Allowances: All allowances are made on a pro rata basis

(31600)

(based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that occur mid-month, the full month's

payment is made.

#### SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

(31720,**Eligibility:** 31720.5. Plans 1, 2 & 4: Any age or years of service; disability must result 31720.6,

from occupational injury or disease, and member 31720.7, must be permanently incapacitated for the 31720.9)

performance of duty.

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

(31727.4)**Monthly Allowance:** Greater of (1) 50% of final compensation, and (2)

the service retirement allowance, if eligible to retire.

Normal Form Of Payment: Life Annuity with 100% continuance to a surviving (31760, 31786)

spouse (or eligible children).

#### RECIPROCAL SERVICE-CONNECTED DISABILITY ALLOWANCE

(31837)**Eligibility:** 

Plans 1, 2 & 4: 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.

Plan 3: Not available under Plan 3.

(31837,**Monthly Allowance:** Same as nonservice-connected disability, but in no 31838.5)

case shall the allowance be greater than if all

service was with one entity.

Normal Form Of Payment: Life Annuity with 100% continuance to a surviving

spouse (or eligible children).

(31760, 31786)



(31726,

(31727(b))

(31787)

#### NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

**Eligibility:** 

Plans 1, 2 & 4: Any age with five years of service and permanently (31720, 31836)

incapacitated for the performance of duty.

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 31726.5) retire, otherwise allowance equals (a) or (b) where:

General Members: (a) 90% of 1/60th of Final Compensation x years of (31727(a))

service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation.

(b) 90% of 1/60th of Final Compensation x years of

service projected to age 65, not to exceed 1/3 of

Final Compensation.

Safety Members: 1/60 is replaced by 1/50 and age 65 is replaced (31727.2)

by age 55 in (a) and (b) above.

**Normal Form Of Payment:** Life Annuity with 60% continuance to a surviving (31760.1)

spouse (or eligible children).

#### SERVICE-CONNECTED DEATH BENEFITS

Eligibility:
Plans 1, 2 & 4: Active members who die in service as a result of (31787)

injury or disease arising out of and in the course of

employment.

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.



### **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.

(31787.6)

(31780)

#### **Additional Amount for Spouse of Safety Member:**

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:**

Plans 1, 2 & 4: Active members who die while in service or while

physically or mentally incapacitated for the

performance of duty.

Plan 3: Not available under Plan 3.



### NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

### **Death Benefit (Lump Sum):**

(31781)

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

#### **Optional Death Benefit:**

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

#### First Optional Death Benefit:

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.

(31781.1)

#### Second Optional Death Benefit:

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

(31781.2, 31765.2)

#### **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% Continuance 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:**

Plans 1, 2 & 4: Age 50 with 10 years of membership.

(31700)

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.

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

### **Monthly Allowance:**

Plans 1, 2 & 4: Same as service retirement allowance;

(31703, 31704,

payable anytime after the member would 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

have been eligible for service retirement.

(31702)

(31497.3)

named beneficiary.

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.

No benefit is paid for death while deferred.



(31874.4)

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%.				
Plan 1:	General & Safety Members (and their beneficiaries) are limited to a maximum 5% cost-of-living increase.	(31870.2)		
	<b>Probation</b> Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)		
Plan 2:	All members Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)		
Plan 3:	Plan 3 does not have a COLA.	(31487)		
Plan 4:	All members Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.	(31870)		
COLA Bank:	Plan 1 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



Plans 2 & 4 do not have a COLA bank.

### Appendix C: Valuation Data and Schedules



Data on SamCERA membership as of June 30, 2008 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, 2008 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.



