ACTUARIAL VALUATION June 30, 2011



Ву

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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:

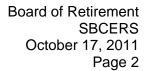
As requested, we performed an actuarial valuation of the Santa Barbara County Employees' Retirement System (SBCERS) as of June 30, 2011 for determining contributions for the fiscal year beginning July 1, 2012. Our findings are set forth in this actuary's report. This report reflects the benefit provisions 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 exception(s):

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

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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,

Nick J. Collier, ASA, EA, MAAA

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Consulting Actuary

NJC/DRW/nlo

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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.

Overview (continued)

• 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.

Employer Contribution Rate

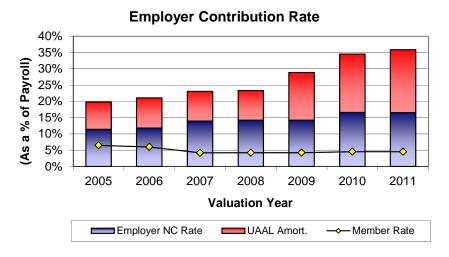
Under the Board's current funding objectives, the calculated Employer contribution rate for the fiscal year beginning July 1, 2012 is 35.87% of payroll. This is equal to the payment of the Employer Normal Cost rate plus a 17-year amortization of the UAAL.

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)

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.



Comparison with Last Year

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 Contribution Rate	Funded Ratio
June 30, 2010 Actuarial Valuation	34.48%	73.7%
Expected Year-to-Year Change	-0.90%	1.6%
Expected June 30, 2011 Actuarial Valuation	33.58%	75.3%
Recognized Asset (Gain)/Loss From 2010-11 From Prior Years Salary / Payroll Variation CPI Less than Expected Active Member Demographic Experience Retired Mortality Experience All Other Experience Total Experience	-1.04% 3.39% 0.24% -0.61% 0.09% 0.17% 0.05% 2.29%	1.4% -4.7% 0.6% 0.9% -0.1% -0.2% -0.2% -2.3%
Actual June 30, 2011 Actuarial Valuation	35.87%	73.0%

Benefit Provision Changes

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

Member Contribution Rates

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

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.

Funding Progress

There were several factors that had an impact on the UAAL. These factors are shown in detail in Exhibit 14 at the end of Section 6. The major change for this valuation was the 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)

	Market	Actuarial		١	Non	Α	ctuarial	
Valuation	Value of	Value of	Valuation	Val	uation	Α	ccrued	Funded
<u>Year</u>	<u>Assets</u>	<u>Assets</u>	<u>Assets</u>	As	<u>sets</u>	L	<u>iability</u>	<u>Ratio</u>
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%

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.



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

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.

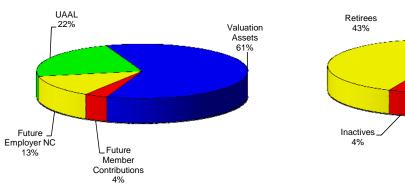
Actuarial Balance Sheet

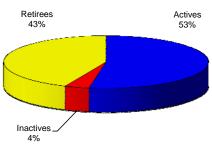
The first step in the valuation process is to compare the total actuarial assets of SBCERS with its total liabilities for all Plans. In this analysis, SBCERS' resources equal the Valuation Assets plus the expected future contributions by both the employers and members. Liabilities reflect benefits already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

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

Resources

Present Value of Future Benefits





Member Information

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.

Summary Valuation Results

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.



Exhibit 1: Summary of Significant Valuation Results

			June 30, 2011	J	lune 30, 2010	Relative Change
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	(1.1)%
	E. Total		8,701		8,727	(0.3)%
II.	Annualized Payroll as of the Valuation Date					
	A. Annual Total (\$thousands)	\$	305,758	\$	306,963	(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%
	B. Retired Members	\$ \$	1,432,333	\$	1,375,289	4.1%
	C. Vested Terminated Members		127,383	\$	108,439	17.5%
	D. Total	\$	2,749,814	\$	2,616,147	5.1%
V.	Assets (\$thousands)					
	A. Market Value of Fund	\$	1,971,903	\$	1,609,449	22.5%
	B. Return on Market Value Basis*	•	21.09%		13.43%	4.00/
	C. Valuation Assets D. Return on Valuation Assets*	\$	2,007,859 3.09%		1,927,229 13.16%	4.2%
	* May differ from return reported in CAFR due to and treatment of expenses.	o ass		tributio		ayments
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		21.04%		21.12%	(0.4)%
	B. Member Contributions		(4.52)%		(4.54)%	(0.4)%
	C. Employer Normal Cost		16.52%		16.58%	(0.4)%
	D. UAAL Amortization		19.35%		17.90%	8.1%
	E. Total Employer Rate		35.87%		34.48%	4.0%

Exhibit 2: Summary of Valuation Results

	06/30/2010 General	06/30/2011 General	Percent Change	06/30/2010 Safety	06/30/2011 Safety	Percent Change	06/30/2010 APCD	06/30/2011 APCD	Percent Change	06/30/2010 Total	06/30/2011 Total	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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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.



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

	_	Actuaria	l Value
Valuation Date	Market Value of Total Assets	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

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

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

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

Actuarial Asset Method

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

The assumed rate of return 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 Method (continued)

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.

Actuarial Value of Assets

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 and Non-Valuation Assets

Valuation Assets are the AVA, less the value of any reserves which have been set aside for current liabilities and special benefits that are to be funded outside of the actuarially determined contribution rates. As of June 30, 2011, the entire AVA is included for valuation purposes. In valuations prior to 2009, certain non-valuation assets were excluded from the Valuation Assets.

