



# **Santa Barbara County Employees' Retirement System**

**Actuarial Valuation Report  
as of June 30, 2017**

**Produced by Cheiron**

**December 2017**

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December 6, 2017

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

Dear Members of the Board:

At your request, we have conducted an actuarial valuation of the Santa Barbara County Employees' Retirement System (SBCERS, the System, the Fund, the Plan) as of June 30, 2017. This report contains information on the System's assets, liabilities, and discloses employer contribution levels. Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of SBCERS. This report is for the use of the Retirement Board of Santa Barbara and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

Cheiron's report was prepared solely for the Retirement Board of Santa Barbara for the purposes described herein, except that the plan auditor may rely on this report solely for the purpose of completing an audit related to the matters herein. It is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

Sincerely,  
Cheiron



Graham A. Schmidt, ASA, FCA, MAAA, EA  
Consulting Actuary



Anne D Harper, FSA, MAAA, EA  
Consulting Actuary

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**FOREWORD**

Cheiron has performed the actuarial valuation of the Santa Barbara County Employees' Retirement System as of June 30, 2017. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation and disclose important trends.
- The **Main Body** of the report presents details on the System's
  - Section II - Assets
  - Section III - Liabilities
  - Section IV - Contributions
  - Section V - Comprehensive Annual Financial Reporting Information
- In the **Appendices** we conclude our report with detailed information describing plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent plan provisions (Appendix C), a glossary of key actuarial terms (Appendix D), and tables containing member contribution rates (Appendix E).

The results of this report rely on future plan experience conforming to the underlying assumptions. To the extent that actual plan experience deviates from the underlying assumptions, the results would vary accordingly.

In preparing our report, we relied on information (some oral and some written) supplied by the SBCERS staff. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

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**SECTION I – EXECUTIVE SUMMARY**

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the System,
- Past and expected trends in the funding progress of the System,
- Employer and employee contribution rates for Plan Year 2018-2019, and,
- Information required by the GFOA for the Comprehensive Annual Financial Report.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key results, (C) an examination of the historical trends, and (D) the projected outlook for the System.

**A. Valuation Basis**

This valuation determines the employer contributions required for the employers' fiscal years beginning July 1, 2018.

The System's funding policy is to collect contributions from the employers and employees equal to the sum of:

- The normal cost under the Entry Age Normal Cost Method,
- Amortization of the Unfunded Actuarial Liability, and
- The Fund's expected administrative expenses.

The Unfunded Actuarial Liability payment is determined as the amount needed to fund the outstanding Unfunded Actuarial liability (UAL). Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period (currently 13 years), except for the additional UAL attributable to the creation of Safety Plan 6, which is being amortized over a separate closed period (currently 11 years).

At a special meeting held on September 5, 2014, the Board of Retirement adopted a new funding policy for any subsequent unexpected change in the Unfunded Actuarial Liability after June 30, 2013. Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses, assumption changes, or method changes are amortized over a closed 19-year period, with a five-year ramp up and down of the amortization payment at the beginning and end of the amortization period and nine years of level payments as a percentage of payroll between the ramping periods. The Board also adopted a policy to replace the smoothed Actuarial Value of Assets with the Market Value of Assets for valuation purposes. These amortization and funding policies in conjunction are a type of policy known as direct rate smoothing.

This valuation was prepared based on the plan provisions shown in Appendix C.

Actuarial experience studies are performed every three years. This valuation was performed based on the economic and demographic assumptions and methods that were determined in the

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**SECTION I – EXECUTIVE SUMMARY**

Actuarial Experience Study performed by Cheiron as of June 30, 2016, and adopted by the Board on October 26, 2016. A summary of the assumptions and methods used in the current valuation is shown in Appendix B.

**B. Key Findings of this Valuation**

The key results of the June 30, 2017 actuarial valuation are as follows:

- The actuarially determined employer contribution rate increased from 38.71% of payroll to 39.14% of payroll for the current valuation. The primary reason for the rate increase is due to the expected phase-in of prior amortization bases under the direct rate smoothing funding policy, offset by both actuarial asset and liability gains.
- The System's funded ratio, the ratio of assets over Actuarial Liability, increased from 71.5% last year to 75.7% as of June 30, 2017.
- The UAL is the excess of the System's Actuarial Liability over the Market Value of Assets. The System experienced a decrease in the UAL from \$1,017.3 million to \$901.0 million, a decrease of \$116.3 million.
- During the plan year ending June 30, 2017, the return on Plan assets was 10.39% on a market value basis - net of investment expenses and assuming mid-year cashflows - as compared to the 7.00% assumption. This produced an actuarial asset gain of \$86.2 million.
- During the 2016-2017 plan year, the actuarial liabilities of the System increased less than expected. The experience gains were primarily due to lower salary increases than expected for returning members and lower COLA increases than expected for current retirees. Consequently, the System experienced a net gain on the Actuarial Liability of \$6.6 million.
- Actual contributions made to the Plan were less than expected by \$8.5 million. This difference results from a timing difference due to the implementation of contribution rates on July 1 following the valuation date that they were calculated. In addition, differences in the actual payroll for FYE 2017 than what was assumed in the previous valuation will cause the actual contributions to differ from the expected contributions.

In aggregate, the System experienced a net actuarial gain of \$83.7 million from all sources combined.

- The assumption on the timing of when benefit payments are made was changed from beginning of the month to the end of the month to better reflect the actual timing. This change resulted in a decrease in the UAL of \$29.7 million.

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**SECTION I – EXECUTIVE SUMMARY**

Below and on the following pages, we present Tables I-1, I-2, and I-3 which summarize the key results of the valuation with respect to SBCERS assets, liabilities, Unfunded Actuarial Liability, funded ratios, contribution rates, and membership. The results are shown and compared for both the current and prior plan year.

<b>Table I-1</b>			
<b>Santa Barbara County Employees' Retirement System</b>			
<b>Summary of Key Valuation Results</b>			
<b>(in millions)</b>			
<b>Valuation Date</b>	<b>June 30, 2016</b>	<b>June 30, 2017</b>	<b>Relative %</b>
<b>Fiscal Year End</b>	<b>2018</b>	<b>2019</b>	<b>Change</b>
Actuarial Liability	\$ 3,571.8	\$ 3,702.3	3.7%
Market Value of Assets	<u>2,554.5</u>	<u>2,801.3</u>	9.7%
Unfunded Actuarial Liability (UAL)	\$ 1,017.3	\$ 901.0	-11.4%
			<b>Absolute</b>
			<b>% Change</b>
Funding Ratio	71.5%	75.7%	4.2%
Net Employer Contribution Rate	38.71%	39.14%	0.43%
Estimated FY Payroll	\$ 356.3	\$ 362.4	\$ 6.1
Estimated FY Net Employer Contributions	\$ 137.9	\$ 141.8	\$ 3.9

The key results shown in Table I-1 indicate that because the Actuarial Liability increased by only 3.7% and the Market Value of Assets increased by 9.7%, the Unfunded Actuarial Liability (UAL) decreased by 11.4% as of June 30, 2017. The UAL decreased from \$1,017.3 million to \$901.0 million from last year to this year. Also, the funding ratio improved significantly from 71.5% to 75.7%, an increase of 4.2%.

The employer contribution rate increased from 38.71% to 39.14% of payroll. Based on estimated fiscal year payroll of \$362.4 million, the estimated fiscal year 2018-19 employer contributions are \$141.8 million.

Note that the estimated fiscal year payroll amounts are based on projected payroll from the previous years' valuation dates (see Table I-2) rolled forward at the assumed payroll growth rate of 3.0% to the fiscal year in which the contribution rate applies.

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**SECTION I – EXECUTIVE SUMMARY**

As shown in Table I-2 below, membership in SBCERS increased by 2.3%. Active membership decreased by 1.1%, inactives increased by 5.2%, and members receiving benefits increased by 4.9%. Total payroll increased by 1.7% which is less than the assumed 3.0% increase. The average pay per active member increased by 2.9%.

<b>Table I-2 Membership Total</b>			
	<b>June 30, 2016</b>	<b>June 30, 2017</b>	<b>% Change</b>
Actives	4,348	4,299	-1.1%
Inactives	1,391	1,463	5.2%
Members Receiving Benefits	<u>4,171</u>	<u>4,375</u>	<u>4.9%</u>
Total Members	9,910	10,137	2.3%
Ratio of Retired Members to Active Members	95.9%	101.8%	5.8%
Active Member Projected Payroll for FYE June 30, 2017 and 2018*	\$ 345,930,967	\$ 351,828,507	1.7%
Average Pay per Active	\$ 79,561	\$ 81,840	2.9%

\* Based on valuation data projected for next fiscal year using a full year of salary increases.



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**SECTION I – EXECUTIVE SUMMARY**

<b>Table I-3 Change in Unfunded Actuarial Liability (in millions)</b>	
Unfunded actuarial liability, 6/30/2016	\$ 1,017.3
Expected change in unfunded actuarial liability	\$ (2.9)
Unfunded decrease due to assumption change	(29.7)
Unfunded decrease due to asset gain*	(77.1)
Unfunded decrease due to liability gain	(6.6)
Total change in unfunded actuarial liability	\$ (116.3)
Unfunded actuarial liability, 6/30/2017	\$ 901.0

\* Includes losses due to expenses being more than expected and contribution timing lag.

The Unfunded Actuarial Liability (UAL) for SBCERS decreased by \$116.3 million, from \$1,017.3 million to \$901.0 million. Table I-3 above presents the specific components of the change in the UAL.

The actuarial asset gain decreased the UAL by \$77.1 million, the liability experience reduced the UAL by \$6.6 million, and the change in assumption for the timing of the benefit payments decreased the UAL by \$29.7 million.

The expected change in the UAL of \$2.9 million due to the UAL payment for FY 2016-17 combined with the above UAL changes produce an overall decrease of \$116.3 million in the UAL.

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**SECTION I – EXECUTIVE SUMMARY**

**Employer Contributions Comparison**

Thus far, the experience of the 2016-17 plan year has been presented in terms of the UAL and funded ratio. Table I-4 below compares the net employer contribution rates from the prior year and its components to the current year. The overall net employer contribution rate increased by 0.43% for the June 30, 2017 valuation, with a decrease of 0.56% in the net employer normal cost and an increase of 0.99% in the amortization of the UAL.

<b>Table I-4 Contributions by Components</b>			
<b>Valuation Year</b>	<b>2016</b>	<b>2017</b>	
<b>Effective for Fiscal Year End</b>	<b>FYE 2018</b>	<b>FYE 2019</b>	<b>Change</b>
Gross Normal Cost %	23.06%	22.82%	-0.24%
Employee Contributions	<u>5.77%</u>	<u>6.09%</u>	0.32%
Employer Normal Cost %	17.29%	16.73%	-0.56%
Amortization of UAL%	21.42%	22.41%	0.99%
Net Employer Contribution Rate: (3 + 4)	38.71%	39.14%	0.43%

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**SECTION I – EXECUTIVE SUMMARY**

Table I-5 summarizes the impact of actuarial experience on the employer contribution rate.

<b>Table I-5</b>			
<b>Employer Contribution Rate Reconciliation</b>			
	<b>Normal Cost</b>	<b>Amortization</b>	<b>Total</b>
FYE 2018 Net Employer Contribution Rate	17.29%	21.42%	38.71%
Expected Change due to DRS amortization phase-in	0.00%	1.33%	1.33%
Change due to asset gain	0.00%	-0.43%	-0.43%
Change due to PEPPA new hires	-0.40%	0.02%	-0.38%
Change due to effect of payroll on amortization	0.00%	0.28%	0.28%
Change due to assumption change	-0.13%	-0.15%	-0.28%
Change due to demographic gains	-0.03%	-0.06%	-0.09%
FYE 2019 Net Employer Contribution Rate	16.73%	22.41%	39.14%

A review of the changes in the employer contribution rate from the prior valuation shows that the expected phase-in of prior amortization bases under direct rate smoothing (DRS), 1.33% of payroll, is the largest driver of a net increase in the employer contribution rate. See Table IV-2 Development of Amortization Payment for details on each base. The other components of the contribution rate change are as follows:

- Asset experience produced an investment gain on a market basis, which decreased the contribution rate by 0.43% of pay. The assets of the Plan returned 10.39% (net of investment expenses) on a market basis, greater than the assumed rate of 7.00%.
- PEPPA members are now about 26% of active member payroll. The average employee contribution rate continues to increase since PEPPA members have higher employee contribution rates than the retiring legacy members they replace. PEPPA benefits are also lower than the legacy members' benefits. The impact of the increasing number of PEPPA members was a 0.38% of pay decrease on the employer contribution rate.
- The assumption change for the timing of the benefit payments, from beginning of the month to end of the month, decreased the contribution rate by 0.28% of pay. The savings is approximately the equivalent of one month's interest on the benefit payments.
- Demographic experience was favorable for a net decrease in cost of about 0.09% of pay.

The demographic experience of the Plan – including rates of retirement, death, disability, and termination – was better than predicted by the actuarial assumptions in aggregate, causing a decrease in cost. The primary factors contributing to this decrease were lower

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**SECTION I – EXECUTIVE SUMMARY**

than expected Cost-of-Living Adjustments (COLAs) for current retirees, and lower than expected salary increases for returning members.

- Payroll used to amortize unfunded liabilities was lower than expected by about \$4.5 million. As a result, unfunded actuarial liabilities are amortized over a smaller payroll base than expected, and as a result the employer contribution rate, as a percentage of payroll, increased by 0.28%.

**Plan Risk**

Table I-6 below shows the ratio of assets to active member payroll for SBCERS.

<b>Table I-6</b>	
<b>Asset to Payroll Ratio as of June 30, 2017</b>	
Active Member Payroll	\$351,828,507
Market Value of Assets	\$2,801,306,795
Ratio of Assets to Payroll	7.96
Ratio with 100% Funding	10.52

One of the most important measures of a plan's risk is the ratio of plan assets to payroll. The table above shows SBCERS's assets as a percentage of active member payroll. This ratio indicates the sensitivity of the plan to the returns earned on plan assets. We note in the table that assets currently are nearly eight times covered payroll for the Plan; as funding improves and the Plan reaches 100% funding, the ratio of asset to payroll will increase to over ten times payroll, perhaps higher depending on the Plan's future demographic makeup.

To appreciate the impact of the ratio of assets to payroll on cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the cost is nil, because the assets are so small. On the other hand, consider the situation for SBCERS. Suppose SBCERS's assets lose 10% of their value in a year. Since they are assumed to earn 7%, there is an actuarial loss of 17% of assets. Based on the current ratio of asset to payroll (796%), that means the loss in assets is about 135% of active payroll (796% of the 17% loss). There is only one source of funding to make up for this loss: employer contributions. Consequently, barring future offsetting investment gains, the loss must be made up with future employer contributions.

As the plan matures and becomes better funded, the ratio of assets to payroll will increase. If assets are 1052% of pay, the 10% loss discussed above will translate to a loss of over 179% of payroll. Therefore, the Plan is likely to become more sensitive to market variation in the future than it is today.

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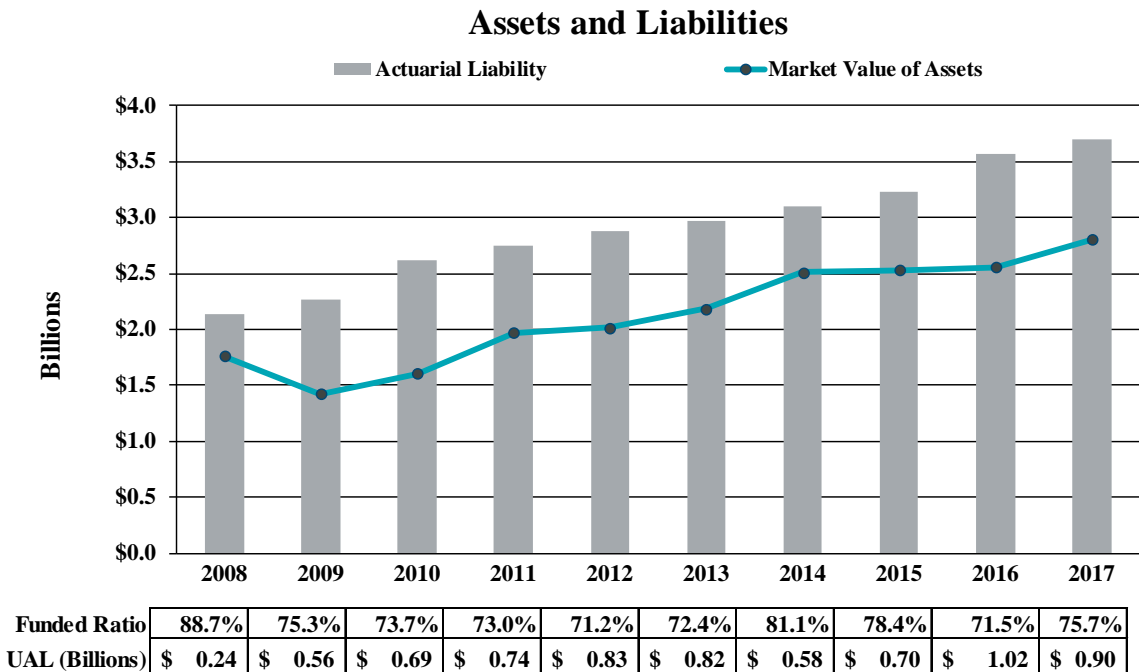
**SECTION I – EXECUTIVE SUMMARY**

**C. Historical Trends**

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results and in particular, the size of the current Unfunded Actuarial Liability and the employer contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

**Assets and Liabilities**

The chart below compares the Market Value of Assets (MVA) to the actuarial liabilities. The percentage shown in the table below the graph is the ratio of the Market Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has declined from 88.7% in 2008 to 75.7% as of June 30, 2017, primarily as a result of the asset losses in 2008-2009 and changes in the actuarial assumptions. The increase in the funded ratio in 2017 from 71.5% to 75.7% is primarily due to asset gains for 2016-2017 as discussed above.



