

# Alameda County Employees' Retirement Association

Actuarial Valuation and Review  
as of December 31, 2014



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

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*June 24, 2015*

*Board of Retirement  
Alameda County Employees' Retirement Association  
475 14<sup>th</sup> Street, Suite 1000  
Oakland, CA 94612*

*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 fiscal 2015-2016 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 were prepared by ACERA. 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 this 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.*

A handwritten signature in black ink, appearing to read "Paul Angelo", written over a horizontal line.

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

A handwritten signature in black ink, appearing to read "Andy Yeung", written over a horizontal line.

*Andy Yeung, ASA, MAAA, FCA, EA  
Vice President and Associate Actuary*

*DNA/gxk*

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

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### Purpose

This report has been prepared by Segal Consulting to present a valuation of the Alameda 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 November 30, 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. that the Board has adopted for the December 31, 2014 valuation.

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 consistent, both internally and with prior year's information.

The contribution requirements are determined as a percentage of payroll. The Association's employer rates provide for both normal cost and a payment or credit to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have reflected the Board's funding policy to amortize the Association's unfunded actuarial accrued liability using a layered approach. The aggregate employer contribution rate calculated on this basis is 25.58% of payroll. In this valuation, we have applied the 7.60% net investment earnings, 3.25% inflation, and 0.50% across-the-board salary increase assumptions adopted by the Board from the December 1, 2010 – November 30, 2013 experience study. The 7.60% investment return assumption has been developed without taking into consideration the impact of the "excess earnings" sharing mechanism between the SRBR and the Retirement Plan<sup>1</sup>. The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2015 through June 30, 2016.

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<sup>1</sup> For informational purposes only, we have provided on page iii the estimated impact future excess earnings allocations may have on the Retirement Plan.

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

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### Significant Issues in Valuation Year

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

- Ref: Pg. 25 and Pg. 26*
- The results of this valuation reflect changes in the economic and non-economic actuarial assumptions studied by Segal and adopted by the Board for the December 31, 2014 valuation. The Board adopted a 7.60% investment return assumption for this valuation. The other changes in assumptions were documented in our Actuarial Experience Study report dated September 9, 2014 and are also outlined in Section 4, Exhibit V of this report. These assumption changes resulted in an increase in the aggregate employer contribution rate of 3.44% of payroll and in an increase in the average employee contribution rate of 0.17% of payroll.
- Ref: Pg. 62*
- In the December 31, 2013 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities was 75.9%. In this December 31, 2014 valuation, the funding ratio has decreased to 74.8%. The funded ratio if measured on a market value of assets basis decreased from 80.9% as of December 31, 2013 to 76.4% as of December 31, 2014. The reduction in both of the above ratios was primarily caused by the change in the actuarial assumptions in the December 31, 2014 valuation.
  - The Association's unfunded actuarial accrued liability (UAAL) as of December 31, 2013 was \$1,650.7 million. In this year's valuation, the UAAL has increased to \$1,911.0 million. The increase in the UAAL was also primarily due to the change in the actuarial assumptions in the December 31, 2014 valuation.
- Ref: Pg. 8 and Pg. 53*
- Aside from the increase in UAAL due to the change in the actuarial assumptions, the Plan had a net actuarial experience gain of about \$204.1 million since the prior actuarial valuation. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit H.
- Ref: Pg. 25 and Pg. 110*
- The aggregate employer rate calculated in this valuation has increased from 23.65% of payroll to 25.58% of payroll. This change is due primarily to the change in actuarial assumptions and amortizing the prior year's UAAL over a smaller than expected projected total payroll, offset somewhat by higher than expected return on investments (after smoothing), lower than expected salary increases for active members, and other actuarial gains. A reconciliation of the Association's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15). A schedule of the projected contributions by each participating employer is provided in Appendix B.

Employer rates for AHS/Court/First 5 are higher than the County's rates to reflect that only the County has received a reimbursement of \$5.2 million for the implicit retiree health benefit subsidy paid by the County for 2014 (note that this is an estimated amount provided by ACERA). The \$5.2 million and the unused credit from prior years' transfers (the balance of prior transfers was about \$43.3 million as of December 31, 2014) have been recognized over separate 20-year periods

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

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(i.e., 18 years is the remaining period as of December 31, 2014 for the unused credit for transfers prior to 2013, and 19 years is the remaining period as of December 31, 2014 for the unused credit for last year's transfer).

- Ref: Pg. 26 and Pg. 90*
- The aggregate member rate calculated in this valuation increased from 8.59% of payroll to 8.75% of payroll. This change is due primarily to the change in actuarial assumptions, offset slightly by a change in membership demographics. A reconciliation of the Association's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).

The individual member rates have been updated to reflect the valuation as of December 31, 2014. The detailed member rates are provided in Appendix A of this report.

- Ref: Pg. 6*
- As indicated in Section 2, Subsection B (see Chart 7) of this report, the total unrecognized net investment gain as of December 31, 2014 is \$242.9 million (in the previous valuation, this amount was a \$686.8 million net gain). This net investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, and will offset any investment losses that may occur after December 31, 2014. This implies that if the Association earns the assumed net rate of investment return of 7.60% per year on a **market value** basis, it will result in investment gains on the actuarial value of assets in the next few years. So, if the actual market return is equal to the assumed 7.60% rate and all other actuarial assumptions are met, the contribution requirements would generally decrease in the next few years.

The net deferred gain of \$242.9 million represents 3.6% of the market value of assets as of December 31, 2014. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$242.9 million deferred market gain is expected to have a significant impact on the Association's future funded percentage and contribution rate requirements. Under a simplified approach, this potential impact may be illustrated as follows:

- If one-half of the net deferred gain were recognized immediately in the valuation value of assets, the funded percentage would increase from 74.8% to 76.4%.
  - If one-half of the net deferred gain were recognized immediately in the valuation value of assets, the aggregate employer rate would decrease from 25.58% to about 24.7% of payroll.
- The actuarial assumptions used in the December 31, 2014 valuation have been approved by the Board based on our review of those assumptions in our triennial experience study dated September 9, 2014.

As part of that review, we pointed out that for the funding valuation, the investment return assumption of 7.60% that the Board approved for determining the liabilities for funding purposes and used for establishing the employer and employee contribution rates in this report has continued to be developed without considering the impact of any future 50/50 excess earnings allocation. This is based on our understanding that Article 5.5 of the Statute, which authorizes the allocation of 50% allocation of excess earnings to the SRBR, does not allow for the use of a different investment return for funding than

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

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is used for interest crediting. This would appear in effect to preclude the prefunding of the SRBR through the use of an assumption lower than the market earnings assumption of 7.60%.

As discussed in our triennial experience study report, the Actuarial Standard of Practice (ASOP) No. 4 (“*Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*”) was recently revised and adopted in December 2013. The revised ASOP states that some plan provisions, including gain sharing provisions, “may create pension obligations that are difficult to appropriately measure using traditional valuation procedures.” ASOP No. 4 now mentions that “for such plan provisions, the actuary should consider using alternative valuation procedures, such as stochastic modeling....to reflect the impact of variations in experience from year to year.”

Accordingly, we performed a stochastic model to estimate the impact of the 50% allocation of future excess earnings to the SRBR. The results of our model indicated that the 50/50 allocation of future excess earnings would have the same impact as an “outflow” (i.e., assets not available to fund the benefits included in this valuation) that would average approximately 0.75% of assets over time.

Applying the results of our stochastic model to this valuation (for informational purposes only), we have estimated that such an annual outflow would increase the AAL measured in this valuation using a 7.60% investment return assumption from \$7.59 billion to \$8.28 billion (for a difference of \$0.69 billion) and would increase the employer’s contribution rate by about 5% - 6% of payroll.

- 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.
- The Governmental Accounting Standards Board (GASB) approved two 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.

### Impact of Future Experience on Contribution Rates

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

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

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

**Summary of Key Valuation Results  
(Dollar amounts in thousands)**

	December 31, 2014		December 31, 2013	
<b>Employer Contribution Rates:</b>		Estimated		Estimated
<u>County Only</u>	Total Rate	Annual Amount <sup>(1)</sup>	Total Rate	Annual Amount <sup>(1)</sup>
General Tier 1	20.86%	\$3,965	19.58%	\$3,722
General Tier 2	20.11	87,483	18.66	81,175
General Tier 4	19.22	11,286	17.45	10,246
Safety Tier 1	71.82	1,175	66.88	1,094
Safety Tier 2	54.00	67,619	49.57	62,073
Safety Tier 2C	55.81	1,896	52.29	1,778
Safety Tier 2D	51.41	4,944	47.01	4,521
Safety Tier 4	52.72	4,615	50.68	4,436
County Combined	27.67	182,983	25.56	169,045
<u>AHS, Court &amp; First 5 Only</u>				
General Tier 1	21.42	1,195	20.08	1,120
General Tier 2	20.67	49,238	19.16	45,640
General Tier 4	19.78	6,942	17.95	6,300
<u>Other Districts</u>				
General Tier 1	26.69	1,221	25.32	1,159
General Tier 2	25.94	74	24.40	70
General Tier 3	29.32	925	30.37	958
General Tier 4 (Housing Authority, Office of Education)	25.05	49	23.19	46
General Tier 4 (LARPD Only)	22.87	90	23.69	93
<u>All Categories Combined</u>	25.58	242,717	23.65	224,431
<b>Average Member Contribution Rates:</b>		Estimated		Estimated
	Total Rate	Annual Amount <sup>(1)</sup>	Total Rate <sup>(2)</sup>	Annual Amount <sup>(1)</sup>
General Tier 1	9.02%	\$2,630	8.94%	\$2,607
General Tier 2	7.41	49,907	7.25	48,830
General Tier 3	12.89	407	12.57	396
General Tier 4	8.09	7,637	8.12	7,665
Safety Tier 1	12.59	206	12.30	201
Safety Tier 2	15.08	18,883	14.68	18,382
Safety Tier 2C	12.76	434	12.42	422
Safety Tier 2D	16.73	1,609	16.35	1,572
Safety Tier 4	15.25	1,335	16.77	1,468
All Categories Combined	8.75	83,048	8.59	81,543

<sup>(1)</sup> Based on December 31, 2014 projected annual compensation.

<sup>(2)</sup> Average rates have been recalculated by applying the individual entry age based member rates determined in the December 31, 2013 valuation to the Association membership as of December 31, 2014.



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

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

	December 31, 2014	December 31, 2013
<b>Funded Status:</b>		
Actuarial Accrued Liability (AAL) <sup>(3)</sup>	\$7,592,072	\$6,861,687
Valuation Value of Assets (VVA) <sup>(4)</sup>	5,681,097	5,210,944
Market Value of Assets (MVA) <sup>(4)</sup>	5,802,524	5,554,364
Funded Percentage on VVA Basis	74.8%	75.9%
Funded Percentage on MVA Basis	76.4%	80.9%
Unfunded Actuarial Accrued Liability (UAAL) on VVA Basis	\$1,910,975	\$1,650,743
Unfunded Actuarial Accrued Liability (UAAL) on MVA Basis	1,789,548	1,307,323
<b>Key Economic Assumptions:</b>		
Interest Rate	7.60%	7.80%
Inflation Rate	3.25%	3.50%
Across-the-Board Salary Increase	0.50%	0.50%

<sup>(3)</sup> Excludes liabilities held for SRBR and other non-valuation reserves.

<sup>(4)</sup> Excludes Reserve for Interest Fluctuations (Contingency Reserve) if positive, Supplemental Retirees Benefit Reserve, 401(h) Reserve, and, for Market Value of Assets, one-half of the deferred market gains.

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

### Summary of Key Valuation Demographic and Financial Data

	December 31, 2014	December 31, 2013	Percentage Change
<b>Active Members:</b>			
Number of members	11,025	10,877	1.4%
Average age	47.3	47.3	N/A
Average service	11.5	11.5	N/A
Projected total compensation	\$948,848,000	\$916,803,000	3.5%
Average projected compensation	\$86,063	\$84,288	2.1%
<b>Retired Member and Beneficiaries:</b>			
Number of members:			
Service retired	6,807	6,593	3.2%
Disability retired	836	818	2.2%
Beneficiaries	1,170	1,155	1.3%
Total	8,813	8,566	2.9%
Average age	70.9	70.7	N/A
Average monthly benefit <sup>(1)</sup>	\$3,549	\$3,442	3.1%
<b>Vested Terminated Members:</b>			
Number of vested terminated members <sup>(2)</sup>	1,995	1,902	4.9%
Average age	48.7	49.0	N/A
<b>Summary of Financial Data (dollar amounts in thousands):</b>			
Market value of assets	\$6,788,013	\$6,640,295	2.2%
Return on market value of assets	4.04%	19.53%	N/A
Actuarial value of assets	\$6,545,159	\$5,953,455	9.9%
Return on actuarial value of assets	12.05%	9.73%	N/A
Valuation value of assets	\$5,681,097	\$5,210,944	9.0%
Return on valuation value of assets	10.61%	8.48%	N/A

(1) Excludes monthly benefits payable from the SRBR.

(2) Includes members who left their contributions on deposit even though they have less than five years of service.

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

**A. MEMBER DATA**

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

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

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

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

**CHART 1**  
**Member Population: 2005 – 2014**

<b>Year Ended December 31</b>	<b>Active Members</b>	<b>Vested Terminated Members*</b>	<b>Retired Members and Beneficiaries</b>	<b>Ratio of Non-Actives to Actives</b>
2005	10,503	1,522	6,718	0.78
2006	10,662	1,722	6,936	0.81
2007	10,912	1,730	7,183	0.82
2008	11,173	1,773	7,246	0.81
2009	10,927	1,816	7,333	0.84
2010	10,879	1,785	7,558	0.86
2011	10,724	1,796	7,906	0.90
2012	10,800	1,835	8,175	0.93
2013	10,877	1,902	8,566	0.96
2014	11,025	1,995	8,813	0.98

\* Includes terminated members due a refund of member contributions

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

**Active Members**

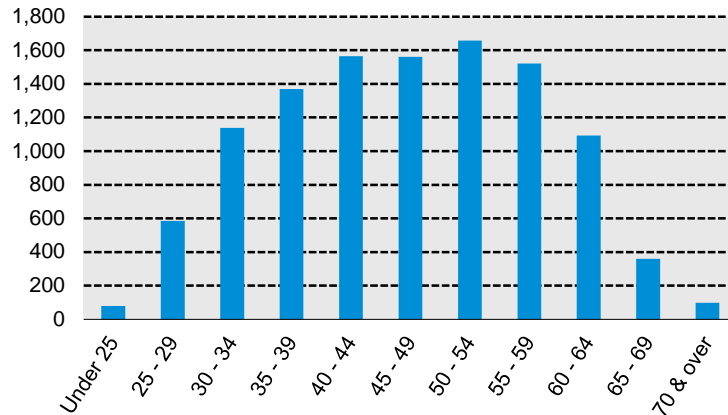
Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 11,025 active members with an average age of 47.3 years, average years of service of 11.5 and average compensation of \$86,063. The 10,877 active members in the prior valuation had an average age of 47.3 years, average service of 11.5 and average compensation of \$84,288.

**Inactive Members**

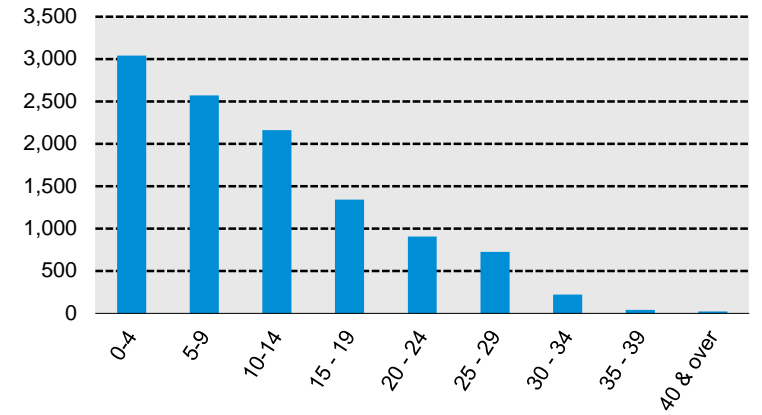
In this year's valuation, there were 1,995 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 1,902 in the prior valuation.

*These graphs show a distribution of active members by age and by years of service. Age and years of service have been projected to December 31, 2014 based on census data collected as of November 30, 2014.*

**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**



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

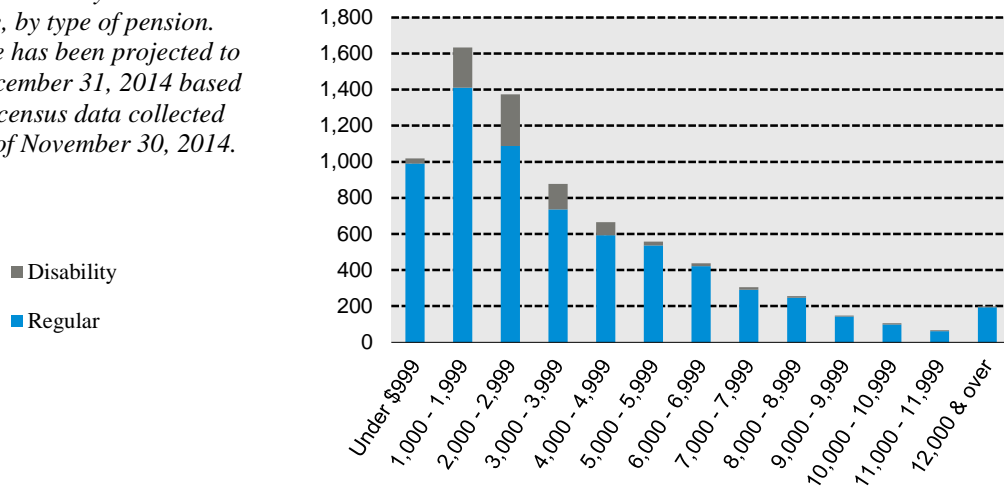
**Retired Members and Beneficiaries**

As of December 31, 2014, 7,643 retired members and 1,170 beneficiaries were receiving total monthly benefits of \$31,280,680. For comparison, in the previous valuation, there were 7,411 retired members and 1,155 beneficiaries receiving monthly benefits of \$29,487,279. These monthly benefits exclude supplemental COLA benefits payable from the Supplemental Retirees Benefit Reserve (SRBR).