Allocation of Assets

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

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

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

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

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

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		135,758,382		71,502,381
Securities Purchases Pending		139,302,963		46,411,500
Benefits Payable		7,110,055		6,907,423
Accounts Payable		292,264		380,522
Total Liabilities		282,463,664		125,201,826
Net Assets Held in Trust for Pension Benefits	\$	1,971,902,920	\$	1,609,448,698
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Statement of Changes in Plan Net Assets For the Years Ended June 30, 2010 and 2011 Exhibit 4:

	June 30, 2011	J	une 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	\$ 106,661,513	\$	97,813,216
Member Withdrawals	1,476,583		1,319,448
Administrative Expenses	4,112,150		4,045,903
TOTAL DEDUCTIONS	\$ 112,250,246	\$	103,178,567
NET INCREASE	\$ 362,454,222	\$	187,929,516
Assets Held in Trust - Beginning of Year	\$ 1,609,448,698	\$	1,421,519,182
Assets Held in Trust - End of Year	\$ 1,971,902,920	\$	1,609,448,698

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

	2011	2010
Member Deposit Reserve	\$ 165,774,090	\$ 162,431,794
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.

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

Period Ending	Contributions and Miscellaneous Revenue	Benefits*	Expected Investment Return	Actual Investment Return	Earnings Gain or (Loss)	Deferred Portion of Gain/Loss	Deferred Investment Return	Expected Market Value	Actual Market Value
06/30/2008	84,940,244	86,228,890	155,026,096	(136,224,090)	(291,250,186)	20%	(58,250,037)	2,054,198,744	1,762,948,558
06/30/2009	86,985,601	90,790,672	143,701,399	(337,624,304)	(481,325,703)	40%	(192,530,281)	1,902,844,886	1,421,519,183
06/30/2010	96,296,127	99,132,664	115,882,504	190,766,052	74,883,548	60%	44,930,129	1,534,565,150	1,609,448,698
12/31/2010	47,136,779	53,208,423	61,088,099	249,009,301	187,921,202	80%	150,336,962	1,664,465,153	1,852,386,355
06/30/2011	81,770,032	54,929,673	70,946,216	92,676,206	21,729,990	90%	19,556,991	1,950,172,930	1,971,902,920
1. Total							\$ (35,956,236)		
2. Market Va	alue of Assets as of Jun	e 30, 2011					\$ 1,971,902,920		
3. Preliminar	ry Actuarial Value of As	sets as of June 30	, 2011 = (2) - (1)				\$ 2,007,859,156		
4. Corridor Limit a. 80% of Net Market Value b. 120% of Net Market Value 1,577,522,336 2,366,283,504									
5. Actuarial V	alue of Assets After Co	orridor as of June 3	30, 2011				\$ 2,007,859,156		

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

Exhibit 7a: Development of Valuation Assets

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

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%

^{*} Based on All Urban Consumers - U.S. City Average, June indices.

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 x 7)	\$	1,182,395	\$	798,048	\$	27,416	\$	2,007,859

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

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.

Actuarial Balance Sheet – Liabilities

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

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

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

Exhibit 9: Actuarial Balance Sheet – June 30, 2011

(Dollars in Thousands)

	Resources			
	<u>General</u>	<u>Safety</u>	<u>APCD</u>	<u>Total</u>
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:				
a) Normal Cost	253,530	170,103	3,427	427,060
b) Unfunded Actuarial Accrued Liability	457,950	275,221	8,784	741,955
Total Resources	\$ 1,970,002	\$ 1,282,603	\$ 41,212	3,293,817

	Liabilities			
	<u>General</u>	<u>Safety</u>	<u>APCD</u>	<u>Total</u>
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	<u>3,338</u>	<u>287</u>	<u>80</u>	<u>3,705</u>
- 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

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

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

Actuarial Cost Method

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

- A Normal Cost amount; and
- Whatever amount is left over, which is used to amortize what is called the Unfunded Actuarial Accrued Liability (UAAL).

Normal Cost

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

The Normal Cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Under the entry age actuarial cost method, the Normal Cost contribution rate maintains the funding of benefits as a level percentage of pay.

Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid. If experience follows the actuarial assumptions precisely and if the employers contributed the Normal Cost, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

By applying the Normal Cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future Normal Cost contributions. Future contributions are expected to be made by both the Members and the Employers.

Normal Cost (continued)

The member contribution rates are determined based upon requirements established in bargaining agreements between the employers and employees and the actuarial assumptions. Based on these member contribution rates, we determine the present value of future member contributions. We subtract that value from the total future Normal Cost contributions expected, based on the entry age cost method. The remaining difference is the Employer's portion of the future Normal Cost contributions.

In Exhibit 10, we report the Total Normal Cost Contribution Rate for each class in total and then reduce the total by the members' average contribution rates to develop the Employer's Net Normal Cost Contribution Rate as of June 30, 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.

Exhibit 10: Calculated Employer Normal Cost Contribution Rates – June 30, 2011 All Members

	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 of 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)%

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 Percentage of Payroll (C) - (D)	(0.11)%	(0.24)%	(0.14)%	0.11%	(0.14)%

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

			Safety	,		
	4A	4B	4C	6A	6B	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%

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

The difference between the present value of all future obligations and the present value of the future Normal Cost contributions is referred to as the Actuarial Accrued Liability (AAL). The results for SBCERS for all classes are summarized in Exhibit 11.

Unfunded Actuarial Accrued Liability

The portion allocated to service already rendered or accrued is called the AAL. The difference between the AAL and the Valuation Assets is called the Unfunded Actuarial Accrued Liability (UAAL). If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses.

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

Exhibit 11 shows how the UAAL was derived for each classification. In the Actuarial Balance sheet, the total liabilities for all future benefits must be equal to the current and future assets.

Funding Adequacy

A key consideration in determining the adequacy of the funding of SBCERS is how the UAAL is being funded. If the UAAL amount is positive (that is, the AAL to be funded is greater than the Valuation Assets), then the UAAL is amortized. Under the current funding method, the UAAL is amortized over an open/rolling 17-year period.

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

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

Analysis of Change in UAAL

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

The 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.

Exhibit 11: Calculated UAAL Amount by Class - June 30, 2011 **All Members**

(Dollars in Millions)

				2011	2010	
	General	Safety	APCD	All	All	Percent
				Plans	Plans	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	<u>32</u>	<u>3,387</u>	<u>3,318</u>	2.1%
Total Number	6,735	1,871	95	8,701	8,727	-0.3%
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)%

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

	General	Safety	APCD	All
				Plans
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	<u>32</u>	<u>3,387</u>
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.

