

Ventura County Employees' Retirement Association

Actuarial Valuation and Review
as of June 30, 2015



This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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December 11, 2015

*Board of Retirement
Ventura County Employees' Retirement Association
1190 S. Victoria Avenue, Suite 200
Ventura, CA 93003-6572*

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2015. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2016-2017 and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Plan. The census and financial information on which our calculations were based was provided by the Retirement Association. That assistance is gratefully acknowledged.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of John Monroe, ASA, MAAA, Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

*Paul Angelo, FSA, EA, MAAA, FCA
Senior Vice President and Actuary*

AW/

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Vice President and Actuary*

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SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

PURPOSE AND SCOPE

This report has been prepared by Segal Consulting to present a valuation of the Ventura County Employees' Retirement Association as of June 30, 2015. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Retirement Association, as administered by VCERA;
- The characteristics of covered active members, terminated vested members, and retired members and beneficiaries as of June 30, 2015, provided by VCERA;
- The assets of the Plan as of June 30, 2015, provided by VCERA;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the system's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the Association's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the Association's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with the prior year's information.

Please note that the Actuarial Standards Board has adopted a revised Actuarial Standard of Practice (ASOP) No. 4 that provides guidelines for actuaries to follow when measuring pension obligations. For a plan such as that offered by the Retirement Association that may use undesignated excess earnings to provide supplemental benefits, the valuation report must indicate that the impact of any such future use of undesignated excess earnings on the future financial condition of the plan has not been explicitly measured or otherwise reflected in the valuation. However, it should be noted that under the Board's Interest Crediting Policy, the balance of \$885.6 million (negative) in the Contra Account has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Ref: Pg. 59

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In 2004, the Board elected to amortize the Association's Unfunded Actuarial Accrued Liability (UAAL) as of June 30, 2004 over a declining 15-year period. Any change in the UAAL after June 30, 2004 is amortized over separate 15-year declining amortization periods.

Ref: Pgs. 42-45

Effective with the June 30, 2012 valuation, any change in the UAAL that arises due to assumption changes is amortized over separate 20-year declining amortization periods. Also, any change in the UAAL that arises due to retirement incentives is annualized over separate declining amortization period of up to 5 years. A schedule of current amortization amounts may be found in Section 3, Exhibit I.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2016 through June 30, 2017.

SIGNIFICANT ISSUES IN THIS VALUATION

The following key findings were the result of this actuarial valuation:

Ref: Pg. 51

- The results of this valuation reflect changes in the actuarial assumptions as recommended by Segal and adopted by the Board for the June 30, 2015 valuation. These changes were documented in our Actuarial Experience Study and are also outlined in Section 4, Exhibit II of this report. These assumption changes resulted in an increase in the average employer contribution rate of 2.66% of payroll and an increase in the average member rate of 0.06% of payroll.

Ref: Pg. 16

- In this report, the employer and member contribution rates shown in Chart 14a and Appendix A are now calculated based on a 50/50 sharing of Normal Cost for non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers.

The employer and member contribution rates calculated under the prior method (i.e., no 50/50 sharing of Normal Cost for non-PEPRA tiers) are shown in Appendix C and Appendix D, respectively.

Ref: Pg. 10

- The market value of assets earned a return of 2.0% for the July 1, 2014 to June 30, 2015 plan year. The valuation value of assets earned a return of 9.8% for the same period due to the deferral of most of the current year investment losses and the recognition of prior investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 7.75% for the 2014/15 year. This actuarial investment gain decreased the average employer contribution rate by 1.05% of payroll.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Ref: Pg. 23

- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 82.7% to 83.1%. The Association's Unfunded Actuarial Accrued Liability (UAAL) increased from \$820 million as of June 30, 2014 to \$876 million as of June 30, 2015. This increase is primarily due to changes in actuarial assumptions offset to some extent by the investment gain (on the valuation value of assets) and lower than expected benefit increases for retirees and beneficiaries. A complete reconciliation of the Association's UAAL is provided in Section 3, Exhibit H.

Ref: Pg. 41

Ref: Pg. 20

- The average employer rate decreased from 28.11% of payroll to 27.77% of payroll. This decrease is primarily due to the 50/50 sharing of Normal Cost for non-PEPRA Tiers, the investment gain (on the valuation value of assets) and lower than expected benefit increases for retirees and beneficiaries offset to some extent by changes in actuarial assumptions. A complete reconciliation of the Association's employer rate is provided in Section 2, Subsection D, Chart 15.

As previously adopted by the Board, we have continued to calculate the Basic and COLA UAAL rates on a combined basis for all General Tiers. This results in more stable COLA UAAL rates for General Tier 1.

Ref: Pg. 21

- The average member rate increased from 8.61% of payroll in the June 30, 2014 valuation to 10.24% of payroll in the June 30, 2015 valuation. This increase was mainly the result of the 50/50 sharing of Normal Cost for non-PEPRA Tiers. A complete reconciliation of the member rate is provided in Section 2, Subsection D, Chart 16.

Ref: Pg. 5

- As indicated in Section 2, Subsection B, Chart 7 of this report, the net unrecognized investment gain as of June 30, 2015 is \$54 million as compared to an unrecognized gain of \$310 million in the June 30, 2014 valuation. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes over the next few years. This means that if the plan earns the current assumed rate of investment return of 7.50% per year (net of expenses) on a **market value** basis then the deferred gains will be recognized over the next few years as shown in the footnote to Chart 7.
- The June 30, 2015 unrecognized investment gains of \$54 million represents about 1.2% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$54 million market gains is expected to have an impact on the Association's future funded ratio and average employer contribution rate. This potential impact may be illustrated as follows:

- If the net deferred gains were recognized immediately in the valuation value of assets, the funded ratio would increase from 83.1% to 84.1%.

For comparison purposes, if all the deferred gains in the June 30, 2014 valuation had been recognized immediately in the June 30, 2014 valuation, the funded ratio would have increased from 82.7% to 89.2%.

- If the net deferred gains were recognized immediately in the valuation value of assets, the average employer rate would decrease from 27.77% to about 27.06% of payroll.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

For comparison purposes, if all the deferred gains in the June 30, 2014 valuation had been recognized immediately in the June 30, 2014 valuation, the average employer rate would have decreased from 28.11% to about 23.90% of payroll.

- The actuarial valuation report as of June 30, 2015 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.

Impact of Future Experience on Contribution Rates

Future contribution requirements may differ from those determined in the valuation because of:

- Differences between actual experience and anticipated experience;
- Changes in actuarial assumptions or methods;
- Changes in statutory provisions; and
- Differences between the contribution rates determined by the valuation and those adopted by the Board.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Summary of Key Valuation Results (all dollar amounts in thousands)

	June 30, 2015		June 30, 2014	
Employer Contribution Rates: ⁽¹⁾		Estimated		Estimated
	Total Rate	Annual Amount ⁽²⁾	Total Rate	Annual Amount ⁽²⁾
General Tier 1	23.85%	\$2,060	22.93%	\$2,293
General Tier 2	16.80%	35,864	18.07%	37,913
General PEPRA Tier 2	16.67%	3,666	16.63%	1,978
General Tier 2C ⁽³⁾	20.52%	45,829	20.70%	47,340
General PEPRA Tier 2C ⁽³⁾	20.33%	8,361	19.21%	4,603
General Combined	18.84%	95,780	19.43%	94,127
Safety	54.56%	88,725	53.87%	86,233
Safety PEPRA	52.77%	4,001	50.30%	1,913
Safety Combined	54.48%	92,726	53.79%	88,146
All Categories combined	27.77%	\$188,506	28.11%	\$182,273
Average Member Contribution Rates: ⁽¹⁾⁽⁴⁾		Estimated		Estimated
	Total Rate	Annual Amount ⁽²⁾	Total Rate	Annual Amount ⁽²⁾
General Tier 1	10.09%	\$872	9.16%	\$916
General Tier 2	7.16%	15,283	5.78%	12,129
General PEPRA Tier 2	7.03%	1,546	6.92%	823
General Tier 2C ⁽³⁾	9.79%	21,861	8.41%	19,231
General PEPRA Tier 2C ⁽³⁾	9.66%	3,972	9.55%	2,288
Safety	15.27%	24,832	12.40%	19,849
Safety PEPRA	14.68%	1,113	14.69%	559
All Categories combined	10.24%	\$69,479	8.61%	\$55,795

⁽¹⁾ Before reflection of any member rate that may be "picked-up" by the employer. Contributions are assumed to be paid throughout the year.

⁽²⁾ Based on projected compensation for each year shown.

⁽³⁾ Throughout this report, this category represents those Tier 2 members who contribute a negotiated 2.63% of compensation for a fixed 2% COLA pursuant to Government Code 31627 that applies to service after March 2003.

⁽⁴⁾ The non-refundability factors as of June 30, 2015 are 0.98 for General Tier 1 and Tier 2 (non-PEPRA) and 0.99 for Safety (non-PEPRA) compared to 0.97 for General Tier 1 and Tier 2 (non-PEPRA) and 0.99 for Safety (non-PEPRA) from June 30, 2014.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Summary of Key Valuation Results (continued) (all dollar amounts in thousands)

	June 30, 2015	June 30, 2014
Funded Status:		
Actuarial accrued liability(AAL) ⁽¹⁾	\$5,178,157	\$4,731,016
Valuation value of assets (VVA) ⁽¹⁾	4,302,330	3,910,801
Market value of assets (MVA)	4,364,795	4,274,886
Funded percentage on VVA basis (VVA/AAL)	83.09%	82.66%
Funded percentage on MVA basis (MVA/AAL)	84.29%	90.36%
Unfunded actuarial accrued liability (UAAL) on VVA basis	\$875,827	\$820,215
Unfunded actuarial accrued liability (UAAL) on MVA basis	813,362	456,130
Key Assumptions:		
Interest rate	7.50%	7.75%
Inflation rate	3.00%	3.25%
Across the board salary increase	0.50%	0.75%

⁽¹⁾ Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Summary of Key Valuation Demographic and Financial Data

	June 30, 2015	June 30, 2014	Percentage Change
Active Members:			
Number of members	8,299	8,210	1.1%
Average age	45.2	45.3	N/A
Average service	11.2	11.2	N/A
Projected total compensation	\$678,705,846	\$648,257,042	4.7%
Average projected compensation	\$81,782	\$78,959	3.6%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	4,657	4,452	4.6%
Disability retired	834	837	-0.4%
Beneficiaries	847	832	1.8%
Total	6,338	6,121	3.5%
Average age	69.6	69.4	N/A
Average monthly benefit ⁽¹⁾	\$2,936	\$2,897	1.3%
Vested Terminated Members:			
Number of terminated vested members ⁽²⁾	2,441	2,339	4.4%
Average age	46.2	46.2	N/A
Total Members:	17,078	16,670	2.4%
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	\$4,364,795	\$4,274,886	2.1%
Return on market value of assets	1.98%	18.06%	N/A
Actuarial value of assets	\$4,311,131	\$3,964,814	8.7%
Return on actuarial value of assets	8.60%	9.32%	N/A
Valuation value of assets	\$4,302,330	\$3,910,801	10.0%
Return on valuation value of assets	9.82%	8.13%	N/A

⁽¹⁾ Excludes monthly benefits for vested fixed supplemental and supplemental medical benefit amounts.

⁽²⁾ Includes terminated members with member contributions on deposit.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

Important Information about Actuarial Valuations

In order to prepare an actuarial valuation, Segal Consulting (“Segal”) relies on a number of input items. These include:

- **Plan of benefits** Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan description in this report to confirm that Segal has correctly interpreted the plan of benefits.
- **Participant data** An actuarial valuation for a plan is based on data provided to the actuary by VCERA. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
- **Assets** This valuation is based on the market value of assets as of the valuation date, as provided by VCERA.
- **Actuarial assumptions** In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan’s assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.

The user of Segal’s actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The valuation is prepared at the request of the VCERA. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement of the plan’s assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

SECTION 1: Valuation Summary for the Ventura County Employees' Retirement Association

- If the Association is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.

As Segal Consulting has no discretionary authority with respect to the management or assets of VCERA, it is not a fiduciary in its capacity as actuaries and consultants with respect to VCERA.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.

CHART 1
Member Population: 2006 – 2015

Year Ended June 30	Active Members	Vested Terminated Members⁽¹⁾	Retired Members and Beneficiaries	Total Non-Actives	Ratio of Non-Actives to Actives
2006	7,403	1,756	4,570	6,326	0.85
2007	7,653	1,864	4,770	6,634	0.87
2008	7,928	2,007	4,914	6,921	0.87
2009	8,045	2,055	5,041	7,096	0.88
2010	8,003	2,040	5,267	7,307	0.91
2011	8,040	2,097	5,481	7,578	0.94
2012	8,019	2,161	5,658	7,819	0.98
2013	8,068	2,249	5,888	8,137	1.01
2014	8,210	2,339	6,121	8,460	1.03
2015	8,299	2,441	6,338	8,779	1.06

⁽¹⁾ Includes terminated members with member contributions on deposit.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 8,299 active members with an average age of 45.2, average service of 11.2 years and average compensation of \$81,782. The 8,210 active members in the prior valuation had an average age of 45.3, average service of 11.2 years and average compensation of \$78,959.

Among the active members, there were none with unknown age.

Inactive Members

In this year's valuation, there were 2,441 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 2,339 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

CHART 2
Distribution of Active Members by Age as of June 30, 2015

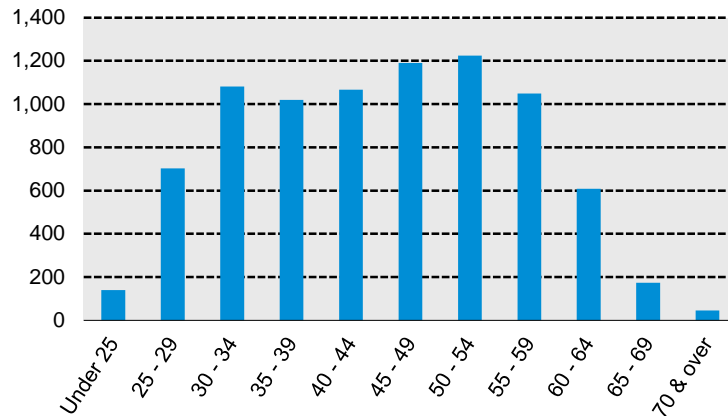
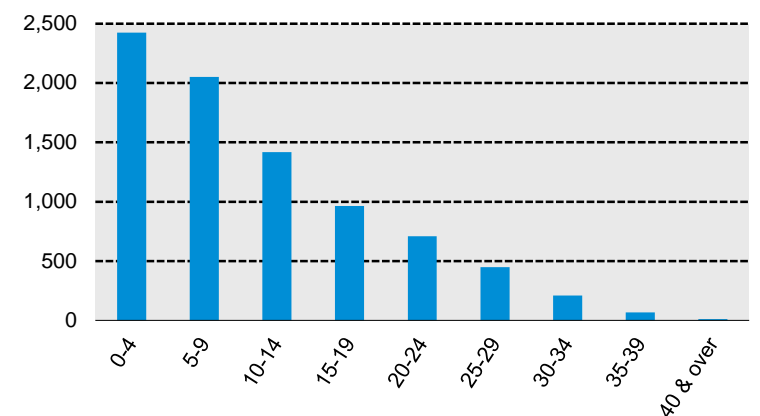


CHART 3
Distribution of Active Members by Years of Service as of June 30, 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Retired Members and Beneficiaries

As of June 30, 2015, 5,491 retired members and 847 beneficiaries were receiving total monthly benefits of \$18,609,671. For comparison, in the previous valuation, there were 5,289 retired members and 832 beneficiaries receiving monthly benefits of \$17,733,078. These monthly benefits exclude benefits for vested fixed supplemental and supplemental medical benefit amounts.

