# Santa Barbara County Employees' Retirement System 

## ACTUARIAL VALUATION

## June 30, 2011



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October 17, 2011

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, 2011 for determining contributions for the fiscal year beginning July 1, 2012. Our findings are set forth in this actuary's report. This report 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 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,
Wist Coll.

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


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

# Santa Barbara County Employees' Retirement System 

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# Santa Barbara County Employees' Retirement System 

## Section 1: Summary of the Findings



Overview

2011 Valuation Results

|  | June 30, 2011 | June 30, 2010 |
| :--- | :---: | ---: |
| Employer Contribution Rate | $35.87 \%$ | $34.48 \%$ |
| Funded Ratio | $73.0 \%$ | $73.7 \%$ |

We are pleased to present the results of the June 30, 2011 actuarial valuation. Key points are summarized as follows:

- Investment Returns: SBCERS' investment return was $21.1 \%$ 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.

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. As of this valuation, the AVA is approximately $101.8 \%$ of the MVA, and thus the asset corridor no longer applies.

After applying the asset-smoothing method, the rate of return on the AVA was $3.1 \%$ since last year, which is significantly lower than the assumed rate of $7.75 \%$. Note that currently, the MVA is $\$ 1,971.9$ million, while the AVA is $\$ 2,007.9$ million. This means that a $\$ 36.0$ million net investment return loss is being deferred. These deferred losses will be reflected in future valuations.

- Funded Ratio: The Funded Ratio decreased from 73.7\% to $73.0 \%$. 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. These losses were partially offset by the positive investment experience since June 30, 2009 as well as other factors. Please see Exhibit 14 for more detail.

Overview Funded Ratio (continued)

On a Market Value of Valuation Assets basis, the Funded Ratio has increased significantly from $61.5 \%$ to $71.7 \%$. This increase is explained by the positive investment experience in the past year. Note that the Funded Ratio on a market value basis is now close to the Funded Ratio on an actuarial value basis, while it was much lower at the time of our last valuation. This is due to the fact that a significant portion of the deferred losses were recognized in the past year.

- Contribution Rates: The Employer Normal Cost rate decreased from $16.58 \%$ to $16.52 \%$. 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 19.35\%. This compares to a rate of $17.90 \%$ 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 $1.39 \%$ (from $34.48 \%$ to $35.87 \%$ ) of payroll. Note that the new rate is $4.0 \%$ higher, on a relative basis, than the previous rate (35.87\% / 34.48\%-1).
- Key Assumptions: There have been no changes to the actuarial assumptions from our previous valuation one year ago. Please see Appendix A for a summary of our assumptions.

As of June 30, 2010, the Board elected to decrease the economic assumptions for inflation, wage growth and investment return (discount rate). The Board chose a 7.75\% investment return assumption for this valuation and plans to use a $7.50 \%$ investment return assumption for the 2012 valuation. 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 COLA normal costs. In this valuation, the COLA normal cost rates have actually declined by four 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, when the discount rate decreases from $7.75 \%$ to $7.50 \%$, we expect to see some increase in the COLA normal cost rate.

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

## Overview (continued)

Employer<br>Contribution Rate

- UAAL Amortization for Safety Plan 6: For our June 30, 2009 and June 30, 2010 actuarial valuations, we calculated one UAAL contribution rate for all Safety members based upon the UAAL, the 17-year amortization factor and the projected payroll. For this valuation, it was requested that we calculate a bifurcated contribution level for Safety Plan 4 and Safety Plan 6, since the establishment of Plan 6 created an additional UAAL.

The calculated UAAL rate for Safety Plan 4 is $25.82 \%$, while the calculated UAAL rate for Safety Plan 6 is $28.60 \%$. Please see Section 4 of this actuarial valuation report for more information regarding our methodology and calculations.

- UAAL by Employer Exhibit: 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. Because we do not have the Valuation Assets broken down by employer (except APCD), 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 Exhibit 12 in Section 4 of this actuarial valuation report. 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 will not match the breakdown required in the Governmental Accounting Standards Board (GASB) Exposure Draft for cost-sharing employers. Note that these are proposed standards that are not effective until fiscal years beginning June 15, 2013 or later for multiple employer plans.

Under the Board's current funding objectives, the calculated Employer contribution rate for the fiscal year beginning July 1, 2012 is $35.87 \%$ of payroll. This is equal to the payment of the Employer Normal Cost rate plus a 17-year amortization of the UAAL.

It should be noted that the $35.87 \%$ 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.

## Employer Contribution Rate (continued)

## Comparison with <br> Last Year

The new rate effective for the fiscal year beginning July 1, 2012 of $35.87 \%$ 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.

Employer Contribution Rate


A detailed analysis of the sources of the changes since the 2010 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 <br> Contribution <br> Rate | Funded <br> Ratio |
| :--- | :---: | :---: |
| June 30, 2010 Actuarial Valuation | $\mathbf{3 4 . 4 8 \%}$ | $\mathbf{7 3 . 7 \%}$ |
| Expected Year-to-Year Change | $-0.90 \%$ | $1.6 \%$ |
| Expected June 30, 2011 Actuarial Valuation | $33.58 \%$ | $\mathbf{7 5 . 3 \%}$ |
| Recognized Asset (Gain)/Loss |  |  |
| From 2010-11 | $-1.04 \%$ | $1.4 \%$ |
| From Prior Years | $3.39 \%$ | $-4.7 \%$ |
| Salary / Payroll Variation | $0.24 \%$ | $0.6 \%$ |
| CPI Less than Expected | $-0.61 \%$ | $0.9 \%$ |
| Active Member Demographic Experience | $0.09 \%$ | $-0.1 \%$ |
| Retired Mortality Experience | $0.17 \%$ | $-0.2 \%$ |
| All Other Experience | $0.05 \%$ | $-0.2 \%$ |
| Total Experience | $\mathbf{2 . 2 9 \%}$ | $\mathbf{- 2 . 3 \%}$ |
|  |  |  |
| Actual June 30, 2011 Actuarial Valuation | $35.87 \%$ | $\mathbf{7 3 . 0 \%}$ |

## Benefit Provision Changes <br> Member Contribution Rates

It is our understanding that there have been no changes to the benefit plan provisions since our previous valuation.

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.

The aggregate member contribution rate has changed from $4.54 \%$ to $4.52 \%$ of payroll since our prior valuation due to small changes in the demographics for the group.

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 partial recognition of the deferred asset losses from the 2007-2009 periods. These losses were partially offset by the positive investment experience since the prior valuation 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 almost $100 \%$ in 2000. However, due primarily to asset losses early in this decade and again in 2008 and 2009, the Funded Ratio has decreased since then.

Currently, the Funded Ratio is 73.0\%; that is, the Valuation Assets of $\$ 2,007.9$ million are $27.0 \%$ less than the AAL of \$2,749.8 million.
(all dollar amounts in millions)

| Valuation Year | Market Value of Assets | Actuarial Value of Assets | Valuation Assets | Non <br> Valuation <br> Assets |  | Actuarial Accrued Liability |  | Funded Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 2005 | \$ 1,476 | \$ 1,444 | \$ 1,306 | \$ | 138 | \$ | 1,688 | 85.6\% |
| 2006 | \$ 1,629 | \$ 1,553 | \$ 1,415 | \$ | 138 | \$ | 1,810 | 85.8\% |
| 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\% |

[^0]
#### Abstract

Assets For the fiscal year ending June 30, 2011, we estimate that SBCERS earned $21.1 \%$, net of expenses, on its MVA. Note that our return figure may be slightly different than that shown in the 2011 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 $101.8 \%$ 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 $3.1 \%$ since last year, much lower than the market rate of return due to the recognition of deferred losses. The return on an AVA basis was also less than the assumed rate of 7.75\%.

Because $\$ 36.0$ 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.

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, 2011, the Transferred Funds reserve was \$114.9 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.


Non-Valuation Assets

Actuarial Balance Sheet

As of June 30, 2011, 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.

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.

Resources


Present Value of Future Benefits


## Member Information

## Summary Valuation Results

The number of active members included in the valuation decreased by 80 (or $1.9 \%$ ) between 2010 and 2011.

Retired member counts and average retirement benefit amounts continue to increase steadily. For 2011, there were 3,387 retired members and beneficiaries with an average benefit of $\$ 2,712$ per month. This represents a $2.1 \%$ increase in count and a $2.8 \%$ increase in the average monthly benefit.

The following Exhibits present a summary of key data elements on June 30, 2011 and June 30, 2010, 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, 2011

June 30, 2010
Relative
I. Total Membership

| A. Active Members | 4,148 | 4,228 | $(1.9) \%$ |
| :--- | ---: | ---: | ---: |
| B. Retired Members \& Beneficiaries | 3,387 | 3,318 | $2.1 \%$ |
| C. Vested Terminated Members | 890 | 902 | $(1.3) \%$ |
| D. Terminated Members (with Contributions) | 276 | 279 |  |
|  | E. Total | 8,701 | 8,727 |

II. Annualized Payroll as of the Valuation Date
A. Annual Total (\$thousands)

| $\$$ | 305,758 | $\$$ | 306,963 |
| :--- | ---: | ---: | ---: |
| $\$$ | 6,143 | $\$$ | 6,050 |

(0.4)\%
B. Monthly Average
\$
6,143 \$ 6,050
1.5\%
III. Average Monthly Benefit to Current

Retirees and Beneficiaries
\$
2,712
\$
2,637
2.8\%
IV. Actuarial Accrued Liability (\$thousands)
A. Active Members

| $\$$ | $1,190,098$ |  | $\$$ | $1,132,419$ | $5.1 \%$ |
| :--- | ---: | :--- | ---: | ---: | ---: |
| $\$$ | $1,432,333$ |  | $\$$ | $1,375,289$ | $4.1 \%$ |
| $\$$ | 127,383 |  | $\$$ | 108,439 | $17.5 \%$ |
|  | $2,749,814$ |  | $\$$ | $2,616,147$ |  |

V. Assets (\$thousands)

| A. Market Value of Fund | $\$$ | $1,971,903$ | $\$$ | $1,609,449$ |
| :--- | :---: | :---: | :---: | :---: |
| B. Return on Market Value Basis* |  | $21.09 \%$ | $13.43 \%$ | $22.5 \%$ |
| C. Valuation Assets | $\$$ | $2,007,859$ | $1,927,229$ | $4.2 \%$ |
| D. Return on Valuation Assets* |  | $3.09 \%$ | $13.16 \%$ |  |

* May differ from return reported in CAFR due to assumed timing of contributions and benefit payments and treatment of expenses.
VI. Funded Ratios
A. Market Value of Assets Basis (V.A. / IV.)
71.7\%
61.5\%
16.6\%
B. Valuation Assets Basis (V.C. / IV.)
73.0\%
73.7\%
(0.9)\%
VII. Unfunded Actuarial Accrued Liability (\$thousands)
\$
741,954
\$
688,918
7.7\%
VIII. Required Employer contribution rate for all tiers combined as a percent of total payroll
A. Gross Normal Cost
B. Member Contributions
C. Employer Normal Cost
D. UAAL Amortization
E. Total Employer Rate

| $\begin{aligned} & 21.04 \% \\ & (4.52) \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 21.12 \% \\ & (4.54) \% \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.4) \% \\ & (0.4) \% \end{aligned}$ |
| :---: | :---: | :---: |
| 16.52\% | 16.58\% | (0.4)\% |
| 19.35\% | 17.90\% | 8.1\% |
| 35.87\% | 34.48\% | 4.0\% |