\* As of 2014, Market Value of Assets is used to calculate the unfunded actuarial accrued liability and funded ratio.

**Contribution Trends**

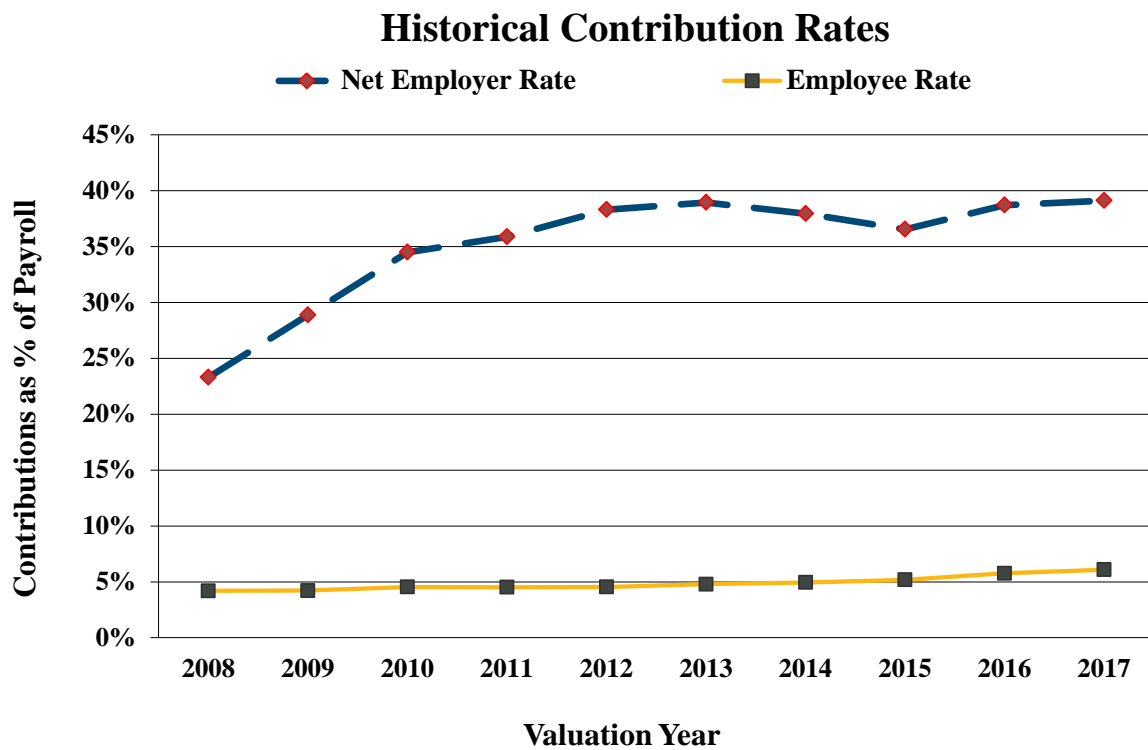
In the chart below, we present the historical trends for the SBCERS contribution rates. The employer contribution rates rose steadily after 2008, as the investment losses from 2008-2009 were recognized in the Actuarial Value of Assets. However, for 2014, the employer rate decreased due to favorable asset experience and an asset method change in 2013-2014 to Market

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Value of Assets. The impact of the 2014 gains continued to decrease the employer contribution rate in 2015 since amortization of the decrease in the UAL was in its second year of the ramp up period under the direct rate smoothing amortization method. However, assumption changes implemented after the most recent experience study increased the employer contribution rate in 2016. The employer contribution rate in 2017 increased slightly, mostly due to the phase-in of prior amortization bases under the direct rate smoothing method.

The average employee contribution rates have stayed relatively stable, increasing slightly as the Plan's economic assumptions have changed. Also, average employee contribution rates will continue to increase as more new members under PEPRA are hired.



**Gains and Losses**

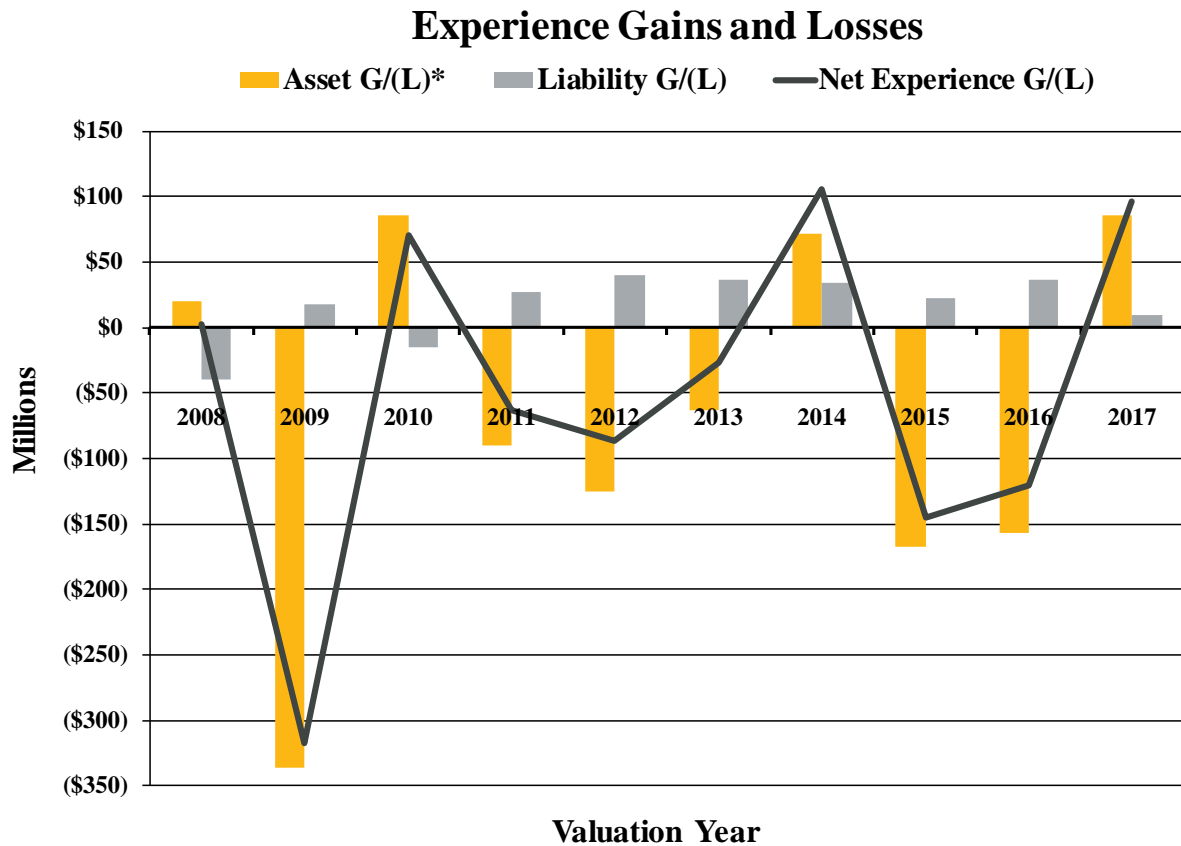
The chart on the next page presents the pattern of annual gains and losses, broken into the investment and liability components. The investment gains and losses prior to 2015 represent the changes on a smoothed basis (i.e., based on the actuarial value of assets). Starting with the June 30, 2015 valuation, the investment experience is based on the Market Value of Assets due to the new asset valuation method implemented in the June 30, 2014 valuation. The chart does not include any changes in SBCERS' assets and liabilities attributable to changes to actuarial methods, assumptions or plan benefit changes.

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The investment loss in 2008-2009 was by far the most significant gain or loss during the last 10 years. Even though the Plan was using actuarial smoothing of the assets, there was a significant loss reflected in the June 30, 2009 valuation, because the amount of smoothing was limited by the 80/120% corridor around the Market Value of Assets (the return on the smoothed value of assets for 2008-2009 was -9.6%). This loss was fully recognized in the June 30, 2013 valuation.

Over the past seven years, there has been a period of liability gains primarily due to retiree COLAs and continuing active pay increases being less than anticipated. The liability experience was more varied prior to this period.



*\* Prior to 2015, based on actuarial value of assets which recognizes market gains/losses over a 5-year period.  
In 2015 and thereafter, based on actual market gains/losses with no smoothing.*

**D. Future Expected Financial Trends**

The analysis of projected financial trends is an important component of this valuation. In this section, we present our assessment of the implications of the June 30, 2017 valuation results in terms of benefit security (assets over liabilities). All the projections in this section are based on

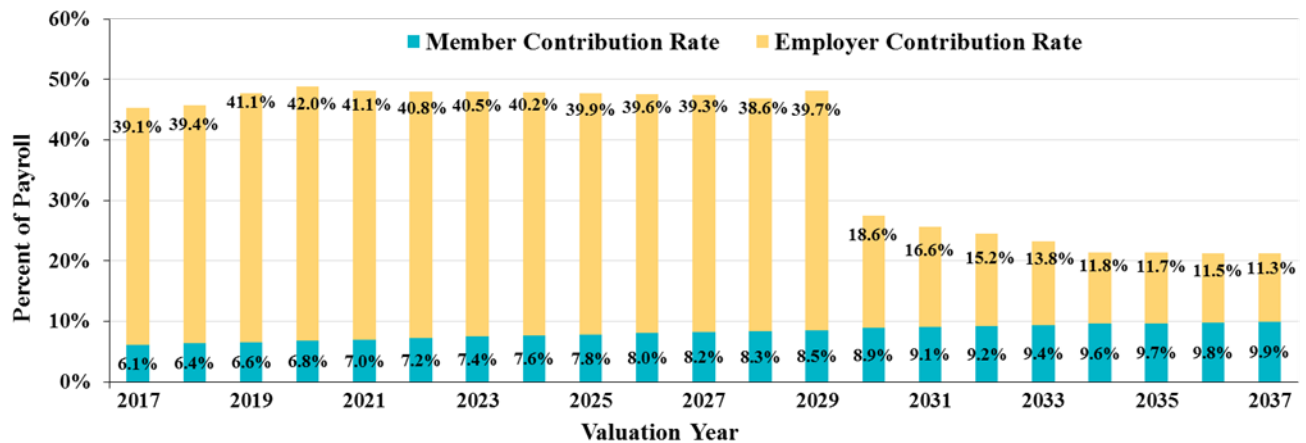
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the current investment return assumption of 7.00%. We have assumed future payroll increases of 3.00% per year.

**Projection Of Contributions**

The following graph shows the expected employer contribution rate based on achieving the 7.00% assumption **each year** for the next 20 years. This scenario is highly unlikely; even if the Plan does achieve an **average** return of 7.00% over this time period, the returns in each given year will certainly vary.



The employer contribution rate is approximately 39% of member payroll for the June 30, 2017 valuation; it is expected to increase gradually to about 42% in three years as the new assumptions are phased-in, and then remain around that level for the next nine years if all actuarial assumptions are met. After 2029, the total contribution rate is expected to drop significantly, when the remaining unfunded liability as of June 30, 2013 is fully paid.

There is a moderate decline projected in the employer normal cost rates, primarily due to the PEPRA members becoming a larger proportion of the active member population over time. PEPRA benefits are lower than the legacy plan benefits and PEPRA employee contribution rates are greater than the legacy plans since members pay 50% of the normal cost rate.

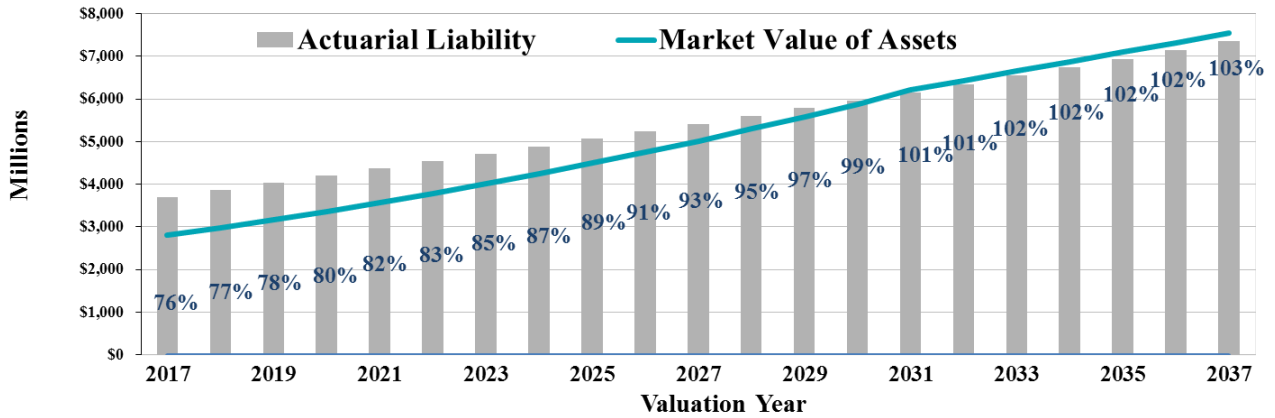


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**Asset and Liability Projections:**

The following graph shows the projection of assets and liabilities assuming that assets will earn the 7.00% assumption each year during the projection period. The percentages along the graph represent the funded ratio or status of the System.



The projected funded status, based on the Market Value of Assets, increases over the next 15 years and reaches 101% in 2031 assuming the actuarial assumptions are achieved.

However, as above, it is the **actual** return on System assets that will determine the future funding status and contribution rate to the Fund.

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**SECTION II – ASSETS**

Pension plan assets play a key role in the financial operation of the System and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact employer contributions and the ultimate security of participants' benefits.

In this section, we present detailed information on System assets including:

- **Disclosure** of System assets as of June 30, 2016 and June 30, 2017,
- Statement of the **changes** in market values during the year,
- An allocation of the assets by **reserve balances**,
- An assessment of historical **investment performance versus inflation**, and,
- An allocation of the assets between the **valuation subgroups**.

**Disclosure**

Only the Market Value of Assets is relevant for this actuarial valuation. It represents a snap-shot value, which provides the principal basis for measuring financial performance from one year to the next.

As of June 30, 2014, a smoothed Actuarial Value of Assets is no longer used in the calculations of the Unfunded Actuarial Liability or funded status due to the implementation of the new funding policy adopted by the Board in September 2014. This policy change was made in conjunction with the new 19-year layered amortization with phase-in of any unexpected changes in the Unfunded Actuarial Liability starting with the June 30, 2014 valuation.

Table II-1 on the next page discloses and compares the asset values as of June 30, 2016 and June 30, 2017.