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
_	AZ Mara Arradi adia a Fartar		0.070757
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%
	Tatal Cafata IIAAI	Φ	075 000 074
Н.	Total Safety UAAL		275,220,671
I.	Total Safety UAAL less Extra Plan 6 Layer [H-C]		260,734,571
J.	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%
М.	UAAL Rate - Plan 4 [L]		25.82%
N.	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.

Exhibit 12: UAAL by Employer - June 30, 2011

	Total	Santa Barbara County	Carpinter Summerla FPD	nd	Santa Maria Cemetery	C	Goleta Cemetery	Dak Hill emetery	SE	BCAG	tummer- land Sanitary	arpinteria emetery	APCD	\ C	County ector ontrol 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	\$ 53,5	6 \$	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	39,1	9	2,577		1,396	400		8,998	 1,655	573	27,416		968	72,270
Unfunded Actuarial Accrued Liability	741,955	685,803	14,4	7	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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Section 5: **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	Code Section	Member Contribution Provides Average Annuity of	FAS Period
General 5A	31621.5	1/200th of FAS* at age 60	1 voor
General 5B	31621.2	1/100th of FAS* at age 60	1 year 1 year
General 5C	31621.5	1/200th of FAS* at age 60	3 years
General 2	NA NA	NA	3 years
APCD 1	31621.6 & 31581.1	1/2 x 1/100th of FAS* at age 55	1 year
APCD 2	31621.6	1/100th of FAS* at age 55	1 year
Safety 4A & 6A Safety 4B Safety 4C & 6B		1/2 x 3/200th of FAS* at age 55 3/200th of FAS* at age 55 1/2 x 3/200th of FAS* at age 55	1 year 1 year 3 years

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

Basic Contributions

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

- 1. Expected rate of return on assets
- 2. Individual salary increase rate (wage growth + merit)
- 3. 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.

Safety Member Contributions

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

Member Contribution Rates

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

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.



Employer Contributions Section 6:



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.

Calculated **Contribution Rate**

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.

Changes in UAAL and UAAL **Contribution Rates**

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

Changes have occurred since the 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)

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

Member COLA Contribution Rates It is our understanding that at least some of the General members will be asked to contribute one-half of the annual increase in COLA normal costs. In this valuation, the COLA normal cost rates 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.

Total Employer Contributions Exhibit 13: **All Members**

		(General	Safety	ı	APCD	2011 All Plans
Nu	mber of Active Members		3,198	904		46	4,148
A.	Basic Employer Normal Cost Rate		8.99%	15.48%		8.88%	10.70%
В.	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 (C + F)		30.18%	51.60%		34.39%	35.87%
Н.	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 (G x I) **	\$	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%

^{*} 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.

Exhibit 13a: Total Employer Contributions General Members

				General		
		5A	5B	5C	Plan 2	Total
Nu	mber 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 (C + F)	29.75%	29.41%	30.78%	19.42%	30.18%
Н.	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.

Exhibit 13b: Total Employer Contributions Safety Members

			Safet	у		
	4A	4B	4C	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%
 Estimated Payroll for fiscal year beginning July 1, 2012 * 	\$ 11,559 \$	1,385	\$ 28,311 \$	5 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 5	1,252 \$	3 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.

Exhibit 13c: Total Employer Contributions APCD Members

				APCD	
		ا	Plan 1	Plan 2	Total
Nui	mber 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 (C + F)		36.00%	32.55%	34.39%
Н.	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 (G x I) **	\$	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%

^{*} 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.

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.

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).

Exhibit 15: **Schedule of Funding Progress**

Actuarial Valuation Date*	(a) Actuarial Value of Assets	(b) -Valuation sets (NVA)	(c) Valuation Assets (a)-(b)	(d) Valuation Actuarial Accrued bilities (AAL)	(e) AAL with NVA (b)+(d)	(f) Unfunded Actuarial Accrued abilities (UAAL) d)-(c) = (e)-(a)	(g) Prior Method Funded Ratio (a)/(e)	(h) Current Method Funded Ratio (c)/(d)	(i) Covered Payroll	UAAL as a Percentage of Covered Payroll (f)/(i)
January 1, 1995 January 1, 1996	\$ 562,861 624,823	n/a n/a	n/a n/a	n/a n/a	\$ 643,453 711,869	\$ 80,592 87,046	87.5% 87.8%	n/a n/a	\$ 140,571 154,120	57.3% 56.5%
January 1, 1997 January 1, 1998 January 1, 1999 January 1, 2000 January 1, 2001	693,301 799,539 938,295 1,068,357 1,171,138	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	n/a n/a n/a n/a n/a	758,772 873,624 950,205 1,067,377 1,145,519	65,471 74,085 11,910 (980) (25,619)	91.4% 91.5% 98.7% 100.1% 102.2%	n/a n/a n/a n/a n/a	159,906 171,602 184,291 199,448 219,739	40.9% 43.2% 6.5% -0.5% -11.7%
January 1, 2003 June 30, 2003 June 30, 2004 June 30, 2005 June 30, 2006	1,295,956 1,346,665 1,379,170 1,443,824 1,552,776	\$ n/a 135,317 137,613 137,829 137,825	n/a \$ 1,211,348 1,241,557 1,305,995 1,414,951	\$ n/a 1,319,547 1,441,156 1,549,803 1,671,831	1,363,605 1,454,864 1,578,769 1,687,632 1,809,656	67,649 108,199 199,599 243,808 256,880	95.0% 92.6% 87.4% 85.6% 85.8%	n/a 91.8% 86.2% 84.3% 84.6%	251,834 257,237 266,960 267,785 287,382	26.9% 42.1% 74.8% 91.0% 89.4%
June 30, 2007 ** June 30, 2008 June 30, 2009 June 30, 2010 June 30, 2011	1,735,489 1,893,984 1,705,733 1,927,229 2,007,859	31,020 2,528 - -	1,704,469 1,891,456 1,705,733 1,927,229 2,007,859	1,956,834 2,135,955 2,263,862 2,616,147 2,749,813	1,987,854 2,138,483 2,263,862 2,616,147 2,749,813	252,365 244,499 558,129 688,918 741,954	87.3% 88.6% 75.3% 73.7% 73.0%	87.1% 88.6% 75.3% 73.7% 73.0%	294,163 307,264 306,524 306,963 305,758	85.8% 79.6% 182.1% 224.4% 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.