*These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension. Age has been projected to December 31, 2014 based on census data collected as of November 30, 2014.*

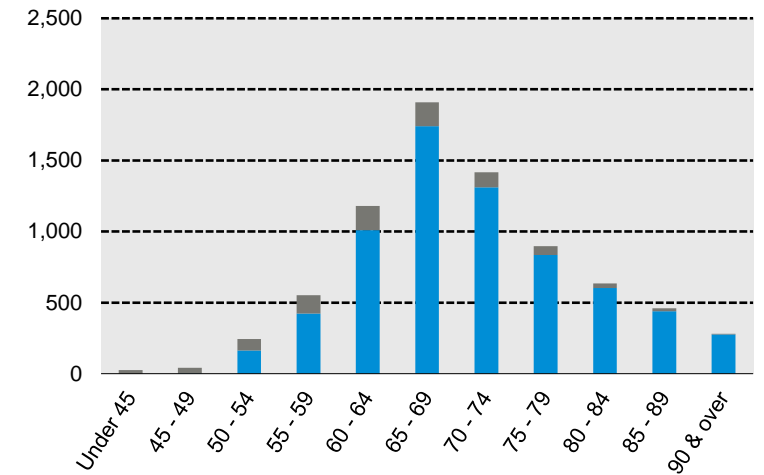
**CHART 4**

**Distribution of Retired Members (Excl. Beneficiaries) by Type and by Monthly Amount as of December 31, 2014**



**CHART 5**

**Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of December 31, 2014**



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

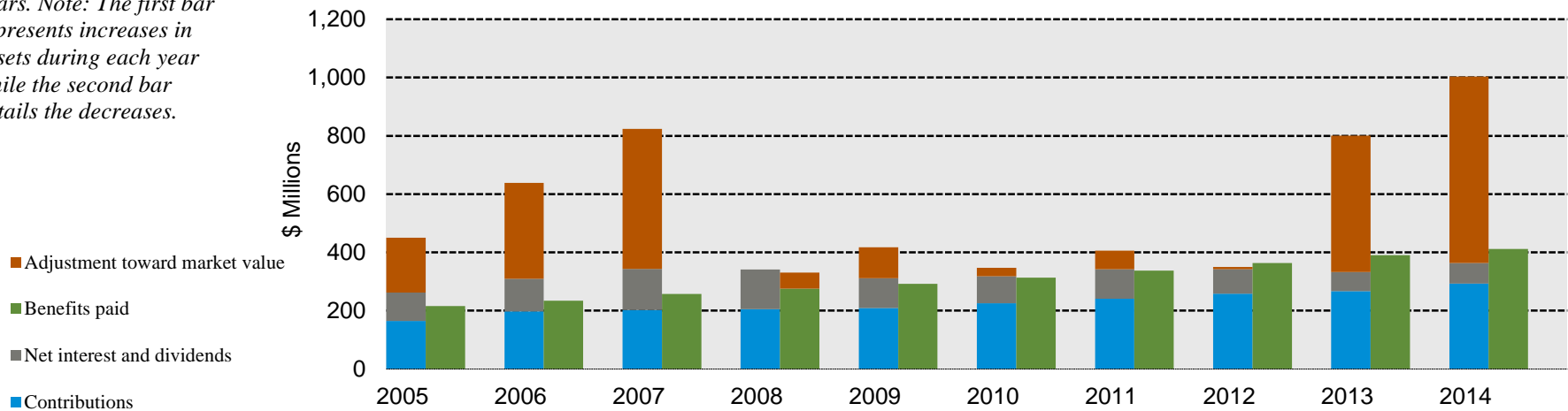
**B. FINANCIAL INFORMATION**

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

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

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

**CHART 6**  
**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2005 through 2014**



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

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

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

The determination of the Actuarial Value of Assets is provided on the following page.

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

**CHART 7**

**Determination of Actuarial Value of Assets for Year Ended December 31, 2014**

Six Month Period		Total Actual	Expected	Investment	Deferred	Deferred
From	To	Market	Market	Gain (Loss)	Factor	Return
		Return (net)	Return (net)			
01/01/2010	06/30/2010	-\$171,083,230	\$186,202,514	-\$357,285,743	0.0	\$0
07/01/2010	12/31/2010	806,700,469	175,307,561	631,392,909	0.1	63,139,291
01/01/2011	06/30/2011	274,085,462	205,402,533	68,682,929	0.2	13,736,586
07/01/2011	12/31/2011	-327,895,627	214,282,574	-542,178,201	0.3	-162,653,460
01/01/2012	06/30/2012	295,998,792	199,451,466	96,547,326	0.4	38,618,930
07/01/2012	12/31/2012	402,683,765	206,354,148	196,329,617	0.5	98,164,809
01/01/2013	06/30/2013	379,463,693	219,754,365	159,709,329	0.6	95,825,597
07/01/2013	12/31/2013	715,724,522	232,095,516	483,629,006	0.7	338,540,304
01/01/2014	06/30/2014	337,783,821	257,878,773	79,905,048	0.8	63,924,038
07/01/2014	12/31/2014	-71,755,579	268,735,880	-340,491,459	0.9	-306,442,313
1. Total Deferred Return*						\$242,853,782
2. Net Market Value						\$6,788,013,006
3. Actuarial Value of Assets (Item 2 – Item 1)						\$6,545,159,225
4. Actuarial Value as a Percentage of Market Value (Before Corridor; Item 3 / Item 2)						96.4%
5. Actuarial Value of Assets – Corridor Limits:						
a. Lower Limit – 60% of Net Market Value						\$4,072,807,804
b. Upper Limit – 140% of Net Market Value						\$9,503,218,209
6. Actuarial Value of Assets (within corridor)						\$6,545,159,225
7. Non-valuation reserves and designations:						
a. Reserve for Interest Fluctuations (Contingency Reserve), but no less than \$0						\$72,292,151
b. Supplemental Retirees Benefit Reserve (SRBR)						789,826,877
c. Other Non-Valuation Reserve (401(h) Reserve)						7,158,417
d. SRBR Transfer to Employer Advance Reserve**						-5,215,355
e. Subtotal						\$864,062,090
8. Valuation Value of Assets (Item 6 – Item 7e)						\$5,681,097,135

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

Note: Results may not add due to rounding.

\* The amounts of deferred return that will be recognized in each subsequent valuation are as follows:

12/31/15: 103,566,010 12/31/16: 80,907,953 12/31/17: 96,183,346 12/31/18: -3,754,382 12/31/19: -34,049,146

\*\* Estimate provided by ACERA.



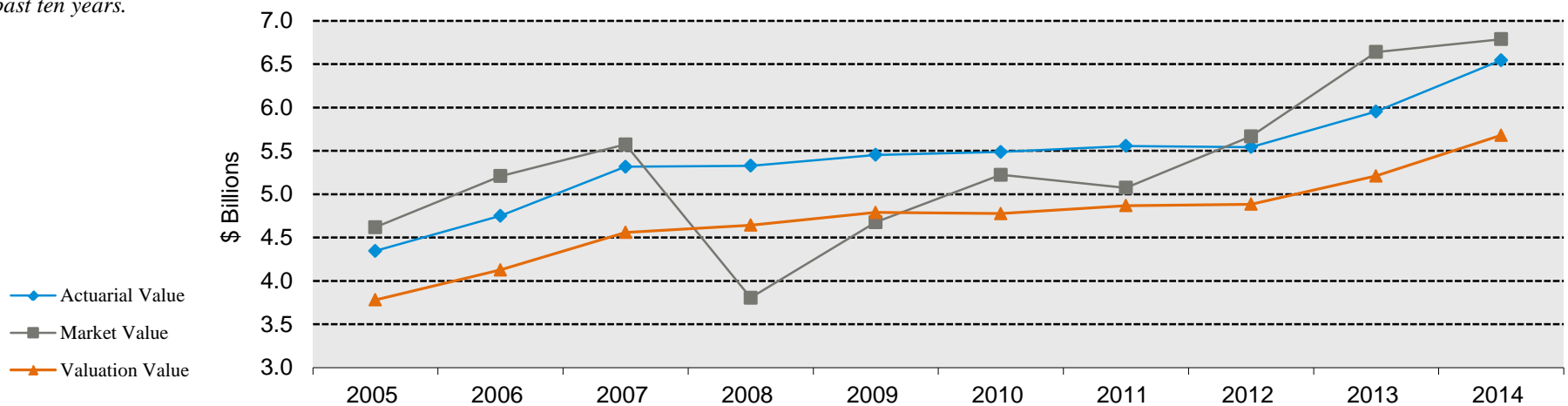
## SECTION 2: Valuation Results for the Alameda County Employees' Retirement Association

The market value, actuarial value, and valuation value of assets are representations of ACERA'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 ACERA's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

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

**CHART 8**

**Market Value, Actuarial Value and Valuation Value of Assets as of December 31, 2005 – 2014**



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

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**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 \$204.1 million, a net gain of \$145.4 million from investments and a gain of \$58.7 million from all other sources. The net experience variation from individual sources other than investments was 0.8% 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.*

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**CHART 9**  
**Actuarial Experience for Year Ended December 31, 2014**

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1. Net gain from investments <sup>(1)</sup>	\$(145,395,000)
2. Net gain from other experience <sup>(2)</sup>	<u>(58,700,000)</u>
3. Net experience gain <sup>(3)</sup> : (1) + (2)	\$(204,095,000)

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<sup>(1)</sup> Details in Chart 10.

<sup>(2)</sup> See Section 3, Exhibit H.

<sup>(3)</sup> Excludes loss from contributions less than anticipated due to scheduled delay in implementing the higher contribution rate calculated in the December 31, 2013 valuation.

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

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**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 ACERA's investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.80% for the December 31, 2013 valuation. The actual rate of return on a valuation value of assets basis for the 2014 plan year was 10.61%.

Since the actual return for the year was more than the assumed return, ACERA experienced an actuarial gain during the year ended December 31, 2014 with regard to its investments.

*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**

	<b>Valuation Value</b>	<b>Actuarial Value</b>	<b>Market Value</b>
1. Actual return	\$548,585,891	\$710,015,277	\$266,028,241
2. Average value of assets	\$5,169,119,820	\$5,894,299,305	\$6,581,140,122
3. Actual rate of return: (1) ÷ (2)	10.61%	12.05%	4.04%
4. Assumed rate of return	7.80%	7.80%	7.80%
5. Expected return: (2) x (4)	\$403,191,346	\$459,755,346	\$513,328,929
6. Actuarial gain/(loss): (1) - (5)	<u>\$145,394,545</u>	<u>\$250,259,931</u>	<u>\$(247,300,688)</u>

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

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

**CHART 11**

**Investment Return – Valuation Value, Actuarial Value and Market Value: 2005 – 2014**

Year Ended December 31	Valuation Value Investment Return		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$247,067,988	6.97%	\$285,732,957	6.99%	\$347,722,582	8.09%
2006	355,019,495	9.40%	440,937,597	10.19%	627,526,993	13.64%
2007	454,105,997	11.03%	621,715,716	13.16%	419,578,805	8.10%
2008	118,705,974	2.61%	81,465,408	1.54%	-1,698,059,095	-30.65%
2009	190,184,291	4.12%	208,175,576	3.94%	953,666,087	25.33%
2010	36,890,575	0.77%	122,091,092	2.26%	635,617,239	13.72%
2011	149,447,325	3.15%	164,671,046	3.03%	-53,810,165	-1.04%
2012	76,720,113	1.59%	91,936,980	1.67%	698,682,557	13.91%
2013	410,409,663	8.48%	533,248,385	9.73%	1,095,188,215	19.53%
2014	548,585,891	10.61%	710,015,277	12.05%	266,028,241	4.04%
Five-Year Average Return		4.85%		5.66%		9.78%
Ten-Year Average Return		5.81%		6.37%		6.29%

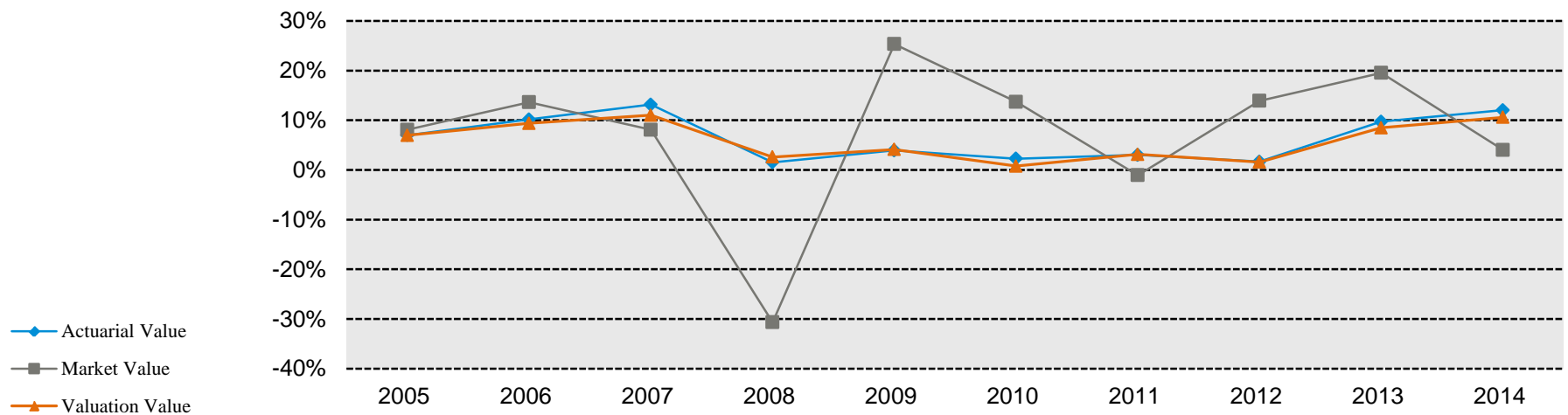
## SECTION 2: Valuation Results for the Alameda County Employees' Retirement Association

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

*This chart illustrates how this leveling effect has actually worked over the years 2005 – 2014.*

**CHART 12**

**Market, Actuarial and Valuation Value Rates of Return for Years Ended December 31, 2005 - 2014**



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

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### **Other Experience**

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

- actual 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 \$58.7 million which is 0.8% of the actuarial accrued liability. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

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

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### D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

*Normal Cost*

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

*Contribution to the Unfunded Actuarial Accrued Liability (UAAL)*

The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) 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 3.75% (i.e., 3.25% inflation plus 0.50% across-the-board salary increase).

Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 18 years remaining as of December 31, 2014). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.

The recommended employer contributions are provided on Chart 13.

Member Contributions

*Non-Tier 4 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 non-Tier 4 General and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a

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

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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 Salary for General Tier 1, General Tier 3, and all Safety non-Tier 4 members and 1/120 of Final Average Salary for General Tier 2 members. That age is 60 for General Tier 1 and Tier 2, 55 for General Tier 3, and 50 for all Safety non-Tier 4 members. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to the basic contributions, members pay one-half of the total normal cost necessary to fund cost-of-living benefits. As instructed by ACERA, we have also included a 3% cost-sharing contribution that we understand will be paid by Safety Tier 1 and Tier 2 members even after they attain 30 years of service. For Safety Tier 2C members, there are no cost-sharing contributions. For Safety Tier 2D members, the cost-sharing contribution rate is 5% of salary for the first 5 years of vesting service and 3% of salary for each subsequent year of vesting service (even after the member attains 30 years of service).

Accumulation includes semi-annual crediting of interest at the assumed investment earnings rate. Following the procedure established by the Board, basic member rates have been adjusted to anticipate conversion of terminal pay at retirement.

### *Tier 4 Members*

Pursuant to Section 7522.30(a) of the Government Code, Tier 4 members are required to contribute at least 50% of the Normal Cost rate.

When previously calculating member rates, there were certain additional requirements that had to be met such as requiring the employee rates be rounded to the nearest one quarter of one percent and requiring the new employees to pay the contribution rate of "similarly situated employees", if it is greater. (reference: Section 7522.30(c)). Furthermore, Section 7522.30(d) indicated that "once established, the employee contribution rate described in subdivision (c) shall not be adjusted on account of a change to the normal cost rate unless the normal cost rate increases or decreases by more than 1 percent of payroll above or below the normal cost rate in effect at the time the employee contribution rate is first established or, if later, the normal cost rate in effect at the time of the last adjustment to the employee contribution rate under this section."



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

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However, as we referenced in our letter dated February 26, 2014, Assembly Bill 1380 (AB 1380) was approved by the Governor on September 6, 2013. In particular, Section 31620.5(a) was added to the Government Code to provide the Board with the discretion to not apply the rounding previously required under Section 7522.30(c). We understand that our recommendation in that letter to no longer apply the rounding rule effective with the December 31, 2013 valuation was adopted by the Board, and the results in this valuation reflect that action taken by the Board.

Section 31620.5(b) of AB 1380 also stipulates that the “one percent rule” under Section 7522.30(d) “shall not apply to the contribution rates of members of retirement systems established pursuant to this chapter.”

Therefore, in preparing the Normal Cost rates in this report, we have assumed that exactly 50% of the Normal Cost would be paid by the Tier 4 members.

The member contribution rates for all members are provided in Appendix A.

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

**CHART 13**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

County Only	December 31, 2014						December 31, 2013	
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>General Tier 1 Members</b>								
Normal Cost	7.28%	\$1,384	2.45%	\$465	9.73%	\$1,849	10.25%	\$1,948
UAAL (Before POB Credit)	13.02%	2,475	3.94%	749	16.96%	3,224	15.07%	2,865
Pension Obligation Bond Credit	-3.65%	-694	-1.62%	-308	-5.27%	-1,002	-5.24%	-996
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-106</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-106</u>	<u>-0.50%</u>	<u>-95</u>
Total Contribution	16.09%	\$3,059	4.77%	\$906	20.86%	\$3,965	19.58%	\$3,722
<b>General Tier 2 Members</b>								
Normal Cost	7.51%	\$32,670	1.47%	\$6,395	8.98%	\$39,065	9.33%	\$40,587
UAAL (Before POB Credit)	13.02%	56,640	3.94%	17,140	16.96%	73,780	15.07%	65,558
Pension Obligation Bond Credit	-3.65%	-15,878	-1.62%	-7,048	-5.27%	-22,926	-5.24%	-22,795
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-2,436</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-2,436</u>	<u>-0.50%</u>	<u>-2,175</u>
Total Contribution	16.32%	\$70,996	3.79%	\$16,487	20.11%	\$87,483	18.66%	\$81,175
<b>General Tier 4 Members</b>								
Normal Cost	6.76%	\$3,969	1.33%	\$781	8.09%	\$4,750	8.12%	\$4,768
UAAL (Before POB Credit)	13.02%	7,645	3.94%	2,314	16.96%	9,959	15.07%	8,849
Pension Obligation Bond Credit	-3.65%	-2,143	-1.62%	-951	-5.27%	-3,094	-5.24%	-3,077
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-329</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-329</u>	<u>-0.50%</u>	<u>-294</u>
Total Contribution	15.57%	\$9,142	3.65%	\$2,144	19.22%	\$11,286	17.45%	\$10,246

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

County Only	December 31, 2014				December 31, 2013			
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>Safety Tier 1 Members</b>								
Normal Cost	27.26%	\$446	10.09%	\$165	37.35%	\$611	35.97%	\$588
Member Cost Sharing Contributions (Adjusted for Refunds)	-3.00%	-49	0.00%	0	-3.00%	-49	-3.00%	-49
UAAL (Before POB Credit)	34.17%	559	9.12%	149	43.29%	708	39.60%	648
Pension Obligation Bond Credit	-3.21%	-53	-2.05%	-33	-5.26%	-86	-5.19%	-85
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-9</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-9</u>	<u>-0.50%</u>	<u>-8</u>
Total Contribution	54.66%	\$894	17.16%	\$281	71.82%	\$1,175	66.88%	\$1,094
<b>Safety Tier 2 Members</b>								
Normal Cost	16.27%	\$20,373	3.21%	\$4,020	19.48%	\$24,393	18.61%	\$23,304
Member Cost Sharing Contributions (Adjusted for Refunds)	-2.95%	-3,694	0.00%	0	-2.95%	-3,694	-2.95%	-3,694
UAAL (Before POB Credit)	34.17%	42,788	9.12%	11,420	43.29%	54,208	39.60%	49,588
Pension Obligation Bond Credit	-3.21%	-4,020	-2.05%	-2,567	-5.26%	-6,587	-5.19%	-6,499
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-701</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-701</u>	<u>-0.50%</u>	<u>-626</u>
Total Contribution	43.72%	\$54,746	10.28%	\$12,873	54.00%	\$67,619	49.57%	\$62,073