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**SECTION II – ASSETS**

<b>Table II-1</b>		
<b>Statement of Assets at Market Value</b>		
<b>Assets:</b>	<b>June 30, 2016</b>	<b>June 30, 2017</b>
Cash and Cash Equivalents	\$ 12,736,382	\$ 1,698,988
Prepaid Expenses		3,082,455
<b>Receivables:</b>		
Contributions Receivable	4,345,642	4,556,940
Other	0	(835)
Accrued Interest	2,062,079	2,541,030
Dividends	1,502,424	1,471,534
Security Sales	<u>13,009,641</u>	<u>31,026,530</u>
Total Receivables	20,919,786	39,595,199
<b>Investments, at Market Value:</b>		
Short Term Investments	72,624,655	44,785,833
Alternative/Private Equity	187,873,279	226,890,992
Domestic Equity	567,082,538	612,634,582
Domestic Bonds	486,328,787	518,339,854
International Equity	450,390,227	581,362,631
International Bonds	324,608,230	300,958,821
Real Estate	242,934,018	270,980,364
Real Assets / Real Return	<u>225,252,499</u>	<u>246,496,889</u>
Total Investments	2,557,094,232	2,802,449,964
<b>Other Assets:</b>		
Collateral Held for Securities Lent	<u>63,804,521</u>	<u>70,460,427</u>
<b>Total Assets</b>	2,654,554,921	2,917,287,033
<b>Liabilities:</b>		
Accounts Payable	364,874	480,879
Benefits Payable	9,668,161	148,488
Collateral Held for Securities Lent	63,804,521	70,460,427
Investment Manager Fees	1,441,940	1,435,443
Security Purchases	<u>24,736,902</u>	<u>43,455,001</u>
<b>Total Liabilities</b>	100,016,398	115,980,238
<b>Market Value of Assets</b>	<b>\$ 2,554,538,523</b>	<b>\$ 2,801,306,795</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION II – ASSETS**

**Changes in Market Value**

The components of asset change are:

- Contributions (employer and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table II-2 below shows the components of change in the Market Value of Assets during the fiscal years ending June 30, 2016 and June 30, 2017.

<b>Table II-2 Changes in Market Values</b>		
<b><u>Additions</u></b>	<b>Fiscal Year ending <u>June 30, 2016</u></b>	<b>Fiscal Year ending <u>June 30, 2017</u></b>
<b>Contributions</b>		
Employer's Contribution	\$ 122,748,021	\$ 121,990,986
Members' Contributions	<u>18,311,646</u>	<u>20,319,910</u>
Total Contributions	141,059,666	142,310,896
<b>Net Investment Income</b>		
Net Appreciation/(Depreciation) in		
Fair Value of Investments	11,762,371	244,511,939
Interest	8,842,411	10,419,763
Dividends	18,601,843	17,023,915
Investment Expense	<u>(7,765,979)</u>	<u>(8,134,254)</u>
Net Investment Income	31,440,646	263,821,363
<b>Securities Lending Income</b>		
Securities Lent Income	110,877	319,123
Securities Lent Expense	<u>129,161</u>	<u>14,497</u>
Net Securities Lending Income	240,038	333,620
<b>Miscellaneous Income</b>		
Net Miscellaneous Income	1,119,721	264,814
<b>Total Additions</b>	<b>173,860,071</b>	<b>406,730,693</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION II – ASSETS**

**Table II-2  
Changes in Market Values (Continued)**

<b><u>Deductions</u></b>	<b>Fiscal Year ending <u>June 30, 2016</u></b>	<b>Fiscal Year ending <u>June 30, 2017</u></b>
Benefit payments	\$ 145,711,311	\$ 153,185,146
Refunds of Members' Contributions	<u>946,405</u>	<u>1,044,286</u>
Total Benefit Payments	146,657,716	154,229,432
Administrative & Other Expenses		
General Administrative Expenses	4,628,913	5,030,530
Actuary Fees	122,609	278,944
Fund Legal Fees	<u>441,284</u>	<u>423,514</u>
Total Administrative & Other Expenses	5,192,807	5,732,988
Total Deductions	151,850,523	159,962,421
Net increase (Decrease)	22,009,548	246,768,272
Net Assets Held in Trust for Pension Benefits		
Beginning of Year	2,532,528,974	2,554,538,523
End of Year	2,554,538,523	2,801,306,795
Expected Return	189,542,331	178,210,342
Actual Return	32,800,405	264,419,797
Expected Return	7.50%	7.00%
Approximate Return	1.30%	10.39%

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION II – ASSETS**

**Allocation of Reserve Balances**

The following table shows the allocation of the assets among the various accounting reserves.

A new Interest Crediting and Undesignated Earnings Policy was established on August 25, 2010. In accordance with that policy, the Market Stabilization Account is based on the difference between the Market Value of Assets and the Actuarial Value of Assets, which is now zero under the new funding policy. The Contra Tracking Account was established with that policy. In effect, that account is the difference between the Actuarial Value of Assets, now equal to the Market Value of Assets, and the sum of the first four reserves in Table II-3, as long as that account is negative.

<b>Table II-3</b>		
<b>Allocation of Assets by Accounting Reserve Amounts for the Years Ended June 30, 2016 and June 30, 2017</b>		
	<b>FYE 2016</b>	<b>FYE 2017</b>
1. Member Deposit Reserve	\$ 183,953,800	\$ 187,083,782
2. County and District Advance Reserve	851,356,624	855,389,510
3. Retired Member Reserve	2,167,810,353	2,360,666,293
4. Transferred Funds Reserve	<u>166,781,520</u>	<u>178,660,534</u>
	<b>\$ 3,369,902,297</b>	<b>\$ 3,581,800,119</b>
5. New Market Stabilization Reserve	0	0
6. Contra Tracking Account	(815,363,774)	(780,493,324)
<b>Total Reserves</b>	<b>\$ 2,554,538,523</b>	<b>\$ 2,801,306,795</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION II – ASSETS**

**Historical Investment Performance**

The following table shows the historical annual asset returns on a market value as well as the change in the Consumer Price Index (CPI) since 1993.

<b>Table II-4 Net Return on Assets vs. Increase in Consumer Price Index</b>		
<b>Year Ended June 30</b>	<b>Net Return at Market Value</b>	<b>Increase in Consumer Price Index*</b>
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%	3.3%
2005	9.9%	2.5%
2006	10.6%	4.3%
2007	16.6%	2.7%
2008	-7.2%	5.0%
2009	-19.20%	-1.4%
2010	13.40%	1.1%
2011	21.10%	3.6%
2012	1.80%	1.7%
2013	8.10%	1.8%
2014	15.00%	2.1%
2015	0.83%	0.1%
2016	1.30%	1.0%
2017	10.39%	1.6%
<b>25-Year Geometric Average</b>	<b>7.3%</b>	<b>2.3%</b>

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

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION II – ASSETS**

**Allocation of Assets by Valuation Subgroup**

The following table shows the allocation of the Market Value of Assets between the three valuation subgroups (General, Safety, and APCD). The assets are allocated to each subgroup based on their share of the Valuation Reserves maintained by SBCERS. The Market Value of Asset is used to calculate each subgroups' UAL and the resulting amortization payment.

<b>Table II-5</b>				
<b>Allocation of Assets by Subgroup for June 30, 2017</b>				
<b>(in thousands)</b>				
	<b>General</b>	<b>Safety</b>	<b>APCD</b>	<b>Total</b>
1. Member Deposit Reserve	\$ 147,986	\$ 38,669	\$ 429	\$ 187,084
2. County and District Advance Reserve	564,929	283,936	6,525	855,390
3. Retired Member Reserve	1,326,443	995,989	38,234	2,360,666
4. Transferred Funds Reserve	<u>92,403</u>	<u>84,381</u>	<u>1,876</u>	<u>178,660</u>
5. Total Valuation Reserves (1 + 2 + 3 +4)	\$ 2,131,761	\$ 1,402,975	\$ 47,064	\$ 3,581,800
6. Percentage of Line 5, by Plan	59.52%	39.17%	1.31%	100.00%
7. Market Value of Assets				2,801,307
8. Allocated Market Value of Assets	\$ 1,667,239	\$ 1,097,260	\$ 36,808	\$ 2,801,307



SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017

**SECTION III – LIABILITIES**

In this section, we present detailed information on System liabilities including:

- **Disclosure** of System liabilities at June 30, 2016 and June 30, 2017,
- Statement of **changes** in these liabilities during the year.

**Disclosure**

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not appropriate for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future System obligations; the obligations of the System earned as of the valuation date and those to be earned in the future by current plan participants, under the current System provisions.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the Present Value of Future Benefits and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial funding method. The method used for this System is called the **Entry Age Normal** (EAN) funding method.
- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Market Value of Assets.

Table III-1 on the following page discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus**, or an **Unfunded Actuarial Liability**.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION III – LIABILITIES**

<b>Table III-1</b>					
<b>Present Value of Future Benefits and Actuarial Liability</b>					
<b>(in thousands)</b>					
	<b>General</b>	<b>Safety</b>	<b>APCD</b>	<b>June 30, 2017</b>	<b>June 30, 2016</b>
				<b>Total</b>	<b>Total</b>
<b>Present Value of Future Benefits</b>					
Actives	\$ 1,266,715	\$ 751,893	\$ 16,562	\$ 2,035,170	\$ 2,044,529
Terminated Vested	106,481	31,647	3,407	141,535	141,051
Retirees	1,122,893	738,297	28,905	1,890,094	1,758,560
Disabled	43,551	90,753	0	134,304	121,037
Beneficiaries	70,190	57,812	1,990	129,992	122,225
<b>Total SBCERS</b>	<b>\$ 2,609,830</b>	<b>\$ 1,670,402</b>	<b>\$ 50,864</b>	<b>\$ 4,331,095</b>	<b>\$ 4,187,402</b>
<b>Actuarial Liability</b>					
Total Present Value of Benefits	\$ 2,609,830	\$ 1,670,402	\$ 50,864	\$ 4,331,095	\$ 4,187,402
Present Value of Future Normal Costs					
Employer Portion	257,128	184,417	2,883	444,428	447,779
Employee Portion	114,142	68,288	1,940	184,370	167,825
<b>Actuarial Liability</b>	<b>\$ 2,238,560</b>	<b>\$ 1,417,697</b>	<b>\$ 46,041</b>	<b>\$ 3,702,297</b>	<b>\$ 3,571,798</b>
Market Value of Assets	\$ 1,667,239	\$ 1,097,260	\$ 36,808	\$ 2,801,307	\$ 2,554,539
Funded Ratio	74.5%	77.4%	79.9%	75.7%	71.5%
<b>Unfunded Actuarial Liability/(Surplus)</b>	<b>\$ 571,321</b>	<b>\$ 320,437</b>	<b>\$ 9,233</b>	<b>\$ 900,990</b>	<b>\$ 1,017,259</b>

### **SECTION III – LIABILITIES**

#### **Changes in Liabilities**

Each of the liabilities disclosed in the prior tables are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in System assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure plan assets

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION III – LIABILITIES**

<b>Table III-2 Development of 2017 Experience Gain/(Loss) (in millions)</b>	
	<b>Cost</b>
1. Unfunded Actuarial Liability (UAL) at June 30, 2016	\$ 1,017.3
2. Middle of year actuarial liability payment	(71.6)
3. Interest to end of year on 1 and 2	68.7
4. Increase in Actuarial Liability due to assumption change	<u>(29.7)</u>
5. Expected UAL at June 30, 2017 (1+2+3+4)	\$ 984.7
6. Actual Unfunded Liability at June 30, 2017	<u>901.0</u>
7. Net Gain/(Loss): (4 - 5)	\$ 83.7
8. Portion of net gain/(loss) due to:	
a. Investment experience gain	\$ 86.2
b. Salary increases less than expected	7.5
c. Retiree COLAs less than expected	11.0
d. Inactive mortality loss	(1.5)
e. Retirement experience loss	(4.6)
f. Inactive and terminated vested member loss	(5.6)
g. New entrant loss	(3.3)
h. Contribution timing lag	(8.5)
i. Other experience	<u>2.5</u>
j. Total gain/(loss)	\$ 83.7

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level (if any) of contributions is needed to properly maintain the funding status of the System. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this System, the actuarial funding method used to determine the normal cost and the Unfunded Actuarial Liability is the **Entry Age Normal (EAN)** cost method. There are three primary components to the total contribution: the **normal cost rate** (employee and employer), the **Unfunded Actuarial Liability rate** (UAL rate) and **assumed administrative expenses**. Administrative expenses are split between employees and employers based on their share of the overall contributions to comply with the County Employees' Retirement Law of 1937 (the CERL).

The normal cost rate is determined in the following steps. First, an individual normal cost rate is determined by taking the value of each member's projected future benefits as of the member's entry age into the System. This value is then divided by the value of the member's expected future salary, also at entry age, producing a normal cost rate that should remain relatively constant over a member's career.

The total normal cost is computed by adding the expected dollar amount of each active member's normal cost for the current year – known as the Individual Entry Age Method. The total normal cost is adjusted with interest to the middle of the year, to reflect the fact that the normal cost contributions are paid throughout the year as member payroll payments are made. Finally, the total normal cost rate, calculated by dividing the total normal cost by expected payroll of the closed group, is reduced by the member contribution rate to produce the employer normal cost rate.

The Unfunded Actuarial Liability (UAL) is the difference between the EAN actuarial liability and the Market Value of Assets. The Unfunded Actuarial Liability payment is determined as the amount needed to fund the outstanding Unfunded Actuarial Liability resulting from the creation of Safety Plan 6 over 11 remaining years and the outstanding Unfunded Actuarial Liability as of June 30, 2013 over a closed period with 13 years remaining, both as a level percentage of pay. Any subsequent unexpected change in the Unfunded Actuarial Liability after June 30, 2013 is amortized over 19 years that includes a five-year phase-in/out of the payments/credits for each annual layer.

The table on the following page presents the calculation of the contribution rates for the System for this valuation and compares the total contribution rate with the prior year rate. The tables on the following pages contain more details on the calculation of the UAL amortization payments, as well as details on the calculation of the contribution rates for each group and tier.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

<b>Table IV-1</b>					
<b>Development of the Net Employer Contribution Rate as of June 30, 2017 for FYE 2019</b>					
	June 30, 2017				June 30, 2016
	General	Safety	APCD	COMPOSITE	COMPOSITE
1. Total Normal Cost Rate	19.36%	32.09%	19.43%	<b>22.82%</b>	<b>23.06%</b>
2. Member Contribution Rate	<u>5.54%</u>	<u>7.52%</u>	<u>6.92%</u>	<u>6.09%</u>	<u>5.77%</u>
3. Employer Normal Cost Rate (1-2)	13.82%	24.57%	12.51%	<b>16.73%</b>	<b>17.29%</b>
4. UAL Amortization	<u>19.49%</u>	<u>29.88%</u>	<u>30.33%</u>	<u>22.41%</u>	<u>21.42%</u>
5. Net Employer Contribution Rate (3+4)	33.31%	54.45%	42.84%	<b>39.14%</b>	<b>38.71%</b>
Projected Payroll for FYE 2018	\$ 253,211,650	\$ 95,593,983	\$ 3,022,874	<b>\$ 351,828,507</b>	<b>\$ 345,930,967</b>

*Beginning with the June 30, 2013 valuation, the Member and Employer Contribution Rates have been explicitly loaded to account for anticipated administrative expenses. The load is 3.4% for the June 30, 2017 actuarial valuation, and has been applied to both the Member and Employer Rates.*

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

The table below presents the calculation of the UAL payments of the System as a dollar amount and as a percentage of pay under the amortization policy. The total UAL payment of the System is 22.41% as a percentage of pay, which is not the sum of the individual amortization bases, since the Safety Plan 6 UAL of 4.27% is paid only for members under Safety Plan 6. Once the (Gain)/Loss and Assumption bases are fully phased-in, the UAL payment from these sources will be 25.90% of pay.

If the UAL payment below of \$76,197,929 is calculated based on a single-equivalent period with the June 30, 2017 UAL of \$900,989,407, the number of years to fully pay off the unfunded would be 16 years.

**Table IV-2  
Development of Amortization Payment  
For the June 30, 2017 Actuarial Valuation**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	June 30, 2017 Outstanding Balance	Remaining Amortization Years	Current Phase-In/Out Percentage	Amortization Amount	% of Pay**	% of Pay After Phase-In**
1. Safety Plan 6 Base*	6/30/2007	\$ 12,800,000	15	\$ 12,759,606	11	N/A	\$ 1,441,192	4.27%	4.27%
2. Remaining UAL	6/30/2013	803,940,900	17	753,128,635	13	N/A	74,557,803	21.92%	21.92%
3. (Gain)/Loss Base	6/30/2014	(227,291,825)	19	(251,393,961)	16	80%	(19,199,514)	-5.65%	-7.06%
4. (Gain)/Loss Base	6/30/2015	137,382,857	19	149,473,321	17	60%	8,410,398	2.47%	4.12%
5. (Gain)/Loss Base	6/30/2016	117,812,662	19	123,726,438	18	40%	4,646,336	1.37%	3.42%
6. Assumption Changes	6/30/2016	215,838,077	19	226,672,380	18	40%	8,512,296	2.50%	6.26%
7. (Gain)/Loss Base	6/30/2017	(83,693,202)	19	(83,693,202)	19	20%	(1,602,292)	-0.47%	-2.36%
8. Assumption Change	6/30/2017	(29,683,810)	19	<u>(29,683,810)</u>	19	20%	<u>(568,291)</u>	-0.17%	-0.84%
<b>Total</b>				\$ 900,989,407			\$76,197,929	22.41%	25.90%

\* In 2011, the outstanding balance was re-amortized over a closed 17-year period.

