Sonoma County Employees' Retirement Association

Actuarial Valuation and Review as of December 31, 2014

Segal Consulting

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April 29, 2015

Board of Retirement
Sonoma County Employees' Retirement Association
433 Aviation Boulevard, Suite 100
Santa Rosa, CA 95403

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2014. It summarizes the actuarial data used in the valuation, establishes the funding requirements for the fiscal year beginning July 1, 2016 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 prepared by SCERA. 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 Andy Yeung, ASA, MAAA, FCA, 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, MAAA, FCA, EA
Senior Vice President and Actuary

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SECTION 1

VALUATION SUMMARY

SECTION 2

VALUATION RESULTS

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Purpose

This report has been prepared by Segal Consulting to present a valuation of the Sonoma County Employees' Retirement Association as of December 31, 2014. 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 the Board of Retirement;
- The characteristics of covered active members, inactive vested members, retired members and beneficiaries as of December 31, 2014, provided by the Retirement Association;
- The assets of the Plan as of December 31, 2014, provided by the Retirement Association;
- 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 that fully fund the Association's liabilities, and that, 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 reasonably consistent, both internally and with prior years' information.

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. Consistent with previous valuations, we have applied the funding policy adopted by the Board to amortize the Association's outstanding balance of the December 31, 2007 unfunded actuarial accrued liability (UAAL) as well as any new UAAL established on each subsequent actuarial valuation after the December 31, 2007 valuation over separate 20-year declining periods.

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 Valuation Year

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

Reference: Pg. 42
Reference: Pg. 35

- The ratio of the valuation value of assets to actuarial accrued liabilities increased from 81.8% to 86.3%. The funded ratio measured on a market value basis increased from 90.1% to 91.4%. The Association's UAAL decreased from $449.4 million as of December 31, 2013 to $343.0 million as of December 31, 2014. The reduction in UAAL is primarily due to investment return (after "smoothing") higher than the 7.50% return assumption and the lower than expected individual salary increases during 2014. A complete reconciliation of the Association's unfunded actuarial accrued liability is provided in Section 3, Exhibit H.

Reference: Pg. 18

- The average employer contribution rate calculated in this valuation decreased from 20.74% of payroll to 19.18% of payroll. This change was primarily due to: (i) investment return (after "smoothing") higher than the 7.50% return assumption, (ii) lower than expected individual salary increases during 2014, and (iii) other experience gains, offset to some degree by (iv) increase in UAAL rate due to lower than expected increases in total payroll, (v) demographic changes, and (vi) actual contributions less than expected. A complete reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 14).

Reference: Pg. 19

- The average member rate calculated in this valuation has increased from 11.92% of payroll to 11.93% of payroll. A complete reconciliation of the Association's average member rate is provided in Section 2, Subsection D (see Chart 15).

Reference: Pg. 6

- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized investment gain as of December 31, 2014 was $126.3 million (as compared to an unrecognized gain of $206.0 million in the December 31, 2013 valuation). This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes over the next few years, and will help offset any investment losses that may occur after December 31, 2014. This implies that earning the assumed rate of investment return of 7.50% per year (net of expenses) on a **market value** basis will result in investment gains on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 7.50% rate and all other actuarial assumptions are met, the contribution requirements would decrease in the next few years. The potential impact associated with the deferred investment gains may be illustrated as follows:
  - If the net deferred gains were recognized immediately and entirely in the valuation value of assets, the funded ratio would increase from 86.3% to 91.4%.
  - If the net deferred gains were recognized immediately and entirely in the valuation value of assets, the aggregate employer rate would decrease from 19.2% to 16.5%.

- The actuarial valuation report as of December 31, 2014 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.
- Safety-County members pay an additional contribution amount equal to 3.00% of payroll effective February 1, 2005.
- General-County and General-Court members pay an additional contribution amount equal to 3.03% of payroll from July 1, 2004 to June 30, 2024. Effective July 1, 2024, the employer contribution rate will have to increase to offset for this expiration of the 3.03% rate paid by the General-County and General-Court members.

Reference: Pg. 34

- In this report, we have provided the amount of transfer that would be required to "true-up" the COLA and the Retired Member reserves so that the reserves after the "true-up" are equal to the present value of the COLA and retiree benefits for members currently receiving such benefits.

Reference: Pg. 16

- Effective with the December 31, 2007 valuation, we have calculated a separate Normal Cost rate for Safety – VOM based on the demographics of Safety employees of VOM. Any new Safety UAAL will continue to be allocated to Safety – County and Safety – VOM based on their proportions of payroll to the total Safety payroll.

Reference: Pg. 15

- Effective with the restatement of the December 31, 2012 contribution rates, we have calculated a separate Normal Cost rate for General Plan A – County. Note that the Normal Cost rate for all other General employers continues to be developed on a pooled basis. Similar to Safety, any new General UAAL will continue to be allocated to General – County, General – Court and General – VOM based on their proportions of payroll to the total General payroll.
- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 is effective with the calendar year ending December 31, 2014 for plan reporting. Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information needed to comply with Statements 67 and 68 will be provided in separate reports.

Reference: Pg. 41

- As a result of the phase-in of the employer's rates for the calendar year 2014, we have determined that the employer's actual contributions do equal 100% of an Annual Required Contributions but determined using an amortization period of about 28 years (an amortization period of up to 30 years is allowed by the GASB under the old standard as described above under Statements 25 and 27). This is noted in Section 4, Exhibit II.

Impact of Future Experience on Contribution Rates

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

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

Summary of Key Valuation Results (Dollar amounts in thousands)

	December 31, 2014		December 31, 2013	
Employer Contribution Rates:	Total Rate	Estimated Annual Amount[1]	Total Rate	Estimated Annual Amount[1]
General Plan A – County	17.81%	$36,455	19.39%	$39,689
General Plan A– Court	28.87%	3,358	29.05%	3,379
General Plan A– Valley of the Moon	16.58%	39	18.78%	45
General Plan B – County	12.86%	4,910	14.45%	5,518
General Plan B – Court	23.18%	183	23.45%	185
General Plan B – Valley of the Moon	10.89%	6	13.18%	7
Safety Plan A – County	25.06%	15,240	26.84%	16,323
Safety Plan A – Valley of the Moon	32.52%	1,190	34.79%	1,273
Safety Plan B – County	18.86%	811	19.81%	852
Safety Plan B – Valley of the Moon	20.49%	14	23.30%	15
All Categories combined	19.18%	62,206	20.74%	67,286
Average Member Contribution Rates[2]:	Total Rate	Estimated Annual Amount[1]	Total Rate	Estimated Annual Amount[1]
General Plan A – County (Average Entry Age: 37)	12.14%	$24,849	12.14%	$24,849
General Plan A – Court (Average Entry Age: 36)	12.30%	1,430	12.30%	1,430
General Plan A – Valley of the Moon (Average Entry Age: 52)	11.91%	28	11.91%	28
General Plan B – County	10.40%	3,971	10.42%	3,979
General Plan B – Court	10.40%	82	10.42%	82
General Plan B – Valley of the Moon	7.37%	4	7.39%	4
Safety Plan A – County (Average Entry Age: 30)	12.03%	7,316	12.03%	7,316
Safety Plan A – Valley of the Moon (Average Entry Age: 35)	10.31%	377	10.31%	377
Safety Plan B – County	14.98%	644	14.08%	606
Safety Plan B – Valley of the Moon	10.36%	7	10.87%	7
All Categories combined	11.93%	38,708	11.92%	38,678

(1) *Based on December 31, 2014 projected annual compensation.*

(2) *Includes an additional 3.03% and 3.00% of payroll for General (County and Court) and Safety-County members, respectively.*

Summary of Key Valuation Results – continued (Dollar amounts in thousands)

	December 31, 2014	December 31, 2013
Funded Status:		
Actuarial accrued liability (AAL)	$2,510,253	$2,466,224
Valuation value of assets (VVA)(3)	2,167,210	2,016,781
Market value of assets (MVA)(3)	2,293,475	2,222,773
Funded percentage on a VVA basis	86.3%	81.8%
Funded percentage on a MVA basis	91.4%	90.1%
Unfunded Actuarial Accrued Liability on a VVA basis	343,043	$449,443
Unfunded Actuarial Accrued Liability on a MVA basis	216,778	243,451
Key Assumptions:		
Interest rate	7.50%	7.50%
Inflation rate	3.25%	3.25%
Across the board salary increase	0.75%	0.75%

(3) *Excludes non-valuation reserves.*

Summary of Key Valuation Demographic and Financial Data

	December 31, 2014	December 31, 2013	Percentage Change
Active Members:			
Number of members	3,922	3,833	2.3%
Average age	46.0	46.0	N/A
Average service	9.8	9.9	N/A
Projected total compensation	$324,418,882	$329,893,979	-1.7%
Average projected compensation	$82,718	$86,067	-3.9%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	3,409	3,296	3.4%
Disability retired	606	614	-1.3%
Beneficiaries	491	484	1.4%
Total	4,506	4,394	2.5%
Average age	67.8	67.5	N/A
Average monthly benefit	$2,645	$2,601	1.7%
Vested Terminated Members:			
Number of terminated vested members(1)	975	918	6.2%
Average age	46.4	46.9	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	$2,293,475	$2,222,773	3.2%
Return on market value of assets	5.18%	19.49%	N/A
Actuarial value of assets	$2,167,210	$2,016,781	7.5%
Return on actuarial value of assets	9.71%	11.38%	N/A
Valuation value of assets	$2,167,210	$2,016,781	7.5%
Return on valuation value of assets	9.71%	11.38%	N/A

(1) *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

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: 2005 – 2014

Year Ended December 31	Active Members	Vested Terminated Members[1]	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2005	4,230	589	2,939	0.83
2006	4,212	729	3,095	0.91
2007	4,246	763	3,282	0.95
2008	4,193	853	3,399	1.01
2009	3,984	881	3,570	1.12
2010	3,780	904	3,780	1.24
2011	3,587	919	4,021	1.38
2012	3,620	876	4,258	1.42
2013	3,833	918	4,394	1.39
2014	3,922	975	4,506	1.40

[1] *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 3,922 active members with an average age of 46.0, average years of service of 9.8 years and average projected compensation of $82,718. The 3,833 active members in the prior valuation had an average age of 46.0, average service of 9.9 years and average projected compensation of $86,067.

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

Inactive Members

In this year's valuation, there were 975 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 918 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 December 31, 2014

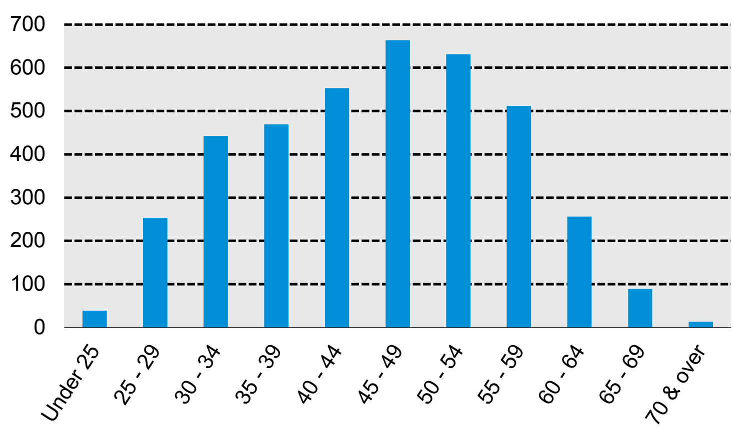
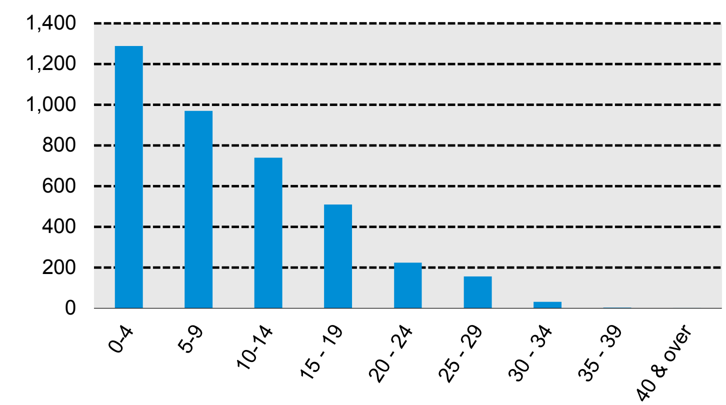


CHART 3

Distribution of Active Members by Years of Service as of December 31, 2014



Retired Members and Beneficiaries
As of December 31, 2014, 4,015 retired members and 491 beneficiaries were receiving total monthly benefits of $11,917,933. For comparison, in the previous valuation, there were 3,910 retired members and 484 beneficiaries receiving monthly benefits of $11,428,122.