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

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

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

^{**} January 1, 2003 through June 30, 2003

Exhibit 17: **Solvency Test**

(Dollars in Thousands)

			Acti	uarial <i>A</i>	ccrued Liabi	lities fo	r			
			ve Member	Re	tirees and	(E	ve Members Employer Financed		n of Actuarial A bilities Covered Assets	
Actuarial Valuation Date*	Valuation Assets	Cor	tributions (A)	Bei	neficiaries (B)		Portion) (C)	(A)	(B)	(C)
June 30, 2003	\$ 1,346,665	\$	105,570	\$	572,737	\$	776,557	100%	100%	86%
June 30, 2004	1,379,170		115,530		633,082		830,157	100%	100%	76%
June 30, 2005	1,443,824		125,040		715,319		847,273	100%	100%	71%
June 30, 2006	1,552,776		137,148		788,479		884,029	100%	100%	71%
June 30, 2007 **	1,704,469		169,218		979,657		810,516	100%	100%	69%
June 30, 2008	1,891,456		177,770		1,124,748		833,437	100%	100%	71%
June 30, 2009	1,705,733		174,951		1,237,215		851,696	100%	100%	34%
June 30, 2010	1,927,229		162,432		1,483,728		969,987	100%	100%	29%
June 30, 2011	2,007,859		165,774		1,559,716		1,024,324	100%	100%	28%

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.



Appendix A: Actuarial Procedures and Assumptions



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

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

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

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

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

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

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

Actuarial Cost Method

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

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

Actuarial Cost Method (continued)

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

Records and Data

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

Replacement of **Terminated Members**

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

Growth in Membership

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

Internal Revenue Code Section 415 Limit

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

Internal Revenue Code Section 401(a)(17)

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

Employer Contributions

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

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

Member **Contributions**

The member contribution rates vary by entry age and are described in the law or pursuant to collective bargaining. Code references and a description of the rates are shown in Section 5 of the report. The methods and assumptions used are detailed later in this section. The individual member rates by entry age, plan and class are illustrated in Appendix D.

Valuation of Assets

The assets are valued using a five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. The expected market value with fiveyear smoothing valuation basis for all assets was adopted effective June 30, 2002.

Investment Earnings and Expenses

The future investment earnings of the assets of SBCERS are assumed to accrue at an annual rate of 7.75% compounded annually, net of both investment and administrative expenses. This rate was adopted effective June 30, 2010.

Postretirement Benefit Increases

Postretirement increases are assumed for the valuation in accordance with the benefits provided as described in Appendix B. These adjustments are assumed to be payable each year in the future as they are less than the expected increase in the Consumer Price Index of 3.25% per year. This rate was adopted effective June 30, 2010.

Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 4.25%. This rate was adopted effective June 30. 2010. As of June 30, 2008, the credited interest rate each sixmonth period is the semi-annual yield of the five-year Treasury note as of the last business day of the interest crediting period.

Future Salaries

The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Tables A-5 and A-6. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 3.75% per annum rate of increase in the general wage level of the membership. Salary increases are assumed to occur midvear. These rates were adopted effective June 30, 2010.

Social Security Wage Base

General Plan 2 members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 3.75% per year. Note, statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement.



Retirement

After members attain age 50 (55 for General Plan 2 members) 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 Credit Upon Retirement

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

Vacation Cashout

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

Mortality – Other Than Disabled **Members**

The same postretirement mortality rates are used in the valuation for active members, members retired for service, and beneficiaries. These rates are illustrated in Table A-2. Beneficiary mortality is assumed to be the same assumption as healthy members. Beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members. These rates were adopted June 30, 2010.

Males:

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

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

Females: General members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using

scale AA, with ages set back four years.

Safety members: RP-2000 Combined Healthy Mortality Table for Females projected to 2010 using scale AA,

with ages set back four years

Mortality - Disabled **Members**

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

General members: RP-2000 Combined Healthy Males:

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.

Member Contribution Rate Optional Form Factor Assumptions

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

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

A. Annuity factor used for General and Safety members is based on using a unisex mortality assumption. For these purposes, as well as determining option factors, the unisex mortality assumption is:

General Healthy Members: RP-2000 Combined Healthy Male

projected to 2010 using scale AA,

set back 4 years.

Safety Healthy Members: RP-2000 Combined Healthy Male

projected to 2010 using scale AA,

set back 3 years.

Beneficiaries: RP-2000 Combined Healthy Female

projected to 2010 using scale AA,

set back 2 years.

General Disabled Members: RP-2000 Combined Healthy Male

projected to 2010 using scale AA.

set back 1 year.

Safety Disabled Members: RP-2000 Combined Healthy Male

projected to 2010 using scale AA,

no adjustment.

- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.75%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.

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

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



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

Economic assumptions

A. General wage increases 3.75% B. Investment earnings 7.75% C. Growth in membership 0.00

D. Postretirement benefit increases (varies by plan) Plan COLA not greater than CPI assumption.

E. CPI inflation assumption 3.25%

Demographic assumptions II.

> A. Salary increases due to service Tables A-5 to A-6 B. Retirement Tables A-7 to A-12 Tables A-7 to A-12 C. Disability

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

Table A-2

Basis – RP-2000 Combined Healthy Mortality Table for respective sexes for general members projected to 2010 using scale AA, as adjusted:

Class of Members	Age <u>Adjustment</u>
General – males	-2 years
General – females	-4 years
Safety – males	-2 years
Safety – females	-4 years

E. Mortality among disabled members*

Table A-3

Basis – RP-2000 Combined Healthy Mortality Table projected to 2010 using scale AA, as adjusted:

General - males 0 years General - females 0 years

Safety - males 0 years Safety - females 0 years

F. Mortality for beneficiaries.*

Table A-2

Basis – Beneficiaries are assumed to have the same mortality as a general member of the opposite sex who has taken a service retirement.

