
Santa Barbara County Employees' Retirement System

Actuarial Valuation
June 30, 2012

By

Nick J. Collier

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

and

Daniel R. Wade

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





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

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

milliman.com

October 15, 2012

Board of Retirement
Santa Barbara County Employees' Retirement System
3916 State Street, Suite 210
Santa Barbara, CA 93105

Dear Members of the Board:

As requested, we performed an actuarial valuation of the Santa Barbara County Employees' Retirement System (SBCERS) as of June 30, 2012 for determining contributions for the fiscal year beginning July 1, 2013. Our findings are set forth in this actuarial valuation. This valuation reflects the benefit provisions in effect as of the valuation date.

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

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

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

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for SBCERS. Actuarial computations presented in this report under GASB Statements No. 25 and 27 are for purposes of fulfilling financial accounting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our

This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

understanding of the System's funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the plan provisions described in Appendix B of this report, and of GASB Statements No. 25 and 27. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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

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

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

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

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We would like to express our appreciation to members of SBCERS' staff who gave substantial assistance in supplying the data on which this report is based.

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

Sincerely,

Handwritten signature of Nick J. Collier in black ink.

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

Handwritten signature of Daniel R. Wade in black ink.

Daniel R. Wade, FSA, EA, MAAA
Consulting Actuary

NJC/DRW/nlo

Santa Barbara County Employees' Retirement System

Table of Contents

	<i>Page</i>
Section 1: Summary of the Findings	1
Exhibit 1: Summary of Significant Valuation Results.....	8
Exhibit 2: Summary of Valuation Results by Class	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, 2011 and 2012....	16
Exhibit 4: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2011 and 2012.....	17
Exhibit 5: Allocation of Assets by Accounting Reserve Amounts For the Years Ended June 30, 2011 and 2012.....	18
Exhibit 6: Five-Year Smoothing of Gains and Losses on Market Value	19
Exhibit 7a: Development of Valuation Assets	20
Exhibit 7b: Net Return on Assets vs. Increase in Consumer Price Index	21
Exhibit 8: Allocation of Valuation Assets For the Year Ended June 30, 2012.....	22
Section 4: Actuarial Liabilities	23
Exhibit 9: Actuarial Balance Sheet – June 30, 2012	24
Exhibit 10: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 All Members.....	27
Exhibit 10a: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 General Members.....	28
Exhibit 10b: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 Safety Members	29
Exhibit 10c: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 APCD Members.....	30
Exhibit 11: Calculated UAAL Amount by Class – June 30, 2012 All Members.....	33
Exhibit 11a: UAAL Amortization Rates – June 30, 2012	34
Exhibit 11b: Calculated UAAL Amortization Rates by Plan for Safety – June 30, 2012.....	36
Exhibit 12: UAAL by Employer – June 30, 2012	38
Section 5: Member Contributions.....	39
Section 6: Employer Contributions	41
Exhibit 13: Total Employer Contributions All Members	45
Exhibit 13a: Total Employer Contributions General Members.....	46
Exhibit 13b: Total Employer Contributions Safety Members	47
Exhibit 13c: Total Employer Contributions APCD Members	48
Exhibit 14: Analysis of Change in Unfunded Actuarial Accrued Liability.....	49
Section 7: Information for Comprehensive Annual Financial Report (CAFR)	51
Exhibit 15: Schedule of Funding Progress.....	52
Exhibit 16: Schedule of Contributions from the Employer	53
Exhibit 17: Solvency Test	54

**Table of Contents
(continued)**

Page

Appendices

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



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Section 1: Summary of the Findings



Overview

2012 Valuation Results

	June 30, 2012	June 30, 2011
Employer Contribution Rate	38.30%	35.87%
Funded Ratio	71.2%	73.0%

We are pleased to present the results of the June 30, 2012 actuarial valuation. Key points are summarized as follows:

- **Investment Returns:** SBCERS' investment return was 1.75% over the past year on a Market Value basis compared to an assumed return of 7.75% per year. Note that our estimated return is on a dollar-weighted basis and will likely differ from that reported by your investment consultant.

The Actuarial Value of Assets (AVA) is a smoothed value that recognizes, over a five-year period, investment earnings less than (or greater than) the assumed investment return. The actual and expected investment returns used in the calculation are based upon the Market Value of Assets (MVA). When a loss (or gain) occurs, 20% of that amount is recognized each year until it is fully recognized in the fifth year.

After applying the asset-smoothing method, the rate of return on the AVA was 1.5% since last year, which is lower than the assumed rate of 7.75%. This actuarial loss had a significant impact on the valuation.

- **Funded Ratio:** The Funded Ratio decreased from 73.0% to 71.2%. This is the ratio of the Valuation Assets to the Actuarial Accrued Liability (AAL). This decrease was caused by the recognition of deferred losses from the 2007-2009 period, along with the asset loss this year. These losses were partially offset by the positive investment experience from the 2009-2011 period. Please see Exhibit 14 for more detail.

On a Market Value of Valuation Assets basis, the Funded Ratio has decreased from 71.7% to 70.1%. This decrease is explained by the investment experience in the past year. Note that the Funded Ratio on a market value basis remains close to the Funded Ratio on an actuarial value basis.

Overview (continued)

- **Contribution Rates:** The Employer Normal Cost rate decreased from 16.52% to 16.43%. Barring changes in plan provisions or assumptions, we expect the Normal Cost rates to remain relatively stable from year to year.

The employer's required contribution rate to finance the Unfunded Actuarial Accrued Liability (UAAL) over the 17-year amortization period is 21.87%. This compares to a rate of 19.35% in the previous valuation. The increase was primarily caused by recognition of deferred losses with this valuation. The overall result is an increase in the required total contribution rate from the prior valuation of 2.43% (from 35.87% to 38.30%) of payroll. Note that the new rate is 6.8% higher, on a relative basis, than the previous rate ($38.30\% / 35.87\% - 1$).

- **Key Assumptions:** There have been no changes to the actuarial assumptions from our previous valuation; in particular, the Board elected to continue to use the 7.75% investment return assumption at its April 2012 meeting. Please see Appendix A for a summary of our assumptions. All of the assumptions will be reviewed prior to the 2013 valuation as a result of the triennial Investigation of Experience scheduled for that time.
- **Member COLA Contribution Rates:** It is our understanding that at least some of the General members will be asked to contribute one-half of the annual increase in Cost-of-Living Adjustment (COLA) Normal Costs. In this valuation, the COLA Normal Cost rates for General members have actually declined by two basis points from our prior valuation. It is also our understanding that this will result in leaving the member contribution rates unchanged from a year ago.

Barring changes to assumptions or plan provisions, we would expect the COLA Normal Cost rate to remain fairly stable from year to year. Next year, after the Investigation of Experience, the rates may change more significantly if new assumptions are adopted.

Employer Contribution Rate

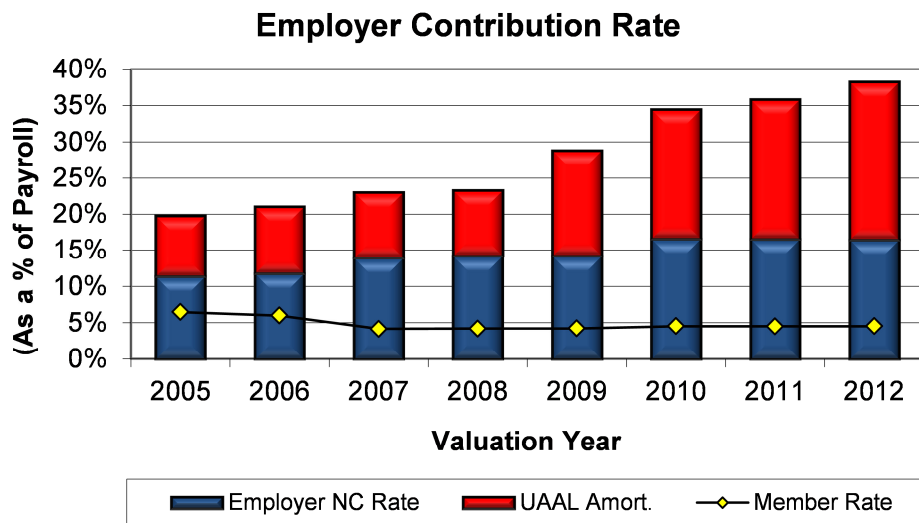
Under the Board's current funding objectives, the calculated employer contribution rate for the fiscal year beginning July 1, 2013 is 38.30% of payroll. This is equal to the payment of the Employer Normal Cost rate plus a 17-year amortization of the UAAL, with one exception. The exception is that the additional UAAL attributable to the creation of Safety Plan 6 is now being amortized over a closed period and that period stands at 16 years.

**Employer
Contribution Rate
(continued)**

It should be noted that the 38.30% is a weighted average for all SBCERS cost groups (General, Safety, and APCD). The actual percentage of payroll to be contributed by the employer varies by tier. See Exhibits 10a, 10b and 10c for Normal Cost rates by tier. See Exhibit 11a for the UAAL contribution rates for General, Safety, and APCD and Exhibit 11b for the development of UAAL contribution rates for Safety Plan 4 and Safety Plan 6. See Exhibits 13a, 13b and 13c for the total employer contribution rates by tier.

The new rate effective for the fiscal year beginning July 1, 2013 of 38.30% 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 UAAL to be amortized over an open/rolling 17-year period.

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



Comparison with Last Year

A detailed analysis of the sources of the changes since the 2011 valuation is shown in the Gain and Loss Exhibit 14, Section 6 of this report.

The following chart summarizes how these and various other factors affected the overall funding of SBCERS and the employer contribution rate, as compared to the last valuation.

Sources of Change	Employer Contribution Rate	Funded Ratio
June 30, 2011 Actuarial Valuation	35.87%	73.0%
Expected Year-to-Year Change	-0.72%	1.2%
Expected June 30, 2012 Actuarial Valuation	35.15%	74.2%
Recognized Asset (Gain)/Loss		
From 2011-12	0.63%	-0.8%
From Prior Years	2.70%	-3.5%
Salary Increases Less Than Assumed	-0.76%	1.0%
Decrease in Payroll	0.92%	0.0%
CPI Less than Expected	-0.19%	0.3%
All Other Experience	-0.15%	0.0%
Total Experience	3.15%	-3.0%
Actual June 30, 2012 Actuarial Valuation	38.30%	71.2%

Benefit Provision Changes

- **General Plan 7:** Effective June 25, 2012, it is our understanding that all County General members will join General Plan 7. The basic monthly service retirement allowance for General Plan 7 is prescribed under CERL Section 31676.1. There were no active members in General Plan 7 at the time of our valuation. For that reason, we have recommended contribution rates for the Fiscal Year 2013-2014 based on the same methodology used in our letter dated April 13, 2012. Please see Section 6 of this report for details regarding the contribution rates for this plan.
- **Government Code 7522.66:** It is our understanding the new California Public Employees' Pension Reform Act of 2013 includes enhanced service-connected disability benefits for Safety members who become disabled between January 1, 2013 and December 31, 2017. The new disability retirement benefit will be equal to the greater of the following:
 - Fifty percent (50%) of his or her final compensation, plus an annuity purchased with accumulated contributions, if any;
 - A service retirement allowance, if qualified for service retirement; or
 - An actuarial reduced factor, as determined by the actuary for each quarter year that his or her service age is less than 50 years of age, if the amount would be higher than 50%.

**Benefit Provision
Changes
(continued)**

The current benefit is the greater of 50% of final compensation or the service retirement allowance, if qualified for service retirement. The key increase under the new law is the addition of the annuity based on contributions to the 50% of compensation benefit.

The new benefit resulted in a 0.03% increase in the Normal Cost rate for Safety members and an increase of 0.03% for the Safety UAAL rates. It is our understanding that no other changes are expected to impact current members at this time.

**Member Contribution
Rates**

There have been no changes in the assumptions for wage increases, investment returns or retiree mortality. Therefore, there have not been changes recommended in the member contribution rates since our prior valuation. Member rates for all tiers are discussed in Section 5 and are shown in detail in Appendix D.

General Plan 7 has new formulas for member contribution rates. Please see Section 5 for more detail and see Appendix D for the recommended rates. These are the same as those currently in effect, as recommended in our letter dated April 13, 2012. The aggregate member contribution rate has changed from 4.52% to 4.54% of payroll since our prior valuation due to small changes in the demographics for the group.

Funding Progress

There were several factors that had an impact on the UAAL. These factors are shown in detail in Exhibit 14 at the end of Section 6. The major change for this valuation was the recognition of a portion of the deferred asset losses from the 2007-2009 periods. The 2007-2008 loss has now fully been recognized and the 2008-2009 loss is one year away from full recognition. The investment return for the most recent year was also lower than assumed, with 20% of that loss being recognized in this year's AVA. These losses were partially offset by the recognition of a portion of the positive investment experience for the 2009-2011 period as well as other factors.

One measure of the funding adequacy of the system is the Funded Ratio, which compares the Valuation Assets to the AAL, for all SBCERS tiers combined. SBCERS' Funded Ratio increased rapidly in the last half of the 1990's, reaching more than 100% in 2000 and 2001. However, due primarily to asset losses early in this decade and again in 2008 and 2009, the Funded Ratio has decreased since then.

Funding Progress (continued)

Currently, the Funded Ratio using the smoothed value of assets is 71.2%; that is, the Valuation Assets of \$2,046.6 million are 28.8% less than the AAL of \$2,874.4 million.

(all dollar amounts in millions)

Valuation Year	Market Value of Assets	Actuarial Value of Assets	Valuation Assets	Non Valuation Assets	Actuarial Accrued Liability	Funded Ratio
2007	\$ 1,900	\$ 1,735	\$ 1,704	\$ 31	\$ 1,957	87.1%
2008	\$ 1,763	\$ 1,894	\$ 1,891	\$ 3	\$ 2,136	88.6%
2009	\$ 1,421	\$ 1,706	\$ 1,706	\$ -	\$ 2,264	75.3%
2010	\$ 1,609	\$ 1,927	\$ 1,927	\$ -	\$ 2,616	73.7%
2011	\$ 1,972	\$ 2,008	\$ 2,008	\$ -	\$ 2,750	73.0%
2012	\$ 2,015	\$ 2,047	\$ 2,047	\$ -	\$ 2,874	71.2%

Assets

For the fiscal year ending June 30, 2012, we estimate that SBCERS earned 1.75%, net of expenses, on its MVA. Note that our return figure may be slightly different than that shown in the 2012 CAFR due to timing of contributions and benefit payments, as well as the treatment of expenses.

As mentioned above, SBCERS uses an asset-smoothing method in the determination of the AVA used in the calculation of the UAAL contribution rate. Under this method, the Market Value returns are smoothed over a five-year period. After that, it has been SBCERS' practice to apply an asset corridor limit on the AVA, such that the AVA stays within 20% of the MVA. At the time of this valuation, the smoothed value of assets is approximately 101.6% of the MVA. Because of this, the corridor does not apply to the AVA.

After applying the asset-smoothing method, the rate of return on the AVA was 1.50% since last year. The return on an AVA basis was also less than the assumed rate of 7.75%.

Because \$31.5 million in asset losses are being deferred as of the valuation date, it is likely that there will be decreases in the Funded Ratio and increases in the employer contribution rates in future years.

Non-Valuation Assets

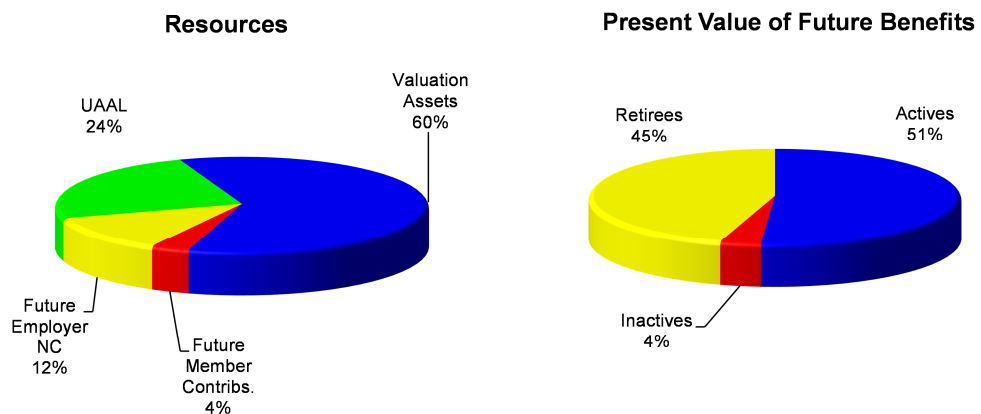
As of June 30, 2012, the entire AVA is included for valuation purposes. In valuations prior to 2009, certain non-valuation assets were excluded from the Valuation Assets.

We have based our understanding of the purposes of the various reserves on information provided to us by the Board and staff.

Actuarial Balance Sheet

The first step in the valuation process is to compare the total actuarial assets of SBCERS with its total liabilities for all plans. In this analysis, SBCERS' resources equal the Valuation Assets plus the expected future contributions by both the employers and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The AAL is the total of these liabilities less expected future Normal Cost Contributions.

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



Member Information

The number of active members included in the valuation decreased by 76 (or 1.8%) between 2011 and 2012.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2012, there were 3,507 retired members and beneficiaries, with an average benefit of \$2,817 per month. This represents a 3.5% increase in count and a 3.9% increase in the average monthly benefit.

Summary Valuation Results

The following exhibits present a summary of key valuation results on June 30, 2012 and June 30, 2011, and how they changed over the past year. More detail on each of these elements can be found in the following sections and exhibits of this report.