## Santa Barbara County Employees’ Retirement System

## Exhibit 2: Summary of Valuation Results

|  | $\begin{gathered} \text { 06/30/2010 } \\ \text { General } \end{gathered}$ | $\begin{gathered} \text { 06/30/2011 } \\ \text { General } \end{gathered}$ | Percent Change | $\begin{gathered} \text { 06/30/2010 } \\ \text { Safety } \end{gathered}$ | $\begin{aligned} & \text { 06/30/2011 } \\ & \text { Safety } \end{aligned}$ | Percent Change | $\begin{aligned} & \text { 06/30/2010 } \\ & \text { APCD } \end{aligned}$ | $\begin{gathered} \text { 06/30/2011 } \\ \text { APCD } \end{gathered}$ | Percent Change | $\begin{gathered} \text { 06/30/2010 } \\ \text { Total } \end{gathered}$ | $\begin{gathered} \text { 06/30/2011 } \\ \text { Total } \end{gathered}$ | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actives | 3,261 | 3,198 | -1.9\% | 921 | 904 | -1.8\% | 46 | 46 | 0.0\% | 4,228 | 4,148 | -1.9\% |
| Inactives* | 974 | 961 | -1.3\% | 192 | 188 | -2.1\% | 15 | 17 | 13.3\% | 1,181 | 1,166 | -1.3\% |
| Retirees | 2,548 | 2,576 | 1.1\% | 742 | 779 | 5.0\% | 28 | 32 | 14.3\% | 3,318 | 3,387 | 2.1\% |
| Totals | 6,783 | 6,735 | -0.7\% | 1,855 | 1,871 | 0.9\% | 89 | 95 | 6.7\% | 8,727 | 8,701 | -0.3\% |
| Active Payroll ** | 223,636,643 | 221,771,155 | -0.8\% | 79,611,070 | 80,529,115 | 1.2\% | 3,715,513 | 3,457,409 | -6.9\% | 306,963,226 | 305,757,679 | -0.4\% |
| Average | 68,579 | 69,347 | 1.1\% | 86,440 | 89,081 | 3.1\% | 80,772 | 75,161 | -6.9\% | 72,602 | 73,712 | 1.5\% |
| Retiree Benefits | 63,146,124 | 65,682,264 | 4.0\% | 40,964,544 | 43,537,116 | 6.3\% | 868,116 | 999,792 | 15.2\% | 104,978,784 | 110,219,172 | 5.0\% |
| Average | 24,783 | 25,498 | 2.9\% | 55,208 | 55,888 | 1.2\% | 31,004 | 31,244 | 0.8\% | 31,639 | 32,542 | 2.9\% |
| Valuation Assets | 1,128,896,050 | 1,182,394,450 | 4.7\% | 772,276,213 | 798,048,322 | 3.3\% | 26,056,912 | 27,416,383 | 5.2\% | 1,927,229,175 | 2,007,859,156 | 4.2\% |
| Market Value of Assets | 942,752,581 | 1,161,220,428 | 23.2\% | 644,935,725 | 783,757,074 | 21.5\% | 21,760,392 | 26,925,418 | 23.7\% | 1,609,448,698 | 1,971,902,920 | 22.5\% |
| Actuarial Accrued Liability | 1,580,178,198 | 1,640,344,374 | 3.8\% | 1,001,336,747 | 1,073,268,993 | 7.2\% | 34,631,911 | 36,199,935 | 4.5\% | 2,616,146,856 | 2,749,813,302 | 5.1\% |
| Unfunded Actuarial Accrued Liability | 451,282,148 | 457,949,924 | 1.5\% | 229,060,534 | 275,220,671 | 20.2\% | 8,574,999 | 8,783,552 | 2.4\% | 688,917,681 | 741,954,146 | 7.7\% |
| Retirement Contribution Rates |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Normal Cost | 13.85\% | 13.71\% | -1.0\% | 24.33\% | 24.34\% | 0.0\% | 14.76\% | 14.13\% | -4.3\% | 16.58\% | 16.52\% | -0.4\% |
| Unfunded Actuarial Accrued Liability | 16.09\% | 16.47\% | 2.4\% | 22.95\% | 27.26\% | 18.8\% | 18.41\% | 20.26\% | 10.0\% | 17.90\% | 19.35\% | 8.1\% |
| Total | 29.94\% | 30.18\% | 0.8\% | 47.28\% | 51.60\% | 9.1\% | 33.17\% | 34.39\% | 3.7\% | 34.48\% | 35.87\% | 4.0\% |
| Funded Ratios |  |  |  |  |  |  |  |  |  |  |  |  |
| Valuation Assets | 71.4\% | 72.1\% | 1.0\% | 77.1\% | 74.4\% | -3.6\% | 75.2\% | 75.7\% | 0.7\% | 73.7\% | 73.0\% | -0.9\% |
| Market Value of Assets | 59.7\% | 70.8\% | 18.6\% | 64.4\% | 73.0\% | 13.4\% | 62.8\% | 74.4\% | 18.4\% | 61.5\% | 71.7\% | 16.6\% |

* June 30, 2011 numbers include 276 terminated members with a pending refund of contributions as of June 30, 2011. The June 30, 2010 numbers include 279 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.

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## 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 as of June 30, 2011. 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, 2011.

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).

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, 2011.
- 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, 2011. 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 |

On June 30, 2011, the total Market Value of Assets (MVA) was about $\$ 1.972$ billion. The Actuarial Value of Assets (AVA), which is equal to Valuation Assets as of June 30, 2011, was determined to be $\$ 2.008$ billion, equal to $101.8 \%$ of the Market Value of Assets.

## Financial Exhibits

## Actuarial Asset Method

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.

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 through June 30, 2010 is $8.16 \%$, net of all expenses. After June 30, 2010, the assumed rate of return is $7.75 \%$.

The difference between the actual Market Value and the computed expected Market Value is smoothed, or recognized over a five-year period. Due to the Board's new Interest Crediting and Undesignated Earnings Policy adopted on August 25, 2010, the AVA must be calculated each December 31 in addition to each June 30. For this reason, beginning with December 31, 2010, we recognize an additional 10\% of each asset gain and loss every six months. Previously, 20\% was recognized every year.

Because the gains and losses in fiscal years 2010 and previous years were not broken into six-month periods, we do not have a full schedule of six-month losses. We will recognize an additional $10 \%$ of each of those losses every six months.

## Actuarial Asset <br> Method (continued)

## Actuarial Value of Assets

Valuation Assets and Non-Valuation Assets

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 $101.8 \%$ of the MVA. Because of this, the corridor does not apply to the AVA.

The development of the June 30, 2011 AVA is shown in Exhibit 6. As of that date, the AVA is $101.8 \%$ of the MVA. At the time of the last valuation, the AVA was $119.7 \%$ of MVA. There are $\$ 36.0$ million of deferred investment return losses yet to be recognized.

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, 2011, the entire AVA is included for valuation purposes. In valuations prior to 2009, certain non-valuation assets were excluded from the Valuation 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, 2010 and 2011

|  | 2011 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Cash and Deposits | \$ | 24,599,333 | \$ | 21,483,873 |
| Receivables |  |  |  |  |
| Contributions |  | 5,107,540 |  | 3,983,960 |
| Security Sales Pending |  | 51,826,051 |  | 46,507,251 |
| Dividends |  | 2,318,412 |  | 1,308,354 |
| Accrued Interest |  | 4,876,629 |  | 3,912,942 |
| Other Receivables |  | 13,678,052 |  | 123,565 |
| Total Receivables | \$ | 77,806,684 | \$ | 55,836,072 |
| Investments at Fair Value |  |  |  |  |
| Short Term Investments |  | 130,307,075 |  | 51,142,189 |
| Alternative Equity |  | 81,681,978 |  | 55,168,188 |
| Domestic Fixed Income Securities |  | 483,852,878 |  | 415,198,303 |
| Domestic Equities |  | 662,734,075 |  | 585,091,702 |
| International Equities |  | 378,086,499 |  | 305,747,082 |
| International Fixed Income Securities |  | 137,331,656 |  | 106,185,345 |
| Real Estate |  | 142,208,024 |  | 67,295,389 |
| Total Investments | \$ | 2,016,202,185 | \$ | 1,585,828,198 |
| Collateral Held for Securities Lent |  | 135,758,382 |  | 71,502,381 |
| Total Assets | \$ | 2,254,366,584 | \$ | 1,734,650,524 |

## Liabilities

Payables
Collateral Held for Securities Lent
Securities Purchases Pending

|  | $135,758,382$ | $71,502,381$ |
| ---: | ---: | ---: |
| $139,302,963$ | $46,411,500$ |  |
|  | $7,110,055$ | $6,907,423$ |
| 292,264 | 380,522 |  |
|  | $\mathbf{2 8 2 , 4 6 3 , 6 6 4}$ | $\mathbf{1 2 5 , 2 0 1 , 8 2 6}$ |
|  |  |  |
| $\$$ | $\mathbf{1 , 9 7 1 , 9 0 2 , 9 2 0}$ | $\mathbf{\$}$ |

Net Assets Held in Trust for Pension Benefits

## Santa Barbara County Employees' Retirement System

## Exhibit 4: Statement of Changes in Plan Net Assets

 For the Years Ended June 30, 2010 and 2011
## June 30, 2011

June 30, 2010

## Additions

Contributions

| Employer | \$ | 94,436,686 | \$ | 84,647,133 |
| :---: | :---: | :---: | :---: | :---: |
| Member |  | 10,843,091 |  | 11,648,995 |
| Total Contributions |  | 105,279,777 |  | 96,296,128 |
| Investment Income |  |  |  |  |
| Net Appreciation in Fair Value of Investments |  | 309,413,571 |  | 162,597,694 |
| Interest |  | 22,387,681 |  | 21,392,480 |
| Dividends |  | 18,630,224 |  | 14,501,082 |
| Total Investment Income |  | 350,431,476 |  | 198,491,256 |
| Less investment expense |  | $(5,088,570)$ |  | $(4,245,801)$ |
| Net Investment Income |  | 345,342,906 |  | 194,245,455 |
| Securities Lending Income |  | 410,070 |  | 398,599 |
| Securities Lending Expense |  | $(52,802)$ |  | $(60,976)$ |
| Net Securities Income |  | 357,268 |  | 337,623 |
| Other Income |  | 23,724,517 |  | 228,877 |
| Total Other Income |  | 23,724,517 |  | 228,877 |
| TOTAL ADDITIONS | \$ | 474,704,468 | \$ | 291,108,083 |

## Deductions

Benefits Paid - Includes Pension and Death Benefits
Member Withdrawals
Administrative Expenses


## Santa Barbara County Employees' Retirement System

Exhibit 5: Allocation of Assets by Accounting Reserve Amounts For the Years Ended June 30, 2010 and 2011

|  | 2011 | 2010 |
| :---: | :---: | :---: |
| 1. Member Deposit Reserve | \$ 165,774,090 | \$ 162,431,794 |
| 2. County and District Advance Reserve | 611,551,174 | 542,735,967 |
| 3. Retired Member Reserve | 1,447,916,960 | 1,361,616,490 |
| 4. Transferred Funds Reserve* | 114,861,676 | 106,451,816 |
|  | \$ 2,340,103,900 | \$ 2,173,236,067 |
| 5. Old Market Stabilization Account |  | $(563,787,369)$ |
| 6. New Market Stabilization Account | $(35,956,236)$ |  |
| 7. Contra Tracking Account | $(332,244,744)$ |  |
| Total Reserves | \$ 1,971,902,920 | \$ 1,609,448,698 |

* Established as a valuation asset reserve effective June 30, 2007.

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



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


## Santa Barbara County Employees' Retirement System

## Exhibit 7a: Development of Valuation Assets

|  |  | Actuarial Value of Assets |  | Market Value of Assets |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | Total June 30, 2010 Valuation | \$ | 1,927,229,175 | \$ | 1,609,448,698 |
| 2. Changes During the Year |  |  |  |  |  |
|  | Contributions and Miscellaneous Revenue |  | 128,906,811 |  | 128,906,811 |
|  | Benefit Payments |  | $(108,138,096)$ |  | $(108,138,096)$ |
|  | Investment Return, Net of Expenses |  | 59,861,266 |  | 341,685,507 |
|  | Total Changes | \$ | 80,629,981 | \$ | 362,454,222 |
| 3. | Total June 30, 2011 Valuation = $1+2$ | \$ | 2,007,859,156 | \$ | 1,971,902,920 |
| 4. | Expected Value as of June 30, 2011 | \$ | 2,098,147,922 | \$ | 1,755,739,458 |
| 5. | Gain / (Loss) = (3) - (4) |  | $(90,288,766)$ |  | 216,163,462 |
| 6. | Rate of Return |  | 3.09\% |  | 21.09\% |

## 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\% |
| 24-Year Compound Average | 8.5\% |  | 2.9\% |

## Santa Barbara County Employees' Retirement System

Exhibit 8: Allocation of Valuation Assets
For the Year Ended June 30, 2011
(Dollars in Thousands)

|  |  | General |  | Safety | APCD |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Member Deposit Reserve | \$ | 132,690 | \$ | 31,492 | \$ | 1,592 | \$ | 165,774 |
| 2. County and District Advance Reserve |  | 394,019 |  | 205,572 |  | 11,960 |  | 611,551 |
| 3. Retired Member Reserve |  | 791,933 |  | 638,789 |  | 17,195 |  | 1,447,917 |
| 4. Transferred Funds Reserve * |  | 59,407 |  | 54,249 |  | 1,206 |  | 114,862 |
| 5. Total Valuation Reserves (1+2+3+4) | \$ | 1,378,049 | \$ | 930,102 | \$ | 31,953 | \$ | 2,340,104 |
| 6. Percentage of Line 5. by Plan |  | 58.89\% |  | 39.75\% |  | 1.37\% |  | 100.00\% |
| 7. Actuarial Value of Valuation Assets (Exhibit 6) |  |  |  |  |  |  | \$ | 2,007,859 |
| 8. Allocated Valuation Assets ( $6 \times 7$ ) | \$ | 1,182,395 | \$ | 798,048 | \$ | 27,416 | \$ | 2,007,859 |

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


# Santa Barbara County Employees' <br> 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, 2011. 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.