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

CHART 4

Distribution of Retired Members by Type and by Monthly Amount as of June 30, 2015

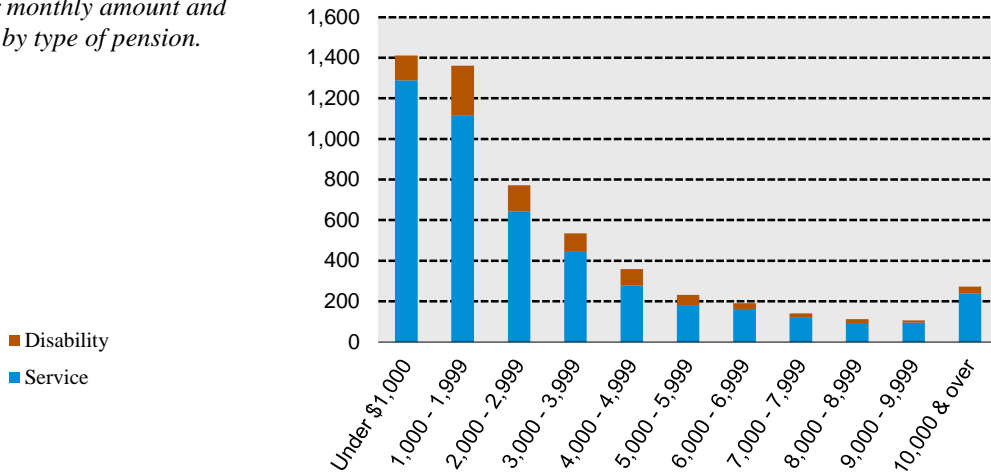
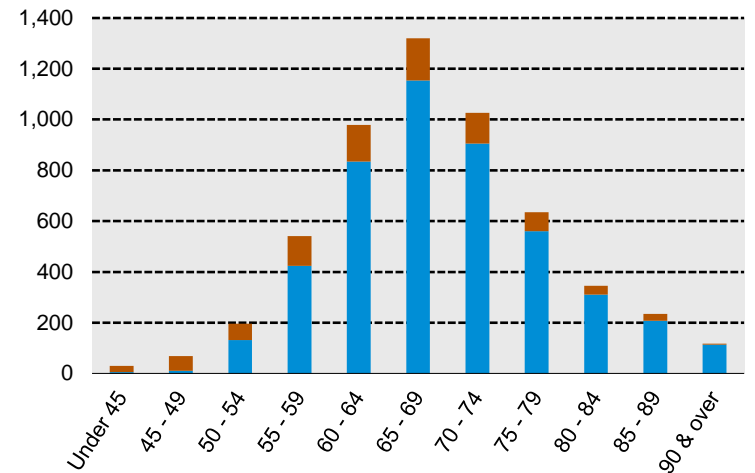


CHART 5

Distribution of Retired Members by Type and by Age as of June 30, 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

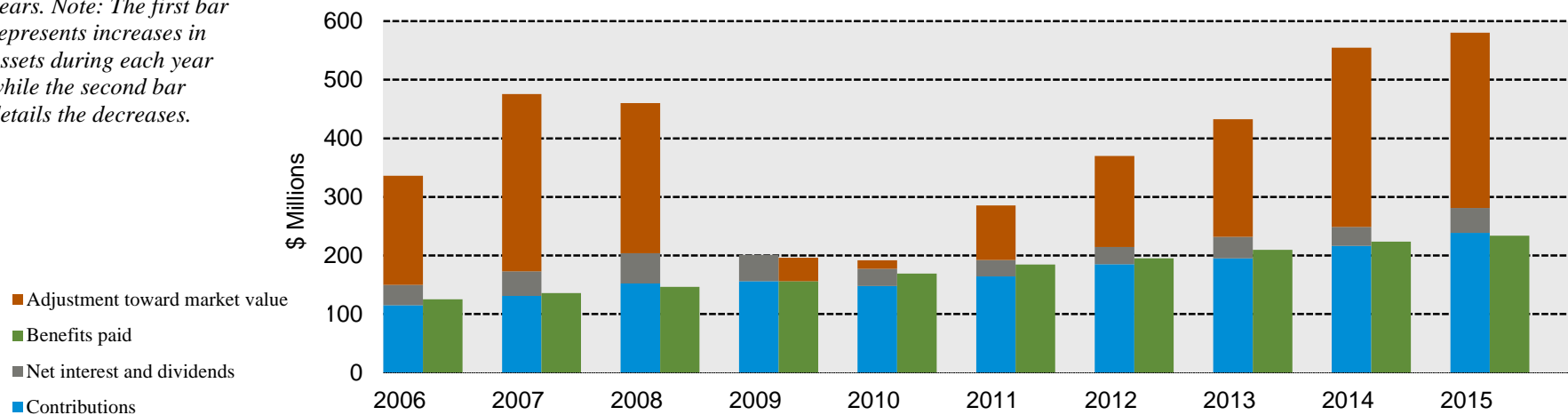
Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the “non-cash” earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D and E.

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart depicts the components of changes in the actuarial value of assets over the last ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6
Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2006 – 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

The chart shows the determination of the actuarial and valuation value of assets as of the valuation date.

CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended June 30, 2015

Six Month Period		Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain (Loss)	Deferred Factor	Deferred Return*
From	To					
6/2011	Combined net deferred loss**			(\$63,892,227)	0.1111	(\$7,098,426)
7/2011	12/2011	(\$156,476,001)	\$127,074,122	(283,550,123)	0.2	(56,710,025)
1/2012	6/2012	203,623,364	120,287,707	83,335,657	0.3	25,000,697
7/2012	12/2012	230,080,850	128,592,180	101,488,670	0.4	40,595,468
1/2013	6/2013	203,932,155	137,287,941	66,644,214	0.5	33,322,107
7/2013	12/2013	405,462,695	140,757,243	264,705,452	0.6	158,823,272
1/2014	6/2014	249,072,466	155,947,487	93,124,979	0.7	65,187,485
7/2014	12/2014	1,675,147	165,579,616	(163,904,469)	0.8	(131,123,575)
1/2015	6/2015	83,151,071	165,743,013	(82,591,942)	0.9	<u>(74,332,748)</u>
1.	Total Deferred Return					\$53,664,255
2.	Net Market Value of Assets					\$4,364,795,188
3.	a. Actuarial Value of Assets (Item 2 – Item 1)					\$4,311,130,933
	b. Ratio of Actuarial Value of Assets to Net Market Value of Assets (Item 3a / Item 2)					98.8%
4.	Non-valuation reserves					
	a. Supplemental Medical Benefit					\$8,800,509
	b. Statutory Contingency					<u>0</u>
	c. Subtotal					\$8,800,509
5.	Valuation Value of Assets (Item 3a – Item 4c)					\$4,302,330,424
6.	Amount of Deferred Returns to be recognized in the following valuations:					
	a. June 30, 2016					\$8,752,061
	b. June 30, 2017					64,226,947
	c. June 30, 2018					28,931,225
	d. June 30, 2019					(39,986,784)
	e. June 30, 2020					<u>(8,259,194)</u>
	f. Subtotal					\$53,664,255

* Recognition at 10% per six month period over 5 years.

** Net deferred loss as of June 30, 2011 was combined and will be recognized over 4.5 years in level semi-annual amounts.

Note: Results may not add due to rounding.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 8

Allocation of Valuation Value of Assets as of June 30, 2015

The calculation of the valuation value of assets from June 30, 2014 to June 30, 2015 by category is provided below:

	Allocated Assets for Funding			
	General			Total
	Tier I	Tier II	Safety	
1. Allocated Assets as of Beginning of Plan Year	\$574,178,471	\$1,614,671,867	\$1,721,950,459	\$3,910,800,797
2. Member Contributions	827,648	39,135,504	20,436,112	60,399,264
3. Member Buybacks	107,056	625,810	375,546	1,108,412
4. Employer Pick-up Contributions Credited to Member Account	47,078	1,230,961	893,055	2,171,094
5. Employer Contributions	2,773,795	82,819,838	89,505,917	175,099,550
6. Refunds of Member Contributions and Death Benefits Paid	298,575	4,404,986	568,672	5,272,233
7. Retiree Benefit Payments Excluding Supplemental Medical Payments	73,916,946	61,325,939	91,175,694	226,418,579
8. Subtotal (Items 1 + 2 + 3 + 4 + 5 – 6 – 7)	\$503,718,527	\$1,672,753,055	\$1,741,416,723	\$3,917,888,305
9. Weighted Average Fund Balance: Item 1 + ½ of (Items 2, 3, 4, 5) – ½ of (Items 6, 7)	538,948,499	1,643,712,461	1,731,683,591	3,914,344,551
10. Earnings Allocated in Proportion to Item 9	52,932,106	161,435,023	170,074,990	384,442,119
11. Valuation Value of Assets (Items 8 + 10)	\$556,650,633	\$1,834,188,078	\$1,911,491,713	\$4,302,330,424

Note: Results may not add due to rounding.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

The market value, actuarial value, and valuation value of assets are representations of VCERA's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation value of assets is significant because VCERA's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

This chart shows the change in market value, actuarial value and valuation value over the past ten years.

CHART 9

Market Value, Actuarial Value and Valuation Value of Assets as of June 30, 2006 – 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain) the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience gain was \$109.6 million, a \$81.1 million gain from investments and a \$28.5 million gain from all other sources. The net experience variation from individual sources other than investments experience was 0.6% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience during the past year.

CHART 10
Actuarial Experience for Year Ended June 30, 2015

1. Net gain from investments ⁽¹⁾	\$81,080,000
2. Net gain from other experience ⁽²⁾	<u>28,526,000</u>
3. Net experience gain: (1) + (2)	\$109,606,000

⁽¹⁾ Details in Chart 11.

⁽²⁾ See Section 3, Exhibit H. Does not include the effect of plan or assumption changes, if any.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on VCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets is 7.75% (based on the June 30, 2014 valuation). The actual rate of return on the valuation value of assets for the 2014/2015 plan year was 9.82%.

Since the actual return for the year was greater than the assumed return, the VCERA experienced an actuarial gain during the year ended June 30, 2015 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 11

Investment Experience for Year Ended June 30, 2015 – Market Value, Actuarial Value and Valuation Value of Assets

	Market Value	Actuarial Value	Valuation Value
1. Actual return	\$84,826,216	\$341,233,326	\$384,442,119
2. Average value of assets	4,277,427,418	3,967,356,053	3,914,344,551
3. Actual rate of return: (1) ÷ (2)	1.98%	8.60%	9.82%
4. Assumed rate of return	7.75%	7.75%	7.75%
5. Expected return: (2) x (4)	\$331,500,625	\$307,470,094	\$303,361,703
6. Actuarial gain/(loss): (1) – (5)	<u>(\$246,674,409)</u>	<u>\$33,763,232</u>	<u>\$81,080,416</u>

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial, valuation, and market basis for the last ten years.

CHART 12

Investment Return – Market Value, Actuarial Value and Valuation Value: 2006 – 2015

Year Ended June 30	Market Value Investment Return		Actuarial Value Investment Return		Valuation Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent
2006	\$238,212,815	9.95%	\$221,191,725	9.88%	\$221,191,725	10.00%
2007	458,962,761	17.48	344,644,568	14.06	308,000,514	12.68
2008	(211,806,573)	(6.86)	307,776,354	11.01	310,176,628	11.32
2009	(628,718,568)	(21.86)	5,186,654	0.17	31,242,785	1.02
2010	343,005,717	15.33	43,756,165	1.41	43,756,185	1.42
2011	622,940,028	24.34	121,406,541	3.89	121,406,541	3.91
2012	47,147,363	1.49	184,787,098	5.72	184,909,716	5.75
2013	432,694,392	13.51	237,282,497	6.97	237,282,497	7.00
2014	654,535,161	18.06	338,343,729	9.32	294,307,214	8.13
2015	84,826,216	1.98	341,233,326	8.60	384,442,119	9.82
Five-Year Average Return		10.94%		7.05%		7.09%
Ten-Year Average Return		6.79%		6.92%		6.94%

Note: Each year's yield is weighted by the average asset value in that year.

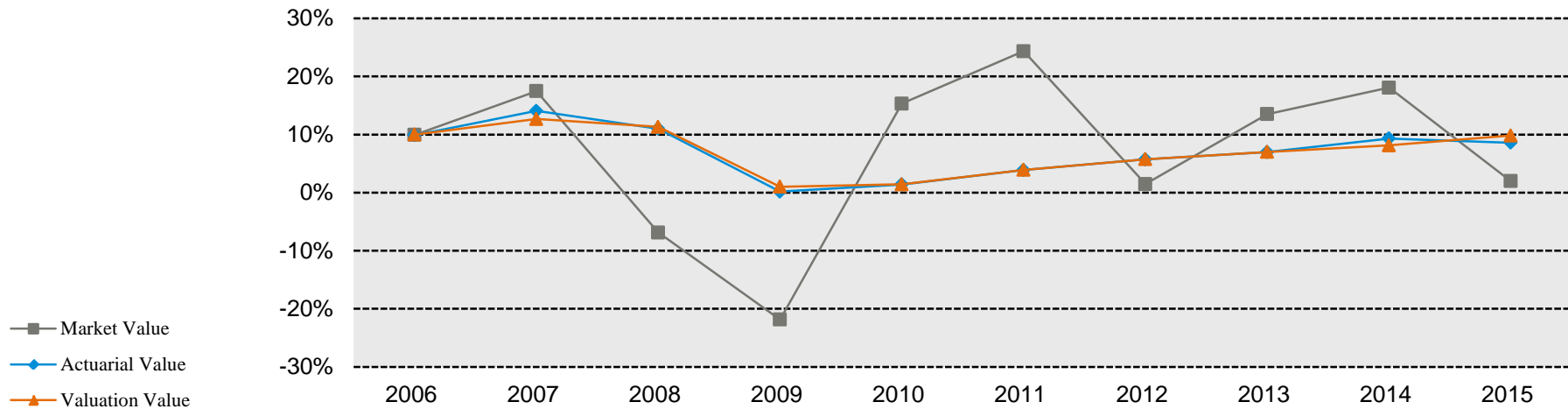
SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2006 - 2015.

CHART 13

Market, Actuarial and Valuation Rates of Return for Years Ended June 30, 2006 - 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- mortality (more or fewer deaths than expected),
- the number of disability retirements,
- salary increases different than assumed, and
- COLA increases for retirees different than assumed.

The net gain from this other experience for the year ended June 30, 2015 amounted to \$28.5 million which is 0.6% of the actuarial accrued liability. This gain was mainly due to lower than expected COLA increases for retirees and beneficiaries. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL)

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Association) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the combined annual inflation and "across the board" increases rate of 3.50%. The June 30, 2004 UAAL is being amortized over a 15-year declining period effective June 30, 2004. The change in UAAL that arises due to actuarial gains or losses or due to plan amendments (with the exception of retirement incentives) at each valuation is amortized over its own declining 15-year period. Effective with the June 30, 2012 valuation, any change in UAAL that arises due to changes in actuarial assumptions or methods is amortized over its own declining 20-year period and any change in UAAL due to retirement incentives is amortized over its own declining period of up to 5 years.

VCERA's UAAL is determined separately for each tier depending on the assets and liabilities for that tier.

Effective with the June 30, 2012 valuation, the Basic UAAL rate has been calculated on a combined basis for all General Tiers. Effective with the June 30, 2014 valuation, the COLA UAAL rate has been calculated on a combined basis for General Tiers that have a COLA. The recommended employer contribution rates determined under this

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

combined methodology are provided on Chart 14. For reference purposes only, Appendix E shows the employer contribution rates under the previous non-combined methodology.

The employer contribution rates shown in Chart 14a are now calculated based on a 50/50 sharing of Normal Cost for non-PEPRA Tiers. For purposes of these calculations, we have been previously directed by VCERA to assume that the cessation of member contributions after 30 years of service for non-PEPRA members continues per the County Employees Retirement Law (CERL) and that the cost associated with this provision is to be paid for by employers. Chart 14b contains the employer rates for the prior year under the prior methodology.

Member Contributions *Non-PEPRA Members*

The non-PEPRA member contribution rates are provided in Appendix A. Please note that the member rates provided in the report are the full rate before reflecting any employer pickup. General Tier 2 members eligible for the fixed 2% cost-of-living benefit contribute a negotiated 2.63% of compensation per year towards the cost of that benefit.

Appendix C and Appendix D show the employer and member contribution rates based on the prior methodology as defined in Articles 6 and 6.8 of the 1937 Act for General members and Safety members. The basic contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to 1/120 of Final Average Compensation for General members and 1/100 of Final Average Compensation for Safety members. That age is 55 for General Tier 1 members, 60 for General Tier 2 members and 50 for Safety members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to their basic contributions, General Tier 1 and Safety members pay one-half of the total normal cost necessary to fund their cost-of-living benefits. Member contributions accumulate with interest at the lesser of the assumed investment earning rate or the rate on ten year U.S. Treasury notes. Any difference between the assumed investment earning rate and the actual interest crediting rate will be credited to the County Advance reserve. Please note that in calculating the basic member rate, we follow the Board's

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

past practice and have not included any in-service pay redemptions that may potentially increase a member's final average compensation and hence retirement benefit.