Santa Barbara County Employees' Retirement System

Exhibit 1: Summary of Significant Valuation Results

	June 30, 2012	June 30, 2011	Relative Change
I. Total Membership			
A. Active Members	4,072	4,148	(1.8)%
B. Retired Members & Beneficiaries	3,507	3,387	3.5%
C. Vested Terminated Members	879	890	(1.2)%
D. Terminated Members (with Contributions)	271	276	(1.8)%
E. Total	8,729	8,701	0.3 %
II. Annualized Payroll as of the Valuation Date*			
A. Annual Total (\$thousands)	\$ 302,114	\$ 305,758	(1.2)%
B. Monthly Average	\$ 6,183	\$ 6,143	0.7%
<i>* Active payroll excludes pay for Safety members over 65 and General members over age 75. These members are assumed to retire at the valuation date.</i>			
III. Average Monthly Benefit to Current Retirees and Beneficiaries	\$ 2,817	\$ 2,712	3.9%
IV. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 1,213,611	\$ 1,190,098	2.0%
B. Retired Members	\$ 1,540,076	\$ 1,432,333	7.5%
C. Vested Terminated Members	\$ 120,697	\$ 127,383	(5.2)%
D. Total	\$ 2,874,384	\$ 2,749,814	4.5%
V. Assets (\$thousands)			
A. Market Value of Fund	\$ 2,015,150	\$ 1,971,903	2.2%
B. Return on Market Value Basis*	1.75%	21.09%	
C. Valuation Assets	\$ 2,046,641	2,007,859	1.9%
D. Return on Valuation Assets*	1.50%	3.09%	
<i>* May differ from return reported in CAFR due to assumed timing of contributions and benefit payments and treatment of expenses.</i>			
VI. Funded Ratios			
A. Market Value of Assets Basis (V.A. / IV.)	70.1%	71.7%	(2.2)%
B. Valuation Assets Basis (V.C. / IV.)	71.2%	73.0%	(2.5)%
VII. Unfunded Actuarial Accrued Liability (\$thousands)	\$ 827,742	\$ 741,955	11.6%
VIII. Required Employer contribution rate for all tiers combined as a percent of total payroll			
A. Gross Normal Cost	20.97%	21.04%	(0.3)%
B. Member Contributions	(4.54)%	(4.52)%	0.4%
C. Employer Normal Cost	16.43%	16.52%	(0.5)%
D. UAAL Amortization	21.87%	19.35%	13.0%
E. Total Employer Rate	38.30%	35.87%	6.8%

Santa Barbara County Employees' Retirement System

Exhibit 2: Summary of Valuation Results by Class

	6/30/2011 General	6/30/2012 General	Percent Change	6/30/2011 Safety	6/30/2012 Safety	Percent Change	6/30/2011 APCD	6/30/2012 APCD	Percent Change	6/30/2011 Total	6/30/2012 Total	Percent Change
Actives	3,198	3,141	-1.8%	904	885	-2.1%	46	46	0.0%	4,148	4,072	-1.8%
Inactives *	961	946	-1.6%	188	188	0.0%	17	16	-5.9%	1,166	1,150	-1.4%
Retirees	2,576	2,640	2.5%	779	830	6.5%	32	37	15.6%	3,387	3,507	3.5%
Totals	6,735	6,727	-0.1%	1,871	1,903	1.7%	95	99	4.2%	8,701	8,729	0.3%
Active Payroll **	221,771,155	219,952,884	-0.8%	80,529,115	78,685,694	-2.3%	3,457,409	3,475,210	0.5%	305,757,679	302,113,788	-1.2%
Average	69,347	70,026	1.0%	89,081	88,910	-0.2%	75,161	75,548	0.5%	73,712	74,193	0.7%
Retiree Benefits	65,682,264	69,100,068	5.2%	43,537,116	48,157,152	10.6%	999,792	1,287,780	28.8%	110,219,172	118,545,000	7.6%
Average	25,498	26,174	2.7%	55,888	58,021	3.8%	31,244	34,805	11.4%	32,542	33,802	3.9%
Valuation Assets	1,182,394,450	1,211,048,065	2.4%	798,048,322	807,531,356	1.2%	27,416,383	28,061,690	2.4%	2,007,859,156	2,046,641,111	1.9%
Market Value of Assets	1,161,220,428	1,192,414,154	2.7%	783,757,074	795,106,195	1.4%	26,925,418	27,629,916	2.6%	1,971,902,920	2,015,150,265	2.2%
Actuarial Accrued Liability	1,640,344,374	1,709,276,669	4.2%	1,073,268,993	1,127,432,200	5.0%	36,199,935	37,674,681	4.1%	2,749,813,302	2,874,383,550	4.5%
Unfunded Actuarial Accrued Liability	457,949,924	498,228,604	8.8%	275,220,671	319,900,844	16.2%	8,783,552	9,612,991	9.4%	741,954,146	827,742,439	11.6%
<u>Retirement Contribution Rates</u>												
Employer Normal Cost	13.71%	13.64%	-0.5%	24.34%	24.33%	0.0%	14.13%	14.10%	-0.2%	16.52%	16.43%	-0.5%
Unfunded Actuarial Accrued Liability	16.47%	18.07%	9.7%	27.26%	32.49%	19.2%	20.26%	22.06%	8.9%	19.35%	21.87%	13.0%
Total	30.18%	31.71%	5.1%	51.60%	56.82%	10.1%	34.39%	36.16%	5.1%	35.87%	38.30%	6.8%
<u>Funded Ratios</u>												
Valuation Assets	72.1%	70.9%	-1.7%	74.4%	71.6%	-3.7%	75.7%	74.5%	-1.7%	73.0%	71.2%	-2.5%
Market Value of Assets	70.8%	69.8%	-1.5%	73.0%	70.5%	-3.4%	74.4%	73.3%	-1.4%	71.7%	70.1%	-2.2%

* June 30, 2012 numbers include 271 terminated members with a pending refund of contributions as of that date. The June 30, 2011 numbers include 276 such members.

** Active payroll excludes pay for Safety members over 65 and General members over age 75. These members are assumed to retire at the valuation date.

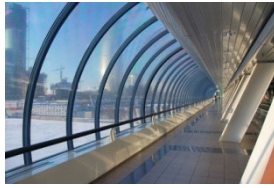


This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

This page intentionally left blank.

Santa Barbara County Employees' Retirement System

Section 2: Scope of the Report



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

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

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of SBCERS. The assets and investment income are presented in Exhibits 3-5. Exhibits 6-8 develop the Actuarial Value of Assets as of June 30, 2012.

In Section 4, we describe the benefit obligations of SBCERS. Exhibit 9 is the Actuarial Balance Sheet. Additional analysis on the change in UAAL is also provided in this section.

In Section 5, we present the methodology for determining the member contribution rates.

In Section 6, we develop the calculations for the employer contributions needed to fund the benefits under the actuarial cost method in use.

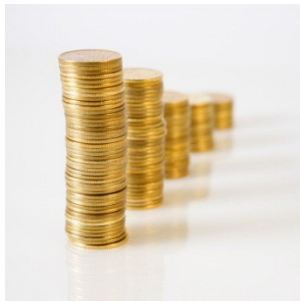
In Section 7, we disclose the information required under Statement No. 25 of the Governmental Accounting Standards Board (GASB). Note that in future years, Statement No. 67 will apply.

This report includes several appendices:

- Appendix A A summary of the actuarial procedures and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure as determined by the provisions of governing law on June 30, 2012.
- Appendix C Schedules of valuation data classified by various categories of members by class, plan and tier.
- Appendix D Member contribution rates by class, plan and tier.
- Appendix E A glossary of actuarial terms used in this report.

Santa Barbara County Employees' Retirement System

Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date which, for this valuation, is June 30, 2012. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the 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 employers 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. Section 5 covers the member contribution rates. Section 6 deals with the process for determining required employer contributions based on the relationship between the actuarial assets and the actuarial liabilities.

A historical summary of the SBCERS' assets is presented below:

All dollar amounts in millions

Valuation Date	Market Value of Total Assets	Actuarial Value	
		Total Assets	Valuation Assets
2004	\$ 1,347	\$ 1,379	\$ 1,242
2005	1,476	1,444	1,306
2006	1,629	1,553	1,415
2007	1,900	1,735	1,704
2008	1,763	1,894	1,891
2009	1,421	1,706	1,706
2010	1,609	1,927	1,927
2011	1,972	2,008	2,008
2012	2,015	2,047	2,047

On June 30, 2012, the total Market Value of Assets (MVA) was about \$2.015 billion. The Actuarial Value of Assets (AVA), which is equal to Valuation Assets as of June 30, 2012, was determined to be \$2.047 billion, equal to 101.6% of the MVA.

Financial Exhibits

Exhibit 3 is the Statement of Plan Net Assets and Exhibit 4 is the Statement of Changes in Plan Net Assets. Exhibit 5 displays the allocation of SBCERS' assets by the various reserve values determined for accounting purposes.

Exhibits 3 and 4 and the data for Exhibit 5 are taken directly from data furnished to us by SBCERS for its annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

The Board established a new Interest Crediting and Undesignated Earnings Policy on August 25, 2010. After that policy, the new Market Stabilization Account is based on the difference between the MVA and the AVA. The Contra Tracking Account was established with that policy. In effect, that account is the difference between the AVA and the sum of the accounting reserves, as long as the account is negative.

Actuarial Asset Method

Under the actuarial asset method used by SBCERS, we compute the expected MVA based on the prior year's MVA, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return.

The assumed rate of return until June 30, 2010 was 8.16%, net of all expenses. With the June 30, 2010 actuarial valuation, the assumed rate of return was decreased to 7.75%. That rate has been assumed since then.

The difference between the actual Market Value and the computed expected Market Value is smoothed, or recognized over a five-year period.

To prevent the AVA from deviating too much from the MVA, it has been SBCERS' practice to apply an asset corridor limit on the AVA, such that the AVA stays within 20% of the MVA. After the smoothed value of assets is calculated, the smoothed value is compared to 80% of MVA and 120% of MVA. If the smoothed value is within that range, the smoothed value is used. If the smoothed value is higher than 120% of MVA, then the AVA is set equal to 120% of MVA. Similarly, if the smoothed value is lower than 80% of MVA, the AVA is set equal to 80% of MVA.

At the time of this valuation, the smoothed value of assets is 101.6% of the MVA. Because of this, the corridor does not apply to the AVA.

Actuarial Value of Assets

The development of the June 30, 2012 AVA is shown in Exhibit 6. As of that date, the AVA is 101.6% of the MVA. At the time of the last valuation, the AVA was 101.8% of MVA. There are \$31.5 million of deferred investment return losses yet to be recognized.

Valuation Assets and Non-Valuation Assets

Valuation Assets are the AVA, 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. As of June 30, 2012, the entire AVA is included for valuation purposes. In valuations prior to 2009, certain non-valuation assets were excluded from the Valuation Assets.

At its September 19, 2008 meeting, the Board directed a new classification of assets effective June 30, 2007. As a result of that classification, the Health Coverage Reserve was eliminated. The \$93.5 million that had been in the Health Coverage Reserve was allocated into two new reserves.

One of those new reserves was the 2007-2008 Health Benefit Reserve of \$9.4 million, created to pay the \$15 Health Benefits from July 2007 through September 2008 and the \$4 Supplemental Benefits from July 2007 through December 2008. The remaining \$84.1 million was allocated to the Transferred Funds reserve and included with Valuation Assets.

As of June 30, 2012, the Transferred Funds Reserve was \$123.9 million. At its September 24, 2008 meeting, the Board directed that the Transferred Funds Reserve be treated as a sub-account of the Retired Member reserve.

Note that the Health Benefits are reported in the SBCERS GASB 43 actuarial valuation of Post Employment Benefits Other than Pensions.

Allocation of Assets

Valuation Assets are allocated by classification (General, Safety and APCD) as shown in Exhibit 8. This is because UAAL contribution rates are determined separately by class.

The Normal Cost employer contribution rate is determined separately for each tier of each class.

The Member Deposit Reserve, County and District Advance Reserve, Retired Member Reserve, and Transferred Funds Reserve were all separated by classification by SBCERS.

At its September 24, 2008 meeting, the Board decided to classify the Transferred Funds Reserve as a sub-account of the Retired Member Reserve.

Please see Exhibit 8 for a detailed summary of the allocation of assets across classes.

Santa Barbara County Employees' Retirement System

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

	2012	2011
Assets		
Cash and Deposits	\$ 9,524,840	\$ 24,599,333
Receivables		
Contributions	6,419,670	5,107,540
Security Sales Pending	51,990,437	51,826,051
Dividends	1,554,189	2,318,412
Accrued Interest	5,284,567	4,876,629
Other Receivables	15,403	13,678,052
Total Receivables	\$ 65,264,266	\$ 77,806,684
Investments at Fair Value		
Short Term Investments	45,428,477	130,307,075
Alternative Equity	115,398,890	85,329,652
Domestic Fixed Income Securities	519,566,541	480,205,204
Domestic Equities	716,525,087	662,734,075
International Equities	239,257,317	378,086,499
International Fixed Income Securities	149,789,382	137,331,656
Real Estate	247,119,062	142,208,024
Total Investments	\$ 2,033,084,756	\$ 2,016,202,185
Collateral Held for Securities Lent	196,271,072	135,758,382
Total Assets	\$ 2,304,144,934	\$ 2,254,366,584
Liabilities		
Payables		
Collateral Held for Securities Lent	196,271,072	135,758,382
Securities Purchases Pending	92,206,310	139,302,963
Benefits Payable	-	7,110,055
Accounts Payable	517,287	292,264
Total Liabilities	288,994,669	282,463,664
Net Assets Held in Trust for Pension Benefits	\$ 2,015,150,265	\$ 1,971,902,920

Santa Barbara County Employees' Retirement System

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

	June 30, 2012	June 30, 2011
Additions		
Contributions		
Employer	\$ 108,764,094	\$ 94,436,686
Member	14,524,627	10,843,091
Total Contributions	<u>123,288,721</u>	<u>105,279,777</u>
Investment Income		
Net Appreciation in Fair Value of Investments	(441,462)	309,413,571
Interest	25,398,974	22,387,681
Dividends	19,100,099	18,630,225
Total Investment Income	<u>44,057,611</u>	<u>350,431,477</u>
Less investment expense	(6,062,082)	(5,088,571)
Net Investment Income	<u>37,995,529</u>	<u>345,342,906</u>
Securities Lending Income	234,228	410,070
Securities Lending Expense	126,298	(52,802)
Net Securities Income	<u>360,526</u>	<u>357,268</u>
Other Income	223,470	23,724,517
Total Other Income	<u>223,470</u>	<u>23,724,517</u>
TOTAL ADDITIONS	<u>\$ 161,868,246</u>	<u>\$ 474,704,468</u>
Deductions		
Benefits Paid - Includes Pension and Death Benefits	\$ 113,525,989	\$ 106,661,513
Member Withdrawals	1,071,850	1,476,583
Administrative Expenses	4,023,062	4,112,150
TOTAL DEDUCTIONS	<u>\$ 118,620,901</u>	<u>\$ 112,250,246</u>
NET INCREASE	<u>\$ 43,247,345</u>	<u>\$ 362,454,222</u>
Assets Held in Trust - Beginning of Year	<u>\$ 1,971,902,920</u>	<u>\$ 1,609,448,698</u>
Assets Held in Trust - End of Year	<u>\$ 2,015,150,265</u>	<u>\$ 1,971,902,920</u>

Santa Barbara County Employees' Retirement System

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

	2012	2011
1. Member Deposit Reserve	\$ 165,622,535	\$ 165,774,090
2. County and District Advance Reserve	627,458,520	611,551,174
3. Retired Member Reserve	1,620,660,603	1,447,916,960
4. Transferred Funds Reserve *	123,935,927	114,861,676
	<u>\$ 2,537,677,585</u>	<u>\$ 2,340,103,900</u>
5. New Market Stabilization Account	(31,490,846)	(35,956,236)
6. Contra Tracking Account	(491,036,474)	(332,244,744)
	<u>(522,527,320)</u>	<u>(368,200,980)</u>
Total Reserves	<u>\$ 2,015,150,265</u>	<u>\$ 1,971,902,920</u>

* Established as a valuation asset reserve effective June 30, 2007. It is a sub-account of the Retired Member Reserve.

A new Interest Crediting and Undesignated Earnings Policy was established on August 25, 2010. In accordance with that policy, the new Market Stabilization Account is based on the difference between the Market Value of Assets and the Actuarial Value of Assets. The Contra Tracking Account was established with that policy. In effect, that account is the difference between the Actuarial Value of Assets and the sum of the first four reserves above, as long as that account is negative.

Santa Barbara County Employees' Retirement System

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

Period Ending	Contributions and Miscellaneous Revenue	Benefits*	Expected Investment Return	Actual Investment Return	Actual minus Expected Inv Return	Deferred Portion of Gain/Loss	Deferred Investment Return	Expected Market Value	Actual Market Value
6/30/2008	84,940,244	86,228,890	155,026,096	(136,224,090)	(291,250,186)	0%	-	2,054,198,744	1,762,948,558
6/30/2009	86,985,601	90,790,672	143,701,399	(337,624,304)	(481,325,703)	20%	(96,265,141)	1,902,844,886	1,421,519,183
6/30/2010	96,296,127	99,132,664	115,882,504	190,766,052	74,883,548	40%	29,953,419	1,534,565,150	1,609,448,698
6/30/2011	128,906,811	108,138,096	125,522,045	341,685,507	216,163,462	60%	129,698,077	1,755,739,458	1,971,902,920
6/30/2012	123,288,721	114,597,839	153,152,964	34,556,463	(118,596,501)	80%	(94,877,201)	2,133,746,766	2,015,150,265

1. Total	\$ (31,490,846)
2. Market Value of Assets as of June 30, 2012	\$ 2,015,150,265
3. Preliminary Actuarial Value of Assets as of June 30, 2012 = (2) - (1)	\$ 2,046,641,111
4. Corridor Limit	
a. 80% of Net Market Value	1,612,120,212
b. 120% of Net Market Value	2,418,180,318
5. Actuarial Value of Assets After Corridor as of June 30, 2012	<u>\$ 2,046,641,111</u>

* Includes pensions, death benefits, and member withdrawals. It also includes health benefits paid prior to the establishment of the 401(h) account.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Exhibit 7a: Development of Valuation Assets

	Actuarial Value of Assets	Market Value of Assets
1. Total June 30, 2011 Valuation	\$ 2,007,859,156	\$ 1,971,902,920
2. Changes During the Year		
Contributions and Miscellaneous Revenue	123,288,721	123,288,721
Benefit Payments	(114,597,839)	(114,597,839)
Investment Return, Net of Expenses	30,091,073	34,556,463
Total Changes	\$ 38,781,955	\$ 43,247,345
3. Total June 30, 2012 Valuation = 1 + 2	\$ 2,046,641,111	\$ 2,015,150,265
4. Expected Value as of June 30, 2012	\$ 2,172,489,611	\$ 2,133,746,766
5. Gain / (Loss) = (3) - (4)	(125,848,500)	(118,596,501)
6. Rate of Return	1.50%	1.75%

Santa Barbara County Employees' Retirement System

Exhibit 7b: Net Return on Assets vs. Increase in Consumer Price Index

Year Ended June 30	Net Return at Market Value	Net Return at Actuarial Value	Increase in Consumer Price Index*
1988	1.9%		4.0%
1989	17.6%		5.2%
1990	10.8%		4.7%
1991	9.7%		4.7%
1992	18.5%		3.1%
1993	13.2%		3.0%
1994	-0.7%		2.5%
1995	17.7%		3.0%
1996	15.6%		2.8%
1997	19.9%		2.3%
1998	18.9%		1.7%
1999	10.5%		2.0%
2000	6.4%		3.7%
2001	-4.3%		3.2%
2002	-5.4%		1.1%
2003	4.6%		2.1%
2004	15.7%	2.9%	3.3%
2005	9.9%	5.0%	2.5%
2006	10.6%	7.8%	4.3%
2007	16.6%	11.7%	2.7%
2008	-7.2%	9.2%	5.0%
2009	-19.2%	-9.6%	-1.4%
2010	13.4%	13.2%	1.1%
2011	21.1%	3.1%	3.6%
2012	1.8%	1.5%	1.7%
25-Year Compound Average	8.2%		2.9%

* Based on All Urban Consumers – U.S. City Average, June indices.

Santa Barbara County Employees' Retirement System

Exhibit 8: Allocation of Valuation Assets For the Year Ended June 30, 2012

(Dollars in Thousands)

	General	Safety	APCD	Total
1. Member Deposit Reserve	\$ 134,044	\$ 30,212	\$ 1,367	\$ 165,623
2. County and District Advance Reserve	432,241	185,343	9,875	627,459
3. Retired Member Reserve	871,223	727,187	22,251	1,620,661
4. Transferred Funds Reserve *	64,100	58,535	1,301	123,936
<hr/>				
5. Total Valuation Reserves (1 + 2 + 3 + 4)	\$ 1,501,608	\$ 1,001,277	\$ 34,794	\$ 2,537,679
<hr/>				
6. Percentage of Line 5. by Plan	59.17%	39.46%	1.37%	100.00%
7. Actuarial Value of Valuation Assets (Exhibit 6)			\$	2,046,641
8. Allocated Valuation Assets (6 x 7)	<u>\$ 1,211,048</u>	<u>\$ 807,531</u>	<u>\$ 28,062</u>	<u>\$ 2,046,641</u>

* The Transferred Funds Reserve is a sub-account of Retired Member Reserves.

Santa Barbara County Employees' Retirement System

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 SBCERS' assets as of the valuation date, June 30, 2012. In this section, the discussion will focus on the commitments of SBCERS 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 common in all but fully closed down funds, 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 Valuation Assets to the Actuarial Liabilities. The difference is the amount that needs to be funded by the member and employer contributions in the future. Both the current and future assets (contributions) are compared to the actuarial liabilities in the Actuarial Balance Sheet.

Exhibit 9 contains an analysis of the actuarial present value of all future benefits for 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 pension valuation liabilities reflect the benefits effective through June 30, 2012.

The actuarial assumptions used to determine the liabilities are based on the results of our analysis of experience as of June 30, 2010 and were adopted by the Board in October 2010. These assumptions are summarized in Appendix A.