\*\* Includes explicit administrative expense load. Safety Plan 6 Base is shown as a percentage of the Safety Plan 6 payroll only.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

As discussed earlier, a portion of the UAL attributable to the implementation of Safety Plan 6 is being amortized over a separate period from the rest of UAL. The amortization payment for this separate base is applied only to the payroll of the Safety Plan 6 members. Beginning with the 2011 actuarial valuation, the outstanding balance of the Safety Plan 6 UAL is being amortized over a closed 17-year period; 11 years are now remaining. Table IV-3 contains the details of the calculations of the Safety UAL rates for the Plan 6 members.

<b>Table IV-3</b>	
<b>Development of Safety UAL Amortization Rates</b>	
<b>(Excluding explicit load for anticipated administrative expenses)</b>	
June 30, 2017 Plan 6 Layer	\$ 12,759,606
Eleven year amortization factor	0.112950
Safety Plan 6 payroll	\$ 34,934,507
Middle of year payment	1,441,192
Extra Plan 6 UAL Amortization Rate	4.13%
Safety UAL less Extra Plan 6	\$307,676,616
Middle of year payment	26,167,152
Total Safety Payroll	95,593,983
UAL Rate without Extra Plan 6	27.37%
UAL Rate - Plan 6	31.50%



**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

Tables IV-4 through IV-7 show the calculations of the employer contribution rates for each group and tier, as well as a comparison to the prior year rates.

Table IV-4 Development of the General Net Employer Contribution Rate as of June 30, 2017 for FYE 2019									
	5A	5B	5C	Plan 2	Plan 7	PEPRA		Total	
						2% COLA	3% COLA		
<b>Current Year</b>									
A. Basic Employer Normal Cost Rate	10.42%	9.96%	11.76%	3.76%	11.93%	6.94%	7.68%		9.99%
B. COLA Normal Cost Rate	<u>4.39%</u>	<u>5.34%</u>	<u>4.81%</u>	<u>0.00%</u>	<u>3.22%</u>	<u>1.38%</u>	<u>2.13%</u>		<u>3.85%</u>
C. Employer Normal Cost Rate	14.81%	15.30%	16.57%	3.76%	15.15%	8.32%	9.81%		13.84%
D. Basic UAL Contribution Rate	13.83%	13.83%	13.83%	13.83%	13.83%	13.83%	13.83%		13.83%
E. COLA UAL Contribution Rate	<u>5.66%</u>	<u>5.66%</u>	<u>5.66%</u>	<u>5.66%</u>	<u>5.66%</u>	<u>5.66%</u>	<u>5.66%</u>		<u>5.66%</u>
F. UAL Contribution Rate	19.49%	19.49%	19.49%	19.49%	19.49%	19.49%	19.49%		19.49%
<b>G. Total June 30, 2017 Contribution Rate (C+F)</b>	<b>34.30%</b>	<b>34.79%</b>	<b>36.06%</b>	<b>23.25%</b>	<b>34.64%</b>	<b>27.81%</b>	<b>29.30%</b>		<b>33.33%</b>
Projected Payroll for FYE 2018 (in thousands)	\$ 40,337	\$ 38,079	\$ 95,832	\$ 645	\$ 9,117	\$ 66,293	\$ 2,910		\$ 253,212
<b>Prior Year</b>									
A. Basic Employer Normal Cost Rate	10.65%	10.14%	11.94%	4.25%	11.95%	6.87%	7.87%		10.29%
B. COLA Normal Cost Rate	<u>4.46%</u>	<u>5.39%</u>	<u>4.86%</u>	<u>0.00%</u>	<u>3.23%</u>	<u>1.38%</u>	<u>2.20%</u>		<u>4.03%</u>
C. Employer Normal Cost Rate	15.11%	15.53%	16.80%	4.25%	15.18%	8.25%	10.07%		14.32%
D. Basic UAL Contribution Rate	12.95%	12.95%	12.95%	12.95%	12.95%	12.95%	12.95%		12.95%
E. COLA UAL Contribution Rate	<u>5.26%</u>	<u>5.26%</u>	<u>5.26%</u>	<u>5.26%</u>	<u>5.26%</u>	<u>5.26%</u>	<u>5.26%</u>		<u>5.26%</u>
F. UAL Contribution Rate	18.21%	18.21%	18.21%	18.21%	18.21%	18.21%	18.21%		18.21%
<b>G. Total June 30, 2016 Contribution Rate (C+F)</b>	<b>33.32%</b>	<b>33.74%</b>	<b>35.01%</b>	<b>22.46%</b>	<b>33.39%</b>	<b>26.46%</b>	<b>28.28%</b>		<b>32.53%</b>
Projected Payroll for FYE 2017 (in thousands)	\$ 46,025	\$ 40,000	\$ 100,215	\$ 632	\$ 8,052	\$ 56,078	\$ 1,819		\$ 252,821

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

Table IV-5 Development of the Safety Net Employer Contribution Rate as of June 30, 2017 for FYE 2019							
	4A	4B	4C	6A	6B	PEPRA	Total
<b>Current Year</b>							
A. Basic Employer Normal Cost Rate	18.45%	16.08%	17.16%	21.00%	19.71%	10.65%	16.83%
B. COLA Normal Cost Rate	<u>8.18%</u>	<u>9.64%</u>	<u>8.20%</u>	<u>9.10%</u>	<u>9.57%</u>	<u>3.73%</u>	<u>7.74%</u>
C. Employer Normal Cost Rate	26.63%	25.72%	25.36%	30.10%	29.28%	14.38%	24.57%
D. Basic UAL Contribution Rate	18.81%	18.81%	18.81%	21.64%	21.64%	18.81%	19.84%
E. COLA UAL Contribution Rate	<u>9.51%</u>	<u>9.51%</u>	<u>9.51%</u>	<u>10.95%</u>	<u>10.95%</u>	<u>9.51%</u>	<u>10.04%</u>
F. UAL Contribution Rate	28.32%	28.32%	28.32%	32.59%	32.59%	28.32%	29.88%
<b>G. Total June 30, 2017 Contribution Rate (C+F)</b>	<b>54.95%</b>	<b>54.04%</b>	<b>53.68%</b>	<b>62.69%</b>	<b>61.87%</b>	<b>42.70%</b>	<b>54.45%</b>
Projected Payroll for FYE 2018 (in thousands)	\$ 6,171	\$ 1,553	\$ 32,848	\$ 6,679	\$ 28,256	\$ 20,087	\$ 95,594
<b>Prior Year</b>							
A. Basic Employer Normal Cost Rate	18.47%	16.42%	17.30%	20.89%	19.86%	10.69%	17.59%
B. COLA Normal Cost Rate	<u>8.20%</u>	<u>9.38%</u>	<u>8.26%</u>	<u>9.24%</u>	<u>9.62%</u>	<u>3.77%</u>	<u>8.20%</u>
C. Employer Normal Cost Rate	26.67%	25.80%	25.56%	30.13%	29.48%	14.46%	25.79%
D. Basic UAL Contribution Rate	19.01%	19.01%	19.01%	21.66%	21.66%	19.01%	20.08%
E. COLA UAL Contribution Rate	<u>9.54%</u>	<u>9.54%</u>	<u>9.54%</u>	<u>10.87%</u>	<u>10.87%</u>	<u>9.54%</u>	<u>10.08%</u>
F. UAL Contribution Rate	28.55%	28.55%	28.55%	32.53%	32.53%	28.55%	30.16%
<b>G. Total June 30, 2016 Contribution Rate (C+F)</b>	<b>55.22%</b>	<b>54.35%</b>	<b>54.11%</b>	<b>62.66%</b>	<b>62.01%</b>	<b>43.01%</b>	<b>55.95%</b>
Projected Payroll for FYE 2017 (in thousands)	\$ 7,150	\$ 1,688	\$ 32,988	\$ 8,029	\$ 28,339	\$ 11,796	\$ 89,990

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

<b>Table IV-6</b>				
<b>Development of the APCD Net Employer Contribution Rate as of June 30, 2017 for FYE 2019</b>				
	<b>Plan 1</b>	<b>Plan 2</b>	<b>PEPRA</b>	<b>Total</b>
<b>Current Year</b>				
A. Basic Employer Normal Cost Rate	10.97%	9.25%	5.48%	8.52%
B. COLA Normal Cost Rate	<u>4.77%</u>	<u>5.51%</u>	<u>1.14%</u>	<u>4.00%</u>
C. Employer Normal Cost Rate	15.74%	14.76%	6.62%	12.52%
D. Basic UAL Contribution Rate	21.72%	21.72%	21.72%	21.72%
E. COLA UAL Contribution Rate	<u>8.61%</u>	<u>8.61%</u>	<u>8.61%</u>	<u>8.61%</u>
F. UAL Contribution Rate	30.33%	30.33%	30.33%	30.33%
<b>G. Total June 30, 2017 Contribution Rate (C+F)</b>	<b>46.07%</b>	<b>45.09%</b>	<b>36.95%</b>	<b>42.85%</b>
Projected Payroll for FYE 2018 (in thousands)	\$ 732	\$ 1,358	\$ 933	\$ 3,023
<b>Prior Year</b>				
A. Basic Employer Normal Cost Rate	10.99%	8.94%	5.71%	8.72%
B. COLA Normal Cost Rate	<u>4.79%</u>	<u>5.45%</u>	<u>1.20%</u>	<u>4.37%</u>
C. Employer Normal Cost Rate	15.78%	14.39%	6.91%	13.09%
D. Basic UAL Contribution Rate	20.57%	20.57%	20.57%	20.57%
E. COLA UAL Contribution Rate	<u>8.00%</u>	<u>8.00%</u>	<u>8.00%</u>	<u>8.00%</u>
F. UAL Contribution Rate	28.57%	28.57%	28.57%	28.57%
<b>G. Total June 30, 2016 Contribution Rate (C+F)</b>	<b>44.35%</b>	<b>42.96%</b>	<b>35.48%</b>	<b>41.66%</b>
Projected Payroll for FYE 2017 (in thousands)	\$ 719	\$ 1,714	\$ 688	\$ 3,121

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION IV – CONTRIBUTIONS**

<b>Table IV-7</b>				
<b>Development of the PEPRA Member and Net Employer Contribution Rates as of June 30, 2017 for FYE 2019</b>				
	<b>General</b>			
	<b>2% COLA</b>	<b>3% COLA</b>	<b>Safety</b>	<b>APCD</b>
<b>Current Year</b>				
Basic Member Contribution Rate	6.94%	7.68%	10.64%	5.47%
COLA Member Contribution Rate	<u>1.38%</u>	<u>2.13%</u>	<u>3.73%</u>	<u>1.14%</u>
<b>Member Contribution Rate</b>	<b>8.32%</b>	<b>9.81%</b>	<b>14.37%</b>	<b>6.61%</b>
Basic Employer Normal Cost Rate	6.94%	7.68%	10.64%	5.47%
COLA Employer Normal Cost Rate	<u>1.38%</u>	<u>2.13%</u>	<u>3.73%</u>	<u>1.14%</u>
Employer Normal Cost Rate	8.32%	9.81%	14.37%	6.61%
Basic UAL Contribution Rate	13.83%	13.83%	18.81%	21.72%
COLA UAL Contribution Rate	<u>5.66%</u>	<u>5.66%</u>	<u>9.51%</u>	<u>8.61%</u>
Employer UAL Contribution Rate	19.49%	19.49%	28.32%	30.33%
<b>Employer Contribution Rate</b>	<b>27.81%</b>	<b>29.30%</b>	<b>42.69%</b>	<b>36.94%</b>
<b>Prior Year</b>				
Basic Member Contribution Rate	6.87%	7.87%	10.69%	5.71%
COLA Member Contribution Rate	<u>1.38%</u>	<u>2.20%</u>	<u>3.77%</u>	<u>1.20%</u>
<b>Member Contribution Rate</b>	<b>8.25%</b>	<b>10.07%</b>	<b>14.46%</b>	<b>6.91%</b>
Basic Employer Normal Cost Rate	6.87%	7.87%	10.69%	5.71%
COLA Employer Normal Cost Rate	<u>1.38%</u>	<u>2.20%</u>	<u>3.77%</u>	<u>1.20%</u>
Employer Normal Cost Rate	8.25%	10.07%	14.46%	6.91%
Basic UAL Contribution Rate	12.95%	12.95%	19.01%	20.57%
COLA UAL Contribution Rate	<u>5.26%</u>	<u>5.26%</u>	<u>9.54%</u>	<u>8.00%</u>
Employer UAL Contribution Rate	18.21%	18.21%	28.55%	28.57%
<b>Employer Contribution Rate</b>	<b>26.46%</b>	<b>28.28%</b>	<b>43.01%</b>	<b>35.48%</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION V – COMPREHENSIVE ANNUAL FINANCIAL REPORTING INFORMATION**

The GASB adopted Statement Nos. 67 and 68, which replaced GASB Statement Nos. 25 and 27. GASB 67 became effective June 30, 2014 for the Plan and GASB 68 became effective for the fiscal year ending June 30, 2015 for the Employers. The disclosures needed to satisfy the GASB requirements can be found in the SBCERS GASB 67/68 Report as of June 30, 2017.

In accordance with Government Finance Officers Association (GFOA) and their recommended checklist for Comprehensive Annual Financial Reports, we continue to prepare the Solvency Test and Actuarial Analysis of Financial Experience disclosures below.

<b>Table V-1 SOLVENCY TEST (dollars in thousands)</b>								
Valuation Date June 30,	(A)	(B)	(C)		Portion of Actuarial Liabilities Covered by Reported Assets			
	Active Member Contributions	Retirees And Beneficiaries	Remaining Active Members' Liabilities	Reported Assets *	(A)	(B)	(C)	
2017	\$ 187,084	\$ 2,295,926	\$ 1,219,287	\$ 2,801,307	100%	100%	26%	
2016	183,954	2,142,873	1,244,971	2,554,539	100%	100%	18%	
2015	178,233	1,926,975	1,125,926	2,532,529	100%	100%	38%	
2014	174,958	1,822,654	1,100,403	2,513,630	100%	100%	47%	
2013	171,614	1,747,430	1,049,090	2,150,006	100%	100%	22%	
2012 **	165,623	1,660,773	1,047,987	2,046,641	100%	100%	21%	
2011	165,774	1,559,716	1,024,324	2,007,859	100%	100%	28%	
2010	162,432	1,483,728	969,987	1,927,229	100%	100%	29%	
2009	174,951	1,237,215	851,696	1,705,733	100%	100%	34%	
2008	177,770	1,124,748	833,437	1,891,456	100%	100%	71%	

\* Actuarial Value of Assets. As of June 30 2014, the Actuarial Value of Assets is the Market Value of Assets.

\*\* June 30, 2012 and earlier numbers calculated by prior actuary.