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

County Only	December 31, 2014				December 31, 2013			
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>Safety Tier 2C Members</b>								
Normal Cost	15.24%	\$518	3.10%	\$105	18.34%	\$623	18.38%	\$625
Member Cost Sharing Contributions (Adjusted for Refunds)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
UAAL (Before POB Credit)	34.17%	1,161	9.12%	310	43.29%	1,471	39.60%	1,346
Pension Obligation Bond Credit	-3.21%	-109	-2.05%	-70	-5.26%	-179	-5.19%	-176
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-19</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-19</u>	<u>-0.50%</u>	<u>-17</u>
Total Contribution	45.64%	\$1,551	10.17%	\$345	55.81%	\$1,896	52.29%	\$1,778
<b>Safety Tier 2D Members</b>								
Normal Cost	15.24%	\$1,466	3.16%	\$304	18.40%	\$1,770	17.61%	\$1,694
Member Cost Sharing Contributions (Adjusted for Refunds)	-4.46%	-429	0.00%	0	-4.46%	-429	-4.51%	-434
UAAL (Before POB Credit)	34.17%	3,286	9.12%	877	43.29%	4,163	39.60%	3,808
Pension Obligation Bond Credit	-3.21%	-309	-2.05%	-197	-5.26%	-506	-5.19%	-499
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-54</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-54</u>	<u>-0.50%</u>	<u>-48</u>
Total Contribution	41.18%	\$3,960	10.23%	\$984	51.41%	\$4,944	47.01%	\$4,521

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

County Only	December 31, 2014						December 31, 2013	
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>Safety Tier 4 Members</b>								
Normal Cost	12.38%	\$1,083	2.87%	\$252	15.25%	\$1,335	16.77%	\$1,468
Member Cost Sharing Contributions (Adjusted for Refunds)	0.00%	0	0.00%	0	0.00%	0	0.00%	0
UAAL (Before POB Credit)	34.17%	2,991	9.12%	798	43.29%	3,789	39.60%	3,466
Pension Obligation Bond Credit	-3.21%	-281	-2.05%	-179	-5.26%	-460	-5.19%	-454
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-49</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-49</u>	<u>-0.50%</u>	<u>-44</u>
Total Contribution	42.78%	\$3,744	9.94%	\$871	52.72%	\$4,615	50.68%	\$4,436
<b>All County Categories Combined</b>								
Normal Cost	9.36%	\$61,909	1.89%	\$12,487	11.25%	\$74,396	11.34%	\$74,982
Member Cost Sharing Contributions (Adjusted for Refunds)	-0.63%	-4,172	0.00%	0	-0.63%	-4,172	-0.63%	-4,177
UAAL (Before POB Credit)	17.77%	117,545	5.11%	33,757	22.88%	151,302	20.58%	136,128
Pension Obligation Bond Credit	-3.55%	-23,487	-1.72%	-11,353	-5.27%	-34,840	-5.23%	-34,581
Implicit Retiree Health Benefit Subsidy	<u>-0.56%</u>	<u>-3,703</u>	<u>0.00%</u>	<u>0</u>	<u>-0.56%</u>	<u>-3,703</u>	<u>-0.50%</u>	<u>-3,307</u>
Total Contribution	22.39%	\$148,092	5.28%	\$34,891	27.67%	\$182,983	25.56%	\$169,045

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

AHS, Court & First 5 Only	December 31, 2014						December 31, 2013	
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>General Tier 1 Members</b>								
Normal Cost	7.28%	\$406	2.45%	\$137	9.73%	\$543	10.25%	\$572
UAAL (Before POB Credit)	13.02%	726	3.94%	220	16.96%	946	15.07%	840
Pension Obligation Bond Credit	<u>-3.65%</u>	<u>-204</u>	<u>-1.62%</u>	<u>-90</u>	<u>-5.27%</u>	<u>-294</u>	<u>-5.24%</u>	<u>-292</u>
Total Contribution	16.65%	\$928	4.77%	\$267	21.42%	\$1,195	20.08%	\$1,120
<b>General Tier 2 Members</b>								
Normal Cost	7.51%	\$17,889	1.47%	\$3,502	8.98%	\$21,391	9.33%	\$22,225
UAAL (Before POB Credit)	13.02%	31,014	3.94%	9,386	16.96%	40,400	15.07%	35,897
Pension Obligation Bond Credit	<u>-3.65%</u>	<u>-8,694</u>	<u>-1.62%</u>	<u>-3,859</u>	<u>-5.27%</u>	<u>-12,553</u>	<u>-5.24%</u>	<u>-12,482</u>
Total Contribution	16.88%	\$40,209	3.79%	\$9,029	20.67%	\$49,238	19.16%	\$45,640
<b>General Tier 4 Members</b>								
Normal Cost	6.76%	\$2,372	1.33%	\$467	8.09%	\$2,839	8.12%	\$2,850
UAAL (Before POB Credit)	13.02%	4,569	3.94%	1,383	16.96%	5,952	15.07%	5,289
Pension Obligation Bond Credit	<u>-3.65%</u>	<u>-1,281</u>	<u>-1.62%</u>	<u>-568</u>	<u>-5.27%</u>	<u>-1,849</u>	<u>-5.24%</u>	<u>-1,839</u>
Total Contribution	16.13%	\$5,660	3.65%	\$1,282	19.78%	\$6,942	17.95%	\$6,300

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

Other Districts	December 31, 2014						December 31, 2013	
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>General Tier 1 Members</b>								
Normal Cost	7.28%	\$333	2.45%	\$112	9.73%	\$445	10.25%	\$469
UAAL	<u>13.02%</u>	<u>596</u>	<u>3.94%</u>	<u>180</u>	<u>16.96%</u>	<u>776</u>	<u>15.07%</u>	<u>690</u>
Total Contribution	20.30%	\$929	6.39%	\$292	26.69%	\$1,221	25.32%	\$1,159
<b>General Tier 2 Members</b>								
Normal Cost	7.51%	\$21	1.47%	\$5	8.98%	\$26	9.33%	\$27
UAAL	<u>13.02%</u>	<u>37</u>	<u>3.94%</u>	<u>11</u>	<u>16.96%</u>	<u>48</u>	<u>15.07%</u>	<u>43</u>
Total Contribution	20.53%	\$58	5.41%	\$16	25.94%	\$74	24.40%	\$70
<b>General Tier 3 Members</b>								
Normal Cost	10.75%	\$339	3.79%	\$120	14.54%	\$459	14.80%	\$467
UAAL	<u>11.17%</u>	<u>352</u>	<u>3.61%</u>	<u>114</u>	<u>14.78%</u>	<u>\$466</u>	<u>15.57%</u>	<u>491</u>
Total Contribution	21.92%	\$691	7.40%	\$234	29.32%	\$925	30.37%	\$958
<b>General Tier 4 Members (Housing Authority, Office of Education)</b>								
Normal Cost	6.76%	\$13	1.33%	\$3	8.09%	\$16	8.12%	\$16
UAAL	<u>13.02%</u>	<u>26</u>	<u>3.94%</u>	<u>7</u>	<u>16.96%</u>	<u>\$33</u>	<u>15.07%</u>	<u>30</u>
Total Contribution	19.78%	\$39	5.27%	\$10	25.05%	\$49	23.19%	\$46

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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

Other Districts	December 31, 2014						December 31, 2013	
	BASIC		COLA		TOTAL		BASIC AND COLA COMBINED	
	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>	<u>Rate</u>	<u>Estimated Annual Amount*</u>
<b>General Tier 4 Members (LARPD Only)</b>								
Normal Cost	6.76%	\$26	1.33%	\$6	8.09%	\$32	8.12%	\$32
UAAL	<u>11.17%</u>	<u>44</u>	<u>3.61%</u>	<u>14</u>	<u>14.78%</u>	<u>\$58</u>	<u>15.57%</u>	<u>61</u>
Total Contribution	17.93%	\$70	4.94%	\$20	22.87%	\$90	23.69%	\$93
<b>All Categories Combined</b>								
<b>All Categories Combined</b>								
Normal Cost (Net)	8.34%	\$79,136	1.77%	\$16,839	10.11%	\$95,975	10.27%	\$97,463
UAAL (Net)	<u>12.39%</u>	<u>117,540</u>	<u>3.08%</u>	<u>29,202</u>	<u>15.47%</u>	<u>146,742</u>	<u>13.38%</u>	<u>126,968</u>
Total Contribution	20.73%	\$196,676	4.85%	\$46,041	25.58%	\$242,717	23.65%	\$224,431

\* Amounts are in thousands and are based on the December 31, 2014 annual payroll (also in thousands) shown on the following page.



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

**CHART 13 (continued)**

**Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)**

**Payroll Breakdown**

	<u>County Only</u>	<u>AHS, Court &amp; First 5</u>	<u>Other Districts</u>	<u>Total</u>
General Tier 1	\$ 19,008	\$ 5,576	\$ 4,576	\$ 29,160
General Tier 2	435,021	238,205	285	673,511
General Tier 3			3,154	3,154
General Tier 4 (non-LARPD)	58,718	35,093	196	94,007
General Tier 4 (LARPD Only)			392	392
Safety Tier 1	1,636			1,636
Safety Tier 2	125,221			125,221
Safety Tier 2C	3,398			3,398
Safety Tier 2D	9,617			9,617
Safety Tier 4	8,752			8,752
<b>Total</b>	<b>\$ 661,371</b>	<b>\$ 278,874</b>	<b>\$ 8,603</b>	<b>\$ 948,848</b>

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

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**CHART 14**

**Breakdown of Employer Contribution Rate by Types of Benefit (For information purposes only)**

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A breakdown of the approximate portion of the employer contribution rate by the various types of benefit is as follows:

	<b>General</b>	<b>Safety</b>
Service and non-service connected disability benefits	9% <sup>(1)</sup>	20%
Service retirement and other benefits	<u>91%</u>	<u>80%</u>
	100%	100%

<sup>(1)</sup> As part of the changes in the non-economic actuarial assumptions in this valuation, disability rates for General members were decreased for most ages, and the proportion of General members assumed to retire under service connected disability (as opposed to non-service connected disability) was decreased from 70% to 60%. These changes had the effect of reducing the relative value of disability benefits from 11% of total benefits in the prior year to 9% of total benefits this year, and is primarily the reason behind the decrease in the employer normal cost rates for both General Tier 1 and Tier 2 members after the changes in the economic and non-economic assumptions.

*Note: In developing these percentages, we made the simplifying assumption that the liability for active and inactive members (including members who have already retired) can be approximated by the proportion of the normal cost required to fund disability and non-disability benefits.*

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

The employer 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 Employer Contribution

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

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

#### CHART 15

#### Reconciliation of Recommended Employer Contribution from December 31, 2013 to December 31, 2014 (Dollars in Thousands)

	Contribution Rate	Estimated Amount*
Recommended Contribution Rate as of December 31, 2013	23.65%	\$224,431
Effect of actuarial experience during 2014		
1. Effect of investment gain	-1.10%	-\$10,432
2. Effect of lower than expected salary increases for actives	-0.28%	-2,657
3. Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	0.05%	474
4. Net effect of other experience (gain)/loss (including scheduled delay in implementing contribution rates after date of valuation)	-0.18%	-1,739
5. Effect of change in assumptions	3.44%	32,640
Subtotal	1.93%	\$18,286
Recommended Contribution Rate as of December 31, 2014	25.58%	\$242,717

\* Based on December 31, 2014 projected compensation.

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

The member 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 Member Contribution Rate**

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

**CHART 16**  
**Reconciliation of Recommended Member Contribution from December 31, 2013 to December 31, 2014**  
**(Dollar Amounts in Thousands)**

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

	Contribution Rate	Estimated Amount*
Average Contribution Rate as of December 31, 2013	8.59%	\$81,543
1. Effect of change in membership demographics	-0.01%	-\$126
2. Effect of change in assumptions	0.17%	1,631
Subtotal	0.16%	\$1,505
Average Contribution Rate as of December 31, 2014	8.75%	\$83,048

\* Based on December 31, 2014 projected compensation.

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

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**E. FUNDED RATIO**

A critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other factors.

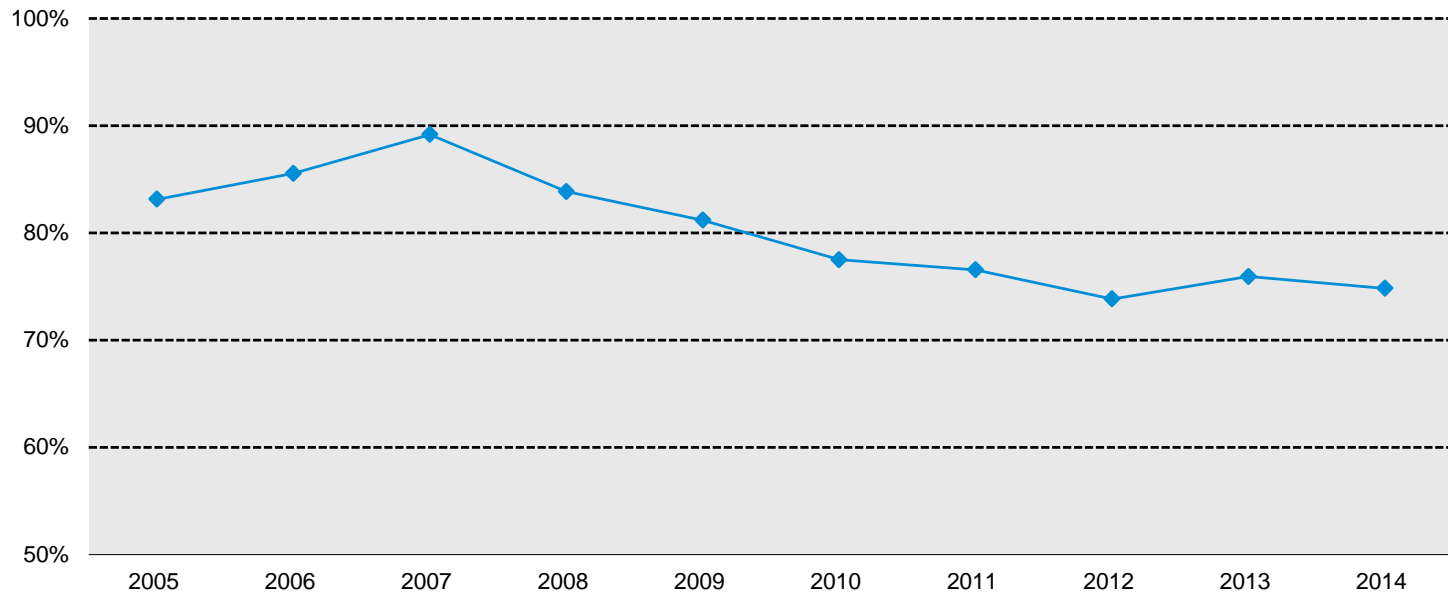
The chart below depicts a history of the funded ratio for this plan.

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**CHART 17**

**Funded Ratio for Plan Years Ending December, 31 2005 – 2014**

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

**F. VOLATILITY RATIOS**

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

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

For ACERA, the current AVR is about 6.1. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.1% of one-year's payroll. Since ACERA amortizes actuarial gains and losses over a 20-year period, there would be a 0.4% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

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

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

For ACERA, the current LVR is about 8.0. This is about 29% 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 – 2013**

Year Ended December 31	Asset Volatility Ratio <sup>(1)</sup>	Liability Volatility Ratio
2009	4.5	6.7
2010	5.0	6.9
2011	4.9	7.1
2012	5.5	7.3
2013	6.1	7.5
2014	6.1	8.0

<sup>(1)</sup> Prior to the December 31, 2013 valuation, the Asset Volatility Ratio was calculated using the end-of-year Valuation Value of Assets plus any deferred market gains. Beginning with the December 31, 2013 valuation, the adjusted Valuation Value of Assets for this purpose includes only **one-half** of any deferred market gains.

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

**EXHIBIT A**

**Table of Plan Coverage**

**i. General Tier 1**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	332	398	-16.6%
Average age	58.4	58.0	N/A
Average service	28.2	27.9	N/A
Projected total compensation	\$29,159,913	\$34,181,263	-14.7%
Projected average compensation	\$87,831	\$85,883	2.3%
Member account balances	\$107,321,202	\$116,090,102	-7.6%
Total active vested members	323	382	-15.4%
<b>Vested terminated members</b>			
Number	93	103	-9.7%
Average age	59.2	59.0	N/A
<b>Retired members</b>			
Number in pay status	3,506	3,572	-1.8%
Average age	74.8	74.5	N/A
Average monthly benefit <sup>(1)</sup>	\$4,083	\$3,917	4.2%
<b>Disabled members</b>			
Number in pay status	187	191	-2.1%
Average age	71.6	70.9	N/A
Average monthly benefit <sup>(1)</sup>	\$2,747	\$2,680	2.5%
<b>Beneficiaries</b>			
Number in pay status	758	766	-1.0%
Average age	79.0	78.8	N/A
Average monthly benefit <sup>(1)</sup>	\$1,868	\$1,746	7.0%

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the General Tier 1 service retirees and disabled retirees was 59.2 and 52.0, respectively.

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

**EXHIBIT A**

**Table of Plan Coverage**

**ii. General Tier 2**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	7,871	8,330	-5.5%
Average age	49.1	48.4	N/A
Average service	12.6	11.7	N/A
Projected total compensation	\$673,510,928	\$691,353,368	-2.6%
Projected average compensation	\$85,569	\$82,996	3.1%
Member account balances	\$644,974,784	\$585,191,210	10.2%
Total active vested members	6,451	6,550	-1.5%
<b>Vested terminated members</b>			
Number	1,649	1,614	2.2%
Average age	48.9	48.7	N/A
<b>Retired members</b>			
Number in pay status	2,207	1,967	12.2%
Average age	67.9	67.6	N/A
Average monthly benefit <sup>(1)</sup>	\$2,264	\$2,145	5.5%
<b>Disabled members</b>			
Number in pay status	410	400	2.5%
Average age	62.2	61.4	N/A
Average monthly benefit <sup>(1)</sup>	\$2,273	\$2,225	2.2%
<b>Beneficiaries</b>			
Number in pay status	187	168	11.3%
Average age	63.8	62.4	N/A
Average monthly benefit <sup>(1)</sup>	\$1,244	\$1,194	4.2%

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the General Tier 2 service retirees and disabled retirees was 61.9 and 50.4, respectively.



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

**EXHIBIT A**

**Table of Plan Coverage**

**iii. General Tier 3**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	45	48	-6.3%
Average age	51.5	51.0	N/A
Average service	13.1	12.3	N/A
Projected total compensation	\$3,154,168	\$3,198,380	-1.4%
Projected average compensation	\$70,093	\$66,633	5.2%
Member account balances	\$5,714,322	\$5,143,124	11.1%
Total active vested members	36	38	-5.3%
<b>Vested terminated members</b>			
Number	8	6	33.3%
Average age	47.6	46.9	N/A
<b>Retired members</b>			
Number in pay status	14	12	16.7%
Average age	62.9	62.3	N/A
Average monthly benefit <sup>(1)</sup>	\$4,714	\$4,974	-5.2%
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	1	1	0.0%
Average age	51.8	50.8	N/A
Average monthly benefit <sup>(1)</sup>	\$502	\$489	2.7%

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the General Tier 3 service retirees was 59.0.

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

**EXHIBIT A**

**Table of Plan Coverage**

**iv. General Tier 4**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	1,369	709	93.1%
Average age	38.6	37.7	N/A
Average service	1.0	0.6	N/A
Projected total compensation	\$94,399,512 <sup>(1)</sup>	\$43,698,125	116.0%
Projected average compensation	\$68,955	\$61,633	11.9%
Member account balances	\$6,918,336	\$1,748,605	295.6%
Total active vested members	11	6	83.3%
<b>Vested terminated members</b>			
Number	82	26	215.4%
Average age	39.5	42.1	N/A
<b>Retired members</b>			
Number in pay status	1	0	N/A
Average age	63.9	N/A	N/A
Average monthly benefit <sup>(2)</sup>	\$4,634	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Projected compensation for 2015 has been limited. 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 120% of \$117,020, or \$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)).