Santa Barbara County Employees' Retirement System

Exhibit 9: Actuarial Balance Sheet – June 30, 2012

(Dollars in Thousands)

Resources				
	<u>General</u>	<u>Safety</u>	<u>APCD</u>	<u>Total</u>
Valuation Assets (Actuarial)	\$ 1,211,048	\$ 807,531	\$ 28,062	\$ 2,046,641
Present Value of Future Member Contributions	74,585	38,014	1,675	114,274
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	246,401	164,003	3,464	413,868
b) Unfunded Actuarial Accrued Liability	498,228	319,901	9,613	827,742
Total Resources	\$ 2,030,262	\$ 1,329,449	\$ 42,814	\$ 3,402,525

Liabilities				
	<u>General</u>	<u>Safety</u>	<u>APCD</u>	<u>Total</u>
Present Value of Future Benefits				
1. Present Retired Members	\$ 840,716	\$ 680,663	\$ 18,697	\$ 1,540,076
2. Current Inactive Members	90,123	28,474	2,100	120,697
3. Current Active Members				
- Service Retirement	1,016,953	567,088	20,476	1,604,517
- Disability Retirement	34,956	31,151	617	66,724
- Death Benefits	13,070	4,923	448	18,441
- Deferred Vested Benefit	31,385	16,900	376	48,661
- Refund of Member Contributions	<u>3,059</u>	<u>250</u>	<u>100</u>	<u>3,409</u>
- Total Active	\$ 1,099,423	\$ 620,312	\$ 22,017	\$ 1,741,752
Total Actuarial Liabilities	\$ 2,030,262	\$ 1,329,449	\$ 42,814	\$ 3,402,525

Actuarial Balance Sheet – Resources

For the purpose of the Actuarial Balance Sheet, SBCERS' 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 employers.

Actuarial Cost Method

In the Actuarial Balance Sheet, we determine the amount of future contributions that are needed, but the method used to determine when those future contributions are to be made 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 Unfunded Actuarial Accrued Liability (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. Under the entry age actuarial cost method, the Normal Cost Contribution Rate maintains the funding of benefits as a level percentage of pay.

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. If experience follows the actuarial assumptions precisely and if the employers contributed the Normal Cost, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

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 employers.

Normal Cost (continued)

The member contribution rates are determined based upon requirements established in bargaining agreements between the employers and employees 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 employer's portion of the future Normal Cost contributions.

In Exhibit 10, we report the Total Normal Cost Contribution Rate for each class in total and then reduce the total by the members' average contribution rates to develop the Employer's Net Normal Cost Contribution Rate as of June 30, 2012. Exhibits 10a, 10b and 10c provide similar information regarding the Normal Cost rates, but they give the information by each tier within each plan, one exhibit for each class. Note that we have added active member headcounts to these exhibits since last year.

Note that the Normal Cost rates for General Plan 5A and Safety Plan 6A are actually lower than the rates for General Plan 5C and Safety Plan 6B, respectively. This is the case despite the fact that the only difference in benefits between the plans is that General Plan 5A and Safety Plan 6A use the member's highest 12 months of compensation and General Plan 5C and Safety Plan 6B use the member's highest 36 months of compensation.

The reason for this is demographic differences between the plans. The average entry age for General Plan 5C and Safety Plan 6B is significantly higher than the average entry age for General Plan 5A and Safety Plan 6A, respectively. Members with higher entry ages will generally have higher Normal Cost rates, causing the Normal Cost rates to be higher for General Plan 5C and Safety Plan 6B.

**Santa Barbara County Employees'
Retirement System**

**Exhibit 10: Calculated Employer Normal Cost Contribution Rates – June 30, 2012
All Members**

	General	Safety	APCD	All Plans
Number of Active Members	3,141	885	46	4,072
A. Normal Cost Contribution Rate				
Service Retirement	14.68%	24.56%	16.11%	17.27%
Disability Retirement	0.81%	2.58%	0.93%	1.27%
Death while Active	0.26%	0.36%	0.61%	0.29%
Deferred Retirements	1.53%	2.27%	1.90%	1.73%
Refund of Member Contributions	0.47%	0.23%	0.71%	0.41%
Total	17.75%	30.00%	20.26%	20.97%
B. Member Contributions	(4.11)%	(5.67)%	(6.16)%	(4.54)%
C. Net Employer Normal Cost as of June 30, 2012 (A) + (B)	13.64%	24.33%	14.10%	16.43%
D. Net Employer Normal Cost as of June 30, 2011	13.71%	24.34%	14.13%	16.52%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.07)%	(0.01)%	(0.03)%	(0.09)%

Santa Barbara County Employees' Retirement System

Exhibit 10a: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 General Members

	General				
	5A	5B	5C	Plan 2	Total
Number of Active Members	796	474	1,860	11	3,141
A. Normal Cost Contribution Rate					
Service Retirement	13.32%	16.92%	14.62%	2.41%	14.68%
Disability Retirement	0.72%	0.96%	0.80%	0.13%	0.81%
Death while Active	0.26%	0.32%	0.24%	0.03%	0.26%
Deferred Retirements	1.80%	1.33%	1.47%	0.39%	1.53%
Refund of Member Contributions	0.37%	0.84%	0.38%	0.00%	0.47%
Total	16.47%	20.37%	17.51%	2.96%	17.75%
B. Member Contributions	(3.22)%	(7.43)%	(3.33)%	0.00%	(4.11)%
C. Net Employer Normal Cost as of June 30, 2012 (A) + (B)					
	13.25%	12.94%	14.18%	2.96%	13.64%
D. Net Employer Normal Cost as of June 30, 2011					
	13.28%	12.94%	14.31%	2.95%	13.71%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)					
	(0.03)%	0.00%	(0.13)%	0.01%	(0.07)%

Santa Barbara County Employees' Retirement System

Exhibit 10b: Calculated Employer Normal Cost Contribution Rates – June 30, 2012 Safety Members

	Safety					Total
	4A	4B	4C	6A	6B	
Number of Active Members	79	16	356	120	314	885
A. Normal Cost Contribution Rate						
Service Retirement	24.18%	27.97%	23.02%	25.40%	25.66%	24.56%
Disability Retirement	2.79%	3.53%	2.63%	2.39%	2.49%	2.58%
Death while Active	0.42%	0.35%	0.35%	0.36%	0.35%	0.36%
Deferred Retirements	2.08%	1.35%	1.94%	2.57%	2.58%	2.27%
Refund of Member Contributions	0.23%	0.59%	0.22%	0.21%	0.22%	0.23%
Total	29.70%	33.79%	28.16%	30.93%	31.30%	30.00%
B. Member Contributions	(5.81)%	(12.87)%	(5.52)%	(5.42)%	(5.46)%	(5.67)%
C. Net Employer Normal Cost as of June 30, 2012 (A) + (B)	23.89%	20.92%	22.64%	25.51%	25.84%	24.33%
D. Net Employer Normal Cost as of June 30, 2011	23.93%	19.09%	22.63%	25.50%	25.84%	24.34%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.04)%	1.83%	0.01%	0.01%	0.00%	(0.01)%

**Santa Barbara County Employees'
Retirement System**

**Exhibit 10c: Calculated Employer Normal Cost Contribution Rates – June 30, 2012
APCD Members**

	APCD		
	Plan 1	Plan 2	Total
Number of Active Members	20	26	46
A. Normal Cost Contribution Rate			
Service Retirement	15.09%	17.02%	16.11%
Disability Retirement	0.89%	0.97%	0.93%
Death while Active	0.69%	0.53%	0.61%
Deferred Retirements	2.15%	1.68%	1.90%
Refund of Member Contributions	0.45%	0.94%	0.71%
Total	19.27%	21.14%	20.26%
B. Member Contributions	(3.90)%	(8.19)%	(6.16)%
C. Net Employer Normal Cost as of June 30, 2012 (A) + (B)	15.37%	12.95%	14.10%
D. Net Employer Normal Cost as of June 30, 2011	15.74%	12.29%	14.13%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.37)%	0.66%	(0.03)%

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 (AAL). The results for SBCERS for all classes are summarized in Exhibit 11.

Unfunded Actuarial Accrued Liability

The portion allocated to service already rendered or accrued is called the AAL. The difference between the AAL 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 employers have 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 11 shows how the UAAL was derived for each classification. In the Actuarial Balance Sheet, the total liabilities 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 SBCERS is how the UAAL is being funded. If the UAAL amount is positive (that is, the AAL to be funded is greater than the Valuation Assets), then the UAAL is amortized. Under the current funding method, the UAAL is amortized over an open/rolling 17-year period, with one exception. The exception is that the additional UAAL attributable to the creation of Safety Plan 6 is now being amortized over a closed period and that period stands at 16 years.

Under an open/rolling amortization method, the entire UAAL (less the outstanding balance for Safety Plan 6) is amortized over a constant period, in this case, 17 years. A 17-year amortization factor will be applied to the entire UAAL for each of the General, Safety, and APCD groups. The factor does not change from year to year unless the discount rate or wage increase assumption is changed. Because the discount rate and wage increase assumption did not change from the prior valuation, the amortization factor has not changed.

The Board adopted this funding policy at its September 23, 2009 meeting. Exhibit 11a discloses the development of the UAAL payment for each classification.

Analysis of Change in UAAL

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

The 2012 actuarial valuation reflects an increase in the UAAL of \$85.7 million for the fiscal year just ended from \$742.0 million to \$827.7 million, a 11.6% increase. See Exhibit 14 in Section 6 for a detailed breakdown of the change in UAAL.

The main reason for the increase in the UAAL was the continued recognition of asset losses from the 2007-2009 periods. The 2007-2008 loss has now fully been recognized and the 2008-2009 loss is one year away from full recognition. Investment returns were also worse than assumed since our prior valuation and 20% of that loss was recognized in the Actuarial Value of Assets.

These losses were partially offset by the positive investment experience for the 2009-2011 period as well as other factors.

Santa Barbara County Employees' Retirement System

Exhibit 11: Calculated UAAL Amount by Class – June 30, 2012 All Members

(Dollars in Millions)

	General	Safety	APCD	2012 All Plans	2011 All Plans	Percent Change
Number of Active Members	3,141	885	46	4,072	4,148	-1.8%
Number of Vested Terminated Members	946	188	16	1,150	1,166	-1.4%
Number of Retirees and Beneficiaries	<u>2,640</u>	<u>830</u>	<u>37</u>	<u>3,507</u>	<u>3,387</u>	3.5%
Total Number	6,727	1,903	99	8,729	8,701	0.3%
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 2,030.3	\$ 1,329.4	\$ 42.8	\$ 3,402.5	\$ 3,293.8	3.3%
B. Actuarial present value of total future Normal Costs for current members	<u>321.0</u>	<u>202.0</u>	<u>5.1</u>	<u>528.1</u>	<u>544.0</u>	(2.9)%
C. Actuarial Accrued Liability [A-B]	\$ 1,709.3	\$ 1,127.4	\$ 37.7	\$ 2,874.4	\$ 2,749.8	4.5%
D. Valuation Assets	<u>1,211.0</u>	<u>807.5</u>	<u>28.1</u>	<u>2,046.6</u>	<u>2,007.8</u>	1.9%
E. UAAL [C-D]	\$ 498.2	\$ 319.9	\$ 9.6	\$ 827.7	\$ 742.0	11.5%
F. Funded Ratio [D/C]	70.8%	71.6%	74.5%	71.2%	73.0%	(2.5)%

Santa Barbara County Employees' Retirement System

Exhibit 11a: UAAL Amortization Rates – June 30, 2012

	General	Safety	APCD	All Plans
Number of Active Members	3,141	885	46	4,072
Number of Vested Terminated Members	946	188	16	1,150
Number of Retirees and Beneficiaries	<u>2,640</u>	<u>830</u>	<u>37</u>	<u>3,507</u>
Total Number	6,727	1,903	99	8,729
A. Unfunded Actuarial Accrued Liability	\$ 498,228,604	\$ 319,900,844	\$ 9,612,991	\$ 827,742,439
B. 17-Year Amortization Factor	0.079757	Varies*	0.079757	0.079757
C. Beginning of Year Payment [AxB]	\$ 39,737,011	\$ 25,566,147	\$ 766,699	\$ 66,069,857
D. Beginning of Year Payroll	\$ 219,952,884	\$ 78,685,694	\$ 3,475,210	\$ 302,113,788
E. UAAL Amortization Rate [C/D]	18.07%	32.49%	22.06%	21.87%

* A separate layer has been established for Safety Plan 6. That layer is amortized on a closed basis, with a current amortization period equal to 16 years. Please see Exhibit 11b.

UAAL Amortization for Safety Plan 6

We calculate a bifurcated contribution level for Safety Plan 4 and Safety Plan 6, since the establishment of Plan 6 created an additional UAAL.

At the time of the 2011 valuation, an outstanding balance for the additional UAAL attributable to Plan 6 was calculated as of June 30, 2011. Beginning with the 2011 valuation, the outstanding balance is amortized over a closed 17-year period. If an open/rolling period had been used for this amortization, the base would never be fully paid. This means that an amortization for the UAAL would continue long after all of the people who benefited from the retroactive benefit increase for Plan 6 would retire.

The outstanding base of June 30, 2012 is approximately \$14.4 million. After applying a 16-year amortization factor and dividing by Safety Plan 6 payroll, the UAAL contribution rate is 2.97% as of June 30, 2012 for this base. This rate has increased from the 2.78% calculated last year due to the fact that the Safety Plan 6 payroll did not increase as much as assumed.

Amortizing the remainder of the Safety UAAL on a rolling 17-year basis and dividing by the total Safety payroll results in a UAAL contribution rate of 30.97%. Thus, the amortization for Plan 4 would simply be 30.97%, while the amortization for Plan 6 would be 33.94% (30.97% + 2.97%). The combined amortization rate for all Safety members is 32.49%, as shown in Exhibit 11a.

The details of the calculation are provided in the following exhibit.

**Santa Barbara County Employees'
Retirement System**

Exhibit 11b: Calculated UAAL Amortization Rates by Plan for Safety – June 30, 2012

A.	Plan 6 Layer - June 30, 2011	\$ 14,486,100
B.	Beginning of Year Payment	1,155,362
C.	Plan 6 Layer - June 30, 2012 [(A-B)x1.0775]	14,363,870
D.	16-Year Amortization Factor for Plan 6 Layer	0.083316
E.	Beginning of Year Payment [CxD]	\$ 1,196,745
F.	Safety Plan 6 Beginning of Year Payroll	\$ 40,309,332
G.	Extra Plan 6 UAAL Amortization Rate [E/F]	2.97%
H.	Total Safety UAAL	\$ 319,900,844
I.	Total Safety UAAL less Extra Plan 6 Layer [H-C]	305,536,974
J.	17-Year Amortization Factor	0.079757
K.	Beginning of Year Payment [IxJ]	24,368,585
L.	Total Safety Payroll	78,685,694
M.	UAAL Rate without Extra Plan 6 Layer [K/L]	30.97%
N.	UAAL Rate - Plan 4 [M]	30.97%
O.	UAAL Rate - Plan 6 [G+M]	33.94%

UAAL by Employer

It was requested that we create an exhibit displaying the UAAL for each employer of SBCERS. Recall that the UAAL is the difference between the AAL and the Valuation Assets. We have the Valuation Assets broken into Safety, General, and APCD, but do not have them broken down by employer (except APCD). Because of this, an assumption was necessary to display the UAAL by employer.

For non-APCD employers, we allocated the valuation assets in proportion to the AAL for purposes of the following exhibit. These assets will not match the assets that would be available to an employer upon withdrawal from SBCERS. In addition, the UAAL breakdown by employer may not match the breakdown required in the Governmental Accounting Standards Board (GASB) Statement No. 68 for cost-sharing employers. Note that these standards will not be effective until fiscal years beginning June 15, 2014 or later for multiple employer plans.

Santa Barbara County Employees' Retirement System

Exhibit 12: UAAL by Employer – June 30, 2012

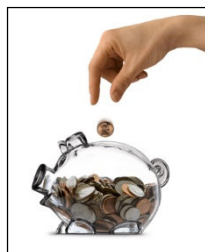
(Dollars in thousands)

	Total	Santa Barbara County	Carpinteria- Summerland FPD	Santa Maria Cemetery	Goleta Cemetery	Oak Hill Cemetery	SBCAG	Summer- land Sanitary	Carpinteria Cemetery	APCD	SB County Vector Control District	Courts
Number of Active Members	4,072	3,689	34	9	4	3	18	4	2	46	6	257
Number of Inactive Members	1,150	1,081	6	1	1	0	9	0	1	16	2	33
Number of Retired Members	3,507	3,311	34	4	3	0	11	2	1	37	1	103
Actuarial Accrued Liability	\$ 2,874,383	\$ 2,653,231	\$ 55,259	\$ 3,665	\$ 1,567	\$ 595	\$ 12,944	\$ 2,430	\$ 849	\$ 37,675	\$ 1,320	\$ 104,848
Actuarial Value of Assets*	<u>2,046,641</u>	<u>1,888,018</u>	<u>39,322</u>	<u>2,608</u>	<u>1,115</u>	<u>423</u>	<u>9,211</u>	<u>1,729</u>	<u>604</u>	<u>28,062</u>	<u>940</u>	<u>74,609</u>
Unfunded Actuarial Accrued Liability	827,742	765,213	15,937	1,057	452	172	3,733	701	245	9,613	380	30,239

* For purposes of this exhibit, the Actuarial Value of Assets are allocated in proportion to the Actuarial Accrued Liability. This would not match the assets that would be allocated to a district if it chose to withdraw from SBCERS.

Santa Barbara County Employees' Retirement System

Section 5: Member Contributions



For SBCERS, member contributions are currently just one type: Basic contributions.

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

Plan/Tier	Code Section	Member Contribution Provides Average Annuity of	FAS Period
General 5A	31621.5	1/200th of FAS* at age 60	1 year
General 5B	31621.2	1/100th of FAS* at age 60	1 year
General 5C	31621.5	1/200th of FAS* at age 60	3 years
General 2	NA	NA	3 years
General 7	31621.4	1/240th of FAS* at age 60	3 years
APCD 1	31621.6 & 31581.1	1/2 x 1/100th of FAS* at age 55	1 year
APCD 2	31621.6	1/100th of FAS* at age 55	1 year
Safety 4A & 6A		1/2 x 3/200th of FAS* at age 55	1 year
Safety 4B		3/200th of FAS* at age 55	1 year
Safety 4C & 6B		1/2 x 3/200th of FAS* at age 55	3 years

**FAS is Final Average Salary. FAS Period is length of time for the average.*

Note that this is the first valuation for which General Plan 7 member contribution rates were calculated. We have provided those rates in Appendix D.

Basic Contributions

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. No pre-retirement decrements
4. Mortality for members on service retirement
5. No COLAs are assumed

Changes in the actuarial assumptions have not occurred since the prior valuation. The expected rate of return on assets, the wage growth assumptions and the mortality assumptions have all remained the same. The rates shown in Appendix D reflect member contribution rates, effective July 1, 2013.

Safety Member Contributions

Based on information provided by SBCERS, the Safety member contribution rates were established during negotiations in 2000. They do not directly correspond to a CERL Section. Contribution rates were not changed when Plans 6A and 6B were adopted.

Member Contribution Rates

Some members only pay one-half of the rate otherwise defined by the formulas shown above. The groups paying half rates are indicated in the table.

General Plan 2 members make no employee contributions.

It is our understanding that at least some of the General members will be asked to contribute one-half of the annual increase in COLA Normal Costs. In this valuation, the COLA Normal Cost rates for General members have actually declined by two basis points from the previous valuation. It is also our understanding that this will result in leaving the member contribution rates unchanged from a year ago.

Barring changes to assumptions or plan provisions, we would expect the COLA Normal Cost Rate to remain fairly stable from year to year. Next year, after the Investigation of Experience, the rates may change more significantly due to new assumptions.

Santa Barbara County Employees' Retirement System

Section 6: Employer Contributions



Contributions to SBCERS 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. Exhibit 10 in Section 4 shows the aggregate Normal Cost by class and in total for all plans. Exhibits 10a, 10b and 10c in Section 4 illustrate the Normal Cost Rates by type of benefit and for each plan and tier based on this valuation.

It should be noted that when we use the term “Normal Cost Contribution Rate,” we are referring to the value of benefits earned by active members allocated to the valuation year. The Net Employer Normal Cost is the portion of the annual benefit for which the employer is responsible. This is the Normal Cost Contribution Rate less the contribution rate paid by the members.

Exhibit 13 shows the total employer contribution rates by class in total for all plans.

The total calculated employer contribution rates for each tier, along with a comparison to the prior year’s computed rates, can be found in Exhibits 13a, 13b and 13c. These results are expressed as a percentage of payroll and annual contribution dollars. Note that SBCERS’ UAAL is determined separately for each class. For the General and APCD classes, the System funds the UAAL evenly as a percentage of pay over salaries for all members. A separate amortization is determined for Safety Plan 6. Please see pages 35-36 for further explanation regarding the UAAL rates for Safety Plan 4 and Plan 6.