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, 2011.

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: $\quad$ Actuarial Balance Sheet - June 30, 2011

(Dollars in Thousands)

| Resources |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | General |  | Safety |  | APCD |  | Total |  |
| Valuation Assets (Actuarial) | \$ | 1,182,395 | \$ | 798,048 | \$ | 27,416 | \$ | 2,007,859 |
| Present Value of Future Member Contributions |  | 76,127 |  | 39,231 |  | 1,585 |  | 116,943 |
| Present Value of Future Employer Contributions to Fund: <br> a) Normal Cost <br> b) Unfunded Actuarial Accrued Liability |  | $\begin{aligned} & 253,530 \\ & 457,950 \end{aligned}$ |  | $\begin{aligned} & 170,103 \\ & 275,221 \end{aligned}$ |  | $\begin{aligned} & 3,427 \\ & 8,784 \end{aligned}$ |  | $\begin{aligned} & 427,060 \\ & 741,955 \end{aligned}$ |
| Total Resources | \$ | 1,970,002 | \$ | 1,282,603 | \$ | 41,212 | \$ | 3,293,817 |
| Liabilities |  |  |  |  |  |  |  |  |
|  |  | General |  | Safety |  | APCD |  | Total |
| Present Value of Future Benefits |  |  |  |  |  |  |  |  |
| 1. Present Retired Members | \$ | 802,621 | \$ | 614,997 | \$ | 14,715 | \$ | 1,432,333 |
| 2. Current Inactive Members |  | 89,059 |  | 34,725 |  | 3,599 |  | 127,383 |
| 3. Current Active Members |  |  |  |  |  |  |  |  |
| - Service Retirement |  | 995,161 |  | 578,618 |  | 21,323 |  | 1,595,102 |
| - Disability Retirement |  | 34,931 |  | 31,367 |  | 640 |  | 66,938 |
| - Death Benefits |  | 12,929 |  | 5,009 |  | 461 |  | 18,399 |
| - Deferred Vested Benefit |  | 31,963 |  | 17,600 |  | 394 |  | 49,957 |
| - Refund of Member Contributions |  | 3,338 |  | $\underline{287}$ |  | 80 |  | 3,705 |
| - Total Active | \$ | 1,078,322 | \$ | 632,881 | \$ | 22,898 | \$ | 1,734,101 |
| Total Actuarial Liabilities | \$ | 1,970,002 | \$ | 1,282,603 | \$ | 41,212 | \$ | 3,293,817 |

Actuarial Balance Sheet - Resources

## Actuarial Cost Method

## Normal Cost

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.

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).

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, 2011. 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 Safety Plan 6A are actually lower than the rates for Safety Plan 6B. This is the case despite the fact that the only difference in benefits between the plans is that Safety Plan 6A uses the member's highest 12 months of compensation and Safety Plan 6B uses the member's highest 36 months of compensation. The reason for this is demographic differences between the two plans. The average entry age for Safety Plan 6B is significantly higher than the average entry age for Safety Plan 6A and that causes the normal cost rate to be higher for Safety Plan 6B.

| Santa Barbara County Employees' Retirement System |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Exhibit 10: | mal Cost | ontributio | Rates - Ju | $0,2011$ |
|  | General | Safety | APCD | All Plans |
| Number of Active Members | 3,198 | 904 | 46 | 4,148 |
| A. Normal Cost Contribution Rate |  |  |  |  |
| Service Retirement | 14.75\% | 24.57\% | 15.84\% | 17.35\% |
| Disability Retirement | 0.81\% | 2.55\% | 0.92\% | 1.27\% |
| Death while Active | 0.26\% | 0.36\% | 0.59\% | 0.29\% |
| Deferred Retirements | 1.52\% | 2.27\% | 1.93\% | 1.72\% |
| Refund of Member Contributions | 0.47\% | 0.22\% | 0.66\% | 0.41\% |
| Total | 17.81\% | 29.97\% | 19.94\% | 21.04\% |
| B. Member Contributions | (4.10)\% | (5.63)\% | (5.81)\% | (4.52)\% |
| C. Net Employer Normal Cost as o June 30, 2011 (A) + (B) | 13.71\% | 24.34\% | 14.13\% | 16.52\% |
| D. Net Employer Normal Cost as of June 30, 2010 | 13.85\% | 24.33\% | 14.76\% | 16.58\% |
| E. Increase (Decrease) as a Percentage of Payroll (C) - (D) | (0.14)\% | 0.01\% | (0.63)\% | (0.06)\% |

## Santa Barbara County Employees' <br> Retirement System

Exhibit 10a: Calculated Employer Normal Cost Contribution Rates - June 30, 2011 General Members

|  | General |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5A | 5B | 5C | Plan 2 | Total |
| Number of Active Members | 834 | 484 | 1,868 | 12 | 3,198 |
| A. Normal Cost Contribution Rate |  |  |  |  |  |
| Service Retirement | 13.36\% | 16.93\% | 14.78\% | 2.40\% | 14.75\% |
| Disability Retirement | 0.72\% | 0.96\% | 0.81\% | 0.13\% | 0.81\% |
| Death while Active | 0.26\% | 0.32\% | 0.24\% | 0.03\% | 0.26\% |
| Deferred Retirements | 1.80\% | 1.32\% | 1.45\% | 0.39\% | 1.52\% |
| Refund of Member Contributions | 0.37\% | 0.84\% | 0.38\% | 0.00\% | 0.47\% |
| Total | 16.51\% | 20.37\% | 17.66\% | 2.95\% | 17.81\% |
| B. Member Contributions | (3.23)\% | (7.43)\% | (3.35)\% | 0.00\% | (4.10)\% |
| C. Net Employer Normal Cost as of June 30, 2011 (A) + (B) | 13.28\% | 12.94\% | 14.31\% | 2.95\% | 13.71\% |
| D. Net Employer Normal Cost as of June 30, 2010 | 13.39\% | 13.18\% | 14.45\% | 2.84\% | 13.85\% |
| E. Increase (Decrease) as a <br> Percentage of Payroll (C) - (D) | (0.11)\% | (0.24)\% | (0.14)\% | 0.11\% | (0.14)\% |

## Santa Barbara County Employees' Retirement System

Exhibit 10b: Calculated Employer Normal Cost Contribution Rates - June 30, 2011 Safety Members

|  | Safety |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 A | 4 B | 4 C | 6 A | 6 B | Total |
| Number of Active Members | 97 | 11 | 339 | 141 | 316 | 904 |

A. Normal Cost Contribution Rate

| Service Retirement | 24.27\% | 25.70\% | 23.05\% | 25.40\% | 25.70\% | 24.57\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Disability Retirement | 2.80\% | 2.95\% | 2.60\% | 2.38\% | 2.46\% | 2.55\% |
| Death while Active | 0.42\% | 0.31\% | 0.35\% | 0.36\% | 0.35\% | 0.36\% |
| Deferred Retirements | 2.04\% | 1.58\% | 1.93\% | 2.57\% | 2.58\% | 2.27\% |
| Refund of Member Contributions | 0.23\% | 0.51\% | 0.22\% | 0.21\% | 0.22\% | 0.22\% |
| Total | 29.76\% | 31.05\% | 28.15\% | 30.92\% | 31.31\% | 29.97\% |
| B. Member Contributions | (5.83)\% | (11.96)\% | (5.52)\% | (5.42)\% | (5.47)\% | (5.63)\% |
| C. Net Employer Normal Cost as of June 30, 2011 (A) + (B) | 23.93\% | 19.09\% | 22.63\% | 25.50\% | 25.84\% | 24.34\% |
| D. Net Employer Normal Cost as of June 30, 2010 | 23.81\% | 18.98\% | 22.73\% | 25.44\% | 25.89\% | 24.33\% |
| E. Increase (Decrease) as a Percentage of Payroll (C) - (D) | 0.12\% | 0.11\% | (0.10)\% | 0.06\% | (0.05)\% | 0.01\% |

## Santa Barbara County Employees' Retirement System <br> Exhibit 10c: Calculated Employer Normal Cost Contribution Rates - June 30, 2011 APCD Members

|  | APCD |  |  |
| :---: | :---: | :---: | :---: |
|  | Plan 1 | Plan 2 | Total |
| Number of Active Members | 22 | 24 | 46 |
| A. Normal Cost Contribution Rate |  |  |  |
| Service Retirement | 15.57\% | 16.16\% | 15.84\% |
| Disability Retirement | 0.92\% | 0.92\% | 0.92\% |
| Death while Active | 0.68\% | 0.49\% | 0.59\% |
| Deferred Retirements | 2.07\% | 1.76\% | 1.93\% |
| Refund of Member Contributions | 0.46\% | 0.90\% | 0.66\% |
| Total | 19.70\% | 20.23\% | 19.94\% |
| B. Member Contributions | (3.96)\% | (7.94)\% | (5.81)\% |
| C. Net Employer Normal Cost as of June 30, 2011 (A) + (B) | 15.74\% | 12.29\% | 14.13\% |
| D. Net Employer Normal Cost as of June 30, 2010 | 15.86\% | 13.05\% | 14.76\% |
| E. Increase (Decrease) as a Percentage of Payroll (C) - (D) | (0.12)\% | (0.76)\% | (0.63)\% |

Actuarial Accrued Liability

Unfunded Actuarial Accrued Liability

Funding Adequacy

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.

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.

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.

Under an open/rolling amortization method, the entire UAAL is amortized over a constant period, in this case, 17 years. A 17year 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 2011 actuarial valuation reflects an increase in the UAAL of $\$ 53.1$ million for the fiscal year just ended from $\$ 688.9$ million to $\$ 742.0$ million, a $7.7 \%$ 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 recognition of asset losses from the 2007-2009 periods. These recognized losses were partially offset by the positive investment experience since our prior valuation and other factors.

## Santa Barbara County Employees' Retirement System

Exhibit 11: Calculated UAAL Amount by Class - June 30, 2011 All Members
(Dollars in Millions)

|  | General |  | Safety |  | APCD |  | $\begin{gathered} 2011 \\ \text { All } \\ \text { Plans } \end{gathered}$ |  | 2010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | All Plans |  |  | Percent Change |
| Number of Active Members |  | 3,198 |  |  |  | 904 |  |  |  | 46 |  | 4,148 |  | 4,228 | -1.9\% |
| Number of Vested Terminated Members |  | 961 |  | 188 |  | 17 |  | 1,166 |  | 1,181 | -1.3\% |
| Number of Retirees and Beneficiaries |  | 2,576 |  | 779 |  | 32 |  | 3,387 |  | 3,318 | 2.1\% |
| Total Number |  | 6,735 |  | 1,871 |  | 95 |  | 8,701 |  | 8,727 | -0.3\% |
| A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors | \$ | 1,970.0 | \$ | 1,282.6 | \$ | 41.2 | \$ | 3,293.8 | \$ | 3,174.3 | 3.8\% |
| B. Actuarial present value of total future Normal Costs for current members |  | 329.7 |  | 209.3 |  | 5.0 |  | 544.0 |  | 558.2 | (2.5)\% |
| C. Actuarial Accrued Liability [A-B] | \$ | 1,640.3 | \$ | 1,073.3 | \$ | 36.2 | \$ | 2,749.8 | \$ | 2,616.1 | 5.1\% |
| D. Valuation Assets |  | 1,182.4 |  | 798.0 |  | 27.4 |  | 2,007.8 |  | 1,927.2 | 4.2\% |
| E. UAAL [C-D] | \$ | 457.9 | \$ | 275.3 | \$ | 8.8 | \$ | 742.0 | \$ | 688.9 | 7.7\% |
| F. Funded Ratio [D/C] |  | 72.1\% |  | 74.4\% |  | 75.7\% |  | 73.0\% |  | 73.7\% | (0.9)\% |

[^1]
# Santa Barbara County Employees' Retirement System 

Exhibit 11a: UAAL Amortization Rates - June 30, 2011

|  | General | Safety | APCD | All |
| :---: | :---: | :---: | :---: | :---: |
| Number of Active Members | 3,198 | 904 | 46 | 4,148 |
| Number of Vested Terminated Members | 961 | 188 | 17 | 1,166 |
| Number of Retirees and Beneficiaries | 2,576 | 779 | 32 | 3,387 |
| Total Number | 6,735 | 1,871 | 95 | 8,701 |
| A. Unfunded Actuarial Accrued Liability | \$ 457,949,924 | \$ 275,220,671 | \$8,783,552 | \$ 741,954,147 |
| B. 17-Year Amortization Factor | 0.079757 | 0.079757 | 0.079757 | 0.079757 |
| C. Beginning of Year Payment [AxB] | \$ 36,524,521 | \$ 21,950,660 | \$ 700,546 | \$ 59,175,727 |
| D. Beginning of Year Payroll | \$ 221,771,155 | \$ 80,529,115 | \$3,457,409 | \$ 305,757,679 |
| E. UAAL Amortization Rate [C/D] | 16.47\% | 27.26\% | 20.26\% | 19.35\% |

UAAL Amortization for Safety Plan 6

With our June 30, 2009 and June 30, 2010 actuarial valuations, we calculated one UAAL contribution rate for all Safety members based upon the UAAL, the 17-year amortization factor and the projected payroll. For this valuation, it was requested that we calculate a bifurcated contribution level for Safety Plan 4 and Safety Plan 6, since the establishment of Plan 6 created an additional UAAL.