The solvency test shows the portion of actuarial liabilities for active member contributions, inactive members, and the employer-financed portion of the active members that are covered by the Actuarial Value of Assets. As of June 30, 2017, liabilities are discounted at the assumed valuation interest rate of 7.00%.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**SECTION V – COMPREHENSIVE ANNUAL FINANCIAL REPORTING INFORMATION**

<b>Table V-II ACTUARIAL ANALYSIS OF FINANCIAL EXPERIENCE (dollars in millions)</b>	
Unfunded Actuarial Liability (UAL) as of June 30, 2016	\$ 1,017.3
Expected Change in UAL	(2.9)
Actuarial (Gains) or Losses During the Year	
Asset Return (Greater) or Less than Expected	\$ (86.2)
New Entrants	3.3
Salary Increases Greater or (Less) than Expected	(7.5)
Changes in Assumptions and Methodology	(29.7)
All Other (Including Demographic Experience)	<u>6.7</u>
Total Changes	\$ (116.3)
Unfunded Actuarial Liability (UAL) as of June 30, 2017	\$ 901.0

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

The data for this valuation was provided by the System staff as of June 30, 2017. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

**SBCERS' Membership**

<b>As of June 30, 2016 and 2017</b>		<b>2016</b>	<b>2017</b>
<b>Members Now Receiving Benefits</b>			
Service Retirement		3,398	3,562
Disability Retirement		243	256
Beneficiaries and Survivors		530	557
Subtotal		4,171	4,375
<b>Active Members</b>			
Active Vested Members		3,105	2,986
Active Nonvested Members		1,243	1,313
Subtotal		4,348	4,299
<b>Deferred Members</b>		1,391	1,463
<b>Total Membership</b>		9,910	10,137

<b>Schedule of Average Benefit Payments</b>						
<b>June 30, 2017</b>	<b><u>Years of Retirement</u></b>					
	0-9	10-14	15-19	20-24	25-29	30+
Average Monthly Benefit	\$3,383	\$3,117	\$2,804	\$2,503	\$2,488	\$1,978
Average Annual Benefit	40,596	37,404	33,648	30,036	29,856	23,736
Number of Active Retirees	2,298	833	574	259	197	214

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Schedule of Active Member Valuation Data**

Valuation Date	Plan	Active		% Increase in	
		Members	Annual Salary*	Average*	Average Salary
June 30, 2017	General	3,315	\$ 242,037,608	73,013	2.51%
	Safety	949	91,187,124	96,088	2.29%
	APCD	35	2,886,965	82,485	5.19%
	<b>Total</b>	<b>4,299</b>	<b>\$ 336,111,696</b>	<b>78,184</b>	<b>2.78%</b>

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.



**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

Schedule of Retirees & Beneficiaries Added to and Removed from Retirement Payroll								
Fiscal Year	Added to rolls		Removed from rolls		Rolls at end of year		% Increase in Retiree Allowance	Average Annual Allowance
	Number	Annual Allowance *	Number	Annual Allowance	Number	Annual Allowance		
2008	232	\$ 8,624,426	-72	\$ (1,213,017)	2,972	\$ 83,023,412	17.3%	\$ 27,935
2009	239	\$ 8,842,975	-94	\$ (2,084,942)	3,117	\$ 92,275,326	11.1%	\$ 29,604
2010	301	\$ 13,005,361	-100	\$ 2,443,989	3,318	\$ 104,978,781	13.8%	\$ 31,639
2011	192	\$ 5,922,775	-123	\$ 2,942,348	3,387	\$ 110,219,174	5.0%	\$ 32,542
2012	226	\$ 9,082,861	-106	\$ 2,884,973	3,507	\$ 118,545,000	7.6%	\$ 33,802
2013	364**	\$ 8,811,248	-98	\$ 1,787,108	3,773	\$ 126,691,263	6.9%	\$ 33,578
2014	203	\$ 6,842,058	-79	\$ 2,112,523	3,897	\$ 132,766,493	4.8%	\$ 34,069
2015	241	\$ 9,044,486	-108	\$ 2,627,746	4,030	\$ 141,193,001	6.3%	\$ 35,016
2016	244	\$ 9,705,939	-103	\$ 2,534,190	4,171	\$ 149,683,889	6.0%	\$ 35,886
2017	314	\$ 13,124,187	-110	\$ 3,255,813	4,375	\$ 162,510,138	8.6%	\$ 37,146

\*Annual allowance added during the year does not include COLAs granted in year to continuing retirees and beneficiaries.

\*\*Includes 119 new records for members with benefits in more than one plan. Previously these members had only one record that accounted for their total benefit.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**SBCERS Membership - Active Members as of June 30, 2017**

<b>General Members</b>	<b>Count</b>	<b>Annual Salary*</b>	<b>Average Age</b>	<b>Average Monthly Salary*</b>	<b>Average Vesting Service</b>
Plan 2	9	\$624,000	58.3	\$5,778	29.1
Plan 5A	486	\$39,023,000	55.3	\$6,691	25.8
Plan 5B	338	\$36,685,000	49.2	\$9,045	13.6
Plan 5C	1,355	\$92,361,000	47.7	\$5,680	13.5
Plan 7	104	\$8,718,000	40.7	\$6,986	8.0
PEPRA	<u>1,023</u>	<u>\$64,627,000</u>	37.7	\$5,264	2.0
<b>Total</b>	3,315	\$242,038,000	45.7	\$6,084	11.6
<b>APCD Members</b>					
Plan 1	8	\$709,000	57.0	\$7,385	27.6
Plan 2	14	\$1,305,000	43.4	\$7,768	10.2
PEPRA	<u>13</u>	<u>\$873,000</u>	29.5	\$5,596	2.2
<b>Total</b>	35	\$2,887,000	41.4	\$6,874	11.2
<b>Safety Members</b>					
Plan 4A	48	\$5,951,000	52.6	\$10,332	22.8
Plan 4B	12	\$1,495,000	49.6	\$10,382	20.9
Plan 4C	317	\$31,568,000	43.6	\$8,299	14.6
Plan 6A	55	\$6,447,000	52.1	\$9,768	27.7
Plan 6B	278	\$27,143,000	43.1	\$8,136	13.7
PEPRA	<u>239</u>	<u>\$18,583,000</u>	32.4	\$6,479	1.9
<b>Total</b>	949	\$91,187,000	41.7	\$8,007	12.4
<b>Total Active Members</b>	4,299	\$336,112,000	44.8	\$6,515	11.8

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A – MEMBERSHIP INFORMATION**

**SBCERS Membership - Schedule of Active Member Valuation Data**

Valuation Date	Plan Type	Count	Annual Salary*	Average Annual Salary*	Increase in Average Salary
<b>June 30, 2008</b>	General	3,552	\$226,426,000	\$63,746	6.00%
	APCD	48	\$3,608,000	\$75,167	1.10%
	Safety	<u>1,006</u>	<u>\$77,230,000</u>	\$76,769	2.00%
	Total	4,606	\$307,264,000	\$66,710	4.90%
<b>June 30, 2009</b>	General	3,450	\$223,831,000	\$64,879	1.80%
	APCD	50	\$3,955,000	\$79,100	5.20%
	Safety	<u>967</u>	<u>\$79,596,000</u>	\$82,312	7.20%
	Total	4,467	\$307,382,000	\$68,812	3.20%
<b>June 30, 2010</b>	General	3,261	\$223,995,000	\$68,689	5.90%
	APCD	46	\$3,716,000	\$80,783	2.10%
	Safety	<u>921</u>	<u>\$79,795,000</u>	\$86,640	5.30%
	Total	4,228	\$307,506,000	\$72,731	5.70%
<b>June 30, 2011</b>	General	3,198	\$222,046,000	\$69,433	1.10%
	APCD	46	\$3,457,000	\$75,161	-7.00%
	Safety	<u>904</u>	<u>\$81,025,000</u>	\$89,630	3.50%
	Total	4,148	\$306,528,000	\$73,898	1.60%
<b>June 30, 2012</b>	General	3,141	\$220,234,000	\$70,116	1.00%
	APCD	46	\$3,475,000	\$75,548	0.50%
	Safety	<u>885</u>	<u>\$79,168,000</u>	\$89,456	-0.20%
	Total	4,072	\$302,877,000	\$74,380	0.70%
<b>June 30, 2013</b>	General	3,161	\$216,968,000	\$68,639	-2.11%
	APCD	43	\$3,344,000	\$77,767	2.94%
	Safety	<u>904</u>	<u>\$81,004,000</u>	\$89,606	0.17%
	Total	4,108	\$301,316,000	\$73,349	-1.39%
<b>June 30, 2014</b>	General	3,226	\$221,733,000	\$68,733	0.14%
	APCD	41	\$3,335,000	\$81,341	4.60%
	Safety	<u>910</u>	<u>\$83,659,000</u>	\$91,933	2.60%
	Total	4,177	\$308,727,000	\$73,911	0.77%
<b>June 30, 2015</b>	General	3,307	\$231,757,487	\$70,081	1.96%
	APCD	40	\$3,079,706	\$76,993	-5.35%
	Safety	<u>931</u>	<u>\$86,077,154</u>	\$92,457	0.57%
	Total	4,278	\$320,914,347	\$75,015	1.49%
<b>June 30, 2016</b>	General	3,394	\$241,729,055	\$71,222	1.63%
	APCD	38	\$2,979,643	\$78,412	1.84%
	Safety	<u>916</u>	<u>\$86,041,656</u>	\$93,932	1.60%
	Total	4,348	\$330,750,354	\$76,070	1.41%
<b>June 30, 2017</b>	General	3,315	\$242,037,608	\$73,013	2.51%
	APCD	35	\$2,886,965	\$82,485	5.19%
	Safety	<u>949</u>	<u>\$91,187,124</u>	\$96,088	2.30%
	Total	4,299	\$336,111,696	\$78,184	2.78%

\* Based on salary data provided in the for Fiscal Year End of Valuation Date.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**SBCERS Membership – Deferred Vested Members as of June 30, 2017**

<b>General Members</b>	<b>Count</b>	<b>Average Age</b>
Plan 2	18	57.1
Plan 5A	180	55.4
Plan 5B	459	48.8
Plan 5C	315	44.0
Plan 7	39	38.5
PEPRA	<u>208</u>	37.1
<b>Total</b>	<b>1219</b>	<b>46.4</b>
<b>APCD Members</b>		
Plan 1	8	55.3
Plan 2	11	40.1
PEPRA	<u>3</u>	37.7
<b>Total</b>	<b>22</b>	<b>45.3</b>
<b>Safety Members</b>		
Plan 4A	6	48.5
Plan 4B	48	49.4
Plan 4C	36	42.2
Plan 6A	33	53.6
Plan 6B	61	39.8
PEPRA	<u>38</u>	32.9
<b>Total</b>	<b>222</b>	<b>42.6</b>
<b>Total Inactive</b>	<b>1,463</b>	<b>45.8</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A – MEMBERSHIP INFORMATION**

**SBCERS Membership – Retired Members as of June 30, 2017**

<b>General Members</b>	<b>Count</b>	<b>Average Current Age</b>	<b>Average Age at Retirement*</b>	<b>Monthly Allowances</b>	<b>Average Monthly Benefit</b>
Plan 1	815	82.1	58.2	\$1,385,000	\$1,700
Plan 2	67	69.5	61.1	\$45,000	\$665
Plan 3	6	64.7	56.4	\$7,000	\$1,093
Plan 4A	189	75.1	59.5	\$443,000	\$2,344
Plan 4B	5	74.4	59.0	\$1,000	\$277
Plan 5A	1,554	67.3	59.3	\$5,218,000	\$3,358
Plan 5B	305	66.9	60.9	\$512,000	\$1,680
Plan 5C	333	64.8	62.0	\$609,000	\$1,829
Plan 7**	1	67.0	63.2	\$0	\$255
<b>Total</b>	<b>3,275</b>	<b>71.2</b>	<b>59.6</b>	<b>\$8,220,000</b>	<b>\$2,510</b>
<b>APCD Members</b>					
Plan 1	49	65.2	58.1	\$160,000	\$3,270
Plan 2	12	66.1	61.3	\$22,000	\$1,850
<b>Total</b>	<b>61</b>	<b>65.4</b>	<b>58.8</b>	<b>\$182,000</b>	<b>\$2,984</b>
<b>Safety Members</b>					
Plan 1	290	75.8	55.0	\$1,235,000	\$4,259
Plan 2	21	74.0	54.6	\$49,000	\$2,333
Plan 3	3	63.7	55.3	\$13,000	\$4,414
Plan 4A	274	65.3	56.0	\$1,853,000	\$6,763
Plan 4B	102	66.2	56.5	\$295,000	\$2,894
Plan 4C	79	62.2	58.8	\$274,000	\$3,467
Plan 4D	2	62.0	63.0	\$7,000	\$3,650
Plan 6A	220	58.8	53.4	\$1,262,000	\$5,734
Plan 6B	48	55.6	55.4	\$153,000	\$3,196
<b>Total</b>	<b>1,039</b>	<b>66.4</b>	<b>55.4</b>	<b>\$5,141,000</b>	<b>\$4,948</b>
<b>Total Retired Members</b>	<b>4,375</b>	<b>70.0</b>	<b>58.6</b>	<b>\$13,543,000</b>	<b>\$3,096</b>

\* For healthy retired members only, excludes disabled members and beneficiaries.

\*\* Monthly benefit is \$255.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**SBCERS Membership – Retired Members as of June 30, 2017**

	<b>Count</b>	<b>Monthly Allowances</b>	<b>Average Monthly Benefit</b>
<b>General Members</b>			
Healthy	2,746	\$7,335,000	\$2,671
Disabled	127	283,000	2,228
Beneficiaries	402	602,000	1,498
<b>Total</b>	<b>3,275</b>	<b>\$8,220,000</b>	<b>\$2,510</b>
<b>APCD Members</b>			
Healthy	55	\$169,000	\$3,073
Disabled	0	0	0
Beneficiaries	6	13,000	2,167
<b>Total</b>	<b>61</b>	<b>\$182,000</b>	<b>\$2,984</b>
<b>Safety Members</b>			
Healthy	761	\$4,244,000	\$5,577
Disabled	129	502,000	3,891
Beneficiaries	149	395,000	2,651
<b>Total</b>	<b>1,039</b>	<b>\$5,141,000</b>	<b>\$4,948</b>
<b>Total Retired Members</b>	<b>4,375</b>	<b>\$13,543,000</b>	<b>\$3,096</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Salary as of June 30, 2017  
All Members**

**Count**

Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	15	48	0	0	0	0	0	0	0	63
25-29	49	261	30	0	0	0	0	0	0	340
30-34	40	296	151	57	0	0	0	0	0	544
35-39	21	168	136	230	42	0	0	0	0	597
40-44	15	116	57	160	162	34	1	0	0	545
45-49	9	77	45	134	218	117	32	0	0	632
50-54	13	73	56	85	129	119	84	38	2	599
55-59	9	59	37	63	107	85	90	57	18	525
60-64	1	24	30	68	63	47	55	32	17	337
65 & Over	2	17	19	31	19	16	4	3	6	117
<b>Total Count</b>	174	1,139	561	828	740	418	266	130	43	4,299

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Salary**

Age	Years of Service									Average Salary*
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	\$62,751	\$56,381	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,898
25-29	62,009	57,987	70,108	0	0	0	0	0	0	59,636
30-34	66,622	62,902	72,175	75,519	0	0	0	0	0	67,072
35-39	74,390	65,829	72,102	78,814	87,828	0	0	0	0	74,109
40-44	82,435	70,365	76,714	80,329	88,437	87,977	60,463	0	0	80,739
45-49	72,868	71,665	81,769	81,117	88,359	90,293	89,193	0	0	84,500
50-54	70,337	72,971	87,528	77,267	86,722	87,004	91,869	98,815	98,495	85,008
55-59	77,099	87,850	82,096	80,482	80,700	84,557	87,089	94,461	80,417	84,718
60-64	111,057	81,428	98,481	90,344	84,699	78,369	88,093	93,054	77,168	86,995
65 & Over	68,215	69,170	78,137	82,110	80,654	82,315	77,340	68,964	104,754	79,800
Average Salary*	\$68,706	\$65,707	\$77,073	\$80,291	\$86,444	\$86,356	\$88,812	\$94,799	\$83,369	\$78,184

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.