Calculated Contribution Rate

The total employer contribution rate was 35.87% for the fiscal year beginning July 1, 2012. For the fiscal year beginning in 2013, the calculated rate based on this report increased to 38.30%. This is equal to the aggregate Net Normal Cost Contribution Rate of 16.43% plus the amortization payment of the UAAL as measured from the valuation date and reported in Exhibit 11a. The aggregate UAAL contribution rate is 21.87%.

Both the Normal Cost rates and the UAAL rates are broken into pieces for the “Basic” rate and the COLA rate. The Basic rate is for the benefits without cost-of-living adjustments.

For each class, the Basic UAAL Contribution rate was determined by multiplying the total UAAL rate by the portion of the total AAL attributable to basic benefits.

General Plan 7

Effective June 25, 2012, it is our understanding that all County General members will join General Plan 7. The basic monthly service retirement allowance for General Plan 7 is prescribed under CERL Section 31676.1. There were no active members in General Plan 7 at the time of our valuation. For that reason, we have recommended contribution rates for the Fiscal Year 2013-2014 based on the same methodology used in our letter dated April 13, 2012.

Based on the analysis in that letter, we recommend that the total Normal Cost rate for Plan 7 be 80% of the total Normal Cost rate for General Plan 5C. As shown in Exhibit 10a, the total Normal Cost rate for General Plan 5C is 17.51%. The estimated total Normal Cost rate for General Plan 7 is therefore equal to 14.01% ($=80\% \times 17.51\%$).

This contribution rate can be divided into Basic and COLA Normal Cost rates based on annuity values with and without the 2% COLA for General Plan 7. We estimate that the Basic Normal Cost rate is 11.35% and the COLA Normal Cost rate is 2.66%.

To determine the employer Normal Cost rate, the member contribution rates are subtracted from the total Normal Cost rate. The member contribution rates for General Plan 7 can be expected to be approximately equal to the rates for General Plan 5C multiplied by 200 and divided by 240, since that is the difference in the formulas used to determine the rates. Since the average member contribution rate for General Plan 5C was 3.33%, the average member contribution rate for General Plan 7 should be approximately equal to 2.78% ($=3.33\% \times 200 / 240$).

The recommended employer Basic Normal Cost rate for General Plan 7 is 8.57%, based on the 11.35% Basic Normal Cost rate minus 2.78% for member contributions. The total employer Normal Cost rate is 11.23%, based on 8.57% for Basic plus 2.66% for COLA.

We apply the same UAAL rates based on the total UAAL rates for General members.

Changes in the Normal Cost Rate

The change in the calculated Normal Cost Contribution Rates from year to year is generally due to three factors. These three 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 what was assumed to occur during the past fiscal year and what actually occurred, particularly with respect to salary increases and turnover experience.
2. **Changes in Benefit Provisions:** The new General Plan 7 was recently added. Changes in the aggregate composition of the membership among the various plans will lead to experience gains and losses.
3. **Changes in Actuarial Assumptions:** There were no significant changes in assumptions since the previous valuation. Prior to the next valuation, there may be significant changes in assumptions based on the Investigation of Experience.

Changes in UAAL and UAAL Contribution Rates

Exhibit 14 shows the source of the major gains and losses for the System as a whole.

Changes have occurred since the 2011 valuation. The primary source of change is the continued recognition of losses from the 2007 – 2009 periods. The 2007-2008 loss has now fully been recognized and the 2008-2009 loss is one year away from full recognition. Investment returns were also worse than assumed since our prior valuation and 20% of that loss was recognized in the Actuarial Value of Assets.

These losses were partially offset by the positive investment experience for the 2009-2011 period.

Another change from the prior valuation was that the COLAs for some retirees and beneficiaries were less than the 3.0% we assumed. The annual COLA that SBCERS retirees and beneficiaries are eligible to receive is based upon the change in the consumer price index. Our assumption is that all receive 3.0% increases each year. Because the CPI actually increased by 2.5% over 2011, some members did not receive the full 3.0% increases in April 2011. Only those retiring April 1, 1988 or earlier received the full 3.0% COLA as their “COLA banks” were drawn down.

**Changes in UAAL
and UAAL
Contribution Rates
(continued)**

Payroll decreased by 1.2% from our previous valuation, while the assumed increase was 3.75%. Because projected benefits are based upon projected pay, the lower payroll resulted in a decrease in the UAAL. However, because the UAAL is funded based on a level percentage of payroll, the smaller payroll served to increase the contribution rate as a percentage of payroll.

Other experience also caused an increase in the UAAL contribution rate. Please see Exhibit 14 for a complete breakdown of the changes in the UAAL contribution rate.

**Member COLA
Contribution Rates**

It is our understanding that at least some of the General members will be asked to contribute one-half of the annual increase in COLA Normal Costs. In this valuation, the COLA Normal Cost rates for General members have actually declined by two basis points from the previous valuation. It is also our understanding that this will result in leaving the member contribution rates unchanged from a year ago.

Barring changes to assumptions or plan provisions, we would expect the COLA Normal Cost rate to remain fairly stable from year to year. Next year, after the Investigation of Experience, the rates may change more significantly due to new assumptions.

Santa Barbara County Employees' Retirement System

Exhibit 13: Total Employer Contributions All Members

(Dollars in Thousands)

	General	Safety	APCD	2012 All Plans
Number of Active Members	3,141	885	46	4,072
A. Basic Employer Normal Cost Rate	8.94%	15.47%	8.79%	10.64%
B. COLA Normal Cost Rate	4.70%	8.86%	5.31%	5.79%
C. Employer Normal Cost Rate	13.64%	24.33%	14.10%	16.43%
D. Basic UAAL Contribution Rate	12.35%	20.88%	15.56%	14.61%
E. COLA UAAL Contribution Rate	5.72%	11.61%	6.50%	7.26%
F. UAAL Contribution Rate	18.07%	32.49%	22.06%	21.87%
G. Total June 30, 2012 Contribution Rate (C + F)	31.71%	56.82%	36.16%	38.30%
H. Total June 30, 2011 Contribution Rate	30.18%	51.60%	34.39%	35.87%
I. Estimated Payroll for fiscal year beginning July 1, 2013 *	\$ 232,441	\$ 83,154	\$ 3,673	\$ 319,268
J. Estimated Annual Contribution (G x I) **	\$ 73,697	\$ 47,249	\$ 1,328	\$ 122,274
K. Prior Valuation Estimated Annual Contribution ***	\$ 67,617	\$ 41,305	\$ 1,210	\$ 110,132
L. Increase / (Decrease) in Annual Contribution	\$ 6,080	\$ 5,944	\$ 118	\$ 12,142
M. Percentage Change in Annual Contribution	8.99%	14.39%	9.75%	11.02%

* Estimated payroll based upon the assumption of 3.75% annual payroll growth. No adjustment is made for open or closed groups.

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

***Estimated contribution for fiscal year beginning July 1, 2012 based on salary information as of June 30, 2012.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Exhibit 13a: Total Employer Contributions General Members (Dollars in Thousands)

	General					Total
	5A	5B	5C	Plan 2	Plan 7	
Number of Active Members	796	474	1,860	11	0	3,141
A. Basic Employer Normal Cost Rate	8.84%	7.67%	9.52%	2.96%	8.57%	8.94%
B. COLA Normal Cost Rate	4.41%	5.27%	4.66%	0.00%	2.66%	4.70%
C. Employer Normal Cost Rate	13.25%	12.94%	14.18%	2.96%	11.23%	13.64%
D. Basic UAAL Contribution Rate	12.35%	12.35%	12.35%	12.35%	12.35%	12.35%
E. COLA UAAL Contribution Rate	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%
F. UAAL Contribution Rate	18.07%	18.07%	18.07%	18.07%	18.07%	18.07%
G. Total June 30, 2012 Contribution Rate (C + F)	31.32%	31.01%	32.25%	21.03%	29.30%	31.71%
H. Total June 30, 2011 Contribution Rate	29.75%	29.41%	30.78%	19.42%	N/A	30.18%
I. Estimated Payroll for fiscal year beginning July 1, 2013 *	\$ 64,437	\$ 46,722	\$ 120,504	\$ 778	\$ -	\$ 232,441
J. Estimated Annual Contribution (G x I) **	\$ 20,182	\$ 14,488	\$ 38,863	\$ 164	\$ -	\$ 73,697
K. Prior Valuation Estimated Annual Contribution ***	\$ 18,477	\$ 13,244	\$ 35,750	\$ 146	\$ -	\$ 67,617
L. Increase / (Decrease) in Annual Contribution	\$ 1,705	\$ 1,244	\$ 3,113	\$ 18	\$ -	\$ 6,080
M. Percentage Change in Annual Contribution	9.23%	9.39%	8.71%	12.33%	N/A	8.99%

* Estimated payroll based upon the assumption of 3.75% annual payroll growth. No adjustment is made for open or closed groups.

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

***Estimated contribution for fiscal year beginning July 1, 2012 based on salary information as of June 30, 2012.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Exhibit 13b: Total Employer Contributions Safety Members

(Dollars in Thousands)

	Safety					Total
	4A	4B	4C	6A	6B	
Number of Active Members	79	16	356	120	314	885
A. Basic Employer Normal Cost Rate	15.24%	11.36%	14.44%	16.20%	16.48%	15.47%
B. COLA Normal Cost Rate	8.65%	9.56%	8.20%	9.31%	9.36%	8.86%
C. Employer Normal Cost Rate	23.89%	20.92%	22.64%	25.51%	25.84%	24.33%
D. Basic UAAL Contribution Rate	19.90%	19.90%	19.90%	21.81%	21.81%	20.88%
E. COLA UAAL Contribution Rate	11.07%	11.07%	11.07%	12.13%	12.13%	11.61%
F. UAAL Contribution Rate	30.97%	30.97%	30.97%	33.94%	33.94%	32.49%
G. Total June 30, 2012 Contribution Rate (C + F)	54.86%	51.89%	53.61%	59.45%	59.78%	56.82%
H. Total June 30, 2011 Contribution Rate	49.75%	44.91%	48.45%	54.10%	54.44%	51.60%
I. Estimated Payroll for fiscal year beginning July 1, 2013 *	\$ 9,386	\$ 1,716	\$ 29,454	\$ 13,561	\$ 29,037	\$ 83,154
J. Estimated Annual Contribution (G x I) **	\$ 5,149	\$ 890	\$ 15,790	\$ 8,062	\$ 17,358	\$ 47,249
K. Prior Valuation Estimated Annual Contribution ***	\$ 4,501	\$ 743	\$ 13,754	\$ 7,071	\$ 15,236	\$ 41,305
L. Increase / (Decrease) in Annual Contribution	\$ 648	\$ 147	\$ 2,036	\$ 991	\$ 2,122	\$ 5,944
M. Percentage Change in Annual Contribution	14.40%	19.78%	14.80%	14.01%	13.93%	14.39%

* Estimated payroll based upon the assumption of 3.75% annual payroll growth. No adjustment is made for open or closed groups.

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

***Estimated contribution for fiscal year beginning July 1, 2012 based on salary information as of June 30, 2012.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Exhibit 13c: Total Employer Contributions APCD Members (Dollars in Thousands)

	APCD		
	Plan 1	Plan 2	Total
Number of Active Members	20	26	46
A. Basic Employer Normal Cost Rate	10.21%	7.52%	8.79%
B. COLA Normal Cost Rate	5.16%	5.43%	5.31%
C. Employer Normal Cost Rate	15.37%	12.95%	14.10%
D. Basic UAAL Contribution Rate	15.56%	15.56%	15.56%
E. COLA UAAL Contribution Rate	6.50%	6.50%	6.50%
F. UAAL Contribution Rate	22.06%	22.06%	22.06%
G. Total June 30, 2012 Contribution Rate (C + F)	37.43%	35.01%	36.16%
H. Total June 30, 2011 Contribution Rate	36.00%	32.55%	34.39%
I. Estimated Payroll for fiscal year beginning July 1, 2013 *	\$ 1,738	\$ 1,935	\$ 3,673
J. Estimated Annual Contribution (G x I) **	\$ 651	\$ 677	\$ 1,328
K. Prior Valuation Estimated Annual Contribution ***	\$ 603	\$ 607	\$ 1,210
L. Increase / (Decrease) in Annual Contribution	\$ 48	\$ 70	\$ 118
M. Percentage Change in Annual Contribution	7.96%	11.53%	9.75%

* Estimated payroll based upon the assumption of 3.75% annual payroll growth. No adjustment is made for open or closed groups.

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

*** Estimated contribution for fiscal year beginning July 1, 2012 based on salary information as of June 30, 2012.

Santa Barbara County Employees' Retirement System

Exhibit 14: Analysis of Change in Unfunded Actuarial Accrued Liability (Dollars in Millions)

	Amount	As a Percent of June 30, 2012 Actuarial Accrued Liability	UAAL Contribution Rate % of Pay *
Unfunded Actuarial Accrued Liability - June 30, 2011	\$ 742.0	25.81%	19.35%
Interest Accrued	57.5	2.00%	
Benefits Accrued (Normal Cost)	69.7	2.42%	
Contributions and Miscellaneous Revenue (with Assumed Interest)	(128.0)	-4.45%	
Expected Unfunded Actuarial Accrued Liability - June 30, 2012	\$ 741.2	25.78%	18.63%
Source of Change			
Recognized Asset (Gains) and Losses			
From 2011-12	23.7	0.83%	0.63%
From Prior Years	102.1	3.55%	2.70%
Total	125.8	4.38%	3.33%
Actuarial (Gains) and Losses			
Salary Increases Less than Expected	(29.9)	-1.04%	0.16%
CPI Less than Expected	(7.3)	-0.25%	-0.19%
Active and Deferred Vested Experience	1.6	0.06%	0.04%
Retired Mortality Experience	(4.0)	-0.14%	-0.11%
Enhanced Service Connected Disability Benefit	0.3	0.01%	0.01%
Total	(39.3)	-1.36%	-0.09%
Total Changes	86.5	3.02%	3.24%
Unfunded Actuarial Accrued Liability - June 30, 2012	\$ 827.7	28.80%	21.87%

* The June 30, 2011 Unfunded Actuarial Accrued Liability contribution rate as a percentage of pay is based on 2011 valuation pay. The June 30, 2012 Expected Unfunded Actuarial Accrued Liability as a percentage of pay is based on expected 2012 valuation pay based on actual 2011 valuation pay. Otherwise, actual 2012 valuation pay is used to express the contribution rate as a percentage of pay.

This page intentionally left blank.

Santa Barbara County Employees' Retirement System

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 15, compares actuarial assets and liabilities of SBCERS, based on the actuarial funding method used. Note that we do not have the breakdown between non-valuation assets and valuation assets for valuations prior to June 30, 2003.

The required Schedule of Employer Contributions, Exhibit 16, 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.

Note that in June of this year, GASB released Statement No. 67, which amends GASB Statement No. 25. The Statement is effective for financial statements for fiscal years beginning after June 15, 2013.

GASB Statement No. 27 specifies required reporting for pension accounting by state and local governmental employers. GASB also released Statement No. 68 amending No. 27. That Statement is effective for fiscal years beginning after June 15, 2014.

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

Exhibit 17 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 System (GFOA).

Santa Barbara County Employees' Retirement System

Exhibit 15: Schedule of Funding Progress (Dollars in Thousands)

Actuarial Valuation Date*	(a) Actuarial Value of Assets	(b) Non-Valuation Assets (NVA)	(c) Valuation Assets (a)-(b)	(d) Valuation Actuarial Accrued Liabilities (AAL)	(e) AAL with NVA (b)+(d)	(f) Unfunded Actuarial Liabilities (UAAL) (d)-(c) = (e)-(a)	(g) Prior Method Funded Ratio (a)/(e)	(h) Current Method Funded Ratio (c)/(d)	(i) Covered Payroll	UAAL as a Percentage of Covered Payroll (f)/(i)
January 1, 1995	\$ 562,861	n/a	n/a	n/a	\$ 643,453	\$ 80,592	87.5%	n/a	\$ 140,571	57.3%
January 1, 1996	624,823	n/a	n/a	n/a	711,869	87,046	87.8%	n/a	154,120	56.5%
January 1, 1997	693,301	n/a	n/a	n/a	758,772	65,471	91.4%	n/a	159,906	40.9%
January 1, 1998	799,539	n/a	n/a	n/a	873,624	74,085	91.5%	n/a	171,602	43.2%
January 1, 1999	938,295	n/a	n/a	n/a	950,205	11,910	98.7%	n/a	184,291	6.5%
January 1, 2000	1,068,357	n/a	n/a	n/a	1,067,377	(980)	100.1%	n/a	199,448	-0.5%
January 1, 2001	1,171,138	n/a	n/a	n/a	1,145,519	(25,619)	102.2%	n/a	219,739	-11.7%
January 1, 2003	1,295,956	n/a	n/a	n/a	1,363,605	67,649	95.0%	n/a	251,834	26.9%
June 30, 2003	1,346,665	\$ 135,317	\$ 1,211,348	\$ 1,319,547	1,454,864	108,199	92.6%	91.8%	257,237	42.1%
June 30, 2004	1,379,170	137,613	1,241,557	1,441,156	1,578,769	199,599	87.4%	86.2%	266,960	74.8%
June 30, 2005	1,443,824	137,829	1,305,995	1,549,803	1,687,632	243,808	85.6%	84.3%	267,785	91.0%
June 30, 2006	1,552,776	137,825	1,414,951	1,671,831	1,809,656	256,880	85.8%	84.6%	287,382	89.4%
June 30, 2007 **	1,735,489	31,020	1,704,469	1,956,834	1,987,854	252,365	87.3%	87.1%	294,163	85.8%
June 30, 2008	1,893,984	2,528	1,891,456	2,135,955	2,138,483	244,499	88.6%	88.6%	307,264	79.6%
June 30, 2009	1,705,733	-	1,705,733	2,263,862	2,263,862	558,129	75.3%	75.3%	306,524	182.1%
June 30, 2010	1,927,229	-	1,927,229	2,616,147	2,616,147	688,918	73.7%	73.7%	306,963	224.4%
June 30, 2011	2,007,859	-	2,007,859	2,749,815	2,749,815	741,956	73.0%	73.0%	305,758	242.7%
June 30, 2012	2,046,641	-	2,046,641	2,874,383	2,874,383	827,742	71.2%	71.2%	302,114	274.0%

* Information for years prior to 2007 was provided by prior actuaries. Prior to 2007, non-valuation asset reserves were included with the Actuarial Value of Assets (AVA). Non-valuation asset reserves were also added to the AAL prior to 2007. Beginning in 2007, non-valuation assets are not included in the AVA and are no longer added to the AAL. Prior to June 30, 2003, the breakdown of valuation asset reserves and non-valuation asset reserves is unavailable.

** Results as of June 30, 2007 do not match those previously reported in the 2007 Comprehensive Annual Financial Report (CAFR). This information reflects the Board's actions on September 19, 2008 regarding asset reserve classifications.

Santa Barbara County Employees' Retirement System

Exhibit 16: Schedule of Contributions from the Employer (Dollars in Thousands)

Year Ending*	Annual Required Contribution (ARC)	Actual Employer Contributions	Percentage of ARC Contributed
December 31, 1994	\$ 24,678	\$ 24,678	100%
December 31, 1995	27,664	27,664	100%
December 31, 1996	27,114	27,114	100%
December 31, 1997	31,692	31,692	100%
December 31, 1998	28,414	28,414	100%
December 31, 1999	30,484	30,484	100%
December 31, 2000	29,272	29,272	100%
December 31, 2001	27,155	27,155	100%
December 31, 2002	32,999	32,999	100%
June 30, 2003 **	9,118	9,118	100%
June 30, 2004	39,335	39,335	100%
June 30, 2005	46,721	46,721	100%
June 30, 2006	53,977	53,977	100%
June 30, 2007	63,395	63,395	100%
June 30, 2008	69,461	69,461	100%
June 30, 2009	75,902	75,902	100%
June 30, 2010	84,647	84,647	100%
June 30, 2011	94,437	94,437	100%
June 30, 2012	108,764	108,764	100%

* Information for years prior to 2007 was provided by prior actuaries.