<sup>(2)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the General Tier 4 service retirees was 63.4. For all the General Tiers combined, the average age at retirement for the service retirees and disabled retirees was 60.3 and 50.9, respectively.

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

**EXHIBIT A**

**Table of Plan Coverage**

**v. Safety Tier 1**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	10	10	0.0%
Average age	59.7	58.7	N/A
Average service	20.2	19.3	N/A
Projected total compensation	\$1,636,094	\$1,586,332	3.1%
Projected average compensation	\$163,609	\$158,633	3.1%
Member account balances	\$4,822,182	\$4,167,493	15.7%
Total active vested members	9	9	0.0%
<b>Vested terminated members</b>			
Number	15	16	-6.3%
Average age	55.3	54.0	N/A
<b>Retired members</b>			
Number in pay status	667	677	-1.5%
Average age	69.1	68.3	N/A
Average monthly benefit <sup>(1)</sup>	\$7,279	\$7,080	2.8%
<b>Disabled members</b>			
Number in pay status	104	105	-1.0%
Average age	66.5	66.0	N/A
Average monthly benefit <sup>(1)</sup>	\$5,226	\$4,981	4.9%
<b>Beneficiaries</b>			
Number in pay status	167	167	0.0%
Average age	72.3	71.6	N/A
Average monthly benefit <sup>(1)</sup>	\$2,814	\$2,727	3.2%

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the Safety Tier 1 service retirees and disabled retirees was 54.9 and 48.7, respectively.

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

**EXHIBIT A**

**Table of Plan Coverage**

**vi. Safety Tier 2**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	1,153	1,229	-6.2%
Average age	43.9	43.3	N/A
Average service	13.2	12.5	N/A
Projected total compensation	\$125,221,118	\$129,616,788	-3.4%
Projected average compensation	\$108,605	\$105,465	3.0%
Member account balances	\$218,749,787	\$200,765,483	9.0%
Total active vested members	1,139	1,181	-3.6%
<b>Vested terminated members</b>			
Number	139	133	4.5%
Average age	45.3	45.4	N/A
<b>Retired members</b>			
Number in pay status	412	365	12.9%
Average age	60.9	60.6	N/A
Average monthly benefit <sup>(1)</sup>	\$5,464	\$5,328	2.6%
<b>Disabled members</b>			
Number in pay status	135	122	10.7%
Average age	56.5	56.1	N/A
Average monthly benefit <sup>(1)</sup>	\$4,138	\$3,766	9.9%
<b>Beneficiaries</b>			
Number in pay status	57	53	7.5%
Average age	55.2	54.4	N/A
Average monthly benefit <sup>(1)</sup>	\$2,179	\$1,927	13.1%

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2014 actuarial valuation, the average age at retirement for the Safety Tier 2 service retirees and disabled retirees was 55.9 and 46.8, respectively.

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

**EXHIBIT A**

**Table of Plan Coverage**

**vii. Safety Tier 2C**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	34	35	-2.9%
Average age	40.3	39.8	N/A
Average service	4.0	3.0	N/A
Projected total compensation	\$3,398,028	\$3,309,039	2.7%
Projected average compensation	\$99,942	\$94,544	5.7%
Member account balances	\$1,192,935	\$803,550	48.5%
Total active vested members	6	4	50.0%
<b>Vested terminated members</b>			
Number	3	2	50.0%
Average age	37.1	41.4	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

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

**EXHIBIT A**

**Table of Plan Coverage**

**viii. Safety Tier 2D**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	105	86	22.1%
Average age	35.9	33.9	N/A
Average service	4.3	3.0	N/A
Projected total compensation	\$9,616,618	\$7,143,083	34.6%
Projected average compensation	\$91,587	\$83,059	10.3%
Member account balances	\$4,158,185	\$2,174,413	91.2%
Total active vested members	24	15	60.0%
<b>Vested terminated members</b>			
Number	4	1	300.0%
Average age	33.9	26.0	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A

<sup>(1)</sup> Excludes supplemental benefits paid from SRBR.

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

**EXHIBIT A**

**Table of Plan Coverage**

**ix. Safety Tier 4**

<b>Category</b>	<b>Year Ended December 31</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation</b>			
Number	106	32	231.3%
Average age	35.3	38.8	N/A
Average service	1.1	0.4	N/A
Projected total compensation	\$8,751,751 <sup>(1)</sup>	\$2,717,993	222.0%
Projected average compensation	\$82,564	\$84,937	-2.8%
Member account balances	\$1,018,022	\$111,940	809.4%
Total active vested members	0	0	N/A
<b>Vested terminated members</b>			
Number	2	1	100.0%
Average age	28.6	30.6	N/A
<b>Retired members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Disabled members</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit <sup>(2)</sup>	N/A	N/A	N/A

<sup>(1)</sup> *Projected compensation for 2015 has been limited. 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 120% of \$117,020, or \$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)).*

<sup>(2)</sup> *Excludes supplemental benefits paid from SRBR.*

Notes: For all the Safety Tiers combined, the average age at retirement for the service retirees and disabled retirees was 55.3 and 47.6, respectively.

For all the General and Safety Tiers combined, the average age at retirement for the service retirees and disabled retirees was 59.5 and 50.0, respectively.

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

**EXHIBIT B**

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

**i. General Tier 1**

Age	Total	Years of Service								
		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
25 - 29	1	1	--	--	--	--	--	--	--	--
	\$52,224	\$52,224	--	--	--	--	--	--	--	--
30 - 34	2	--	2	--	--	--	--	--	--	--
	60,136	--	\$60,136	--	--	--	--	--	--	--
35 - 39	6	2	3	1	--	--	--	--	--	--
	61,591	57,278	57,876	\$81,365	--	--	--	--	--	--
40 - 44	5	1	2	2	--	--	--	--	--	--
	65,112	52,383	71,508	65,080	--	--	--	--	--	--
45 - 49	12	1	4	5	2	--	--	--	--	--
	66,892	58,101	67,327	69,619	\$63,599	--	--	--	--	--
50 - 54	40	--	--	5	2	1	10	19	3	--
	72,022	--	--	65,520	66,983	\$52,624	\$75,236	\$73,248	\$74,209	--
55 - 59	130	3	4	3	5	11	21	64	15	4
	89,546	76,686	66,544	106,526	90,949	69,719	90,267	93,281	92,899	\$86,098
60 - 64	106	1	5	3	4	8	13	48	19	5
	95,230	95,844	83,403	69,089	80,152	129,315	86,309	92,924	90,248	144,406
65 - 69	22	--	2	3	3	--	3	3	2	6
	91,653	--	91,827	96,100	100,127	--	67,253	84,103	123,025	90,652
70 & over	8	--	--	--	--	--	--	1	1	6
	107,131	--	--	--	--	--	--	61,342	50,501	124,201
<b>Total</b>	<b>332</b>	<b>9</b>	<b>22</b>	<b>22</b>	<b>16</b>	<b>20</b>	<b>47</b>	<b>135</b>	<b>40</b>	<b>21</b>
	<b>\$87,831</b>	<b>\$67,018</b>	<b>\$71,503</b>	<b>\$77,380</b>	<b>\$83,556</b>	<b>\$92,703</b>	<b>\$84,505</b>	<b>\$89,894</b>	<b>\$90,684</b>	<b>\$112,169</b>

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*



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

**EXHIBIT B**

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

**ii. General Tier 2**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & over
Under 25	7	7	--	--	--	--	--	--
	\$51,170	\$51,170	--	--	--	--	--	--
25 - 29	214	171	43	--	--	--	--	--
	65,495	67,327	\$58,207	--	--	--	--	--
30 - 34	627	268	331	28	--	--	--	--
	77,134	80,201	75,663	\$65,172	--	--	--	--
35 - 39	910	257	392	221	40	--	--	--
	81,447	84,131	82,933	77,829	\$69,634	--	--	--
40 - 44	1,072	181	341	362	155	31	2	--
	87,094	91,077	88,411	86,485	83,322	\$77,156	\$58,835	--
45 - 49	1,177	171	267	315	214	166	43	1
	87,347	93,220	85,952	86,777	89,077	84,402	79,550	\$89,264
50 - 54	1,344	152	241	323	210	203	198	17
	87,838	94,873	89,873	81,218	84,731	89,385	93,481	76,083
55 - 59	1,223	126	212	267	203	221	170	24
	89,757	106,768	82,397	85,176	88,530	90,355	92,068	104,959
60 - 64	896	66	161	184	165	141	151	28
	87,377	98,910	81,021	81,490	82,766	89,970	93,133	118,496
65 - 69	316	21	73	80	49	48	37	8
	87,353	108,781	81,803	79,070	85,868	87,260	103,764	98,318
70 & over	85	11	14	29	11	16	3	1
	79,562	100,618	76,835	77,760	72,842	73,131	77,793	120,471
Total	7,871	1,431	2,075	1,809	1,047	826	604	79
	\$85,569	\$87,495	\$83,072	\$83,039	\$85,189	\$87,846	\$92,442	\$102,868

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**iii. General Tier 3**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--
30 - 34	1	--	1	--	--	--	--	--
	\$67,463	--	\$67,463	--	--	--	--	--
35 - 39	4	1	2	--	1	--	--	--
	54,695	\$49,991	55,649	--	\$57,491	--	--	--
40 - 44	4	2	--	--	2	--	--	--
	63,164	50,642	--	--	75,686	--	--	--
45 - 49	8	1	3	2	1	1	--	--
	62,782	57,205	70,096	\$53,921	61,918	\$65,005	--	--
50 - 54	12	2	3	3	1	2	1	--
	73,109	78,254	72,893	69,274	81,163	72,413	\$68,308	--
55 - 59	9	2	1	1	3	1	1	--
	74,231	77,599	98,912	57,013	75,890	54,263	75,027	--
60 - 64	7	1	--	3	--	--	1	2
	81,088	96,691	--	88,967	--	--	79,809	\$62,108
65 - 69	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--
Total	45	9	10	9	8	4	3	2
	\$70,093	\$68,542	\$70,664	\$71,064	\$72,452	\$66,024	\$74,381	\$62,108

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**iv. General Tier 4**

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	59	59	--	--	--	--	--	--
	\$52,057	\$52,057	--	--	--	--	--	--
25 - 29	276	276	--	--	--	--	--	--
	61,182	61,182	--	--	--	--	--	--
30 - 34	303	303	--	--	--	--	--	--
	64,853	64,853	--	--	--	--	--	--
35 - 39	217	216	1	--	--	--	--	--
	71,821	71,758	\$85,432	--	--	--	--	--
40 - 44	166	166	--	--	--	--	--	--
	76,397	76,397	--	--	--	--	--	--
45 - 49	109	106	1	2	--	--	--	--
	73,822	72,799	95,845	\$117,020	--	--	--	--
50 - 54	97	95	2	--	--	--	--	--
	77,057	76,765	90,906	--	--	--	--	--
55 - 59	76	74	1	--	--	1	--	--
	71,110	71,073	90,095	--	--	\$54,868	--	--
60 - 64	54	54	--	--	--	--	--	--
	85,652	85,652	--	--	--	--	--	--
65 - 69	9	9	--	--	--	--	--	--
	75,456	75,456	--	--	--	--	--	--
70 & over	3	3	--	--	--	--	--	--
	98,317	98,317	--	--	--	--	--	--
Total	1,369	1,361	5	2	--	1	--	--
	\$68,955	\$68,815	\$90,637	\$117,020	--	\$54,868	--	--

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**v. Safety Tier 1**

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	--	--	--	--	--	--	--	--
25 - 29	--	--	--	--	--	--	--	--
30 - 34	--	--	--	--	--	--	--	--
35 - 39	--	--	--	--	--	--	--	--
40 - 44	--	--	--	--	--	--	--	--
45 - 49	--	--	--	--	--	--	--	--
50 - 54	2 \$150,354	--	--	--	--	1 \$113,981	1 \$186,726	--
55 - 59	3 213,942	1 \$227,541	--	--	--	--	1 103,102	1 \$311,182
60 - 64	4 145,612	--	--	3 \$159,333	--	1 104,450	--	--
65 - 69	1 111,114	--	--	--	--	--	1 111,114	--
70 & over	--	--	--	--	--	--	--	--
Total	10 \$163,609	1 \$227,541	--	3 \$159,333	--	2 \$109,215	3 \$133,647	1 \$311,182

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**vi. Safety Tier 2**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	--	--	--	--	--	--	--	--
25 - 29	23	--	23	--	--	--	--	--
	\$105,364	--	\$105,364	--	--	--	--	--
30 - 34	151	4	130	16	1	--	--	--
	104,043	\$95,886	102,859	\$114,333	\$125,869	--	--	--
35 - 39	198	--	112	67	19	--	--	--
	108,228	--	102,338	112,466	128,009	--	--	--
40 - 44	293	2	84	103	100	4	--	--
	108,077	102,747	98,938	106,764	115,914	\$140,577	--	--
45 - 49	245	2	35	70	94	27	17	--
	108,786	104,601	101,531	104,936	107,433	120,149	\$129,510	--
50 - 54	137	1	23	28	36	8	39	2
	113,873	133,015	99,716	109,397	111,924	116,983	124,798	\$139,360
55 - 59	68	5	20	13	12	7	9	2
	109,925	125,885	115,564	104,826	102,350	120,994	100,013	98,109
60 - 64	24	--	9	6	7	1	1	--
	107,900	--	124,282	114,779	88,426	92,589	70,800	--
65 - 69	12	--	--	4	2	5	1	--
	109,764	--	--	111,440	140,010	99,565	93,569	--
70 & over	2	--	1	--	1	--	--	--
	178,251	--	170,052	--	186,451	--	--	--
Total	1,153	14	437	307	272	52	67	4
	\$108,605	\$111,477	\$103,008	\$108,362	\$112,467	\$118,838	\$121,392	\$118,735

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**vii. Safety Tier 2C**

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	--	--	--	--	--	--	--	--
25 - 29	8	7	1	--	--	--	--	--
	\$91,418	\$94,925	\$66,871	--	--	--	--	--
30 - 34	4	2	2	--	--	--	--	--
	72,619	73,920	71,319	--	--	--	--	--
35 - 39	9	9	--	--	--	--	--	--
	103,156	103,156	--	--	--	--	--	--
40 - 44	3	2	1	--	--	--	--	--
	95,119	99,210	86,938	--	--	--	--	--
45 - 49	1	--	1	--	--	--	--	--
	72,788	--	72,788	--	--	--	--	--
50 - 54	4	4	--	--	--	--	--	--
	119,882	119,882	--	--	--	--	--	--
55 - 59	5	4	--	1	--	--	--	--
	122,025	133,235	--	\$77,184	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--
Total	34	28	5	1	--	--	--	--
	\$99,942	\$105,415	\$73,847	\$77,184	--	--	--	--

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**viii. Safety Tier 2D**

Age	Years of Service							
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	1	1	--	--	--	--	--	--
	\$89,935	\$89,935	--	--	--	--	--	--
25 - 29	33	32	1	--	--	--	--	--
	91,502	91,811	\$81,607	--	--	--	--	--
30 - 34	23	15	7	1	--	--	--	--
	84,384	88,913	77,199	\$66,742	--	--	--	--
35 - 39	17	14	2	1	--	--	--	--
	92,445	93,116	96,505	74,927	--	--	--	--
40 - 44	17	9	4	4	--	--	--	--
	87,596	95,019	85,584	72,908	--	--	--	--
45 - 49	4	2	1	--	--	1	--	--
	101,825	120,293	72,439	--	--	\$94,276	--	--
50 - 54	6	5	1	--	--	--	--	--
	114,928	111,282	133,153	--	--	--	--	--
55 - 59	4	3	--	1	--	--	--	--
	102,182	112,761	--	70,448	--	--	--	--
60 - 64	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	105	81	16	7	--	1	--	--
	\$91,587	\$94,514	\$85,184	\$71,964	--	\$94,276	--	--

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*

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

**EXHIBIT B**

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

**ix. Safety Tier 4**

Age	Total	Years of Service						
		0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25	12	12	--	--	--	--	--	--
	\$72,134	\$72,134	--	--	--	--	--	--
25 - 29	30	30	--	--	--	--	--	--
	73,000	73,000	--	--	--	--	--	--
30 - 34	27	27	--	--	--	--	--	--
	75,285	75,285	--	--	--	--	--	--
35 - 39	9	9	--	--	--	--	--	--
	70,889	70,889	--	--	--	--	--	--
40 - 44	4	4	--	--	--	--	--	--
	79,652	79,652	--	--	--	--	--	--
45 - 49	5	5	--	--	--	--	--	--
	117,449	117,449	--	--	--	--	--	--
50 - 54	15	15	--	--	--	--	--	--
	114,692	114,692	--	--	--	--	--	--
55 - 59	3	3	--	--	--	--	--	--
	113,073	113,073	--	--	--	--	--	--
60 - 64	1	1	--	--	--	--	--	--
	60,022	60,022	--	--	--	--	--	--
65 - 69	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
70 & over	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--
Total	106	106	--	--	--	--	--	--
	\$82,564	\$82,564	--	--	--	--	--	--

*Note: Age and years of service were projected from November 30, 2014 to December 31, 2014.*



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

**EXHIBIT C**

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

	<b>Active Members</b>	<b>Vested Terminated Members</b>	<b>Pensioners</b>	<b>Disableds</b>	<b>Beneficiaries</b>	<b>Total</b>
Number as of December 31, 2013	10,877	1,902	6,593	818	1,155	21,345
New members	860	0	0	0	77	937
Terminations – with vested rights	-254	254	0	0	0	0
Contributions refunds	-115	-82	0	0	0	-197
Retirements	-332	-70	402	0	0	0
New disabilities	-15	-3	-14	32	0	0
Return to work	20	-20	0	0	0	0
Died with or without beneficiary	-16	-11	-175	-14	-55	-271
Data adjustments	0	25*	1	0	-7	19
Number as of December 31, 2014	11,025	1,995	6,807	836	1,170	21,833

\* *Out of the 25 data adjustments, 20 were for members who were hired and terminated employment after November 30, 2013 (i.e., the census data collection date for last year's valuation).*

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

**EXHIBIT D**

**Summary Statement of Income and Expenses on an Actuarial Value Basis**

	Year Ended December 31,	
	2014	2013
<b>Contribution income:</b>		
Employer contributions	\$213,254,775	\$191,180,146
Employee contributions	<u>79,714,187</u>	<u>76,230,024</u>
Contribution income	\$292,968,962	\$267,410,171
<b>Investment income:</b>		
Interest, dividends and other income	\$132,932,577	\$117,773,112
Adjustment toward market value	\$639,140,739	467,702,142
Less investment and administrative fees	<u>-62,058,039</u>	<u>-52,226,869</u>
Net investment income	<u>\$710,015,277</u>	<u>\$533,248,385</u>
<b>Total income available for benefits</b>	<b>\$1,002,984,239</b>	<b>\$800,658,556</b>
<b>Less benefit payments:</b>		
Service retirement	-\$366,984,137	-\$349,019,309
Death payments	-2,403,288	-2,532,870
Supplemental cost of living	-1,849,140	-2,067,219
Members refunds	-7,452,927	-6,318,512
Health insurance subsidies	<u>-32,590,183</u>	<u>-30,569,194</u>
Benefit payments	-\$411,279,675	-\$390,507,104
<b>Change in reserve for future benefits</b>	<b>\$591,704,564</b>	<b>\$410,151,452</b>