PEPRA Members

Pursuant to Section 7522.30(a) of the Government Code, members under PEPRA tiers are required to contribute at least 50% of the Normal Cost. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: Section 7522.30(e)). In preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not the requirements of Section 7522.30(e). The only exception to this is that we have also shown the PEPRA Tier 2 with COLA contribution rates including the member COLA contribution rate of 2.63% of compensation based on current bargaining agreements.

Also of note is that based on our discussions with VCERA, we have used the discretion made available by Section 31620.5(a) of AB 1380 to no longer round the PEPRA member's contribution rates to the nearest one quarter of one percent as was previously required by CalPEPRA. This is consistent with established practice for the Non-PEPRA plans and should allow for exactly one-half of the normal cost for the PEPRA plans to be paid by the employees and one-half by the employers. In addition, Section 31620.5(b) of AB 1380 also provides that the "one percent rule" under Section 7522.30(d) does not apply. This section formerly limited the circumstances under which the PEPRA member rate would change.

The PEPRA member contribution rates are provided in Appendix B.

Tier 2 COLA Procedures

This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 14a

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation Under Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
General Tier 1 Members						
Normal Cost ⁽²⁾	7.90%	\$683	2.67%	\$230	10.57%	\$913
UAAL ⁽³⁾	<u>9.64%</u>	<u>833</u>	<u>3.64%</u>	<u>314</u>	<u>13.28%</u>	<u>1,147</u>
Total Contribution	17.54%	\$1,516	6.31%	\$544	23.85%	\$2,060
General Tier 2 Members w/o COLA						
Normal Cost	7.16%	\$15,283	0.00%	\$0	7.16%	\$15,283
UAAL ⁽³⁾	<u>9.64%</u>	<u>20,581</u>	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	<u>20,581</u>
Total Contribution	16.80%	\$35,864	0.00%	\$0	16.80%	\$35,864
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.03%	\$1,546	0.00%	\$0	7.03%	\$1,546
UAAL ⁽³⁾	<u>9.64%</u>	<u>2,120</u>	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	<u>2,120</u>
Total Contribution	16.67%	\$3,666	0.00%	\$0	16.67%	\$3,666
General Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	7.16%	\$15,988	0.08%	\$179	7.24%	\$16,167
UAAL ⁽³⁾⁽⁵⁾	<u>9.64%</u>	<u>21,531</u>	<u>3.64%</u>	<u>8,131</u>	<u>13.28%</u>	<u>29,662</u>
Total Contribution	16.80%	\$37,519	3.72%	\$8,310	20.52%	\$45,829
General PEPRA Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	7.03%	\$2,890	0.02%	\$9	7.05%	\$2,899
UAAL ⁽³⁾⁽⁵⁾	<u>9.64%</u>	<u>3,964</u>	<u>3.64%</u>	<u>1,498</u>	<u>13.28%</u>	<u>5,462</u>
Total Contribution	16.67%	\$6,854	3.66%	\$1,507	20.33%	\$8,361
All General Members⁽⁶⁾						
Normal Cost	7.16%	\$36,390	0.08%	\$418	7.24%	\$36,808
UAAL	<u>9.64%</u>	<u>49,029</u>	<u>1.96%</u>	<u>9,943</u>	<u>11.60%</u>	<u>58,972</u>
Total Contribution	16.80%	\$85,419	2.04%	\$10,361	18.84%	\$95,780

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 14a (continued)

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation Under Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Safety Members						
Normal Cost ⁽⁷⁾	11.63%	\$18,913	4.84%	\$7,870	16.47%	\$26,783
UAAL	<u>47.33%</u>	<u>76,968</u>	<u>-9.24%</u>	<u>-15,026</u>	<u>38.09%</u>	<u>61,942</u>
Total Contribution	58.96%	\$95,881	-4.40%	-\$7,156	54.56%	\$88,725
Safety PEPRA Members						
Normal Cost	10.40%	\$789	4.28%	\$324	14.68%	\$1,113
UAAL	<u>47.33%</u>	<u>3,589</u>	<u>-9.24%</u>	<u>-701</u>	<u>38.09%</u>	<u>2,888</u>
Total Contribution	57.73%	\$4,378	-4.96%	-\$377	52.77%	\$4,001
All Safety Members⁽⁶⁾						
Normal Cost	11.58%	\$19,702	4.81%	\$8,194	16.39%	\$27,896
UAAL	<u>47.33%</u>	<u>80,557</u>	<u>-9.24%</u>	<u>-15,727</u>	<u>38.09%</u>	<u>64,830</u>
Total Contribution	58.91%	\$100,259	-4.43%	-\$7,533	54.48%	\$92,726
All Categories Combined⁽⁶⁾						
Normal Cost	8.26%	\$56,092	1.27%	\$8,612	9.53%	\$64,704
UAAL	<u>19.09%</u>	<u>129,586</u>	<u>-0.85%</u>	<u>-5,784</u>	<u>18.24%</u>	<u>123,802</u>
Total Contribution	27.35%	\$185,678	0.42%	\$2,828	27.77%	\$188,506

⁽¹⁾ Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2015 annual payroll (also in thousands) shown below:

General Tier 1	\$8,640
General Tier 2	213,455
General PEPRA Tier 2	21,992
General Tier 2C	223,301
General PEPRA Tier 2C	41,116
Safety	162,619
Safety PEPRA	<u>7,582</u>
Total	\$678,705

⁽²⁾ The total employer rate has been adjusted by 0.48% to account for the cost associated with the cessation of member contributions after 30 years of service.

⁽³⁾ Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

⁽⁴⁾ Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

⁽⁵⁾ Includes 0.54% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

⁽⁶⁾ These aggregated rates are provided for informational purposes only as we understand that the intent is to implement the tier specific rates, if possible.

⁽⁷⁾ The total employer rate has been adjusted by 1.20% to account for the cost associated with the cessation of member contributions after 30 years of service.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 14b

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Prior Valuation Under Combined Methodology

	June 30, 2014 Actuarial Valuation ⁽¹⁾					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾
General Tier 1 Members						
Normal Cost	8.11%	\$811	2.43%	\$243	10.54%	\$1,054
UAAL ⁽³⁾	<u>9.71%</u>	<u>971</u>	<u>2.68%</u>	<u>268</u>	<u>12.39%</u>	<u>1,239</u>
Total Contribution	17.82%	\$1,782	5.11%	\$511	22.93%	\$2,293
General Tier 2 Members w/o COLA						
Normal Cost	8.36%	\$17,543	0.00%	\$0	8.36%	\$17,543
UAAL ⁽³⁾	<u>9.71%</u>	<u>20,370</u>	<u>0.00%</u>	<u>0</u>	<u>9.71%</u>	<u>20,370</u>
Total Contribution	18.07%	\$37,913	0.00%	\$0	18.07%	\$37,913
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	6.92%	\$823	0.00%	\$0	6.92%	\$823
UAAL ⁽³⁾	<u>9.71%</u>	<u>1,155</u>	<u>0.00%</u>	<u>0</u>	<u>9.71%</u>	<u>1,155</u>
Total Contribution	16.63%	\$1,978	0.00%	\$0	16.63%	\$1,978
General Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	8.36%	\$19,117	-0.05%	-\$115	8.31%	\$19,002
UAAL ⁽³⁾⁽⁵⁾	<u>9.71%</u>	<u>22,204</u>	<u>2.68%</u>	<u>6,134</u>	<u>12.39%</u>	<u>28,338</u>
Total Contribution	18.07%	\$41,321	2.63%	\$6,019	20.70%	\$47,340
General PEPRA Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	6.92%	\$1,658	-0.10%	-\$24	6.82%	\$1,634
UAAL ⁽³⁾⁽⁵⁾	<u>9.71%</u>	<u>2,326</u>	<u>2.68%</u>	<u>643</u>	<u>12.39%</u>	<u>2,969</u>
Total Contribution	16.63%	\$3,984	2.58%	\$619	19.21%	\$4,603
All General Members⁽⁶⁾						
Normal Cost	8.25%	\$39,952	0.02%	\$104	8.27%	\$40,056
UAAL	<u>9.71%</u>	<u>47,026</u>	<u>1.45%</u>	<u>7,045</u>	<u>11.16%</u>	<u>54,071</u>
Total Contribution	17.96%	\$86,978	1.47%	\$7,149	19.43%	\$94,127

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 14b (continued)

Recommended Employer Contribution Rates (Dollar Amounts in Thousands) Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Prior Valuation Under Combined Methodology

	June 30, 2014 Actuarial Valuation ⁽¹⁾					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾
Safety Members						
Normal Cost	13.97%	\$22,362	4.29%	\$6,868	18.26%	\$29,230
UAAL	<u>44.50%</u>	<u>71,233</u>	<u>-8.89%</u>	<u>-14,230</u>	<u>35.61%</u>	<u>57,003</u>
Total Contribution	58.47%	\$93,595	-4.60%	-\$7,362	53.87%	\$86,233
Safety PEPRA Members						
Normal Cost	10.60%	\$403	4.09%	\$156	14.69%	\$559
UAAL	<u>44.50%</u>	<u>1,692</u>	<u>-8.89%</u>	<u>-338</u>	<u>35.61%</u>	<u>1,354</u>
Total Contribution	55.10%	\$2,095	-4.80%	-\$182	50.30%	\$1,913
All Safety Members⁽⁶⁾						
Normal Cost	13.89%	\$22,765	4.29%	\$7,024	18.18%	\$29,789
UAAL	<u>44.50%</u>	<u>72,925</u>	<u>-8.89%</u>	<u>-14,568</u>	<u>35.61%</u>	<u>58,357</u>
Total Contribution	58.39%	\$95,690	-4.60%	-\$7,544	53.79%	\$88,146
All Categories Combined⁽⁶⁾						
Normal Cost	9.67%	\$62,717	1.10%	\$7,128	10.77%	\$69,845
UAAL	<u>18.50%</u>	<u>119,951</u>	<u>-1.16%</u>	<u>-7,523</u>	<u>17.34%</u>	<u>112,428</u>
Total Contribution	28.17%	\$182,668	-0.06%	-\$395	28.11%	\$182,273

⁽¹⁾ Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2014 annual payroll (also in thousands) shown below:

General Tier 1	\$10,004
General Tier 2	209,847
General PEPRA Tier 2	11,899
General Tier 2C	228,670
General PEPRA Tier 2C	23,959
Safety	160,075
Safety PEPRA	<u>3,803</u>
Total	\$648,257

⁽²⁾ Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

⁽³⁾ Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

⁽⁴⁾ Includes 0.56% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

⁽⁵⁾ These aggregated rates are provided for informational purposes only as we understand that the intent is to implement the tier specific rates, if possible.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

The employer contribution rates as of June 30, 2015 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Recommended Employer Contribution Rate

The chart below details the changes in the recommended average employer contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the employer contribution from the prior valuation to the amount determined in this valuation.

CHART 15

Reconciliation of Recommended Average Employer Contribution Rate from June 30, 2014 to June 30, 2015 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost ⁽¹⁾
Recommended Average Employer Contribution Rate as of June 30, 2014	28.11%	\$182,273
Effect of investment gain ⁽²⁾	(1.05)%	(7,126)
Effect of difference in actual versus expected contributions due to delay in implementation of contribution rates calculated in June 30, 2014 valuation	(0.01)%	(68)
Effect of difference in actual versus expected individual salary increases	0.22%	1,493
Effect of difference in actual versus expected total payroll growth	(0.16)%	(1,086)
Effect of lower than expected COLA benefit increase for retirees and beneficiaries	(0.61)%	(4,140)
Effect of 50/50 sharing of Normal Cost for non-PEPRA Tiers	(1.23)%	(8,348)
Effect of net other changes ⁽³⁾	(0.16)%	7,454
Effect of actuarial assumption changes	<u>2.66%</u>	<u>18,054</u>
Total change	<u>(0.34)%</u>	<u>\$6,233</u>
Recommended Average Employer Contribution Rate as of June 30, 2015	27.77%	\$188,506

⁽¹⁾ Based on projected payroll for each year.

⁽²⁾ The Association's valuation value of assets earned 9.82% which was greater than the 7.75% assumed rate of return for 2014/15.

⁽³⁾ Other differences in actual versus expected experience including mortality, disability, withdrawal, retirement and in-service redemption experience. Estimated annual dollar cost also reflects change in payroll from prior valuation.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

The member contribution rates as of June 30, 2015 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation.

Reconciliation of Recommended Member Contribution Rate

The chart below details the changes in the recommended average member contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

CHART 16
Reconciliation of Recommended Average Member Contribution Rate from June 30, 2014 to June 30, 2015
(Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost ⁽¹⁾
Recommended Average Member Contribution Rate in June 30, 2014 Valuation	8.61%	\$55,795
Effect of changes in demographic profile of employee group ⁽²⁾	0.01%	2,689
Effect of 50/50 sharing of Normal Cost for non-PEPRA Tiers	1.56%	10,588
Effect of actuarial assumption changes	<u>0.06%</u>	<u>407</u>
Total change	<u>1.63%</u>	<u>\$13,684</u>
Recommended Average Member Contribution Rate in June 30, 2015 Valuation	10.24%	\$69,479

⁽¹⁾ Based on projected payroll for each year.

⁽²⁾ Estimated annual dollar cost also reflects change in payroll from prior valuation.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

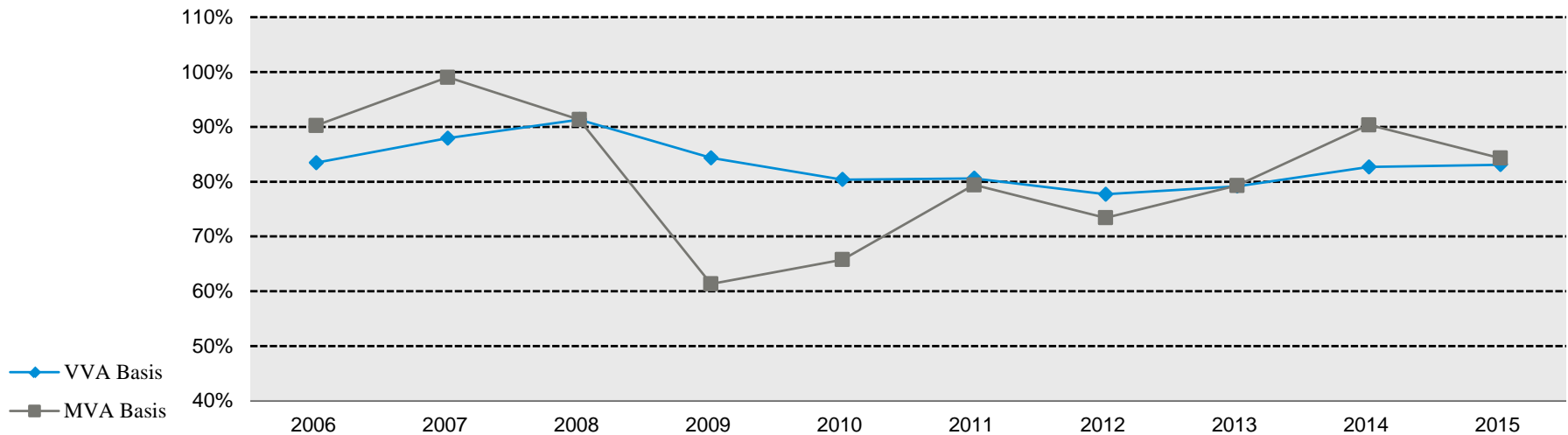
E. FUNDED RATIO

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the valuation value of assets and market value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors. The chart below depicts a history of the funded

ratio for this plan. Chart 18 on the next page shows the Plan's schedule of funding progress for the last ten years.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the valuation or market value of assets is used.