** January 1, 2003 through June 30, 2003

Santa Barbara County Employees' Retirement System

Exhibit 17: Solvency Test

(Dollars in Thousands)

Actuarial Valuation Date*	Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 2003	\$ 1,346,665	\$ 105,570	\$ 572,737	\$ 776,557	100%	100%	86%
June 30, 2004	1,379,170	115,530	633,082	830,157	100%	100%	76%
June 30, 2005	1,443,824	125,040	715,319	847,273	100%	100%	71%
June 30, 2006	1,552,776	137,148	788,479	884,029	100%	100%	71%
June 30, 2007 **	1,704,469	169,218	979,657	810,516	100%	100%	69%
June 30, 2008	1,891,456	177,770	1,124,748	833,437	100%	100%	71%
June 30, 2009	1,705,733	174,951	1,237,215	851,696	100%	100%	34%
June 30, 2010	1,927,229	162,432	1,483,728	969,987	100%	100%	29%
June 30, 2011	2,007,859	165,774	1,559,716	1,024,324	100%	100%	28%
June 30, 2012	2,046,641	165,623	1,660,773	1,047,987	100%	100%	21%

* Information for years prior to 2007 was provided by prior actuaries.

Prior to 2007, non-valuation asset reserves were included with the Actuarial Value of Assets (AVA).

Non-valuation asset reserves were also added to the Actuarial Accrued Liabilities (AAL) for Active Members prior to 2007.

Beginning in 2007, non-valuation assets are not included in the AVA and are no longer added to the AAL.

Also beginning in 2007, liabilities for terminated members with vested deferred benefits are included with the AAL for Retirees and Beneficiaries.

** Results as of June 30, 2007 do not match those previously reported in the 2007 Comprehensive Annual Financial Report (CAFR).

This information reflects the Board's actions on September 19, 2008 regarding asset reserve classifications.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Appendix A: Actuarial Procedures and Assumptions



The actuarial procedures and assumptions used in this valuation are described in this section. The assumptions were reviewed and changed June 30, 2010 as a result of the 2010 Investigation of Experience Study.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of SBCERS and of SBCERS 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 SBCERS' 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.

Tables A-5 and A-6 present the expected annual percentage increase in salaries.

Tables A-7 to A-12 were developed from the experience as measured by the 2010 Investigation of Experience Study. The rates are the probabilities a member will leave active employment for various reasons.

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).

**Actuarial Cost
Method
(continued)**

The UAAL (or Surplus Funding) is amortized as a percentage of the projected salaries of present and future members of SBCERS. Effective with the June 30, 2009 valuation, each year, the entire UAAL is amortized over an “open/rolling” 17-year period. The amortization factor does not change from year to year unless the discount rate or salary assumption is changed.

There is one exception for the additional UAAL attributable to the creation of Safety Plan 6. That UAAL is now being amortized over a closed period and that period stands at 16 years.

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

**Internal Revenue
Code Section 415
Limit**

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

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

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

**Employer
Contributions**

The County and other employers’ contribution rates are set by the Retirement Board based on actuarial valuations.

The employer contribution rates consist of both Normal Cost rates and UAAL rates. Both the Normal Cost rates and the UAAL rates are broken into pieces for the “Basic” rate and the COLA rate. The Basic rate is for the benefits without cost-of-living adjustments. For each class, the Basic UAAL contribution rate was determined by multiplying the total UAAL rate by the portion of the total AAL attributable to basic benefits.

Member Contributions	The member contribution rates vary by entry age and are described in the law or pursuant to collective bargaining. Code references and a description of the rates are shown in Section 5 of the 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.
Valuation of Assets	The assets are valued using a five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. The expected market value with five-year smoothing valuation basis for all assets was adopted effective June 30, 2002.
Investment Earnings and Expenses	The future investment earnings of the assets of SBCERS are assumed to accrue at an annual rate of 7.75% compounded annually, net of both investment and administrative expenses. This rate was adopted effective June 30, 2010.
Postretirement Benefit Increases	Postretirement increases are assumed for the valuation in accordance with the benefits provided as described in Appendix B. These adjustments are assumed to be payable each year in the future as they are less than the expected increase in the Consumer Price Index of 3.25% per year. This rate was adopted effective June 30, 2010.
Interest on Member Contributions	The annual credited interest rate on member contributions is assumed to be 4.25%. This rate was adopted effective June 30, 2010. As of June 30, 2008, the credited interest rate each six-month period is the semi-annual yield of the five-year Treasury note as of the last business day of the interest crediting period.
Future Salaries	The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Tables A-5 and A-6. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 3.75% per annum rate of increase in the general wage level of the membership. Salary increases are assumed to occur midyear. These rates were adopted effective June 30, 2010.
Social Security Wage Base	General Plan 2 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 3.75% 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

After members attain age 50 (55 for General Plan 2 members), have five years of service and 10 years of elapsed time since membership. Actually 10 years of elapsed time, they may retire with a benefit commencing immediately. All Safety members may also retire regardless of age after 20 years of service. General members, except Plan 2 members, can retire after 30 years of service regardless of age. The retirement rates vary by age and are shown by plan in Tables A-7 to A-12.

All General members who attain or who have attained age 75 in active service and all Safety members who have attained age 65 in active service are assumed to retire immediately.

All deferred vested members are assumed to retire at the later of age at termination or the following ages:

General Plans 5 and 7 Members	Age 58
General Plan 2 Members	Age 65
Safety Plan 4 Members	Age 54
Safety Plan 6 Members	Age 50
APCD Members	Age 58

The assumptions regarding termination of employment, early retirement, and unreduced service retirement are treated as a single set of decrements in regards to a particular member. For example, an active General member hired at age 30 has a probability to withdraw from SBCERS due to death, disability or other termination of employment until age 50. After age 50, the member could still withdraw due to death, disability or retirement. Thus, in no year during the member's projected employment would they be eligible for both a probability of other termination of employment and a probability of retirement.

These rates were adopted effective June 30, 2010.

Disability

The rates of disability used in the valuation are also illustrated in Tables A-7 to A-12. These rates were revised June 30, 2010.

**Sick Leave Service
Credit Upon
Retirement**

Upon retirement, members are entitled to turn their sick leave balances into service credit for retirement benefits. Members are limited to one year of service credit. We apply a 1.34% load to the expected years of service at retirement for sick leave service credit. This assumption was adopted effective June 30, 2010.

Vacation Cashout

Any cashouts of vacation at retirement are recognized at that time. There is no preresognition of potential costs included in the valuation.

**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. These rates were adopted June 30, 2010.

Males: General members: RP-2000 Combined Healthy Mortality Table for Males projected to 2010 using scale AA, with ages set back two years.

Safety members: RP-2000 Combined Healthy Mortality Table for Males projected to 2010 using scale AA, with ages set back two years.

Females: General members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using scale AA, with ages set back four years.

Safety members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using scale AA, with ages set back four years

**Mortality – Disabled
Members**

For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3. These rates were adopted June 30, 2010.

Males: General members: RP-2000 Combined Healthy Mortality Table for Males projected to 2010 using scale AA, with no age adjustment.

Safety members: RP-2000 Combined Healthy Mortality Table for Males projected to 2010 using scale AA, with no age adjustment.

Females: General members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using scale AA, with no age adjustment.

Safety members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using scale AA, with no age adjustment.

**Other Employment
Terminations**

Tables A-7 to A-12 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. These rates were adopted effective June 30, 2010.

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 SBCERS. 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 SBCERS or a reciprocal retirement system.

All terminating members are assumed not to be rehired by SBCERS. Table A-4 gives the assumed probabilities that terminated members will elect a refund of contributions immediately upon termination. All other terminating members are assumed to leave their contributions on deposit. Fifty percent (50%) of members who leave their contributions on deposit are assumed to take employment at a reciprocal agency.

Former members with contributions on deposit are assumed to receive a retirement benefit commencing at the following ages:

General Plans 5 and 7 Members	Age 58
General Plan 2 Members	Age 65
Safety Plan 4 Members	Age 54
Safety Plan 6 Members	Age 50
APCD Members	Age 58

Reciprocal members are assumed to remain with the reciprocal agency until retirement, and receive annual salary increases of:

General & APCD Members	4.00%
Safety Members	4.25%

These rates and assumptions were adopted effective June 30, 2010.

**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.

Member Contribution Rates and Optional Form Factor 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 and Safety members is based on using a unisex mortality assumption. For these purposes, as well as determining option factors, the unisex mortality assumption is:

General Healthy Members:	RP-2000 Combined Healthy Male projected to 2010 using scale AA, set back 4 years.
Safety Healthy Members:	RP-2000 Combined Healthy Male projected to 2010 using scale AA, set back 3 years.
Beneficiaries:	RP-2000 Combined Healthy Female projected to 2010 using scale AA, set back 2 years.
General Disabled Members:	RP-2000 Combined Healthy Male projected to 2010 using scale AA, set back 1 year.
Safety Disabled Members:	RP-2000 Combined Healthy Male projected to 2010 using scale AA, no adjustment.

- 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 General Plan 5 member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.

- D. Member Rates are assumed to increase with entry age.

The mortality tables and investment return assumptions above form the basis for calculating optional form factors. In addition, we used them for purposes of counting accumulated contributions into an annuity under new Government Code 7522.66 in the California Public Employees' Reform Act of 2013.

Santa Barbara County Employees' Retirement System

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

I.	Economic assumptions	
	A. General wage increases	3.75%
	B. Investment earnings	7.75%
	C. Growth in membership	0.00
	D. Postretirement benefit increases (varies by plan)	Plan COLA not greater than CPI assumption.
	E. CPI inflation assumption	3.25%
II.	Demographic assumptions	
	A. Salary increases due to service	Tables A-5 to A-6
	B. Retirement	Tables A-7 to A-12
	C. Disability	Tables A-7 to A-12
	D. Mortality for active members after termination and service retired members.*	Table A-2
	Basis – RP-2000 Combined Healthy Mortality Table for respective sexes for general members projected to 2010 using scale AA, as adjusted:	
	<u>Class of Members</u>	<u>Age Adjustment</u>
	General – males	-2 years
	General – females	-4 years
	Safety – males	-2 years
	Safety – females	-4 years
	E. Mortality among disabled members*	Table A-3
	Basis – RP-2000 Combined Healthy Mortality Table projected to 2010 using scale AA, as adjusted:	
	General - males	0 years
	General - females	0 years
	Safety - males	0 years
	Safety - females	0 years
	F. Mortality for beneficiaries.*	Table A-2
	Basis – Beneficiaries are assumed to have the same mortality as a general member of the opposite sex who has taken a service retirement.	
	G. Other terminations of employment	Tables A-7 to A-12
	H. Refund of contributions on vested termination	Table A-4

* The current mortality assumptions contain a margin to account for expected future mortality improvement. Please see our 2010 Investigation of Experience report for details.

Santa Barbara County Employees' Retirement System

Table A-2: Mortality for Members Retired for Service

Age	Safety Male	Safety Female	General Male	General Female
20	0.026%	0.015%	0.026%	0.015%
25	0.032%	0.016%	0.032%	0.016%
30	0.037%	0.019%	0.037%	0.019%
35	0.060%	0.028%	0.060%	0.028%
40	0.091%	0.046%	0.091%	0.046%
45	0.116%	0.067%	0.116%	0.067%
50	0.158%	0.103%	0.158%	0.103%
55	0.238%	0.158%	0.238%	0.158%
60	0.449%	0.291%	0.449%	0.291%
65	0.870%	0.553%	0.870%	0.553%
70	1.552%	1.042%	1.552%	1.042%
75	2.612%	1.749%	2.612%	1.749%
80	4.620%	2.858%	4.620%	2.858%
85	8.279%	4.734%	8.279%	4.734%
90	14.323%	8.215%	14.323%	8.215%

Santa Barbara County Employees' Retirement System

Table A-3: Mortality for Members Retired for Disability

Age	Safety Male	Safety Female	General Male	General Female
20	0.028%	0.016%	0.028%	0.016%
25	0.034%	0.018%	0.034%	0.018%
30	0.042%	0.024%	0.042%	0.024%
35	0.074%	0.043%	0.074%	0.043%
40	0.100%	0.061%	0.100%	0.061%
45	0.132%	0.096%	0.132%	0.096%
50	0.178%	0.141%	0.178%	0.141%
55	0.299%	0.251%	0.299%	0.251%
60	0.574%	0.481%	0.574%	0.481%
65	1.106%	0.923%	1.106%	0.923%
70	1.909%	1.592%	1.909%	1.592%
75	3.286%	2.594%	3.286%	2.594%
80	5.821%	4.277%	5.821%	4.277%
85	10.324%	7.292%	10.324%	7.292%
90	17.620%	12.778%	17.620%	12.778%

Santa Barbara County Employees' Retirement System

Table A-4: Immediate Refund of Contributions Upon Termination of Employment
(Does not apply to General Plan 2)

Years of Service	General Male	General Female	Safety
0	100%	100%	100%
1	100%	100%	100%
2	100%	100%	100%
3	100%	100%	100%
4	100%	100%	100%
5	40%	40%	25%
6	40%	40%	25%
7	40%	40%	25%
8	40%	40%	25%
9	40%	40%	25%
10	25%	25%	0%
11	25%	25%	0%
12	25%	25%	0%
13	25%	25%	0%
14	25%	25%	0%
15	10%	10%	0%
16	10%	10%	0%
17	10%	10%	0%
18	10%	10%	0%
19	10%	10%	0%
20	10%	10%	0%
21	10%	10%	0%
22	10%	10%	0%
23	10%	10%	0%
24	10%	10%	0%
25	0%	10%	0%
26	0%	10%	0%
27	0%	10%	0%
28	0%	10%	0%
29	0%	10%	0%
30 & Up	0%	0%	0%

**Santa Barbara County Employees'
Retirement System**

**Table A-5: Annual Increase in Salary
General**

<u>Years of Service</u>	<u>Due to Promotion and Longevity</u>	<u>Total Annual Increase*</u>
<1	4.75%	8.68%
1	4.00%	7.90%
2	3.25%	7.12%
3	2.50%	6.34%
4	2.00%	5.83%
5	1.50%	5.31%
6	1.25%	5.05%
7	1.00%	4.79%
8	0.90%	4.68%
9	0.80%	4.58%
10	0.78%	4.55%
11	0.75%	4.53%
12	0.70%	4.48%
13	0.65%	4.42%
14	0.60%	4.37%
15	0.55%	4.32%
16	0.50%	4.27%
17	0.48%	4.25%
18	0.46%	4.23%
19	0.44%	4.21%
20	0.42%	4.19%
21	0.40%	4.16%
22	0.38%	4.14%
23	0.36%	4.12%
24	0.34%	4.10%
25	0.32%	4.08%
26	0.30%	4.06%
27	0.28%	4.04%
28	0.26%	4.02%
29	0.25%	4.01%
30 or More	0.25%	4.01%

** The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed 3.75% per annum increase in the general wage level of the membership. The total result is compounded rather than additive.*

Santa Barbara County Employees' Retirement System

**Table A-6: Annual Increase in Salary
Safety**

Years of Service	Due to Promotion and Longevity	Total Annual Increase*
<1	6.00%	9.98%
1	5.00%	8.94%
2	4.00%	7.90%
3	3.25%	7.12%
4	2.50%	6.34%
5	2.00%	5.83%
6	1.60%	5.41%
7	1.30%	5.10%
8	1.20%	4.99%
9	1.10%	4.89%
10	1.00%	4.79%
11	0.95%	4.74%
12	0.92%	4.70%
13	0.89%	4.68%
14	0.87%	4.65%
15	0.85%	4.63%
16	0.82%	4.60%
17	0.80%	4.57%
18	0.77%	4.55%
19	0.74%	4.52%
20	0.72%	4.50%
21	0.69%	4.47%
22	0.67%	4.45%
23	0.64%	4.42%
24	0.62%	4.39%
25	0.59%	4.37%
26	0.57%	4.34%
27	0.54%	4.32%
28	0.52%	4.29%
29	0.50%	4.27%
30 or More	0.50%	4.27%

** The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed 3.75% per annum increase in the general wage level of the membership. The total result is compounded rather than additive.*

Santa Barbara County Employees' Retirement System

**Table A-7: Rate of Separation From Active Service For General Members
All Plans - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Death	Years of Service	Other Terminations
18	0.0000	0.00003	0.00005	0.00023	0	0.1300
19	0.0000	0.00003	0.00005	0.00025	1	0.1200
20	0.0000	0.00003	0.00005	0.00026	2	0.0950
21	0.0000	0.00003	0.00005	0.00027	3	0.0700
22	0.0000	0.00003	0.00005	0.00028	4	0.0600
23	0.0000	0.00003	0.00005	0.00030	5	0.0550
24	0.0000	0.00003	0.00005	0.00031	6	0.0500
25	0.0000	0.00003	0.00005	0.00032	7	0.0450
26	0.0000	0.00003	0.00005	0.00033	8	0.0430
27	0.0000	0.00003	0.00005	0.00034	9	0.0410
28	0.0000	0.00003	0.00005	0.00036	10	0.0390
29	0.0000	0.00003	0.00005	0.00036	11	0.0370
30	0.0000	0.00003	0.00005	0.00037	12	0.0350
31	0.0000	0.00003	0.00005	0.00039	13	0.0330
32	0.0000	0.00003	0.00005	0.00042	14	0.0310
33	0.0000	0.00003	0.00005	0.00047	15	0.0290
34	0.0000	0.00003	0.00005	0.00053	16	0.0270
35	0.0000	0.00003	0.00005	0.00060	17	0.0250
36	0.0000	0.00003	0.00005	0.00067	18	0.0240
37	0.0000	0.00003	0.00005	0.00074	19	0.0230
38	0.0000	0.00003	0.00005	0.00080	20	0.0220
39	0.0000	0.00003	0.00005	0.00086	21	0.0210
40	0.0300	0.00006	0.00009	0.00091	22	0.0200
41	0.0300	0.00015	0.00022	0.00095	23	0.0160
42	0.0300	0.00023	0.00035	0.00100	24	0.0120
43	0.0300	0.00032	0.00048	0.00104	25	0.0080
44	0.0300	0.00041	0.00061	0.00110	26	0.0040
45	0.0300	0.00050	0.00074	0.00116	27	0.0000
46	0.0300	0.00058	0.00087	0.00124	28	0.0000
47	0.0300	0.00067	0.00100	0.00132	29	0.0000
48	0.0300	0.00076	0.00113	0.00140	30 & Above	0.0000
49	0.0300	0.00084	0.00126	0.00149		
50	0.0300	0.00093	0.00140	0.00158		
51	0.0400	0.00102	0.00153	0.00168		
52	0.0400	0.00110	0.00166	0.00178		
53	0.0400	0.00119	0.00179	0.00202		
54	0.0400	0.00128	0.00192	0.00218		
55	0.0400	0.00137	0.00205	0.00238		
56	0.0600	0.00145	0.00218	0.00261		
57	0.0600	0.00154	0.00231	0.00299		
58	0.0600	0.00163	0.00244	0.00350		
59	0.1200	0.00171	0.00257	0.00395		
60	0.1500	0.00180	0.00270	0.00449		
61	0.2500	0.00180	0.00270	0.00506		
62	0.2500	0.00180	0.00270	0.00574		
63	0.2500	0.00180	0.00270	0.00660		
64	0.2500	0.00180	0.00270	0.00753		
65	0.2500	0.00180	0.00270	0.00870		
66	0.2500	0.00180	0.00270	0.00980		
67	0.2500	0.00180	0.00270	0.01106		
68	0.2500	0.00180	0.00270	0.01264		
69	0.2500	0.00180	0.00270	0.01410		
70	0.2500	0.00180	0.00270	0.01552		
71	0.2500	0.00180	0.00270	0.01720		
72	0.2500	0.00180	0.00270	0.01909		
73	0.2500	0.00180	0.00270	0.02112		
74	0.2500	0.00180	0.00270	0.02345		
75	1.0000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