Exhibit C-1: SamCERA Membership – Active Members as of June 30, 2008

					Α	verage	Average	
	Total			Average	N	onthly	Credited	
	Number	Α	nnual Salary	Age	,	Salary	Service	
General Mem	bers							
Plan 1	133	\$	11,574,784	59.0	\$	7,252	31.3	
Plan 2	1,329		109,593,168	51.3		6,872	18.0	
Plan 3	139		9,372,034	43.4		5,619	7.7	
Plan 4	3,142		222,978,539	41.8		5,914	4.5	
Total	4,743	\$	353,518,525	45.0	\$	6,211	9.1	
Safety Membe	ers							
Plan 1	16	\$	2,133,770	56.1	\$	11,113	29.5	
Plan 2	166		19,147,403	47.6		9,612	18.7	
Plan 4	250		25,045,733	38.8		8,349	5.6	
Total	432	\$	46,326,906	42.8	\$	8,937	11.5	
Probation Members								
Plan 1	8	\$	939,959	60.1	\$	9,791	29.4	
Plan 2	90		7,517,323	45.5		6,960	17.0	
Plan 4	227		16,283,722	36.5		5,978	5.6	
Total	325	\$	24,741,003	39.6	\$	6,344	9.4	
Grand Total	5,500	\$	424,586,434	44.5	\$	6,433	9.3	



Exhibit C-2: SamCERA Membership - Deferred Vested Members as of June 30, 2008

	Average									
	Number	Age								
_	_									
General Memi	bers									
Plan 1	55	58.6								
Plan 2	539	48.6								
Plan 3	127	52.1								
Plan 4	391	43.0								
Total	1,112	47.5								
Safety Members										
Plan 1	8	60.9								
Plan 2	36	44.1								
Plan 4	29	36.9								
Total	73	43.1								
Probation Me	mbers									
Plan 1	-	-								
Plan 2	15	40.6								
Plan 4	25	38.2								
Total	40	39.1								
Grand Total	1,225	47.0								

Exhibit C-3a: SamCERA Membership – Retired Members as of June 30, 2008

_	Number	Average Age		Monthly Allowance	Average Monthly Benefit	
General Memb	oers					
Plan 1 Plan 2 Plan 3 Plan 4	2,132 1,130 77 46	76.4 64.7 68.6 57.9	\$	4,920,544 1,912,034 60,891 58,101	\$	2,308 1,692 791 1,263
Total	3,385	72.1	\$	6,951,570	\$	2,054
Safety Membe	rs					
Plan 1 Plan 2 Plan 4	283 78 6	67.5 56.2 48.5	\$	1,494,246 317,257 18,668	\$	5,280 4,067 3,111
Total	367	64.8	\$	1,830,171	\$	4,987
Probation Mer	nbers					
Plan 1 Plan 2 Plan 4*	66 24 -	64.9 60.1 -	\$	287,810 64,725 353	\$	4,361 2,697 353
Total	90	63.6	\$	352,888	\$	3,921
Grand Total	3,842	71.2	\$	9,134,630	\$	2,378

<sup>\*</sup> Member has multiple retirement benefits: count is assigned to another plan.

Exhibit C-3b: SamCERA Membership – Retired Members as of June 30, 2008 Subtotaled by Class and Retirement Type

Plan	Retirement Type	Number_		Monthly Benefit		Average Monthly Benefit
General Plans:						
	Healthy	2,653	\$	5,734,260	\$	2,161
	Disabled	269		537,380		1,998
	Beneficiaries	463		679,931		1,469
	Total	3,385	\$	6,951,570	\$	2,054
Safety Plans:						
	Healthy	222	\$	1,270,117	\$	5,721
	Disabled	89		378,777		4,256
	Beneficiaries	56		181,277		3,237
	Total	367	\$	1,830,171	\$	4,987
Probation Plans:						
	Healthy	83	\$	328,364	\$	3,956
	Disabled	3		5,589		1,863
	Beneficiaries	4		18,936		4,734
	Total	90	\$	352,888	\$	3,921
Grand Totals						
	Healthy	2,958	\$	7,332,741	\$	2,479
	Disabled	361		921,745		2,553
	Beneficiaries	523	_	880,143	_	1,683
	Total	3,842	\$	9,134,630	\$	2,378



Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2008 All Members

Count											
-	Years of Service										
Age	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count	
Under 25	38	42	0	0	0	0	0	0	0	80	
25-29	94	276	48	0	0	0	0	0	0	418	
30-34	98	351	223	21	0	0	0	0	0	693	
35-39	76	270	303	127	21	0	0	0	0	797	
40-44	60	197	219	145	105	35	2	0	0	763	
45-49	46	166	204	136	134	96	22	0	0	804	
50-54	21	191	147	103	120	106	65	13	0	766	
55-59	22	139	133	76	110	76	58	33	24	671	
60-64	10	58	71	58	55	52	36	25	12	377	
65 & Over	2	20	40	20	16	12	8	5	8	131	
Total Count	467	1,710	1,388	686	561	377	191	76	44	5,500	

Compensation	1
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_	Years of Service										
Age	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.	
Under 25	48,166	54,139	-	-	-	-	-	-	-	51,302	
25-29	54,550	63,944	61,952	-	-	-	-	-	-	61,603	
30-34	62,995	69,984	76,683	68,616	-	-	-	-	-	71,110	
35-39	71,707	73,672	79,836	81,313	74,947	-	-	-	-	77,079	
40-44	64,446	74,836	85,752	83,070	84,882	89,834	71,095	-	-	80,777	
45-49	59,429	71,172	77,416	83,467	82,719	88,458	84,636	-	-	78,521	
50-54	64,816	76,350	75,462	87,208	89,614	87,455	92,024	109,651	-	82,833	
55-59	53,908	81,133	77,473	82,767	86,281	90,480	91,997	94,188	87,834	83,423	
60-64	45,218	71,532	76,302	88,198	79,614	79,437	82,904	102,333	83,716	80,082	
65 & Over	63,206	54,313	66,722	91,152	63,676	98,125	91,650	60,578	87,675	73,576	
Avg. Annual Compensation	60,616	71,363	78,040	83,638	84,159	87,775	89,211	97,301	86,682	77,198	



Exhibit C-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2008 General Members

Count											
	Years of Service										
Age	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count	
Under 25	32	37	0	0	0	0	0	0	0	69	
25-29	85	221	44	0	0	0	0	0	0	350	
30-34	92	310	159	17	0	0	0	0	0	578	
35-39	73	237	233	86	18	0	0	0	0	647	
40-44	57	182	173	96	83	22	2	0	0	615	
45-49	46	158	181	119	116	69	17	0	0	706	
50-54	21	182	138	93	99	85	53	10	0	681	
55-59	22	127	128	72	105	66	47	28	24	619	
60-64	10	56	67	56	53	47	33	22	11	355	
65 & Over	2	20	34	20	15	12	8	5	7	123	
Total Count	440	1,530	1,157	559	489	301	160	65	42	4,743	

Compensation	

Years of Service										
Age	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	46,411	52,742	-	-	-	-	-	-	-	49,806
25-29	53,429	61,511	58,716	-	-	-	-	-	-	59,197
30-34	62,587	69,366	72,778	62,708	-	-	-	-	-	69,029
35-39	71,113	71,560	75,988	76,365	74,602	-	-	-	-	73,828
40-44	64,332	73,937	84,196	76,861	80,346	71,349	71,095	-	-	77,152
45-49	59,429	69,804	75,153	81,446	78,978	80,183	77,301	-	-	75,164
50-54	64,816	75,274	74,243	85,528	85,350	80,031	87,032	98,503	-	79,457
55-59	53,908	78,570	76,713	81,582	85,755	88,344	85,314	88,362	87,834	81,235
60-64	45,218	70,860	75,244	87,894	77,645	77,183	81,856	97,951	79,994	78,486
65 & Over	63,206	54,313	63,413	91,152	62,163	98,125	91,650	60,578	83,986	72,567
Avg. Annual Compensation	60,232	70,083	75,446	80,997	81,134	81,531	84,458	91,031	85,139	74,535