CHART 17
Funded Ratio for Plan Years Ending June 30, 2006 - 2015



SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

CHART 18

Schedule of Funding Progress

Actuarial Valuation Date	Valuation Value of Assets⁽¹⁾ (a)	Actuarial Accrued Liability (AAL)⁽²⁾ (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Projected Covered Payroll (c)	UAAL as a Percentage of Projected Covered Payroll [(b) - (a) / (c)]
06/30/2006	\$2,430,048,000	\$2,911,918,000	\$481,870,000	83.45%	\$519,145,000	92.82%
06/30/2007	2,736,558,000	3,112,583,000	376,025,000	87.92%	551,968,000	68.12%
06/30/2008	3,055,756,000	3,345,804,000	290,048,000	91.33%	599,173,000	48.41%
06/30/2009	3,090,148,000	3,663,701,000	573,553,000	84.34%	634,777,000	90.36%
06/30/2010	3,115,984,000	3,877,443,000	761,459,000	80.36%	654,829,000	116.28%
06/30/2011	3,220,388,000	3,995,352,000	774,964,000	80.60%	637,037,000	121.65%
06/30/2012	3,397,360,000	4,373,227,000	975,867,000	77.69%	633,848,000	153.96%
06/30/2013	3,621,709,000	4,575,063,000	953,354,000	79.16%	638,764,000	149.25%
06/30/2014	3,910,801,000	4,731,016,000	820,215,000	82.66%	648,257,000	126.53%
06/30/2015	4,302,330,000	5,178,157,000	875,827,000	83.09%	678,705,000	129.04%

⁽¹⁾ Excludes assets for supplemental medical benefit reserve and statutory contingency reserve.

⁽²⁾ Excludes liabilities held for supplemental medical benefit reserve and statutory contingency reserve.

SECTION 2: Valuation Results for the Ventura County Employees' Retirement Association

F. VOLATILITY RATIOS

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For VCERA, the current AVR is about 6.4. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.4% of one-year's payroll. Since VCERA amortizes actuarial gains and losses over a period of 15 years, there would be a 0.6% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For VCERA, the current LVR is about 7.6. This is about 19% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

CHART 19
Volatility Ratios for Years Ended June 30, 2009 – 2015

Year Ended June 30	Asset Volatility Ratios			Liability Volatility Ratios		
	General	Safety	Total	General	Safety	Total
2009	2.8	5.7	3.5	4.4	9.8	5.8
2010	3.1	6.3	3.9	4.4	10.1	5.9
2011	3.9	8.2	5.0	4.7	10.8	6.3
2012	3.8	8.7	5.1	5.1	12.3	6.9
2013	4.3	9.7	5.7	5.3	12.7	7.2
2014	4.9	11.5	6.6	5.4	12.9	7.3
2015	4.8	11.4	6.4	5.6	13.8	7.6

This chart shows how the asset and liability volatility ratios have varied over time, both for the plan in total and separately for General and Safety.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A

Table of Plan Coverage

i. General Tier 1

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	75	92	-18.5%
Average age	61.1	60.4	N/A
Average service	32.6	31.6	N/A
Projected total compensation ⁽¹⁾	\$8,640,084	\$10,004,102	-13.6%
Projected average compensation	\$115,201	\$108,740	5.9%
Account balances	\$15,052,653	\$17,403,435	-13.5%
Total active vested members	75	92	-18.5%
Vested terminated members⁽²⁾			
	55	58	-5.2%
Retired members:			
Number in pay status	1,474	1,508	-2.3%
Average age	75.3	74.8	N/A
Average monthly benefit ⁽³⁾	\$3,565	\$3,481	2.4%
Disabled members:			
Number in pay status	110	115	-4.3%
Average age	73.5	72.7	N/A
Average monthly benefit ⁽³⁾	\$2,318	\$2,293	1.1%
Beneficiaries:			
Number in pay status	346	359	-3.6%
Average age	79.7	79.0	N/A
Average monthly benefit ⁽³⁾	\$1,602	\$1,551	3.3%

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A (continued)

Table of Plan Coverage

ii. General Tier 2

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	5,494	5,825	-5.7%
Average age	47.9	47.3	N/A
Average service	12.3	11.5	N/A
Projected total compensation ⁽¹⁾	\$436,756,384	\$438,516,507	-0.4%
Projected average compensation	\$79,497	\$75,282	5.6%
Account balances	\$375,523,585	\$360,544,571	4.2%
Total active vested members	4,556	4,607	-1.1%
Vested terminated members⁽²⁾			
	1,933	1,925	0.4%
Retired members:			
Number in pay status	2,481	2,267	9.4%
Average age	67.8	67.6	N/A
Average monthly benefit ⁽³⁾	\$1,669	\$1,585	5.3%
Disabled members:			
Number in pay status	336	337	-0.3%
Average age	63.6	62.9	N/A
Average monthly benefit ⁽³⁾	\$1,463	\$1,436	1.9%
Beneficiaries:			
Number in pay status	274	256	7.0%
Average age	67.9	67.2	N/A
Average monthly benefit ⁽³⁾	\$806	\$788	2.3%

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A (continued)

Table of Plan Coverage

iii. PEPR General Tier 1

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	0	0	N/A
Average age	N/A	N/A	N/A
Average service	N/A	N/A	N/A
Projected total compensation ⁽¹⁾	N/A	N/A	N/A
Projected average compensation	N/A	N/A	N/A
Account balances	N/A	N/A	N/A
Total active vested members	0	0	N/A
Vested terminated members⁽²⁾	3	5	-40.0%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A (continued)

Table of Plan Coverage

iv. PEPR General Tier 2

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	1,209	755	60.1%
Average age	36.8	35.8	N/A
Average service	1.1	0.7	N/A
Projected total compensation ⁽¹⁾	\$63,108,479	\$35,858,216	76.0%
Projected average compensation	\$52,199	\$47,494	9.9%
Account balances	\$5,968,682	\$2,164,512	175.8%
Total active vested members	1	0	N/A
Vested terminated members⁽²⁾	149	64	132.8%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A (continued)

Table of Plan Coverage

v. Safety

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	1,405	1,471	-4.5%
Average age	42.5	41.9	N/A
Average service	15.4	14.6	N/A
Projected total compensation ⁽¹⁾	\$162,618,523	\$160,074,949	1.6%
Projected average compensation	\$115,743	\$108,820	6.4%
Account balances	\$175,551,244	\$161,930,571	8.4%
Total active vested members	1,245	1,274	-2.3%
Vested terminated members⁽²⁾			
	297	284	4.6%
Retired members:			
Number in pay status	702	677	3.7%
Average age	66.0	65.7	N/A
Average monthly benefit ⁽³⁾	\$7,153	\$7,141	0.2%
Disabled members:			
Number in pay status	388	385	0.8%
Average age	63.7	63.4	N/A
Average monthly benefit ⁽³⁾	\$5,192	\$5,044	2.9%
Beneficiaries:			
Number in pay status	227	217	4.6%
Average age	67.7	67.3	N/A
Average monthly benefit ⁽³⁾	\$2,896	\$2,805	3.2%

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT A (continued)

Table of Plan Coverage

vi. PEPRSA Safety

Category	Year Ended June 30		Change From Prior Year
	2015	2014	
Active members in valuation:			
Number	116	67	73.1%
Average age	29.3	28.9	N/A
Average service	1.2	0.7	N/A
Projected total compensation ⁽¹⁾	\$7,582,376	\$3,803,268	99.4%
Projected average compensation	\$65,365	\$56,765	15.2%
Account balances	\$1,259,585	\$335,236	275.7%
Total active vested members	0	0	N/A
Vested terminated members⁽²⁾	4	3	33.3%
Retired members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Disabled members:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A
Beneficiaries:			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit ⁽³⁾	N/A	N/A	N/A

⁽¹⁾ Calculated by increasing annualized bi-weekly compensation rates as of valuation date by one-half year of inflation and "across the board" salary increases.

⁽²⁾ Includes terminated members with member contributions on deposit.

⁽³⁾ Excludes vested fixed supplemental and supplemental medical benefit amounts.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT B

**Members in Active Service and Projected Average Compensation as of June 30, 2015
By Age and Years of Service**

i. General Tier 1

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	--	--	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--	--	--
40 - 44	--	--	--	--	--	--	--	--	--	--
45 - 49	1	--	--	1	--	--	--	--	--	--
	\$183,798	--	--	\$183,798	--	--	--	--	--	--
50 - 54	4	--	--	--	1	1	1	--	1	--
	206,949	--	--	--	\$221,700	\$294,646	\$202,501	--	\$108,950	--
55 - 59	26	--	1	2	2	--	2	2	16	1
	121,733	--	\$178,596	214,933	154,199	--	218,447	\$151,110	87,830	\$103,804
60 - 64	34	--	--	2	2	5	1	3	13	8
	105,978	--	--	182,472	203,418	145,433	74,728	145,330	78,700	71,311
65 - 69	6	--	--	--	1	1	1	--	3	--
	90,665	--	--	--	84,896	130,408	50,309	--	92,792	--
70 & over	4	--	--	--	--	--	--	--	1	3
	79,048	--	--	--	--	--	--	--	53,506	87,562
Total	75	--	1	5	6	7	5	5	34	12
	\$115,201	--	\$178,596	\$195,721	\$170,305	\$164,602	\$152,887	\$147,642	\$84,389	\$78,081

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2015

By Age and Years of Service

ii. General Tier 2

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	11	10	1	--	--	--	--	--	--	--
	\$52,163	\$52,225	\$51,542	--	--	--	--	--	--	--
25 - 29	204	139	65	--	--	--	--	--	--	--
	61,996	63,174	59,477	--	--	--	--	--	--	--
30 - 34	595	210	328	57	--	--	--	--	--	--
	71,641	73,382	71,192	\$67,804	--	--	--	--	--	--
35 - 39	636	130	284	170	52	--	--	--	--	--
	76,287	74,761	77,099	76,983	\$73,391	--	--	--	--	--
40 - 44	687	113	234	190	120	27	3	--	--	--
	80,088	76,052	80,579	79,840	84,468	\$76,106	\$70,107	--	--	--
45 - 49	853	106	230	209	150	125	31	2	--	--
	81,926	74,002	79,006	82,522	88,797	84,740	82,372	\$77,200	--	--
50 - 54	929	89	230	220	131	132	90	37	--	--
	81,962	76,962	77,022	84,044	83,482	84,812	85,998	86,938	--	--
55 - 59	862	76	185	179	131	123	96	63	9	--
	84,199	74,893	81,495	80,679	85,574	88,176	88,936	94,812	\$89,152	--
60 - 64	519	51	119	101	86	84	43	31	4	--
	82,643	80,171	81,851	77,858	83,768	80,310	89,773	93,513	122,501	--
65 - 69	158	14	44	33	23	20	17	6	1	--
	81,744	71,887	75,230	82,529	81,808	89,640	100,977	65,579	91,075	--
70 & over	40	1	15	11	4	4	3	2	--	--
	73,967	50,181	77,086	68,331	66,747	96,153	67,774	72,819	--	--
Total	5,494	939	1,735	1,170	697	515	283	141	14	--
	\$79,497	\$73,011	\$76,767	\$80,033	\$84,320	\$84,683	\$87,709	\$90,654	\$98,818	--

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2015

By Age and Years of Service

iii. PEPR General Tier 2

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	97	97	--	--	--	--	--	--	--	--
	\$38,574	\$38,574	--	--	--	--	--	--	--	--
25 - 29	322	322	--	--	--	--	--	--	--	--
	48,629	48,629	--	--	--	--	--	--	--	--
30 - 34	253	253	--	--	--	--	--	--	--	--
	54,317	54,317	--	--	--	--	--	--	--	--
35 - 39	148	148	--	--	--	--	--	--	--	--
	54,834	54,834	--	--	--	--	--	--	--	--
40 - 44	113	113	--	--	--	--	--	--	--	--
	51,930	51,930	--	--	--	--	--	--	--	--
45 - 49	91	91	--	--	--	--	--	--	--	--
	58,796	58,796	--	--	--	--	--	--	--	--
50 - 54	73	73	--	--	--	--	--	--	--	--
	52,194	52,194	--	--	--	--	--	--	--	--
55 - 59	68	68	--	--	--	--	--	--	--	--
	62,382	62,382	--	--	--	--	--	--	--	--
60 - 64	35	35	--	--	--	--	--	--	--	--
	57,966	57,966	--	--	--	--	--	--	--	--
65 - 69	8	8	--	--	--	--	--	--	--	--
	65,492	65,492	--	--	--	--	--	--	--	--
70 & over	1	1	--	--	--	--	--	--	--	--
	27,280	27,280	--	--	--	--	--	--	--	--
Total	1,209	1,209	--	--	--	--	--	--	--	--
	\$52,199	\$52,199	--	--	--	--	--	--	--	--

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT B (continued)

Members in Active Service and Projected Average Compensation as of June 30, 2015

By Age and Years of Service

iv. Safety

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over
Under 25	7	7	--	--	--	--	--	--	--	--
	\$94,444	\$94,444	--	--	--	--	--	--	--	--
25 - 29	117	71	46	--	--	--	--	--	--	--
	90,839	85,743	\$98,705	--	--	--	--	--	--	--
30 - 34	211	44	140	27	--	--	--	--	--	--
	100,687	92,138	103,614	\$99,441	--	--	--	--	--	--
35 - 39	233	19	71	100	43	--	--	--	--	--
	111,070	101,491	111,075	106,589	\$125,716	--	--	--	--	--
40 - 44	265	10	34	55	116	50	--	--	--	--
	116,645	113,402	108,915	103,842	119,141	\$130,843	--	--	--	--
45 - 49	243	5	12	40	65	77	44	--	--	--
	122,605	108,997	108,503	108,077	116,347	129,058	\$139,156	--	--	--
50 - 54	215	1	5	17	26	39	82	42	3	--
	132,263	180,682	127,175	108,112	117,462	127,927	135,234	\$148,892	\$132,089	--
55 - 59	92	3	3	2	8	16	27	20	13	--
	131,589	139,358	136,470	91,407	103,069	123,882	133,086	130,620	160,267	--
60 - 64	20	--	5	2	1	4	5	1	2	--
	135,818	--	149,201	101,928	144,171	127,813	119,769	122,005	195,114	--
65 - 69	2	--	--	--	1	--	1	--	--	--
	120,922	--	--	--	84,908	--	156,935	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	1,405	160	316	243	260	186	159	63	18	--
	\$115,743	\$93,807	\$106,738	\$105,361	\$118,832	\$128,829	\$135,605	\$142,665	\$159,442	--

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT B

Members in Active Service and Projected Average Compensation as of June 30, 2015

By Age and Years of Service

v. PEPRA Safety

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	24	24	--	--	--	--	--	--	--	--
	\$62,285	\$62,285	--	--	--	--	--	--	--	--
25 - 29	60	60	--	--	--	--	--	--	--	--
	62,150	62,150	--	--	--	--	--	--	--	--
30 - 34	22	22	--	--	--	--	--	--	--	--
	62,846	62,846	--	--	--	--	--	--	--	--
35 - 39	2	2	--	--	--	--	--	--	--	--
	65,189	65,189	--	--	--	--	--	--	--	--
40 - 44	2	2	--	--	--	--	--	--	--	--
	87,664	87,664	--	--	--	--	--	--	--	--
45 - 49	2	2	--	--	--	--	--	--	--	--
	89,320	89,320	--	--	--	--	--	--	--	--
50 - 54	3	3	--	--	--	--	--	--	--	--
	120,417	120,417	--	--	--	--	--	--	--	--
55 - 59	1	1	--	--	--	--	--	--	--	--
	130,315	130,315	--	--	--	--	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
Total	116	116	--	--	--	--	--	--	--	--
	\$65,365	\$65,365	--	--	--	--	--	--	--	--

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT C

Reconciliation of Member Data – June 30, 2014 to June 30, 2015

	Active Members	Vested Terminated Members⁽¹⁾	Pensioners	Disableds	Beneficiaries	Total
Number as of June 30, 2014	8,210	2,339	4,452	837	832	16,670
New members	658	54	0	0	60	772
Terminations – with vested rights	-229	229	0	0	0	0
Contributions refunds	-102	-79	0	0	0	-181
Retirements	-238	-75	313	0	0	0
New disabilities	-9	-2	-10	21	0	0
Return to work	22	-21	-1	0	0	0
Died with or without beneficiary	-13	-3	-101	-22	-41	-180
Data adjustments	0	-1	4	-2	-4	-3
Number as of June 30, 2015	8,299	2,441	4,657	834	847	17,078

⁽¹⁾ *Includes terminated members with member contributions on deposit.*

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended June 30, 2015	Year Ended June 30, 2014
Contribution income:		
Employer contributions	\$175,099,550	\$169,703,083
Member contributions	<u>63,678,770</u>	<u>46,674,443</u>
Contribution income	\$238,778,320	\$216,377,526
Investment income:		
Interest, dividends and other income	\$60,743,969	\$49,344,497
Adjustment toward market value ⁽¹⁾	298,995,273	305,935,366
Less investment and administrative fees	<u>(18,505,915)</u>	<u>(16,936,134)</u>
Net investment income	<u>\$341,233,327</u>	<u>\$338,343,729</u>
Total income available for benefits	\$580,011,647	\$554,721,255
Less benefit payments	(\$233,695,213)	(\$223,532,290)
Change in reserve for future benefits	\$346,316,434	\$331,188,965

⁽¹⁾ Equals the "non-cash" earnings on investments included in the Actuarial Value of Assets.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT E

Summary Statement of Net Assets

	Year Ended June 30, 2015	Year Ended June 30, 2014
Cash equivalents	\$59,061,354	\$63,604,211
Pension software development cost	9,426,005	6,459,436
Accounts receivable:		
Member and employer contributions	\$6,872,228	\$5,691,835
Accrued interest and dividends	3,213,855	3,358,253
Securities sold	38,357,646	23,833,386
Other	<u>32,056</u>	<u>16,979</u>
Total accounts receivable	\$48,475,785	\$32,900,453
Investments:		
Equities	\$2,526,596,112	\$2,490,857,698
Fixed income	1,013,748,941	970,048,742
Real estate	340,986,568	306,840,325
Investments received on securities lending	63,260,292	62,402,546
Others	<u>415,341,030</u>	<u>428,072,939</u>
Total investments at market value	\$4,359,932,943	\$4,258,222,250
Total assets	\$4,476,896,087	\$4,361,186,350
Liabilities:		
Securities lending	(\$63,260,292)	(\$62,402,546)
Security purchases	(46,451,889)	(21,181,466)
Accounts payable	(2,361,658)	(2,689,643)
Prepaid contributions	<u>(27,060)</u>	<u>(26,831)</u>
Total liabilities	(\$112,100,899)	(\$86,300,486)
Net assets at market value	<u>\$4,364,795,188</u>	<u>\$4,274,885,864</u>
Net assets at actuarial value	<u>\$4,311,130,933</u>	<u>\$3,964,814,499</u>
Net assets at valuation value	<u>\$4,302,330,424</u>	<u>\$3,910,800,797</u>

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT F

Actuarial Balance Sheet

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, we first determine the amount and timing of all future payments that will be made by the Plan for current participants. We then discount these payments at the valuation interest rate to the date of the valuation, thereby determining their present value. We refer to this present value as the "liability" of the Plan.

Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Actuarial Balance Sheet (\$ in 000s)

<u>Assets</u>	<u>June 30, 2015</u>	<u>June 30, 2014</u>
1. Total valuation value of assets	\$4,302,330	\$3,910,801
2. Present value of future contributions by members	495,597	449,384
3. Present value of future employer contributions for:		
a. Entry age normal cost	\$554,183	\$514,554
b. Unfunded actuarial accrued liability	<u>875,827</u>	<u>820,215</u>
4. Total current and future assets	\$6,227,937	\$5,694,954
<u>Liabilities</u>		
5. Present value of benefits for retirees and beneficiaries	\$2,901,805	\$2,646,710
6. Present value of benefits for vested terminated members	134,344	127,447
7. Present value of benefits for active members	<u>3,191,788</u>	<u>2,920,797</u>
8. Total liabilities	\$6,227,937	\$5,694,954

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT G

Summary of Allocated Reserves

	<u>June 30, 2015</u>	<u>June 30, 2014</u>
Member contributions reserve ⁽¹⁾	\$647,597,355	\$611,920,699
Employer advance reserve ⁽¹⁾	2,119,359,715	1,886,562,740
Offset: Interest crediting shortfall tracking account ⁽¹⁾	(885,633,697)	(889,356,718)
Retiree reserve ⁽¹⁾	2,269,554,677	2,150,677,421
Supplemental death benefit reserve ⁽¹⁾	14,301,038	13,897,630
Vested fixed supplemental (\$108.44) reserve ⁽¹⁾	137,151,336	134,434,076
Undistributed earnings ⁽¹⁾	0	2,664,949
Valuation reserves	\$4,302,330,424	\$3,910,800,797
Supplemental medical (\$27.50) reserve ⁽²⁾	8,800,509	10,401,838
Contingency reserve ⁽²⁾	0	43,611,864
Total reserves (actuarial value)	\$8,800,509	\$3,964,814,499
Market stabilization reserve ⁽²⁾	53,664,255	310,071,365
Net market value	\$4,364,795,188	\$4,274,885,864

⁽¹⁾ *Included in valuation value of assets.*

⁽²⁾ *Not included in valuation value of assets.*

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT H

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2015

1. Unfunded actuarial accrued liability at beginning of year		\$820,215,000
2. Total Normal Cost payable at middle of year		125,640,000
3. Expected employer and member contributions		(238,068,000)
4. Interest (whole year on (1) plus half year on (2) + (3))		<u>59,644,000</u>
5. Expected unfunded actuarial accrued liability at end of year		<u>\$767,431,000</u>
6. Actuarial (gain)/loss due to all changes:		
(a) Investment return	(\$81,080,000)	
(b) Actual contributions more than expected ⁽¹⁾	(736,000)	
(c) Higher than expected individual salary increases	17,095,000	
(d) Lower than expected COLA benefit increase for retirees and beneficiaries	(47,218,000)	
(e) Other experience	2,333,000	
(f) Changes in actuarial assumptions	<u>218,002,000</u>	
Total changes		<u>\$108,396,000</u>
7. Unfunded actuarial accrued liability at end of year		<u>\$875,827,000</u>

Note: Net gain from other experience of \$28.5 million (as shown on page 8) is equal to the sum of items: 6(b) through 6(e).

⁽¹⁾ *Including contribution gain from one-year delay in implementing lower contribution rates recommended in June 30, 2014 valuation.*

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT I

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment
General Tier 1	June 30, 2004	Restart of Amortization	\$63,394,000	\$31,876,000	4	\$8,764,000
	June 30, 2005	Actuarial (Gain)/Loss	22,085,000	13,095,000	5	2,934,000
	June 30, 2006	Actuarial (Gain)/Loss	7,048,000	4,731,000	6	900,000
	June 30, 2006	Assumption Change	41,538,000	27,850,000	6	5,296,000
	June 30, 2007	Actuarial (Gain)/Loss	(19,901,000)	(14,685,000)	7	(2,437,000)
	June 30, 2008	Actuarial (Gain)/Loss	(18,128,000)	(14,419,000)	8	(2,132,000)
	June 30, 2009	Actuarial (Gain)/Loss	55,190,000	46,585,000	9	6,234,000
	June 30, 2009	Assumption Change	18,574,000	15,669,000	9	2,097,000
	June 30, 2010	Actuarial (Gain)/Loss	50,018,000	44,242,000	10	5,424,000
	June 30, 2011	Actuarial (Gain)/Loss	36,225,000	33,259,000	11	3,773,000
	June 30, 2012	Actuarial (Gain)/Loss	29,865,000	28,225,000	12	2,987,000
	June 30, 2012	Demographic Assumption Change	38,104,000	38,198,000	17	3,111,000
	June 30, 2012	Economic Assumption Change	19,517,000	19,566,000	17	1,593,000
	June 30, 2013	Actuarial (Gain)/Loss	31,670,000	30,661,000	13	3,048,000
	June 30, 2014	Actuarial (Gain)/Loss	16,119,000	15,901,000	14	1,494,000
	June 30, 2015	Actuarial (Gain)/Loss	8,457,000	8,457,000	15	754,000
	June 30, 2015	Assumption Change	47,959,000	<u>47,959,000</u>	20	<u>3,491,000</u>
				\$377,170,000		\$47,331,000

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment
General Tier 2	June 30, 2004	Restart of Amortization	\$49,731,000	\$25,013,000	4	\$6,877,000
	June 30, 2005	Actuarial (Gain)/Loss	7,622,000	4,523,000	5	1,013,000
	June 30, 2006	Actuarial (Gain)/Loss	(9,108,000)	(6,111,000)	6	(1,162,000)
	June 30, 2006	Assumption Change	19,085,000	12,798,000	6	2,434,000
	June 30, 2006	Plan Provision Change	14,731,000	9,869,000	6	1,877,000
	June 30, 2007	Actuarial (Gain)/Loss	(39,508,000)	(29,157,000)	7	(4,839,000)
	June 30, 2008	Actuarial (Gain)/Loss	(34,794,000)	(27,670,000)	8	(4,092,000)
	June 30, 2009	Actuarial (Gain)/Loss	71,253,000	60,131,000	9	8,047,000
	June 30, 2009	Assumption Change	22,696,000	19,148,000	9	2,562,000
	June 30, 2010	Actuarial (Gain)/Loss	47,615,000	42,119,000	10	5,164,000
	June 30, 2011	Actuarial (Gain)/Loss	(6,949,000)	(6,400,000)	11	(726,000)
	June 30, 2012	Actuarial (Gain)/Loss	(18,106,000)	(17,114,000)	12	(1,811,000)
	June 30, 2012	Demographic Assumption Change	29,420,000	29,486,000	17	2,401,000
	June 30, 2012	Economic Assumption Change	32,874,000	32,965,000	17	2,685,000
	June 30, 2013	Actuarial (Gain)/Loss	(23,823,000)	(23,078,000)	13	(2,295,000)
	June 30, 2014	Actuarial (Gain)/Loss	(49,125,000)	(48,465,000)	14	(4,553,000)
	June 30, 2015	Actuarial (Gain)/Loss	(62,406,000)	(62,406,000)	15	(5,567,000)
	June 30, 2015	Assumption Change	50,090,000	<u>50,090,000</u>	20	<u>3,646,000</u>
				\$65,741,000		\$11,661,000

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment
Safety	June 30, 2004	Restart of Amortization	\$210,319,000	\$105,755,000	4	\$29,076,000
	June 30, 2005	Actuarial (Gain)/Loss	19,142,000	11,353,000	5	2,544,000
	June 30, 2006	Actuarial (Gain)/Loss	3,418,000	2,286,000	6	435,000
	June 30, 2006	Assumption Change	42,167,000	28,273,000	6	5,376,000
	June 30, 2007	Actuarial (Gain)/Loss	(37,489,000)	(27,657,000)	7	(4,590,000)
	June 30, 2008	Actuarial (Gain)/Loss	(22,443,000)	(17,840,000)	8	(2,638,000)
	June 30, 2009	Actuarial (Gain)/Loss	78,157,000	65,960,000	9	8,827,000
	June 30, 2009	Assumption Change	49,982,000	42,182,000	9	5,645,000
	June 30, 2010	Actuarial (Gain)/Loss	108,448,000	95,941,000	10	11,763,000
	June 30, 2011	Actuarial (Gain)/Loss	8,879,000	8,160,000	11	926,000
	June 30, 2012	Actuarial (Gain)/Loss	(7,501,000)	(7,076,000)	12	(749,000)
	June 30, 2012	Demographic Assumption Change	55,513,000	55,660,000	17	4,533,000
	June 30, 2012	Economic Assumption Change	51,887,000	52,012,000	17	4,236,000
	June 30, 2013	Actuarial (Gain)/Loss	7,588,000	7,350,000	13	731,000
	June 30, 2014	Actuarial (Gain)/Loss	(54,478,000)	(53,739,000)	14	(5,048,000)
	June 30, 2015	Actuarial (Gain)/Loss	(55,657,000)	(55,657,000)	15	(4,965,000)
	June 30, 2015	Assumption Change	119,953,000	<u>119,953,000</u>	20	<u>8,731,000</u>
				\$432,916,000		\$64,833,000

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT I (continued)

Table of Amortization Bases

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Payment
Total VCERA	June 30, 2004	Restart of Amortization	\$323,444,000	\$162,644,000	4	\$44,717,000
	June 30, 2005	Actuarial (Gain)/Loss	48,849,000	28,971,000	5	6,491,000
	June 30, 2006	Actuarial (Gain)/Loss	1,358,000	906,000	6	173,000
	June 30, 2006	Assumption Change	102,790,000	68,921,000	6	13,106,000
	June 30, 2006	Plan Provision Change	14,731,000	9,869,000	6	1,877,000
	June 30, 2007	Actuarial (Gain)/Loss	(96,898,000)	(71,499,000)	7	(11,866,000)
	June 30, 2008	Actuarial (Gain)/Loss	(75,365,000)	(59,929,000)	8	(8,862,000)
	June 30, 2009	Actuarial (Gain)/Loss	204,600,000	172,676,000	9	23,108,000
	June 30, 2009	Assumption Change	91,252,000	76,999,000	9	10,304,000
	June 30, 2010	Actuarial (Gain)/Loss	206,081,000	182,302,000	10	22,351,000
	June 30, 2011	Actuarial (Gain)/Loss	38,155,000	35,019,000	11	3,973,000
	June 30, 2012	Actuarial (Gain)/Loss	4,258,000	4,035,000	12	427,000
	June 30, 2012	Demographic Assumption Change	123,037,000	123,344,000	17	10,045,000
	June 30, 2012	Economic Assumption Change	104,278,000	104,543,000	17	8,514,000
	June 30, 2013	Actuarial (Gain)/Loss	15,435,000	14,933,000	13	1,484,000
	June 30, 2014	Actuarial (Gain)/Loss	(87,484,000)	(86,303,000)	14	(8,107,000)
	June 30, 2015	Actuarial (Gain)/Loss	(109,606,000)	(109,606,000)	15	(9,778,000)
	June 30, 2015	Assumption Change	218,002,000	<u>218,002,000</u>	20	<u>15,868,000</u>
				\$875,827,000		\$123,825,000

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT J

Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$210,000 for 2015 and 2016. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions. Limits are also affected by the "grandfather" election under Section 415(b)(10).

For non-PEPRA members, benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contribution rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

EXHIBIT K

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) Investment return — the rate of investment yield that the Plan will earn over the long-term future;
- (b) Mortality rates — the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) Retirement rates — the rate or probability of retirement at a given age;
- (d) Turnover rates — the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the cost allocated to the current year of service.

Actuarial Accrued Liability for Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability for Pensioners:

The single sum value of lifetime benefits to benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

SECTION 3: Supplemental Information for the Ventura County Employees' Retirement Association

**Unfunded/(Overfunded) Actuarial
Accrued Liability:**

The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan.

**Amortization of the Unfunded/
(Overfunded) Actuarial
Accrued Liability:**

Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.

Investment Return:

The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.

Payroll or Compensation:

Compensation Earnable and Pensionable Compensation expected to be paid to active members during the twelve months following the valuation date. Only Compensation Earnable and Pensionable Compensation that would possibly go into the determination of retirement benefits are included.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

EXHIBIT I

Summary of Actuarial Valuation Results

The valuation was made with respect to the following data supplied to us:

1. Retired members as of the valuation date (including 847 beneficiaries in pay status)	6,338
2. Members inactive during year ended June 30, 2015 with vested rights ⁽¹⁾	2,441
3. Members active during the year ended June 30, 2015	8,299

The actuarial factors as of the valuation date are as follows (amounts in 000s):

1. Normal cost		\$134,183
2. Present value of future benefits		6,227,937
3. Present value of future normal costs		1,049,780
4. Actuarial accrued liability ⁽²⁾		5,178,157
Retired members and beneficiaries	\$2,901,805	
Inactive members with vested rights ⁽¹⁾	134,344	
Active members	2,142,008	
5. Valuation value of assets ⁽²⁾ (\$4,364,795 at market value as reported by Retirement Association)		4,302,330
6. Unfunded actuarial accrued liability		\$875,827

⁽¹⁾ Includes terminated members with member contributions on deposit.

⁽²⁾ Excludes liabilities and assets held for supplemental medical benefit reserve and statutory contingency reserve.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The determination of the recommended average employer contribution is as follows
(amounts in 000s):

	Dollar Amount	% of Payroll
1. Total normal cost	\$134,183	19.77%
2. Expected employee contributions	<u>-69,479</u>	<u>-10.24%</u>
3. Employer normal cost: (1) + (2)	\$64,704	9.53%
4. Amortization of unfunded actuarial accrued liability	<u>123,802</u>	<u>18.24%</u>
5. Total recommended average employer contribution: (3) + (4)	\$188,506	27.77%
6. Projected compensation	\$678,705	

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

EXHIBIT II

Actuarial Assumptions and Methods

Rationale for Assumptions: The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2011 through June 30, 2014 Actuarial Experience Study and June 30, 2015 Economic Actuarial Assumptions Report both dated April 14, 2015. Unless otherwise noted, all actuarial assumptions and methods shown below apply to both PEPRA and Non-PEPRA members.