G. Other terminations of employment

Tables A-7 to A-12

H. Refund of contributions on vested termination

Table A-4

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



Mortality for Members Retired for Service Table A-2:

	Safety	Safety	General	General
Age	Male	Female	Male	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%

Table A-3: Mortality for Members Retired for Disability

	Safety	Safety	General	General
Age	Male	Female	Male	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%

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%

Table A-5: Annual Increase in Salary General

Years of	Due to Promotion	Total
Service	and Longevity	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.



Table A-6: Annual Increase in Salary Safety

Years of	Due to Promotion	Total
Service	and Longevity	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.



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

	7					
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 74	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		

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 53	0.0300	0.00110	0.00166	0.00120		
53 54	0.0300 0.0900	0.00119 0.00128	0.00179 0.00192	0.00129 0.00141		
55	0.0900		0.00192			
56	0.0900	0.00137 0.00145	0.00203	0.00158		
56 57	0.0900	0.00143	0.00218	0.00175 0.00196		
58	0.0900	0.00163	0.00231	0.00198		
59	0.1200	0.00103	0.00244	0.00219		
60	0.1500	0.00171	0.00237	0.00291		
61	0.1800	0.00180	0.00270	0.00231		
62	0.2500	0.00180	0.00270	0.00373		
63	0.2500	0.00180	0.00270	0.00373		
64	0.2500	0.00180	0.00270	0.00422		
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	0.00033		
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		

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

18	Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
19	18	0.0000	0.00090	0.00010	0.00010	0.00023	0	0.0800
20 0.0000 0.00090 0.00010 0.00010 0.00026 2 0.0300 21 0.0000 0.00090 0.00010 0.00027 3 0.0300 22 0.0000 0.00090 0.00010 0.00010 0.00030 5 0.0300 23 0.0000 0.00090 0.00010 0.00011 0.00031 6 0.0300 24 0.0000 0.00090 0.00010 0.00011 0.00032 7 0.0300 25 0.0000 0.00090 0.00010 0.00013 0.00033 8 0.0270 27 0.0000 0.00090 0.00010 0.00033 8 0.0270 27 0.0000 0.00090 0.00010 0.00034 9 0.0240 28 0.0000 0.00090 0.00010 0.00036 10 0.0210 29 0.0000 0.00135 0.00016 0.00036 11 0.0180 30 0.0200 0.00135 0.00015								
21 0.0000 0.00010 0.00010 0.00027 3 0.0300 22 0.0000 0.00090 0.00010 0.00028 4 0.0300 23 0.0000 0.00090 0.00010 0.00030 5 0.0300 24 0.0000 0.00090 0.00010 0.00011 0.00031 6 0.0300 25 0.0000 0.00090 0.00010 0.00012 0.00032 7 0.0300 26 0.0000 0.00090 0.00010 0.00013 0.00033 8 0.0270 27 0.0000 0.00090 0.00010 0.00013 0.00034 9 0.0240 28 0.0000 0.00090 0.00010 0.00016 0.00036 10 0.0210 29 0.0000 0.00090 0.00015 0.00010 0.00037 12 0.0150 31 0.0200 0.00135 0.00015 0.00010 0.00037 12 0.0150 31 0.0200								
22 0.0000 0.00090 0.00010 0.00010 0.00028 4 0.0300 23 0.0000 0.00090 0.00010 0.00010 0.00031 6 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 0.00014 0.00034 9 0.0240 28 0.0000 0.00090 0.00010 0.00036 10 0.0210 29 0.0000 0.00039 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 0.00047 15 0.0120 34								
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24 0.0000 0.00090 0.00010 0.00001 0.00031 6 0.0300 25 0.0000 0.00090 0.00010 0.00032 7 0.0300 26 0.0000 0.00090 0.00010 0.00033 8 0.0270 27 0.0000 0.00090 0.00010 0.00014 9 0.0240 28 0.0000 0.00090 0.00010 0.00036 10 0.0210 29 0.0000 0.00090 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 0.0047 15 0.0120 34 0.0200 0.00180 0.00020								
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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								

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	0.00422		
65	1.0000	0.00000	0.00000	0.00000	0.00000		

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	20 & Above	0.0000
40	0.0200	0.00100	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	0.00104		
45	0.0200	0.00223	0.00023	0.00010	0.00116		
46	0.0200	0.00270	0.00035	0.00010	0.00110		
47	0.0700	0.00313	0.00033	0.00010	0.00124		
48	0.0700	0.00300	0.00045	0.00010	0.00132		
49	0.1000	0.00450	0.00043	0.00010	0.00149		
50	0.2000	0.00495	0.00055	0.00010	0.00149		
51	0.1000	0.00540	0.00060	0.00010	0.00168		
52	0.1000	0.00585	0.00065	0.00010	0.00108		
53	0.1000	0.00630	0.00003	0.00010	0.00202		
54	0.3000	0.00675	0.00075	0.00010	0.00202		
55	0.3300	0.0073	0.00073	0.00010	0.00218		
56	0.2500	0.00720	0.00080	0.00010	0.00250		
57	0.2500	0.00720	0.00080	0.00010	0.00299		
58	0.2500	0.00720	0.00080	0.00010	0.00255		
59	0.2500	0.00720	0.00080	0.00010	0.00395		
60	0.2500	0.00720	0.00080	0.00010	0.00333		
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	0.00720	0.00000	0.00000	0.00000		
00	1.0000	0.00000	0.00000	0.00000	0.00000		

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		

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:

Government Code Section

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

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

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

APCD Plan 1: APCD employees hired on or before July 3, 1995.

APCD Plan 2: APCD employees hired after July 3, 1995.