Prior to the current methodology of amortizing the entire UAAL over a rolling 17 years, separate layers were established each year based upon gains and losses incurred by the System. In addition to the bases for gains and losses, at the time of our June 30, 2007 actuarial valuation, a base was created for the additional UAAL attributable to the establishment of Plan 6. This base was set equal to the difference between the AAL calculated under Plan 6 provisions and assumptions and the AAL calculated under Plan 4 provisions and assumptions for all of the members anticipated to join Plan 6 in February 2008. This base was $\$ 12.8$ million and was anticipated to be amortized over a closed 15-year period.

For two years, an amortization payment was made toward the extra Plan 6 UAAL. After two years of interest and the two amortization payments, the outstanding balance as of June 30, 2009 was approximately $\$ 12.4$ million with 13 years remaining on the amortization schedule. At that time, the funding policy was changed to the rolling 17-year method and the UAAL for the change to Plan 6 was no longer separated from the total UAAL for Safety.

Adding a year of interest at 8.16\% (the rate used for the June 30, 2009 actuarial valuation), the outstanding balance as of June 30, 2010 was approximately $\$ 13.4$ million. Applying a $7.75 \%$ interest rate for the year after June 30, 2010 results in a base of approximately $\$ 14.5$ million as of June 30, 2011. The balances are growing with interest, but are otherwise unchanged as no separate amortization was being made for the Safety Plan 6 liabilities in our previous two valuations.

We believe a reasonable approach to reflect the additional UAAL for the creation of Safety Plan 6 is to amortize the $\$ 14.5$ million calculated above over a closed 17 -year period. If an open/rolling period were 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.

UAAL Amortization for Safety Plan 6 (continued)

Using the base of $\$ 14.5$ million, applying a 17-year amortization factor and dividing by Safety Plan 6 payroll yields a UAAL contribution rate of $2.78 \%$ as of June 30, 2011. 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 $25.82 \%$. Thus, the amortization for Plan 4 would simply be $25.82 \%$, while the amortization for Plan 6 would be $28.60 \%$ ( $25.82 \%+2.78 \%$ ). This compares to an amortization rate of $27.26 \%$ calculated for all Safety members calculated above.

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, 2011

| A. | Extra Plan 6 Layer - June 30, 2009 | \$ | 12,429,897 |
| :---: | :---: | :---: | :---: |
| B. | Extra Plan 6 Layer - June 30, 2010 [Ax1.0816] |  | 13,444,177 |
| C. | Extra Plan 6 Layer - June 30, 2011 [Bx1.0775] |  | 14,486,100 |
| D. | 17-Year Amortization Factor |  | 0.079757 |
| E. | Beginning of Year Payment [CxD] | \$ | 1,155,362 |
| F. | Safety Plan 6 Beginning of Year Payroll | \$ | 41,490,098 |
| G. | Extra Plan 6 UAAL Amortization Rate [E/F] |  | 2.78\% |
| H. | Total Safety UAAL | \$ | 275,220,671 |
| I. | Total Safety UAAL less Extra Plan 6 Layer [H-C] |  | 260,734,571 |
|  | Beginning of Year Payment [IxD] |  | 20,795,298 |
| K. | Total Safety Payroll |  | 80,529,115 |
| L. | UAAL Rate without Extra Plan 6 Layer [J/K] |  | 25.82\% |
| M. | UAAL Rate - Plan 4 [L] |  | 25.82\% |
|  | UAAL Rate - Plan 6 [G+L] |  | 28.60\% |

## 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 will not match the breakdown required in the Governmental Accounting Standards Board (GASB) Exposure Draft for cost-sharing employers. Note that these are proposed standards that are not effective until fiscal years beginning June 15, 2013 or later for multiple employer plans.

## Santa Barbara County Employees' Retirement System

Exhibit 12: UAAL by Employer - June 30, 2011
(Dollars in thousands)

|  | Total | Santa Barbara County | CarpinteriaSummerland FPD | Santa <br> Maria Cemetery | Goleta Cemetery | Oak Hill Cemetery | SBCAG | Summer- land Sanitary | Carpinteria Cemetery | APCD | SB County Vector Control District | Courts |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Active Members | 4,148 | 3,754 | 33 | 9 | 4 | 3 | 19 | 4 | 2 | 46 | 7 | 267 |
| Number of Inactive Members | 1,166 | 1,096 | 8 | 1 | 1 | 0 | 9 | 0 | 1 | 17 | 1 | 32 |
| Number of Retired Members | 3,387 | 3,210 | 32 | 4 | 3 | 0 | 10 | 2 | 1 | 32 | 1 | 92 |
| Actuarial Accrued Liability | \$ 2,749,814 | \$2,538,300 | \$ 53,586 | \$ 3,531 | \$ 1,913 | \$ 549 | \$ 12,329 | \$ 2,268 | \$ 786 | \$ 36,200 | \$ 1,327 | \$ 99,025 |
| Actuarial Value of Assets* | 2,007,859 | 1,852,497 | 39,109 | 2,577 | 1,396 | 400 | 8,998 | 1,655 | 573 | 27,416 | 968 | 72,270 |
| Unfunded Actuarial Accrued Liability | 741,955 | 685,803 | 14,477 | 954 | 517 | 149 | 3,331 | 613 | 213 | 8,784 | 359 | 26,755 |

* 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.

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## Santa Barbara County Employees' Retirement System

## Section 5: Member Contributions



## Basic Contributions

## Safety Member Contributions

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

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

| Plan/Tier | $\begin{array}{\|l} \hline \text { Code } \\ \text { Section } \end{array}$ | Member Contribution Provides Average Annuity of | FAS <br> 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 |
| APCD 1 | $\begin{array}{r} 31621.6 \& \\ 31581.1 \end{array}$ | $1 / 2 \times 1 / 100$ th of FAS* at age 55 | 1 year |
| APCD 2 | 31621.6 | 1/100th of FAS* at age 55 | 1 year |
| Safety 4A \& 6A |  | $1 / 2 \times 3 / 200$ th of FAS* at age 55 | 1 year |
| Safety 4B |  | $3 / 200$ th of FAS* at age 55 | 1 year |
| Safety 4C \& 6B |  | $1 / 2 \times 3 / 200$ th of FAS* at age 55 | 3 years |

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

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

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, 2011.

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.

Full disclosure of the member rates can be found in Appendix D.
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 have actually declined by four 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, when the discount rate decreases from $7.75 \%$ to $7.50 \%$, we expect to see some increase in the COLA normal cost rate.

# Santa Barbara County Employees' <br> Retirement System 

## Section 6: Employer Contributions



## Calculated Contribution Rate

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 $35-37$ for further explanation regarding the UAAL rates for Safety Plan 4 and Plan 6.

The total Employer contribution rate was $34.48 \%$ for the fiscal year beginning July 1, 2011. For the fiscal year beginning in 2012, the calculated rate based on this report increased to $35.87 \%$. This is equal to the aggregate Net Normal Cost contribution rate of $16.52 \%$ plus the amortization payment of the UAAL as measured from the valuation date and reported in Exhibit 11a. The aggregate UAAL contribution rate is 19.35\%.

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.

## 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: Plans 5C, 6A, and 6B have been added in the past several years. 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 significant changes at the time of the previous valuation due to the Investigation of Experience. We also expect to see increases in normal cost rates when the investment return assumption is lowered from $7.75 \%$ to $7.50 \%$ with next year's valuation.

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

Changes have occurred since the 2010 valuation. The primary source of change is the continued recognition of losses from the $2007-2009$ periods. This recognition caused significant increases in the UAAL contribution rates. These increases have been partially offset by the positive investment experience since the previous valuation.

Another change from the prior valuation was that the COLAs for some retirees and beneficiaries were less than the $3.0 \%$ we expected. 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 $1.0 \%$ over 2010, 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. Some received increases greater than 1.0\%, but less than the full $3.0 \%$.

Payroll decreased by $0.4 \%$ 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.

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

Member COLA Contribution Rates

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.

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 have actually declined by four 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, when the discount rate decreases from $7.75 \%$ to $7.50 \%$, we expect to see some increase in the COLA normal cost rate.

## Santa Barbara County Employees' Retirement System

## Exhibit 13: Total Employer Contributions <br> All Members <br> (Dollars in Thousands)

|  |  | General |  | Safety |  | APCD |  | $\begin{gathered} 2011 \\ \text { All } \\ \text { Plans } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Active Members |  | 3,198 |  | 904 |  | 46 |  | 4,148 |
| A. Basic Employer Normal Cost Rate |  | 8.99\% |  | 15.48\% |  | 8.88\% |  | 10.70\% |
| B. COLA Normal Cost Rate |  | 4.72\% |  | 8.86\% |  | 5.25\% |  | 5.82\% |
| C. Employer Normal Cost Rate |  | 13.71\% |  | 24.34\% |  | 14.13\% |  | 16.52\% |
| D. Basic UAAL Contribution Rate |  | 11.29\% |  | 17.59\% |  | 14.38\% |  | 12.98\% |
| E. COLA UAAL Contribution Rate |  | 5.18\% |  | 9.67\% |  | 5.88\% |  | 6.37\% |
| F. UAAL Contribution Rate |  | 16.47\% |  | 27.26\% |  | 20.26\% |  | 19.35\% |
| G. Total June 30, 2011 Contribution Rate ( $\mathrm{C}+\mathrm{F}$ ) |  | 30.18\% |  | 51.60\% |  | 34.39\% |  | 35.87\% |
| H. Total June 30, 2010 Contribution Rate |  | 29.94\% |  | 47.28\% |  | 33.17\% |  | 34.48\% |
| I. Estimated Payroll for fiscal year beginning July 1, 2012 * | \$ | 234,363 | \$ | 85,101 | \$ | 3,654 | \$ | 323,118 |
| J. Estimated Annual Contribution (GxI)** | \$ | 70,718 | \$ | 43,908 | \$ | 1,257 | \$ | 115,883 |
| K. Prior Valuation Estimated Annual Contribution********) | \$ | 67,643 | \$ | 38,810 | \$ | 1,160 | \$ | 107,613 |
| L. Increase / (Decrease) in Annual Contribution | \$ | 3,075 | \$ | 5,098 | \$ | 97 | \$ | 8,270 |
| M. Percentage Change in Annual Contribution |  | 4.55\% |  | 13.14\% |  | 8.36\% |  | 7.68\% |