**Table A-8: Rate of Separation From Active Service For General Members
All Plans - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Death	Years of Service	Other Terminations
18	0.0000	0.00003	0.00005	0.00014	0	0.1300
19	0.0000	0.00003	0.00005	0.00014	1	0.1300
20	0.0000	0.00003	0.00005	0.00015	2	0.1000
21	0.0000	0.00003	0.00005	0.00016	3	0.0800
22	0.0000	0.00003	0.00005	0.00016	4	0.0600
23	0.0000	0.00003	0.00005	0.00016	5	0.0550
24	0.0000	0.00003	0.00005	0.00016	6	0.0483
25	0.0000	0.00003	0.00005	0.00016	7	0.0450
26	0.0000	0.00003	0.00005	0.00016	8	0.0420
27	0.0000	0.00003	0.00005	0.00017	9	0.0390
28	0.0000	0.00003	0.00005	0.00017	10	0.0360
29	0.0000	0.00003	0.00005	0.00018	11	0.0330
30	0.0000	0.00003	0.00005	0.00019	12	0.0300
31	0.0000	0.00003	0.00005	0.00020	13	0.0280
32	0.0000	0.00003	0.00005	0.00021	14	0.0260
33	0.0000	0.00003	0.00005	0.00022	15	0.0240
34	0.0000	0.00003	0.00005	0.00024	16	0.0220
35	0.0000	0.00003	0.00005	0.00028	17	0.0200
36	0.0000	0.00003	0.00005	0.00032	18	0.0190
37	0.0000	0.00003	0.00005	0.00036	19	0.0180
38	0.0000	0.00003	0.00005	0.00039	20	0.0170
39	0.0000	0.00003	0.00005	0.00043	21	0.0160
40	0.0700	0.00006	0.00009	0.00046	22	0.0150
41	0.0700	0.00015	0.00022	0.00049	23	0.0140
42	0.0700	0.00023	0.00035	0.00052	24	0.0130
43	0.0700	0.00032	0.00048	0.00056	25	0.0120
44	0.0700	0.00041	0.00061	0.00061	26	0.0110
45	0.0700	0.00050	0.00074	0.00067	27	0.0100
46	0.0700	0.00058	0.00087	0.00073	28	0.0067
47	0.0700	0.00067	0.00100	0.00081	29	0.0033
48	0.0700	0.00076	0.00113	0.00088	30 & Above	0.0000
49	0.0700	0.00084	0.00126	0.00096		
50	0.0700	0.00093	0.00140	0.00103		
51	0.0300	0.00102	0.00153	0.00111		
52	0.0300	0.00110	0.00166	0.00120		
53	0.0300	0.00119	0.00179	0.00129		
54	0.0900	0.00128	0.00192	0.00141		
55	0.0900	0.00137	0.00205	0.00158		
56	0.0900	0.00145	0.00218	0.00175		
57	0.0900	0.00154	0.00231	0.00196		
58	0.0900	0.00163	0.00244	0.00219		
59	0.1200	0.00171	0.00257	0.00251		
60	0.1500	0.00180	0.00270	0.00291		
61	0.1800	0.00180	0.00270	0.00331		
62	0.2500	0.00180	0.00270	0.00373		
63	0.2500	0.00180	0.00270	0.00422		
64	0.2500	0.00180	0.00270	0.00481		
65	0.2500	0.00180	0.00270	0.00553		
66	0.2500	0.00180	0.00270	0.00633		
67	0.2500	0.00180	0.00270	0.00727		
68	0.2500	0.00180	0.00270	0.00820		
69	0.2500	0.00180	0.00270	0.00923		
70	0.2500	0.00180	0.00270	0.01042		
71	0.2500	0.00180	0.00270	0.01157		
72	0.2500	0.00180	0.00270	0.01279		
73	0.2500	0.00180	0.00270	0.01413		
74	0.2500	0.00180	0.00270	0.01592		
75	1.0000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

**Table A-9: Rate of Separation From Active Service For Safety Members
Plan 4 - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.00090	0.00010	0.00010	0.00023	0	0.0800
19	0.0000	0.00090	0.00010	0.00010	0.00025	1	0.0800
20	0.0000	0.00090	0.00010	0.00010	0.00026	2	0.0300
21	0.0000	0.00090	0.00010	0.00010	0.00027	3	0.0300
22	0.0000	0.00090	0.00010	0.00010	0.00028	4	0.0300
23	0.0000	0.00090	0.00010	0.00010	0.00030	5	0.0300
24	0.0000	0.00090	0.00010	0.00010	0.00031	6	0.0300
25	0.0000	0.00090	0.00010	0.00010	0.00032	7	0.0300
26	0.0000	0.00090	0.00010	0.00010	0.00033	8	0.0270
27	0.0000	0.00090	0.00010	0.00010	0.00034	9	0.0240
28	0.0000	0.00090	0.00010	0.00010	0.00036	10	0.0210
29	0.0000	0.00090	0.00010	0.00010	0.00036	11	0.0180
30	0.0200	0.00135	0.00015	0.00010	0.00037	12	0.0150
31	0.0200	0.00135	0.00015	0.00010	0.00039	13	0.0140
32	0.0200	0.00135	0.00015	0.00010	0.00042	14	0.0130
33	0.0200	0.00135	0.00015	0.00010	0.00047	15	0.0120
34	0.0200	0.00135	0.00015	0.00010	0.00053	16	0.0110
35	0.0200	0.00180	0.00020	0.00010	0.00060	17	0.0100
36	0.0200	0.00180	0.00020	0.00010	0.00067	18	0.0080
37	0.0200	0.00180	0.00020	0.00010	0.00074	19	0.0060
38	0.0200	0.00180	0.00020	0.00010	0.00080	20 & Above	0.0000
39	0.0200	0.00180	0.00020	0.00010	0.00086		
40	0.0200	0.00225	0.00025	0.00010	0.00091		
41	0.0200	0.00225	0.00025	0.00010	0.00095		
42	0.0200	0.00225	0.00025	0.00010	0.00100		
43	0.0200	0.00225	0.00025	0.00010	0.00104		
44	0.0200	0.00225	0.00025	0.00010	0.00110		
45	0.0200	0.00270	0.00030	0.00010	0.00116		
46	0.0200	0.00315	0.00035	0.00010	0.00124		
47	0.0200	0.00360	0.00040	0.00010	0.00132		
48	0.0200	0.00405	0.00045	0.00010	0.00140		
49	0.0200	0.00450	0.00050	0.00010	0.00149		
50	0.0800	0.00495	0.00055	0.00010	0.00158		
51	0.0400	0.00540	0.00060	0.00010	0.00168		
52	0.0400	0.00585	0.00065	0.00010	0.00178		
53	0.0400	0.00630	0.00070	0.00010	0.00202		
54	0.2000	0.00675	0.00075	0.00010	0.00218		
55	0.3300	0.00720	0.00080	0.00010	0.00238		
56	0.2500	0.00720	0.00080	0.00010	0.00261		
57	0.2500	0.00720	0.00080	0.00010	0.00299		
58	0.2500	0.00720	0.00080	0.00010	0.00350		
59	0.2500	0.00720	0.00080	0.00010	0.00395		
60	0.2500	0.00720	0.00080	0.00010	0.00449		
61	0.2500	0.00720	0.00080	0.00010	0.00506		
62	0.3500	0.00720	0.00080	0.00010	0.00574		
63	0.3500	0.00720	0.00080	0.00010	0.00660		
64	0.3500	0.00720	0.00080	0.00010	0.00753		
65	1.0000	0.00000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

**Table A-10: Rate of Separation From Active Service For Safety Members
Plan 4 - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.00090	0.00010	0.00010	0.00014	0	0.0800
19	0.0000	0.00090	0.00010	0.00010	0.00014	1	0.0800
20	0.0000	0.00090	0.00010	0.00010	0.00015	2	0.0300
21	0.0000	0.00090	0.00010	0.00010	0.00016	3	0.0300
22	0.0000	0.00090	0.00010	0.00010	0.00016	4	0.0300
23	0.0000	0.00090	0.00010	0.00010	0.00016	5	0.0300
24	0.0000	0.00090	0.00010	0.00010	0.00016	6	0.0300
25	0.0000	0.00090	0.00010	0.00010	0.00016	7	0.0300
26	0.0000	0.00090	0.00010	0.00010	0.00016	8	0.0270
27	0.0000	0.00090	0.00010	0.00010	0.00017	9	0.0240
28	0.0000	0.00090	0.00010	0.00010	0.00017	10	0.0210
29	0.0000	0.00090	0.00010	0.00010	0.00018	11	0.0180
30	0.0200	0.00135	0.00015	0.00010	0.00019	12	0.0150
31	0.0200	0.00135	0.00015	0.00010	0.00020	13	0.0140
32	0.0200	0.00135	0.00015	0.00010	0.00021	14	0.0130
33	0.0200	0.00135	0.00015	0.00010	0.00022	15	0.0120
34	0.0200	0.00135	0.00015	0.00010	0.00024	16	0.0110
35	0.0200	0.00180	0.00020	0.00010	0.00028	17	0.0100
36	0.0200	0.00180	0.00020	0.00010	0.00032	18	0.0080
37	0.0200	0.00180	0.00020	0.00010	0.00036	19	0.0060
38	0.0200	0.00180	0.00020	0.00010	0.00039	20 & Above	0.0000
39	0.0200	0.00180	0.00020	0.00010	0.00043		
40	0.0200	0.00225	0.00025	0.00010	0.00046		
41	0.0200	0.00225	0.00025	0.00010	0.00049		
42	0.0200	0.00225	0.00025	0.00010	0.00052		
43	0.0200	0.00225	0.00025	0.00010	0.00056		
44	0.0200	0.00225	0.00025	0.00010	0.00061		
45	0.0200	0.00270	0.00030	0.00010	0.00067		
46	0.0200	0.00315	0.00035	0.00010	0.00073		
47	0.0200	0.00360	0.00040	0.00010	0.00081		
48	0.0200	0.00405	0.00045	0.00010	0.00088		
49	0.0200	0.00450	0.00050	0.00010	0.00096		
50	0.0800	0.00495	0.00055	0.00010	0.00103		
51	0.0400	0.00540	0.00060	0.00010	0.00111		
52	0.0400	0.00585	0.00065	0.00010	0.00120		
53	0.0400	0.00630	0.00070	0.00010	0.00129		
54	0.2000	0.00675	0.00075	0.00010	0.00141		
55	0.3300	0.00720	0.00080	0.00010	0.00158		
56	0.2500	0.00720	0.00080	0.00010	0.00175		
57	0.2500	0.00720	0.00080	0.00010	0.00196		
58	0.2500	0.00720	0.00080	0.00010	0.00219		
59	0.2500	0.00720	0.00080	0.00010	0.00251		
60	0.2500	0.00720	0.00080	0.00010	0.00291		
61	0.2500	0.00720	0.00080	0.00010	0.00331		
62	0.3500	0.00720	0.00080	0.00010	0.00373		
63	0.3500	0.00720	0.00080	0.00010	0.00422		
64	0.3500	0.00720	0.00080	0.00010	0.00481		
65	1.0000	0.00000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

**Table A-11: Rate of Separation From Active Service For Safety Members
Plan 6 - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.00090	0.00010	0.00010	0.00023	0	0.0800
19	0.0000	0.00090	0.00010	0.00010	0.00025	1	0.0800
20	0.0000	0.00090	0.00010	0.00010	0.00026	2	0.0300
21	0.0000	0.00090	0.00010	0.00010	0.00027	3	0.0300
22	0.0000	0.00090	0.00010	0.00010	0.00028	4	0.0300
23	0.0000	0.00090	0.00010	0.00010	0.00030	5	0.0300
24	0.0000	0.00090	0.00010	0.00010	0.00031	6	0.0300
25	0.0000	0.00090	0.00010	0.00010	0.00032	7	0.0300
26	0.0000	0.00090	0.00010	0.00010	0.00033	8	0.0270
27	0.0000	0.00090	0.00010	0.00010	0.00034	9	0.0240
28	0.0000	0.00090	0.00010	0.00010	0.00036	10	0.0210
29	0.0000	0.00090	0.00010	0.00010	0.00036	11	0.0180
30	0.0200	0.00135	0.00015	0.00010	0.00037	12	0.0150
31	0.0200	0.00135	0.00015	0.00010	0.00039	13	0.0140
32	0.0200	0.00135	0.00015	0.00010	0.00042	14	0.0130
33	0.0200	0.00135	0.00015	0.00010	0.00047	15	0.0120
34	0.0200	0.00135	0.00015	0.00010	0.00053	16	0.0110
35	0.0200	0.00180	0.00020	0.00010	0.00060	17	0.0100
36	0.0200	0.00180	0.00020	0.00010	0.00067	18	0.0080
37	0.0200	0.00180	0.00020	0.00010	0.00074	19	0.0060
38	0.0200	0.00180	0.00020	0.00010	0.00080	20 & Above	0.0000
39	0.0200	0.00180	0.00020	0.00010	0.00086		
40	0.0200	0.00225	0.00025	0.00010	0.00091		
41	0.0200	0.00225	0.00025	0.00010	0.00095		
42	0.0200	0.00225	0.00025	0.00010	0.00100		
43	0.0200	0.00225	0.00025	0.00010	0.00104		
44	0.0200	0.00225	0.00025	0.00010	0.00110		
45	0.0200	0.00270	0.00030	0.00010	0.00116		
46	0.0200	0.00315	0.00035	0.00010	0.00124		
47	0.0700	0.00360	0.00040	0.00010	0.00132		
48	0.0700	0.00405	0.00045	0.00010	0.00140		
49	0.1000	0.00450	0.00050	0.00010	0.00149		
50	0.2000	0.00495	0.00055	0.00010	0.00158		
51	0.1000	0.00540	0.00060	0.00010	0.00168		
52	0.1000	0.00585	0.00065	0.00010	0.00178		
53	0.1000	0.00630	0.00070	0.00010	0.00202		
54	0.3000	0.00675	0.00075	0.00010	0.00218		
55	0.3300	0.00720	0.00080	0.00010	0.00238		
56	0.2500	0.00720	0.00080	0.00010	0.00261		
57	0.2500	0.00720	0.00080	0.00010	0.00299		
58	0.2500	0.00720	0.00080	0.00010	0.00350		
59	0.2500	0.00720	0.00080	0.00010	0.00395		
60	0.2500	0.00720	0.00080	0.00010	0.00449		
61	0.2500	0.00720	0.00080	0.00010	0.00506		
62	0.3500	0.00720	0.00080	0.00010	0.00574		
63	0.3500	0.00720	0.00080	0.00010	0.00660		
64	0.3500	0.00720	0.00080	0.00010	0.00753		
65	1.0000	0.00000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

**Table A-12: Rate of Separation From Active Service For Safety Members
Plan 6 - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.00090	0.00010	0.00010	0.00014	0	0.0800
19	0.0000	0.00090	0.00010	0.00010	0.00014	1	0.0800
20	0.0000	0.00090	0.00010	0.00010	0.00015	2	0.0300
21	0.0000	0.00090	0.00010	0.00010	0.00016	3	0.0300
22	0.0000	0.00090	0.00010	0.00010	0.00016	4	0.0300
23	0.0000	0.00090	0.00010	0.00010	0.00016	5	0.0300
24	0.0000	0.00090	0.00010	0.00010	0.00016	6	0.0300
25	0.0000	0.00090	0.00010	0.00010	0.00016	7	0.0300
26	0.0000	0.00090	0.00010	0.00010	0.00016	8	0.0270
27	0.0000	0.00090	0.00010	0.00010	0.00017	9	0.0240
28	0.0000	0.00090	0.00010	0.00010	0.00017	10	0.0210
29	0.0000	0.00090	0.00010	0.00010	0.00018	11	0.0180
30	0.0200	0.00135	0.00015	0.00010	0.00019	12	0.0150
31	0.0200	0.00135	0.00015	0.00010	0.00020	13	0.0140
32	0.0200	0.00135	0.00015	0.00010	0.00021	14	0.0130
33	0.0200	0.00135	0.00015	0.00010	0.00022	15	0.0120
34	0.0200	0.00135	0.00015	0.00010	0.00024	16	0.0110
35	0.0200	0.00180	0.00020	0.00010	0.00028	17	0.0100
36	0.0200	0.00180	0.00020	0.00010	0.00032	18	0.0080
37	0.0200	0.00180	0.00020	0.00010	0.00036	19	0.0060
38	0.0200	0.00180	0.00020	0.00010	0.00039	20 & Above	0.0000
39	0.0200	0.00180	0.00020	0.00010	0.00043		
40	0.0200	0.00225	0.00025	0.00010	0.00046		
41	0.0200	0.00225	0.00025	0.00010	0.00049		
42	0.0200	0.00225	0.00025	0.00010	0.00052		
43	0.0200	0.00225	0.00025	0.00010	0.00056		
44	0.0200	0.00225	0.00025	0.00010	0.00061		
45	0.0200	0.00270	0.00030	0.00010	0.00067		
46	0.0200	0.00315	0.00035	0.00010	0.00073		
47	0.0700	0.00360	0.00040	0.00010	0.00081		
48	0.0700	0.00405	0.00045	0.00010	0.00088		
49	0.1000	0.00450	0.00050	0.00010	0.00096		
50	0.2000	0.00495	0.00055	0.00010	0.00103		
51	0.1000	0.00540	0.00060	0.00010	0.00111		
52	0.1000	0.00585	0.00065	0.00010	0.00120		
53	0.1000	0.00630	0.00070	0.00010	0.00129		
54	0.3000	0.00675	0.00075	0.00010	0.00141		
55	0.3300	0.00720	0.00080	0.00010	0.00158		
56	0.2500	0.00720	0.00080	0.00010	0.00175		
57	0.2500	0.00720	0.00080	0.00010	0.00196		
58	0.2500	0.00720	0.00080	0.00010	0.00219		
59	0.2500	0.00720	0.00080	0.00010	0.00251		
60	0.2500	0.00720	0.00080	0.00010	0.00291		
61	0.2500	0.00720	0.00080	0.00010	0.00331		
62	0.3500	0.00720	0.00080	0.00010	0.00373		
63	0.3500	0.00720	0.00080	0.00010	0.00422		
64	0.3500	0.00720	0.00080	0.00010	0.00481		
65	1.0000	0.00000	0.00000	0.00000	0.00000		

Santa Barbara County Employees' Retirement System

Appendix B: Summary of Benefit Provisions



All actuarial calculations are based on our understanding of the statutes governing the SBCERS as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the County Board of Supervisors, a district Board of Directors, or the SBCERS Board, effective through June 30, 2012. 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.

MEMBERSHIP IN RETIREMENT PLANS

The County has established several defined benefit tiers based primarily on a member's date of entry into SBCERS and in some cases, bargaining unit. There are two types of SBCERS members:

**Government
Code Section**

Safety members: Employees whose principal duty is active law enforcement or active fire suppression are eligible to be Safety members. Membership in a particular tier depends upon date of entry to the system and bargaining unit.

General members: All non-Safety employees are eligible to be General members. Membership in a particular tier depends primarily upon date of entry to the system.

General members employed by Santa Barbara County Air Pollution Control District (APCD) are in APCD Plan 1 or APCD Plan 2 depending upon their date of entry to the system.

APCD Plan 1:	APCD employees hired on or before July 3, 1995.
APCD Plan 2:	APCD employees hired after July 3, 1995.
General Plan 2:	Employees hired on or before January 11, 1999 who elected to join General Plan 2. Once vested, Plan 2 members have a one-time election to defer accrued Plan 2 benefits and enter a contributory plan in effect at the time of election. Contributions are based upon age at time of transfer.
Safety Plan 4A & General Plan 5A:	General employees hired before October 10, 1994 who did not elect to join General Plan 2, and some Safety employees hired before October 10, 1994.
Safety Plan 4B & General Plan 5B:	Employees in certain bargaining units hired on or after October 10, 1994. Some employees are in Safety Plan 4B without regard to hire date.
General Plan 5C:	Members in certain bargaining units hired on or after October 10, 1994. Members in those bargaining units transferred from Plan 5B on March 10, 2008.
General Plan 7	County General employees hired on or after June 25, 2012.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

B-1

- Safety Plan 4C:** Members in certain bargaining units who were hired on or after October 10, 1994. All members in certain bargaining units. Members in those bargaining units transferred from Plan 4B on July 3, 2006.
- Safety Plan 6A:** Members in certain bargaining units hired prior to October 10, 1994. Members in those bargaining units transferred from Plan 4A on February 25, 2008.
- Safety Plan 6B:** Members in certain bargaining units hired after October 10, 1994. Members in those bargaining units transferred from Plan 4D on February 25, 2008.