General Plan 2: Employees hired on or before January 11, 1999 who

> elected to join General Plan 2. Once vested, Plan 2 members have a one-time election to defer accrued Plan 2 benefits and enter a contributory plan in effect at the time of election. Contributions are based upon

age at time of transfer.

Safety Plan 4A & General employees hired before October 10, 1994 General Plan 5A:

who did not elect to join General Plan 2, and Safety

employees hired before October 10, 1994.

Safety Plan 4B & Employees hired on or after October 10, 1994. General Plan 5B:

General Plan 5C: Members in certain bargaining units hired on or after

October 10, 1994. Members in those bargaining units

transferred from Plan 5B on March 10, 2008.



Safety Plan 4C: Members in certain bargaining units who were hired

on or after October 10, 1994. All members in certain bargaining units. Members in those bargaining units

transferred from Plan 4B on July 3, 2006.

Safety Plan 6A: Members in certain bargaining units hired prior to

October 10, 1994. Members in those bargaining units

transferred from Plan 4A on February 25, 2008.

Safety Plan 6B: Members in certain bargaining units hired after

October 10, 1994. Members in those bargaining units

transferred from Plan 4D on February 25, 2008.

MEMBER CONTRIBUTIONS

Basic:

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

(31453, 31454,

31454.1)

Contributions cease 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.

(31625, 31625.2)

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

(31591, 31700)

Cost-of-Living:

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

Cost-Sharing:

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

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

General Plan 5C is based on half rates.

APCD Plan 1 member rates are half APCD Plan 2 member rates. (31621.6, 31581.1)

Safety Plan 4A member rates are half Safety Plan 4B member rates.

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

EMPLOYER CONTRIBUTIONS

The employer (County or District) contributes to the retirement fund a percentage of the total compensation provided for all members based on an actuarial investigation, valuation and recommendation of the actuary.

(31453, 31453.5, 31453.6, 31454, 31454.1, 31581)



SERVICE RETIREMENT ALLOWANCE

Eligibility:		
Plans 5A, 5B & 5C:	General Plan members: Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 30 years of service; or Age 70 regardless of service.	(31672, 31672.1)
Plan 2:	Age 55 with 10 years of service.	(31486.4)
	APCD Plan members: Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 30 years of service; or Age 70 regardless of service.	(31672, 31672.1)
	Safety Plan members: Age 50 with 5 years of service and 10 years of elapsed time since membership; Any age with 20 years of service.	(31663.25)
Final Compensation:		
· ····································	General Plan members:	
Plans 5A & 5B:	Monthly average of a member's highest 12 consecutive months of compensation.	(31462.1)
Plan 5C:	Monthly average of a member's highest 36 consecutive months of compensation.	(31462)
Plan 2:	Monthly average of a member's highest 36 consecutive months of compensation.	(31486.1)
	APCD Plan members:	
	Monthly average of a member's highest 12 consecutive months of compensation.	(31486.1)
	Safety Plan members:	
Plans 4A, 4B & 6A:	Monthly average of a member's highest 12 consecutive months of compensation.	(31462.1)
Plans 4C & 6B:	Monthly average of a member's highest 36 consecutive months of compensation.	(31462)



SERVICE RETIREMENT ALLOWANCE (Continued)

Compensation Limit:

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

Monthly Allowance:

General members:

Plans 5A, 5B & 5C: 2% x Final Compensation x General Age Factor x Years of Service. (31676.12)

Plan 2: Sum of (a) + (b) – (c): (31486.4)

(a) 2% x Final Compensation x Years of Service (max. 35 years); plus

(b) 1% x Final Compensation x Years of Service in excess of 35 (max. 10 years); minus

(c) 1/35 x 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% x Final Compensation x APCD Age Factor x Years of (31676.15) Service.

Safety members:

3% x Final Compensation x Safety Age Factor x (31664.2) Years of service.

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



SERVICE RETIREMENT ALLOWANCE (Continued)

Age Factors by Plan

	General	APCD	Safe	etv
	Plan 5		Plan 4	Plan 6
Code Section:	31676.12	31676.15	31664.2	31664.1
Label:	2% @ 57	2% @ 55	3% @ 55	3% @ 50
Base:	2.00%	2.00%	3.00%	3.00%
Age				
41			0.4777	0.6258
42			0.5058	0.6625
43			0.5347	0.7004
44			0.5647	0.7397
45			0.5958	0.7805
46			0.6280	0.8226
47			0.6625	0.8678
48			0.6936	0.9085
49			0.7269	0.9522
50	0.6681	0.7454	0.7634	1.0000
51	0.7056	0.7882	0.8028	1.0000
52	0.7454	0.8346	0.8457	1.0000
53	0.7882	0.8850	0.8926	1.0000
54	0.8346	0.9399	0.9418	1.0000
55	0.8850	1.0000	1.0000	1.0000
56	0.9399	1.0447	1.0000	1.0000
57	1.0000	1.1048	1.0000	1.0000
58	1.0447	1.1686	1.0000	1.0000
59	1.1048	1.2365	1.0000	1.0000
60	1.1686	1.3093	1.0000	1.0000
61	1.2365	1.3608		
62	1.3093	1.4123		
63	1.3093	1.4638		
64	1.3093	1.5153		
65	1.3093	1.5668		

Maximum Allowance:

General Plan 2: The sum of the normal retirement allowance and the

estimated PIA cannot exceed 70% of Final

Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation

if service exceeds 35 years.

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

Compensation.



(31486.4)

SERVICE RE	TIREMEN	T ALLOWANCE (Continued)			
Unmodified I	Retiremen	t Allowance (Normal Form):			
General Plan	2:	Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children).	(31486.6)		
All other Plan	s:	Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children).	(31760.1)		
Eligible survivor includes certain domestic partners.					
Optional Ret	irement A	llowance:			
retirement allo	owance ap	have the actuarial equivalent of the service or disability plied to a lesser retirement allowance during the retired provide an optional survivor allowance.			
Option 1:	tion 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 ma Option 2, 3 or	ke and name another beneficiary if the member elects	(31782)			
All Allowanc	numb	owances are made on a pro-rata basis (based on the er of days in that month) if not in effect for the entire month rement.	(31600)		

Death after Retirement:

General Plan 2: No benefit is payable upon death after retirement, other than in

accordance with form of benefit allowance.