Economic Assumptions

Net Investment Return: 7.50%, net of investment and administration expenses.

Member Contribution Crediting Rate: 3.00% (actual increase is based on projected long term ten-year Treasury rate).

Consumer Price Index: Increase of 3.00% per year; retiree COLA increases due to CPI are subject to a 3.0% maximum change per year for General Tier 1 and Safety. For General Tier 2, SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI, that applies to future service after March 2003.

Payroll Growth: Inflation of 3.00% per year plus “across the board” real salary increases of 0.50% per year.

Increase in the Internal Revenue Code Section 401(a)(17) Compensation Limit: Increase of 3.00% per year from the valuation date.

Increase in Section 7522.10 Compensation Limit: Increase of 3.00% per year from the valuation date.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Demographic Assumptions

Mortality Rates:

<i>Healthy:</i>	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females. For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years.
<i>Disabled:</i>	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set forward six years for males and eight years for females. For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set forward two years.
<i>Beneficiaries:</i>	Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision appropriate to reasonably anticipate future mortality improvement, based on a review of mortality experience as of the measurement date.

<i>Member Contribution Rates:</i>	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females weighted one-third male and two-thirds female. For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years weighted 80% male and 20% female.
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SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Termination Rates Before Retirement:

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.03	0.02	0.03	0.02
30	0.04	0.03	0.03	0.02
35	0.06	0.05	0.05	0.03
40	0.09	0.07	0.08	0.05
45	0.13	0.11	0.11	0.08
50	0.18	0.17	0.16	0.12
55	0.29	0.25	0.24	0.18
60	0.48	0.39	0.41	0.27
65	0.77	0.72	0.64	0.44

All pre-retirement deaths are assumed to be non-duty related.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Termination Rates Before Retirement (continued):

<u>Age</u>	<u>Rate (%)</u>	
	<u>General⁽¹⁾</u>	<u>Safety⁽²⁾</u>
25	0.02	0.11
30	0.04	0.24
35	0.08	0.36
40	0.13	0.58
45	0.21	0.88
50	0.31	1.48
55	0.41	2.88
60	0.54	5.04
65	0.69	0.00
70	0.90	0.00

⁽¹⁾ 35% of General disabilities are assumed to be duty disabilities and the other 65% are assumed to be ordinary disabilities.

⁽²⁾ 90% of Safety disabilities are assumed to be duty disabilities and the other 10% are assumed to be ordinary disabilities.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Termination Rates Before Retirement (continued):

Years of Service	Rate (%)	
	Withdrawal ⁽¹⁾	
	General	Safety
Less than 1	14.00	10.00
1	10.00	6.00
2	8.00	5.50
3	7.00	5.00
4	6.00	4.00
5	4.00	2.75
6	3.75	2.50
7	3.50	2.00
8	3.50	1.80
9	3.25	1.60
10	3.25	1.40
11	3.00	1.20
12	3.00	1.00
13	2.75	0.95
14	2.75	0.90
15	2.50	0.85
16	2.50	0.80
17	2.25	0.75
18	2.00	0.70
19	2.00	0.65
20 or more	2.00	0.60

⁽¹⁾ The greater of a refund of member contributions and a deferred annuity is valued when a member withdraws.

No withdrawal is assumed after a member is first assumed to retire.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Retirement Rates (%):

<u>Age</u>	<u>General Tier 1 and 2</u>	<u>PEPRA General Tier 1 and 2</u>	<u>Safety</u>	<u>PEPRA Safety</u>
40	0.00	0.00	1.00	0.00
41	0.00	0.00	1.00	0.00
42	0.00	0.00	1.00	0.00
43	0.00	0.00	1.00	0.00
44	0.00	0.00	1.00	0.00
45	0.00	0.00	1.00	0.00
46	0.00	0.00	1.00	0.00
47	0.00	0.00	1.00	0.00
48	0.00	0.00	1.00	0.00
49	0.00	0.00	1.50	0.00
50	2.50	0.00	2.50	5.00
51	2.50	0.00	2.00	2.00
52	3.00	2.00	3.00	4.00
53	3.50	2.00	4.00	6.00
54	4.00	2.50	17.00	16.00
55	4.50	4.00	22.00	20.00
56	5.00	4.50	22.00	20.00
57	6.00	5.00	20.00	18.00
58	8.00	6.00	19.00	18.00
59	8.00	7.00	22.00	25.00
60	12.00	9.00	22.00	25.00
61	15.00	11.00	25.00	25.00
62	22.00	20.00	35.00	40.00
63	20.00	20.00	40.00	40.00
64	22.00	18.00	40.00	40.00
65	30.00	20.00	100.00	100.00
66	35.00	30.00	100.00	100.00
67	35.00	30.00	100.00	100.00
68	35.00	30.00	100.00	100.00
69	20.00	30.00	100.00	100.00
70	20.00	50.00	100.00	100.00
71	20.00	50.00	100.00	100.00
72	20.00	50.00	100.00	100.00
73	20.00	50.00	100.00	100.00
74	30.00	50.00	100.00	100.00
75	100.00	100.00	100.00	100.00

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

**Retirement Age and Benefit for
Deferred Vested Members:**

For deferred vested members, we make the following retirement assumption:

General Age: 59
Safety Age: 54

We assume that 50% and 60% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we assume 4.00% compensation increases per annum.

Future Benefit Accruals:

1.0 year of service per year.

Unknown Data for Members:

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.

Definition of Active Members:

All active members of VCERA as of the valuation date.

Percent Married:

70% of male members and 55% of female members are assumed to be married at pre-retirement death or retirement. There is no explicit assumption for children's benefits.

Age of Spouse:

Female (or male) spouses are 3 years younger (or older) than their spouses.

In-Service Redemptions:

Non-PEPRA Formulas

The following assumptions for in-service redemptions pay as a percentage of final average compensation are used:

General Tier 1 7.50%
General Tier 2 3.50%
Safety 7.25%

For determining the cost of the basic benefit (i.e., non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.

PEPRA Formulas

None

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Individual Salary Increases:

<u>Annual Rate of Compensation Increase</u>		
Inflation: 3.00% per year; plus “across the board” real salary increases of 0.50% per year; plus the following promotional and merit increases:		
Years of Service	General	Safety
Less than 1	6.00%	8.00%
1	4.25	6.25
2	3.25	4.75
3	2.75	4.00
4	2.25	3.25
5	1.75	3.00
6	1.25	2.25
7	1.00	1.50
8	0.75	1.25
9	0.50	1.00
10	0.50	0.75
11	0.50	0.75
12	0.50	0.75
13	0.50	0.75
14	0.50	0.75
15	0.50	0.75
16	0.50	0.50
17	0.50	0.50
18	0.50	0.50
19	0.50	0.50
20 and Over	0.50	0.50

**Average Entry Age for
Member Contribution Rates:**

For non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Actuarial Methods

- Actuarial Cost Method:** Entry Age Actuarial Cost Method. Entry Age is the age at the member's hire date. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formulas for each individual have always been in effect (i.e., "replacement life").
- Actuarial Value of Assets:** Market value of assets less unrecognized returns in each of the last ten semi-annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on market value and are recognized over a five-year period. Deferred gains and losses as of June 30, 2011 have been combined and will be recognized in equal amounts over a period of four and a half years from that date.
- Valuation Value of Assets:** Actuarial Value of Assets reduced by the value of the supplemental medical benefit reserve and statutory contingency reserve.
- Amortization Policy:** The UAAL, (i.e., the difference between the Actuarial Accrued Liability and the Valuation Value of Assets), as of June 30, 2011 shall continue to be amortized over separate 15-year period amortization layers based on the valuations during which each separate layer was previously established.
- Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 15 years.
- Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 20 years.
- Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:
- i) with the exception noted in ii., below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
 - ii) the increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

The UAAL will be amortized over “closed” amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

The UAAL will be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase.

If an overfunding exists (i.e., the total of all UAAL becomes negative so that there is a surplus), such surplus and any subsequent surpluses will be amortized over an “open” amortization period of 30 years. Any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL, will be amortized over 15 years as the first of a new series of amortization layers.

These amortization policy components will apply separately to each of VCERA’s UAAL cost groups.

Basic UAAL contribution rates have been calculated on a combined basis for all General Tiers. COLA UAAL contribution rates have been calculated on a combined basis for all General Tiers that have a COLA.

Changes in Actuarial Assumptions and Methods:

Based on the actuarial experience study, the following actuarial assumptions were changed. Previously these assumptions were as follows:

Economic Assumptions

Net Investment Return:

7.75%, net of investment and administration expenses.

Member Contribution Crediting Rate:

3.25% (actual increase is based on projected long term ten-year Treasury rate).

Consumer Price Index:

Increase of 3.25% per year; retiree COLA increases due to CPI are subject to a 3.0% maximum change per year for General Tier 1 and Safety. For General Tier 2, SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI, that applies to future service after March 2003.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Payroll Growth: Inflation of 3.25% per year plus “across the board” real salary increases of 0.75% per year.

Increase in the Internal Revenue Code Section 401(a)(17) Compensation Limit:

Increase of 3.25% per year from the valuation date.

Increase in the Section 7522.10 Compensation Limit:

Increase of 3.25% per year from the valuation date.

Demographic Assumptions

Mortality Rates:

Healthy:

For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set back one year.

For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set back one year.

Disabled:

For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set forward five years for males and seven years for females.

For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set back one year.

Beneficiaries:

Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who has taken a service (non-disability) retirement.

The above mortality tables contain about a 10% margin, based on actual to expected deaths, as a provision appropriate to reasonably anticipate future mortality improvement, based on a review of mortality experience as of the measurement date.

Member Contribution Rates:

For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set back one year weighted 35% male and 65% female.

For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2025 set back one year weighted 80% male and 20% female.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Termination Rates Before Retirement:

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.03	0.01	0.03	0.01
30	0.04	0.02	0.04	0.02
35	0.06	0.03	0.06	0.03
40	0.09	0.04	0.09	0.04
45	0.10	0.07	0.10	0.07
50	0.13	0.10	0.13	0.10
55	0.19	0.19	0.19	0.19
60	0.40	0.39	0.40	0.39
65	0.79	0.76	0.79	0.76

All pre-retirement deaths are assumed to be non-duty related.

Age	Rate (%) Disability	
	General ⁽¹⁾	Safety ⁽²⁾
25	0.02	0.14
30	0.04	0.26
35	0.08	0.48
40	0.13	0.90
45	0.21	1.16
50	0.40	1.98
55	0.56	3.40
60	0.69	4.60
65	0.90	0.00
70	1.00	0.00

- ⁽¹⁾ 40% of General disabilities are assumed to be duty disabilities and the other 60% are assumed to be ordinary disabilities.
- ⁽²⁾ 90% of Safety disabilities are assumed to be duty disabilities and the other 10% are assumed to be ordinary disabilities.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Termination Rates Before Retirement (continued):

Rate (%)		
<u>Withdrawal (< 5 Years of Service) *</u>		
<u>Years of Service</u>	<u>General</u>	<u>Safety</u>
0	15.00	12.00
1	10.00	6.00
2	8.00	5.50
3	7.00	5.00
4	6.00	4.00
<u>Withdrawal (5+ Years of Service) ⁽¹⁾</u>		
<u>Age</u>	<u>General</u>	<u>Safety</u>
20	6.00	4.00
25	6.00	4.00
30	5.70	3.40
35	4.90	2.40
40	3.90	1.40
45	2.90	0.70
50	2.20	0.20
55	1.70	0.00
60	1.20	0.00
65	1.00	0.00
70	0.00	0.00

⁽¹⁾ The greater of a refund of member contributions and a deferred annuity is valued when a member withdraws.

No withdrawal is assumed after a member is first assumed to retire.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Retirement Rates (%):

Age	General Tier 1 and 2	PEPRA General Tier 1 and 2	Safety	PEPRA Safety
40	0.00	0.00	1.00	0.00
41	0.00	0.00	1.00	0.00
42	0.00	0.00	1.00	0.00
43	0.00	0.00	1.00	0.00
44	0.00	0.00	1.00	0.00
45	0.00	0.00	1.00	0.00
46	0.00	0.00	1.00	0.00
47	0.00	0.00	1.00	0.00
48	0.00	0.00	1.00	0.00
49	0.00	0.00	1.00	0.00
50	3.00	0.00	2.00	4.00
51	3.00	0.00	2.00	2.00
52	4.00	2.00	4.00	5.00
53	4.00	2.00	6.00	8.00
54	6.00	3.00	18.00	18.00
55	6.00	5.00	25.00	20.00
56	7.00	5.00	20.00	20.00
57	8.00	6.00	20.00	18.00
58	10.00	7.00	18.00	18.00
59	10.00	8.00	25.00	30.00
60	14.00	10.00	25.00	30.00
61	18.00	12.50	30.00	30.00
62	22.00	20.00	40.00	50.00
63	20.00	20.00	50.00	50.00
64	25.00	20.00	50.00	50.00
65	35.00	25.00	100.00	100.00
66	35.00	30.00	100.00	100.00
67	35.00	30.00	100.00	100.00
68	25.00	30.00	100.00	100.00
69	20.00	30.00	100.00	100.00
70	20.00	50.00	100.00	100.00
71	20.00	50.00	100.00	100.00
72	20.00	50.00	100.00	100.00
73	20.00	50.00	100.00	100.00
74	40.00	50.00	100.00	100.00
75	100.00	100.00	100.00	100.00

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Retirement Age and Benefit for

Deferred Vested Members:

For deferred vested members, we make the following retirement assumption:

General Age: 58

Safety Age: 54

We assume that 50% and 65% of future General and Safety deferred vested members, respectively, will continue to work for a reciprocal employer. For reciprocals, we assume 4.50% compensation increases per annum.

Percent Married:

70% of male members and 50% of female members are assumed to be married at pre-retirement death or retirement. There is no explicit assumption for children's benefits.

In-Service Redemptions:

Non-PEPRA Formulas

The following assumptions for in-service redemptions pay as a percentage of final average pay are used:

General Tier 1 8.00%

General Tier 2 3.50%

Safety 7.50%

For determining the cost of the basic benefit (i.e., non-COLA component), the cost of this pay element is currently recognized in the valuation as an employer only cost and does not affect member contribution rates.

PEPRA Formulas

None

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Changes in Actuarial Assumptions and Methods (previous assumptions continued):

Individual Salary Increases:

Annual Rate of Compensation Increase		
Inflation: 3.25% per year; plus “across the board” real salary increases of 0.75% per year; plus the following promotional and merit increases:		
Years of Service	General	Safety
Less than 1	5.00%	8.50%
1	3.75	6.25
2	3.00	4.75
3	2.50	4.00
4	2.00	3.00
5	1.50	2.50
6	1.00	2.00
7	1.00	1.50
8	0.75	1.25
9	0.50	1.00
10	0.50	0.75
11	0.50	0.75
12	0.50	0.75
13	0.50	0.75
14	0.50	0.75
15	0.50	0.75
16	0.50	0.50
17	0.50	0.50
18	0.50	0.50
19	0.50	0.50
20 and Over	0.50	0.50

**Average Entry Age for
Member Contribution Rates:**

For non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 36 and 27, respectively.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

EXHIBIT III

Summary of Plan Provisions

This exhibit summarizes the major provisions of the VCERA included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership Eligibility:	All regular employees of the County of Ventura or contracting district, scheduled to work 64 or more hours biweekly, are eligible to become a member of the Retirement Association subject to classification below:
<i>General Tier 1</i>	All General members with membership dates before June 30, 1979, plus Deputy Sheriff trainees and certain executive management with membership dates before January 1, 2013.
<i>General Tier 2</i>	All General members with membership dates on or after June 30, 1979 and before January 1, 2013, except as noted above for General Tier 1.
<i>Safety</i>	All Safety members with membership dates before January 1, 2013.
<i>PEPRA General Tier 1</i>	Deputy Sheriff trainees with membership dates on or after January 1, 2013 and before April 17, 2014.
<i>PEPRA General Tier 2</i>	All General members with membership dates on or after January 1, 2013, except as noted above for PEPRA General Tier 1.
<i>PEPRA Safety</i>	All Safety members with membership dates on or after January 1, 2013.