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 December 31, 2014

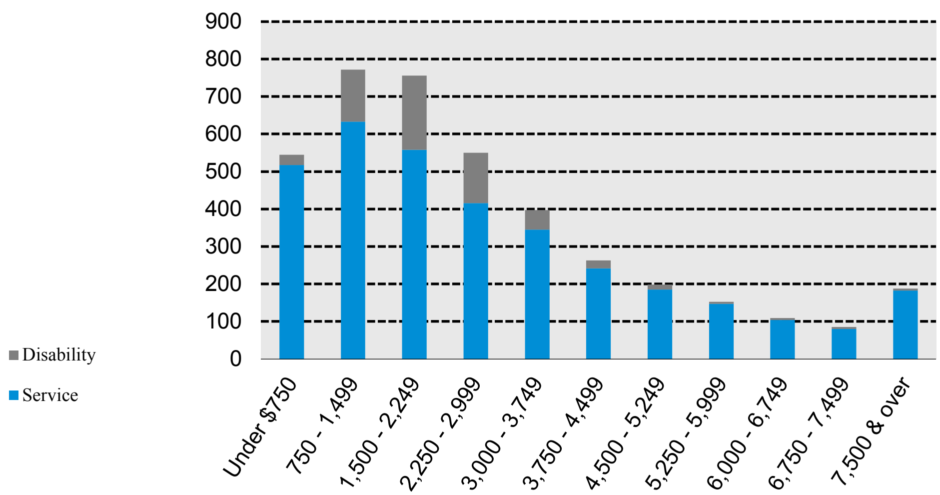
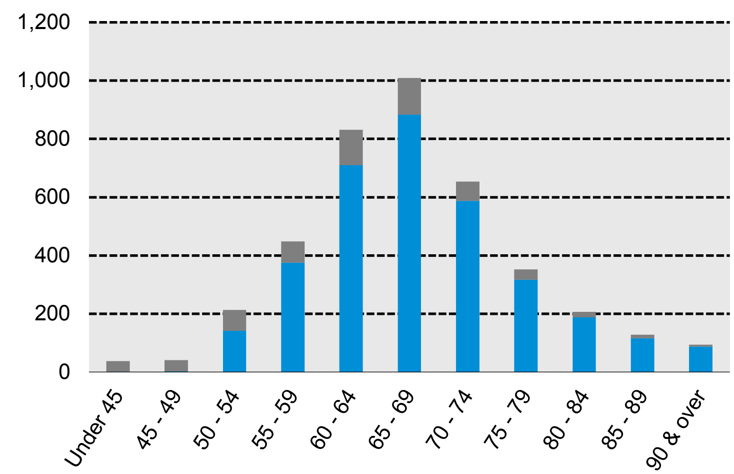


CHART 5

Distribution of Retired Members by Type and by Age as of December 31, 2014



B. FINANCIAL INFORMATION

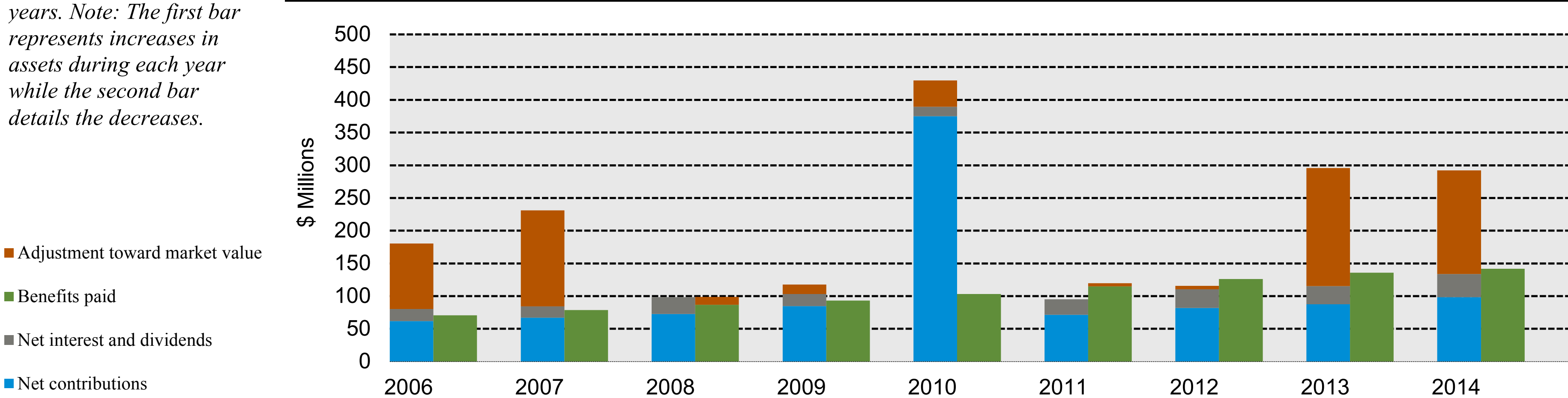
Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments.

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, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last nine 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 December 31, 2006 - 2014



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 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 determination of the actuarial and valuation value of assets is provided on the following page.

The following are points of note in the asset smoothing method used by the actuary in developing the actuarial value and valuation value of assets: (1) the non-investment cash flow included contributions received, benefit payments and administrative expenses made during the last calendar year and (2) the amount subject to smoothing is the actual market return earned during the last calendar year that was in excess/below the expected return on the valuation value of assets.

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 December 31, 2014

Plan Year Ending December 31	Actual Return On Market Value	Expected Return On Valuation Value	Investment Gain/(Loss)	Deferred Factor	Deferred Return
2010	$210,445,768	$132,039,061	$78,406,707	0.0	$0
2011	4,854,307	144,723,796	(139,869,489)	0.2	(27,973,898)
2012	242,604,327	142,862,439	99,741,888	0.4	39,896,755
2013	370,312,599	137,296,052	233,016,547	0.6	139,809,928
2014	117,662,316	149,497,548	(31,835,232)	0.8	(25,468,186)

1.	Total Deferred Return	$126,264,599
2.	Net Market Value of Assets	2,293,474,695
3.	Actuarial Value of Assets (Item 2 – Item 1)	$2,167,210,096
4.	Ratio of Actuarial Value to Market Value	94.5%
5.	Non-Valuation Reserves and Other Adjustments	
	a. Interest Fluctuation Reserve	$0
	b. Undistributed Reserve	0
	c. Negative Contingency Reserve (Before Any Transfer)	(460,445,353)
	d. Transfer to True-Up Reserves	1,794,762
	e. Negative Contingency Reserve (After Transfers) (Item 5c + Item 5d)	(458,650,591)
	f. Total (Item 5a + Item 5b + Max (Item 5e,0))	$0
6.	Valuation Value of Assets (Item 3 – Item 5f)	$2,167,210,096

The amounts of deferred return as of December 31, 2014 to be recognized in each subsequent valuation are as follows:

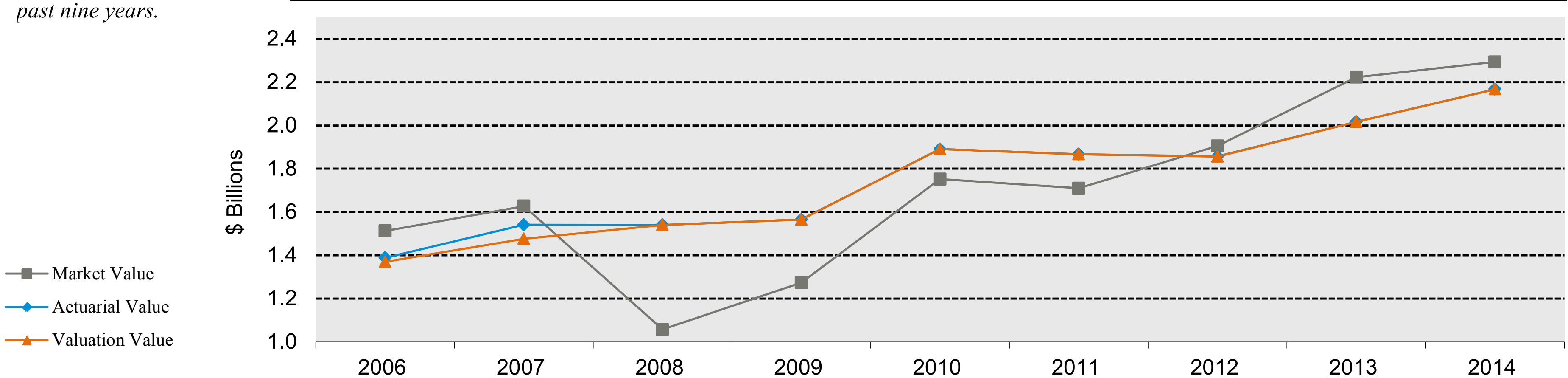
December 31, 2015	$32,210,743
December 31, 2016	60,184,640
December 31, 2017	40,236,263
December 31, 2018	(6,367,047)
Total	$126,264,599

The market value, actuarial value, and valuation value of assets are representations of the SCERA'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 asset value is significant because SCERA'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 nine years.

CHART 8

Market Value, Actuarial Value and Valuation Value of Assets as of December 31, 2006 – 2014



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 $103.4 million, a gain of $44.2 million from investments (after smoothing and relative to a return of 7.50% assumed in the valuation), a loss of $10.3 million from contribution experience and a gain of $69.6 million from all other sources. The gain from all other sources was 2.8% 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 9
Actuarial Experience for Year Ended December 31, 2014

1.	Net gain from investments on valuation value of assets[1]	$44,167,000
2.	Net loss from contribution experience	-10,343,000
3.	Net gain from other experience[2]	69,601,000
4.	Net experience gain: (1) + (2) + (3)	$103,425,000

[1] *Details in Chart 10.*

[2] *See Section 3, Exhibit H.*

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 SCERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.50%. The actual rate of return on a ("smoothed") valuation basis for the 2014 plan year was 9.71%.

Since the actual return for the year on the valuation value of assets was more than the assumed return, SCERA experienced an actuarial gain during the year ended December 31, 2014 with regard to its investments.

For this valuation, there is no difference between the return on the valuation value of assets and the return on the actuarial value of assets.

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

CHART 10

Investment Experience for Year Ended December 31, 2014 – Valuation Value, Actuarial Value and Market Value of Assets

	Valuation Value	Actuarial Value	Market Value
1. Actual return	$193,799,266	$193,799,266	$114,071,949
2. Average value of assets	$1,995,095,826	$1,995,095,826	$2,201,087,742
3. Actual rate of return: (1) ÷ (2)	9.71%	9.71%	5.18%
4. Assumed rate of return	7.50%	7.50%	7.50%
5. Expected return: (2) x (4)	149,632,187	149,632,187	165,081,581
6. Actuarial gain/(loss): (1) – (5)	$44,167,079	$44,167,079	$(51,009,632)

One measure of actuarial experience is to see how the assumed investment rate of return has compared to actual experience over time. The chart below shows the rate of return on an actuarial, valuation and market basis for the last nine years.

Based on future expectations, we have maintained the assumed rate of return of 7.50% for this valuation.

CHART 11

Investment Return – Actuarial Value, Valuation Value and Market Value: 2006 – 2014 (Dollar amount in thousands)

	Valuation Value Investment Return[1]		Actuarial Value Investment Return[1]		Market Value Investment Return[1]	
Year Ended December 31	**Amount**	**Percent**	**Amount**	**Percent**	**Amount**	**Percent**
2006	$102,056	8.02%	$118,855	9.33%	$193,809	14.64%
2007	111,564	8.15%	163,919	11.86%	126,599	8.40%
2008	70,012	4.75%	13,753	0.90%	-556,235	-34.33%
2009	32,771	2.13%	32,771	2.13%	224,056	21.28%
2010	54,093	3.27%	54,093	3.27%	207,173	15.23%
2011	19,508	1.04%	19,508	1.04%	1,179	0.07%
2012	33,652	1.82%	33,652	1.82%	239,065	14.16%
2013	208,550	11.38%	208,550	11.38%	366,462	19.49%
2014	193,799	9.71%	193,799	9.71%	114,072	5.18%
Five-Year Average Return		5.36%		5.36%		10.59%
Nine-Year Average Return		5.52%		5.62%		5.63%

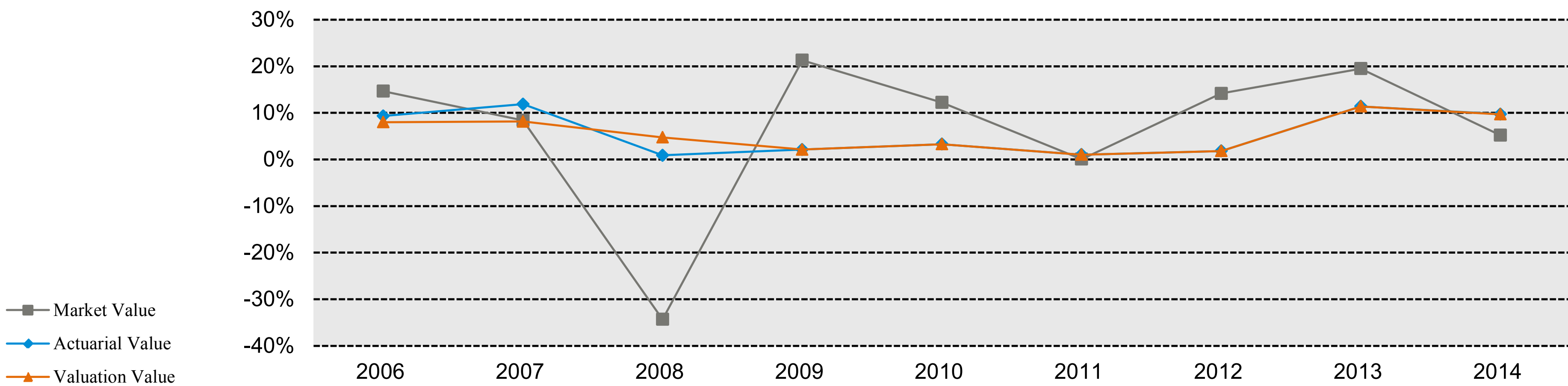
[1] *Net of administrative and investment expenses.*

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 last nine years.