All other Plans: Upon a member's death after retirement, a special lump sum of

\$5,000 is payable to an eligible survivor, or the member's

estate.



(31789.5)

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

_		<u>. </u>
Eligibility:		
General Plan 2:	Disability benefits not valued since provided outside of the retirement system.	(31720, 31720.5,
All other Plans:	Any age and length of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.	31720.6, 31720.7, 31720.9)
Monthly Allowa	nce:	
General Plan 2:	Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.	
All other Plans:	Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire.	(31727.4)
Supplemental D	isability Allowance:	
APCD Members:	Upon retirement for service disability, APCD members receive a monthly supplemental allowance of \$300.	(31740)
Normal Form Of	Payment:	
General Plan 2:	Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.	(31760, 31786)
All other Plans:	Life Annuity payable to retired member with 100% continuance to an eligible survivor (or eligible children).	
Death after Reti	rement:	
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	(31789.5)

estate.

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

General Plan 2: Disability benefits not valued since provided outside of the

retirement system.

All other Plans: Any age with five (5) years of service and permanently

incapacitated for the performance of duty.

(31720)

Monthly Allowance:

General Plan 2: Service retirement benefit payable at age 65 with service

projected from disability until age 65. Prior to age 65, disability

benefits are provided outside the retirement system.

All other Plans: The monthly allowance is equal to a service retirement

allowance if the member is eligible to retire and the service retirement allowance exceeds the benefits described below.

Otherwise, allowance equals (a) or (b) where:

(31727.1, 31727.2, 31727.3)

(a) 90% x 1/50 x 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% x 1/50 x Final Compensation x Projected Service, not to

exceed 1/3 of Final Compensation.

Projected Service:

 General Members:
 Age 62
 (31727.1,

 APCD Members:
 Age 65
 31727.2,

 Safety Members:
 Age 55
 31727.3)

Supplemental Monthly Disability Retirement:

APCD Members: Upon retirement for service disability, APCD members receive a (31740)

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 (31760.1)

eligible children).

Death after Retirement:

General Plan 2: No benefit is payable upon death after retirement, other than in

accordance with form of benefit allowance.

All other Plans: Upon a member's death after retirement, a special lump sum of

\$5,000 is payable to an eligible survivor, or the member's

estate.



(31789.5)

SERVICE-CONNECTED DEATH BENEFITS

Eligibility:

All Plans: Active members who die in service as a result of injury or

(31486.7,disease arising out of and in the course of employment.

31787)

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% x Final Compensation.

(31787)

Supplemental Monthly Death Benefit:

APCD Members: Eligible survivors of an active members who dies while

(31855.11, 31855.12)

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.

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility:

All Plans: Active members who die while in service but not as a result of

(31486.7. injury or disease arising out of and in the course of employment. 31780)

Monthly Allowance:

General Plan 2: A lump sum is payable to an eligible survivor equal to 1/12 x (31781)

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% x the member's allowance. Otherwise, the benefit is a refund of contributions plus a lump sum equal to 1/12 x final 12 months' Salary x years

of service (up to maximum of 6 years).

(31787)

Supplemental Monthly Death Benefit:

APCD Members: Eligible survivors of an active members who dies while

(31855.11,31855.12)

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.

(31700)

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

(31700, 31701, 31702)

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.

(31703, 31704,

31705)

COST-OF-LIVING INCREASES

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

(31870, 31870.1)

All Plans 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.

(31870.1)

COLA Bank:

All Plans When the CPI exceeds the applicable

(excluding General Plan 2): percentage, the difference between the actual

(31874, 31874.1, 31874.2, 31874.3)

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.

General Plan 2: General Plan 2 does not have a COLA and,

therefore, does not have a COLA Bank.



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 C-3b for retired members.

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

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

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

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

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

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

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

	Total Number	Co	Annual ompensation	Average Age	Average Monthly Compensation	Average Vesting 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	22.0
Plan 6B	316	\$	27,359,176	39.0	\$7,215	8.5
Total	904	\$	81,025,333	42.4	\$7,469	12.5
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

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

					Avera	ge	Increase in
Valuation Date	Plan Type	Number	An	nual Payroll	Annual S	Salary	Average Pay
June 30, 2004	General	3,559	\$	199,365,000	\$ 5	6,017	5.8%
June 30, 2004	Safety	3,559 944	Ф \$	67,596,000	-	1,606	3.3%
	Total	4,503	Φ	266,961,000		9,285	5.4%
	i Otai	4,303		200,901,000	:	3,203	J.4 /0
June 30, 2005	General	3,558	\$	199,371,000	\$ 5	6,035	0.0%
00110 00, 2000	Safety	947	\$	68,414,000	-	2,243	0.9%
	Total	4,505	<u> </u>	267,785,000		9,442	0.3%
	· Otal	1,000			•	-,	
June 30, 2006	General	3,658	\$	214,405,000	\$ 5	8,613	4.6%
,	Safety	982	\$	72,977,000	7	4,315	2.9%
	Total	4,640		287,382,000		1,936	4.2%
	:				•		
June 30, 2007	General	3569	\$	214,717,000	\$ 6	0,162	2.6%
	APCD	53	\$	3,940,000		4,340	N/A
	Safety	1,003	\$	75,506,000		5,280	1.3%
	Total	4,625		294,163,000		3,603	2.7%
	:	<u> </u>		<u> </u>			
June 30, 2008	General	3,552	\$	226,426,000	\$ 6	3,746	6.0%
	APCD	48	\$	3,608,000	7	5,167	1.1%
	Safety	1,006	\$	77,230,000	7	6,769	2.0%
	Total	4,606		307,264,000	6	6,710	4.9%
	:				3		
June 30, 2009	General	3,450	\$	223,831,000	\$ 6	4,879	1.8%
	APCD	50	\$	3,955,000	7	9,100	5.2%
	Safety	967	\$	79,596,000	8.	2,312	7.2%
	Total	4,467		307,382,000	6	8,812	3.2%
	:						
June 30, 2010	General	3,261	\$	223,995,000	\$ 6	8,689	5.9%
	APCD	46	\$	3,716,000	8	0,783	2.1%
	Safety	921	\$	79,795,000	8	6,640	5.3%
	Total	4,228		307,506,000	7	2,731	5.7%
	:						
June 30, 2011	General	3,198	\$	222,046,000	\$ 6	9,433	1.1%
	APCD	46	\$	3,457,000	7	5,161	-7.0%
	Safety	904	\$	81,025,000	8	9,630	3.5%
	Total	4,148		306,528,000	7	3,898	1.6%
	:				=		