MEMBER CONTRIBUTIONS

Basic:

Contributions are based on the entry age and class of each member and are required of all members except General Plan 2 members. See Section 5 for details on this calculation. Current member rates are shown in Appendix D. (31453, 31454, 31454.1)

Contributions cease for all safety members credited with 30 years of service. (31625, 31625.2)

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

Cost-of-Living:

Some members may contribute towards the cost-of-living benefit based on increases in COLA Normal Cost rates.

Cost-Sharing:

Members contribute a varying amount based on entry age and Plan.

General Plan 5A member rates are half General Plan 5B member rates. (31621.2, 31621.4, 31621.5)

General Plan 5C is based on half rates.

APCD Plan 1 member rates are half APCD Plan 2 member rates.

Safety Plan 4A member rates are half Safety Plan 4B member rates. (31621.6, 31581.1)

Safety Plans 4C, 6A and 6B are based on half rates.

EMPLOYER CONTRIBUTIONS

The employer (County or District) contributes to the retirement fund a percentage 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, 31454.1, 31581)

SERVICE RETIREMENT ALLOWANCE

Eligibility:

	General Plan members:	
Plans 5A, 5B, 5C & 7:	Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 30 years of service; or Age 70 regardless of service.	(31672, 31672.1)
Plan 2:	Age 55 with 10 years of service.	(31486.4)
	APCD Plan members:	
	Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 30 years of service; or Age 70 regardless of service.	(31672, 31672.1)
	Safety Plan members:	
	Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 20 years of service.	(31663.25)

Final Compensation:

	General Plan members:	
Plans 5A & 5B:	Monthly average of a member's highest 12 consecutive months of compensation.	(31462.1)
Plans 5C & 7:	Monthly average of a member's highest 36 consecutive months of compensation.	(31462)
Plan 2:	APCD Plan members: Monthly average of a member's highest 12 consecutive months of compensation.	(31486.1)
	Safety Plan members:	(31462.1)
Plans 4A, 4B & 6A:	Monthly average of a member's highest 12 consecutive months of compensation.	
Plans 4C & 6B:	Monthly average of a member's highest 36 consecutive months of compensation.	(31462)

SERVICE RETIREMENT ALLOWANCE (Continued)

Compensation Limit:

The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code. (31671)

Monthly Allowance:

General members:

Plans 5A, 5B & 5C: $2\% \times \text{Final Compensation} \times \text{Plan 5 Age Factor} \times \text{Years of Service}$. (31676.12)

Plan 7: $1/60 \times \text{Final Compensation} \times \text{Plan 7 Age Factor} \times \text{Years of Service}$. (31676.1)

Plan 2: Sum of (a) + (b) – (c): (31486.4)
 (a) $2\% \times \text{Final Compensation} \times \text{Years of Service}$ (max. 35 years); plus
 (b) $1\% \times \text{Final Compensation} \times \text{Years of Service}$ in excess of 35 (max. 10 years); minus
 (c) $1/35 \times \text{Primary Insurance Amount (PIA) at age 65} \times \text{Years of Covered Service}$ (max. 35 years)

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, the benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).

APCD members:

$2\% \times \text{Final Compensation} \times \text{APCD Age Factor} \times \text{Years of Service}$. (31676.15)

Safety members:

$3\% \times \text{Final Compensation} \times \text{Safety Age Factor} \times \text{Years of service}$. (31664.2)

Age Factors are higher for Plans 6A and 6B (31664.1)

SERVICE RETIREMENT ALLOWANCE (Continued)

Age Factors by Plan

Code Section:	<u>General</u>		<u>APCD</u>	<u>Safety</u>	
	Plan 5	Plan 7	31676.15	Plan 4	Plan 6
Label:	31676.12	31676.1	31676.15	31664.2	31664.1
Label:	2% @ 57	1.67% @ 57.5	2% @ 55	3% @ 55	3% @ 50
Base:	2.00%	1/60	2.00%	3.00%	3.00%
Age					
41				0.4777	0.6258
42				0.5058	0.6625
43				0.5347	0.7004
44				0.5647	0.7397
45				0.5958	0.7805
46				0.6280	0.8226
47				0.6625	0.8678
48				0.6936	0.9085
49				0.7269	0.9522
50	0.6681	0.7091	0.7454	0.7634	1.0000
51	0.7056	0.7457	0.7882	0.8028	1.0000
52	0.7454	0.7816	0.8346	0.8457	1.0000
53	0.7882	0.8181	0.8850	0.8926	1.0000
54	0.8346	0.8556	0.9399	0.9418	1.0000
55	0.8850	0.8954	1.0000	1.0000	1.0000
56	0.9399	0.9382	1.0447	1.0000	1.0000
57	1.0000	0.9846	1.1048	1.0000	1.0000
58	1.0447	1.0350	1.1686	1.0000	1.0000
59	1.1048	1.0899	1.2365	1.0000	1.0000
60	1.1686	1.1500	1.3093	1.0000	1.0000
61	1.2365	1.1947	1.3608		
62	1.3093	1.2548	1.4123		
63	1.3093	1.3186	1.4638		
64	1.3093	1.3865	1.5153		
65	1.3093	1.4593	1.5668		

Maximum Allowance:

General Plan 2: The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation if service exceeds 35 years. (31486.4)

All other Plans: Allowance may not exceed 100% of Final Compensation.

SERVICE RETIREMENT ALLOWANCE (Continued)

Unmodified Retirement Allowance (Normal Form):

General Plan 2:	Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children).	(31486.6)
All other Plans:	Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children).	(31760.1)

Eligible survivor includes certain domestic partners. (31780.2)

Optional Retirement Allowance:

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

Option 1: Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member. (31761)

Option 2: 100% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member. (31762)

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

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

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

All Allowances: All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. (31600)

Death after Retirement:

General Plan 2: No benefit is payable upon death after retirement, other than in accordance with form of benefit allowance.

All other Plans: Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate. (31789.5)

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

General Plan 2:	Disability benefits not valued since provided outside of the retirement system.	(31720, 31720.5, 31720.6, 31720.7, 31720.9)
All other Plans:	Any age and length of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.	

Monthly Allowance:

General Plan 2:	Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.	
All other Plans:	Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire.	(31727.4)

For Safety disabilities that occur between January 1, 2013 and December 31, 2017, the formula is greater of:

- Fifty percent (50%) of his final compensation, plus an annuity purchased with accumulated contributions, if any;
- A service retirement allowance, if qualified for service retirement; or
- An actuarial reduced factor, as determined by the actuary for each quarter year that his service age is less than 50 years of age, if the amount would be higher than 50%.

Supplemental Disability Allowance:

APCD Members:	Upon retirement for service disability, APCD members receive a monthly supplemental allowance of \$300.	(31740)
---------------	---	---------

Normal Form Of Payment:

General Plan 2:	Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.	(31760, 31786)
All other Plans:	Life Annuity payable to retired member with 100% continuance to an eligible survivor (or eligible children).	

Death after Retirement:

General Plan 2:	No benefit is payable upon death after retirement, other than in accordance with form of benefit allowance.	
All other Plans:	Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate.	(31789.5)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

- General Plan 2: Disability benefits not valued since provided outside of the retirement system.
- All other Plans: Any age with five (5) years of service and permanently incapacitated for the performance of duty. (31720)

Monthly Allowance:

- General Plan 2: Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside the retirement system.
- All other Plans: The monthly allowance is equal to a service retirement allowance if the member is eligible to retire and the service retirement allowance exceeds the benefits described below. Otherwise, allowance equals (a) or (b) where: (31727.1, 31727.2, 31727.3)
- (a) $90\% \times 1/50 \times \text{Final Compensation} \times \text{years of service}$, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation.
- (b) $90\% \times 1/50 \times \text{Final Compensation} \times \text{Projected Service}$, not to exceed 1/3 of Final Compensation.

Projected Service:

- General Members: Age 62 (31727.1,
APCD Members: Age 65 31727.2,
Safety Members: Age 55 31727.3)

Supplemental Monthly Disability Retirement:

- APCD Members: Upon retirement for non-service disability, APCD members receive a monthly supplemental allowance of \$300. (31740)

Normal Form Of Payment:

- General Plan 2: Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.
- All other Plans: Life Annuity with 60% continuance to a surviving spouse (or eligible children). (31760.1)

Death after Retirement:

- General Plan 2: No benefit is payable upon death after retirement, other than in accordance with form of benefit allowance.
- All other Plans: Upon a member's death after retirement, a special lump sum of \$5,000 is payable to an eligible survivor, or the member's estate. (31789.5)

SERVICE-CONNECTED DEATH BENEFITS

Eligibility:

All Plans: Active members who die in service as a result of injury or disease arising out of and in the course of employment. (31486.7, 31787)

Monthly Allowance:

General Plan 2: A lump sum is payable to an eligible survivor equal to $1/12 \times$ final 12 months' Salary \times years of service (up to max of 6 years). (31781)

All other Plans: A monthly allowance is payable to an eligible survivor equal to the greater of the Member's Service Retirement Allowance (if he is eligible for service Retirement at his date of death), and (b) $50\% \times$ Final Compensation. (31787)

Supplemental Monthly Death Benefit:

APCD Members: Eligible survivors of an active members who dies while employed with at least 18 months continuous service immediately prior to death, shall receive a supplemental monthly allowance. The amount of the supplemental allowance is based on the family demographics of the beneficiaries. (31855.11, 31855.12)

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility:

All Plans: Active members who die while in service but not as a result of injury or disease arising out of and in the course of employment. (31486.7, 31780)

Monthly Allowance:

General Plan 2: A lump sum is payable to an eligible survivor equal to $1/12 \times$ final 12 months' Salary \times years of service (up to maximum of 6 years). (31781)

All other Plans: If an active member is eligible for Non-Service Connected Disability at his date of death, then a monthly allowance is payable to an eligible survivor equal to $60\% \times$ the member's non-service connected disability allowance. Otherwise, the benefit is a refund of contributions plus a lump sum equal to $1/12 \times$ final 12 months' Salary \times years of service (up to maximum of 6 years). (31781.1)

Supplemental Monthly Death Benefit:

APCD Members: Eligible survivors of an active members who dies while employed with at least 18 months continuous service immediately prior to death, shall receive a supplemental monthly allowance. The amount of the supplemental allowance is based on the family demographics of the beneficiaries. (31855.11, 31855.12)

DEFERRED VESTED BENEFITS

Eligibility:

General Plan 2:	The member must have terminated with 10 years of service. Members are eligible for service retirement when they reach service retirement eligibility (based on years of service at termination plus reciprocal service, if any).	(31700)
All other Plans:	Member contributions must be left on deposit and the member must have terminated with five (5) years of service or entered a reciprocal agency. Members are eligible for service retirement when they reach service retirement eligibility (based on years of service at termination plus reciprocal service, if any).	(31700, 31701, 31702)

Monthly Allowance:

General Plan 2:	Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55.	
All other Plans:	Same as service retirement allowance; payable any time after the member would have been eligible for service retirement.	(31703, 31704, 31705)

COST-OF-LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%. (31870, 31870.1)

All Plans (excluding General Plans 2 and 7): Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase. (31870.1)

General Plan 7: Members (and their beneficiaries) are limited to a maximum 2% cost-of-living (31870)

General Plan 2: General Plan 2 does not have a COLA.

COLA Bank:

All Plans (excluding General Plan 2): When the CPI exceeds the applicable percentage, 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. (31874, 31874.1, 31874.2, 31874.3)

General Plan 2: General Plan 2 does not have a COLA and, therefore, does not have a COLA Bank.

Santa Barbara County Employees' Retirement System

Appendix C: Valuation Data and Schedules



Data on SBCERS membership as of June 30, 2012 was supplied to us by the system staff. On the following tables, Exhibit C-1a and C-1b, we present summaries of SBCERS membership at June 30, 2012 for active members. Similar information is shown in Exhibit C-2 for deferred vested members and Exhibits C-3a and C-3b for retired members.

Note that the compensation amounts shown are the total prior year earnings, adjusted for one-half year of expected salary increases.

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

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

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

Exhibits C-4 and C-5 are shown for all members combined as well as for each class separately.

Exhibit C-6 displays the reconciliation of system membership categories since the previous valuation.

Santa Barbara County Employees' Retirement System

Exhibit C-1a: SBCERS Membership – Active Members as of June 30, 2012

	<u>Total Number</u>	<u>Annual Compensation</u>	<u>Average Age</u>	<u>Average Monthly Compensation</u>	<u>Average Vesting Service</u>
General Members					
Plan 5A	796	\$ 61,256,150	53.5	\$6,413	22.5
Plan 5B	474	\$ 44,211,680	45.6	\$7,773	7.6
Plan 5C	1,860	\$ 114,029,761	44.0	\$5,109	8.4
Plan 2	11	\$ 735,834	53.3	\$5,574	24.5
Total	<u>3,141</u>	<u>\$ 220,233,425</u>	<u>46.7</u>	<u>\$5,843</u>	<u>11.9</u>
Safety Members					
Plan 4A	79	\$ 8,881,334	50.4	\$9,368	21.1
Plan 4B	16	\$ 1,623,719	47.8	\$8,457	12.6
Plan 4C	356	\$ 28,259,122	41.0	\$6,615	10.2
Plan 6A	120	\$ 12,832,463	49.3	\$8,911	22.5
Plan 6B	314	\$ 27,571,479	39.5	\$7,317	9.0
Total	<u>885</u>	<u>\$ 79,168,118</u>	<u>42.5</u>	<u>\$7,455</u>	<u>12.5</u>
APCD Members					
Plan 1	20	\$ 1,644,267	55.9	\$6,851	23.1
Plan 2	26	\$ 1,830,944	42.0	\$5,868	5.2
Total	<u>46</u>	<u>\$ 3,475,211</u>	<u>48.0</u>	<u>\$6,296</u>	<u>13.0</u>
Grand Total	4,072	\$ 302,876,754	45.8	\$6,198	12.0

Santa Barbara County Employees' Retirement System

Exhibit C-1b: Schedule of Active Member Valuation Data

Valuation Date	Plan Type	Number	Annual Payroll	Average Annual Salary	Increase in Average Pay
June 30, 2005	General	3,558	\$ 199,371,000	\$ 56,035	0.0%
	Safety	947	\$ 68,414,000	72,243	0.9%
	Total	4,505	267,785,000	59,442	0.3%
June 30, 2006	General	3,658	\$ 214,405,000	\$ 58,613	4.6%
	Safety	982	\$ 72,977,000	74,315	2.9%
	Total	4,640	287,382,000	61,936	4.2%
June 30, 2007	General	3569	\$ 214,717,000	\$ 60,162	2.6%
	APCD	53	\$ 3,940,000	\$ 74,340	N/A
	Safety	1,003	\$ 75,506,000	75,280	1.3%
	Total	4,625	294,163,000	63,603	2.7%
June 30, 2008	General	3,552	\$ 226,426,000	\$ 63,746	6.0%
	APCD	48	\$ 3,608,000	75,167	1.1%
	Safety	1,006	\$ 77,230,000	76,769	2.0%
	Total	4,606	307,264,000	66,710	4.9%
June 30, 2009	General	3,450	\$ 223,831,000	\$ 64,879	1.8%
	APCD	50	\$ 3,955,000	79,100	5.2%
	Safety	967	\$ 79,596,000	82,312	7.2%
	Total	4,467	307,382,000	68,812	3.2%
June 30, 2010	General	3,261	\$ 223,995,000	\$ 68,689	5.9%
	APCD	46	\$ 3,716,000	80,783	2.1%
	Safety	921	\$ 79,795,000	86,640	5.3%
	Total	4,228	307,506,000	72,731	5.7%
June 30, 2011	General	3,198	\$ 222,046,000	\$ 69,433	1.1%
	APCD	46	\$ 3,457,000	75,161	-7.0%
	Safety	904	\$ 81,025,000	89,630	3.5%
	Total	4,148	306,528,000	73,898	1.6%
June 30, 2012	General	3,141	\$ 220,234,000	\$ 70,116	1.0%
	APCD	46	\$ 3,475,000	75,548	0.5%
	Safety	885	\$ 79,168,000	89,456	-0.2%
	Total	4,072	302,877,000	74,380	0.7%

**Santa Barbara County Employees'
Retirement System**

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

	Number	Average Age
<i>General Members</i>		
Plan 5A	270	52.5
Plan 5B	459	45.8
Plan 5C	191	42.1
Plan 2	26	54.0
Total	946	47.2
<i>Safety Members</i>		
Plan 4A	7	46.6
Plan 4B	60	42.4
Plan 4C	34	38.8
Plan 4D	7	37.9
Plan 6A	54	49.5
Plan 6B	26	36.9
Total	188	43.0
<i>APCD Members</i>		
Plan 1	10	50.3
Plan 2	6	39.8
Total	16	46.4
<i>Grand Total</i>	1,150	46.5

Santa Barbara County Employees' Retirement System

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

	<u>Number</u>	<u>Average Age</u>	<u>Monthly Allowance</u>	<u>Average Monthly Benefit</u>
General Members				
Plan 5A	1,054	64.5	\$ 3,195,282	\$ 3,032
Plan 5B	186	64.3	\$ 254,585	1,369
Plan 5C	109	62.2	\$ 159,963	1,468
Plan 2	47	69.8	\$ 27,638	588
Other	<u>1,244</u>	<u>78.0</u>	<u>\$ 2,120,871</u>	<u>1,705</u>
Total	2,640	70.8	\$ 5,758,339	\$ 2,181
Safety Members				
Plan 4A	230	61.8	\$ 1,472,808	\$ 6,404
Plan 4B	83	62.7	\$ 337,178	\$ 4,062
Plan 4C	33	61.2	\$ 103,605	\$ 3,140
Plan 4D	2	57.0	\$ 6,828	\$ 3,414
Plan 6A	126	55.7	\$ 731,719	\$ 5,807
Plan 6B	10	58.2	\$ 27,633	\$ 2,763
Other	<u>346</u>	<u>71.5</u>	<u>\$ 1,333,326</u>	<u>\$ 3,854</u>
Total	830	64.9	\$ 4,013,096	\$ 4,835
APCD Members				
Plan 1	31	61.5	\$ 97,481	\$ 3,145
Plan 2	<u>6</u>	<u>63.7</u>	<u>\$ 9,834</u>	<u>\$ 1,639</u>
Total	37	61.9	\$ 107,315	\$ 2,900
Grand Total	3,507	69.3	\$ 9,878,750	\$ 2,817

**Santa Barbara County Employees'
Retirement System**

**Exhibit C-3b: SBCERS Membership – Retired Members as of June 30, 2012
Subtotaled by Class and Retirement Type**

	<u>Number</u>	<u>Monthly Allowance</u>	<u>Average Monthly Benefit</u>
<i>General Members</i>			
Healthy	2,172	\$ 5,059,577	\$ 2,329
Disabled	124	\$ 240,785	\$ 1,942
Beneficiaries	344	\$ 457,978	\$ 1,331
Total	<u>2,640</u>	<u>\$ 5,758,339</u>	<u>\$ 2,181</u>
<i>Safety Members</i>			
Healthy	628	\$ 3,382,781	\$ 5,387
Disabled	120	\$ 400,754	\$ 3,340
Beneficiaries	82	\$ 229,561	\$ 2,800
Total	<u>830</u>	<u>\$ 4,013,096</u>	<u>\$ 4,835</u>
<i>APCD Members</i>			
Healthy	37	\$ 107,315	\$ 2,900
Disabled	-	\$ -	\$ -
Beneficiaries	-	\$ -	\$ -
Total	<u>37</u>	<u>\$ 107,315</u>	<u>\$ 2,900</u>
<i>Grand Total</i>	3,507	\$ 9,878,750	\$ 2,817

Santa Barbara County Employees' Retirement System

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

Count	Years of Vesting Service									Total Count	
	Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34		35&Over
Under 25	17	8	-	-	-	-	-	-	-	-	25
25-29	57	120	58	-	-	-	-	-	-	-	235
30-34	33	155	265	34	1	-	-	-	-	-	488
35-39	18	76	183	175	25	-	-	-	-	-	477
40-44	13	65	175	216	111	30	-	-	-	-	610
45-49	12	79	121	147	117	92	43	-	-	-	611
50-54	13	54	96	141	96	113	85	25	-	-	623
55-59	7	46	104	102	85	99	75	54	6	-	578
60-64	8	27	65	62	47	52	27	26	11	-	325
65 & Over	1	13	28	27	19	5	3	2	2	-	100
Total Count	179	643	1,095	904	501	391	233	107	19	-	4,072