CHART 12

Market, Actuarial and Valuation Rates of Return for Years Ended December 31, 2006 - 2014



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 may 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, and
- salary increases different than assumed.

The net gain from this other experience for the year ended December 31, 2014 amounted to $69.6 million, which was 2.8% of the actuarial accrued liability. See Exhibit H for a detailed development of the changes in the Unfunded Actuarial Accrued Liability.

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 determined as a level percentage of the member's career 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 annual rate of 4.00% (i.e., 3.25% inflation plus 0.75% across-the-board salary increase). The outstanding balance of the December 31, 2007 UAAL as well as any new UAAL established on each subsequent valuation after December 31, 2007 is amortized over separate 20-year declining periods. The UAAL established as a result of including as pensionable salary a cash allowance of $3.45 per hour for General-County and Safety-County members only is amortized over a 20-year declining period with 13 years remaining as of December 31, 2014.

The recommended employer contributions are provided on Charts 13a and 13b.

Member Contributions:

Normal Cost

Plan A Members	Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General Plan A members and Safety Plan A members, respectively. 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 1/100 of Final Average Compensation for General and Safety members. That age is 55 for General members and 50 for Safety members. It is assumed that contributions are made annually at the same rate, starting at entry age. Accumulation includes semi-annual crediting of interest at one-half of the assumed investment earning rate. The member contribution rates are provided in Appendix A.
Plan B Members	Pursuant to Section 7522.30(a) of the Government Code, CalPEPRA members are required to contribute at least 50% of the Normal Cost rate. We have assumed that exactly 50% of the Normal Cost would be paid by the new members. Also of note is that based on our recommendation, SCERA has decided to use the discretion made available by AB1380 to no longer round the member's contribution rate to the nearest ¼% as previously required by the California Public Employees' Pension Reform Act of 2013 (CalPEPRA).
Contribution to the Unfunded Actuarial Accrued Liability (UAAL)	General County and Court members pay an additional contribution amount equal to 3.03% of payroll for a 20-year period from July 1, 2004 to June 30, 2024 while Safety-County members (excluding Valley of the Moon) pay an additional contribution amount equal to 3.00% of payroll effective February 1, 2005. These rates are subtracted from the employer's UAAL rates, after adjustment for refundability.

CHART 13a

Recommended Employer Contribution Rates (Dollar Amounts in Thousands)

	December 31, 2014 Actuarial Valuation		December 31, 2013 Actuarial Valuation	
General Plan A-County Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost	12.32%	$25,218	12.33%	$25,238
UAAL	5.49%	11,237	7.06%	14,451
Total Contribution	17.81%	$36,455	19.39%	$39,689
General Plan A-Court Members				
Normal Cost	13.06%	$1,519	12.99%	$1,511
UAAL	15.81%	1,839	16.06%	1,868
Total Contribution	28.87%	$3,358	29.05%	$3,379
General Plan A-Valley of the Moon Members				
Normal Cost	13.06%	$31	12.99%	$31
UAAL	3.52%	8	5.79%	14
Total Contribution	16.58%	$39	18.78%	$45
General Plan B-County Members				
Normal Cost	7.37%	$2,814	7.39%	$2,822
UAAL	5.49%	2,096	7.06%	2,696
Total Contribution	12.86%	$4,910	14.45%	$5,518
General Plan B-Court Members				
Normal Cost	7.37%	$58	7.39%	$58
UAAL	15.81%	125	16.06%	127
Total Contribution	23.18%	$183	23.45%	$185
General Plan B-Valley of the Moon Members				
Normal Cost	7.37%	$4	7.39%	$4
UAAL	3.52%	2	5.79%	3
Total Contribution	10.89%	$6	13.18%	$7

[1] *Amounts are in thousands and are based on December 31, 2014 projected annual payroll (also in thousands) as shown on page 16.*

CHART 13a (continued)

Recommended Employer Contribution Rates (Dollar Amounts in Thousands)

	December 31, 2014 Actuarial Valuation		December 31, 2013 Actuarial Valuation	
Safety Plan A-County Members	Rate	Estimated Annual Amount[1]	Rate	Estimated Annual Amount[1]
Normal Cost	18.18%	$11,056	18.12%	$11,020
UAAL	6.88%	4,184	8.72%	5,303
Total Contribution	25.06%	$15,240	26.84%	$16,323
Safety Plan A-Valley of the Moon Members				
Normal Cost	22.39%	$819	22.36%	$818
UAAL	10.13%	371	12.43%	455
Total Contribution	32.52%	$1,190	34.79%	$1,273
Safety Plan B-County Members				
Normal Cost	11.98%	$515	11.09%	$477
UAAL	6.88%	296	8.72%	375
Total Contribution	18.86%	$811	19.81%	$852
Safety Plan B-Valley of the Moon Members				
Normal Cost	10.36%	$7	10.87%	$7
UAAL	10.13%	7	12.43%	8
Total Contribution	20.49%	$14	23.30%	$15
All Categories Combined				
Normal Cost	12.96%	$42,041	12.94%	$41,986
UAAL	6.22%	20,165	7.80%	25,300
Total Contribution	19.18%	$62,206	20.74%	$67,286

(1) *Amounts are in thousands and are based on December 31, 2014 projected annual payroll (also in thousands):*

General Plan A-County	$204,690
General Plan A-Court	11,629
General Plan A-Valley of the Moon	236
General Plan B-County	38,183
General Plan B-Court	791
General Plan B-Valley of the Moon	48
Safety Plan A-County	60,816
Safety Plan A-Valley of the Moon	3,658
Safety Plan B-County	4,302
Safety Plan B-Valley of the Moon	65
Total	$324,418

CHART 13b

Breakdown of the Employers' Plus Employees' Normal Cost Contributions to Fund for Each Type of Benefit

Normal Cost	**Elements of Normal Cost for Plan A Members**			
	All General	Safety-County	Safety-Valley of the Moon	Overall
Service Retirement	81%	61%	63%	76%
Vested Termination and Ordinary Withdrawal	10%	7%	6%	9%
Non Service and Service Connected Disability	8%	32%	31%	14%
Non Service and Service Connected Death	1%	0%	0%	1%
Total Employer Plus Employee Normal Cost	100%	100%	100%	100%

Normal Cost	**Elements of Normal Cost for Plan B Members**			
	All General	Safety-County	Safety-Valley of the Moon	Overall
Service Retirement	77%	53%	54%	73%
Vested Termination and Ordinary Withdrawal	10%	8%	8%	10%
Non Service and Service Connected Disability	12%	38%	38%	16%
Non Service and Service Connected Death	1%	1%	0%	1%
Total Employer Plus Employee Normal Cost	100%	100%	100%	100%

The contribution rates as of December 31, 2014 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 Contribution
The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

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

CHART 14

Reconciliation of Recommended Contribution from December 31, 2013 to December 31, 2014 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Annual Dollar Cost[1]
Recommended Average Employer Contribution Rate as of December 31, 2013	20.74%	$67,286
Effect of investment gain[2]	-0.95%	-$3,082
Effect of difference in actual versus expected individual salary increases	-1.39%	-$4,509
Effect of increase in UAAL rate from lower than expected increases in total payroll	0.62%	$2,011
Effect of difference between actual and expected contributions[3]	0.22%	$714
Effect of demographic changes	0.02%	$65
Effect of other experience gains	-0.08%	-$279
Subtotal	-1.56%	-$5,080
Recommended Average Employer Contribution Rate as of December 31, 2014	19.18%	$62,206

(1) *Based on December 31, 2014 projected annual payroll of $324,418.*

(2) *Return on valuation assets was 9.71% and therefore was more than the 7.50% assumed in the valuation.*

(3) *Includes impact of 18-month delay in rate implementation, phase-in of the impact of the changes in actuarial assumptions on the employer contribution rate and difference between normal cost and UAAL contributions due to actual payroll less than expected during 2014. In particular, 0.06% is due to the phase-in of the impact of the changes in actuarial assumptions on the employer contribution rate.*

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

Reconciliation of Recommended Contribution Rate
The chart below details the changes in the aggregate member contribution rate from the prior valuation to the current year's valuation.

CHART 15
Reconciliation of Recommended Member Contribution from December 31, 2013 to December 31, 2014

	General Plan A-County Contribution Rate (1)	General Plan A-Court Contribution Rate (1)	General Plan A-Valley of the Moon Contribution Rate	Safety Plan A-County Contribution Rate (2)	Safety Plan A-Valley of the Moon Contribution Rate	
Recommended Average Member Contribution Rate as of December 31, 2013[3]	12.14%	12.30%	11.91%	12.03%	10.31%	
Effect of demographic changes	0.00%	0.00%	0.00%	0.00%	0.00%	
Recommended Average Member Contribution Rate as of December 31, 2014[4]	12.14%	12.30%	11.91%	12.03%	10.31%	
	General Plan B-County Contribution Rate (1)	**General Plan B-Court Contribution Rate (1)**	**General Plan B-Valley of the Moon Contribution Rate**	**Safety Plan B-County Contribution Rate (2)**	**Safety Plan B-Valley of the Moon Contribution Rate**	**Total Contribution Rate**
Recommended Average Member Contribution Rate as of December 31, 2013	10.42%	10.42%	7.39%	14.08%	10.87%	11.92%
Effect of demographic changes	-0.02%	-0.02%	-0.02%	0.90%	-0.51%	0.01%
Recommended Average Member Contribution Rate as of December 31, 2014	10.40%	10.40%	7.37%	14.98%	10.36%	11.93%

(1) *Rates include an additional 3.03% of payroll.*

(2) *Rates include an additional 3.00% of payroll.*

(3) *The above rates are based on average entry age. The weighted average member contribution rates as of December 31, 2013 are 11.96%, 12.22%, 11.66% and 9.25% for General-County, other General (i.e., Court and Valley of the Moon), Safety-County and Safety-Valley of the Moon, respectively.*

(4) *The above rates are based on average entry age. The weighted average member contribution rates as of December 31, 2014 are 11.94%, 12.25%, 11.60% and 9.13% for General-County, other General (i.e., Court and Valley of the Moon), Safety-County and Safety-Valley of the Moon, respectively.*

E. FUNDED RATIO

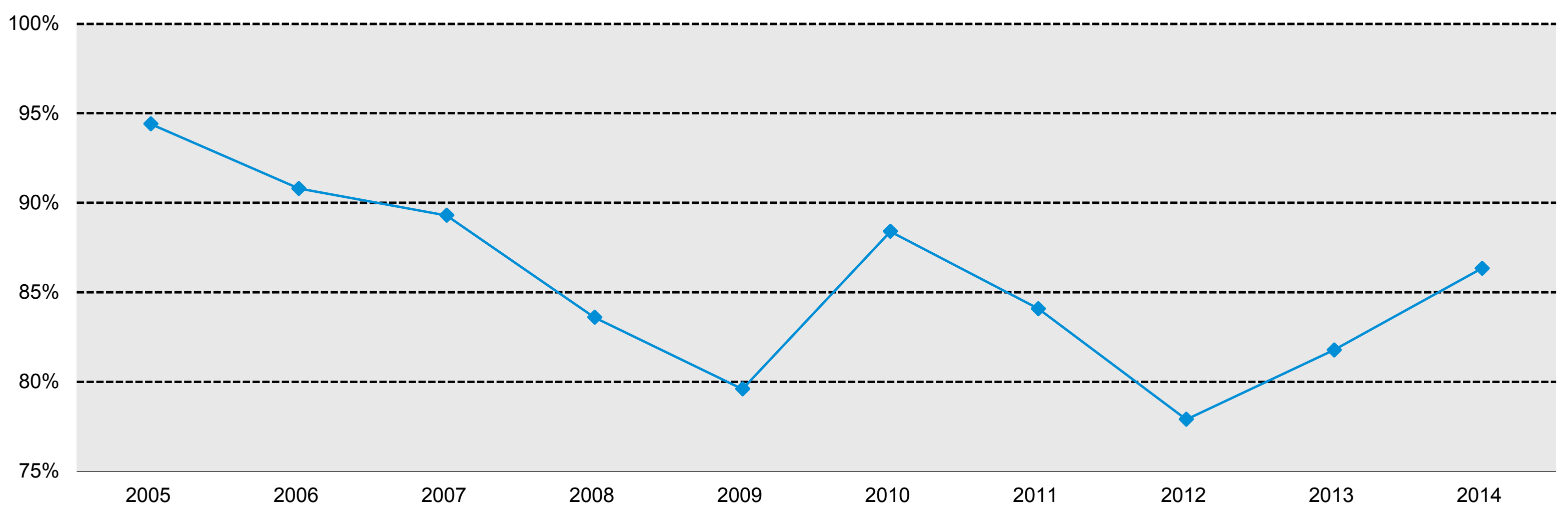
A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the valuation value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios 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 16

Funded Ratio for Plan Years Ending December 31, 2005 - 2014

Note: Results for 2010 excludes $289.3 million in proceeds from issuance of Pension Obligation Bonds.