[^2]
## Santa Barbara County Employees' Retirement System

## Exhibit 13a: Total Employer Contributions General Members

(Dollars in Thousands)

|  | General |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5A |  | 5B |  | 5 C |  | Plan 2 |  | Total |  |
| Number of Active Members |  | 834 |  | 484 |  | 1,868 |  | 12 |  | 3,198 |
| A. Basic Employer Normal Cost Rate |  | 8.86\% |  | 7.67\% |  | 9.61\% |  | 2.95\% |  | 8.99\% |
| B. COLA Normal Cost Rate |  | 4.42\% |  | 5.27\% |  | 4.70\% |  | 0.00\% |  | 4.72\% |
| C. Employer Normal Cost Rate |  | 13.28\% |  | 12.94\% |  | 14.31\% |  | 2.95\% |  | 13.71\% |
| D. Basic UAAL Contribution Rate |  | 11.29\% |  | 11.29\% |  | 11.29\% |  | 11.29\% |  | 11.29\% |
| E. COLA UAAL Contribution Rate |  | 5.18\% |  | 5.18\% |  | 5.18\% |  | 5.18\% |  | 5.18\% |
| F. UAAL Contribution Rate |  | 16.47\% |  | 16.47\% |  | 16.47\% |  | 16.47\% |  | 16.47\% |
| G. Total June 30, 2011 Contribution Rate ( $\mathrm{C}+\mathrm{F}$ ) |  | 29.75\% |  | 29.41\% |  | 30.78\% |  | 19.42\% |  | 30.18\% |
| H. Total June 30, 2010 Contribution Rate |  | 29.48\% |  | 29.27\% |  | 30.54\% |  | 18.93\% |  | 29.94\% |
| I. Estimated Payroll for fiscal year beginning July 1, 2012 * | \$ | 67,040 | \$ | 45,978 | \$ | 120,484 | \$ | 861 | \$ | 234,363 |
| J. Estimated Annual Contribution (G x I) ** | \$ | 19,944 | \$ | 13,522 | \$ | 37,085 | \$ | 167 | \$ | 70,718 |
| K. Prior Valuation Estimated Annual Contribution********) | \$ | 19,049 | \$ | 12,971 | \$ | 35,466 | \$ | 157 | \$ | 67,643 |
| L. Increase / (Decrease) in Annual Contribution | \$ | 895 | \$ | 551 | \$ | 1,619 | \$ | 10 | \$ | 3,075 |
| M. Percentage Change in Annual Contribution |  | 4.70\% |  | 4.25\% |  | 4.56\% |  | 6.37\% |  | 4.55\% |

* Estimated payroll based upon the assumption of 3.75\% annual payroll growth.
** Estimated contributions shown for illustrative purposes. Actual contributions will vary depending on actual payroll and timing.
***Estimated contribution for fiscal year beginning July 1, 2011 based on salary information as of June 30, 2011.


## Santa Barbara County Employees' Retirement System

## Exhibit 13b: Total Employer Contributions Safety Members

(Dollars in Thousands)

|  | Safety |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4A |  | 4B |  | 4 C |  | 6A |  | 6B |  | Total |  |
| Number of Active Members |  | 97 |  | 11 |  | 339 |  | 141 |  | 316 |  | 904 |
| A. Basic Employer Normal Cost Rate |  | 15.28\% |  | 10.17\% |  | 14.43\% |  | 16.19\% |  | 16.48\% |  | 15.48\% |
| B. COLA Normal Cost Rate |  | 8.65\% |  | 8.92\% |  | 8.20\% |  | 9.31\% |  | 9.36\% |  | 8.86\% |
| C. Employer Normal Cost Rate |  | 23.93\% |  | 19.09\% |  | 22.63\% |  | 25.50\% |  | 25.84\% |  | 24.34\% |
| D. Basic UAAL Contribution Rate |  | 16.66\% |  | 16.66\% |  | 16.66\% |  | 18.45\% |  | 18.45\% |  | 17.59\% |
| E. COLA UAAL Contribution Rate |  | 9.16\% |  | 9.16\% |  | 9.16\% |  | 10.15\% |  | 10.15\% |  | 9.67\% |
| F. UAAL Contribution Rate |  | 25.82\% |  | 25.82\% |  | 25.82\% |  | 28.60\% |  | 28.60\% |  | 27.26\% |
| G. Total June 30, 2011 Contribution Rate ( $C+F$ ) |  | 49.75\% |  | 44.91\% |  | 48.45\% |  | 54.10\% |  | 54.44\% |  | 51.60\% |
| H. Total June 30, 2010 Contribution Rate |  | 46.76\% |  | 41.93\% |  | 45.68\% |  | 48.39\% |  | 48.84\% |  | 47.28\% |
| I. Estimated Payroll for fiscal year beginning July 1, 2012 * | \$ | 11,559 | \$ | 1,385 | \$ | 28,311 | \$ | 15,132 | \$ | 28,714 | \$ | 85,101 |
| J. Estimated Annual Contribution (G x I) ** | \$ | 5,751 | \$ | 622 | \$ | 13,717 | \$ | 8,186 | \$ | 15,632 | \$ | 43,908 |
| K. Prior Valuation Estimated Annual Contribution********) | \$ | 5,210 | \$ | 560 | \$ | 12,465 | \$ | 7,058 | \$ | 13,517 | \$ | 38,810 |
| L. Increase / (Decrease) in Annual Contribution | \$ | 541 | \$ | 62 | \$ | 1,252 | \$ | 1,128 | \$ | 2,115 | \$ | 5,098 |
| M. Percentage Change in Annual Contribution |  | 10.38\% |  | 11.07\% |  | 10.04\% |  | 15.98\% |  | 15.65\% |  | 13.14\% |

* Estimated payroll based upon the assumption of 3.75\% annual payroll growth.
** Estimated contributions shown for illustrative purposes. Actual contributions will vary depending on actual payroll and timing.
*** Estimated contribution for fiscal year beginning July 1, 2011 based on salary information as of June 30, 2011.


## 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 |  | 22 |  | 24 |  | 46 |
| A. Basic Employer Normal Cost Rate |  | 10.47\% |  | 7.04\% |  | 8.88\% |
| B. COLA Normal Cost Rate |  | 5.27\% |  | 5.25\% |  | 5.25\% |
| C. Employer Normal Cost Rate |  | 15.74\% |  | 12.29\% |  | 14.13\% |
| D. Basic UAAL Contribution Rate |  | 14.38\% |  | 14.38\% |  | 14.38\% |
| E. COLA UAAL Contribution Rate |  | 5.88\% |  | 5.88\% |  | 5.88\% |
| F. UAAL Contribution Rate |  | 20.26\% |  | 20.26\% |  | 20.26\% |
| G. Total June 30, 2011 Contribution Rate ( $\mathrm{C}+\mathrm{F}$ ) |  | 36.00\% |  | 32.55\% |  | 34.39\% |
| H. Total June 30, 2010 Contribution Rate |  | 34.27\% |  | 31.46\% |  | 33.17\% |
| I. Estimated Payroll for fiscal year beginning July 1, 2012 * | \$ | 1,957 | \$ | 1,697 | \$ | 3,654 |
| J. Estimated Annual Contribution (GxI) ** | \$ | 705 | \$ | 552 | \$ | 1,257 |
| K. Prior Valuation Estimated Annual Contribution*******) | \$ | 646 | \$ | 514 | \$ | 1,160 |
| L. Increase / (Decrease) in Annual Contribution | \$ | 59 | \$ | 38 | \$ | 97 |
| M. Percentage Change in Annual Contribution |  | 9.13\% |  | 7.39\% |  | 8.36\% |

[^3]
## Santa Barbara County Employees' <br> Retirement System

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

|  |  | Amount | As a Percent of June 30, 2011 Actuarial Accrued Liability | UAAL Contribution Rate \% of Pay * |
| :---: | :---: | :---: | :---: | :---: |
| Unfunded Actuarial Accrued Liability - June 30, 2010 | \$ | 688.9 | 25.05\% | 17.90\% |
| Interest Accrued |  | 53.4 | 1.94\% |  |
| Benefits Accrued (Normal Cost) |  | 70.3 | 2.56\% |  |
| Contributions and Miscellaneous Revenue (with Assumed Interest) |  | (133.8) | -4.87\% |  |
| Expected Unfunded Actuarial Accrued Liability - June 30, 2011 | \$ | 678.8 | 24.68\% | 17.00\% |
| Source of Change |  |  |  |  |
| Recognized Asset (Gains) and Losses |  |  |  |  |
| From 2010-11 | (39.8) |  | -1.45\% | -1.04\% |
| From Prior Years | 130.1 |  | 4.73\% | 3.39\% |
| Total |  | 90.3 | 3.28\% | 2.35\% |
| Actuarial (Gains) and Losses |  |  |  |  |
| Salary Increases Less than Expected | (18.0) |  | -0.65\% | 0.24\% |
| CPI Less than Expected | (23.5) |  | -0.85\% | -0.61\% |
| Active Member Demographic Experience | 3.5 |  | 0.13\% | 0.09\% |
| Retired Mortality Experience | 6.4 |  | 0.23\% | 0.17\% |
| All Other Experience | 4.5 |  | 0.16\% | 0.11\% |
| Total |  | (27.1) | -0.98\% | 0.00\% |
| Total Changes |  | 63.2 | 2.30\% | 2.35\% |
| Unfunded Actuarial Accrued Liability - June 30, 2011 | \$ | 742.0 | 26.98\% | 19.35\% |

* The June 30, 2010 Unfunded Actuarial Accrued Liability contribution rate as a percentage of pay is based on 2010 valuation pay. The June 30, 2011 Expected Unfunded Actuarial Accrued Liability as a percentage of pay is based on expected 2011 valuation pay based on actual 2010 valuation pay. Otherwise, actual 2011 valuation pay is used to express the contribution rate as a percentage of pay.


## Santa Barbara County Employees' <br> 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 have added more historical years to this exhibit this year. 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.

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

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

Exhibit 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) <br> Actuarial Value of Assets | (b) Non-Valuation Assets (NVA) | (c) Valuation Assets (a)-(b) | (d) <br> Valuation <br> Actuarial <br> Accrued <br> Liabilities (AAL) | (e) AAL with NVA (b) + (d) | (f) <br> Unfunded <br> Actuarial <br> Accrued <br> Liabilities (UAAL) <br> (d)-(c) $=(\mathrm{e})-(\mathrm{a})$ | (g) Prior Method Funded Ratio (a)/(e) | (h) <br> Current Method Funded Ratio (c)/(d) |  | (i) Covered Payroll | UAAL as a Percentage of Covered Payroll (f) (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January 1, 1995 | \$ 562,861 | $\mathrm{n} / \mathrm{a}$ | n/a | $\mathrm{n} / \mathrm{a}$ | \$ 643,453 | \$ 80,592 | 87.5\% | n/a | \$ | 140,571 | 57.3\% |
| January 1, 1996 | 624,823 | $\mathrm{n} / \mathrm{a}$ | n/a | n/a | 711,869 | 87,046 | 87.8\% | n/a |  | 154,120 | 56.5\% |
| January 1, 1997 | 693,301 | $\mathrm{n} / \mathrm{a}$ | n/a | $\mathrm{n} / \mathrm{a}$ | 758,772 | 65,471 | 91.4\% | n/a |  | 159,906 | 40.9\% |
| January 1, 1998 | 799,539 | $\mathrm{n} / \mathrm{a}$ | n/a | $\mathrm{n} / \mathrm{a}$ | 873,624 | 74,085 | 91.5\% | n/a |  | 171,602 | 43.2\% |
| January 1, 1999 | 938,295 | $\mathrm{n} / \mathrm{a}$ | n/a | n/a | 950,205 | 11,910 | 98.7\% | n/a |  | 184,291 | 6.5\% |
| January 1, 2000 | 1,068,357 | $\mathrm{n} / \mathrm{a}$ | 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 | 2,749,813 | 2,749,813 | 741,954 | 73.0\% | 73.0\% |  | 305,758 | 242.7\% |

* 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.

[^4]5003 SBC 38/35.003.SBC.10.2011 / NJC/DRW/nlo

## Santa Barbara County Employees' <br> Retirement System

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

| Year Ending* | Annual Required <br> Contribution <br> (ARC) | Actual Employer <br> Contributions | Percentage of <br> ARC Contributed |  |
| :--- | ---: | ---: | ---: | :--- |
| December 31, 1994 | $\$$ | 24,678 | $\$$ | 24,678 |
| 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 | $100 \%$ |  |
| * Information for years prior to 2007 was provided by prior actuaries. | $100 \%$ |  |  |  |
| ** January 1, 2003 through June 30, 2003 |  |  |  |  |

## Santa Barbara County Employees’ Retirement System

Exhibit 17: Solvency Test
(Dollars in Thousands)

| Actuarial <br> Valuation Date* | Valuation Assets |  | Actuarial Accrued Liabilities for |  |  |  |  |  | Portion of Actuarial Accrued Liabilities Covered by Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Active Member Contributions <br> (A) |  | Retirees and Beneficiaries <br> (B) |  | Active Members (Employer Financed Portion) <br> (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\% |

* 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.