**Age & Service Distribution of Active Members by Count and Average Salary as of June 30, 2017  
General Members**

**Count**

Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	4	27	0	0	0	0	0	0	0	31
25-29	28	202	21	0	0	0	0	0	0	251
30-34	23	233	108	41	0	0	0	0	0	405
35-39	15	144	99	141	27	0	0	0	0	426
40-44	13	103	44	116	96	20	1	0	0	393
45-49	6	75	36	102	147	72	21	0	0	459
50-54	13	66	51	74	101	83	55	27	2	472
55-59	8	53	32	58	95	77	76	44	18	461
60-64	1	24	27	63	55	45	50	29	15	309
65 & Over	2	17	19	28	18	15	3	2	4	108
Total Count	113	944	437	623	539	312	206	102	39	3,315



**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Salary**

Age	Years of Service									Average Salary*	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over		
Under 25	\$54,117	\$47,916	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,716
25-29	53,884	52,991	63,622	0	0	0	0	0	0	0	53,980
30-34	60,066	57,853	64,633	68,396	0	0	0	0	0	0	60,854
35-39	74,189	63,241	64,251	67,607	76,290	0	0	0	0	0	66,133
40-44	83,279	69,052	71,913	73,252	75,725	75,901	60,463	0	0	0	73,039
45-49	77,255	70,871	79,156	76,748	80,915	81,029	74,264	0	0	0	77,876
50-54	70,337	71,910	85,602	75,394	82,791	77,805	81,917	84,080	98,495	0	79,232
55-59	78,287	85,943	78,180	79,866	78,491	82,298	80,649	86,593	80,417	0	81,336
60-64	111,057	81,428	96,589	88,021	84,129	78,301	87,822	92,232	75,852	0	85,996
65 & Over	68,215	69,170	78,137	78,959	78,592	81,626	71,724	56,507	67,329	0	76,336
Average Salary*	\$66,849	\$62,970	\$72,428	\$74,847	\$79,933	\$79,791	\$81,850	\$86,941	\$78,246	\$0	\$73,013

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Salary as of June 30, 2017  
Safety Members**

**Count**

Age	Years of Service									Total Count
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	11	16	0	0	0	0	0	0	0	27
25-29	21	55	8	0	0	0	0	0	0	84
30-34	17	62	41	15	0	0	0	0	0	135
35-39	6	22	34	88	15	0	0	0	0	165
40-44	2	13	12	44	66	14	0	0	0	151
45-49	3	2	9	32	71	45	11	0	0	173
50-54	0	6	3	11	28	36	26	11	0	121
55-59	1	6	5	5	12	8	13	11	0	61
60-64	0	0	3	5	5	2	4	3	2	24
65 & Over	0	0	0	3	1	1	0	1	2	8
<b>Total Count</b>	<b>61</b>	<b>182</b>	<b>115</b>	<b>203</b>	<b>198</b>	<b>106</b>	<b>54</b>	<b>26</b>	<b>4</b>	<b>949</b>

**Salary**

Age	Years of Service									Average Salary*
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	\$65,891	\$69,097	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,791
25-29	72,841	75,580	86,014	0	0	0	0	0	0	75,889
30-34	75,492	81,592	91,517	92,880	0	0	0	0	0	85,092
35-39	74,892	82,687	92,468	96,238	108,595	0	0	0	0	94,002
40-44	76,946	80,768	93,959	98,986	106,928	105,227	0	0	0	100,776
45-49	64,095	101,443	92,221	95,041	103,772	105,117	117,693	0	0	102,076
50-54	0	83,813	108,372	89,863	100,901	108,212	114,572	134,984	0	107,446
55-59	67,594	104,694	107,153	87,632	98,190	106,300	122,877	127,083	0	109,733
60-64	0	0	115,510	119,616	94,773	79,898	89,955	101,004	87,043	100,633
65 & Over	0	0	0	111,521	117,769	92,649	0	93,878	179,605	124,759
<b>Average Salary*</b>	<b>\$72,147</b>	<b>\$79,803</b>	<b>\$93,471</b>	<b>\$96,641</b>	<b>\$104,289</b>	<b>\$105,678</b>	<b>\$115,384</b>	<b>\$126,139</b>	<b>\$133,324</b>	<b>\$96,088</b>

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2017  
APCD Members**

**Count**

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

**Salary**

Age	Years of Service									Average Salary*
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	\$0	\$61,399	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,399
25-29	0	68,410	79,056	0	0	0	0	0	0	70,539
30-34	0	80,675	82,936	107,160	0	0	0	0	0	88,427
35-39	0	66,669	100,397	125,633	0	0	0	0	0	93,360
40-44	0	0	81,023	0	0	0	0	0	0	81,023
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	77,954	105,366	0	0	0	77,565	0	0	86,896
55-59	0	0	0	0	0	0	111,275	88,141	0	95,852
60-64	0	0	0	0	78,357	0	94,187	0	0	82,314
65 & Over	0	0	0	0	0	0	94,187	0	0	94,187
<b>Average Salary*</b>	\$0	\$67,123	\$93,097	\$116,396	\$78,357	\$0	\$88,724	\$88,141	\$0	\$82,485

\* Based on salary data provided in the June 30, 2017 valuation data for FYE 2017.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Distribution of Retired Members by Age and Retirement Year as of June 30, 2017  
All Members**

Age	Benefit Effective Date									Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-17		
Under 35	0	0	0	0	3	2	1	3	0	9	\$621
35-39	0	0	0	0	0	1	1	0	1	3	\$1,458
40-44	0	0	0	0	0	2	0	7	5	14	\$2,556
45-49	0	0	0	0	3	3	2	7	9	24	\$2,557
50-54	0	0	0	2	2	2	8	55	70	139	\$2,590
55-59	0	0	0	0	10	13	66	183	140	412	\$2,989
60-64	0	0	1	1	12	44	213	285	199	755	\$3,413
65-69	1	2	6	3	37	126	251	307	144	877	\$3,508
70-74	11	7	4	21	110	227	276	161	53	870	\$3,487
75-79	11	6	11	56	101	162	97	39	23	506	\$2,927
80-84	11	7	35	50	104	60	30	16	8	321	\$2,414
85-89	6	23	32	69	39	36	15	18	11	249	\$2,133
90-94	22	21	34	18	5	11	11	12	3	137	\$1,822
95-99	8	22	7	1	3	3	2	1	3	50	\$2,156
100 & Over	4	0	2	2	1	0	0	0	0	9	\$1,503
<b>Total Count</b>	<b>74</b>	<b>88</b>	<b>132</b>	<b>223</b>	<b>430</b>	<b>692</b>	<b>973</b>	<b>1,094</b>	<b>669</b>	<b>4,375</b>	
<b>Avg Monthly Benefit</b>	<b>\$1,867</b>	<b>\$1,910</b>	<b>\$2,422</b>	<b>\$2,404</b>	<b>\$2,713</b>	<b>\$3,023</b>	<b>\$3,326</b>	<b>\$3,266</b>	<b>\$3,456</b>	<b>\$3,096</b>	<b>\$3,096</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Distribution of Retired Members by Age and Retirement Year as of June 30, 2017  
General Members**

Age	Benefit Effective Date									Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-17		
Under 35	0	0	0	0	3	2	1	1	0	7	\$527
35-39	0	0	0	0	0	1	1	0	1	3	\$1,458
40-44	0	0	0	0	0	1	0	2	4	7	\$1,382
45-49	0	0	0	0	2	2	2	2	1	9	\$1,377
50-54	0	0	0	2	1	1	2	18	45	69	\$1,205
55-59	0	0	0	0	8	8	37	73	105	231	\$1,704
60-64	0	0	1	1	7	32	135	145	215	536	\$2,500
65-69	1	0	4	3	30	85	181	225	174	703	\$3,148
70-74	1	0	2	10	65	142	239	121	62	642	\$2,882
75-79	2	2	6	43	58	140	83	33	20	387	\$2,374
80-84	4	7	26	38	93	56	28	11	8	271	\$2,180
85-89	4	20	28	67	36	31	13	11	16	226	\$2,054
90-94	19	20	34	18	5	10	11	8	4	129	\$1,777
95-99	4	22	7	1	3	3	2	1	3	46	\$2,014
100 & Over	4	0	2	2	1	0	0	0	0	9	\$1,503
<b>Total Count</b>	<b>39</b>	<b>71</b>	<b>110</b>	<b>185</b>	<b>312</b>	<b>514</b>	<b>735</b>	<b>651</b>	<b>658</b>	<b>3,275</b>	
<b>Avg Monthly Benefit</b>	<b>\$1,272</b>	<b>\$1,599</b>	<b>\$2,090</b>	<b>\$2,019</b>	<b>\$1,832</b>	<b>\$2,287</b>	<b>\$2,679</b>	<b>\$2,815</b>	<b>\$2,893</b>	<b>\$2,510</b>	<b>\$2,510</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Distribution of Retired Members by Age and Retirement Year as of June 30, 2017  
Safety Members**

Age	Benefit Effective Date									Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-17		
Under 35	0	0	0	0	0	0	0	2	0	2	\$951
35-39	0	0	0	0	0	0	0	0	0	0	\$0
40-44	0	0	0	0	0	1	0	3	3	7	\$3,731
45-49	0	0	0	0	1	1	0	3	10	15	\$3,265
50-54	0	0	0	0	1	1	6	16	43	67	\$4,079
55-59	0	0	0	0	2	5	27	64	71	169	\$4,833
60-64	0	0	0	0	5	12	72	80	34	203	\$5,800
65-69	0	2	2	0	7	39	69	24	19	162	\$5,060
70-74	10	7	2	11	45	84	32	14	11	216	\$5,293
75-79	9	4	5	13	43	21	12	3	6	116	\$4,733
80-84	7	0	9	12	11	2	2	5	0	48	\$3,790
85-89	2	3	4	2	3	4	2	2	0	22	\$3,037
90-94	3	1	0	0	0	1	0	1	2	8	\$2,549
95-99	4	0	0	0	0	0	0	0	0	4	\$3,797
100 & Over	0	0	0	0	0	0	0	0	0	0	\$0
<b>Total Count</b>	<b>35</b>	<b>17</b>	<b>22</b>	<b>38</b>	<b>118</b>	<b>171</b>	<b>222</b>	<b>217</b>	<b>199</b>	<b>1,039</b>	
<b>Avg Monthly Benefit</b>	<b>\$2,529</b>	<b>\$3,206</b>	<b>\$4,080</b>	<b>\$4,277</b>	<b>\$5,043</b>	<b>\$5,269</b>	<b>\$5,517</b>	<b>\$4,905</b>	<b>\$4,826</b>	<b>\$4,948</b>	<b>\$4,948</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Distribution of Retired Members by Age and Retirement Year as of June 30, 2017  
APCD Members**

Age	Benefit Effective Date									Total Count	Average Monthly Benefit
	Pre-1980	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-17		
Under 35	0	0	0	0	0	0	0	0	0	0	\$0
35-39	0	0	0	0	0	0	0	0	0	0	\$0
40-44	0	0	0	0	0	0	0	0	0	0	\$0
45-49	0	0	0	0	0	0	0	0	0	0	\$0
50-54	0	0	0	0	0	0	0	1	2	3	\$1,164
55-59	0	0	0	0	0	0	2	5	5	12	\$1,739
60-64	0	0	0	0	0	0	6	6	4	16	\$3,696
65-69	0	0	0	0	0	2	1	6	3	12	\$3,650
70-74	0	0	0	0	0	1	5	4	2	12	\$3,313
75-79	0	0	0	0	0	1	2	0	0	3	\$4,427
80-84	0	0	0	0	0	2	0	0	0	2	\$1,019
85-89	0	0	0	0	0	1	0	0	0	1	\$53
90-94	0	0	0	0	0	0	0	0	0	0	\$0
95-99	0	0	0	0	0	0	0	0	0	0	\$0
100 & Over	0	0	0	0	0	0	0	0	0	0	\$0
<b>Total Count</b>	0	0	0	0	0	7	16	22	16	61	
<b>Avg Monthly Benefit</b>	\$0	\$0	\$0	\$0	\$0	\$2,163	\$2,641	\$3,191	\$3,426	\$2,984	\$2,984

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of System Membership Since Prior Valuation  
All Members**

	Actives	Deferred Members	Non-Duty Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>June 30, 2016</b>	<b>4,348</b>	<b>1,391</b>	<b>66</b>	<b>177</b>	<b>3,398</b>	<b>530</b>	<b>9,910</b>
New Entrants	388	0	0	0	0	0	388
Rehires	21	(9)	0	0	(1)	0	11
Duty Disabilities	(9)	(4)	0	15	(2)	0	0
Ordinary Disabilities	0	(1)	2	0	(1)	0	0
Retirements	(178)	(56)	0	0	234	0	0
Retirements from Safety with Misc Service	0	(2)	0	0	16	0	14
Vested Terminations	(63)	63	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(1)	0	(1)	(1)	(35)	38	0
Non-Vested Terminations and Death without beneficiary	(117)	113	(1)	(1)	(46)	0	(52)
Transfers	(17)	16	0	0	0	0	(1)
Beneficiary Deaths	0	0	0	0	0	(19)	(19)
Domestic Relations Orders	0	(1)	0	0	0	9	8
Withdrawals Paid	(72)	(47)	0	0	0	0	(119)
Data Corrections	(1)	0	0	0	0	0	(1)
Benefit Expired	0	0	0	0	(1)	(1)	(2)
<b>June 30, 2017</b>	<b>4,299</b>	<b>1,463</b>	<b>66</b>	<b>190</b>	<b>3,562</b>	<b>557</b>	<b>10,137</b>



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**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of System Membership Since Prior Valuation  
General Members**

	Actives	Deferred Members	Non-Duty Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>June 30, 2016</b>	<b>3,394</b>	<b>1,153</b>	<b>56</b>	<b>68</b>	<b>2,625</b>	<b>382</b>	<b>7,678</b>
New Entrants	279	0	0	0	0	0	279
Rehires	16	(7)	0	0	0	0	9
Duty Disabilities	(1)	(2)	0	4	(1)	0	0
Ordinary Disabilities	0	(1)	2	0	(1)	0	0
Retirements	(132)	(47)	0	0	179	0	0
Retirements from one plan with service in another	0	(2)	0	0	15	0	13
Vested Terminations	(51)	51	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(1)	0	0	(1)	(25)	27	0
Non-Vested Terminations and Death without beneficiary	(103)	100	(1)	(1)	(45)	0	(50)
Transfers	(22)	16	0	0	0	0	(6)
Beneficiary Deaths	0	0	0	0	0	(13)	(13)
Domestic Relations Orders	0	0	0	0	0	7	7
Withdrawals Paid	(63)	(42)	0	0	0	0	(105)
Data Corrections	(1)	0	0	0	0	0	(1)
Benefit Expired	0	0	0	0	(1)	(1)	(2)
<b>June 30, 2017</b>	<b>3,315</b>	<b>1,219</b>	<b>57</b>	<b>70</b>	<b>2,746</b>	<b>402</b>	<b>7,809</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of System Membership Since Prior Valuation  
Safety Members**

	Actives	Deferred Members	Non-Duty Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>June 30, 2016</b>	<b>916</b>	<b>220</b>	<b>10</b>	<b>109</b>	<b>719</b>	<b>142</b>	<b>2,116</b>
New Entrants	105	0	0	0	0	0	105
Rehires	5	(2)	0	0	(1)	0	2
Duty Disabilities	(8)	(2)	0	11	(1)	0	0
Ordinary Disabilities	0	0	0	0	0	0	0
Retirements	(45)	(8)	0	0	53	0	0
Retirements from Safety with Misc Service	0	0	0	0	1	0	1
Vested Terminations	(9)	9	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	(1)	0	(10)	11	0
Non-Vested Terminations and Death without beneficiary	(12)	11	0	0	0	0	(1)
Transfers	5	0	0	0	0	0	5
Beneficiary Deaths	0	0	0	0	0	(6)	(6)
Domestic Relations Orders	0	(1)	0	0	0	2	1
Withdrawals Paid	(8)	(5)	0	0	0	0	(13)
Data Corrections	0	0	0	0	0	0	0
Benefit Expired	0	0	0	0	0	0	0
<b>June 30, 2017</b>	<b>949</b>	<b>222</b>	<b>9</b>	<b>120</b>	<b>761</b>	<b>149</b>	<b>2,210</b>

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**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of System Membership Since Prior Valuation  
APCD Members**

	Actives	Deferred Members	Non-Duty Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>June 30, 2016</b>	<b>38</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>6</b>	<b>116</b>
New Entrants	4	0	0	0	0	0	4
Rehires	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	0	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0
Retirements	(1)	(1)	0	0	2	0	0
Retirements from Safety with Misc Service	0	0	0	0	0	0	0
Vested Terminations	(3)	3	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0
Non-Vested Terminations and Death without beneficiary	(2)	2	0	0	(1)	0	(1)
Transfers	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0
Withdrawals Paid	(1)	0	0	0	0	0	(1)
Data Corrections	0	0	0	0	0	0	0
Benefit Expired	0	0	0	0	0	0	0
<b>June 30, 2017</b>	<b>35</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>55</b>	<b>6</b>	<b>118</b>

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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**APPENDIX B – STATEMENT OF CURRENT ACTUARIAL  
ASSUMPTIONS AND METHODS**

## **Contribution Allocation Procedure**

The contribution allocation procedure primarily consists of an actuarial cost method, an asset valuation method, and an amortization method as described below. There were no changes to the contribution allocation procedures from the prior valuation.

### **1. 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 normal cost for the Plan is based on the sum of the individual normal costs for each member (Individual Entry Age Method).

### **2. Amortization Method**

The UAL (or Surplus Funding) is amortized as a percentage of the projected salaries of present and future members of SBCERS. Effective with the June 30, 2013 valuation, the UAL as of June 30, 2013 is amortized over a closed 17-year period, except for the additional UAL attributable to the creation of Safety Plan 6, which is being amortized over a separate closed period (currently 13 years). Effective with the June 30, 2014 valuation, any new sources of UAL due to actuarial gains and losses, assumption changes, or method changes is amortized over a closed 19-year period, with five-year ramp up period at the beginning of the period, a four-year ramp down at the end of the period, and ten years of level payments as a percentage of payroll. This new method is a type of direct rate smoothing method.