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 SCERA, the current AVR is about 7.1. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 7.1% of one-year's payroll. Since SCERA amortizes actuarial gains and losses over a 20-year period, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss). As the plan approaches full funding, we expect the AVR to increase.

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 SCERA, the current LVR is about 7.7. This is about 8% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long-term.

This chart shows how the asset and liability volatility ratios have varied over time.

CHART 18

Volatility Ratios for Years Ended December 31, 2009 – 2014

Year Ended December 31	Asset Volatility Ratio	Liability Volatility Ratio
2009	3.9	6.1
2010	5.4	6.6
2011	5.5	7.2
2012	6.3	7.9
2013	6.7	7.5
2014	7.1	7.7

EXHIBIT A

Table of Plan Coverage

i. General Plan A

Category	Year Ended December 31 2014	Year Ended December 31 2013	Change From Prior Year
Active members in valuation			
Number	2,626	2,772	-5.3%
Average age	48.2	47.7	N/A
Average service	11.3	10.7	N/A
Projected total compensation	$216,555,408	$234,357,634	-7.6%
Projected average compensation	$82,466	$84,545	-2.5%
Account balances	$318,940,926	$303,163,702	5.2%
Total active vested members	2,084	2,156	-3.3%
Vested terminated members(1)	735	736	-0.1%
Retired members			
Number in pay status	3,001	2,907	3.2%
Average age	68.8	68.6	N/A
Average monthly benefit	$2,708	$2,668	1.5%
Disabled members			
Number in pay status	350	358	-2.2%
Average age	65.0	64.5	N/A
Average monthly benefit	$1,741	$1,730	0.6%
Beneficiaries			
Number in pay status	409	406	0.7%
Average age	72.9	72.2	N/A
Average monthly benefit	$1,121	$1,106	1.4%

(1) *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

EXHIBIT A

Table of Plan Coverage

ii. General Plan B

Category	Year Ended December 31 2014	Year Ended December 31 2013	Change From Prior Year
Active members in valuation			
Number	585	353	65.7%
Average age	40.5	40.3	N/A
Average service	1.1	0.5	N/A
Projected total compensation	$39,021,956	$23,743,230	64.3%
Projected average compensation	$66,704	$67,261	-0.8%
Account balances	$4,001,051	$1,082,966	269.5%
Total active vested members	4	1	300.0%
Vested terminated members[(1)]	60	19	215.8%
Retired members			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit	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	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	N/A	N/A	N/A

[(1)] *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

EXHIBIT A

Table of Plan Coverage

iii. Safety Plan A

	Year Ended December 31		
Category	**2014**	**2013**	**Change From Prior Year**
Active members in valuation			
Number	653	681	-4.1%
Average age	43.0	42.5	N/A
Average service	12.5	11.8	N/A
Projected total compensation	$64,473,981	$69,690,439	-7.5%
Projected average compensation	$98,735	$102,335	-3.5%
Account balances	$110,449,194	$103,408,407	6.8%
Total active vested members	563	587	-4.1%
Vested terminated members[(1)]	174	162	7.4%
Retired members			
Number in pay status	408	389	4.9%
Average age	63.6	63.3	N/A
Average monthly benefit	$4,446	$4,436	0.2%
Disabled members			
Number in pay status	256	256	0.0%
Average age	58.7	58.8	N/A
Average monthly benefit	$2,954	$2,861	3.3%
Beneficiaries			
Number in pay status	82	78	5.1%
Average age	63.6	63.6	N/A
Average monthly benefit	$1,864	$1,867	-0.2%

[(1)] *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

EXHIBIT A

Table of Plan Coverage

iv. Safety Plan B

Category	Year Ended December 31 2014	Year Ended December 31 2013	Change From Prior Year
Active members in valuation			
Number	58	27	114.8%
Average age	33.1	30.6	N/A
Average service	0.9	0.4	N/A
Projected total compensation	$4,367,538	$2,102,676	107.7%
Projected average compensation	$75,302	$77,877	-3.3%
Account balances	$552,365	$105,002	426.1%
Total active vested members	0	0	N/A
Vested terminated members[1]	6	1	500.0%
Retired members			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit	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	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	N/A	N/A	N/A

[1] *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

EXHIBIT B

Members in Active Service and Projected Average Compensation as of December 31, 2014
By Age and Years of Service

i. General Plan A

		Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	6	6	- -	- -	- -	- -	- -	- -	- -	- -
	$65,109	$65,109	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	99	80	19	- -	- -	- -	- -	- -	- -	- -
	67,231	66,888	$68,675	- -	- -	- -	- -	- -	- -	- -
30 - 34	216	96	104	16	- -	- -	- -	- -	- -	- -
	73,265	73,890	72,993	$71,282	- -	- -	- -	- -	- -	- -
35 - 39	278	90	118	64	6	- -	- -	- -	- -	- -
	78,314	75,596	80,569	77,549	$82,867	- -	- -	- -	- -	- -
40 - 44	351	70	115	98	58	9	1	- -	- -	- -
	83,576	85,302	86,909	80,655	79,874	$82,611	$89,029	- -	- -	- -
45 - 49	438	77	129	91	78	44	19	- -	- -	- -
	82,179	84,393	79,580	77,968	84,217	90,152	84,187	- -	- -	- -
50 - 54	510	57	122	129	94	50	46	11	1	- -
	85,981	84,273	82,642	82,521	86,760	93,466	93,705	$96,991	$112,949	- -
55 - 59	419	55	83	107	79	40	42	12	1	- -
	87,838	93,561	82,801	81,937	92,232	84,972	90,413	117,772	122,616	- -
60 - 64	216	14	67	52	44	21	15	3	- -	- -
	83,305	92,437	84,448	80,621	80,548	80,913	92,551	72,644	- -	- -
65 - 69	82	9	22	27	17	5	1	- -	- -	1
	86,812	117,190	85,304	69,914	101,060	85,626	85,630	- -	- -	$67,711
70 & over	11	1	1	5	2	- -	2	- -	- -	- -
	74,219	95,447	75,571	68,045	74,244	- -	78,336	- -	- -	- -
Total	2,626	555	780	589	378	169	126	26	2	1
	$82,466	$80,184	$81,062	$79,687	$86,114	$88,223	$90,690	$103,773	$117,783	$67,711

EXHIBIT B

Members in Active Service and Projected Average Compensation as of December 31, 2014
By Age and Years of Service

ii. General Plan B

		Years of Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	23	23	- -	- -	- -	- -	- -	- -	- -	- -
	$54,353	$54,353	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	107	107	- -	- -	- -	- -	- -	- -	- -	- -
	60,631	60,631	- -	- -	- -	- -	- -	- -	- -	- -
30 - 34	109	109	- -	- -	- -	- -	- -	- -	- -	- -
	64,782	64,782	- -	- -	- -	- -	- -	- -	- -	- -
35 - 39	80	80	- -	- -	- -	- -	- -	- -	- -	- -
	68,599	68,599	- -	- -	- -	- -	- -	- -	- -	- -
40 - 44	68	68	- -	- -	- -	- -	- -	- -	- -	- -
	66,477	66,477	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	64	64	- -	- -	- -	- -	- -	- -	- -	- -
	71,997	71,997	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	48	47	1	- -	- -	- -	- -	- -	- -	- -
	72,551	73,229	$40,680	- -	- -	- -	- -	- -	- -	- -
55 - 59	53	52	1	- -	- -	- -	- -	- -	- -	- -
	67,673	67,917	54,973	- -	- -	- -	- -	- -	- -	- -
60 - 64	26	26	- -	- -	- -	- -	- -	- -	- -	- -
	76,421	76,421	- -	- -	- -	- -	- -	- -	- -	- -
65 - 69	5	4	1	- -	- -	- -	- -	- -	- -	- -
	81,491	89,932	47,728	- -	- -	- -	- -	- -	- -	- -
70 & over	2	2	- -	- -	- -	- -	- -	- -	- -	- -
	71,681	71,681	- -	- -	- -	- -	- -	- -	- -	- -
Total	585	582	3	- -	- -	- -	- -	- -	- -	- -
	$66,704	$66,802	$47,794	- -	- -	- -	- -	- -	- -	- -

EXHIBIT B

Members in Active Service and Projected Average Compensation as of December 31, 2014
By Age and Years of Service

iii. Safety Plan A

		Years of Service							
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 & over**
Under 25	1	1	- -	- -	- -	- -	- -	- -	- -
	$99,171	$99,171	- -	- -	- -	- -	- -	- -	- -
25 - 29	25	17	8	- -	- -	- -	- -	- -	- -
	85,420	86,532	$83,056	- -	- -	- -	- -	- -	- -
30 - 34	106	34	61	11	- -	- -	- -	- -	- -
	88,586	90,395	87,835	$87,154	- -	- -	- -	- -	- -
35 - 39	109	14	46	41	8	- -	- -	- -	- -
	94,447	86,747	93,630	96,715	$101,001	- -	- -	- -	- -
40 - 44	133	9	27	48	42	7	- -	- -	- -
	99,875	109,245	95,063	103,263	96,694	$102,249	- -	- -	- -
45 - 49	159	8	14	32	57	30	17	1	- -
	105,335	95,141	92,626	97,500	105,421	115,633	$114,637	$143,560	- -
50 - 54	66	5	9	9	17	12	12	2	- -
	106,950	94,549	94,856	101,225	103,700	122,967	110,939	125,732	- -
55 - 59	38	4	15	5	6	4	1	2	1
	102,386	133,895	101,467	89,198	95,424	89,348	85,869	126,141	$119,016
60 - 64	14	2	4	4	1	2	1	- -	- -
	98,760	112,016	95,296	108,083	87,791	87,329	82,649	- -	- -
65 - 69	2	- -	2	- -	- -	- -	- -	- -	- -
	95,400	- -	95,400	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	653	94	186	150	131	55	31	5	1
	$98,735	$93,987	$92,154	$98,600	$101,537	$112,589	$111,245	$129,461	$119,016

EXHIBIT B

Members in Active Service and Projected Average Compensation as of December 31, 2014
By Age and Years of Service
iv. Safety Plan B

		Years of Service							
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	9	9	- -	- -	- -	- -	- -	- -	- -
	$73,148	$73,148	- -	- -	- -	- -	- -	- -	- -
25 - 29	22	22	- -	- -	- -	- -	- -	- -	- -
	71,388	71,388	- -	- -	- -	- -	- -	- -	- -
30 - 34	12	12	- -	- -	- -	- -	- -	- -	- -
	68,326	68,326	- -	- -	- -	- -	- -	- -	- -
35 - 39	2	2	- -	- -	- -	- -	- -	- -	- -
	57,173	57,173	- -	- -	- -	- -	- -	- -	- -
40 - 44	1	1	- -	- -	- -	- -	- -	- -	- -
	86,465	86,465	- -	- -	- -	- -	- -	- -	- -
45 - 49	3	3	- -	- -	- -	- -	- -	- -	- -
	67,942	67,941	- -	- -	- -	- -	- -	- -	- -
50 - 54	7	7	- -	- -	- -	- -	- -	- -	- -
	108,281	108,281	- -	- -	- -	- -	- -	- -	- -
55 - 59	2	2	- -	- -	- -	- -	- -	- -	- -
	78,077	78,077	- -	- -	- -	- -	- -	- -	- -
60 - 64	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
65 - 69	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
70 & over	- -	- -	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	58	58	- -	- -	- -	- -	- -	- -	- -
	$75,302	$75,302	- -	- -	- -	- -	- -	- -	- -