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

35003 SBC 38/35.003.SBC.10.2011 / NJC/DRW/nlo

## Santa Barbara County Employees' Retirement System

## Appendix A: Actuarial Procedures and Assumptions



## Actuarial Cost Method

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.

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)

Records and Data

## Replacement of Terminated Members

Growth in<br>Membership

## Internal Revenue <br> Code Section 415 <br> Limit <br> Internal Revenue <br> Code Section <br> 401(a)(17)

Employer
Contributions

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.

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.

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.

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.

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.

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.

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

## Valuation of Assets

## Investment Earnings and Expenses

## Postretirement Benefit Increases

## Interest on Member Contributions

Future Salaries

Social Security Wage Base

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.

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 fiveyear smoothing valuation basis for all assets was adopted effective June 30, 2002.

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 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.

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 sixmonth period is the semi-annual yield of the five-year Treasury note as of the last business day of the interest crediting period.

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.

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) and have 10 years of service, 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 Plan 5 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 <br> Credit Upon <br> 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 prerecognition of potential costs included in the valuation. |

## Disability

## Sick Leave Service Credit Upon Retirement

## Vacation Cashout

After members attain age 50 (55 for General Plan 2 members) and have 10 years of service, 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:

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.
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.

Upon retirement, members are entitled to turn their sick leave balances into service credit for retirement benefits. Members are inited to one year of service credit. We apply a $1.34 \%$ load to the expected years of service at retirement for sick leave service

Any cashouts of vacation at retirement are recognized at that the valuation.

## Mortality - Other Than Disabled Members

Mortality - 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

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 Plan 5 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.

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.

## Santa Barbara County Employees' Retirement System

## Table A-1: Summary of Valuation Assumptions as of June 30, 2011

I. Economic assumptions
A. General wage increases
3.75\%
B. Investment earnings
7.75\%
C. Growth in membership
D. Postretirement benefit increases (varies by plan)
E. CPI inflation assumption
0.00
Plan COLA not greater than CPI assumption.
3.25\%
II. Demographic assumptions
A. Salary increases due to service
B. Retirement
C. Disability
D. Mortality for active members after termination and service retired members.*

Tables A-5 to A-6
Tables A-7 to A-12
Tables A-7 to A-12
Table A-2
Basis - RP-2000 Combined Healthy Mortality Table for respective sexes for general members projected to 2010 using scale AA, as adjusted:

| Class of Members | Age <br> Adjustment |
| :--- | :---: |
| General - males | -2 years <br> 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:
\(\left.$$
\begin{array}{ll}\begin{array}{ll}\text { General - males } \\
\text { General - females }\end{array}
$$ \& 0 years <br>

0 years\end{array}\right]\)| 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
H. Refund of contributions on vested termination

Tables A-7 to A-12
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 <br> 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 <br> 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' <br> Retirement System

## Table A-5: Annual Increase in Salary

 General| Years of Service | Due to Promotion and Longevity | Total <br> Annual Increase* |
| :---: | :---: | :---: |
| <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' <br> 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 |  |  |

This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. A-14 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## 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 |  |  |

This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. A-15 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

# 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 |  |  |

This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. A-18 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

# 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 |  |  |

This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. A-19 Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## 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, 2011. 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:

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 Plan 2:
General Plan 2:

## Safety Plan 4A \&

 General Plan 5A:Safety Plan 4B \& General Plan 5B:

APCD employees hired on or before July 3, 1995.
APCD employees hired after July 3, 1995.
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.

General employees hired before October 10, 1994 who did not elect to join General Plan 2, and Safety employees hired before October 10, 1994.
Employees hired on or after October 10, 1994.

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.

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

Contributions cease when general members are credited with 30 years of service in a contributory plan, provided they were members of SBCERS or a reciprocal system on March 7, 1973 and continuously thereafter. All safety members are eligible for the 30-year cessation of contributions, regardless of hire date.
Interest is credited to contributions semiannually on June 30 and December 31 at (31453, 31454, 31454.1)
(31625, 31625.2) an interest rate set by the Board of Retirement on amounts that have been on deposit for at least six months.

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.
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.
(31621.2,
31621.5)
(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,

Eligibility:

## General Plan members:

Plans 5A, 5B \& 5C: Age 50 with 5 years of service and 10 years of elapsed
(31672, 31672.1) time since membership; Any age with 30 years of service; or Age 70 regardless of service.

Plan 2:
Age 55 with 10 years of service.
APCD Plan members:
Age 50 with 5 years of service and 10 years of elapsed
(31672, time since membership;
Any age with 30 years of service; or
Age 70 regardless of service.

## 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.

## Final Compensation:

## General Plan members:

Plans 5A \& 5B: Monthly average of a member's highest
12 consecutive months of compensation.
Plan 5C: Monthly average of a member's highest
36 consecutive months of compensation.
Plan 2: Monthly average of a member's highest
36 consecutive months of compensation.
APCD Plan members:
Monthly average of a member's highest
12 consecutive months of compensation.

## Safety Plan members:

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.

## Compensation Limit:

The amount of compensation that is taken into account

## Monthly Allowance:

## General members:

Plans 5A, 5B \& 5C: $2 \% \times$ Final Compensation x General Age Factor x Years of Service.

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

$2 \% \times$ Final Compensation x APCD Age Factor x Years of

## Safety members:

3\% x Final Compensation x Safety Age Factor x
Years of service.
Age Factors are higher for Plans 6A and 6B

## SERVICE RETIREMENT ALLOWANCE (Continued)

## Age Factors by Plan



## Maximum Allowance:

The sum of the normal retirement allowance and the estimated PIA cannot exceed 70\% of Finalservice, and cannot exceed $80 \%$ of Final Compensationif service exceeds 35 years.

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

## Unmodified Retirement Allowance (Normal Form):

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

Eligible survivor includes certain domestic partners.

## 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.

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.

Option 3: $50 \%$ of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.

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

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

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.

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.

## Eligibility:

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

## 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.

## Supplemental Disability Allowance:

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

## 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 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.

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.

## 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:
(a) $90 \% \times 1 / 50 \times$ Final Compensation $x$ years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds $1 / 3$ of final compensation.
(b) $90 \% \times 1 / 50 \times$ Final Compensation $\times$ Projected Service, not to exceed $1 / 3$ of Final Compensation.

## Projected Service:

General Members: Age 62

APCD Members: Age 65
Safety Members: Age 55

## Supplemental Monthly Disability Retirement:

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

## 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).

## 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.
(31727.1,
31727.2,
31727.3)
(31727.1, 31727.2, 31727.3)

## 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. | $\begin{aligned} & \text { (31486.7, } \\ & 31787) \end{aligned}$ |
| :---: | :---: | :---: |
| Monthly Allowance: |  |  |
| General Plan 2: | A lump sum is payable to an eligible survivor equal to $1 / 12 x$ final 12 months' Salary x 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. | $\begin{aligned} & \text { (31855.11, } \\ & 31855.12) \end{aligned}$ |

NONSERVICE-CONNECTED DEATH BENEFITS
Eligibility:

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

## Monthly Allowance:

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

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 $60 \% \mathrm{x}$ the member's allowance. Otherwise, the benefit is a refund of contributions plus a lump sum equal to $1 / 12 \times$ final 12 months' Salary $x$ years of service (up to maximum of 6 years).

## 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.

## 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).

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).

## 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.
(31700, 31701,
(31700) 31702)
(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 $1 / 2$ of $1 \%$.

All Plans Members (and their beneficiaries) are
(excluding General Plan 2): limited to a maximum 3\% cost-of-living increase.
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 <br> percentage, the difference between the actu <br> CPI and the maximum cost-of-living increase <br> in any year is credited to the COLA Accumu <br> (COLA Bank). It may be used in future year |
| provide cost-of-living increases when the CP |  |
| below the applicable percentage. |  |

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

## Santa Barbara County Employees' Retirement System

Appendix C: Valuation Data and Schedules


Data on SBCERS membership as of June 30, 2011 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, 2011 for active members. Similar information is shown in Exhibit C-2 for deferred vested members and Exhibits C-3a and $\mathrm{C}-3 \mathrm{~b}$ 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' <br> Retirement System

Exhibit C-1a: SBCERS Membership - Active Members as of June 30, 2011

|  | Total <br> Number | Annual Compensation |  | Average $\qquad$ | Average <br> Monthly <br> Compensation | Average <br> Vesting <br> Service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Members |  |  |  |  |  |  |
| Plan 5A | 834 | \$ | 63,712,339 | 52.9 | \$6,366 | 21.9 |
| Plan 5B | 484 | \$ | 43,507,668 | 44.9 | \$7,491 | 7.0 |
| Plan 5C | 1,868 | \$ | 114,010,694 | 43.7 | \$5,086 | 7.8 |
| Plan 2 | 12 | \$ | 814,843 | 53.0 | \$5,659 | 24.5 |
| Total | 3,198 | \$ | 222,045,544 | 46.3 | \$5,786 | 11.4 |

## Safety Members

| Plan 4A | 97 | $\$$ | $10,938,331$ | 49.8 | $\$ 9,397$ | 20.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Plan 4B | 11 | $\$$ | $1,310,784$ | 47.7 | $\$ 9,930$ | 18.8 |
| Plan 4C | 339 | $\$$ | $27,098,020$ | 40.8 | $\$ 6,661$ | 9.8 |
| Plan 6A | 141 | $\$$ | $14,319,021$ |  | 48.6 | $\$ 8,463$ |
| Plan 6B | 316 | $\$$ | $27,359,176$ | 39.0 | $\$ 7,215$ | 22.0 |
|  | 904 | $\$$ | $81,025,333$ |  | 42.4 | $\$ 7,469$ |

## APCD Members

| Plan 1 | 22 | \$ | 1,851,933 | 55.8 | \$7,015 | 22.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan 2 | 24 | \$ | 1,605,476 | 40.0 | \$5,575 | 5.3 |
| Total | 46 | \$ | 3,457,409 | 47.6 | \$6,263 | 13.5 |
| Grand Total | 4,148 | \$ | 306,528,286 | 45.5 | \$6,158 | 11.7 |

## 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, 2004 | General | 3,559 |  | 199,365,000 | \$ | 56,017 | 5.8\% |
|  | Safety | 944 | \$ | 67,596,000 |  | 71,606 | 3.3\% |
|  | Total | 4,503 |  | 266,961,000 |  | 59,285 | 5.4\% |
| 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\% |

## Santa Barbara County Employees' Retirement System

Exhibit C-2: SBCERS Membership - Deferred Vested Members as of June 30, 2011

|  | Number | Average Age |
| :---: | :---: | :---: |
| General Members |  |  |
| Plan 5A | 288 | 51.8 |
| Plan 5B | 467 | 45.3 |
| Plan 5C | 179 | 41.5 |
| Plan 2 | 27 | 53.1 |
| Total | 961 | 46.8 |
| Safety Members |  |  |
| Plan 4A | 9 | 47.1 |
| Plan 4B | 61 | 41.9 |
| Plan 4C | 36 | 38.6 |
| Plan 4D | 8 | 38.1 |
| Plan 6A | 59 | 49.0 |
| Plan 6B | 15 | 36.3 |
| Total | 188 | 43.1 |
| APCD Members |  |  |
| Plan 1 | 13 | 50.3 |
| Plan 2 | 4 | 42.5 |
| Total | 17 | 48.5 |
| Grand Total | 1,166 | 46.2 |