Final Compensation for Benefit Determination:	
<i>General Tier 1 and Safety</i>	Highest consecutive twelve months of compensation earnable (§31462.1)(FAC1).
<i>General Tier 2</i>	Highest consecutive thirty-six months of compensation earnable (§31462)(FAC3).
<i>PEPRA General Tier 1, PEPRA General Tier 2 and PEPRA Safety</i>	Highest consecutive thirty-six months of pensionable compensation (§7522.32) (FAS3).

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Compensation Limit:

General Tier 1, General Tier 2 and Safety

For members with membership dates on or after July 1, 1996, Compensation Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit as of July 1, 2015 is \$265,000. The limit is indexed for inflation on an annual basis.

PEPRA General Tier 1, PEPRA General Tier 2 and PEPRA Safety

Pensionable Compensation is limited to \$117,020 for 2015 (\$140,424, if not enrolled in Social Security). The limit is indexed for inflation on an annual basis.

Service:

Years of service. (Yrs)

Service Retirement Eligibility:

General

Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years, regardless of age (§31672).

Safety

Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years, regardless of age (§31663.25).

PEPRA General

Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).

PEPRA Safety

Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).

Benefit Formula:

	Retirement Age	Benefit Formula
<i>General Tier 1</i> (§31676.11)	50	$(1.24\% \times \text{FAC1} - 1/3 \times 1.24\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(1.67\% \times \text{FAC1} - 1/3 \times 1.67\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(2.18\% \times \text{FAC1} - 1/3 \times 2.18\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.35\% \times \text{FAC1} - 1/3 \times 2.35\% \times \$350 \times 12) \times \text{Yrs}$
	65 or later	$(2.61\% \times \text{FAC1} - 1/3 \times 2.61\% \times \$350 \times 12) \times \text{Yrs}$

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	Retirement Age	Benefit Formula
<i>General Tier 2 (§31676.1)</i>	50	$(1.18\% \times \text{FAC3} - 1/3 \times 1.18\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(1.49\% \times \text{FAC3} - 1/3 \times 1.49\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(1.92\% \times \text{FAC3} - 1/3 \times 1.92\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.09\% \times \text{FAC3} - 1/3 \times 2.09\% \times \$350 \times 12) \times \text{Yrs}$
	65 or later	$(2.43\% \times \text{FAC3} - 1/3 \times 2.43\% \times \$350 \times 12) \times \text{Yrs}$
	Retirement Age	Benefit Formula
<i>PEPRA General Tier 1 and PEPRA General Tier 2 (§7522.20(a))</i>	52	$(1.00\% \times \text{FAS3} \times \text{Yrs})$
	55	$(1.30\% \times \text{FAS3} \times \text{Yrs})$
	60	$(1.80\% \times \text{FAS3} \times \text{Yrs})$
	62	$(2.00\% \times \text{FAS3} \times \text{Yrs})$
	65	$(2.30\% \times \text{FAS3} \times \text{Yrs})$
	67 or later	$(2.50\% \times \text{FAS3} \times \text{Yrs})$
	Retirement Age	Benefit Formula
<i>Safety (Non-Integrated) (§31664)</i>	50	$(2.00\% \times \text{FAC1} \times \text{Yrs})$
	55	$(2.62\% \times \text{FAC1} \times \text{Yrs})$
	60 or later	$(2.62\% \times \text{FAC1} \times \text{Yrs})$
	Retirement Age	Benefit Formula
<i>PEPRA Safety (§7522.25(d))</i>	50	$(2.00\% \times \text{FAS3} \times \text{Yrs})$
	55	$(2.50\% \times \text{FAS3} \times \text{Yrs})$
	57 or later	$(2.70\% \times \text{FAS3} \times \text{Yrs})$

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Maximum Benefit:

<i>General Tier 1, General Tier 2 and Safety</i>	100% of Highest Average Compensation (§31676.1, §31676.11, §31664)
<i>PEPRA General Tier 1, PEPRA General Tier 2 and PEPRA Safety</i>	None

Ordinary Disability:

<i>General Tier 1, General Tier 2, PEPRA General Tier 1 and PEPRA General Tier 2</i>	
<i>Eligibility</i>	Five years of service (§31720).
<i>Benefit Formula</i>	1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but total benefit cannot be more than one-third of Final Compensation (§31727).
<i>Safety and PEPRA Safety</i>	
<i>Eligibility</i>	Five years of service (§31720).
<i>Benefit Formula</i>	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but total benefit cannot be more than one-third of Final Compensation (§31727.2).

Line-of-Duty Disability:

<i>All Members</i>	
<i>Eligibility</i>	No age or service requirements (§31720).
<i>Benefit Formula</i>	50% of the Final Compensation or 100% of Service Retirement benefit, if larger (§31727.4).

Pre-Retirement Death:

<i>All Members</i>	
<i>Less than Five Years of Service</i>	Refund of employee contributions with interest, plus one month's compensation for each year of service to a maximum of six month's compensation (§31781). 50% of Final Compensation or 100% of Service Retirement benefit, if larger, payable to spouse if Line-of-Duty death (§31787).

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Five or More Years of Service

An additional lump sum benefit of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).

OR

60% of the greater of Service Retirement or Ordinary Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of above.

An additional lump sum benefit of one-year of compensation is paid if Line-of-Duty death for Safety member (§31787.6).

Death After Retirement:

All Members

Service Retirement or Ordinary Disability Retirement

60% of member's unmodified allowance continued to eligible spouse (§31760.1). In addition, there is a \$5,000 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31760.2, §31785.1).

Line-of-Duty Disability

100% of member's allowance continued to eligible spouse (§31786). In addition, there is a \$5,000 lump sum benefit payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least two years prior to the date of death and has attained age 55 on or prior to the date of death (§31786.1).

Withdrawal Benefits:

Less than Five Years of Service

Refund of accumulated employee contributions with interest (§31628) or entitled to earned benefits commencing at anytime after eligible to retire (§31629.5).

Five or More Years of Service

If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§31700).

Post-retirement

Cost-of-Living Benefits:

General Tier 1, Safety, PEPRA General Tier 1 and PEPRA Safety

Future changes based on Consumer Price Index to a maximum of 3% per year, excess "banked" (§31870.1).

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<i>General Tier 2 and PEPRA General Tier 2</i>	SEIU members receive a fixed 2% cost-of-living adjustment, not subject to changes in the CPI, that applies to future service after March, 2003. This benefit has been valued consistent with the methodologies described in our October 9, 2006 report entitled "Funding Policies and Procedures for General Tier II COLA Benefit".
Supplemental Benefit:	A supplemental benefit in the amount of \$108.44 per month is paid to retirees and their survivors.
Member Contributions:	Please refer to Appendix A for the specific rates.
<i>General Tier 1 and Safety</i>	Provide for 50% of total Normal Cost.
<i>General Tier 2</i>	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
<i>PEPRA General Tier 2</i>	Provide for 50% of total basic Normal Cost. In addition, for General Tier 2 with COLA members, the current member COLA contribution rate of 2.63% of compensation has been reflected.
<i>PEPRA Safety</i>	Provide for 50% of total Normal Cost.
Other Information:	For Non-PEPRA members hired after November 1974, they will pay a contribution corresponding to a General and Safety member hired at entry age 35 and 27, respectively. Non-PEPRA Safety members with 30 or more years of service are exempt from paying member contributions. The same applies for Non-PEPRA General members hired on or before March 7, 1973.
Plan Provisions Not Valued:	<p>The Board of Retirement has approved a Supplemental Medical Benefit. This benefit is funded from Undistributed Excess Earnings, paid from a reserve that is not included in the Valuation Value of Assets and is subject at all times to the availability of funds.</p> <p>The Supplemental Medical Benefit is \$27.50 per month and is payable to virtually all retirees and beneficiaries.</p>

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Plan Changes: There has been a change in plan provisions reflected since the previous actuarial valuation. Previously this plan provision was as follows:

Member Contributions:

General Tier 1

Basic Provide for an average annuity at age 55 equal to 1/120 of FAC1 (§31621.1).

Cost-of-Living Provide for one-half of future cost-of-living costs.

General Tier 2

Basic Provide for an average annuity at age 60 equal to 1/120 of FAC3 (§31621).

Cost-of-Living Provide for a fixed 2% cost-of-living increase for SEIU members that applies to service after March 2003 (§31627). The contribution rate is currently a negotiated 2.63% of compensation.

Safety

Basic Provide for an average annuity at age 50 equal to 1/100 of FAC1 (§31639.25).

Cost-of-Living Provide for one-half of future cost-of-living costs.

NOTE: *The summary of major plan provisions is designed to outline principle plan benefits as interpreted for purposes of the actuarial valuation. If the Association should find the plan summary not in accordance with the actual provisions, the Association should alert the actuary so they can both be sure the proper provisions are valued.*

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Appendix A

Member Contribution Rates Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
General Tier 1	5.08%	7.62%	1.73%	2.59%	6.81%	10.21%
General Tier 2 without COLA	4.86%	7.29%	0.00%	0.00%	4.86%	7.29%
General Tier 2 COLA	4.86%	7.29%	2.63% ⁽¹⁾	2.63% ⁽¹⁾	7.49%	9.92%
Safety	10.78%	10.78%	4.49%	4.49%	15.27%	15.27%

⁽¹⁾ General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

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Appendix B

Member Contribution Rates for PEPRA Members

	Basic	COLA	Total
General Tier 2 without COLA	7.03%	0.00%	7.03%
General Tier 2 with COLA	7.03%	2.63% ⁽¹⁾	9.66%
Safety	10.40%	4.28%	14.68%

The PEPRA member contribution rate is 50% of the Normal Cost.

⁽¹⁾ General Tier 2 members with COLA are required to pay COLA contributions of 2.63% of compensation based on current bargaining agreements.

Note: It is our understanding that in the determination of pension benefits under the PEPRA tier formulas, the compensation that can be taken into account for 2015 is \$117,020. (For an employer that is not enrolled in Social Security, the maximum amount is \$140,424) (reference Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2015 (reference Section 7522.10(d)).

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Appendix C

Employer Contribution Rates (Dollar Amounts in Thousands) Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation Under Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
General Tier 1 Members						
Normal Cost	8.43%	\$728	2.63%	\$228	11.06%	\$956
UAAL ⁽²⁾	<u>9.64%</u>	<u>833</u>	<u>3.64%</u>	<u>314</u>	<u>13.28%</u>	<u>1,147</u>
Total Contribution	18.07%	\$1,561	6.27%	\$542	24.34%	\$2,103
General Tier 2 Members w/o COLA						
Normal Cost	8.54%	\$18,229	0.00%	\$0	8.54%	\$18,229
UAAL ⁽²⁾	<u>9.64%</u>	<u>20,581</u>	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	<u>20,581</u>
Total Contribution	18.18%	\$38,810	0.00%	\$0	18.18%	\$38,810
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.03%	\$1,546	0.00%	\$0	7.03%	\$1,546
UAAL ⁽²⁾	<u>9.64%</u>	<u>2,120</u>	<u>0.00%</u>	<u>0</u>	<u>9.64%</u>	<u>2,120</u>
Total Contribution	16.67%	\$3,666	0.00%	\$0	16.67%	\$3,666
General Tier 2 Members w/COLA						
Normal Cost ⁽³⁾	8.54%	\$19,070	0.08%	\$179	8.62%	\$19,249
UAAL ⁽²⁾⁽⁴⁾	<u>9.64%</u>	<u>21,531</u>	<u>3.64%</u>	<u>8,131</u>	<u>13.28%</u>	<u>29,662</u>
Total Contribution	18.18%	\$40,601	3.72%	\$8,310	21.90%	\$48,911
General PEPRA Tier 2 Members w/COLA						
Normal Cost ⁽³⁾	7.03%	\$2,890	0.02%	\$9	7.05%	\$2,899
UAAL ⁽²⁾⁽⁴⁾	<u>9.64%</u>	<u>3,964</u>	<u>3.64%</u>	<u>1,498</u>	<u>13.28%</u>	<u>5,462</u>
Total Contribution	16.67%	\$6,854	3.66%	\$1,507	20.33%	\$8,361
All General Members⁽⁵⁾						
Normal Cost	8.35%	\$42,463	0.08%	\$416	8.43%	\$42,879
UAAL	<u>9.64%</u>	<u>49,029</u>	<u>1.96%</u>	<u>9,943</u>	<u>11.60%</u>	<u>58,972</u>
Total Contribution	17.99%	\$91,492	2.04%	\$10,359	20.03%	\$101,851

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Appendix C (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers – Current Valuation Under Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Safety Members						
Normal Cost	13.48%	\$21,921	4.39%	\$7,139	17.87%	\$29,060
UAAL	<u>47.33%</u>	<u>76,968</u>	<u>-9.24%</u>	<u>-15,026</u>	<u>38.09%</u>	<u>61,942</u>
Total Contribution	60.81%	\$98,889	-4.85%	-\$7,887	55.96%	\$91,002
Safety PEPRA Members						
Normal Cost	10.40%	\$789	4.28%	\$324	14.68%	\$1,113
UAAL	<u>47.33%</u>	<u>3,589</u>	<u>-9.24%</u>	<u>-701</u>	<u>38.09%</u>	<u>2,888</u>
Total Contribution	57.73%	\$4,378	-4.96%	-\$377	52.77%	\$4,001
All Safety Members⁽⁵⁾						
Normal Cost	13.34%	\$22,710	4.39%	\$7,463	17.73%	\$30,173
UAAL	<u>47.33%</u>	<u>80,557</u>	<u>-9.24%</u>	<u>-15,727</u>	<u>38.09%</u>	<u>64,830</u>
Total Contribution	60.67%	\$103,267	-4.85%	-\$8,264	55.82%	\$95,003
All Categories Combined⁽⁵⁾						
Normal Cost	9.60%	\$65,173	1.16%	\$7,879	10.76%	\$73,052
UAAL	<u>19.09%</u>	<u>129,586</u>	<u>-0.85%</u>	<u>-5,784</u>	<u>18.24%</u>	<u>123,802</u>
Total Contribution	28.69%	\$194,759	0.31%	\$2,095	29.00%	\$196,854

⁽¹⁾ Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2015 annual payroll (also in thousands) shown below:

General Tier 1	\$8,640
General Tier 2	213,455
General PEPRA Tier 2	21,992
General Tier 2C	223,301
General PEPRA Tier 2C	41,116
Safety	162,619
Safety PEPRA	<u>7,582</u>
Total	\$678,705

⁽²⁾ Basic UAAL rates have been calculated on a combined basis for all General Tiers. COLA UAAL rates have been calculated on a combined basis for all General Tiers that have a COLA (excludes General Tier 2 without COLA and General PEPRA Tier 2 without COLA).

⁽³⁾ Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

⁽⁴⁾ Includes 0.54% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

⁽⁵⁾ These aggregated rates are provided for informational purposes only as we understand that the intent is to implement the tier specific rates, if possible.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Appendix D

Member Contribution Rates Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers

**General Tier 1 Members' Contribution Rates from the June 30, 2015 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Recommended Assumptions

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
15	3.24%	4.86%	1.21%	1.82%	4.45%	6.68%
16	3.24%	4.86%	1.21%	1.82%	4.45%	6.68%
17	3.31%	4.96%	1.23%	1.85%	4.54%	6.81%
18	3.38%	5.06%	1.25%	1.89%	4.63%	6.95%
19	3.44%	5.17%	1.29%	1.92%	4.73%	7.09%
20	3.51%	5.27%	1.32%	1.97%	4.83%	7.24%
21	3.59%	5.38%	1.33%	2.00%	4.92%	7.38%
22	3.66%	5.49%	1.36%	2.04%	5.02%	7.53%
23	3.73%	5.60%	1.39%	2.08%	5.12%	7.68%
24	3.81%	5.71%	1.42%	2.13%	5.23%	7.84%
25	3.88%	5.82%	1.45%	2.17%	5.33%	7.99%
26	3.96%	5.94%	1.47%	2.21%	5.43%	8.15%
27	4.04%	6.06%	1.51%	2.26%	5.55%	8.32%
28	4.12%	6.18%	1.53%	2.30%	5.65%	8.48%
29	4.20%	6.30%	1.57%	2.35%	5.77%	8.65%
30	4.28%	6.42%	1.60%	2.40%	5.88%	8.82%
31	4.37%	6.55%	1.62%	2.44%	5.99%	8.99%
32	4.45%	6.68%	1.66%	2.49%	6.11%	9.17%
33	4.54%	6.81%	1.69%	2.54%	6.23%	9.35%
34	4.63%	6.95%	1.73%	2.59%	6.36%	9.54%
35	4.72%	7.08%	1.77%	2.65%	6.49%	9.73%
36	4.82%	7.22%	1.79%	2.70%	6.61%	9.92%
37	4.91%	7.37%	1.83%	2.74%	6.74%	10.11%
38	5.01%	7.51%	1.87%	2.81%	6.88%	10.32%

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

**General Tier 1 Members' Contribution Rates from the June 30, 2015 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Recommended Assumptions

Entry Age	Basic		COLA		Total	
	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
39	5.11%	7.66%	1.90%	2.86%	7.01%	10.52%
40	5.21%	7.82%	1.95%	2.92%	7.16%	10.74%
41	5.32%	7.98%	1.99%	2.98%	7.31%	10.96%
42	5.43%	8.14%	2.02%	3.04%	7.45%	11.18%
43	5.54%	8.32%	2.07%	3.10%	7.61%	11.42%
44	5.66%	8.50%	2.12%	3.17%	7.78%	11.67%
45	5.79%	8.69%	2.16%	3.24%	7.95%	11.93%
46	5.91%	8.87%	2.21%	3.31%	8.12%	12.18%
47	6.03%	9.04%	2.24%	3.37%	8.27%	12.41%
48	6.14%	9.21%	2.29%	3.43%	8.43%	12.64%
49	6.23%	9.35%	2.33%	3.49%	8.56%	12.84%
50	6.31%	9.47%	2.36%	3.53%	8.67%	13.00%
51	6.37%	9.56%	2.38%	3.56%	8.75%	13.12%
52	6.42%	9.62%	2.39%	3.59%	8.81%	13.21%
53	6.43%	9.64%	2.39%	3.59%	8.82%	13.23%
54 & Over	6.37%	9.55%	2.37%	3.56%	8.74%	13.11%
Interest:	7.50%					
COLA:	3.00%					
COLA Loading:	37.30%					
Mortality:	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females weighted one-third male and two-thirds female.					
Salary Increase:	See Exhibit II.					