EXHIBIT C

Reconciliation of Member Data – December 31, 2013 to December 31, 2014

	Active Members	Vested Terminated Members[1]	Disabled Pensioners	Retired Members	Beneficiaries	Total
Number as of December 31, 2013	3,833	918	614	3,296	484	9,145
New members	365	33[2]	N/A	N/A	N/A	398
Terminations – with vested rights	-114	114	N/A	N/A	N/A	0
Contribution refunds	-27	-31	N/A	N/A	N/A	-58
Retirements	-135	-43	N/A	178	N/A	0
New disabilities	-10	-4	15	-1	N/A	0
Return to work	12	-12	0	0	N/A	0
Died with or without beneficiary	-1	0	-23	-64	7[3]	-81
Data adjustments	-1	0	0	0	0	-1
Number as of December 31, 2014	3,922	975	606	3,409	491	9,403

(1) *Includes members who choose to leave their contributions on deposit even though they have less than five years of service.*

(2) *Included for the first time in this year's valuation as they were hired and terminated in the 2014 calendar year.*

(3) *This is the net increase in the number of beneficiaries after subtracting the number of beneficiaries who died during the year.*

EXHIBIT D
Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended December 31, 2014		Year Ended December 31, 2013	
Contribution income:				
Employer contributions	$61,179,319		$51,852,499	
Employee contributions	37,126,072		35,491,526	
Net contribution income		$98,305,391		$87,344,025
Investment income:				
Interest, dividends and other income	$56,821,792		$47,899,037	
Recognition of capital appreciation	158,289,584		180,720,935	
Less investment fees and administrative expenses	-21,312,110		-20,070,153	
Net investment income		193,799,266		208,549,819
Total income available for benefits		$292,104,657		$295,893,844
Less benefit payments:				
Service retirement and disability benefits	-$140,429,773		-$134,310,807	
Member refunds	-1,245,610		-1,649,649	
Net benefit payments		-$141,675,383		-$135,960,456
Change in assets held for future benefits		$150,429,274		$159,933,388

Results may be off due to rounding.

EXHIBIT E
Summary Statement of Plan Assets

	Year Ended December 31, 2014		Year Ended December 31, 2013	
Cash equivalents		$160,577,332		$115,517,949
Accounts receivable:				
Contributions, interest and dividends, and securities sold	$22,284,216		$16,047,575	
Other receivable	152,135		76,210	
Total accounts receivable		22,436,351		16,123,785
Investments:				
Domestic and international stocks	$1,370,683,219		$1,513,308,258	
Domestic bonds	374,923,467		266,937,075	
Real estate	382,119,536		345,374,098	
Securities lending collateral	113,076,856		96,959,809	
Miscellaneous	69,465,441		68,582,783	
Total investments at market value		2,310,268,519		2,291,162,023
Total assets		$2,493,282,202		$2,422,803,757
Less accounts payable		-$199,807,507		-$200,031,019
Net assets at market value		$2,293,474,695		$2,222,772,738
Net assets at actuarial value		$2,167,210,096		$2,016,780,822
Net assets at valuation value		$2,167,210,096		$2,016,780,822

Results may be off due to rounding.

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 are anticipated to 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.

Actuarial Balance Sheet (Dollar Amounts in Thousands)

Assets	Basic	COLA	Total
1 Total valuation assets	$2,121,358	$45,852	$2,167,210
2 Present value of future contributions by members[1]	$253,476	$0	$253,476
3 Present value of future employer contributions for:			
a Entry age normal cost	$219,240	$0	$219,240
b Unfunded actuarial accrued liability[1]	$343,043	$0	$343,043
4 Total current and future assets	$2,937,117	$45,852	$2,982,969
Liabilities			
5 Present value of benefits already granted	$1,452,210	$45,852	$1,498,062
6 Present value of benefits to be granted	$1,484,907	$0	$1,484,907
7 Total liabilities	$2,937,117	$45,852	$2,982,969

[1] *Before reflecting supplemental contributions payable by certain members for the UAAL.*

EXHIBIT G

Summary of Reported Reserve Information as of December 31, 2014

Reserves	Before True-Up	After True-Up	Transfer Amount
Member reserves [1]			
General	$363,488,359	$363,488,359	$0
Safety	120,692,678	120,692,678	0
Employer reserves [1]			
General	$444,810,305	$446,955,720	$2,145,415
Safety	196,360,499	196,661,930	301,431
Retired member reserve [1]			
General	$1,103,285,415	1,101,140,000	$(2,145,415)
Safety	351,371,431	351,070,000	(301,431)
COLA	47,646,711	45,852,000	(1,794,711)
Negative contingency reserve [1]	(460,445,353)	(458,650,591)	1,794,762
Total valuation reserve [1]	2,167,210,045	2,167,210,096	51
Undistributed reserve [2]	0	0	0
Interest fluctuation reserve [2]	0	0	0
Market stabilization reserve [2]	126,264,650	126,264,599	(-51)
Net market value	$2,293,474,695	$2,293,474,695	$0

[1] *Included in development of valuation value of assets.*

[2] *Not included in development of valuation value of assets.*

Results may be off due to rounding.

EXHIBIT H

Development of Unfunded Actuarial Accrued Liability for Year Ended December 31, 2014

			(Dollar Amounts in Thousands)	
1	Unfunded Actuarial Accrued Liability as of December 31, 2013			$449,443
2	Normal Cost			72,785
3	Expected employer and member contributions			-108,274
4	Interest			32,514
5	Expected Unfunded Actuarial Accrued Liability			$446,468
6	Actuarial (gains)/losses due to all changes:			
	Experience (gains)/losses			
	(a)	Investment gain	-$44,167	
	(b)	Less than expected contributions[1]	10,343	
	(c)	Lower than expected salary increase	-64,347	
	(d)	Other experience gains	-5,254	
	(e)	Total experience gains and losses		-103,425
7	Unfunded Actuarial Accrued Liability as of December 31, 2014			$343,043

[1] *Includes impact of 18-month delay in rate implementation, phase-in of the impact of the changes in actuarial assumptions on the employer contribution rate and difference between normal cost and UAAL contributions due to actual payroll less than expected during 2014.*

Note: Net gain from other experience of $69.6 million (as shown on page 8) is equal to 6(c)+ 6(d).

EXHIBIT I

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 indexed for inflation. That limit is $210,000 for 2014 and 2015. 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.

Plan A 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.

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

EXHIBIT J
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; and

(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 level 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 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.

Unfunded Actuarial Accrued Liability: The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There are many approaches to recognizing the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

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.

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 491 beneficiaries in pay status)		4,506
2.	Members inactive during year ended December 31, 2014 with vested rights[1]		975
3.	Members active during the year ended December 31, 2014		3,922

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

1.	Normal cost		$70,337
2.	Present value of future benefits		2,982,969
3.	Present value of future normal costs		472,716
4.	Actuarial accrued liability		2,510,253
	Retired members and beneficiaries	$1,498,062	
	Inactive members with vested rights	75,395	
	Active members	936,796	
5.	Valuation value of assets[2] ($2,293,475 at market value as reported by Retirement Association)		2,167,210
6.	Unfunded actuarial accrued liability		$343,043

[1] *Includes members who choose to leave their contributions on deposit even though they may have less than five years of service.*

[2] *Excludes non-valuation reserves.*

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	$70,337	21.68%
2. Expected employee normal cost contributions (excluding expected employee supplemental contributions)	-28,296	-8.72%
3. Employer normal cost: (1) + (2)	$42,041	12.96%
4. Amortization of unfunded actuarial accrued liability (less expected employee supplemental contributions to reduce the employer's UAAL)	20,165	6.22%
5. Total recommended average employer contribution: (3) + (4)	$62,206	19.18%
6. Projected compensation	$324,418	

EXHIBIT II
Schedule of Employer Contributions (Dollar Amounts in Thousands)

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions	Percentage Contributed
2005	$24,993	$24,993	100.0%
2006	29,391	29,391	100.0%
2007	34,273	34,273	100.0%
2008	38,553 (1)	38,553	100.0% (1)
2009	47,577 (1)	47,577	100.0% (1)
2010	48,426 (2)	48,426 (3)	100.0% (2)
2011	35,711 (4)	35,711	100.0% (4)
2012	45,079 (2)	45,079	100.0% (2)
2013	51,852 (5)	51,852	100.0% (5)
2014	61,179 (6)	61,179	100.0% (6)

(1) *Determined using an amortization period of about 29 years (an amortization period of up to 30 years is allowed by GASB).*

(2) *Determined using an amortization period of about 26 years (an amortization period of up to 30 years is allowed by GASB).*

(3) *Excludes $289.3 million in proceeds from issuance of Pension Obligation Bonds.*

(4) *Determined using an amortization period of about 23 years (an amortization period of up to 30 years is allowed by GASB).*

(5) *Determined using an amortization period of about 27 years (an amortization period of up to 30 years is allowed by GASB).*

(6) *Determined using an amortization period of about 28 years (an amortization period of up to 30 years is allowed by GASB).*

Note: Reference to GASB is under the old Statements 25 and 27.

EXHIBIT III

Schedule of Funding Progress (Dollar Amounts in Thousands)

Actuarial Valuation Date	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
12/31/2005(1)	$1,276,771	$1,352,635	$75,864	94.4%	$265,248	28.6%
12/31/2006(1)	1,369,669	1,509,083	139,414	90.8%	273,548	51.0%
12/31/2007	1,476,496	1,653,847	177,351	89.3%	292,772	60.6%
12/31/2008	1,540,461	1,842,404	301,943	83.6%	334,391	90.3%
12/31/2009	1,564,970	1,967,058	402,088	79.6%	322,484	124.7%
12/31/2010	1,890,874	2,139,460	248,586	88.4%	323,601	76.8%
12/31/2011	1,867,117	2,220,520	353,403	84.1%	308,644	114.5%
12/31/2012	1,856,847	2,351,087	494,240	79.0%	302,764	163.2%
12/31/2013	2,016,781	2,466,224	449,443	81.8%	329,896	136.2%
12/31/2014	2,167,210	2,510,253	343,043	86.3%	324,418	105.7%

(1) *Source: December 31, 2006 Comprehensive Annual Financial Report*

EXHIBIT IV
Supplementary Information on Actuarially Determined Contribution Required by GASB

Valuation date	December 31, 2014
Actuarial cost method	Entry Age Cost Method
Amortization method	Level percent of payroll for total unfunded liability
Remaining amortization period	20 years (declining) for outstanding balance of the December 31, 2007 UAAL and for UAAL established on each subsequent valuation plus 20 years (declining) with 13 years remaining as of December 31, 2014 for UAAL established as a result of including as pensionable salary a cash allowance.
Asset valuation method	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on valuation value of assets and is recognized over a five-year period. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves and designations.
Actuarial assumptions:	
Investment rate of return	7.50%
Inflation rate	3.25%
Across the board salary increase	0.75%
Projected salary increases*	General: 4.50% to 10.00% and Safety: 4.50% to 12.50%
Cost of living adjustments	0.00% of retirement income
Plan membership:	
Retired members and beneficiaries receiving benefits	4,506
Terminated members entitled to, but not yet receiving benefits	975
Active members	3,922
Total	9,403

* *Includes inflation at 3.25%, across the board increase of 0.75%, plus merit and longevity increases. See Exhibit V for these increases.*

EXHIBIT V
Actuarial Assumptions and Actuarial Cost Method

Mortality Rates:	
Healthy Retirement:	For General Members – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2015 set back two years. For Safety Members – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2015.
Disabled Retirement:	For General Members – RP-2000 Disabled Retiree Mortality Table projected with Scale AA to 2015 set back four years. For Safety Members – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2015 set forward six years. The mortality tables shown above were determined so as to reasonably reflect future mortality improvement, based on a review of the mortality experience in the January 1, 2009 – December 31, 2011 Actuarial Experience Study.
Employee Contribution Rates:	For General Members – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2015 set back two years weighted 30% male and 70% female. For Safety Members – RP-2000 Combined Healthy Mortality Table projected with Scale AA to 2015 weighted 75% male and 25% female.

Termination Rates Before Retirement:

Mortality Rates:

	Rate (%)			
	General		Safety	
Age	Male	Female	Male	Female
30	0.02	0.01	0.02	0.01
35	0.03	0.02	0.04	0.02
40	0.04	0.02	0.05	0.03
45	0.06	0.04	0.06	0.04
50	0.07	0.05	0.08	0.06
55	0.11	0.09	0.14	0.12
60	0.21	0.18	0.26	0.23

All pre-retirement deaths are assumed to be non-service connected deaths.