## Santa Barbara County Employees' <br> Retirement System

Exhibit C-3a: SBCERS Membership - Retired Members as of June 30, 2011

| General Members | Number | Average Age | Monthly Allowance |  | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Plan 5A | 993 | 63.8 | \$ | 2,949,183 | \$ | 2,970 |
| Plan 5B | 163 | 64.1 | \$ | 214,845 |  | 1,318 |
| Plan 5C | 76 | 62.2 | \$ | 105,839 |  | 1,393 |
| Plan 2 | 45 | 70.5 | \$ | 28,058 |  | 624 |
| Other | 1,299 | 77.6 | \$ | 2,175,597 |  | 1,675 |
| Total | 2,576 | 70.8 | \$ | 5,473,522 | \$ | 2,125 |
| Safety Members |  |  |  |  |  |  |
| Plan 4A | 212 | 61.3 | \$ | 1,326,061 | \$ | 6,255 |
| Plan 4B | 81 | 62.1 | \$ | 317,221 | \$ | 3,916 |
| Plan 4C | 28 | 60.8 | \$ | 86,263 | \$ | 3,081 |
| Plan 4D | 2 | 56.0 | \$ | 6,661 | \$ | 3,331 |
| Plan 6A | 94 | 55.6 | \$ | 531,128 | \$ | 5,650 |
| Plan 6B | 5 | 57.4 | \$ | 12,674 | \$ | 2,535 |
| Other | 357 | 70.8 | \$ | 1,348,085 | \$ | 3,776 |
| Total | 779 | 65.0 | \$ | 3,628,093 | \$ | 4,657 |
| APCD Members |  |  |  |  |  |  |
| Plan 1 | 26 | 61.0 | \$ | 73,722 | \$ | 2,835 |
| Plan 2 | 6 | 62.7 | \$ | 9,594 | \$ | 1,599 |
| Total | 32 | 61.3 | \$ | 83,316 | \$ | 2,604 |
| Grand Total | 3,387 | 69.4 | \$ | 9,184,931 | \$ | 2,712 |

## Santa Barbara County Employees' Retirement System

Exhibit C-3b: SBCERS Membership - Retired Members as of June 30, 2011 Subtotaled by Class and Retirement Type

|  | Number | Monthly <br> Allowance |  | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| General Members |  |  |  |  |  |
| Healthy | 2,095 | \$ | 4,789,028 | \$ | 2,286 |
| Disabled | 126 | \$ | 240,937 | \$ | 1,912 |
| Beneficiaries | 355 | \$ | 443,557 | \$ | 1,249 |
| Total | 2,576 | \$ | 5,473,522 | \$ | 2,125 |
| Safety Members |  |  |  |  |  |
| Healthy | 579 | \$ | 3,025,017 | \$ | 5,225 |
| Disabled | 119 | \$ | 387,099 | \$ | 3,253 |
| Beneficiaries | 81 | \$ | 215,977 | \$ | 2,666 |
| Total | 779 | \$ | 3,628,093 | \$ | 4,657 |
| APCD Members |  |  |  |  |  |
| Healthy | 31 | \$ | 81,363 | \$ | 2,625 |
| Disabled | - | \$ | - | \$ | - |
| Beneficiaries | 1 | \$ | 1,954 | \$ | 1,954 |
| Total | 32 | \$ | 83,316 | \$ | 2,604 |
| Grand Total | 3,387 | \$ | 9,184,931 | \$ | 2,712 |

## Santa Barbara County Employees' Retirement System

Exhibit C-4: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2011 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 | 11 | 13 | 1 | - | - | - | - | - | - | 25 |
| 25-29 | 40 | 168 | 65 | - | - | - | - | - | - | 273 |
| 30-34 | 31 | 200 | 210 | 26 | - | - | - | - | - | 467 |
| 35-39 | 15 | 113 | 185 | 174 | 33 | 1 | - | - | - | 521 |
| 40-44 | 19 | 104 | 160 | 205 | 110 | 34 | 1 | - | - | 633 |
| 45-49 | 11 | 97 | 120 | 153 | 104 | 106 | 35 | 1 | - | 627 |
| 50-54 | 13 | 70 | 106 | 136 | 99 | 106 | 85 | 36 | - | 651 |
| 55-59 | 13 | 57 | 94 | 103 | 80 | 93 | 63 | 46 | 4 | 553 |
| 60-64 | 3 | 33 | 65 | 64 | 43 | 39 | 25 | 29 | 6 | 307 |
| 65 \& Over | - | 11 | 28 | 22 | 13 | 7 | 5 | 1 | 4 | 91 |
| Total Count | 156 | 866 | 1,034 | 883 | 482 | 386 | 214 | 113 | 14 | 4,148 |


| 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 | 21,601 | 55,136 | 47,872 | - | - | - | - | - | - | 40,090 |
| 25-29 | 35,475 | 59,572 | 64,721 | - | - | - | - | - | - | 57,267 |
| 30-34 | 35,088 | 64,702 | 66,987 | 72,647 | - | - | - | - | - | 64,206 |
| 35-39 | 41,618 | 66,676 | 71,845 | 74,929 | 72,232 | 48,534 | - | - | - | 70,863 |
| 40-44 | 37,434 | 76,810 | 74,663 | 77,272 | 74,190 | 79,949 | 72,819 | - | - | 74,942 |
| 45-49 | 53,140 | 76,616 | 71,927 | 75,971 | 75,740 | 83,138 | 79,092 | 72,964 | - | 76,239 |
| 50-54 | 53,950 | 78,633 | 72,412 | 73,261 | 76,108 | 83,281 | 99,364 | 82,804 | - | 79,315 |
| 55-59 | 60,021 | 87,416 | 76,840 | 73,157 | 84,768 | 83,269 | 85,294 | 90,437 | 77,218 | 81,174 |
| 60-64 | 23,780 | 82,950 | 66,779 | 78,211 | 77,946 | 74,406 | 90,786 | 88,334 | 103,046 | 77,713 |
| 65 \& Over | - | 104,757 | 71,924 | 86,830 | 79,179 | 68,643 | 73,154 | 214,033 | 50,167 | 80,953 |
| Avg. Annual Compensation | 39,855 | 70,435 | 71,029 | 75,657 | 77,010 | 81,693 | 90,168 | 88,405 | 80,558 | 73,898 |

[^5]Sbc0258 Appendices.doc
35003 SBC 38 / 35.003.SBC.10.2011 / DRW/NJC/nlo

## Santa Barbara County Employees' Retirement System

Exhibit C-4a: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2011 General Members

| Count | Years of Service |  |  |  |  |  |  |  |  | Total Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 0-1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 8 | 11 | 1 | - | - | - | - | - | - | 20 |
| 25-29 | 32 | 129 | 42 | - | - | - | - | - | - | 203 |
| 30-34 | 28 | 148 | 137 | 19 | - | - | - | - | - | 332 |
| 35-39 | 14 | 92 | 131 | 106 | 21 | 1 | - | - | - | 365 |
| 40-44 | 17 | 84 | 116 | 135 | 68 | 20 | 1 | - | - | 441 |
| 45-49 | 11 | 86 | 100 | 117 | 80 | 61 | 27 | 1 | - | 483 |
| 50-54 | 12 | 62 | 99 | 121 | 76 | 80 | 49 | 27 | - | 526 |
| 55-59 | 13 | 47 | 83 | 89 | 66 | 75 | 51 | 37 | 4 | 465 |
| 60-64 | 3 | 31 | 61 | 58 | 39 | 35 | 23 | 26 | 4 | 280 |
| 65 \& Over | - | 8 | 28 | 19 | 13 | 6 | 4 | 1 | 4 | 83 |
| Total Count | 138 | 698 | 798 | 664 | 363 | 278 | 155 | 92 | 12 | 3,198 |


| Compensation |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years of Service |  |  |  |  |  |  |  |  |  |
| Age | 0-1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 17,011 | 50,870 | 47,872 | - | - | - | - | - | - | 37,176 |
| 25-29 | 33,224 | 54,480 | 54,564 | - | - | - | - | - | - | 51,147 |
| 30-34 | 32,890 | 60,054 | 58,747 | 65,786 | - | - | - | - | - | 57,552 |
| 35-39 | 42,847 | 62,900 | 65,567 | 65,813 | 60,065 | 48,534 | - | - | - | 63,731 |
| 40-44 | 33,655 | 76,414 | 68,858 | 70,746 | 65,733 | 69,164 | 72,819 | - | - | 69,059 |
| 45-49 | 53,140 | 75,841 | 70,102 | 72,511 | 69,656 | 72,339 | 73,216 | 72,964 | - | 71,710 |
| 50-54 | 54,284 | 73,480 | 72,686 | 71,784 | 73,938 | 76,408 | 85,507 | 70,372 | - | 73,975 |
| 55-59 | 60,021 | 83,706 | 74,993 | 71,965 | 81,850 | 81,695 | 79,553 | 85,380 | 77,218 | 78,275 |
| 60-64 | 23,780 | 83,350 | 65,330 | 78,835 | 77,886 | 73,414 | 90,431 | 86,859 | 73,906 | 76,620 |
| 65 \& Over |  | 114,968 | 71,924 | 86,665 | 79,179 | 66,198 | 68,823 | 214,033 | 50,167 | 80,684 |
| Avg. Annual Compencation | 38,984 | 67,617 | 66,910 | 71,642 | 72,705 | 75,723 | 81,625 | 82,657 | 67,097 | 69,433 |

## Santa Barbara County Employees' Retirement System

Exhibit C-4b: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2011 Safety Members

| Count | Years of Service |  |  |  |  |  |  |  |  | Total Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 0-1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 2 | 2 | - | - | - | - | - | - | - | 4 |
| 25-29 | 6 | 36 | 22 | - | - | - | - | - | - | 64 |
| 30-34 | 2 | 49 | 73 | 7 | - | - | - | - | - | 131 |
| 35-39 | - | 20 | 54 | 68 | 11 | - | - | - | - | 153 |
| 40-44 | 2 | 19 | 44 | 69 | 42 | 14 | - | - | - | 190 |
| 45-49 | - | 11 | 19 | 35 | 24 | 42 | 8 | - | - | 139 |
| 50-54 | - | 8 | 7 | 15 | 20 | 24 | 35 | 9 | - | 118 |
| 55-59 | - | 10 | 11 | 10 | 13 | 14 | 11 | 9 | - | 78 |
| 60-64 | - | 1 | 4 | 5 | 4 | 1 | 2 | 2 | 2 | 21 |
| 65 \& Over | - | 3 | - | 3 | - | - | - | - | - | 6 |
| Total Count | 12 | 159 | 234 | 212 | 114 | 95 | 56 | 20 | 2 | 904 |

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 | 39,159 | 78,598 | - | - | - | - | - | - | - | 58,878 |
| 25-29 | 48,198 | 77,620 | 83,076 | - | - | - | - | - | - | 76,737 |
| 30-34 | 71,312 | 78,627 | 82,449 | 91,270 | - | - | - | - | - | 81,321 |
| 35-39 | - | 83,951 | 87,076 | 89,138 | 91,432 | - | - | - | - | 87,897 |
| 40-44 | 69,557 | 78,213 | 89,970 | 89,549 | 87,881 | 95,356 | - | - | - | 88,362 |
| 45-49 | - | 82,678 | 80,441 | 88,531 | 96,020 | 99,655 | 98,925 | - | - | 92,215 |
| 50-54 | - | 118,571 | 68,546 | 85,169 | 82,523 | 105,708 | 118,302 | 120,098 | - | 102,668 |
| 55-59 | - | 104,852 | 90,777 | 82,884 | 97,628 | 92,231 | 110,257 | 111,227 | - | 98,079 |
| 60-64 | - | 62,403 | 88,874 | 70,798 | 78,535 | 98,154 | 94,876 | 106,517 | 161,326 | 90,934 |
| 65 \& Over | - | 77,528 | - | 87,877 | - | - | - | - | - | 82,703 |
| Avg. Annual Compensation | 54,104 | 82,835 | 84,912 | 88,216 | 89,781 | 99,441 | 113,117 | 114,748 | 161,326 | 89,630 |

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## Santa Barbara County Employees’ <br> Retirement System

Exhibit C-4c: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2011
$\quad$ APCD Members

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


| Compensation |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 0-1 | 1-4 | 5-9 | 10-14 | s of Service | 20-24 | 25-29 | 30-34 | 35\&Over | Average Comp. |
|  |  |  |  |  |  |  |  |  |  |  |
| Under 25 | 23,204 | - | - | - | - | - | - | - | - | 23,204 |
| 25-29 | 33,318 | 61,941 | 87,506 | - | - | - | - | - | - | 56,661 |
| 30-34 | 24,209 | 66,564 | - | - | - | - | - | - | - | 55,975 |
| 35-39 | 24,412 | 68,533 | - | - | 116,556 | - | - | - | - | 69,834 |
| 40-44 | - | 83,469 | - | 111,219 | - | - | - | - | - | 97,344 |
| 45-49 | - | - | 92,638 | 41,173 | - | 71,464 | - | - | - | 69,640 |
| 50-54 | 49,941 | - | - | - | 88,302 | 89,084 | 115,549 | - | - | 86,937 |
| 55-59 | - | - | - | 75,377 | 110,202 | 81,422 | 103,517 | - | - | 84,091 |
| 60-64 | - | 91,095 | - | 79,036 | - | 78,073 | - | 90,329 | - | 82,446 |
| 65 \& Over | - | - | - | - | - | 83,313 | 90,481 | - | - | 86,897 |
| Avg. Annual Compensation | 31,400 | 69,846 | 90,072 | 76,134 | 98,333 | 79,675 | 103,182 | 90,329 | - | 75,161 |