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 35. These rates are determined before any pickups by the employer.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

**General Tier 2 Members' Contribution Rates from the June 30, 2015 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Recommended Assumptions

Entry Age	Basic Only		Entry Age	Basic Only	
	First \$350	Over \$350		First \$350	Over \$350
16	2.66%	3.99%	38	4.13%	6.20%
17	2.72%	4.08%	39	4.21%	6.32%
18	2.77%	4.16%	40	4.29%	6.44%
19	2.83%	4.25%	41	4.38%	6.57%
20	2.89%	4.33%	42	4.47%	6.70%
21	2.95%	4.42%	43	4.55%	6.83%
22	3.01%	4.51%	44	4.65%	6.97%
23	3.07%	4.61%	45	4.74%	7.11%
24	3.13%	4.70%	46	4.84%	7.26%
25	3.20%	4.80%	47	4.94%	7.41%
26	3.26%	4.89%	48	5.05%	7.57%
27	3.33%	4.99%	49	5.15%	7.72%
28	3.39%	5.09%	50	5.25%	7.88%
29	3.46%	5.19%	51	5.35%	8.02%
30	3.53%	5.30%	52	5.44%	8.16%
31	3.60%	5.40%	53	5.51%	8.27%
32	3.67%	5.51%	54	5.57%	8.36%
33	3.75%	5.62%	55	5.61%	8.42%
34	3.82%	5.73%	56	5.63%	8.45%
35	3.89%	5.84%	57	5.61%	8.42%
36	3.97%	5.96%	58	5.81%	8.72%
37	4.05%	6.08%	59 & over	6.02%	9.03%

Interest: 7.50%

COLA: SEIU members contribute a negotiated 2.63% for a fixed 2% COLA pursuant to Government Code 31627.

Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back one year for males and set forward one year for females weighted one-third male and two-thirds female.

Salary Increase: See Exhibit II.

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 35. These rates are determined before any pickups by the employer.

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**Safety Members' Contribution Rates from the June 30, 2015 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
15	7.74%	4.43%	12.17%
16	7.74%	4.43%	12.17%
17	7.74%	4.43%	12.17%
18	7.74%	4.43%	12.17%
19	7.74%	4.43%	12.17%
20	7.74%	4.43%	12.17%
21	7.74%	4.43%	12.17%
22	7.90%	4.52%	12.42%
23	8.07%	4.61%	12.68%
24	8.23%	4.71%	12.94%
25	8.40%	4.81%	13.21%
26	8.57%	4.91%	13.48%
27	8.75%	5.01%	13.76%
28	8.93%	5.11%	14.04%
29	9.12%	5.22%	14.34%
30	9.31%	5.33%	14.64%
31	9.51%	5.44%	14.95%
32	9.71%	5.56%	15.27%
33	9.93%	5.67%	15.60%
34	10.12%	5.79%	15.91%
35	10.32%	5.91%	16.23%
36	10.54%	6.02%	16.56%
37	10.76%	6.15%	16.91%
38	10.99%	6.29%	17.28%
39	11.24%	6.43%	17.67%
40	11.48%	6.56%	18.04%
41	11.71%	6.70%	18.41%
42	11.94%	6.83%	18.77%
43	12.12%	6.93%	19.05%
44	12.23%	7.00%	19.23%

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

**Safety Members' Contribution Rates from the June 30, 2015 Actuarial Valuation
(Expressed as a Percentage of Monthly Payroll)**

Calculated Under Recommended Assumptions

Entry Age	Basic	COLA	Total
45	12.34%	7.06%	19.40%
46	12.40%	7.10%	19.50%
47	12.42%	7.11%	19.53%
48	12.33%	7.05%	19.38%
49 & Over	12.11%	6.92%	19.03%

Interest: 7.50%

COLA: 3.00%

COLA Loading: 57.20%

Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2035 set back three years weighted 80% male and 20% female.

Salary Increase: See Exhibit II.

Note: All members hired after November 1974, will pay a contribution corresponding to entry age 27. These rates are determined before any pickups by the employers.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Appendix E

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Current Valuation Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers Under Non-Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
General Tier 1 Members						
Normal Cost ⁽²⁾	7.90%	\$683	2.67%	\$230	10.57%	\$913
UAAL ⁽³⁾	<u>473.75%</u>	<u>40,932</u>	<u>74.06%</u>	<u>6,399</u>	<u>547.81%</u>	<u>47,331</u>
Total Contribution	481.65%	\$41,615	76.73%	\$6,629	558.38%	\$48,244
General Tier 2 Members w/o COLA						
Normal Cost	7.16%	\$15,283	0.00%	\$0	7.16%	\$15,283
UAAL ⁽³⁾	<u>1.62%</u>	<u>3,458</u>	<u>0.00%</u>	<u>0</u>	<u>1.62%</u>	<u>3,458</u>
Total Contribution	8.78%	\$18,741	0.00%	\$0	8.78%	\$18,741
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	7.03%	\$1,546	0.00%	\$0	7.03%	\$1,546
UAAL ⁽³⁾	<u>1.62%</u>	<u>356</u>	<u>0.00%</u>	<u>0</u>	<u>1.62%</u>	<u>356</u>
Total Contribution	8.65%	\$1,902	0.00%	\$0	8.65%	\$1,902
General Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	7.16%	\$15,988	0.08%	\$179	7.24%	\$16,167
UAAL ⁽³⁾⁽⁵⁾	<u>1.62%</u>	<u>3,617</u>	<u>1.34%</u>	<u>2,993</u>	<u>2.96%</u>	<u>6,610</u>
Total Contribution	8.78%	\$19,605	1.42%	\$3,172	10.20%	\$22,777
General PEPRA Tier 2 Members w/COLA						
Normal Cost ⁽⁴⁾	7.03%	\$2,890	0.02%	\$9	7.05%	\$2,899
UAAL ⁽³⁾⁽⁵⁾	<u>1.62%</u>	<u>666</u>	<u>1.34%</u>	<u>551</u>	<u>2.96%</u>	<u>1,217</u>
Total Contribution	8.65%	\$3,556	1.36%	\$560	10.01%	\$4,116
All General Members⁽⁶⁾						
Normal Cost	7.16%	\$36,390	0.08%	\$418	7.24%	\$36,808
UAAL	<u>9.64%</u>	<u>49,029</u>	<u>1.96%</u>	<u>9,943</u>	<u>11.60%</u>	<u>58,972</u>
Total Contribution	16.80%	\$85,419	2.04%	\$10,361	18.84%	\$95,780

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Current Valuation Based on 50/50 Sharing of Normal Cost for Non-PEPRA Tiers Under Non-Combined Methodology

	June 30, 2015 Actuarial Valuation					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾	Rate	Estimated Annual Amount ⁽¹⁾
Safety Members						
Normal Cost ⁽⁷⁾	11.63%	\$18,913	4.84%	\$7,870	16.47%	\$26,783
UAAL	<u>47.33%</u>	<u>76,968</u>	<u>-9.24%</u>	<u>-15,026</u>	<u>38.09%</u>	<u>61,942</u>
Total Contribution	58.96%	\$95,881	-4.40%	-\$7,156	54.56%	\$88,725
Safety PEPRA Members						
Normal Cost	10.40%	\$789	4.28%	\$324	14.68%	\$1,113
UAAL	<u>47.33%</u>	<u>3,589</u>	<u>-9.24%</u>	<u>-701</u>	<u>38.09%</u>	<u>2,888</u>
Total Contribution	57.73%	\$4,378	-4.96%	-\$377	52.77%	\$4,001
All Safety Members⁽⁶⁾						
Normal Cost	11.58%	\$19,702	4.81%	\$8,194	16.39%	\$27,896
UAAL	<u>47.33%</u>	<u>80,557</u>	<u>-9.24%</u>	<u>-15,727</u>	<u>38.09%</u>	<u>64,830</u>
Total Contribution	58.91%	\$100,259	-4.43%	-\$7,533	54.48%	\$92,726
All Categories Combined⁽⁶⁾						
Normal Cost	8.26%	\$56,092	1.27%	\$8,612	9.53%	\$64,704
UAAL	<u>19.09%</u>	<u>129,586</u>	<u>-0.85%</u>	<u>-5,784</u>	<u>18.24%</u>	<u>123,802</u>
Total Contribution	27.35%	\$185,678	0.42%	\$2,828	27.77%	\$188,506

⁽¹⁾ Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2015 annual payroll (also in thousands) shown below:

General Tier 1	\$8,640
General Tier 2	213,455
General PEPRA Tier 2	21,992
General Tier 2C	223,301
General PEPRA Tier 2C	41,116
Safety	162,619
Safety PEPRA	<u>7,582</u>
Total	\$678,705

⁽²⁾ The total employer rate has been adjusted by 0.48% to account for the cost associated with the cessation of member contributions after 30 years of service.

⁽³⁾ Basic UAAL rates have not been calculated on a combined basis for all General Tiers.

⁽⁴⁾ Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

⁽⁵⁾ Includes 0.54% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.

⁽⁶⁾ These aggregated rates are provided for informational purposes only as we understand that the intent is to implement the tier specific rates, if possible.

⁽⁷⁾ The total employer rate has been adjusted by 1.20% to account for the cost associated with the cessation of member contributions after 30 years of service.

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Prior Valuation Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers Under Non-Combined Methodology

	June 30, 2014 Actuarial Valuation ⁽¹⁾					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾
General Tier 1 Members						
Normal Cost	8.11%	\$811	2.43%	\$243	10.54%	\$1,054
UAAL ⁽²⁾	<u>369.07%</u>	<u>36,922</u>	<u>41.64%</u>	<u>4,165</u>	<u>410.71%</u>	<u>41,087</u>
Total Contribution	377.18%	\$37,733	44.07%	\$4,408	421.25%	\$42,141
General Tier 2 Members w/o COLA						
Normal Cost	8.36%	\$17,543	0.00%	\$0	8.36%	\$17,543
UAAL ⁽²⁾	<u>2.13%</u>	<u>4,470</u>	<u>0.00%</u>	<u>0</u>	<u>2.13%</u>	<u>4,470</u>
Total Contribution	10.49%	\$22,013	0.00%	\$0	10.49%	\$22,013
General PEPRA Tier 2 Members w/o COLA						
Normal Cost	6.92%	\$823	0.00%	\$0	6.92%	\$823
UAAL ⁽²⁾	<u>2.13%</u>	<u>253</u>	<u>0.00%</u>	<u>0</u>	<u>2.13%</u>	<u>253</u>
Total Contribution	9.05%	\$1,076	0.00%	\$0	9.05%	\$1,076
General Tier 2 Members w/COLA						
Normal Cost ⁽³⁾	8.36%	\$19,117	-0.05%	-\$115	8.31%	\$19,002
UAAL ⁽²⁾⁽⁴⁾	<u>2.13%</u>	<u>4,871</u>	<u>1.14%</u>	<u>2,607</u>	<u>3.27%</u>	<u>7,478</u>
Total Contribution	10.49%	\$23,988	1.09%	\$2,492	11.58%	\$26,480
General PEPRA Tier 2 Members w/COLA						
Normal Cost ⁽³⁾	6.92%	\$1,658	-0.10%	-\$24	6.82%	\$1,634
UAAL ⁽²⁾⁽⁴⁾	<u>2.13%</u>	<u>510</u>	<u>1.14%</u>	<u>273</u>	<u>3.27%</u>	<u>783</u>
Total Contribution	9.05%	\$2,168	1.04%	\$249	10.09%	\$2,417
All General Members						
Normal Cost	8.25%	\$39,952	0.02%	\$104	8.27%	\$40,056
UAAL	<u>9.71%</u>	<u>47,026</u>	<u>1.45%</u>	<u>7,045</u>	<u>11.16%</u>	<u>54,071</u>
Total Contribution	17.96%	\$86,978	1.47%	\$7,149	19.43%	\$94,127

SECTION 4: Reporting Information for the Ventura County Employees' Retirement Association

Appendix E (continued)

Employer Contribution Rates (Dollar Amounts in Thousands) For Reference Purposes Only – Prior Valuation Without 50/50 Sharing of Normal Cost for Non-PEPRA Tiers Under Non-Combined Methodology

	June 30, 2014 Actuarial Valuation ⁽¹⁾					
	BASIC		COLA		TOTAL	
	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾	Rate	Estimated Annual Amount ⁽²⁾
Safety Members						
Normal Cost	13.97%	\$22,362	4.29%	\$6,868	18.26%	\$29,230
UAAL	<u>44.50%</u>	<u>71,233</u>	<u>-8.89%</u>	<u>-14,230</u>	<u>35.61%</u>	<u>57,003</u>
Total Contribution	58.47%	\$93,595	-4.60%	-\$7,362	53.87%	\$86,233
Safety PEPRA Members						
Normal Cost	10.60%	\$403	4.09%	\$156	14.69%	\$559
UAAL	<u>44.50%</u>	<u>1,692</u>	<u>-8.89%</u>	<u>-338</u>	<u>35.61%</u>	<u>1,354</u>
Total Contribution	55.10%	\$2,095	-4.80%	-\$182	50.30%	\$1,913
All Safety Members						
Normal Cost	13.89%	\$22,765	4.29%	\$7,024	18.18%	\$29,789
UAAL	<u>44.50%</u>	<u>72,925</u>	<u>-8.89%</u>	<u>-14,568</u>	<u>35.61%</u>	<u>58,357</u>
Total Contribution	58.39%	\$95,690	-4.60%	-\$7,544	53.79%	\$88,146
All Categories Combined						
Normal Cost	9.67%	\$62,717	1.10%	\$7,128	10.77%	\$69,845
UAAL	<u>18.50%</u>	<u>119,951</u>	<u>-1.16%</u>	<u>-7,523</u>	<u>17.34%</u>	<u>112,428</u>
Total Contribution	28.17%	\$182,668	-0.06%	-\$395	28.11%	\$182,273

⁽¹⁾ Amounts are in thousands, assumed to be paid throughout the year, and are based on June 30, 2014 annual payroll (also in thousands) shown below:

General Tier 1	\$10,004
General Tier 2	209,847
General PEPRA Tier 2	11,899
General Tier 2C	228,670
General PEPRA Tier 2C	23,959
Safety	160,075
Safety PEPRA	<u>3,803</u>
Total	\$648,257

⁽²⁾ Basic UAAL rates have not been calculated on a combined basis for all General Tiers.

⁽³⁾ Reflects General Tier 2 member COLA contribution rate of 2.63% based on current bargaining agreements.

⁽⁴⁾ Includes 0.56% in COLA UAAL costs attributed to the first two years of service accrued for the fixed 2% COLA pursuant to Government Code 31627.