Exhibit C-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2008 Safety Members

Count											
	Years of Service										
Age	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count	
Under 25	2	2	0	0	0	0	0	0	0	4	
	2	_	U	Ū	Ū	Ū	Ū	_	Ū	4	
25-29	3	27	4	0	0	0	0	0	0	34	
30-34	4	12	30	3	0	0	0	0	0	49	
35-39	3	21	31	20	2	0	0	0	0	77	
40-44	2	8	27	28	10	10	0	0	0	85	
45-49	0	4	15	11	13	19	5	0	0	67	
50-54	0	8	4	8	13	16	9	3	0	61	
55-59	0	12	3	4	3	6	8	5	0	41	
60-64	0	2	3	1	0	5	0	1	0	12	
65 & Over	0	0	1	0	0	0	0	0	1	2	
Total Count	14	96	118	75	41	56	22	9	1	432	

Compensation	

Years of Service										
Age	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	69,984	74,827	-	-	-	-	-	-	-	72,406
25-29	89,788	87,747	97,552	-	-	-	-	-	-	89,081
30-34	76,594	96,317	97,242	101,866	-	-	-	-	-	95,613
35-39	86,164	101,576	110,975	105,628	75,946	-	-	-	-	105,146
40-44	71,155	100,735	101,460	109,773	124,318	130,302	-	-	-	109,500
45-49	-	126,429	105,781	106,054	113,030	118,062	109,575	-	-	112,231
50-54	-	101,947	113,392	108,141	122,095	126,224	120,594	146,811	-	119,129
55-59	-	108,258	110,750	104,089	105,478	115,554	127,119	126,814	-	114,841
60-64	-	90,356	103,318	82,507	-	100,625	-	134,527	-	100,902
65 & Over	-	-	100,666	-	-	-	-	-	113,497	107,081
Avg. Annual Compensation	79,751	98,070	103,985	106,965	116,296	120,754	120,462	134,337	113,497	107,238



Exhibit C-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2008

Probation Members

Count

Journ												
	Years of Service											
Age	0-1	1-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count		
Under 25	4	3	0	0	0	0	0	0	0	7		
25-29	6	28	0	0	0	0	0	0	0	34		
30-34	2	29	34	1	0	0	0	0	0	66		
35-39	0	12	39	21	1	0	0	0	0	73		
40-44	1	7	19	21	12	3	0	0	0	63		
45-49	0	4	8	6	5	8	0	0	0	31		
50-54	0	1	5	2	8	5	3	0	0	24		
55-59	0	0	2	0	2	4	3	0	0	11		
60-64	0	0	1	1	2	0	3	2	1	10		
65 & Over	0	0	5	0	1	0	0	0	0	6		
Total Count	13	84	113	52	31	20	9	2	1	325		

0	ensation
Comi	nensation :
	on our

	Years of Service										
Age	0-1	1-2	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.	
Under 25	51,294	57,566	-	-	-	-	-	-	-	53,982	
25-29	52,820	60,198	-	-	-	-	-	-	-	58,896	
30-34	54,569	65,700	76,808	69,286	-	-	-	-	-	71,139	
35-39	-	66,548	78,078	78,416	79,164	-	-	-	-	76,295	
40-44	57,536	68,607	77,593	75,849	83,392	90,506	-	-	-	77,414	
45-49	-	69,951	75,425	82,133	90,695	89,521	-	-	-	82,117	
50-54	-	67,528	78,778	81,632	89,605	89,601	94,519	-	-	86,379	
55-59	-	-	76,195	-	85,112	88,110	103,030	-	-	89,468	
60-64	-	-	66,113	110,943	131,780	-	94,428	134,430	124,664	111,742	
65 & Over	-	-	82,436	-	86,370	-	-	-	-	83,091	
Avg. Annual Compensation	52,982	64,163	77,511	78,382	89,366	89,407	97,325	134,430	124,664	76,126	



Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2008 All Plans Combined

				Retire	ment Year				Total	Average Monthly
Age	Pre-1974	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-07	Count	Benefit
Under 35	-	-	-	-	-	6	2	2	10	\$ 1,659
35-39	-	-	-	-	1	-	3	5	9	2,084
40-44	-	-	-	1	1	3	8	5	18	2,441
45-49	-	-	-	-	-	10	11	10	31	2,462
50-54	-	-	-	2	5	9	37	80	133	2,354
55-59	-	-	-	6	23	32	120	174	355	2,530
60-64	2	1	6	7	27	111	191	261	606	3,269
65-69	3	1	5	25	102	174	223	173	706	2,807
70-74	5	9	15	60	128	152	111	21	501	2,286
75-79	4	10	59	74	147	107	28	10	439	1,974
80-84	7	63	108	160	106	28	3	1	476	1,833
85-89	31	66	135	107	20	1	-	-	360	1,755
90-94	22	65	51	9	1	1	-	-	149	1,411
95-99	16	18	9	-	-	-	-	1	44	1,577
100 & Over	3	2	-	-	-	-	-	-	5	1,516
Total Count	93	235	388	451	561	634	737	743	3,842	
Avg Monthly Benefit	\$ 1,510	\$ 1,633	\$ 1,492	\$ 1,899	\$ 1,990	\$ 2,140	\$ 2,761	\$ 3,589		\$ 2,378



Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2008 General Plans Combined

				Retire	ment Year				Total	Average Monthly
Age	Pre-1974	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-07	Count	Benefit
Under 35	-	-	-	-	-	6	2	2	10	\$ 1,659
35-39	-	-	-	-	1	-	1	5	7	1,227
40-44	-	-	-	1	1	1	5	2	10	1,814
45-49	-	-	-	-	-	9	8	6	23	1,987
50-54	-	-	-	2	3	7	29	61	102	1,628
55-59	-	-	-	2	14	26	107	140	289	2,011
60-64	2	-	3	6	20	94	124	241	490	2,730
65-69	1	1	4	15	80	116	193	168	578	2,386
70-74	3	7	15	48	115	143	104	21	456	2,045
75-79	3	8	56	67	146	106	25	10	421	1,894
80-84	6	55	102	157	106	28	3	1	458	1,763
85-89	22	61	134	107	20	1	-	-	345	1,675
90-94	21	64	51	9	1	1	-	-	147	1,403
95-99	16	18	9	-	-	-	-	1	44	1,577
100 & Over	3	2	-	-	-	-	-	-	5	1,516
Total Count	77	216	374	414	507	538	601	658	3,385	
Avg Monthly Benefit	\$ 1,253	\$ 1,462	\$ 1,434	\$ 1,750	\$ 1,742	\$ 1,708	\$ 2,237	\$ 3,240		\$ 2,054



Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2007 Safety Plans Combined

				Rotiro	ment Year				Total	Average Monthly
Age	Pre-1974	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-07	Count	Benefit
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	2	-	2	5,082
40-44	-	-	-	-	-	2	2	3	7	3,486
45-49	-	-	-	-	-	1	3	4	8	3,827
50-54	-	-	-	-	2	2	5	15	24	5,044
55-59	-	-	-	4	9	4	12	23	52	5,122
60-64	-	1	3	1	7	15	54	12	93	5,899
65-69	2	-	1	10	20	42	17	3	95	4,904
70-74	2	2	-	12	13	6	1	-	36	4,950
75-79	1	2	3	7	1	-	1	-	15	4,146
80-84	1	8	6	3	-	-	-	-	18	3,605
85-89	9	5	1	-	-	-	-	-	15	3,583
90-94	1	1	-	-	-	-	-	-	2	2,049
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	16	19	14	37	52	72	97	60	367	
Avg Monthly Benefit	\$ 2,750	\$ 3,582	\$ 3,055	\$ 3,568	\$ 4,164	\$ 4,645	\$ 5,857	\$ 7,071		\$ 4,987



Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2007 Probation Plans Combined

Age	Pre-1974	1975-79	1980-84	<b>Retire</b> 1985-89	ment Year 1990-94	1995-99	2000-04	2005-07	Total Count	Average Monthly Benefit
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	1	-	1	1,390
45-49	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	3	4	7	3,721
55-59	-	-	-	-	-	2	1	11	14	3,630
60-64	-	-	-	-	-	2	13	8	23	4,128
65-69	-	-	-	-	2	16	13	2	33	4,145
70-74	-	-	-	-	-	3	6	-	9	3,875
75-79	-	-	-	-	-	1	2	-	3	2,270
80-84	-	-	-	-	-	-	-	-	-	1,232
85-89	-	-	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	-	-	2	24	39	25	90	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ 8,456	\$ 4,292	\$ 3,139	\$ 4,422		\$ 3,921



### **Appendix D: Member Contribution Rates**



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

**Exhibit D-1: Basic Member Contribution Rates** 

	General (	(County)	General (S	MCM&VCD)	Proba	tion	Safe	ety
Entry Age *	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4
16	5.12%	4.90%	4.40%	4.22%	5.55%	5.31%	6.93%	6.64%
17	5.21%	4.99%	4.49%	4.30%	5.65%	5.41%	7.06%	6.76%
18	5.31%	5.08%	4.57%	4.38%	5.75%	5.51%	7.19%	6.88%
19	5.41%	5.18%	4.66%	4.46%	5.86%	5.61%	7.32%	7.01%
20	5.51%	5.27%	4.74%	4.54%	5.96%	5.71%	7.45%	7.14%
21	5.61%	5.37%	4.83%	4.63%	6.07%	5.81%	7.59%	7.27%
22	5.71%	5.47%	4.92%	4.71%	6.18%	5.92%	7.73%	7.40%
23	5.82%	5.57%	5.01%	4.80%	6.30%	6.03%	7.87%	7.53%
24	5.92%	5.67%	5.11%	4.89%	6.41%	6.14%	8.01%	7.67%
25	6.03%	5.78%	5.20%	4.98%	6.53%	6.25%	8.16%	7.81%
26	6.14%	5.88%	5.30%	5.07%	6.64%	6.36%	8.31%	7.95%
27	6.25%	5.99%	5.40%	5.17%	6.76%	6.48%	8.46%	8.10%
28	6.37%	6.10%	5.49%	5.26%	6.89%	6.59%	8.61%	8.24%
29	6.48%	6.21%	5.59%	5.36%	7.01%	6.71%	8.77%	8.39%