*Note: Results may not total properly due to rounding.*

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

**EXHIBIT E**

**Summary Statement of Assets**

ASSETS	Year Ended December 31,	
	2014	2013
Cash	\$400,037	\$839,239
Securities Lending Collateral	404,621,066	337,579,008
<b>Accounts Receivable:</b>		
Contributions	\$19,437,641	\$18,249,841
Investment Receivables	17,369,906	16,048,484
Investments Sold	5,142,576	9,045,114
Foreign Exchange Contracts	2,392,650	1,856,883
Others	<u>314,856</u>	<u>271,071</u>
Total Accounts Receivable	\$44,657,629	\$45,471,393
Prepaid Expenses	660,117	607,128
<b>Investments:</b>		
Short-Term Investments	\$130,527,799	\$132,890,323
Equities	4,270,160,118	4,398,440,617
Fixed Income Investments	1,044,088,459	961,109,507
Real Estate	443,475,497	421,526,894
Capital Assets	3,369,866	4,524,122
Private Equity and Alternative Investments	<u>887,254,522</u>	<u>698,026,880</u>
Total Investments at Market Value	<u>\$6,778,876,262</u>	<u>\$6,616,518,343</u>
<b>Total Assets</b>	<b>\$7,229,215,111</b>	<b>\$7,001,015,111</b>

*Note: Results may not total properly due to rounding.*

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

**EXHIBIT E (Continued)**

**Summary Statement of Assets**

<b>LIABILITIES</b>	<b>Year Ended December 31,</b>	
	<b>2014</b>	<b>2013</b>
<b>Less Accounts Payable:</b>		
Securities Lending & Investments Purchased	-\$426,050,220	-\$345,096,556
Investment-Related Payables	-9,310,532	-8,516,145
Futures Contracts & Equity Swaps	-1,407,552	-1,883,725
Foreign Exchange Contracts	-361,037	-541,919
Accrued Administration Expense	-1,548,238	-1,987,132
Members Benefits & Refunds, and Retirement Payroll Deductions Payable	<u>-2,524,526</u>	<u>-2,694,157</u>
Total Accounts Payable	-\$441,202,105	-\$360,719,633
<b>NET ASSETS</b>		
<b>Net Assets at Market Value</b>	<u>\$6,788,013,006</u>	<u>\$6,640,295,478</u>
<b>Net Assets at Actuarial Value</b>	<u>\$6,545,159,225</u>	<u>\$5,953,454,661</u>
<b>Net Assets at Valuation Value</b>	<u>\$5,681,097,135</u>	<u>\$5,210,943,750</u>

*Note: Results may not total properly due to rounding.*

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

**EXHIBIT F**

**Actuarial Balance Sheet**

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

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

**Actuarial Balance Sheet (Dollar Amounts in Thousands)**

<b>Assets</b>	<b>Basic</b>	<b>COLA</b>	<b>Total</b>
1. Total valuation assets	\$3,827,678	\$1,853,419	\$5,681,097
2. Present value of future contributions by members	\$556,383	\$127,964	\$684,347
3. Present value of future employer contributions for:			
a. entry age normal cost	\$579,478	\$121,129	\$700,607
b. unfunded actuarial accrued liability	\$1,525,450	\$385,525	\$1,910,975
4. Total current and future assets	\$6,488,989	\$2,488,037	\$8,977,026
<b>Liabilities</b>			
5. Present value of benefits already granted	\$2,923,962	\$1,683,123	\$4,607,085
6. Present value of benefits to be granted to present non-retired members	\$3,565,027	\$804,914	\$4,369,941
7. Total liabilities	\$6,488,989	\$2,488,037	\$8,977,026

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

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**EXHIBIT G**

**Summary of Reported Asset Information as of December 31, 2014**

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	<b>Reserves</b>
<b>Used in Development of Valuation Value of Assets</b>	
Members deposit-basic	\$1,004,507,906
Members cost-of-living	224,361,620
Employer advance (before transfer from SRBR to employer advance)	560,805,351
Pension reserve-current	1,424,408,399
Pension reserve-prior	3,885,807
Annuity reserve	823,541,862
Cost-of-living reserve	1,629,057,110
Survivor death benefit	5,313,726
SRBR transfer to employer advance	5,215,355*
Reserve for interest fluctuations (contingency reserve), if negative	0
Subtotal	<u>\$5,681,097,135</u>
<b>Not Used in Development of Valuation Value of Assets</b>	
401(h) account	\$7,158,417
Supplemental retirees benefit reserve (before transfer from SRBR to employer advance)	789,826,877
Reserve for interest fluctuations (contingency reserve), if positive	72,292,151
Market stabilization reserve	242,853,782
SRBR transfer to employer advance	-5,215,355*
Subtotal	<u>\$1,106,915,871</u>
Total	<u>\$6,788,013,006</u>

\* Estimate provided by ACERA.

Note: Results may not total properly due to rounding.

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

**EXHIBIT H**

**Development of Unfunded Actuarial Accrued Liability as of December 31, 2014**

	<b>(Dollar Amounts in Thousands)</b>
1. Unfunded actuarial accrued liability at beginning of year	\$1,650,743
2. Total Normal Cost at middle of year	173,515
3. Actual employer and member contributions	-292,969
4. Interest (whole year on (1) plus half year on (2) + (3))	<u>124,099</u>
5. Expected unfunded actuarial accrued liability at end of year	\$1,655,388
6. Actuarial (gain)/loss due to all changes*:	
a. Gain from investments as recognized on December 31, 2014	-\$145,395
b. Gain from lower than expected salary increases for actives	-37,205
c. Other experience gains	<u>-21,495</u>
d. Subtotal**	-\$204,095
e. Change in actuarial assumptions	<u>\$459,682</u>
f. Subtotal	\$255,587
7. Actual unfunded actuarial accrued liability at end of year (5) + (6f)	\$1,910,975

\* The "net gain from other experience" of \$(58,700) from Chart 9 is equal to the sum of items 6b and 6c.

\*\* Excludes net loss of about \$3.0 million from lower than expected payroll used in determining the actual UAAL contributions for 2014. That loss is already included in the development of item 5.

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

**EXHIBIT I**

**Table of Amortization Bases (Dollar Amounts in Thousands)**

Type	Date Established	Initial Years	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment*
<b>General (All, Excluding LARPD Tier 3 and Tier 4 )</b>						
Combined Bases	12/31/2011	21	\$885,036	\$894,927	18	\$69,266
Experience Loss	12/31/2012	20	165,501	166,316	18	12,873
Experience Gain	12/31/2013	20	-75,003	-75,288	19	-5,611
Experience Gain	12/31/2014	20	-156,281	-156,281	20	-11,243
Change in Assumptions	12/31/2014	20	350,827	<u>350,827</u>	20	<u>25,240</u>
Total				\$1,180,501		\$90,525
<b>General (LARPD Tier 3 and Tier 4 Only)**</b>						
Combined Bases	12/31/2011	21	\$7,060	\$7,139	18	\$553
Experience Loss	12/31/2012	20	370	372	18	29
Experience Gain	12/31/2013	20	-534	-536	19	-40
Experience Gain	12/31/2014	20	-1,562	-1,562	20	-112
Change in Assumptions	12/31/2014	20	1,303	<u>1,303</u>	20	<u>94</u>
Total				\$6,716		\$524
<b>General (All General Members Combined)</b>						
Combined Bases	12/31/2011	21	\$892,096	\$902,066	18	\$69,819
Experience Loss	12/31/2012	20	165,871	166,688	18	12,902
Experience Gain	12/31/2013	20	-75,537	-75,824	19	-5,651
Experience Gain	12/31/2014	20	-157,843	-157,843	20	-11,355
Change in Assumptions	12/31/2014	20	352,130	<u>352,130</u>	20	<u>25,334</u>
Total				\$1,187,217		\$91,049
<b>Safety</b>						
Combined Bases	12/31/2011	21	\$598,698	\$605,389	18	\$46,856
Experience Loss	12/31/2012	20	63,130	63,441	18	4,910
Experience Gain	12/31/2013	20	-9,350	-9,386	19	-699
Experience Gain	12/31/2014	20	-43,238	-43,238	20	-3,111
Change in Assumptions	12/31/2014	20	107,552	<u>107,552</u>	20	<u>7,738</u>
Total				\$723,758		\$55,694
<b>Total</b>						
Combined Bases	12/31/2011	21	\$1,490,794	\$1,507,455	18	\$116,675
Experience Loss	12/31/2012	20	229,001	230,129	18	17,812
Experience Gain	12/31/2013	20	-84,887	-85,210	19	-6,350
Experience Gain	12/31/2014	20	-201,081	-201,081	20	-14,466
Change in Assumptions	12/31/2014	20	459,682	<u>459,682</u>	20	<u>33,072</u>
Total				\$1,910,975		\$146,743

Note: The equivalent single amortization period is 18 years.



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

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#### EXHIBIT I

#### Table of Amortization Bases (Continued)

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\* *Level percentage of payroll.*

\*\* *When LARPD General Tier 3 was established in 2008, they were classified as a stand-alone group since they were the only employer with the higher 2.5% at 55 benefit (i.e., Section 31676.18), and the cost to upgrade the past service under that formula was only to be paid by LARPD. (reference: Segal's letter dated October 7, 2008). The initial UAAL rate for that group was based on an allocation of assets needed to maintain the total employer rate from the December 31, 2007 valuation before any benefit improvements for General Tier 3. The UAAL rate for LARPD General Tier 3 was then increased to reflect the benefit improvement. When LARPD General Tier 4 was later established in 2013, that tier was combined with LARPD General Tier 3 for purpose of determining their UAAL, in order to continue with the open-group level percentage of payroll approach for paying off the UAAL amount for General Tier 3 (that is now closed to new entrants because of CalPEPRA).*

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

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#### EXHIBIT J

#### Section 415 Limitations

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$210,000 for 2014 and 2015. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must generally be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Non-Tier 4 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.

Non-Tier 4 contributions rates determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

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

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**EXHIBIT K**

**Definitions of Pension Terms**

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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 net, in this case, of investment and administrative expenses.
- (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 (Overfunded) Actuarial Accrued Liability:**

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

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

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**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 capital gains and losses to avoid significant swings in the value of assets from one year to the next.

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

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### EXHIBIT I

#### Summary of Actuarial Valuation Results

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

1. Retired members as of the valuation date (including 1,170 beneficiaries in pay status)	8,813
2. Members inactive during year ended December 31, 2014 with vested rights	1,995
3. Members active during the year ended December 31, 2014	11,025

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

1. Normal cost	\$179,023
2. Present value of future benefits	8,977,026
3. Present value of future normal costs	1,384,954
4. Actuarial accrued liability*	7,592,072
Retired members and beneficiaries	\$4,607,085
Inactive members with vested rights	178,105
Active members	2,806,882
5. Valuation value of assets** (\$6,788,013 at market value as reported by Retirement Association)	5,681,097
6. Unfunded actuarial accrued liability	\$1,910,975

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\* Excludes liabilities held for SRBR and other non-valuation reserves.

\*\* Excludes Reserve for Interest Fluctuations (Contingency Reserve) if positive, Supplemental Retirees Benefit Reserve, and 401(h) Reserve.

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

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**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results**

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

	<b>Dollar Amount</b>	<b>% of Payroll</b>
1. Total normal cost	\$179,023	18.86%
2. Expected employee contributions	<u>-83,048</u>	<u>-8.75%</u>
3. Employer normal cost: (1) + (2)	\$95,975	10.11%
4. Amortization of unfunded actuarial accrued liability	<u>\$146,742</u>	<u>15.47%</u>
5. Total recommended average employer contribution: (3) + (4)	\$242,717	25.58%
6. Projected compensation	\$948,848	

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

**EXHIBIT II**

**History of Employer Contributions**

<b>Plan Year Ended December 31</b>	<b>Actuarially Determined Employer Contributions (ADEC)<sup>(1)</sup></b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2005	\$100,801,162	\$100,801,162	100.0%
2006	127,095,644	127,095,644	100.0%
2007	130,039,582	130,039,582	100.0%
2008	129,660,363	129,660,363	100.0%
2009	132,198,602	132,198,602	100.0%
2010	147,543,301	147,543,301	100.0%
2011	162,879,221	162,879,221	100.0%
2012	179,648,811	179,648,811	100.0%
2013	191,180,146	191,180,146	100.0%
2014	213,254,775	213,254,775	100.0%

<sup>(1)</sup> Prior to plan year ending December 31, 2014, this amount was reported as the Annual Required Contribution (ARC).

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

**EXHIBIT III**

**Schedule of Funding Progress (Dollar Amounts in Thousands)**

<b>Actuarial Valuation Date</b>	<b>Valuation Value of Assets<sup>(1)</sup> (a)</b>	<b>Actuarial Accrued Liability (AAL)<sup>(2)</sup> (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (%) (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll (%) [(b) - (a)] / (c)</b>
12/31/2005	\$3,781,843	\$4,548,213	\$766,370	83.2%	\$709,783	108.0%
12/31/2006	4,127,841 <sup>(3)</sup>	4,825,157	697,316	85.5	762,139	91.5
12/31/2007	4,560,213 <sup>(4)</sup>	5,112,403	552,190	89.2	793,558	69.6
12/31/2008	4,644,010 <sup>(5)</sup>	5,537,919	893,909	83.9	864,260	103.4
12/31/2009	4,789,000 <sup>(6)</sup>	5,899,331	1,110,331	81.2	882,606	125.8
12/31/2010	4,776,128 <sup>(7)</sup>	6,162,740	1,386,612	77.5	898,342	154.4
12/31/2011	4,868,689 <sup>(8)</sup>	6,359,483	1,490,794	76.6	892,489	167.0
12/31/2012	4,883,872 <sup>(9)</sup>	6,612,929	1,729,057	73.9	906,500	190.7
12/31/2013	5,210,944 <sup>(10)</sup>	6,861,687	1,650,743	75.9	916,803	180.1
12/31/2014	5,681,097 <sup>(11)</sup>	7,592,072	1,910,975	74.8	948,848	201.4

<sup>(1)</sup> Excludes assets for SRBR and other non-valuation reserves.

<sup>(2)</sup> Excludes liabilities for SRBR and other non-valuation reserves.

<sup>(3)</sup> Includes \$6,303,514 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2005 and 2006.

<sup>(4)</sup> Includes \$3,091,493 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2007.

<sup>(5)</sup> Includes \$4,149,463 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2008.

<sup>(6)</sup> Includes \$5,287,767 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2009.

<sup>(7)</sup> Includes \$4,500,000 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2010 (estimate, provided by ACERA).

<sup>(8)</sup> Includes \$4,411,206 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2011 (estimate, provided by ACERA).

<sup>(9)</sup> Includes \$7,370,466 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2012 (estimate, provided by ACERA).

<sup>(10)</sup> Includes \$6,993,032 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2013 (estimate, provided by ACERA).

<sup>(11)</sup> Includes \$5,215,355 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2014 (estimate, provided by ACERA).



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

**EXHIBIT IV**

**Supplementary Information Required by GASB**

<b>Valuation date</b>	December 31, 2014
<b>Actuarial cost method</b>	Entry Age Cost Method
<b>Amortization method</b>	Level percent of payroll (3.75% payroll growth assumed)
<b>Remaining amortization period</b>	Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011 (and 18 years remaining as of December 31, 2014). On or after January 1, 2012, any new UAAL resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.
<b>Asset valuation method</b>	The Actuarial Value of Assets is determined by phasing in any difference between actual and expected market return over 10 six-month interest crediting periods. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves.
<b>Actuarial assumptions:</b>	
Investment rate of return	7.60%
Inflation rate	3.25%
Real across-the-board salary increase	0.50%
Projected salary increases*	General: 4.15% to 7.45% and Safety: 4.45% to 10.45%
Cost of living adjustments	3.00% of Tier 1 and Tier 3 retirement income and 2.00% of Tier 2 and Tier 4 retirement income
<b>Plan membership:</b>	
Retired members and beneficiaries receiving benefits	8,813
Terminated members entitled to, but not yet receiving benefits	1,995
Active members	<u>11,025</u>
Total	21,833

\* Includes inflation at 3.25% plus real across-the-board salary increase of 0.50% plus merit and longevity increases. See Exhibit V for these increases.

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

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**EXHIBIT V**

**Actuarial Assumptions and Actuarial Cost Method**

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**Post-Retirement Mortality Rates**

*Healthy:*

For General members and all beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females.

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females.

*Disabled:*

For General members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward four years for females.

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward six years for males and set forward three years for females.

The mortality tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of the mortality experience in the December 1, 2010 - November 30, 2013 Actuarial Experience Study.

*Employee Contribution Rates:*

For General members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.

For Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.

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

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*Optional Forms of Benefit:*

*Service Retirement and  
All Beneficiaries*

General members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.

General beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 70% male and 30% female.

Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.

Safety beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 25% male and 75% female.

*Disability Retirement*

General members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward four years for females, weighted 30% male and 70% female.

Safety members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward six years for males and set forward three years for females, weighted 75% male and 25% female.

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

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**Termination Rates Before Retirement:**

Age	Rate (%) Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.07	0.04	0.07	0.04
40	0.10	0.06	0.10	0.06
45	0.13	0.10	0.14	0.09
50	0.19	0.15	0.20	0.14
55	0.30	0.22	0.34	0.21
60	0.53	0.37	0.59	0.33
65	0.90	0.68	1.00	0.60

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

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

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**Termination Rates Before Retirement (continued):**

<b>Age</b>	<b>Rate (%)</b>	
	<b>Disability</b>	
	<b>General<sup>(1)</sup></b>	<b>Safety<sup>(2)</sup></b>
20	0.00	0.00
25	0.01	0.03
30	0.03	0.23
35	0.08	0.41
40	0.13	0.48
45	0.21	0.65
50	0.31	1.35
55	0.38	1.90
60	0.43	2.15

<sup>(1)</sup> 60% of General disabilities are assumed to be service connected disabilities. The other 40% are assumed to be non-service connected disabilities.

<sup>(2)</sup> 100% of Safety disabilities are assumed to be service connected disabilities.

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

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**Termination Rates Before Retirement (continued):**

<b>Rate (%)</b>		
<b>Termination (&lt; 5 Years of Service)<sup>(1)</sup></b>		
<b>Years of Service</b>	<b>General</b>	<b>Safety</b>
0	10.00	5.00
1	9.00	4.00
2	7.00	3.00
3	6.00	2.00
4	5.00	1.00
<b>Termination (5+ Years of Service)<sup>(2)</sup></b>		
<b>Age</b>	<b>General</b>	<b>Safety</b>
20	5.00	2.00
25	5.00	2.00
30	5.00	1.70
35	4.40	1.20
40	3.40	1.00
45	2.70	1.00
50	2.50	1.00
55	2.50	1.00
60	2.50	0.40

<sup>(1)</sup> 60% of all terminated members will choose a refund of contributions and 40% will choose a deferred vested benefit.

<sup>(2)</sup> 40% of all terminated members will choose a refund of contributions and 60% will choose a deferred vested benefit. No termination is assumed after a member is eligible for retirement.