The single equivalent amortization period is 16 years. As of June 30, 2017, it would take approximately 16 years to fully pay off the total Unfunded Actuarial Liability based on the current UAL payment increasing as a level percentage of payroll.

### **3. Asset Valuation Method**

As of June 30, 2014, the market value of assets is used to determine the System's UAL. A smoothed Actuarial Value of Assets is no longer used.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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## **Actuarial Assumptions**

The assumptions used in this report reflect the results of an Experience Study performed by Cheiron covering the period from July 1, 2013 through June 30, 2016 and adopted by the Board. More details on the rationale for the demographic and economic assumptions can be found in the Experience Analysis dated December 14, 2016.

### **1. Rate of Return**

Assets are assumed to earn 7.00%, net of investment expenses.

### **2. Administrative Expenses**

Administrative expenses are assumed to be \$5.3 million for the next year, to be split between employees and employers based on their share of the overall contributions. Administrative expenses are assumed to increase by the assumed wage inflation of 3.00% each year.

### **3. Cost-of-Living**

The cost-of-living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.75% per year. This assumption is also used for increasing the compensation limit that applies to PEPRAs members.

### **4. Post Retirement COLA**

Benefits are assumed to increase after retirement at the rate of 2.6% per year for General Plans 5, Safety Plans 4, 6 and 8 (PEPRA), and APCD Plans 1 and 2; 1.90% per year for General Plans 7 and APCD Plan 8 (PEPRA), and 0% per year for General Plan 2.

For General Plan 8 (PEPRA), benefits are assumed to increase at the rate of 1.90% per year if their employer had implemented General Plan 7 prior to January 1, 2013. Otherwise, benefits are assumed to increase at the rate of 2.6% per year.

### **5. 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.

### **6. 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.

### **7. Social Security Wage Base**

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General Plan 2 members have their benefits offset by an assumed Social Security Benefit. For projecting the Social Security Benefit, the annual Social Security Wage Base increase is assumed to be 2.75% per year.

**8. Interest on Member Contributions**

The annual credited interest rate on member contributions is assumed to be 3.75%. As of June 30, 2008, the credited interest rate each six-month period is the semi-annual yield of the five-year Treasury note as of the last business day of the interest-crediting period.

**9. 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. For safety plan members, a 2.00% load was applied to the expected years of service at retirement for sick leave service credit. For general plan members, the load was 1.25%. This assumption was adopted effective June 30, 2016.

**10. Family Composition**

Percentage married for all active members who retire, become disabled, or die during active service is shown in the table below. Male members are assumed to be three years older than their spouses and female members are assumed to be two years younger than their spouses.

<b>Percentage Married</b>	
<b>Gender</b>	<b>Percentage</b>
Males	75%
Females	55%

**11. Vacation Cashout**

Any cashouts of vacation during the final average salary period affecting the calculation of a retirement benefit are recognized at the time of retirement. There is no prerecognition of potential costs included in the valuation.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
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**12. Increases in Pay**

Wage inflation component: 3.00%

Additional longevity and promotion component:

Longevity and Promotion Increases		
Service	General	Safety
0	4.75%	6.00%
1	4.00%	5.00%
2	3.25%	4.00%
3	2.50%	3.25%
4	2.00%	2.50%
5	1.50%	2.00%
6	1.25%	1.60%
7	1.00%	1.30%
8	0.90%	1.20%
9	0.80%	1.10%
10	0.78%	1.00%
11	0.75%	0.95%
12	0.70%	0.92%
13	0.65%	0.89%
14	0.60%	0.87%
15	0.55%	0.85%
16	0.50%	0.82%
17	0.48%	0.80%
18	0.46%	0.77%
19	0.44%	0.74%
20	0.42%	0.72%
21	0.40%	0.69%
22	0.38%	0.67%
23	0.36%	0.64%
24	0.34%	0.62%
25	0.32%	0.59%
26	0.30%	0.57%
27	0.28%	0.54%
28	0.26%	0.52%
29	0.25%	0.50%
30+	0.25%	0.50%

*Increases are compound rather than additive.*

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**13. Rates of Termination**

Sample rates of termination are shown in the following table below. The 1.30% rate of termination continues for Safety PEPRA members with 20 or more years of service who are not eligible to retire.

Rates of Termination		
Service	General	Safety
0	20.00%	9.00%
1	14.00%	9.00%
2	10.00%	3.50%
3	8.00%	3.00%
4	7.00%	3.00%
5	6.00%	5.00%
6	6.00%	2.75%
7	5.00%	2.75%
8	5.00%	2.75%
9	4.50%	2.75%
10	4.50%	2.00%
11	3.50%	1.50%
12	3.50%	1.30%
13	3.00%	1.30%
14	2.50%	1.30%
15	2.50%	1.30%
16	2.50%	1.30%
17	1.50%	1.30%
18	1.50%	1.30%
19	1.50%	1.30%
20	1.50%	0.00%
21	1.50%	
22	1.50%	
23	1.50%	
24	1.50%	
25	1.50%	
26	1.50%	
27	1.50%	
28	1.50%	
29	1.50%	
30	0.00%	

*Termination rates do not apply once a member is eligible for retirement.*



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**14. Withdrawal**

Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits.

Rates of Withdrawal		
Service	General	Safety
0	100.00%	100.00%
1	100.00%	100.00%
2	100.00%	100.00%
3	100.00%	100.00%
4	100.00%	100.00%
5	20.00%	20.00%
6	20.00%	20.00%
7	20.00%	20.00%
8	20.00%	20.00%
9	20.00%	20.00%
10	15.00%	10.00%
11	15.00%	10.00%
12	15.00%	10.00%
13	15.00%	10.00%
14	15.00%	10.00%
15	10.00%	10.00%
16	10.00%	10.00%
17	10.00%	10.00%
18	10.00%	10.00%
19	10.00%	10.00%
20	5.00%	0.00%
21	5.00%	0.00%
22	5.00%	0.00%
23	5.00%	0.00%
24	5.00%	0.00%
25	0.00%	0.00%
26	0.00%	0.00%
27	0.00%	0.00%
28	0.00%	0.00%
29	0.00%	0.00%
30	0.00%	0.00%

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

General Plans 5, 7, and 8 (PEPRA) Members:	Age 58
General Plan 2 Members:	Age 65
Safety Plans 4 and 8 (PEPRA) Members:	Age 54
Safety Plan 6 Members:	Age 52
APCD Members:	Age 58

**15. Reciprocal Transfers**

30% of vested terminated General (except Plan 2) and Safety Members that leave their member contributions on deposit with the Plan are assumed to be reciprocal.

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

General & APCD Members:	3.25%
Safety Members:	3.50%

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**16. Rates of Disability**

Disability rates of active participants are shown below.

Age	Rates of Disability			
	General		Safety	
	Years of Service		Years of Service	
	Less than 5	5 or More	Less than 5	5 or More
29 or less	0.004%	0.010%	0.045%	0.050%
30	0.004%	0.010%	0.054%	0.060%
31	0.004%	0.010%	0.054%	0.060%
32	0.004%	0.010%	0.054%	0.060%
33	0.004%	0.010%	0.054%	0.060%
34	0.004%	0.010%	0.054%	0.060%
35	0.004%	0.010%	0.090%	0.100%
36	0.008%	0.020%	0.090%	0.100%
37	0.008%	0.020%	0.090%	0.100%
38	0.008%	0.020%	0.090%	0.100%
39	0.008%	0.020%	0.090%	0.100%
40	0.008%	0.020%	0.117%	0.130%
41	0.008%	0.020%	0.117%	0.130%
42	0.012%	0.030%	0.117%	0.130%
43	0.016%	0.040%	0.117%	0.130%
44	0.020%	0.050%	0.117%	0.130%
45	0.024%	0.060%	0.135%	0.150%
46	0.024%	0.060%	0.162%	0.180%
47	0.024%	0.060%	0.180%	0.200%
48	0.024%	0.060%	0.225%	0.250%
49	0.024%	0.060%	0.225%	0.250%
50	0.028%	0.070%	0.252%	0.280%
51	0.028%	0.070%	0.270%	0.300%
52	0.028%	0.070%	0.450%	0.500%
53	0.028%	0.070%	0.450%	0.500%
54	0.028%	0.070%	0.450%	0.500%
55	0.040%	0.100%	0.450%	0.500%
56	0.040%	0.100%	0.450%	0.500%
57	0.040%	0.100%	0.450%	0.500%
58	0.040%	0.100%	0.450%	0.500%
59	0.040%	0.100%	0.450%	0.500%
60	0.060%	0.150%	0.720%	0.800%
61	0.060%	0.150%	0.720%	0.800%
62	0.060%	0.150%	0.720%	0.800%
63	0.060%	0.150%	0.720%	0.800%
64	0.060%	0.150%	0.720%	0.800%
65	0.060%	0.150%	0.000%	0.000%
66	0.060%	0.150%		
67	0.060%	0.150%		
68	0.060%	0.150%		
69	0.060%	0.150%		
70	0.060%	0.150%		
71	0.060%	0.150%		
72	0.060%	0.150%		
73	0.060%	0.150%		
74	0.060%	0.150%		
75	0.000%	0.000%		

40% of General disabilities and 90% of Safety disabilities where the member has five or more years of service are assumed to be service-related. All disabilities for those with less than five years of service are assumed to be service-related.

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**17. Rates of Mortality for Healthy Lives**

Mortality rates for retirees, beneficiaries, terminated vested, and reciprocals are based on the sex distinct 2014 CalPERS Healthy Annuitant Mortality Tables adjusted by 0.95 for males and 0.90 for females, with Generational improvement using Projection Scale MP-2016 from a base year of 2009.

Non-duty related mortality rates for active members are based on the sex distinct 2014 CalPERS Preretirement Non-Industrial Mortality Table, with no adjustment, with Generational improvement using Projection Scale MP-2016 from a base year of 2009. Safety members are also subject to the 2014 CalPERS Preretirement Industrial Mortality Table for duty-related deaths, with the same Generational improvements applied.

**18. Rates of Mortality for Retired Disabled Lives**

Mortality rates for disabled retirees are based on 2014 CalPERS Industrial Disabled Annuitant Mortality, with no adjustment (Safety only), 2014 CalPERS Non-Industrial Disabled Annuitant Mortality, with no adjustment (General only), with Generational improvement using Projection Scale MP-2016 from a base year of 2009.

**19. Benefit Payment Timing**

End of the month

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**20. Rates of Retirement**

Rates of retirement are based on age and service according to the following table. The rates for Safety PEPRAs members are the same as the Safety Plan 4 rates.

Rates of Retirement								
Age	General		General - PEPRAs		Plan 4		Safety Plan 6	
	Svc < 30	Svc >= 30	Male	Female	Svc < 20	Svc >= 20	Svc < 20	Svc >= 20
< 34	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
35	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
36	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
37	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
38	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
39	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
40	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
41	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
42	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
43	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
44	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
45	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	1.00%
46	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	2.00%
47	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	5.00%
48	0.00%	4.00%	0.00%	0.00%	0.00%	1.00%	0.00%	5.00%
49	0.00%	4.00%	0.00%	0.00%	0.00%	3.00%	0.00%	17.00%
50	3.00%	4.00%	0.00%	0.00%	4.00%	4.00%	20.00%	25.00%
51	3.00%	4.00%	0.00%	0.00%	4.00%	4.00%	15.00%	15.00%
52	3.00%	4.00%	2.40%	1.80%	4.00%	4.00%	15.00%	20.00%
53	3.00%	4.00%	2.40%	1.80%	5.00%	5.00%	15.00%	20.00%
54	3.00%	5.00%	2.40%	5.40%	10.00%	20.00%	15.00%	30.00%
55	5.00%	10.00%	2.40%	5.40%	10.00%	35.00%	25.00%	35.00%
56	5.00%	10.00%	3.60%	5.40%	10.00%	20.00%	15.00%	25.00%
57	7.00%	10.00%	3.60%	5.40%	10.00%	25.00%	15.00%	25.00%
58	7.00%	10.00%	3.60%	5.40%	10.00%	25.00%	15.00%	25.00%
59	7.00%	10.00%	7.20%	7.20%	10.00%	25.00%	15.00%	25.00%
60	7.00%	15.00%	9.00%	9.00%	25.00%	25.00%	15.00%	25.00%
61	15.00%	30.00%	15.00%	10.80%	15.00%	25.00%	15.00%	25.00%
62	25.00%	40.00%	20.00%	20.00%	30.00%	25.00%	15.00%	25.00%
63	15.00%	40.00%	20.00%	20.00%	20.00%	30.00%	15.00%	25.00%
64	26.00%	40.00%	20.00%	20.00%	20.00%	30.00%	15.00%	25.00%
65	26.00%	40.00%	25.00%	25.00%	100.00%	100.00%	100.00%	100.00%
66	26.00%	40.00%	25.00%	25.00%				
67	26.00%	40.00%	40.00%	40.00%				
68	26.00%	40.00%	25.00%	25.00%				
69	26.00%	40.00%	25.00%	25.00%				
70	26.00%	40.00%	25.00%	25.00%				
71	26.00%	40.00%	25.00%	25.00%				
72	26.00%	40.00%	25.00%	25.00%				
73	26.00%	40.00%	25.00%	25.00%				
74	26.00%	40.00%	25.00%	25.00%				
75	100.00%	100.00%	100.00%	100.00%				

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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, 2017. 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.

There have been no changes to the Plan provisions since the prior valuation.

**A. Membership in Retirement Plans**

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

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

**General members:** All non-Safety employees are eligible to be General members. Membership in a particular tier depends primarily upon date of entry to the system. General members employed by Santa Barbara County Air Pollution Control District (APCD) are in APCD Plan 1, APCD Plan 2, General Plan 7, or General Plan 8 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 June 30, 1999, who elected to join General Plan 2. Once vested, Plan 2 members have a one-time election to defer accrued Plan 2 benefits and enter a contributory plan in effect at the time of election. Contributions are based upon age at time of transfer.

**Safety Plan 4A &**

**General Plan 5A:** General employees hired before October 10, 1994, who did not elect to join General Plan 2, and some Safety employees hired before October 10, 1994.

**Safety Plan 4B &**

**General Plan 5B:** Employees in certain bargaining units hired on or after October 10, 1994. Some employees are in Safety Plan 4B without regard to hire date.

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- General Plan 5C:** Members in certain bargaining units hired on or after October 10, 1994. Members in those bargaining units transferred from Plan 5B on March 10, 2008.
- General Plan 7:** County General employees hired on or after June 25, 2012, and other new non-PEPRA General hires for employers that have adopted Plan 7.
- 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 4B on February 25, 2008.
- Plan 8 (PEPRA):** All new members hired on or after January 1, 2013. Employees who transfer from and are eligible for reciprocity with another public employer will not be PEPRA members if their service in the reciprocal system was under a pre-PEPRA tier.

## **B. 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 Appendix E for details on this calculation. Current member rates are shown in the Appendix. (31453, 31454, 31454.1)

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

Plan 8: PEPRA members must contribute half of the normal cost of the Plan. Contributions for these members will be based on the Normal Cost associated with their benefits; General and Safety members will pay different rates.

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)

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**Cost-of-Living:** Some members may contribute towards the cost-of-living benefit based on increases in COLA Normal Cost rates. No additional employee contributions towards the cost-of-living benefits are included in the current employee rates.

**Cost-Sharing:** Members contribute a varying amount based on entry age and Plan.

General Plan 5A member rates are half General Plan 5B member rates.  
General Plan 5C is based on half rates.