Compensation	Years of Vesting Service									Average Comp.	
	Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34		35&Over
Under 25	12,979	53,566	-	-	-	-	-	-	-	-	25,967
25-29	23,971	59,516	63,998	-	-	-	-	-	-	-	52,001
30-34	28,800	62,876	68,936	70,826	22,540	-	-	-	-	-	64,334
35-39	29,064	71,641	72,084	75,603	74,882	-	-	-	-	-	71,828
40-44	33,168	77,696	74,620	79,830	75,423	82,337	-	-	-	-	76,435
45-49	30,219	83,309	71,951	76,310	79,536	81,089	85,284	-	-	-	77,415
50-54	48,294	82,446	71,440	73,428	78,198	80,650	92,784	83,721	-	-	78,478
55-59	48,797	100,004	82,269	75,906	77,363	84,389	92,464	83,710	79,642	-	83,224
60-64	43,661	71,836	72,525	71,411	81,133	78,679	82,811	88,808	117,970	-	77,470
65 & Over	7,003	110,429	77,497	83,553	70,754	86,959	65,944	143,181	60,040	-	82,518
Avg. Annual Compensation	28,939	72,815	72,360	76,193	77,470	81,648	89,796	86,063	99,769	-	74,380



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Count										
Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	16	7	-	-	-	-	-	-	-	23
25-29	39	93	42	-	-	-	-	-	-	174
30-34	22	121	169	25	1	-	-	-	-	338
35-39	17	61	136	105	18	-	-	-	-	337
40-44	9	54	129	144	73	19	-	-	-	428
45-49	9	72	103	109	81	56	25	-	-	455
50-54	10	47	84	120	82	90	50	22	-	505
55-59	7	40	95	88	70	88	58	45	6	497
60-64	7	26	58	57	42	44	26	24	8	292
65 & Over	1	11	27	22	19	5	3	2	2	92
Total Count	137	532	843	670	386	302	162	93	16	3,141

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	13,552	49,246	-	-	-	-	-	-	-	24,415
25-29	22,613	54,204	57,191	-	-	-	-	-	-	47,844
30-34	28,775	59,469	60,075	62,323	22,540	-	-	-	-	57,876
35-39	30,064	68,842	66,732	66,183	66,543	-	-	-	-	65,083
40-44	39,160	77,040	69,162	73,038	67,022	72,572	-	-	-	70,616
45-49	29,398	82,017	70,516	72,485	70,369	72,038	70,688	-	-	72,165
50-54	46,103	79,202	69,373	70,911	75,871	74,805	79,855	76,748	-	73,575
55-59	48,797	97,171	80,678	75,527	73,982	82,642	85,395	78,963	79,642	80,431
60-64	30,407	70,944	69,297	70,900	79,645	78,980	82,951	88,174	106,538	75,559
65 & Over	7,003	115,247	77,002	84,687	70,754	86,959	65,944	143,181	60,040	82,612
Avg. Annual Compensation	28,339	70,616	68,096	71,621	72,286	77,245	80,663	82,197	90,640	70,116



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Count										
Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	1	1	-	-	-	-	-	-	-	2
25-29	17	23	15	-	-	-	-	-	-	55
30-34	9	30	96	9	-	-	-	-	-	144
35-39	1	13	47	70	7	-	-	-	-	138
40-44	4	11	46	71	38	11	-	-	-	181
45-49	2	6	18	37	36	33	18	-	-	150
50-54	3	6	11	21	14	21	33	3	-	112
55-59	-	6	9	10	14	9	16	8	-	72
60-64	-	1	7	5	5	2	1	1	3	25
65 & Over	-	2	-	4	-	-	-	-	-	6
Total Count	37	99	249	227	114	76	68	12	3	885

Compensation										
Age	Years of Service									Average Comp.
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	3,822	83,804	-	-	-	-	-	-	-	43,813
25-29	25,358	80,265	81,178	-	-	-	-	-	-	63,543
30-34	29,357	75,972	84,536	94,446	-	-	-	-	-	79,922
35-39	12,063	85,863	87,572	89,734	96,323	-	-	-	-	88,404
40-44	19,686	80,914	89,929	93,330	91,561	99,205	-	-	-	90,069
45-49	33,302	98,211	80,162	88,787	100,162	97,031	105,558	-	-	93,945
50-54	55,597	112,744	84,847	87,812	91,831	104,727	112,629	134,852	-	100,240
55-59	-	118,889	99,063	79,222	92,069	102,237	116,123	107,937	-	101,773
60-64	-	95,035	99,273	77,239	93,631	87,120	79,190	102,494	148,456	97,823
65 & Over	-	83,934	-	78,668	-	-	-	-	-	80,424
Avg. Annual Compensation	27,658	85,427	86,540	89,780	94,756	99,828	111,087	114,212	148,456	89,456



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	-	-	-	-	-	-	-	-	-	-
25-29	1	4	1	-	-	-	-	-	-	6
30-34	2	4	-	-	-	-	-	-	-	6
35-39	-	2	-	-	-	-	-	-	-	2
40-44	-	-	-	1	-	-	-	-	-	1
45-49	1	1	-	1	-	3	-	-	-	6
50-54	-	1	1	-	-	2	2	-	-	6
55-59	-	-	-	4	1	2	1	1	-	9
60-64	1	-	-	-	-	6	-	1	-	8
65 & Over	-	-	1	1	-	-	-	-	-	2
Total Count	5	12	3	7	1	13	3	2	-	46

Age	Years of Service									Average Comp.
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	-	-	-	-	-	-	-	-	-	-
25-29	53,323	63,721	92,175	-	-	-	-	-	-	66,730
30-34	26,567	67,688	-	-	-	-	-	-	-	53,981
35-39	-	64,562	-	-	-	-	-	-	-	64,562
40-44	-	-	-	99,340	-	-	-	-	-	99,340
45-49	31,440	86,906	-	31,537	-	74,682	-	-	-	62,322
50-54	-	53,084	97,508	-	-	90,896	88,579	-	-	84,923
55-59	-	-	-	75,952	108,141	80,936	123,934	103,512	-	89,030
60-64	136,436	-	-	-	-	73,658	-	90,329	-	83,589
65 & Over	-	-	90,877	78,153	-	-	-	-	-	84,515
Avg. Annual Compensation	54,866	66,229	93,520	73,263	108,141	77,666	100,364	96,920	-	75,548



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Age	Benefit Effective Date								Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	-	-	-	3	3	4	-	10	\$ 853
35-39	-	-	-	-	-	2	-	-	2	2,852
40-44	-	-	-	-	3	3	2	2	10	1,833
45-49	-	-	-	2	2	2	7	10	23	2,493
50-54	-	-	-	-	10	13	62	89	174	2,638
55-59	-	-	2	1	12	44	209	131	399	3,042
60-64	1	3	6	3	38	118	256	162	587	3,337
65-69	11	7	4	21	114	224	274	103	758	3,536
70-74	13	8	15	64	119	165	104	27	515	2,878
75-79	16	11	39	59	119	71	33	14	362	2,317
80-84	14	31	40	89	52	38	19	8	291	2,047
85-89	43	31	65	30	13	16	15	9	222	1,673
90-94	29	40	17	4	5	11	5	4	115	1,646
95-99	23	5	3	1	1	1	-	-	34	1,494
100 & Over	3	-	-	1	-	-	1	-	5	1,493
Total Count	153	136	191	275	491	711	991	559	3,507	
Avg Monthly Benefit	\$ 1,453	\$ 1,811	\$ 2,258	\$ 2,376	\$ 2,523	\$ 2,971	\$ 3,222	\$ 3,292		\$ 2,834



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product. **C-11**

Santa Barbara County Employees' Retirement System

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

Age	Benefit Effective Date								Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	-	-	-	3	3	3	-	9	\$ 640
35-39	-	-	-	-	-	1	-	-	1	1,981
40-44	-	-	-	-	2	2	2	-	6	1,403
45-49	-	-	-	2	1	1	1	4	9	1,243
50-54	-	-	-	-	8	7	33	39	87	1,164
55-59	-	-	1	1	7	31	127	73	240	1,435
60-64	1	1	4	3	31	77	189	142	448	2,745
65-69	1	-	2	10	68	132	239	90	542	2,802
70-74	2	2	9	46	68	140	89	25	381	2,308
75-79	6	8	27	44	104	66	31	12	298	2,057
80-84	8	27	36	85	46	34	15	7	258	1,932
85-89	39	30	64	29	13	15	15	8	213	1,619
90-94	25	39	17	4	5	11	5	4	110	1,546
95-99	22	5	3	1	1	1	-	-	33	1,458
100 & Over	3	-	-	1	-	-	1	-	5	1,493
Total Count	107	112	163	226	357	521	750	404	2,640	
Avg Monthly Benefit	\$ 1,118	\$ 1,576	\$ 2,000	\$ 1,966	\$ 1,721	\$ 2,195	\$ 2,553	\$ 2,584		\$ 2,191



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Age	Benefit Effective Date								Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	-	-	-	-	-	-	1	-	1	\$ 2,766
35-39	-	-	-	-	-	1	-	-	1	\$ 3,723
40-44	-	-	-	-	1	1	-	2	4	\$ 2,479
45-49	-	-	-	-	1	1	6	6	14	\$ 3,296
50-54	-	-	-	-	2	6	28	45	81	\$ 4,270
55-59	-	-	1	-	5	13	75	54	148	\$ 5,674
60-64	-	2	2	-	7	39	66	18	134	\$ 5,334
65-69	10	7	2	11	46	90	30	10	206	\$ 5,465
70-74	11	6	6	18	51	24	13	2	131	\$ 4,507
75-79	10	3	12	15	15	3	2	2	62	\$ 3,591
80-84	6	4	4	4	6	4	4	1	33	\$ 2,939
85-89	4	1	1	1	-	1	-	1	9	\$ 2,952
90-94	4	1	-	-	-	-	-	-	5	\$ 3,859
95-99	1	-	-	-	-	-	-	-	1	\$ 2,670
100 & Over	-	-	-	-	-	-	-	-	-	\$ -
Total Count	46	24	28	49	134	183	225	141	830	
Avg Monthly Benefit	\$ 2,232	\$ 2,906	\$ 3,760	\$ 4,269	\$ 4,659	\$ 5,194	\$ 5,481	\$ 5,336		\$ 4,876



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

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

Age	Benefit Effective Date								Total Count	Average Monthly Benefit	
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14			
Under 35	-	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	1	5	6	1,982	
55-59	-	-	-	-	-	-	7	4	11	2,662	
60-64	-	-	-	-	-	2	1	2	5	2,885	
65-69	-	-	-	-	-	2	5	3	10	3,603	
70-74	-	-	-	-	-	1	2	-	3	4,140	
75-79	-	-	-	-	-	2	-	-	2	1,636	
80-84	-	-	-	-	-	-	-	-	-	-	
85-89	-	-	-	-	-	-	-	-	-	-	
90-94	-	-	-	-	-	-	-	-	-	-	
95-99	-	-	-	-	-	-	-	-	-	-	
100 & Over	-	-	-	-	-	-	-	-	-	-	
Total Count	-	-	-	-	-	7	16	14	37		
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,582	\$ 2,832	\$ 3,138		\$ 2,900	



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product. **C-14**

Santa Barbara County Employees' Retirement System

Exhibit C-6: Reconciliation of System Membership Since Prior Valuation

	<u>Actives</u>	<u>Vested Terms</u>	<u>Terms with Contributions on Deposit</u>	<u>Retirees *</u>	<u>Disabilities</u>	<u>Beneficiaries</u>	<u>Total</u>
Total Record Count as of July 1, 2011	4,148	890	276	2,705	245	437	8,701
New Members	160						160
Rehired Non-Vested Members	20		(9)				11
Rehired Vested Members	9	(8)		(1)			-
Non-Vested Terms - Contributions on Deposit	(34)		34				-
Vested Terms	(59)	63	(4)				-
Service Retirements	(114)	(58)	(3)	175			-
Retirement Disabilities	(4)	-		(1)	5		-
New Beneficiaries	-					25	25
Deaths	(6)		-	(63)	(6)	(36)	(111)
Refund of Contributions	(48)	(7)	(38)				(93)
Other Status Transfers		1					1
Data Adjustments		(2)	15	22	-		35
Subtotal of Net Changes from 2011 to 2012	(76)	(11)	(5)	132	(1)	(11)	28
Total Record Count as of July 1, 2012	4,072	879	271	2,837	244	426	8,729

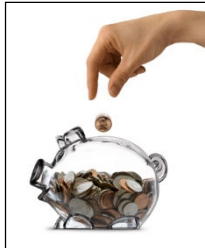
* Retiree count includes duplicate records for members being both Service Retirement and Continuance benefits as well as members being paid benefits from multiple plans.



This work product was prepared solely for SBCERS for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Santa Barbara County Employees' Retirement System

Appendix D: Member Contribution Rates



This section illustrates the member contribution rates by plan, tier and entry age.

Santa Barbara County Employees' Retirement System

Exhibit D-1: Based on June 30, 2012 Valuation Assumptions Member Contribution Rates

Entry Age	General			APCD		Safety		
	5A	5B	5C	1	2	4A & 6A	4B	4C & 6B
16	2.60%	5.19%	2.50%	3.07%	6.15%	4.83%	9.66%	4.63%
17	2.60%	5.19%	2.50%	3.07%	6.15%	4.83%	9.66%	4.63%
18	2.60%	5.19%	2.50%	3.07%	6.15%	4.83%	9.66%	4.63%
19	2.60%	5.19%	2.50%	3.07%	6.15%	4.83%	9.66%	4.63%
20	2.60%	5.19%	2.50%	3.07%	6.15%	4.83%	9.66%	4.63%
21	2.66%	5.31%	2.55%	3.14%	6.28%	4.93%	9.86%	4.73%
22	2.72%	5.43%	2.61%	3.21%	6.42%	5.03%	10.06%	4.83%
23	2.78%	5.55%	2.67%	3.28%	6.56%	5.13%	10.26%	4.92%
24	2.84%	5.67%	2.73%	3.35%	6.71%	5.24%	10.48%	5.03%
25	2.90%	5.80%	2.79%	3.43%	6.86%	5.35%	10.69%	5.13%
26	2.97%	5.93%	2.85%	3.50%	7.01%	5.45%	10.91%	5.23%
27	3.03%	6.06%	2.91%	3.58%	7.16%	5.56%	11.13%	5.34%
28	3.10%	6.19%	2.98%	3.66%	7.31%	5.68%	11.35%	5.44%
29	3.17%	6.33%	3.04%	3.74%	7.47%	5.79%	11.58%	5.55%
30	3.24%	6.47%	3.11%	3.81%	7.63%	5.90%	11.80%	5.65%
31	3.31%	6.61%	3.18%	3.89%	7.79%	6.01%	12.03%	5.76%
32	3.38%	6.75%	3.25%	3.98%	7.95%	6.13%	12.26%	5.87%
33	3.45%	6.90%	3.32%	4.06%	8.11%	6.25%	12.49%	5.98%
34	3.53%	7.05%	3.39%	4.14%	8.28%	6.36%	12.73%	6.09%
35	3.60%	7.20%	3.46%	4.22%	8.45%	6.48%	12.96%	6.20%
36	3.68%	7.35%	3.53%	4.31%	8.62%	6.60%	13.20%	6.32%
37	3.75%	7.50%	3.60%	4.40%	8.79%	6.72%	13.44%	6.43%
38	3.83%	7.66%	3.68%	4.48%	8.97%	6.84%	13.68%	6.54%
39	3.91%	7.81%	3.75%	4.57%	9.15%	6.97%	13.93%	6.66%
40	3.99%	7.97%	3.83%	4.66%	9.32%	7.09%	14.18%	6.78%
41	4.07%	8.13%	3.90%	4.75%	9.50%	7.22%	14.44%	6.90%
42	4.15%	8.30%	3.98%	4.84%	9.68%	7.35%	14.70%	7.02%
43	4.23%	8.46%	4.06%	4.93%	9.86%	7.48%	14.96%	7.14%
44	4.32%	8.63%	4.14%	5.02%	10.05%	7.62%	15.23%	7.27%
45	4.40%	8.80%	4.22%	5.12%	10.23%	7.75%	15.51%	7.39%
46	4.48%	8.96%	4.29%	5.21%	10.43%	7.89%	15.78%	7.51%
47	4.57%	9.13%	4.37%	5.31%	10.62%	8.03%	16.06%	7.63%
48	4.65%	9.30%	4.45%	5.40%	10.81%	8.17%	16.34%	7.73%
49	4.74%	9.48%	4.53%	5.49%	10.98%	8.29%	16.58%	7.81%
50	4.83%	9.65%	4.62%	5.57%	11.14%	8.40%	16.79%	7.86%
51	4.92%	9.84%	4.70%	5.63%	11.27%	8.47%	16.94%	7.87%
52	5.01%	10.02%	4.77%	5.67%	11.35%	8.50%	17.01%	7.87%
53	5.10%	10.20%	4.85%	5.69%	11.38%	8.50%	17.01%	8.13%
54	5.18%	10.36%	4.91%	5.69%	11.38%	8.50%	17.01%	8.43%
55	5.26%	10.51%	4.95%	5.69%	11.38%	8.50%	17.01%	8.43%
56	5.32%	10.63%	4.98%	5.69%	11.38%	8.50%	17.01%	8.43%
57	5.36%	10.71%	4.98%	5.69%	11.38%	8.50%	17.01%	8.43%
58	5.37%	10.73%	5.16%	5.69%	11.38%	8.50%	17.01%	8.43%
59	5.37%	10.73%	5.35%	5.69%	11.38%	8.50%	17.01%	8.43%
60	5.37%	10.73%	5.35%	5.69%	11.38%	8.50%	17.01%	8.43%

Assumptions:

Interest: 7.75%

Salary: 2010 Valuation Scale (Service Based)

Unisex Mortality: General and APCD - RP 2000 Projected to 2010 with Scale AA (Male, Setback 4 years)

Safety - RP 2000 Projected to 2010 with Scale AA (Male, Setback 3 years)

Santa Barbara County Employees' Retirement System

Exhibit D-2: Based on June 30, 2012 Actuarial Valuation Member Contribution Rates

<u>Entry Age</u>	<u>General Plan 7</u>	<u>Entry Age</u>	<u>General Plan 7</u>
16	2.08%	38	3.06%
17	2.08%	39	3.13%
18	2.08%	40	3.19%
19	2.08%	41	3.25%
20	2.08%	42	3.32%
21	2.13%	43	3.38%
22	2.18%	44	3.45%
23	2.22%	45	3.51%
24	2.27%	46	3.58%
25	2.32%	47	3.64%
26	2.38%	48	3.71%
27	2.43%	49	3.78%
28	2.48%	50	3.85%
29	2.54%	51	3.91%
30	2.59%	52	3.98%
31	2.65%	53	4.04%
32	2.71%	54	4.09%
33	2.76%	55	4.13%
34	2.82%	56	4.15%
35	2.88%	57	4.15%
36	2.94%	58	4.30%
37	3.00%	59 and later	4.46%

Assumptions:

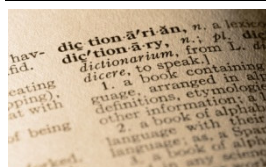
Interest: 7.75%

Salary: 2010 Valuation Scale (Service Based)

Unisex Mortality: General - RP 2000 Projected to 2010 with Scale AA (Male, Setback 4 years)

Santa Barbara County Employees' Retirement System

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 SBCERS and include terms used exclusively by SBCERS. 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. It may spread the recognition of certain investment gains or losses over a period of years in accordance with the asset valuation method.
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 12-month period beginning July 1 and ending June 30.
Projected Benefits	Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
Unfunded Actuarial Accrued Liability	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
Valuation Assets	The value of assets is used in calculating the required contributions. It is equal to the Actuarial Value of Assets minus Non-Valuation Reserves, if any.
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.