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

**Retirement Rates:**

Age	Rate (%)							
	General Tier 1	General Tier 2	General Tier 3	General Tier 4	Safety Tier 1 <sup>(1)</sup>	Safety Tier 2, 2D <sup>(1)</sup>	Safety Tier 2C <sup>(1)</sup>	Safety Tier 4
50	4.00	2.00	6.00	0.00	35.00	15.00	4.00	4.00
51	4.00	2.00	3.00	0.00	30.00	15.00	2.00	2.00
52	4.00	2.00	5.00	4.00	25.00	15.00	2.00	2.00
53	4.00	2.00	6.00	1.50	35.00	15.00	3.00	3.00
54	4.00	2.00	6.00	1.50	45.00	15.00	6.00	6.00
55	7.00	2.00	12.00	2.50	45.00	15.00	10.00	10.00
56	9.00	3.00	13.00	2.50	45.00	20.00	12.00	12.00
57	12.00	4.00	13.00	3.50	45.00	25.00	20.00	20.00
58	12.00	4.00	14.00	4.50	45.00	25.00	10.00	10.00
59	16.00	5.00	16.00	4.50	45.00	25.00	15.00	15.00
60	24.00	6.00	21.00	4.50	100.00	30.00	60.00	60.00
61	24.00	9.00	20.00	7.50	100.00	30.00	60.00	60.00
62	40.00	18.00	30.00	19.00	100.00	30.00	60.00	60.00
63	35.00	18.00	25.00	15.00	100.00	30.00	60.00	60.00
64	35.00	20.00	25.00	17.00	100.00	100.00	100.00	100.00
65	35.00	25.00	30.00	21.00	100.00	100.00	100.00	100.00
66	35.00	25.00	25.00	20.00	100.00	100.00	100.00	100.00
67	30.00	25.00	25.00	20.00	100.00	100.00	100.00	100.00
68	25.00	30.00	25.00	30.00	100.00	100.00	100.00	100.00
69	35.00	35.00	50.00	35.00	100.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

<sup>(1)</sup> Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

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

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

For deferred vested members, retirement age assumptions are as follows:

General Age:	60
Safety Age:	56

For future deferred vested members who terminate with less than five years of service and are not vested, we assume that they will retire at age 70 for both General and Safety if they decide to leave their contributions on deposit.

We assume that 30% of future General and 60% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocals, we assume 4.15% and 4.45% compensation increases per annum for General and Safety, respectively.

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**Future Benefit Accruals:**

1.0 year of service per year of employment plus 0.005 year of additional service to anticipate conversion of unused sick leave for each year of employment.

**Unknown Data for Members:**

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

**Inclusion of Deferred Vested Members:**

All deferred vested members are included in the valuation.

**Percent Married:**

70% of male members; 50% of female members.

**Age of Spouse:**

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

**Net Investment Return:**

7.60%, net of administration and investment expenses

**Employee Contribution Crediting Rate:**

7.60%, compounded semi-annually.

**Consumer Price Index:**

Increase of 3.25% per year, retiree COLA increases due to CPI subject to a 3% maximum change per year for General Tier 1, General Tier 3, and Safety Tier 1, and 2% maximum change per year for General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4.



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

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**Salary Increases:**

Annual Rate of Compensation Increase (%)		
Inflation: 3.25%; an additional 0.50% “across the board” salary increases (other than inflation); plus the following Merit and Promotional increases based on service.		
Service	General	Safety
0-1	3.70%	6.70%
1-2	3.70	6.70
2-3	3.20	5.90
3-4	2.10	3.80
4-5	1.70	3.30
5-6	1.40	2.50
6-7	1.30	1.40
7-8	1.10	0.90
8-9	0.70	0.80
9-10	0.60	0.80
10-11	0.50	0.70
11+	0.40	0.70

**Actuarial Value of Assets:**

The Actuarial Value of Assets is determined by phasing in any difference between actual and expected market return over 10 six-month interest crediting periods.

**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. The Normal Cost is also calculated on an individual basis where the Entry Age Normal Cost is calculated as the sum of the individual Normal Costs.

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

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**Terminal Pay Assumptions:**

Additional pay elements are expected to be received during a member's final average earnings period. The percentages, added to the final year salary, used in this valuation are:

	<u>Service Retirement</u>	<u>Disability Retirement</u>
General Tier 1	8.0%	6.5%
General Tier 2	3.0%	1.4%
General Tier 3	8.0%	6.5%
General Tier 4	N/A	N/A
Safety Tier 1	8.5%	6.4%
Safety Tier 2	4.0%	2.1%
Safety Tier 2C	4.0%	2.1%
Safety Tier 2D	4.0%	2.1%
Safety Tier 4	N/A	N/A

**Changes in Actuarial Assumptions:**

Based on the December 1, 2010 – November 30, 2013 actuarial experience study, the following actuarial assumptions were changed. Previously these assumptions were as follows:

**Post-Retirement Mortality Rates**

*Healthy:*

For General members and all beneficiaries: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females.

For Safety members: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females.

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

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### **Changes in Actuarial Assumptions (continued):**

#### **Post-Retirement Mortality Rates (continued)**

<i>Disabled:</i>	For General members: RP-2000 Combined Healthy Mortality Table set forward four years. For Safety members: RP-2000 Combined Healthy Mortality Table set forward two years.
<i>Employee Contribution Rates:</i>	For General members: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females, weighted 30% male and 70% female. For Safety members: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females, weighted 75% male and 25% female.
<i>Optional Forms of Benefit:</i>	
<i>Service Retirement and All Beneficiaries</i>	General members: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females, weighted 30% male and 70% female. General beneficiaries: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females, weighted 70% male and 30% female. Safety members: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females, weighted 75% male and 25% female. Safety beneficiaries: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females, weighted 25% male and 75% female.

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

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**Changes in Actuarial Assumptions (continued):**

**Post-Retirement Mortality Rates (continued)**

*Optional Forms of Benefit (continued):*

*Disability Retirement*

General members: RP-2000 Combined Healthy Mortality Table, set forward four years, weighted 30% male and 70% female.

Safety members: RP-2000 Combined Healthy Mortality Table, set forward two years, weighted 75% male and 25% female.

**Termination Rates Before Retirement:**

Age	Rate (%)			
	Mortality			
	General		Safety	
	Male	Female	Male	Female
25	0.04	0.02	0.04	0.02
30	0.04	0.02	0.04	0.02
35	0.06	0.04	0.06	0.04
40	0.10	0.06	0.10	0.06
45	0.13	0.10	0.13	0.10
50	0.19	0.16	0.19	0.16
55	0.29	0.24	0.29	0.24
60	0.53	0.44	0.53	0.44
65	1.00	0.86	1.00	0.86

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

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

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**Changes in Actuarial Assumptions (continued):**

**Termination Rates Before Retirement (continued):**

<b>Age</b>	<b>Rate (%)</b>	
	<b>Disability</b>	
	<b>General<sup>(1)</sup></b>	<b>Safety<sup>(2)</sup></b>
20	0.00	0.00
25	0.01	0.00
30	0.03	0.24
35	0.08	0.46
40	0.16	0.50
45	0.23	0.50
50	0.34	1.10
55	0.46	1.92
60	0.59	2.20

<sup>(1)</sup> 70% of General disabilities are assumed to be service connected disabilities. The other 30% are assumed to be non-service connected disabilities.

<sup>(2)</sup> 100% of Safety disabilities are assumed to be service connected disabilities.

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

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**Changes in Actuarial Assumptions (continued):**

**Termination Rates Before Retirement (continued):**

Rate (%)		
Termination (< 5 Years of Service) <sup>(1)</sup>		
Years of Service	General	Safety
0	13.00	5.00
1	9.00	3.00
2	8.00	3.00
3	6.00	2.00
4	5.00	2.00
Termination (5+ Years of Service) <sup>(2)</sup>		
Age	General	Safety
20	5.00	2.00
25	5.00	2.00
30	5.00	2.00
35	4.70	1.40
40	3.72	1.00
45	2.54	1.00
50	2.04	1.00
55	2.00	1.00
60	2.00	0.40

<sup>(1)</sup> 70% of all terminated members will choose a refund of contributions and 30% will choose a deferred vested benefit.

<sup>(2)</sup> 40% of all terminated members will choose a refund of contributions and 60% will choose a deferred vested benefit. No termination is assumed after a member is eligible for retirement.

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

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**Changes in Actuarial Assumptions (continued):**

**Retirement Rates:**

Age	Rate (%)				
	General Tier 1	General Tier 2	Safety Tier 1 <sup>(1)</sup>	Safety Tier 2, 2D <sup>(1)</sup>	Safety Tier 2C <sup>(1)</sup>
50	3.00	2.00	35.00	10.00	4.00
51	3.00	2.00	25.00	10.00	2.00
52	3.00	2.00	25.00	10.00	2.00
53	3.00	2.00	35.00	10.00	3.00
54	3.00	2.00	40.00	10.00	6.00
55	6.00	3.00	40.00	10.00	10.00
56	8.00	3.00	40.00	15.00	12.00
57	10.00	4.00	40.00	20.00	20.00
58	10.00	5.00	40.00	20.00	10.00
59	13.00	5.00	40.00	20.00	15.00
60	20.00	5.00	100.00	40.00	60.00
61	20.00	8.00	100.00	40.00	60.00
62	35.00	20.00	100.00	40.00	60.00
63	30.00	16.00	100.00	40.00	60.00
64	30.00	18.00	100.00	100.00	100.00
65	35.00	22.00	100.00	100.00	100.00
66	30.00	20.00	100.00	100.00	100.00
67	25.00	20.00	100.00	100.00	100.00
68	20.00	30.00	100.00	100.00	100.00
69	40.00	35.00	100.00	100.00	100.00
70	100.00	100.00	100.00	100.00	100.00

<sup>(1)</sup> Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

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

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### Changes in Actuarial Assumptions (continued):

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

For deferred vested members, retirement age assumptions are as follows:

General Age: 59

We assume that 35% of future General and 55% of future Safety deferred vested members will continue to work for a reciprocal employer. For reciprocals, we assume 4.60% and 4.70% compensation increases per annum for General and Safety, respectively.

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**Future Benefit Accruals:**

1.0 year of service per year of employment plus 0.006 year of additional service to anticipate conversion of unused sick leave for each year of employment.

**Net Investment Return:**

7.80%, net of administration and investment expenses (approximately 1% of assets)

**Employee Contribution  
Crediting Rate:**

7.80%, compounded semi-annually.

**Consumer Price Index:**

Increase of 3.50% per year, retiree COLA increases due to CPI subject to a 3% maximum change per year for General Tier 1, General Tier 3 and Safety Tier 1 and 2% maximum change per year for General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4.



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

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**Changes in Actuarial Assumptions (continued):**

**Salary Increases:**

<u>Annual Rate of Compensation Increase (%)</u>		
Inflation: 3.50%; an additional 0.50% “across the board” salary increases (other than inflation); plus the following Merit and Promotional increases based on service.		
<u>Service</u>	<u>General</u>	<u>Safety</u>
0-1	3.20%	6.20%
1-2	3.20	6.20
2-3	2.90	5.40
3-4	2.10	3.60
4-5	2.00	3.00
5-6	1.70	2.70
6-7	1.50	1.60
7-8	1.40	1.10
8-9	1.00	1.00
9-10	1.00	1.00
10-11	0.90	1.00
11+	0.60	0.70

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

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### EXHIBIT VI

#### Summary of Plan Provisions

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

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#### Membership Eligibility:

	Membership with ACERA usually begins with the second pay period following appointment to a full time County or member District position. ACERA members who change from full time to part time will continue to participate at ACERA.
<i>General and Safety Tier 1</i>	All General and Safety members hired on or before June 30, 1983 <sup>(1)</sup> .
<i>General and Safety Tier 2</i>	All General and Safety members hired after June 30, 1983 <sup>(2)</sup> , and not in any of the other Tiers listed below.
<i>General Tier 3</i>	Only General LARPD members hired before October 1, 2008 who elected the 2.5% at 55 formula and all General LARPD members hired after that date.
<i>General and Safety Tier 4</i>	All General and Safety members with membership dates on or after January 1, 2013.
<i>Safety Tier 2C</i>	All Safety members in the Sheriff's Department (excluding Probation Officers) hired on or after October 17, 2010 who elected the 2% at 50 formula.
<i>Safety Tier 2D</i>	All Safety members in the Sheriff's Department (excluding Probation Officers) hired on or after October 17, 2010 who elected the 3% at 55 formula.

<sup>(1)</sup> For Housing Authority General members, the hire date is on or before September 30, 2011 (instead of June 30, 1983). For LARPD General members, the hire date is on or before September 30, 2008 (instead of June 30, 1983).

<sup>(2)</sup> For Housing Authority General members, the hire date is after September 30, 2011 (instead of June 30, 1983).

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

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**Final Compensation for Benefit Determination:**

*General Tier 1, General Tier 3 and Safety Tier 1*

Highest consecutive twelve months of compensation earnable (§31462.1) (FAS1).

*General Tier 2, General Tier 4, Safety Tier 2, Safety Tier 2C, Safety Tier 2D, and Safety Tier 4*

For non-Tier 4 members, highest consecutive thirty-six months of compensation earnable (§31462), and for Tier 4 members, highest consecutive thirty-six months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34).

**Service:**

Years of service (Yrs).

**Service Retirement Eligibility:**

*General*

*Non-Tier 4*

Age 50 with 5 years of service and a total of 10 years of qualifying membership, or age 70 regardless of service, or after 30 years, regardless of age (§31672).

*Tier 4*

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

*Safety*

*Non-Tier 4*

Age 50 with 5 years of service and a total of 10 years of qualifying membership, or age 70 regardless of service, or after 20 years, regardless of age (§31663.25).

*Tier 4*

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

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

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**Benefit Formula:**

	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>General Tier 1 (§31676.12)</i>	50	$(1.34\% \times \text{FAS1} - 1/3 \times 1.34\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(1.77\% \times \text{FAS1} - 1/3 \times 1.77\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(2.34\% \times \text{FAS1} - 1/3 \times 2.34\% \times \$350 \times 12) \times \text{Yrs}$
	62 or later	$(2.62\% \times \text{FAS1} - 1/3 \times 2.62\% \times \$350 \times 12) \times \text{Yrs}$

	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>General Tier 2 (§31676.1)</i>	50	$(1.18\% \times \text{FAS3} - 1/3 \times 1.18\% \times \$350 \times 12) \times \text{Yrs}$
	55	$(1.49\% \times \text{FAS3} - 1/3 \times 1.49\% \times \$350 \times 12) \times \text{Yrs}$
	60	$(1.92\% \times \text{FAS3} - 1/3 \times 1.92\% \times \$350 \times 12) \times \text{Yrs}$
	62	$(2.09\% \times \text{FAS3} - 1/3 \times 2.09\% \times \$350 \times 12) \times \text{Yrs}$
	65	$(2.43\% \times \text{FAS3} - 1/3 \times 2.43\% \times \$350 \times 12) \times \text{Yrs}$

	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>General Tier 3 (§31676.18)</i>	50	$2.00\% \times \text{FAS1} \times \text{Yrs}$
	55 or later	$2.50\% \times \text{FAS1} \times \text{Yrs}$

	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>General Tier 4 (§7522.20(a))</i>	52	$1.00\% \times \text{FAS3} \times \text{Yrs}$
	55	$1.30\% \times \text{FAS3} \times \text{Yrs}$
	60	$1.80\% \times \text{FAS3} \times \text{Yrs}$
	62	$2.00\% \times \text{FAS3} \times \text{Yrs}$
	65	$2.30\% \times \text{FAS3} \times \text{Yrs}$
	67 or later	$2.50\% \times \text{FAS3} \times \text{Yrs}$

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

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	<b>Retirement Age</b>	<b>Benefit Formula</b>
<i>Safety Tier 1 (Non-Integrated)</i> (§31664.1)	50 55 or later	3.00% x FAS1 x Yrs 3.00% x FAS1 x Yrs
<i>Safety Tier 2 (Non-Integrated)</i> (§31664.1)	50 55 or later	3.00% x FAS3 x Yrs 3.00% x FAS3 x Yrs
<i>Safety Tier 2C (Non-Integrated)</i> (§31664)	50 55 or later	2.00% x FAS3 x Yrs 2.62% x FAS3 x Yrs
<i>Safety Tier 2D (Non-Integrated)</i> (§31664.2)	50 55 or later	2.29% x FAS3 x Yrs 3.00% x FAS3 x Yrs
<i>Safety Tier 4 (Non-Integrated)</i> (§7522.25(d))	50 55 57 or later	2.00% x FAS3 x Yrs 2.50% x FAS3 x Yrs 2.70% x FAS3 x Yrs
<b>Maximum Benefit:</b>		
<i>Non-Tier 4</i>	100% of Highest Average Compensation (§31676.1, §31676.12, §31676.18, §31664, §31664.1, and §31664.2).	
<i>Tier 4</i>	None	

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

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**Ordinary Disability:**

General Tier 1, Tier 2, Tier 3, and Tier 4

<i>Eligibility</i>	Five years of service (§31720).
<i>Benefit Formula</i>	1.8% per year of service for General Tier 1 and Tier 3 and 1.5% per year of service for General Tier 2 and Tier 4. If the benefit does not exceed one-third of Final Compensation, the service is projected to 62 for General Tier 1 and Tier 3, and to age 65 for General Tier 2 and Tier 4, but the total benefit cannot be more than one-third of Final Compensation (§31727.1 and §31727).

Safety Tier 1, Tier 2, Tier 2C, Tier 2D, and Tier 4

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

---

**Line-of-Duty Disability:**

All Members

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

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

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**Pre-Retirement Death:**

All Members

<i>Eligibility</i>	None.
<i>Basic lump sum benefit</i>	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six month's compensation (§31781).
<i>Death in line of duty</i>	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).

OR

Vested Members

<i>Eligibility</i>	Five years of service.
<i>Basic benefit</i>	60% of the greater of Service or Ordinary Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.
<i>Death in line of duty</i>	50% of Final compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).

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

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**Death After Retirement:**

*All Members*

*Service or*

*Ordinary Disability Retirement*

60% of member's unmodified allowance continued to eligible spouse (§31760.1) and lump sum death burial benefit<sup>(1)</sup> payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement (§31760.1).

*Line-of-Duty Disability*

100% of member's allowance continued to eligible spouse (§31786).

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**Withdrawal Benefits:**

*Less than Five Years of Service*

Refund of accumulated employee contributions with interest, or earned benefit at age 70 (§31628). Effective January 1, 2003, a member may also elect to leave contributions on deposit in the retirement fund (§31629.5).

*Five or More Years of Service*

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

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**Post-retirement**

**Cost-of-Living Benefits:**

*General Tier 1, General Tier 3  
and Safety Tier 1*

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

*General Tier 2, General Tier 4  
Safety Tier 2, Safety Tier 2C,  
Safety Tier 2D, and Safety Tier 4*

Future changes based on Consumer Price Index to a maximum of 2% per year; excess "banked" (§31870).

<sup>(1)</sup> Based on action taken by the Board in February 2014, we are continuing to exclude the death burial benefit from the pension valuation.



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

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<b>County Contributions:</b>	Prior to January 1, 2012, the total UAAL was amortized on a 30-year decreasing period, with 21 years remaining as of December 31, 2011. On or after January 1, 2012, plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 20-year periods; and experience gains/losses are also amortized over separate decreasing 20-year periods.
<b>Supplemental Benefit:</b>	Non-vested supplemental COLA and medical benefits are also paid from the Supplemental Retirees Benefit Reserve to eligible retirees and survivors. These benefits have been excluded from this valuation.
<b>Member Contributions:</b>	Please refer to Appendix A for specific rates.
<i>General Tier 1</i>	
<i>Basic</i>	Provide for an average annuity at age 60 equal to 1/100 of FAS1 (§31621.2).
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
<i>General Tier 2</i>	
<i>Basic</i>	Provide for an average annuity at age 60 equal to 1/120 of FAS3 (§31621).
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
<i>General Tier 3</i>	
<i>Basic</i>	Provide for an average annuity at age 55 equal to 1/100 of FAS1 (§31621.8).
<i>Cost-of-Living</i>	Provide for one-half of future Cost-of-Living costs.
<i>General Tier 4</i>	50% of the total Normal Cost rate.

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

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*Safety Non-Tier 4*

*Basic*

Provide for an average annuity at age 50 equal to 1/100 of FAS1 (FAS3 for Tier 2, Tier 2C, and Tier 2D) (\$31639.25). As instructed by ACERA, we have also included a 3% cost sharing contribution that we understand will be paid by Safety Tier 1 and Tier 2 members even after they attain 30 years of service. For Safety Tier 2C members, there are no cost-sharing contributions. For Safety Tier 2D members, the cost-sharing contribution rate is 5% of salary for the first 5 years of employment and 3% of salary for each subsequent year of employment (even after the member attains 30 years of service).