- Milliman $\begin{aligned} & \text { This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to } \mathrm{C} \text {-10 } \\ & \text { other parties who receive this work. }\end{aligned}$

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## Santa Barbara County Employees'

Retirement System

## Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2011 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 | 4 | 4 | - | 11 | \$ | 931 |
| 35-39 | - | - | - | - | - | 1 | - | - | 1 |  | 3,632 |
| 40-44 | - | - | - | 1 | 4 | 3 | 2 | 1 | 11 |  | 1,955 |
| 45-49 | - | - | - | 1 | 1 | 8 | 10 | 6 | 26 |  | 2,402 |
| 50-54 | - | - | - | - | 13 | 11 | 92 | 49 | 165 |  | 2,214 |
| 55-59 | - | 1 | 3 | 1 | 11 | 58 | 221 | 77 | 372 |  | 2,978 |
| 60-64 | 4 | 2 | 6 | 4 | 53 | 145 | 300 | 120 | 634 |  | 3,351 |
| 65-69 | 10 | 9 | 6 | 24 | 133 | 221 | 225 | 54 | 682 |  | 3,360 |
| 70-74 | 18 | 10 | 15 | 69 | 117 | 151 | 80 | 13 | 473 |  | 2,723 |
| 75-79 | 12 | 13 | 42 | 62 | 117 | 56 | 29 | 8 | 339 |  | 2,182 |
| 80-84 | 22 | 38 | 49 | 84 | 37 | 38 | 23 | 8 | 299 |  | 1,908 |
| 85-89 | 47 | 31 | 63 | 29 | 14 | 18 | 14 | 6 | 222 |  | 1,689 |
| 90-94 | 33 | 36 | 14 | 3 | 3 | 13 | 5 | 4 | 111 |  | 1,535 |
| 95-99 | 24 | 6 | 2 | - | 2 | - | 1 | - | 35 |  | 1,351 |
| 100 \& Over | 4 | - | - | - | 1 | - | 1 | - | 6 |  | 1,209 |
| Total Count | 174 | 146 | 200 | 278 | 509 | 727 | 1,007 | 346 | 3,387 |  |  |
| Avg Monthly <br> Benefit | \$ 1,425 | \$ 1,819 | \$ 2,207 | \$ 2,372 | \$ 2,454 | \$ 2,869 | \$ 3,123 | \$ 3,153 |  | \$ | 2,712 |

Benefit

Milliman This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to C - 11 other parties who receive this work

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## Santa Barbara County Employees’ <br> Retirement System

Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2011 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 | 4 | 3 | - | 10 | \$ | 755 |
| 35-39 | - | - | - | - | - | - | - | - | - |  | - |
| 40-44 | - | - | - | 1 | 2 | 2 | 2 | - | 7 |  | 1,273 |
| 45-49 | - | - | - | 1 | 1 | 4 | 2 | 2 | 10 |  | 1,331 |
| 50-54 | - | - | - | - | 8 | 7 | 48 | 25 | 88 |  | 1,202 |
| 55-59 | - | - | 1 | 1 | 9 | 40 | 138 | 47 | 236 |  | 1,520 |
| 60-64 | 2 | 1 | 4 | 3 | 42 | 88 | 235 | 106 | 481 |  | 2,774 |
| 65-69 | - | 2 | 3 | 12 | 74 | 145 | 198 | 48 | 482 |  | 2,641 |
| 70-74 | 3 | 1 | 10 | 49 | 76 | 130 | 70 | 12 | 351 |  | 2,243 |
| 75-79 | 6 | 11 | 29 | 47 | 104 | 52 | 26 | 7 | 282 |  | 1,925 |
| 80-84 | 16 | 32 | 46 | 82 | 34 | 34 | 21 | 7 | 272 |  | 1,804 |
| 85-89 | 39 | 31 | 62 | 28 | 14 | 17 | 14 | 6 | 211 |  | 1,654 |
| 90-94 | 30 | 35 | 14 | 3 | 3 | 13 | 5 | 4 | 107 |  | 1,424 |
| 95-99 | 22 | 6 | 2 | - | 2 | - | 1 | - | 33 |  | 1,300 |
| 100 \& Over | 4 | - | - | - | 1 | - | 1 | - | 6 |  | 1,209 |
| Total Count | 122 | 119 | 171 | 227 | 373 | 536 | 764 | 264 | 2,576 |  |  |
| Avg Monthly Benefit | \$ 1,094 | \$ 1,586 | \$ 1,972 | \$ 1,964 | \$ 1,680 | \$ 2,126 | \$ 2,480 | \$ 2,678 |  | \$ | 2,125 |

[^7]
## Santa Barbara County Employees' <br> Retirement System

Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2011 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 | \$ | 2,685 |
| 35-39 | - | - | - | - | - | 1 | - | - | 1 | \$ | 3,632 |
| 40-44 | - | - | - | - | 2 | 1 | - | 1 | 4 | \$ | 3,147 |
| 45-49 | - | - | - | - | - | 4 | 8 | 4 | 16 | \$ | 3,071 |
| 50-54 | - | - | - | - | 5 | 4 | 40 | 21 | 70 | \$ | 3,499 |
| 55-59 | - | 1 | 2 | - | 2 | 18 | 78 | 28 | 129 | \$ | 5,684 |
| 60-64 | 2 | 1 | 2 | 1 | 11 | 53 | 63 | 12 | 145 | \$ | 5,280 |
| 65-69 | 10 | 7 | 3 | 12 | 59 | 76 | 23 | 5 | 195 | \$ | 5,158 |
| 70-74 | 15 | 9 | 5 | 20 | 41 | 18 | 8 | 1 | 117 | \$ | 4,149 |
| 75-79 | 6 | 2 | 13 | 15 | 13 | 4 | 3 | 1 | 57 | \$ | 3,452 |
| 80-84 | 6 | 6 | 3 | 2 | 3 | 4 | 2 | 1 | 27 | \$ | 2,955 |
| 85-89 | 8 | - | 1 | 1 | - | 1 | - | - | 11 | \$ | 2,376 |
| 90-94 | 3 | 1 | - | - | - | - | - | - | 4 | \$ | 4,496 |
| 95-99 | 2 | - | - | - | - | - | - | - | 2 | \$ | 2,192 |
| 100 \& Over | - | - | - | - | - | - | - | - | - | \$ | - |
| Total Count | 52 | 27 | 29 | 51 | 136 | 184 | 226 | 74 | 779 |  |  |
| Avg Monthly Benefit | \$ 2,203 | \$ 2,844 | \$ 3,593 | \$ 4,186 | \$ 4,577 | \$ 5,046 | \$ 5,326 | \$ 4,923 |  | \$ | 4,657 |

[^8]
## Santa Barbara County Employees' <br> Retirement System

Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2011 APCD Members

| Age | Benefit Effective Date |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average <br> Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | e-1980 |  | 980-84 |  | 1985-89 |  | 1990-94 |  | 1995-99 |  | 2000-04 |  | 2005-09 | 2010-14 |  |  |  |
| Under 35 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - | \$ | - |
| 35-39 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 40-44 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 45-49 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 50-54 |  | - |  | - |  | - |  | - |  | - |  | - |  | 4 | 3 | 7 |  | 2,070 |
| 55-59 |  | - |  | - |  | - |  | - |  | - |  | - |  | 5 | 2 | 7 |  | 2,275 |
| 60-64 |  | - |  | - |  | - |  | - |  | - |  | 4 |  | 2 | 2 | 8 |  | 3,121 |
| 65-69 |  | - |  | - |  | - |  | - |  | - |  | - |  | 4 | 1 | 5 |  | 2,524 |
| 70-74 |  | - |  | - |  | - |  | - |  | - |  | 3 |  | 2 | - | 5 |  | 3,062 |
| 75-79 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 80-84 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 85-89 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 90-94 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 95-99 |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| 100 \& Over |  | - |  | - |  | - |  | - |  | - |  | - |  | - | - | - |  | - |
| Total Count |  | - |  | - |  | - |  | - |  | - |  | 7 |  | 17 | 8 | 32 |  |  |
| Avg Monthly Benefit | \$ | - | \$ | \$ - | \$ | \$ | \$ | \$ - | \$ | \$ | \$ | \$ 2,519 | \$ | \$ 2,715 | \$ 2,440 |  | \$ | 2,604 |

[^9]
## Santa Barbara County Employees' <br> Retirement System

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

|  | Actives | Vested Terms | Terms with Contributions on Deposit | Retirees* | Disabilities | Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Record Count as of July 1, 2010 | 4,228 | 902 | 279 | 2,637 | 248 | 433 | 8,727 |
| New Members | 140 |  |  |  |  |  | 140 |
| Rehired Non-Vested Members | 19 |  | (7) |  |  |  | 12 |
| Rehired Vested Members | 4 | (3) |  | (1) |  |  | - |
| Non-Vested Terms - Contributions on Deposit | (48) |  | 48 |  |  |  | - |
| Vested Terms | (74) | 76 | (2) |  |  |  | - |
| Service Retirements | (68) | (62) |  | 130 |  |  | - |
| Retirement Disabilities | (1) | (3) |  | (2) | 6 |  | - |
| New Beneficiaries | - |  |  |  |  | 35 | 35 |
| Deaths | (1) |  | (1) | (81) | (10) | (31) | (124) |
| Refund of Contributions | (51) | (19) | (53) |  |  |  | (123) |
| Other Status Transfers |  | - |  |  |  |  | - |
| Data Adjustments |  | (1) | 12 | 22 | 1 |  | 34 |
| Subtotal of Net Changes from 2010 to 2011 | (80) | (12) | (3) | 68 | (3) | 4 | (26) |
| Total Record Count as of July 1, 2011 | 4,148 | 890 | 276 | 2,705 | 245 | 437 | 8,701 |

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# 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, 2010 Actuarial Valuation
Member Contribution Rates

|  | General |  |  | APCD |  | Safety |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Entry Age | 5A | 5B | 5C | 1 | 2 | 4A \& 6A | 4B | 4 C \& 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) |  |  |  |  |  |  |  |

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# Santa Barbara County Employees' Retirement System 

Appendix E: Glossary


## Accrued Benefit

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.

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

## Actuarial Assumptions

## Actuarial Gain (Loss)

## Actuarial Present Value

## Actuarial

Valuation

## Actuarial Value of Assets

## Actuarially <br> Equivalent <br> Amortization <br> Payment

COLA

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.

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.

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.

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.

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.

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.

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

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 <br> Actuarial Accrued Liability | The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets. |
| Valuation Date | The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year. |
| Valuation Reserves | All reserves excluding the Non-Valuation Reserves. |


[^0]:    Prior to 2007, Actuarial Accrued Liability (AAL) was the sum of actuarial accrued liability calculated for the valuation and the non-valuation assets.

    Prior to 2007, Funded Ratio is measured against Actuarial Value of Assets (AVA), which includes Non-Valuation Assets.
    Effective in 2007, Funded Ratio is measured against Valuation Assets.
    Effective in 2007, the Special Allowance Reserve was added to the Valuation
    Reserves. Liabilities also include Special Allowances.

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[^2]:    * Estimated payroll based upon the assumption of 3.75\% annual payroll growth.
    ** Estimated contributions shown for illustrative purposes. Actual contributions will vary depending on actual payroll and timing.
    ***Estimated contribution for fiscal year beginning July 1, 2011 based on salary information as of June 30, 2011.

[^3]:    * Estimated payroll based upon the assumption of 3.75\% annual payroll growth.
    ** Estimated contributions shown for illustrative purposes. Actual contributions will vary depending on actual payroll and timing.
    *** Estimated contribution for fiscal year beginning July 1, 2011 based on salary information as of June 30, 2011.

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[^5]:    L'Milliman
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[^6]:    Milliman $\begin{aligned} & \text { This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to } \\ & \text { other parties who receive this work. }\end{aligned}$

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[^10]:    Milliman $\begin{aligned} & \text { This work product was prepared solely for SBCERS. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to } \mathrm{C}-15 \\ & \text { other parties who receive this work. }\end{aligned}$