Disability Rates:

	Rate (%)	
Age	General[1]	Safety[2]
20	0.05	0.06
25	0.05	0.16
30	0.06	0.38
35	0.12	0.95
40	0.24	1.40
45	0.33	1.80
50	0.41	2.30
55	0.51	2.80
60	0.70	0.00

(1) *50% of General disabilities are assumed to be service connected disabilities. The other 50% are assumed to be non-service connected disabilities.*

(2) *90% of Safety disabilities are assumed to be service connected disabilities. The other 10% are assumed to be non-service connected disabilities.*

Withdrawal Rates:

	Rate (%)	
	Withdrawal (< 5 Years of Service)	
Years of Service	General	Safety
0	7.0	5.0
1	5.0	3.0
2	4.0	2.0
3	3.0	2.0
4	2.5	2.0

	Rate (%)	
	Withdrawal (5+ Years of Service)	
Age	General	Safety
20	2.50	2.00
25	2.50	2.00
30	2.20	1.58
35	1.28	0.88
40	0.68	0.42
45	0.48	0.18
50	0.34	0.00
55	0.24	0.00
60	0.14	0.00

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

Vested Termination Rates:

	Rate (%)	
	Vested Termination (<5 Years of Service)	
Years of Service	General	Safety
0	6.0	4.0
1	5.0	4.0
2	4.0	4.0
3	3.0	4.0
4	3.0	4.0

	Rate (%)	
	Vested Termination (5+ Years of Service)	
Age	General	Safety
20	3.00	2.00
25	3.00	2.00
30	3.00	2.00
35	3.00	1.40
40	2.40	0.94
45	1.85	0.84
50	1.60	0.00
55	1.05	0.00
60	0.75	0.00

No vested termination is assumed after a member is assumed to retire.

Retirement Rates:

	Rate (%)					
	General			Safety		
Age	Plan A Before 30 Years	Plan A 30 or More Years	Plan B	Plan A Before 30 Years	Plan A 30 or More Years	Plan B
50	7.0	10.0	0.0	10.0	10.0	4.0
51	7.0	10.0	0.0	12.0	12.0	5.0
52	7.0	12.0	4.0	18.0	18.0	6.0
53	8.0	14.0	1.5	19.0	25.0	6.0
54	9.0	15.0	2.5	20.0	50.0	8.0
55	9.0	20.0	2.5	25.0	100.0	20.0
56	10.0	22.0	4.5	25.0	100.0	15.0
57	13.0	22.0	5.5	25.0	100.0	15.0
58	15.0	25.0	6.5	25.0	100.0	20.0
59	17.0	35.0	7.5	25.0	100.0	20.0
60	21.0	45.0	8.5	100.0	100.0	100.0
61	25.0	45.0	9.5	100.0	100.0	100.0
62	40.0	45.0	14.5	100.0	100.0	100.0
63	35.0	45.0	16.5	100.0	100.0	100.0
64	35.0	45.0	19.0	100.0	100.0	100.0
65	35.0	45.0	24.0	100.0	100.0	100.0
66	35.0	45.0	20.0	100.0	100.0	100.0
67	40.0	50.0	20.0	100.0	100.0	100.0
68	50.0	50.0	20.0	100.0	100.0	100.0
69	80.0	80.0	20.0	100.0	100.0	100.0
70	100.0	100.0	100.0	100.0	100.0	100.0

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested members, we make the following retirement assumption: General: Age 58 Safety: Age 53 We assumed that 30% of General and 45% of Safety deferred vested members 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:	First day of pay period following employment.
Percent Married:	75% of male members and 55% of female members are assumed to be married at retirement or pre-retirement death.
Age of Spouse:	Females (or male) spouses are 3 years younger (older) than their spouses.
Net Investment Return:	7.50%; net of administration and investment expenses.
Employee Contribution Crediting Rate:	½ of the net investment return credited semi-annually.

Cost-of-Living Adjustment for Retirees: Not applicable.

Salary Scale:

Annual Rate of Compensation Increase

Inflation: 3.25% per year; plus "Across the Board" salary increases of 0.75% per year; plus Merit and Promotion increases as follows:

Years of Service	General	Safety
0	6.00%	8.50%
1	5.00	4.75
2	3.75	3.75
3	2.50	2.75
4	1.50	1.75
5+	0.50	0.50

Cashouts for Plan A Court and VOM members: The following assumptions for a one-time compensation increase at retirement from vacation, sick leave and holiday cashouts are used:

General members: 4%

Safety members: 6%

Note: For the purposes of calculating member contribution rates, these assumptions are adjusted by a factor of 91% since about 9% of the full costs included above have been determined by SCERA to be from the cashout of sick leave and should be excluded from the cashout cost paid by the active members.

Increase in Section 7522.10 Compensation Limit: Increase of 3.25% per year from the valuation date.

Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the expected return on valuation value and are recognized over a five-year period.
Valuation Value of Assets:	The Actuarial Value of Assets reduced by the value of the non-valuation reserves.
Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the age at the member's hire date. Actuarial Accrued Liability is calculated on an individual basis and is based on costs allocated as a level percentage of compensation.
Changes in Actuarial Assumptions and Methods:	There were no changes in actuarial assumptions or methods since the prior valuation.

EXHIBIT VI
Summary of Plan Provisions

This exhibit summarizes the major provisions of the SCERA 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 permanent employees of the County of Sonoma or contracting district, scheduled to work at least 50% of a full-time position are eligible to become a member of the Retirement Association.
Plan A	All General and Safety members with membership dates before January 1, 2014.
Plan B	All General and Safety members with membership dates on or after January 1, 2014.
Final Compensation for Benefit Determination:	
Plan A	Highest consecutive one year of compensation earnable (§31462.1)(FAC1).
Plan B	Highest consecutive three years of pensionable compensation (§7522.10(c), §7522.32 and §7522.34)(FAC3).
Service:	Years of service (Yrs).
Service Retirement Eligibility:	
General	
Plan A	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672).
Plan B	Age 52 with 5 years of service credit (§7522.20(a)).
Safety	
Plan A	Age 50 with 10 years of service credit, or age 70 regardless of service credit, or after 30 years of service credit, regardless of age (§31672).
Plan B	Age 50 with 5 years of service credit (§7522.25(d)).

Benefit Formula:

	Retirement Age	Benefit Formula
General Plan A – County (§31676.17)	50	(2.00%xFAC1 – 1/3x2.00%x$350 x 12)xYrs
	55	(2.50%xFAC1 – 1/3x2.50%x$350 x 12)xYrs
	60 or later	(3.00%xFAC1 – 1/3x3.00%x$350 x 12)xYrs
General Plan A – Court (§31676.17)	50	(2.00%xFAC1 – 1/3x2.00%x$350 x 12)xYrs
	55	(2.50%xFAC1 – 1/3x2.50%x$350 x 12)xYrs
	60 or later	(3.00%xFAC1 – 1/3x3.00%x$350 x 12)xYrs
General Plan A – Valley of the Moon (§31676.17)	50	2.00%xFAC1xYrs
	55	2.50%xFAC1xYrs
	60 or later	3.00%xFAC1xYrs
General Plan B (§7522.20(a))	52	1.00%xFAC3xYrs
	55	1.30%xFAC3xYrs
	60	1.80%xFAC3xYrs
	62	2.00%xFAC3xYrs
	65	2.30%xFAC3xYrs
	67 or later	2.50%xFAC3xYrs

	Retirement Age	Benefit Formula
Safety Plan A – County (§31664.1)	50	(3.00%xFAC1 – 1/3x3.00%x$350x12)xYrs
	55	(3.00%xFAC1 – 1/3x3.00%x$350x12)xYrs
	60 or later	(3.00%xFAC1 – 1/3x3.00%x$350x12)xYrs
Safety Plan A – Valley of the Moon (§31664.1)	50	3.00%xFAC1xYrs
	55	3.00%xFAC1xYrs
	60 or later	3.00%xFAC1xYrs
Safety Plan B (§7522.25(d))	50	2.00%xFAC3xYrs
	55	2.50%xFAC3xYrs
	57 or later	2.70%xFAC3xYrs

Maximum Benefit:

Plan A	100% of Final Average Compensation (§31676.17, §31664.1)
Plan B	None

Non Service Connected Disability:	
General Plan A Members	
Eligibility	Five years of service (§31720).
Benefit Formula	1.8% of FAC per year of service. If the benefit does not exceed one-third of Final Average Compensation, the service is projected to 62, and the total benefit cannot be more than one-third of Final Average Compensation (§31727.1). The Service Retirement benefit is payable, if greater.
Safety Plan A Members	
Eligibility	Five years of service (§31720).
Benefit Formula	1.8% of FAC per year of service. If the benefit does not exceed one-third of Final Average Compensation, the service is projected to 55, and the total benefit cannot be more than one-third of Final Average Compensation (§31727.2). The Service Retirement benefit is payable, if greater.
All Plan B Members	
Eligibility	Five years of service (§31720).
Benefit Formula	1.5% of FAC per year of service. If the benefit does not exceed one-third of Final Average Compensation, the service is projected to 65, and the total benefit cannot be more than one-third of Final Average Compensation (§31727). The Service Retirement benefit is payable, if greater.
Service Connected Disability:	
All Members	
Eligibility	No age or service requirements (§31720).
Benefit Formula	50% of the Final Average Compensation or 100% of Service Retirement benefit, if larger (§31727.4).

Pre-Retirement Death:	
<u>All Members</u>	
Eligibility	None.
Basic lump sum benefit	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§37181).
Service Connected Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or registered domestic partner (§31787).
	OR
<u>Vested Members</u>	
Eligibility	Five years of service.
Basic benefit	60% of the greater of Service or Non Service Connected Disability Retirement benefit payable to surviving eligible spouse or registered domestic partner (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.
Service Connected Death	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or registered domestic partner (§31787).
Death After Retirement:	
<u>All Members</u>	
Service or Non Service Connected Disability Retirement	60% of member's unmodified allowance continued to eligible spouse or registered domestic partner (§31760.1).
Service Connected Disability Retirement	100% of member's unmodified allowance continued to eligible spouse or registered domestic partner (§31786).

Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated employee contributions with interest, or earned benefit at age 70 (§31628). A member may also elect to leave contributions on deposit in the retirement fund (§31629.5).
Five or More Years Service	If contributions left on deposit, eligible for retirement benefits at any time after meeting eligibility criteria to retire (§31700).
Employer Contributions:	The amortization period for the outstanding balance of the December 31, 2007 Unfunded Actuarial Accrued Liability as well as for UAAL established on each subsequent valuation as a result of actuarial gains or losses and changes in actuarial assumptions is amortized over a declining 20-year period. The amortization period for UAAL established as a result of including as pensionable salary a cash allowance is amortized over a declining 20-year period with 13 years remaining as of December 31, 2014.
Member Contributions:	Please refer to Appendix A for the specific rates.
General Plan A	Provide for an average annuity at age 55 equal to 1/100 of FAC. (§31621.8)
General Plan B	50% of the total Normal Cost rate.
Safety Plan A	Provide for an average annuity at age 50 equal to 1/100 of FAC. (§31639.25)
Safety Plan B	50% of the total Normal Cost rate.
Additional Contributions	
General – County and Courts	An additional amount equal to 3.03% of payroll will be paid from July 1, 2004 to June 30, 2024.
Safety – County	An additional amount equal to 3.00% of payroll will be paid effective February 1, 2005.

Other Information:	Safety Plan A members with 30 or more years of service are exempt from paying member contributions. The same applies for General Plan A members hired on or before March 7, 1973.