30	6.60%	6.32%	5.70%	5.45%	7.14%	6.84%	8.93%	8.55%
31	6.72%	6.43%	5.80%	5.55%	7.14%	6.96%	9.09%	8.70%
32	6.84%	6.55%	5.91%	5.65%	7.40%	7.09%	9.26%	8.86%
33	6.97%	6.67%	6.01%	5.76%	7.54%	7.09%	9.43%	9.03%
34	7.09%	6.79%	6.12%	5.86%	7.68%	7.22 %	9.60%	9.19%
35	7.22%	6.91%	6.23%	5.97%	7.83%	7.30%	9.78%	9.37%
36	7.35%	7.04%	6.35%	6.08%	7.98%	7.49%	9.97%	9.54%
36 37	7.35% 7.49%	7.04% 7.17%	6.46%	6.19%	8.13%	7.03% 7.77%	10.16%	9.54%
37 38	7.49% 7.63%	7.17%	6.58%	6.30%	8.28%	7.77% 7.90%		
39	7.03%		6.70%	6.41%	8.43%	8.04%	10.35%	9.88%
40	7.77%	7.44%	6.82%				10.53%	10.05%
40 41	7.92% 8.07%	7.58% 7.72%	6.95%	6.53% 6.65%	8.57% 8.72%	8.17% 8.29%	10.72%	10.21%
							10.90%	10.36%
42	8.22%	7.86%	7.07%	6.77%	8.86%	8.40%	11.07%	10.50%
43	8.37%	8.00%	7.20%	6.90%	8.99%	8.50%	11.23%	10.63%
44	8.52%	8.13%	7.34%	7.03%	9.10%	8.59%	11.38%	10.74%
45	8.67%	8.26%	7.48%	7.16%	9.21%	8.66%	11.52%	10.83%
46	8.82%	8.38%	7.62%	7.29%	9.30%	8.70%	11.63%	10.88%
47	8.96%	8.50%	7.77%	7.42%	9.37%	8.70%	11.71%	10.88%
48	9.09%	8.60%	7.91%	7.55%	9.40%	9.01%	11.75%	11.26%
49	9.21%	8.69%	8.05%	7.68%	9.40%	9.34%	11.75%	11.68%
50	9.32%	8.76%	8.19%	7.80%	9.40%	9.34%	11.75%	11.68%
51	9.41%	8.80%	8.33%	7.92%	9.40%	9.34%	11.75%	11.68%
52	9.48%	8.80%	8.46%	8.03%	9.40%	9.34%	11.75%	11.68%
53	9.51%	9.11%	8.58%	8.12%	9.40%	9.34%	11.75%	11.68%
54	9.51%	9.45%	8.70%	8.21%	9.40%	9.34%	11.75%	11.68%
55	9.51%	9.45%	8.80%	8.27%	9.40%	9.34%	11.75%	11.68%
56	9.51%	9.45%	8.89%	8.31%	9.40%	9.34%	11.75%	11.68%
57	9.51%	9.45%	8.95%	8.31%	9.40%	9.34%	11.75%	11.68%
58	9.51%	9.45%	8.98%	8.60%	9.40%	9.34%	11.75%	11.68%
59	9.51%	9.45%	8.98%	8.92%	9.40%	9.34%	11.75%	11.68%
60	9.51%	9.45%	8.98%	8.92%	9.40%	9.34%	11.75%	11.68%