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

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

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

*(31621.2, 31621.4, 31621.5, 31621.6, 31581.1)*

**C. 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)*

**D. Service Retirement Allowance:**

**Eligibility:**

***General Plan members:***

**Plans 5A,**

**5B, 5C, & 7:** Age 50 with 5 years of service and 10 years of elapsed time since membership;  
Any age with 30 years of service; or  
Age 70 regardless of service. *(31672, 31672.1)*

**Plan 2:** Age 55 with 10 years of service and 10 years of elapsed time since membership. *(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)*



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***PEPRA Plan 8 members:***

General and APCD: Age 52 with 5 years of service.  
Safety: Age 50 with 5 years of service.  
All PEPRA members: Age 70 regardless of service. (31672.3)

**Final Compensation:**

***General Plan members:***

**Plans 5A & 5B:** Monthly average of a member's highest 12 consecutive months of compensation. (31462.1)

**Plans 5C & 7:** Monthly average of a member's highest 36 consecutive months of compensation. (31462)

**Plan 2:** Monthly average of a member's highest 36 non-consecutive months of compensation.

***APCD Plan members:***

**Plans 1 & 2:** 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)

***PEPRA Plan members:***

**Plan 8:** Monthly average of a member's highest 36 consecutive months of pensionable compensation.

**Compensation**

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

**Plan 8:** For PEPRA members, only pensionable compensation up to the Social Security-integrated PEPRA compensation limit will count for computing Plan benefits and employee contributions and employer contributions for those participating in Social Security (\$120,082 for calendar year 2017 and \$123,719 for calendar year 2018). For those not participating in Social

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Security, the compensation cap is 120% of the above limit (\$144,098 for calendar year 2017 and \$148,463 for calendar year 2018). In addition, it is possible that some sources of compensation, such as any payments deemed to be terminal or special pays, may be excluded from the benefit and contribution computations for PEPRA members.

**Monthly Allowance:**

***General Plan members:***

**Plans 5A,  
5B & 5C:**

2% x Final Compensation x Plan 5 Age Factor x Years of Service.  
(31676.12)

**Plan 7:**

1/60 x Final Compensation x Plan 7 Age Factor x Years of Service.  
(31676.1)

**Plan 2:**

Sum of (a) + (b) – (c):

(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). (31486.4)

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 Plan members:***

2% x Final Compensation x APCD Age Factor x Years of Service.  
(31676.15)

***Safety Plan members:***

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

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

***General, Safety and APCD members:***

***PEPRA Plan 8:*** PEPRA Age Factor x Final Compensation x Years of Service.

In between exact ages, the multiplier will increase by 0.025% for each quarter year increase in age.

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Age Factors By Plan							
	General		General & APCD	APCD	Safety		
	Plan 5	Plan 7	Plan 8		Plan 4	Plan 6	Plan 8
<b>Code Section:</b>	<b>31676.12</b>	<b>31676.1</b>		<b>31676.15</b>	<b>31664.2</b>	<b>31664.1</b>	
<b>Label:</b>	<b>2% @ 57</b>	<b>1.67% @ 57.5</b>	<b>PEPRA</b>	<b>2% @ 55</b>	<b>3% @ 55</b>	<b>3% @ 50</b>	<b>PEPRA</b>
<b>Base:</b>	<b>2.00%</b>	<b>1.67%</b>		<b>2.00%</b>	<b>3.00%</b>	<b>3.00%</b>	
<b>Age:</b>							
41					0.4777	0.6258	
42					0.5058	0.6625	
43					0.5347	0.7004	
44					0.5647	0.7397	
45					0.5958	0.7805	
46					0.6280	0.8226	
47					0.6625	0.8678	
48					0.6936	0.9085	
49					0.7269	0.9522	
50	0.6681	0.7091		0.7454	0.7634	1.0000	0.0200
51	0.7056	0.7457		0.7882	0.8028	1.0000	0.0210
52	0.7454	0.7816	0.0100	0.8346	0.8457	1.0000	0.0220
53	0.7882	0.8181	0.0110	0.8850	0.8926	1.0000	0.0230
54	0.8346	0.8556	0.0120	0.9399	0.9418	1.0000	0.0240
55	0.8850	0.8954	0.0130	1.0000	1.0000	1.0000	0.0250
56	0.9399	0.9382	0.0140	1.0447	1.0000	1.0000	0.0260
57	1.0000	0.9846	0.0150	1.1048	1.0000	1.0000	0.0270
58	1.0447	1.0350	0.0160	1.1686	1.0000	1.0000	0.0270
59	1.1048	1.0899	0.0170	1.2365	1.0000	1.0000	0.0270
60	1.1686	1.1500	0.0180	1.3093	1.0000	1.0000	0.0270
61	1.2365	1.1947	0.0190	1.3608	1.0000	1.0000	0.0270
62	1.3093	1.2548	0.0200	1.4123	1.0000	1.0000	0.0270
63	1.3093	1.3186	0.0210	1.4638	1.0000	1.0000	0.0270
64	1.3093	1.3865	0.0220	1.5153	1.0000	1.0000	0.0270
65	1.3093	1.4593	0.0230	1.5668	1.0000	1.0000	0.0270
66	1.3093	1.4593	0.0240	1.5668	1.0000	1.0000	0.0270
67	1.3093	1.4593	0.0250	1.5668	1.0000	1.0000	0.0270

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**Maximum Allowance:**

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

**All other Plans:** Allowance may not exceed 100% of Final Compensation (does not apply to PEPRA members).

**Unmodified Retirement Allowance (Normal Form):**

**General Plan 2:** Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children). (31486.6)

**All other Plans:** Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children). (31760.1)

Eligible survivor includes certain domestic partners. (31780.2) If there is no eligible survivor, any unpaid remainder of the member's accumulated contributions will be paid to the member's designated beneficiary.

**Optional Retirement Allowance:**

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

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

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

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

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

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

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

**Death after Retirement:**

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

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

**E. Service-Connected Disability Retirement Allowance**

**Eligibility:**

**General Plan 2:** Disability benefits not valued since provided outside of the retirement system.

**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, 31720.5, 31720.6, 31720.7, 31720.9)

**Monthly Allowance:**

**General Plan 2:** Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.

**All other Plans:** Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire. (31727.4)

**Supplemental Disability Allowance:**

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

**Normal Form Of Payment:**

**General Plan 2:** Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system. (31760, 31786)

**All other Plans:** Life Annuity payable to retired member with 100% continuance to an eligible survivor (or eligible children).

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**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)

**F. Non Service-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 of 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, 31727.1, 31727.2, 31727.3)

(a)  $90\% \times 1/50$  (1/60 for PEPR General and PEPR APCD members and those in Plan 7)  $\times$  Final Compensation  $\times$  years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation.

(b)  $90\% \times 1/50$  (1/60 for PEPR General and APCD members and those in Plan 7)  $\times$  Final Compensation  $\times$  Projected Service, not to exceed 1/3 of Final Compensation.

**Projected Service:**

**General Members:** Age 62. (31727.1); Age 65 for Plan 8 (PEPR) General members.

**APCD Members:** Age 65. (31727.3)

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**Safety Members:** Age 55. (31727.2)

**Supplemental Monthly Disability Retirement:**

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

**Normal Form Of Payment:**

**General Plan 2:** Service retirement benefit payable at age 65 with service projected from disability until age 65. Prior to age 65, disability benefits are provided outside of retirement system.

**All other Plans:** Life Annuity with 60% continuance to a surviving spouse (or eligible children). (31760.1)

**Death after Retirement:**

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

**All other Plans:** Life Annuity with 60% continuance to a surviving spouse (or eligible children). 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)

**G. Service-Connected Death Benefits**

**Eligibility:**

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

**Monthly Allowance:**

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

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

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### Supplemental Monthly Death Benefit:

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

## H. Non Service-Connected Death Benefits

### Eligibility:

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

### Monthly Allowance:

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

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

### Supplemental Monthly Death Benefit:

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

## I. Deferred Vested Benefits

### Eligibility:

**General Plan 2:** The member must have terminated with 10 years of service. Members are eligible for service retirement when they reach service retirement eligibility (based on years of service at termination plus reciprocal service, if any). (31700)



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

**Monthly Allowance:**

**General Plan 2:** Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55.

**All other Plans:** Same as service retirement allowance; payable any time after the member would have been eligible for service retirement. (31703, 31704, 31705)

**J. 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 average annual Consumer Price Index (CPI), rounded to the nearest ½ of 1%. (31870, 31870.1)

**All Plans (excluding General Plans 2, 7, and 8):**

Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase. (31870.1)

**General Plan 7:**

Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase. (31870)

**General Plan 8 (PEPRA):**

Members (and their beneficiaries) hired by employers who had implemented General Plan 7 prior to January 1, 2013 are limited to a maximum 2% cost-of-living increase. (31870) Members hired by employers who had not implemented General Plan 7 prior to January 1, 2013 are limited to a maximum 3% cost-of-living increase. (31870.1)

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

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**COLA Bank:**

**All Plans (excluding General Plan 2):**

When the CPI exceeds the applicable percentage, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation (COLA Bank). It may be used in future years to provide cost-of-living increases when the CPI falls below the applicable percentage. (31874, 31874.1, 31874.2, 31874.3)

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

**APPENDIX D – GLOSSARY**

**1. Actuarial Assumptions**

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

**2. Actuarial Cost Method**

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a Normal Cost and an Actuarial Liability.

**3. Actuarial Gain (Loss)**

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

**4. Actuarial Liability**

The portion of the Actuarial Present Value of Projected Benefits that will not be paid by future Normal Costs. It represents the value of the past Normal Costs with interest to the valuation date.

**5. Actuarial Present Value (Present Value)**

The value as of a given date of a future amount or series of payments. The Actuarial Present Value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

**6. Actuarial Valuation**

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

**APPENDIX D – GLOSSARY**

**7. 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. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values. As of the June 30, 2014 actuarial valuation the Actuarial Value of Assets is equal to the market value.

**8. Actuarially Equivalent**

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

**9. Amortization Payment**

The portion of the pension plan contribution which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

**10. Entry Age Normal 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 of the individual between entry age and assumed exit ages.

**11. Funded Ratio**

The ratio of the Market Value of Assets to the Actuarial Liability.

**12. Normal Cost**

That portion of the Actuarial Present Value of pension plan benefits and expenses that is allocated to a valuation year by the Actuarial Cost Method.

**13. Projected Benefits**

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of Actuarial Assumptions, taking into account such items as increases in future compensation and service credits.

**14. Unfunded Actuarial Liability**

The excess of the Actuarial Liability over the Market Value of Assets.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX E – MEMBER CONTRIBUTION RATES**

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

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX E – MEMBER CONTRIBUTION RATES**

**Member Contribution Rates effective as of the July 1, 2016 Valuation**

Entry Age	General				APCD		Safety		
	5A	5B	5C	7	1	2	4A & 6A	4B	4C & 6B
16	2.93%	5.86%	2.84%	2.36%	3.44%	6.89%	5.41%	10.83%	5.23%
17	2.93%	5.86%	2.84%	2.36%	3.44%	6.89%	5.41%	10.83%	5.23%
18	2.93%	5.86%	2.84%	2.36%	3.44%	6.89%	5.41%	10.83%	5.23%
19	2.93%	5.86%	2.84%	2.36%	3.44%	6.89%	5.41%	10.83%	5.23%
20	2.93%	5.86%	2.84%	2.36%	3.44%	6.89%	5.41%	10.83%	5.23%
21	2.99%	5.99%	2.90%	2.42%	3.52%	7.04%	5.53%	11.05%	5.34%
22	3.06%	6.12%	2.97%	2.47%	3.60%	7.20%	5.64%	11.28%	5.45%
23	3.13%	6.26%	3.03%	2.53%	3.68%	7.36%	5.76%	11.52%	5.56%
24	3.20%	6.40%	3.10%	2.58%	3.76%	7.52%	5.88%	11.76%	5.68%
25	3.27%	6.55%	3.17%	2.64%	3.85%	7.69%	6.00%	12.00%	5.80%
26	3.35%	6.69%	3.24%	2.70%	3.93%	7.86%	6.12%	12.25%	5.92%
27	3.42%	6.84%	3.32%	2.76%	4.02%	8.03%	6.25%	12.50%	6.03%
28	3.50%	7.00%	3.39%	2.82%	4.10%	8.21%	6.38%	12.75%	6.16%
29	3.58%	7.15%	3.47%	2.89%	4.19%	8.39%	6.50%	13.01%	6.28%
30	3.66%	7.31%	3.54%	2.95%	4.28%	8.57%	6.63%	13.26%	6.40%
31	3.74%	7.48%	3.62%	3.02%	4.37%	8.75%	6.76%	13.52%	6.52%
32	3.82%	7.64%	3.70%	3.08%	4.47%	8.93%	6.89%	13.78%	6.65%
33	3.90%	7.81%	3.78%	3.15%	4.56%	9.12%	7.02%	14.05%	6.77%
34	3.99%	7.98%	3.86%	3.22%	4.65%	9.31%	7.16%	14.31%	6.90%
35	4.07%	8.15%	3.94%	3.28%	4.75%	9.50%	7.29%	14.58%	7.03%
36	4.16%	8.32%	4.02%	3.35%	4.85%	9.69%	7.43%	14.86%	7.16%
37	4.25%	8.49%	4.11%	3.42%	4.95%	9.89%	7.57%	15.13%	7.29%
38	4.34%	8.67%	4.19%	3.49%	5.05%	10.09%	7.70%	15.41%	7.42%
39	4.43%	8.85%	4.28%	3.57%	5.15%	10.29%	7.85%	15.69%	7.56%
40	4.52%	9.03%	4.37%	3.64%	5.25%	10.50%	7.99%	15.98%	7.69%
41	4.61%	9.22%	4.46%	3.71%	5.35%	10.70%	8.14%	16.28%	7.83%
42	4.70%	9.41%	4.54%	3.79%	5.45%	10.90%	8.29%	16.58%	7.97%
43	4.80%	9.60%	4.63%	3.86%	5.56%	11.11%	8.44%	16.89%	8.12%
44	4.89%	9.79%	4.72%	3.94%	5.66%	11.32%	8.60%	17.20%	8.26%
45	4.99%	9.98%	4.82%	4.01%	5.77%	11.54%	8.76%	17.52%	8.41%
46	5.09%	10.18%	4.91%	4.09%	5.88%	11.76%	8.92%	17.84%	8.55%
47	5.19%	10.37%	5.00%	4.17%	5.99%	11.99%	9.08%	18.17%	8.68%
48	5.28%	10.57%	5.09%	4.24%	6.10%	12.20%	9.24%	18.47%	8.79%
49	5.38%	10.77%	5.19%	4.32%	6.20%	12.40%	9.37%	18.75%	8.87%
50	5.49%	10.98%	5.28%	4.40%	6.28%	12.57%	9.48%	18.97%	8.91%
51	5.59%	11.19%	5.38%	4.48%	6.35%	12.70%	9.55%	19.10%	8.91%
52	5.70%	11.40%	5.46%	4.55%	6.38%	12.77%	9.58%	19.15%	8.91%
53	5.80%	11.60%	5.54%	4.62%	6.39%	12.77%	9.58%	19.15%	9.14%
54	5.90%	11.79%	5.61%	4.67%	6.39%	12.77%	9.58%	19.15%	9.45%
55	5.97%	11.95%	5.65%	4.71%	6.39%	12.77%	9.58%	19.15%	9.45%
56	6.04%	12.07%	5.67%	4.73%	6.39%	12.77%	9.58%	19.15%	9.45%
57	6.07%	12.14%	5.67%	4.73%	6.39%	12.77%	9.58%	19.15%	9.45%
58	6.07%	12.15%	5.85%	4.88%	6.39%	12.77%	9.58%	19.15%	9.45%
59	6.07%	12.15%	6.05%	5.04%	6.39%	12.77%	9.58%	19.15%	9.45%
60	6.07%	12.15%	6.05%	5.04%	6.39%	12.77%	9.58%	19.15%	9.45%

**Assumptions:**

Interest: 7.00%

Salary: 2016 Valuation Scale (Service based, includes wage inflation at 3.00%)

Unisex Mortality: CalPERS Healthy Annuitant Mortality, projected to 2039 using MP-2016.  
(blended 35% Male /65% Female for General and APCD, and blended 80% Male / 20% Female for Safety)

Administrative expenses: Rates have been loaded by 3.4% to account for expected administrative expenses allocated to the members.

**SANTA BARBARA COUNTY EMPLOYEES' RETIREMENT SYSTEM  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2017**

**APPENDIX E – MEMBER CONTRIBUTION RATES**

**PEPRA Member Contribution Rates effective as of the July 1, 2017 Valuation**

<b>PEPRA Rates</b>				
	<b>General</b>			
	<b>2% COLA</b>	<b>3% COLA</b>	<b>Safety</b>	<b>APCD</b>
	8.32%	9.81%	14.37%	6.61%
<b>Assumptions:</b>				
Interest:	7.00%			
Salary:	2016 Valuation Scale (Service based, includes wage inflation at 3.00%)			
Mortality:	The PEPRA contribution rates are based on 50% of the actual Normal Cost. Thus, the mortality rates are the same as those used in the actuarial valuation (CALPERS Healthy Annuitant Mortality, based on generational mortality improvements using MP-2016).			
Administrative expenses:	Rates have been loaded by 3.4% to account for expected administrative expenses allocated to the members.			



*Classic Values, Innovative Advice*