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.*

Appendix A
Member Contribution Rates

Comparison of Total Member Rate[1] from December 31, 2014 (New) and December 31, 2013 (Current) Valuations

General Plan A – County[2]

Entry Age	Current	New	**Change**
25	7.49%	7.49%	**0.00%**
35	8.81%	8.81%	**0.00%**
45	10.42%	10.42%	**0.00%**

Safety Plan A – County[4]

Entry Age	Current	New	**Change**
25	8.32%	8.32%	**0.00%**
35	9.80%	9.80%	**0.00%**
45	11.80%	11.80%	**0.00%**

General Plan A – Court and VOM[2]

Entry Age	Current	New	**Change**
25	7.75%	7.75%	**0.00%**
35	9.12%	9.12%	**0.00%**
45	10.77%	10.77%	**0.00%**

Safety Plan A – VOM

Entry Age	Current	New	**Change**
25	8.76%	8.76%	**0.00%**
35	10.31%	10.31%	**0.00%**
45	12.31%	12.31%	**0.00%**

General Plan B[2]

Entry Age	Current	New	**Change**
Any[3]	7.39%	7.37%	**(0.02%)**

Safety Plan B – County[4]

Entry Age	Current	New	**Change**
Any[3]	11.08%	11.98%	**0.90%**

Safety Plan B – VOM

Entry Age	Current	New	**Change**
Any[3]	10.87%	10.36%	**(0.51%)**

(1) *For Plan A integrated members, contributions for the first $350 of monthly payroll are based on 2/3 of the above rates.*

(2) *Rates exclude an additional 3.03% of payroll payable from July 1, 2004 to June 30, 2024 for County and Court members only.*

(3) *Plan B member rates are independent of entry age.*

(4) *Rates exclude an additional 3.00% of payroll payable effective February 1, 2005 for County members only.*

Appendix A
Member Contribution Rates (continued)

General Members' Contribution Rates from the December 31, 2014 Actuarial Valuation (As a Percentage of Monthly Payroll)

Plan A – County			Plan A – Court and VOM		
Entry Age	First $350*	Over $350	Entry Age	First $350*	Over $350
16	4.30%	6.44%	16	4.45%	6.67%
17	4.37%	6.55%	17	4.53%	6.79%
18	4.44%	6.66%	18	4.60%	6.90%
19	4.52%	6.78%	19	4.68%	7.02%
20	4.59%	6.89%	20	4.76%	7.14%
21	4.67%	7.01%	21	4.84%	7.26%
22	4.75%	7.12%	22	4.92%	7.38%
23	4.83%	7.24%	23	5.00%	7.50%
24	4.91%	7.36%	24	5.08%	7.63%
25	4.99%	7.49%	25	5.17%	7.75%
26	5.07%	7.61%	26	5.25%	7.88%
27	5.16%	7.74%	27	5.34%	8.01%
28	5.24%	7.86%	28	5.43%	8.14%
29	5.33%	7.99%	29	5.52%	8.28%
30	5.42%	8.13%	30	5.61%	8.41%
31	5.51%	8.26%	31	5.70%	8.55%
32	5.60%	8.39%	32	5.79%	8.69%
33	5.69%	8.53%	33	5.89%	8.83%
34	5.78%	8.67%	34	5.98%	8.98%
35	5.88%	8.81%	35	6.08%	9.12%
36	5.97%	8.96%	36	6.18%	9.27%
37	6.07%	9.11%	37	6.28%	9.42%
38	6.17%	9.26%	38	6.38%	9.58%
39	6.27%	9.41%	39	6.49%	9.73%
40	6.38%	9.57%	40	6.60%	9.90%
41	6.49%	9.73%	41	6.71%	10.06%

Appendix A

Member Contribution Rates (continued)

General Members' Contribution Rates from the December 31, 2014 Actuarial Valuation
(As a Percentage of Monthly Payroll)

Plan A – County			Plan A – Court and VOM		
Entry Age	First $350*	Over $350	Entry Age	First $350*	Over $350
42	6.60%	9.89%	42	6.82%	10.23%
43	6.71%	10.06%	43	6.93%	10.40%
44	6.83%	10.24%	44	7.05%	10.58%
45	6.95%	10.42%	45	7.18%	10.77%
46	7.08%	10.62%	46	7.31%	10.96%
47	7.22%	10.83%	47	7.45%	11.17%
48	7.37%	11.05%	48	7.60%	11.40%
49	7.54%	11.30%	49	7.76%	11.64%
50	7.66%	11.49%	50	7.88%	11.82%
51	7.74%	11.61%	51	7.95%	11.92%
52	7.76%	11.64%	52	7.94%	11.91%
53	7.72%	11.58%	53	7.85%	11.78%
54 & Over	7.63%	11.44%	54 & Over	7.63%	11.44%

Interest:	7.50%
COLA:	0.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected to 2015 with Scale AA setback two years weighted 30% male and 70% female
Salary Increase:	Inflation (3.25%) + Across the board increase (0.75%) + Merit (see Exhibit V)
Note:	**The above rates exclude an additional 3.03% of payroll payable from July 1, 2004 to June 30, 2024 for County and Court members only.**

* *For integrated members only.*

Appendix A
Member Contribution Rates (continued)

General Members' Contribution Rates from the December 31, 2014 Actuarial Valuation
(As a Percentage of Monthly Payroll)

	Plan B
	All Eligible Pay*
All Members	7.37%

Interest:	7.50%
COLA:	0.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected to 2015 with Scale AA setback two years weighted 30% male and 70% female
Salary Increase:	Inflation (3.25%) + Across the board increase (0.75%) + Merit (see Exhibit V)
Note:	**The above rates exclude an additional 3.03% of payroll payable from July 1, 2004 to June 30, 2024 for County and Court members only.**

* *It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2015 is equal to $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)).*

Appendix A
Member Contribution Rates (continued)

Safety Members' Contribution Rates from the December 31, 2014 Actuarial Valuation
(As a Percentage of Monthly Payroll)

	Plan A – County			Plan A – VOM	
Entry Age	First $350*	Over $350	Entry Age	First $350*	Over $350
16	4.78%	7.17%	16	5.04%	7.56%
17	4.86%	7.29%	17	5.12%	7.68%
18	4.94%	7.41%	18	5.21%	7.81%
19	5.03%	7.54%	19	5.29%	7.94%
20	5.11%	7.66%	20	5.38%	8.07%
21	5.19%	7.79%	21	5.47%	8.21%
22	5.28%	7.92%	22	5.56%	8.34%
23	5.37%	8.05%	23	5.65%	8.48%
24	5.46%	8.18%	24	5.75%	8.62%
25	5.55%	8.32%	25	5.84%	8.76%
26	5.64%	8.46%	26	5.94%	8.90%
27	5.73%	8.60%	27	6.03%	9.05%
28	5.83%	8.74%	28	6.13%	9.20%
29	5.92%	8.88%	29	6.23%	9.35%
30	6.02%	9.03%	30	6.33%	9.50%
31	6.12%	9.18%	31	6.44%	9.66%
32	6.22%	9.33%	32	6.54%	9.81%
33	6.32%	9.48%	33	6.65%	9.98%
34	6.43%	9.64%	34	6.76%	10.14%
35	6.54%	9.80%	35	6.87%	10.31%
36	6.65%	9.97%	36	6.99%	10.48%
37	6.76%	10.14%	37	7.10%	10.66%
38	6.88%	10.32%	38	7.23%	10.84%
39	7.00%	10.50%	39	7.35%	11.03%
40	7.13%	10.70%	40	7.48%	11.22%
41	7.27%	10.90%	41	7.62%	11.43%

Appendix A
Member Contribution Rates (continued)

Safety Members' Contribution Rates from the December 31, 2014 Actuarial Valuation
(As a Percentage of Monthly Payroll)

Plan A – County			Plan A – VOM		
Entry Age	First $350*	Over $350	Entry Age	First $350*	Over $350
42	7.41%	11.12%	42	7.77%	11.65%
43	7.57%	11.36%	43	7.92%	11.89%
44	7.75%	11.63%	44	8.10%	12.15%
45	7.87%	11.80%	45	8.21%	12.31%
46	7.94%	11.91%	46	8.26%	12.39%
47	7.97%	11.96%	47	8.26%	12.38%
48	7.97%	11.96%	48	8.18%	12.27%
49 & Over	7.80%	11.70%	49 & Over	7.80%	11.70%

Interest:	7.50%
COLA:	0.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected to 2015 with Scale AA weighted 75% male and 25% female
Salary Increase:	Inflation (3.25%) + Across the board increase (0.75%) + Merit (see Exhibit V)
Note:	**The above rates exclude an additional 3.00% of payroll payable effective February 1, 2005 for County members only.**

* *For integrated members only.*

Appendix A
Member Contribution Rates (continued)

Safety Members' Contribution Rates from the December 31, 2014 Actuarial Valuation
(As a Percentage of Monthly Payroll)

Plan B – County		Plan B – VOM	
	All Eligible Pay*		All Eligible Pay*
All Members	11.98%	All Members	10.36%

Interest:	7.50%
COLA:	0.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected to 2015 with Scale AA weighted 75% male and 25% female
Salary Increase:	Inflation (3.25%) + Across the board increase (0.75%) + Merit (see Exhibit V)
Note:	**The above rates exclude an additional 3.00% of payroll payable effective February 1, 2005 for County members only.**

* *It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2015 is equal to $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)).*

Appendix B
Schedule of Additional (non-SCERA) Employer Contributions

As requested by SCERA, we have provided the following additional employer contributions made by the employer to other outside parties. These rates are provided by the employer and we have not audited them against any other sources.

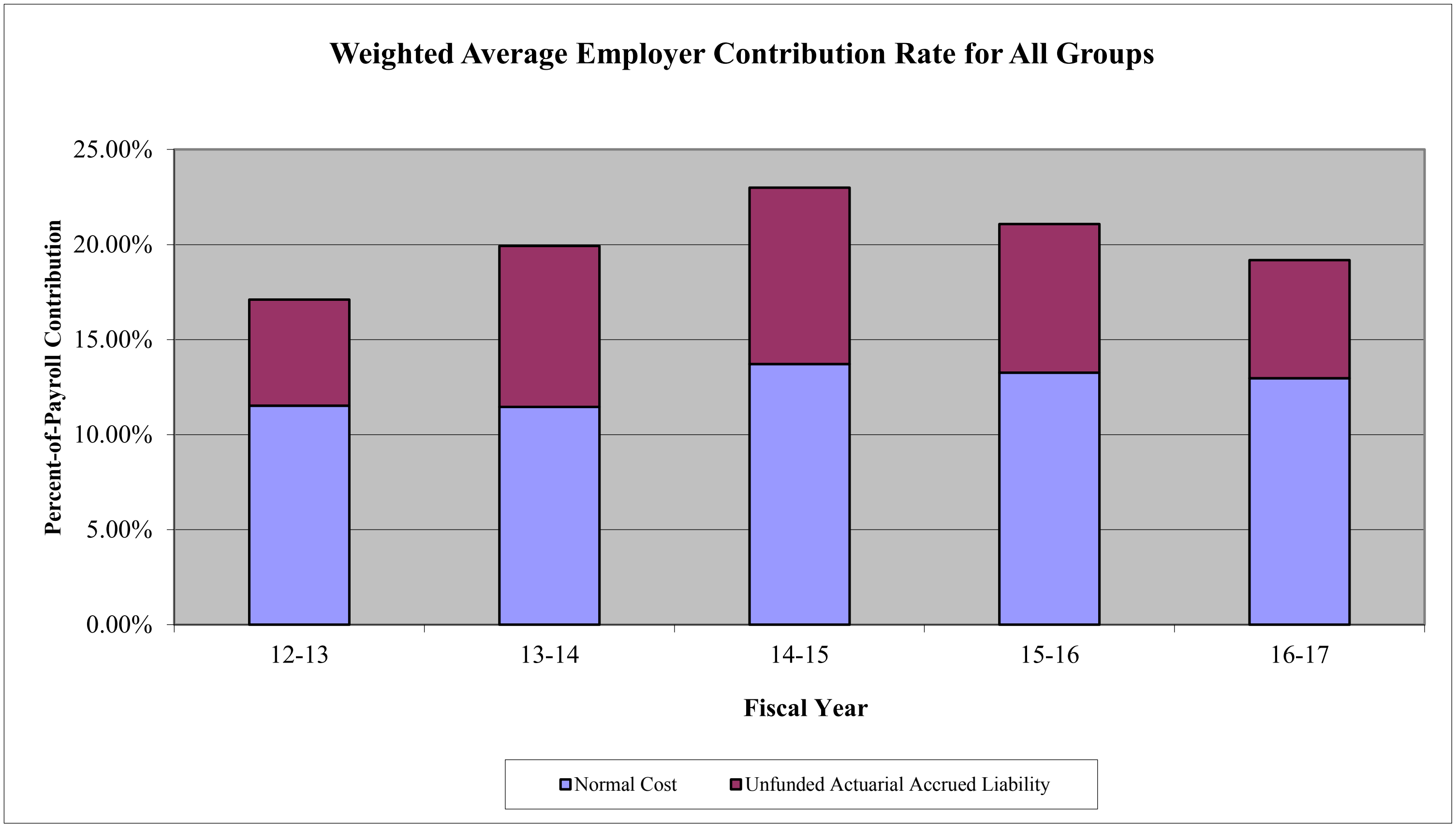
The County's total contributions toward retirement benefits include the contributions shown in this report which are paid to SCERA, along with payments to holders of Pension Obligation Bonds issued by the County in 1993, 2003 and 2010. The 1993 Pension Obligation Bond was paid-off in 2012/2013; therefore, the rates for 2013/2014 and later include only the payments for the 2003 and 2010 Pension Obligation Bonds. According to information supplied by the County, these contributions are projected to be made at the following percentage of covered payroll:

Pension Obligation Bonds

Fiscal Year	Rate as % of Payroll
2007/2008	8.31%
2008/2009	8.11%
2009/2010	8.15%
2010/2011	15.55%
2011/2012	General – 15.43%, Safety – 16.83%
2012/2013	General – 15.95%, Safety – 17.80%
2013/2014	General – 13.69%, Safety – 13.88%
2014/2015	General – 13.83%, Safety – 14.01%
2015/2016	Not Yet Available
2016/2017	Not Yet Available

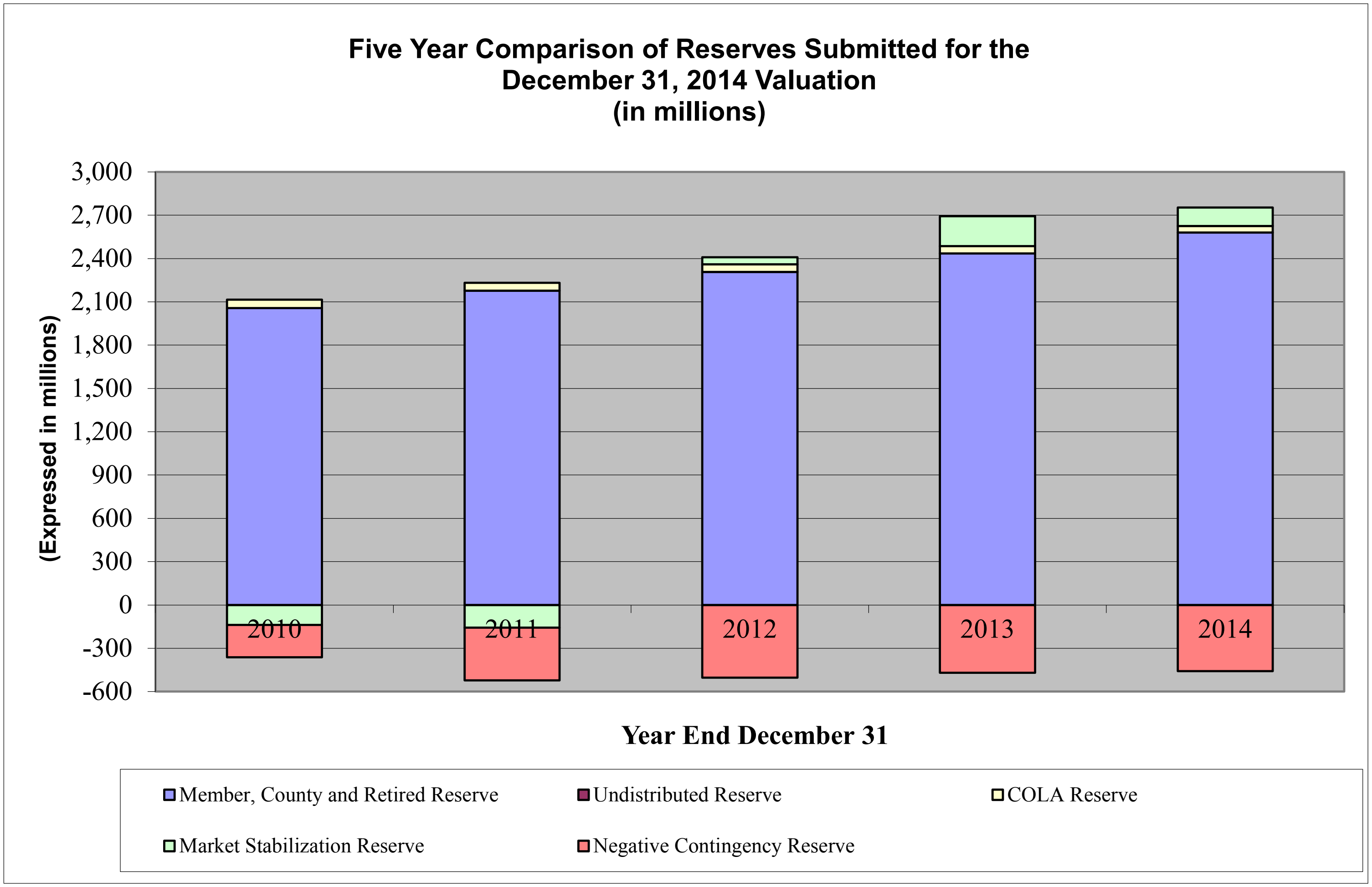
Appendix C
Average Employer Contribution Rates

The following chart displays the historical average employer contribution rates, broken down by normal cost and unfunded actuarial accrued liability. These rates have not been adjusted for any contribution rate phase-in (if applicable). The unfunded actuarial accrued liability rate for 2012-2013 reflects the Pension Obligation Bonds issued by the County around September 2010.



Appendix D
Reserves

The following chart displays the 5-year historical reserves balance after "true-up".



Appendix E
Amortization Schedule for UAAL (Dollar Amounts in Thousands)

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment[3]
General	December 31, 2007	Restart amortization - County	$123,396	$34,001[2]	14	$3,104
	December 31, 2007	Restart amortization - Court	8,599	8,335	14	761
	December 31, 2007[1]	Cash Allowance - County	55,982	15,348[2]	13	1,486
	December 31, 2008	Actuarial loss - County	44,591	12,424[2]	14	1,134
	December 31, 2008	Actuarial loss - Court	3,107	3,045	14	278
	December 31, 2009[1]	Early Retirement Option - County	1,448	408[2]	15	35
	December 31, 2009	Actuarial loss - County	45,691	12,875[2]	15	1,114
	December 31, 2009	Actuarial loss - Court	2,859	2,834	15	245
	December 31, 2009	Actuarial loss - VOM	13	13	15	1
	December 31, 2009	Assumption changes - County	10,990	3,097[2]	15	268
	December 31, 2009	Assumption changes - Court	688	682	15	59
	December 31, 2009	Assumption changes - VOM	3	3	15	0
	December 31, 2010	Actuarial loss - County	48,235	48,146	16	3,965
	December 31, 2010	Actuarial loss - Court	3,044	3,039	16	250
	December 31, 2010	Actuarial loss - VOM	14	14	16	1
	December 31, 2010	Assumption changes - County	37,393	37,324	16	3,073
	December 31, 2010	Assumption changes - Court	2,360	2,356	16	194
	December 31, 2010	Assumption changes - VOM	11	11	16	1
	December 31, 2011	Actuarial loss - County	74,087	74,245	17	5,841
	December 31, 2011	Actuarial loss - Court	4,760	4,770	17	375
	December 31, 2011	Actuarial loss - VOM	23	23	17	2
	December 31, 2012	Actuarial loss - County	71,616	71,812	18	5,417
	December 31, 2012	Actuarial loss - Court	4,188	4,200	18	317
	December 31, 2012	Actuarial loss - VOM	99	100	18	8
	December 31, 2012	Assumption changes - County	64,345	64,522	18	4,867
	December 31, 2012	Assumption changes - Court	3,763	3,773	18	285
	December 31, 2012	Assumption changes - VOM	89	90	18	7
	December 31, 2012	Compensation earnable change - County	(8,157)	(8,179)	18	(617)
	December 31, 2012	Compensation earnable change - Court	(477)	(478)	18	(36)
	December 31, 2012	Compensation earnable change - VOM	(11)	(11)	18	(1)
	December 31, 2012	Cashout change - County	(20,626)	(20,683)	18	(1,560)

(1) *Payment is only made by the County and not by the Court or Valley of the Moon because the programs were only available to County employees.*
(2) *Adjusted to reflect $289.3 million in proceeds from issuance of Pension Obligation Bonds by the County.*
(3) *Before adjustments for supplemental contributions paid by certain employees to reduce the employer's UAAL.*

Appendix E (continued)
Amortization Schedule for UAAL (Dollar Amounts in Thousands)

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment[1]
General (Continued)	December 31, 2013	Actuarial gain - County	(35,260)	(35,356)	19	(2,564)
	December 31, 2013	Actuarial gain - Court	(1,884)	(1,889)	19	(137)
	December 31, 2013	Actuarial gain - VOM	(38)	(38)	19	(3)
	December 31, 2014	Actuarial gain - County	(71,508)	(71,508)	20	(5,000)
	December 31, 2014	Actuarial gain - Court	(3,657)	(3,657)	20	(256)
	December 31, 2014	Actuarial gain - VOM	(84)	(84)	20	(6)
Subtotal				$265,607		$22,908

(1) *Before adjustments for supplemental contributions paid by certain employees to reduce the employer's UAAL.*

Appendix E (continued)
Amortization Schedule for UAAL (Dollar Amounts in Thousands)

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment[3]
Safety – County	December 31, 2007	Restart amortization	$43,504	$11,986 [2]	14	$1,094
	December 31, 2007[1]	Cash Allowance	14,693	4,028 [2]	13	390
	December 31, 2008	Actuarial loss	7,603	2,118 [2]	14	193
	December 31, 2009	Actuarial loss	28,643	8,071 [2]	15	698
	December 31, 2009	Assumption changes	7,337	2,069 [2]	15	179
	December 31, 2010	Actuarial loss	14,765	14,738	16	1,214
	December 31, 2010	Assumption changes	14,376	14,350	16	1,182
	December 31, 2011	Actuarial loss	24,746	24,799	17	1,951
	December 31, 2012	Actuarial loss	26,012	26,083	18	1,967
	December 31, 2012	Assumption changes	12,268	12,301	18	928
	December 31, 2012	Compensation earnable change	(2,613)	(2,620)	18	(198)
	December 31, 2012	Cashout change	(11,987)	(12,020)	18	(907)
	December 31, 2013	Actuarial gain	(6,051)	(6,067)	19	(440)
	December 31, 2014	Actuarial gain	(26,652)	(26,652)	20	(1,864)
Subtotal				$73,184		$6,387
Safety – Valley of the Moon	December 31, 2007	Restart amortization	$1,852	$1,795	14	$164
	December 31, 2008	Actuarial loss	169	166	14	15
	December 31, 2009	Actuarial loss	678	672	15	58
	December 31, 2009	Assumption changes	174	172	15	15
	December 31, 2010	Actuarial loss	344	344	16	28
	December 31, 2010	Assumption changes	335	335	16	28
	December 31, 2011	Actuarial loss	639	640	17	50
	December 31, 2012	Actuarial loss	1,444	1,448	18	109
	December 31, 2012	Assumption changes	681	683	18	52
	December 31, 2012	Compensation earnable change	(145)	(145)	18	(11)
	December 31, 2013	Actuarial gain	(333)	(334)	19	(24)
	December 31, 2014	Actuarial gain	(1,524)	(1,524)	20	(107)
Subtotal				$4,252		$377

(1) *Payment is only made by the County and not by the Court or Valley of the Moon because the programs were only available to County employees.*
(2) *Adjusted to reflect $289.3 million in proceeds from issuance of Pension Obligation Bonds by the County.*
(3) *Before adjustments for supplemental contributions paid by certain employees to reduce the employer's UAAL.*

Appendix E (continued)
Amortization Schedule for UAAL (Dollar Amounts in Thousands)

	Date Established	Source	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment[2]
Total	December 31, 2007	Restart amortization	$177,351	$56,117 [1]	14	$5,123
	December 31, 2007	Cash Allowance	70,675	19,376 [1]	13	1,876
	December 31, 2008	Actuarial loss	55,470	17,753 [1]	14	1,620
	December 31, 2009	Early Retirement Option	1,448	408 [1]	15	35
	December 31, 2009	Actuarial loss	77,884	24,465 [1]	15	2,116
	December 31, 2009	Assumption changes	19,192	6,023	15	521
	December 31, 2010	Actuarial loss	66,402	66,281	16	5,458
	December 31, 2010	Assumption changes	54,475	54,376	16	4,478
	December 31, 2011	Actuarial loss	104,255	104,477	17	8,219
	December 31, 2012	Actuarial loss	103,359	103,643	18	7,818
	December 31, 2012	Assumption changes	81,146	81,369	18	6,139
	December 31, 2012	Compensation earnable change	(11,403)	(11,433)	18	(863)
	December 31, 2012	Cashout change	(32,613)	(32,703)	18	(2,467)
	December 31, 2013	Actuarial gain	(43,566)	(43,684)	19	(3,168)
	December 31, 2014	Actuarial gain	(103,425)	(103,425)	20	(7,233)
Subtotal				$343,043		$29,672

(1) *Adjusted to reflect $289.3 million in proceeds from issuance of Pension Obligation Bonds by the County.*
(2) *Before adjustments for supplemental contributions paid by certain employees to reduce the employer's UAAL.*

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