<sup>\*</sup> For County General members entering after age 55, the rate equals the rate at age 55. Likewise for Safey and Probation members entering after age 50, the rate equals the rate at age 50. Only Probation rates reflect employer pick-up.



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

	General (	County)	General (SM	CM&VCD)***	Probation		Safet	v**
Entry Age *	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4	Plans 1&2	Plan 4
16	8.12%	7.90%	4.40%	4.22%	9.05%	8.81%	11.93%	11.64%
17	8.21%	7.99%	4.49%	4.30%	9.15%	8.91%	12.06%	11.76%
18	8.31%	8.08%	4.57%	4.38%	9.25%	9.01%	12.19%	11.88%
19	8.41%	8.18%	4.66%	4.46%	9.36%	9.11%	12.32%	12.01%
20	8.51%	8.27%	4.74%	4.54%	9.46%	9.21%	12.45%	12.14%
21	8.61%	8.37%	4.83%	4.63%	9.57%	9.31%	12.59%	12.27%
22	8.71%	8.47%	4.92%	4.71%	9.68%	9.42%	12.73%	12.40%
23	8.82%	8.57%	5.01%	4.80%	9.80%	9.53%	12.87%	12.53%
24	8.92%	8.67%	5.11%	4.89%	9.91%	9.64%	13.01%	12.67%
25	9.03%	8.78%	5.20%	4.98%	10.03%	9.75%	13.16%	12.81%
26	9.14%	8.88%	5.30%	5.07%	10.14%	9.86%	13.31%	12.95%
27	9.25%	8.99%	5.40%	5.17%	10.26%	9.98%	13.46%	13.10%
28	9.37%	9.10%	5.49%	5.26%	10.39%	10.09%	13.61%	13.24%
29	9.48%	9.21%	5.59%	5.36%	10.51%	10.21%	13.77%	13.39%
30	9.60%	9.32%	5.70%	5.45%	10.64%	10.34%	13.93%	13.55%
31	9.72%	9.43%	5.80%	5.55%	10.77%	10.46%	14.09%	13.70%
32	9.84%	9.55%	5.91%	5.65%	10.90%	10.59%	14.26%	13.86%
33	9.97%	9.67%	6.01%	5.76%	11.04%	10.72%	14.43%	14.03%
34	10.09%	9.79%	6.12%	5.86%	11.18%	10.86%	14.60%	14.19%
35	10.22%	9.91%	6.23%	5.97%	11.33%	10.99%	14.78%	14.37%
36	10.35%	10.04%	6.35%	6.08%	11.48%	11.13%	14.97%	14.54%
37	10.49%	10.17%	6.46%	6.19%	11.63%	11.27%	15.16%	14.71%
38	10.63%	10.30%	6.58%	6.30%	11.78%	11.40%	15.35%	14.88%
39	10.77%	10.44%	6.70%	6.41%	11.93%	11.54%	15.53%	15.05%
40	10.92%	10.58%	6.82%	6.53%	12.07%	11.67%	15.72%	15.21%
41	11.07%	10.72%	6.95%	6.65%	12.22%	11.79%	15.90%	15.36%
42	11.22%	10.86%	7.07%	6.77%	12.36%	11.90%	16.07%	15.50%
43	11.37%	11.00%	7.20%	6.90%	12.49%	12.00%	16.23%	15.63%
44	11.52%	11.13%	7.34%	7.03%	12.60%	12.09%	16.38%	15.74%
45	11.67%	11.26%	7.48%	7.16%	12.71%	12.16%	16.52%	15.83%
46	11.82%	11.38%	7.62%	7.29%	12.80%	12.20%	16.63%	15.88%
47	11.96%	11.50%	7.77%	7.42%	12.87%	12.20%	16.71%	15.88%
48	12.09%	11.60%	7.91%	7.55%	12.90%	12.51%	16.75%	16.26%
49	12.21%	11.69%	8.05%	7.68%	12.90%	12.84%	16.75%	16.68%
50	12.32%	11.76%	8.19%	7.80%	12.90%	12.84%	16.75%	16.68%
51	12.41%	11.80%	8.33%	7.92%	12.90%	12.84%	16.75%	16.68%
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53	12.51%	12.11%	8.58%	8.12%	12.90%	12.84%	16.75%	16.68%
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55	12.51%	12.45%	8.80%	8.27%	12.90%	12.84%	16.75%	16.68%
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57	12.51%	12.45%	8.95%	8.31%	12.90%	12.84%	16.75%	16.68%
58	12.51%	12.45%	8.98%	8.60%	12.90%	12.84%	16.75%	16.68%
59	12.51%	12.45%	8.98%	8.92%	12.90%	12.84%	16.75%	16.68%
60	12.51%	12.45%	8.98%	8.92%	12.90%	12.84%	16.75%	16.68%

<sup>\*</sup> For County General members entering after age 55, the rate equals the rate at age 55. Likewise for Safey and Probation members entering after age 50, the rate equals the rate at age 50. Only Probation rates reflect employer pick-up.



<sup>\*\*</sup> Cost sharing is less for deputy sheriffs

<sup>\*\*\*</sup>Mosquito and Vector Control District does not participate in cost sharing.

#### 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 adjustment 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 twelve-month period beginning July 1 and ending June 30.

Projected Benefits Those pension plan benefit amounts which are expected to be paid

at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation

and service credits.

Unfunded Actuarial Accrued Liability The excess, if any, of the Actuarial Accrued Liability over the

Actuarial Value of Assets.

Valuation Date The date upon which the Normal Cost, Actuarial Accrued Liability,

and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.

Valuation Reserves

All reserves excluding the Non-Valuation Reserves.