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

		Average
	Number	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
	.,	

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

	Number	Average Age	Monthly Allowance		M	verage onthly enefit
General Members						
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

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

	Number		Monthly Allowance	Average Monthly Benefit		
General Members						
Healthy	2,095	\$	4,789,028	\$	2,286	
Disabled	126	\$	240,937	\$	1,912	
Beneficiaries	355	<u>\$</u> \$	443,557	<u>\$</u> \$	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	

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

Count]									
_					of Vesting Se					Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	11	13	1	-	-	-	-	-	-	25
25-29	40	168	65	-	-	-	-	-	-	273
30-34	31	200	210	26	-	-	-	-	-	46
35-39	15	113	185	174	33	1	-	-	-	52
40-44	19	104	160	205	110	34	1	-	-	63
45-49	11	97	120	153	104	106	35	1	-	62
50-54	13	70	106	136	99	106	85	36	-	65
55-59	13	57	94	103	80	93	63	46	4	55
60-64	3	33	65	64	43	39	25	29	6	30
65 & Over	-	11	28	22	13	7	5	1	4	9
Total Count	156	866	1,034	883	482	386	214	113	14	4,14
Compensation	٦									
Compensation	<u> </u>			Years	of Vesting Se	ervice				Averag
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	21,601	55,136	47,872	-	-	-	-	-	-	40,09
25-29	35,475	59,572	64,721	-	-	-	-	-	-	57,26
30-34	35,088	64,702	66,987	72,647	-	-	-	-	-	64,20
35-39	41,618	66,676	71,845	74,929	72,232	48,534	-	-	-	70,86
40-44	37,434	76,810	74,663	77,272	74,190	79,949	72,819	-	-	74,94
45-49	53,140	76,616	71,927	75,971	75,740	83,138	79,092	72,964	-	76,23
50-54	53,950	78,633	72,412	73,261	76,108	83,281	99,364	82,804	-	79,31
55-59	60,021	87,416	76,840	73,157	84,768	83,269	85,294	90,437	77,218	81,17
60-64	23,780	82,950	66,779	78,211	77,946	74,406	90,786	88,334	103,046	77,71
65 & Over	-	104,757	71,924	86,830	79,179	68,643	73,154	214,033	50,167	80,95
Avg. Annual	39,855	70,435	71,029	75,657	77,010	81,693	90,168	88,405	80,558	73,89



Compensation

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 other parties who receive this work.

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

Count	J			Υe	ars of Service	e				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
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	-	-	44
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

				Ye	ars of Servic	e				Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
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	38,984	67,617	66,910	71,642	72,705	75,723	81,625	82,657	67,097	69,433
Compensation										



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 the other parties who receive this work.

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

•				Ye	ars of Service	е				Total
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
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
_					ars of Service					Average
Age	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
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



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 the parties who receive this work.

Count

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

Count										
Age	0-1	1-4	5-9	10-14	ears of Service 15-19	20-24	25-29	30-34	35&Over	Total Count
Under 25	1	_	_	_	_	_	_	_	_	1
25-29	2	3	1	_	_	_	_	_	_	6
30-34	1	3	_ '	_	_	_	_	_	_	4
35-39	1	1	_	_	1	_	_	_	_	3
40-44	<u>.</u>	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	<u>.</u>	3	_	1	_	6
65 & Over	-	-	-	-	-	1	1	-	-	2
Total Count	6	9	2	7	5	13	3	1	-	46
Age	0-1	1-4	5-9	10-14	ears of Service 15-19	20-24	25-29	30-34	35&Over	Average Comp.
Age	<u>U-1</u>	1-4	<u> 5-9</u>	10-14	15-19	20-24	25-29	30-34	33&Over	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



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-10 other parties who receive this work.

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

				5					-	Average
Age	Pre-1980	1980-84	1985-89	1990-94	ffective Date 1995-99	2000-04	2005-09	2010-14	Total Count	Monthly Benefit
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 Benefit	\$ 1,425	\$ 1,819	\$ 2,207	\$ 2,372	\$ 2,454	\$ 2,869	\$ 3,123	\$ 3,153		\$ 2,712



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

	- 1000	1000.01	1005.00		ffective Date	0000.04	0005.00		Total	M	verage Ionthly
Age	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	Count		Benefit
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

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

				Benefit F	ffective Date				Total	verage Ionthly
Age	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	Count	Benefit
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

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

	Benefit Effective Date									Average Monthly
Age	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	Total Count	Benefit
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

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

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



Appendix D: Member Contribution Rates



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

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

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)



Appendix E: Glossary



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

Accrued Benefit

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

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

Amortization Payment

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

COLA

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

Employer Reserve The accumulation of employer contributions for future retirement

benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.

Entry Age Actuarial Cost Method A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Funded Ratio A measurement of the funded status of the system. The Funded

Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates

assets are 10% less than liabilities.

Member Reserve The accumulation of member contributions. Additions include

member contributions and related earnings. Deductions include

annuity payments to retirees and refunds to members.

Non-Valuation Reserves

Reserves excluded from the calculation of contribution rates.

Normal Cost That portion of the Actuarial Present Value of pension plan benefits

and expenses which is allocated to a valuation year by the Actuarial

Cost Method.

Plan Year A 12-month period beginning July 1 and ending June 30.

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

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

and service credits.

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

Actuarial Value of Assets.

Valuation 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.