*Cost-of-Living*

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

*Safety Tier 4*

50% of the total Normal Cost rate.

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**Other Information:**

Non-Tier 4 Safety members with 30 or more years of service are exempt from paying member contributions. This also applies for General members hired on or before March 7, 1973.

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**NOTE:** *The summary of major plan provisions is designed to outline principal 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.*

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

**Appendix A**

**Member Contribution Rates**

Comparison of Total Member Rate<sup>(1)</sup> from December 31, 2014 (New) and December 31, 2013 (Current) Valuations

<b>General Tier 1</b>				<b>General Tier 2</b>			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	8.79%	8.78%	<b>-0.01%</b>	25	5.99%	5.99%	<b>0.00%</b>
35	10.49%	10.65%	<b>0.16%</b>	35	7.14%	7.27%	<b>0.13%</b>
45	12.52%	12.90%	<b>0.38%</b>	45	8.52%	8.79%	<b>0.27%</b>
<b>General Tier 3</b>				<b>General Tier 4</b>			
Entry Age	Current	New	Change	Entry Age <sup>(2)</sup>	Current	New	Change
25	10.22%	10.26%	<b>0.04%</b>	Any	8.12%	8.09%	<b>-0.03%</b>
35	12.19%	12.41%	<b>0.22%</b>				
45	14.54%	15.06%	<b>0.52%</b>				
<b>Safety Tier 1</b>				<b>Safety Tier 2</b>			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	16.46%	16.76%	<b>0.30%</b>	25	13.79%	14.13%	<b>0.34%</b>
30	17.68%	18.03%	<b>0.35%</b>	30	14.76%	15.15%	<b>0.39%</b>
35	19.06%	19.44%	<b>0.38%</b>	35	15.85%	16.29%	<b>0.44%</b>
<b>Safety Tier 2C</b>				<b>Safety Tier 2D (with less than 5 years of vesting service)</b>			
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	10.36%	10.60%	<b>0.24%</b>	25	15.59%	15.90%	<b>0.31%</b>
30	11.29%	11.57%	<b>0.28%</b>	30	16.55%	16.90%	<b>0.35%</b>
35	12.33%	12.65%	<b>0.32%</b>	35	17.62%	18.01%	<b>0.39%</b>
<b>Safety Tier 2D (with 5 or more years of vesting service)</b>				<b>Safety Tier 4</b>			
Entry Age	Current	New	Change	Entry Age <sup>(2)</sup>	Current	New	Change
25	13.59%	13.90%	<b>0.31%</b>	Any	16.77%	15.25%	<b>-1.52%</b>
30	14.55%	14.90%	<b>0.35%</b>				
35	15.62%	16.01%	<b>0.39%</b>				

<sup>(1)</sup> For the non-CalPEPRA tiers, contributions for the first \$161 of biweekly payroll are based on 2/3 of the above rates for integrated members.

<sup>(2)</sup> Tier 4 member rates are independent of entry age.

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

Breakdown of member rate between basic and COLA calculated in the December 31, 2014 and December 31, 2013 valuations:

	December 31, 2014 Actuarial Valuation								December 31, 2013 Actuarial Valuation <sup>(1)</sup>							
	BASIC		COLA		COST SHARING CONTRIBUTIONS		TOTAL		BASIC		COLA		COST SHARING CONTRIBUTIONS		TOTAL	
	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*	Rate	Estimated Annual Amount*
<b>General Tier 1 Members</b>	6.59%	\$1,922	2.43%	\$708			9.02%	\$2,630	6.57%	\$1,916	2.37%	\$691			8.94%	\$2,607
<b>General Tier 2 Members</b>	6.06%	40,815	1.35%	9,092			7.41%	49,907	5.95%	\$40,074	1.30%	\$8,756			7.25%	\$48,830
<b>General Tier 3 Members</b>	9.42%	297	3.47%	110			12.89%	407	9.26%	\$292	3.31%	\$104			12.57%	\$396
<b>General Tier 4 Members</b>	6.76%	6,381	1.33%	1,256			8.09%	7,637	6.84%	\$6,457	1.28%	\$1,208			8.12%	\$7,665
<b>Safety Tier 1 Members</b>	6.23%	102	3.36%	55	3.00%	\$49	12.59%	206	6.09%	\$100	3.21%	\$52	3.00%	\$49	12.30%	\$201
<b>Safety Tier 2 Members</b>	8.91%	11,157	3.17%	3,969	3.00%	3,757	15.08%	18,883	8.74%	\$10,944	2.94%	\$3,681	3.00%	\$3,757	14.68%	\$18,382
<b>Safety Tier 2C Members</b>	9.89%	336	2.87%	98	0.00%	0	12.76%	434	9.68%	\$329	2.74%	\$93	0.00%	\$0	12.42%	\$422
<b>Safety Tier 2D Members</b>	9.14%	879	3.00%	289	4.59% <sup>(2)</sup>	441	16.73%	1,609	8.96%	\$862	2.80%	\$269	4.59% <sup>(2)</sup>	\$441	16.35%	\$1,572
<b>Safety Tier 4 Members</b>	12.38%	1,083	2.87%	252	0.00%	0	15.25%	1,335	13.68%	\$1,197	3.09%	\$271	0.00%	\$0	16.77%	\$1,468
<b>All Member Categories Combined</b>	6.64%	\$62,972	1.66%	\$15,829	0.45%	\$4,247	8.75%	\$83,048	6.55%	\$62,171	1.59%	\$15,125	0.45%	\$4,247	8.59%	\$81,543

<sup>(1)</sup> These rates have been re-calculated by applying the individual entry age based member rates determined in December 31, 2013 valuation to the Association membership as of December 31, 2014.

<sup>(2)</sup> Determined based on proportion of members contributing 5.00% (with less than 5 years of vesting service) and 3.00% (with 5 or more years of vesting service).

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

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

	<u>County Only</u>	<u>AHS, Court &amp; First 5</u>	<u>Other Districts</u>	<u>Total</u>
General Tier 1	\$19,008	\$5,576	\$4,576	\$29,160
General Tier 2	435,021	238,205	285	673,511
General Tier 3			3,154	3,154
General Tier 4	58,718	35,093	588	94,399
Safety Tier 1	1,636			1,636
Safety Tier 2	125,221			125,221
Safety Tier 2C	3,398			3,398
Safety Tier 2D	9,617			9,617
Safety Tier 4	8,752			8,752
Total	\$661,371	\$278,874	\$8,603	\$948,848

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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 1 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	3.58%	5.37%	1.31%	1.97%	4.89%	7.34%
16	3.58%	5.37%	1.31%	1.97%	4.89%	7.34%
17	3.65%	5.48%	1.34%	2.01%	4.99%	7.49%
18	3.73%	5.59%	1.37%	2.06%	5.10%	7.65%
19	3.80%	5.70%	1.40%	2.10%	5.20%	7.80%
20	3.88%	5.82%	1.43%	2.14%	5.31%	7.96%
21	3.96%	5.93%	1.45%	2.18%	5.41%	8.11%
22	4.04%	6.05%	1.49%	2.23%	5.53%	8.28%
23	4.12%	6.17%	1.51%	2.27%	5.63%	8.44%
24	4.20%	6.30%	1.55%	2.32%	5.75%	8.62%
25	4.28%	6.42%	1.57%	2.36%	5.85%	8.78%
26	4.37%	6.55%	1.61%	2.41%	5.98%	8.96%
27	4.45%	6.68%	1.64%	2.46%	6.09%	9.14%
28	4.54%	6.81%	1.67%	2.50%	6.21%	9.31%
29	4.63%	6.94%	1.70%	2.55%	6.33%	9.49%
30	4.72%	7.08%	1.73%	2.60%	6.45%	9.68%
31	4.81%	7.22%	1.77%	2.65%	6.58%	9.87%
32	4.90%	7.36%	1.80%	2.70%	6.70%	10.06%
33	5.00%	7.50%	1.84%	2.76%	6.84%	10.26%
34	5.10%	7.64%	1.87%	2.81%	6.97%	10.45%
35	5.19%	7.79%	1.91%	2.86%	7.10%	10.65%
36	5.29%	7.94%	1.95%	2.92%	7.24%	10.86%
37	5.40%	8.09%	1.99%	2.98%	7.39%	11.07%
38	5.50%	8.25%	2.02%	3.03%	7.52%	11.28%
39	5.60%	8.41%	2.06%	3.09%	7.66%	11.50%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 1 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
40	5.71%	8.57%	2.10%	3.15%	7.81%	11.72%
41	5.82%	8.73%	2.14%	3.21%	7.96%	11.94%
42	5.93%	8.90%	2.18%	3.27%	8.11%	12.17%
43	6.05%	9.07%	2.23%	3.34%	8.28%	12.41%
44	6.16%	9.25%	2.27%	3.40%	8.43%	12.65%
45	6.28%	9.43%	2.31%	3.47%	8.59%	12.90%
46	6.41%	9.61%	2.35%	3.53%	8.76%	13.14%
47	6.54%	9.80%	2.40%	3.60%	8.94%	13.40%
48	6.67%	10.00%	2.45%	3.68%	9.12%	13.68%
49	6.80%	10.20%	2.50%	3.75%	9.30%	13.95%
50	6.93%	10.39%	2.55%	3.82%	9.48%	14.21%
51	7.05%	10.58%	2.59%	3.89%	9.64%	14.47%
52	7.16%	10.75%	2.63%	3.95%	9.79%	14.70%
53	7.26%	10.90%	2.67%	4.01%	9.93%	14.91%
54	7.36%	11.04%	2.71%	4.06%	10.07%	15.10%
55	7.44%	11.17%	2.74%	4.11%	10.18%	15.28%
56	7.50%	11.26%	2.76%	4.14%	10.26%	15.40%
57	7.49%	11.23%	2.75%	4.13%	10.24%	15.36%
58	7.40%	11.09%	2.72%	4.08%	10.12%	15.17%
59 & Over	7.13%	10.69%	2.62%	3.93%	9.75%	14.62%

\* Use these rates for Non-Integrated Members

Interest: 7.60% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.  
 Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 36.77%  
 Terminal Pay: 8.0%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 2 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

Entry Age	Basic Only		COLA Only		Total	
	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	2.73%	4.10%	0.61%	0.91%	3.34%	5.01%
16	2.73%	4.10%	0.61%	0.91%	3.34%	5.01%
17	2.79%	4.18%	0.62%	0.93%	3.41%	5.11%
18	2.84%	4.27%	0.63%	0.95%	3.47%	5.22%
19	2.90%	4.35%	0.65%	0.97%	3.55%	5.32%
20	2.96%	4.44%	0.66%	0.99%	3.62%	5.43%
21	3.02%	4.53%	0.67%	1.01%	3.69%	5.54%
22	3.08%	4.62%	0.69%	1.03%	3.77%	5.65%
23	3.14%	4.71%	0.70%	1.05%	3.84%	5.76%
24	3.20%	4.81%	0.71%	1.07%	3.91%	5.88%
25	3.27%	4.90%	0.73%	1.09%	4.00%	5.99%
26	3.33%	5.00%	0.74%	1.11%	4.07%	6.11%
27	3.40%	5.10%	0.75%	1.13%	4.15%	6.23%
28	3.47%	5.20%	0.77%	1.15%	4.24%	6.35%
29	3.53%	5.30%	0.79%	1.18%	4.32%	6.48%
30	3.60%	5.40%	0.80%	1.20%	4.40%	6.60%
31	3.67%	5.51%	0.81%	1.22%	4.48%	6.73%
32	3.74%	5.61%	0.83%	1.25%	4.57%	6.86%
33	3.82%	5.72%	0.85%	1.27%	4.67%	6.99%
34	3.89%	5.83%	0.87%	1.30%	4.76%	7.13%
35	3.96%	5.95%	0.88%	1.32%	4.84%	7.27%
36	4.04%	6.06%	0.90%	1.35%	4.94%	7.41%
37	4.12%	6.18%	0.91%	1.37%	5.03%	7.55%
38	4.20%	6.30%	0.93%	1.40%	5.13%	7.70%
39	4.28%	6.42%	0.95%	1.42%	5.23%	7.84%



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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 2 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
40	4.36%	6.54%	0.97%	1.45%	5.33%	7.99%
41	4.44%	6.66%	0.99%	1.48%	5.43%	8.14%
42	4.53%	6.79%	1.01%	1.51%	5.54%	8.30%
43	4.61%	6.92%	1.03%	1.54%	5.64%	8.46%
44	4.70%	7.06%	1.05%	1.57%	5.75%	8.63%
45	4.80%	7.19%	1.07%	1.60%	5.87%	8.79%
46	4.89%	7.33%	1.09%	1.63%	5.98%	8.96%
47	4.98%	7.48%	1.11%	1.66%	6.09%	9.14%
48	5.08%	7.62%	1.13%	1.69%	6.21%	9.31%
49	5.17%	7.76%	1.15%	1.72%	6.32%	9.48%
50	5.26%	7.89%	1.17%	1.75%	6.43%	9.64%
51	5.34%	8.01%	1.19%	1.78%	6.53%	9.79%
52	5.41%	8.12%	1.20%	1.80%	6.61%	9.92%
53	5.48%	8.22%	1.22%	1.83%	6.70%	10.05%
54	5.54%	8.30%	1.23%	1.84%	6.77%	10.14%
55	5.57%	8.35%	1.23%	1.85%	6.80%	10.20%
56	5.56%	8.34%	1.23%	1.85%	6.79%	10.19%
57	5.53%	8.29%	1.23%	1.84%	6.76%	10.13%
58	5.73%	8.59%	1.27%	1.91%	7.00%	10.50%
59 & Over	5.94%	8.91%	1.32%	1.98%	7.26%	10.89%

\* Use these rates for Non-Integrated Members

Interest: 7.60% per annum  
 COLA: 2.00%  
 Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.  
 Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 22.21%  
 Terminal Pay: 3.0%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 3 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	4.19%	6.29%	1.55%	2.32%	5.74%	8.61%
16	4.19%	6.29%	1.55%	2.32%	5.74%	8.61%
17	4.27%	6.41%	1.57%	2.36%	5.84%	8.77%
18	4.36%	6.54%	1.61%	2.41%	5.97%	8.95%
19	4.45%	6.67%	1.64%	2.46%	6.09%	9.13%
20	4.53%	6.80%	1.67%	2.51%	6.20%	9.31%
21	4.62%	6.94%	1.71%	2.56%	6.33%	9.50%
22	4.72%	7.07%	1.74%	2.61%	6.46%	9.68%
23	4.81%	7.21%	1.77%	2.66%	6.58%	9.87%
24	4.90%	7.35%	1.81%	2.71%	6.71%	10.06%
25	5.00%	7.50%	1.84%	2.76%	6.84%	10.26%
26	5.10%	7.64%	1.88%	2.82%	6.98%	10.46%
27	5.19%	7.79%	1.91%	2.87%	7.10%	10.66%
28	5.29%	7.94%	1.95%	2.93%	7.24%	10.87%
29	5.40%	8.10%	1.99%	2.98%	7.39%	11.08%
30	5.50%	8.25%	2.03%	3.04%	7.53%	11.29%
31	5.61%	8.41%	2.07%	3.10%	7.68%	11.51%
32	5.71%	8.57%	2.11%	3.16%	7.82%	11.73%
33	5.82%	8.74%	2.15%	3.22%	7.97%	11.96%
34	5.94%	8.90%	2.19%	3.28%	8.13%	12.18%
35	6.05%	9.07%	2.23%	3.34%	8.28%	12.41%
36	6.17%	9.25%	2.27%	3.41%	8.44%	12.66%
37	6.28%	9.43%	2.31%	3.47%	8.59%	12.90%
38	6.41%	9.61%	2.36%	3.54%	8.77%	13.15%
39	6.53%	9.79%	2.41%	3.61%	8.94%	13.40%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**General Tier 3 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
40	6.66%	9.98%	2.45%	3.68%	9.11%	13.66%
41	6.79%	10.18%	2.50%	3.75%	9.29%	13.93%
42	6.92%	10.38%	2.55%	3.83%	9.47%	14.21%
43	7.06%	10.59%	2.60%	3.90%	9.66%	14.49%
44	7.20%	10.80%	2.65%	3.98%	9.85%	14.78%
45	7.34%	11.00%	2.71%	4.06%	10.05%	15.06%
46	7.47%	11.21%	2.75%	4.13%	10.22%	15.34%
47	7.59%	11.38%	2.79%	4.19%	10.38%	15.57%
48	7.69%	11.54%	2.83%	4.25%	10.52%	15.79%
49	7.80%	11.70%	2.87%	4.31%	10.67%	16.01%
50	7.88%	11.83%	2.91%	4.36%	10.79%	16.19%
51	7.95%	11.92%	2.93%	4.39%	10.88%	16.31%
52	7.93%	11.89%	2.92%	4.38%	10.85%	16.27%
53	7.83%	11.75%	2.89%	4.33%	10.72%	16.08%
54 & over	7.55%	11.32%	2.78%	4.17%	10.33%	15.49%

\* Use these rates for Non-Integrated Members

Interest: 7.60% per annum  
 COLA: 3.00%  
 Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.  
 Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 36.86%  
 Terminal Pay: 8.0%

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

**Appendix A  
Member Contribution Rates (Continued)**

**General Tier 4 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of eligible payroll)\***

	<u>Basic Only</u> <u>Eligible Pay</u>	<u>COLA Only</u> <u>Eligible Pay</u>	<u>Total</u> <u>Eligible Pay</u>
All General Tier 4 Members	6.76%	1.33%	8.09%

Interest:	7.60% per annum
COLA:	2.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and females, weighted 30% male and 70% female.
Salary Increase:	Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)
COLA Loading Factor:	19.67%
Terminal Pay:	0.0%

\* 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 120% of \$117,020, or \$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))

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 1 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

<u>Entry Age</u>	<u>Basic Only</u>		<u>Cost Sharing Contributions</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	5.09%	7.64%	3.00%	3.00%	2.74%	4.11%	10.83%	14.75%
16	5.09%	7.64%	3.00%	3.00%	2.74%	4.11%	10.83%	14.75%
17	5.18%	7.77%	3.00%	3.00%	2.79%	4.18%	10.97%	14.95%
18	5.27%	7.91%	3.00%	3.00%	2.84%	4.26%	11.11%	15.17%
19	5.37%	8.05%	3.00%	3.00%	2.89%	4.33%	11.26%	15.38%
20	5.46%	8.20%	3.00%	3.00%	2.94%	4.41%	11.40%	15.61%
21	5.56%	8.34%	3.00%	3.00%	2.99%	4.49%	11.55%	15.83%
22	5.66%	8.49%	3.00%	3.00%	3.05%	4.57%	11.71%	16.06%
23	5.76%	8.64%	3.00%	3.00%	3.10%	4.65%	11.86%	16.29%
24	5.86%	8.79%	3.00%	3.00%	3.15%	4.73%	12.01%	16.52%
25	5.97%	8.95%	3.00%	3.00%	3.21%	4.81%	12.18%	16.76%
26	6.07%	9.11%	3.00%	3.00%	3.27%	4.90%	12.34%	17.01%
27	6.18%	9.27%	3.00%	3.00%	3.33%	4.99%	12.51%	17.26%
28	6.29%	9.43%	3.00%	3.00%	3.38%	5.07%	12.67%	17.50%
29	6.40%	9.60%	3.00%	3.00%	3.45%	5.17%	12.85%	17.77%
30	6.51%	9.77%	3.00%	3.00%	3.51%	5.26%	13.02%	18.03%
31	6.63%	9.95%	3.00%	3.00%	3.57%	5.35%	13.20%	18.30%
32	6.75%	10.13%	3.00%	3.00%	3.63%	5.45%	13.38%	18.58%
33	6.87%	10.31%	3.00%	3.00%	3.70%	5.55%	13.57%	18.86%
34	7.00%	10.50%	3.00%	3.00%	3.77%	5.65%	13.77%	19.15%
35	7.13%	10.69%	3.00%	3.00%	3.83%	5.75%	13.96%	19.44%
36	7.26%	10.89%	3.00%	3.00%	3.91%	5.86%	14.17%	19.75%
37	7.40%	11.10%	3.00%	3.00%	3.98%	5.97%	14.38%	20.07%
38	7.55%	11.32%	3.00%	3.00%	4.06%	6.09%	14.61%	20.41%
39	7.70%	11.55%	3.00%	3.00%	4.15%	6.22%	14.85%	20.77%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 1 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

Entry Age	Basic Only		Cost Sharing Contributions		COLA Only		Total	
	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.86%	11.79%	3.00%	3.00%	4.23%	6.34%	15.09%	21.13%
41	8.02%	12.04%	3.00%	3.00%	4.32%	6.48%	15.34%	21.52%
42	8.20%	12.30%	3.00%	3.00%	4.41%	6.62%	15.61%	21.92%
43	8.36%	12.54%	3.00%	3.00%	4.49%	6.74%	15.85%	22.28%
44	8.45%	12.68%	3.00%	3.00%	4.55%	6.82%	16.00%	22.50%
45	8.50%	12.75%	3.00%	3.00%	4.57%	6.86%	16.07%	22.61%
46	8.52%	12.78%	3.00%	3.00%	4.59%	6.88%	16.11%	22.66%
47	8.40%	12.60%	3.00%	3.00%	4.52%	6.78%	15.92%	22.38%
48	8.18%	12.27%	3.00%	3.00%	4.40%	6.60%	15.58%	21.87%
49 & Over	7.76%	11.64%	3.00%	3.00%	4.17%	6.26%	14.93%	20.90%

\* Use these rates for Non-Integrated Members

Interest:	7.60% per annum
COLA:	3.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.
Salary Increase:	Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)
COLA Loading Factor:	53.80%
Terminal Pay:	8.5%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

Entry Age	Basic Only		Cost Sharing Contributions		COLA Only		Total	
	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	4.67%	7.01%	3.00%	3.00%	1.66%	2.49%	9.33%	12.50%
16	4.67%	7.01%	3.00%	3.00%	1.66%	2.49%	9.33%	12.50%
17	4.75%	7.13%	3.00%	3.00%	1.69%	2.54%	9.44%	12.67%
18	4.84%	7.26%	3.00%	3.00%	1.72%	2.58%	9.56%	12.84%
19	4.93%	7.39%	3.00%	3.00%	1.75%	2.63%	9.68%	13.02%
20	5.01%	7.52%	3.00%	3.00%	1.78%	2.67%	9.79%	13.19%
21	5.10%	7.65%	3.00%	3.00%	1.81%	2.72%	9.91%	13.37%
22	5.19%	7.79%	3.00%	3.00%	1.85%	2.77%	10.04%	13.56%
23	5.28%	7.93%	3.00%	3.00%	1.88%	2.82%	10.16%	13.75%
24	5.38%	8.07%	3.00%	3.00%	1.91%	2.87%	10.29%	13.94%
25	5.47%	8.21%	3.00%	3.00%	1.95%	2.92%	10.42%	14.13%
26	5.57%	8.35%	3.00%	3.00%	1.98%	2.97%	10.55%	14.32%
27	5.67%	8.50%	3.00%	3.00%	2.01%	3.02%	10.68%	14.52%
28	5.77%	8.65%	3.00%	3.00%	2.05%	3.08%	10.82%	14.73%
29	5.87%	8.80%	3.00%	3.00%	2.09%	3.13%	10.96%	14.93%
30	5.97%	8.96%	3.00%	3.00%	2.13%	3.19%	11.10%	15.15%
31	6.08%	9.12%	3.00%	3.00%	2.16%	3.24%	11.24%	15.36%
32	6.19%	9.28%	3.00%	3.00%	2.20%	3.30%	11.39%	15.58%
33	6.30%	9.45%	3.00%	3.00%	2.24%	3.36%	11.54%	15.81%
34	6.41%	9.62%	3.00%	3.00%	2.28%	3.42%	11.69%	16.04%
35	6.53%	9.80%	3.00%	3.00%	2.33%	3.49%	11.86%	16.29%
36	6.65%	9.98%	3.00%	3.00%	2.37%	3.55%	12.02%	16.53%
37	6.78%	10.17%	3.00%	3.00%	2.41%	3.62%	12.19%	16.79%
38	6.91%	10.36%	3.00%	3.00%	2.46%	3.69%	12.37%	17.05%
39	7.04%	10.56%	3.00%	3.00%	2.51%	3.76%	12.55%	17.32%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

Entry Age	Basic Only		Cost Sharing Contributions		COLA Only		Total	
	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.18%	10.77%	3.00%	3.00%	2.55%	3.83%	12.73%	17.60%
41	7.31%	10.97%	3.00%	3.00%	2.60%	3.90%	12.91%	17.87%
42	7.42%	11.13%	3.00%	3.00%	2.64%	3.96%	13.06%	18.09%
43	7.49%	11.24%	3.00%	3.00%	2.67%	4.00%	13.16%	18.24%
44	7.52%	11.28%	3.00%	3.00%	2.67%	4.01%	13.19%	18.29%
45	7.49%	11.24%	3.00%	3.00%	2.67%	4.00%	13.16%	18.24%
46	7.39%	11.09%	3.00%	3.00%	2.63%	3.94%	13.02%	18.03%
47	7.24%	10.86%	3.00%	3.00%	2.57%	3.86%	12.81%	17.72%
48	7.49%	11.24%	3.00%	3.00%	2.67%	4.00%	13.16%	18.24%
49 & Over	7.76%	11.64%	3.00%	3.00%	2.76%	4.14%	13.52%	18.78%

\*Use these rates for Non-Integrated Members

Interest: 7.60% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.

Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 35.57%

Terminal Pay: 4.0%



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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2C Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll)**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	4.67%	7.01%	1.36%	2.04%	6.03%	9.05%
16	4.67%	7.01%	1.36%	2.04%	6.03%	9.05%
17	4.75%	7.13%	1.38%	2.07%	6.13%	9.20%
18	4.84%	7.26%	1.41%	2.11%	6.25%	9.37%
19	4.93%	7.39%	1.43%	2.15%	6.36%	9.54%
20	5.01%	7.52%	1.46%	2.19%	6.47%	9.71%
21	5.10%	7.65%	1.49%	2.23%	6.59%	9.88%
22	5.19%	7.79%	1.51%	2.26%	6.70%	10.05%
23	5.28%	7.93%	1.53%	2.30%	6.81%	10.23%
24	5.38%	8.07%	1.57%	2.35%	6.95%	10.42%
25	5.47%	8.21%	1.59%	2.39%	7.06%	10.60%
26	5.57%	8.35%	1.62%	2.43%	7.19%	10.78%
27	5.67%	8.50%	1.65%	2.47%	7.32%	10.97%
28	5.77%	8.65%	1.68%	2.52%	7.45%	11.17%
29	5.87%	8.80%	1.71%	2.56%	7.58%	11.36%
30	5.97%	8.96%	1.74%	2.61%	7.71%	11.57%
31	6.08%	9.12%	1.77%	2.65%	7.85%	11.77%
32	6.19%	9.28%	1.80%	2.70%	7.99%	11.98%
33	6.30%	9.45%	1.83%	2.75%	8.13%	12.20%
34	6.41%	9.62%	1.87%	2.80%	8.28%	12.42%
35	6.53%	9.80%	1.90%	2.85%	8.43%	12.65%
36	6.65%	9.98%	1.93%	2.90%	8.58%	12.88%
37	6.78%	10.17%	1.97%	2.96%	8.75%	13.13%
38	6.91%	10.36%	2.01%	3.01%	8.92%	13.37%
39	7.04%	10.56%	2.05%	3.07%	9.09%	13.63%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2C Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of payroll) - continued**

<u>Entry Age</u>	<u>Basic Only</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
40	7.18%	10.77%	2.09%	3.13%	9.27%	13.90%
41	7.31%	10.97%	2.13%	3.19%	9.44%	14.16%
42	7.42%	11.13%	2.16%	3.24%	9.58%	14.37%
43	7.49%	11.24%	2.18%	3.27%	9.67%	14.51%
44	7.52%	11.28%	2.19%	3.28%	9.71%	14.56%
45	7.49%	11.24%	2.18%	3.27%	9.67%	14.51%
46	7.39%	11.09%	2.15%	3.22%	9.54%	14.31%
47	7.24%	10.86%	2.11%	3.16%	9.35%	14.02%
48	7.49%	11.24%	2.18%	3.27%	9.67%	14.51%
49 & Over	7.76%	11.64%	2.26%	3.39%	10.02%	15.03%

\* Use these rates for Non-Integrated Members

Interest: 7.60% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.

Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 29.08%

Terminal Pay: 4.0%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2D Members' Contribution Rates for Members with Less than 5 Years of Vesting Service Based on the December 31, 2014 Actuarial Valuation  
(as a % of payroll)**

<u>Entry Age</u>	<u>Basic Only</u>		<u>Cost Sharing Contributions**</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	4.67%	7.01%	5.00%	5.00%	1.53%	2.30%	11.20%	14.31%
16	4.67%	7.01%	5.00%	5.00%	1.53%	2.30%	11.20%	14.31%
17	4.75%	7.13%	5.00%	5.00%	1.56%	2.34%	11.31%	14.47%
18	4.84%	7.26%	5.00%	5.00%	1.59%	2.38%	11.43%	14.64%
19	4.93%	7.39%	5.00%	5.00%	1.61%	2.42%	11.54%	14.81%
20	5.01%	7.52%	5.00%	5.00%	1.64%	2.46%	11.65%	14.98%
21	5.10%	7.65%	5.00%	5.00%	1.67%	2.51%	11.77%	15.16%
22	5.19%	7.79%	5.00%	5.00%	1.70%	2.55%	11.89%	15.34%
23	5.28%	7.93%	5.00%	5.00%	1.73%	2.60%	12.01%	15.53%
24	5.38%	8.07%	5.00%	5.00%	1.76%	2.64%	12.14%	15.71%
25	5.47%	8.21%	5.00%	5.00%	1.79%	2.69%	12.26%	15.90%
26	5.57%	8.35%	5.00%	5.00%	1.83%	2.74%	12.40%	16.09%
27	5.67%	8.50%	5.00%	5.00%	1.86%	2.79%	12.53%	16.29%
28	5.77%	8.65%	5.00%	5.00%	1.89%	2.83%	12.66%	16.48%
29	5.87%	8.80%	5.00%	5.00%	1.92%	2.88%	12.79%	16.68%
30	5.97%	8.96%	5.00%	5.00%	1.96%	2.94%	12.93%	16.90%
31	6.08%	9.12%	5.00%	5.00%	1.99%	2.99%	13.07%	17.11%
32	6.19%	9.28%	5.00%	5.00%	2.03%	3.04%	13.22%	17.32%
33	6.30%	9.45%	5.00%	5.00%	2.07%	3.10%	13.37%	17.55%
34	6.41%	9.62%	5.00%	5.00%	2.10%	3.15%	13.51%	17.77%
35	6.53%	9.80%	5.00%	5.00%	2.14%	3.21%	13.67%	18.01%
36	6.65%	9.98%	5.00%	5.00%	2.18%	3.27%	13.83%	18.25%
37	6.78%	10.17%	5.00%	5.00%	2.22%	3.33%	14.00%	18.50%
38	6.91%	10.36%	5.00%	5.00%	2.27%	3.40%	14.18%	18.76%
39	7.04%	10.56%	5.00%	5.00%	2.31%	3.46%	14.35%	19.02%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2D Members' Contribution Rates for Members with Less than 5 Years of Vesting Service Based on the December 31, 2014 Actuarial Valuation - continued**

(as a % of payroll)

Entry Age	Basic Only		Cost Sharing Contributions**		COLA Only		Total	
	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.18%	10.77%	5.00%	5.00%	2.35%	3.53%	14.53%	19.30%
41	7.31%	10.97%	5.00%	5.00%	2.40%	3.60%	14.71%	19.57%
42	7.42%	11.13%	5.00%	5.00%	2.43%	3.65%	14.85%	19.78%
43	7.49%	11.24%	5.00%	5.00%	2.45%	3.68%	14.94%	19.92%
44	7.52%	11.28%	5.00%	5.00%	2.47%	3.70%	14.99%	19.98%
45	7.49%	11.24%	5.00%	5.00%	2.45%	3.68%	14.94%	19.92%
46	7.39%	11.09%	5.00%	5.00%	2.42%	3.63%	14.81%	19.72%
47	7.24%	10.86%	5.00%	5.00%	2.37%	3.56%	14.61%	19.42%
48	7.49%	11.24%	5.00%	5.00%	2.45%	3.68%	14.94%	19.92%
49 & Over	7.76%	11.64%	5.00%	5.00%	2.55%	3.82%	15.31%	20.46%

\* Use these rates for Non-Integrated Members

\*\* The 5.00% cost sharing contribution is reduced to 3.00% for members with at least 5 years of vesting service.

Interest:	7.60% per annum
COLA:	2.00%
Mortality:	RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.
Salary Increase:	Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)
COLA Loading Factor:	32.77%
Terminal Pay:	4.0%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2D Members' Contribution Rates for Members with 5 or More Years of Vesting Service Based on the December 31, 2014 Actuarial Valuation**

(as a % of payroll)

<u>Entry Age</u>	<u>Basic Only</u>		<u>Cost Sharing Contributions</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
15	4.67%	7.01%	3.00%	3.00%	1.53%	2.30%	9.20%	12.31%
16	4.67%	7.01%	3.00%	3.00%	1.53%	2.30%	9.20%	12.31%
17	4.75%	7.13%	3.00%	3.00%	1.56%	2.34%	9.31%	12.47%
18	4.84%	7.26%	3.00%	3.00%	1.59%	2.38%	9.43%	12.64%
19	4.93%	7.39%	3.00%	3.00%	1.61%	2.42%	9.54%	12.81%
20	5.01%	7.52%	3.00%	3.00%	1.64%	2.46%	9.65%	12.98%
21	5.10%	7.65%	3.00%	3.00%	1.67%	2.51%	9.77%	13.16%
22	5.19%	7.79%	3.00%	3.00%	1.70%	2.55%	9.89%	13.34%
23	5.28%	7.93%	3.00%	3.00%	1.73%	2.60%	10.01%	13.53%
24	5.38%	8.07%	3.00%	3.00%	1.76%	2.64%	10.14%	13.71%
25	5.47%	8.21%	3.00%	3.00%	1.79%	2.69%	10.26%	13.90%
26	5.57%	8.35%	3.00%	3.00%	1.83%	2.74%	10.40%	14.09%
27	5.67%	8.50%	3.00%	3.00%	1.86%	2.79%	10.53%	14.29%
28	5.77%	8.65%	3.00%	3.00%	1.89%	2.83%	10.66%	14.48%
29	5.87%	8.80%	3.00%	3.00%	1.92%	2.88%	10.79%	14.68%
30	5.97%	8.96%	3.00%	3.00%	1.96%	2.94%	10.93%	14.90%
31	6.08%	9.12%	3.00%	3.00%	1.99%	2.99%	11.07%	15.11%
32	6.19%	9.28%	3.00%	3.00%	2.03%	3.04%	11.22%	15.32%
33	6.30%	9.45%	3.00%	3.00%	2.07%	3.10%	11.37%	15.55%
34	6.41%	9.62%	3.00%	3.00%	2.10%	3.15%	11.51%	15.77%
35	6.53%	9.80%	3.00%	3.00%	2.14%	3.21%	11.67%	16.01%
36	6.65%	9.98%	3.00%	3.00%	2.18%	3.27%	11.83%	16.25%
37	6.78%	10.17%	3.00%	3.00%	2.22%	3.33%	12.00%	16.50%
38	6.91%	10.36%	3.00%	3.00%	2.27%	3.40%	12.18%	16.76%
39	7.04%	10.56%	3.00%	3.00%	2.31%	3.46%	12.35%	17.02%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 2D Members' Contribution Rates for Members with 5 or More Years of Vesting Service Based on the December 31, 2014 Actuarial Valuation – continued**  
(as a % of payroll)

<u>Entry Age</u>	<u>Basic Only</u>		<u>Cost Sharing Contributions</u>		<u>COLA Only</u>		<u>Total</u>	
	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>	<u>First \$161</u>	<u>Over \$161*</u>
40	7.18%	10.77%	3.00%	3.00%	2.35%	3.53%	12.53%	17.30%
41	7.31%	10.97%	3.00%	3.00%	2.40%	3.60%	12.71%	17.57%
42	7.42%	11.13%	3.00%	3.00%	2.43%	3.65%	12.85%	17.78%
43	7.49%	11.24%	3.00%	3.00%	2.45%	3.68%	12.94%	17.92%
44	7.52%	11.28%	3.00%	3.00%	2.47%	3.70%	12.99%	17.98%
45	7.49%	11.24%	3.00%	3.00%	2.45%	3.68%	12.94%	17.92%
46	7.39%	11.09%	3.00%	3.00%	2.42%	3.63%	12.81%	17.72%
47	7.24%	10.86%	3.00%	3.00%	2.37%	3.56%	12.61%	17.42%
48	7.49%	11.24%	3.00%	3.00%	2.45%	3.68%	12.94%	17.92%
49 & Over	7.76%	11.64%	3.00%	3.00%	2.55%	3.82%	13.31%	18.46%

\* Use these rates for Non-Integrated Members

Interest: 7.60% per annum  
 COLA: 2.00%  
 Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.  
 Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 32.77%  
 Terminal Pay: 4.0%

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

**Appendix A**

**Member Contribution Rates (Continued)**

**Safety Tier 4 Members' Contribution Rates Based on the December 31, 2014 Actuarial Valuation (as a % of eligible payroll)\***

	Basic Only	COLA Only	Total
	<u>Eligible Pay</u>	<u>Eligible Pay</u>	<u>Eligible Pay</u>
All Safety Tier 4 Members	12.38%	2.87%	15.25%

Interest: 7.60% per annum  
 COLA: 2.00%  
 Mortality: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, with no setback for males and set back two years for females, weighted 75% male and 25% female.  
 Salary Increase: Inflation (3.25%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)  
 COLA Loading Factor: 23.18%  
 Terminal Pay: 0.0%

\* 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 120% of \$117,020, or \$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))

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

**Appendix B**

**Projected Employer Contributions By Each Participating Employer**

Estimated Employer Contribution Requirement for Each Participating Employer in ACERA (\$000s)  
 Calculated Based on Projected Employer Compensation Used in the December 31, 2014 Actuarial Valuation

Dollar Contribution<sup>(1)</sup> - Based on December 31, 2014 Valuation

<u>Employer Name (Code)</u>	<u>General</u>				<u>Safety</u>					<u>Total</u>
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>	<u>Tier 4</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 2C</u>	<u>Tier 2D</u>	<u>Tier 4</u>	
Alameda County (101)	\$3,965	\$87,483		\$11,286	\$1,175	\$67,619	\$1,896	\$4,944	\$4,615	\$182,983
Health System (106)	639	39,934		6,097						46,670
Superior Court (632)	556	8,522		763						9,841
First 5 (714)		782		82						864
Housing Authority (103)	1,003	74		49						1,126
LARPD (104)	199		\$925	90						1,214
Office of Education (105)	19									19
<b>Total</b>	<b>\$6,381</b>	<b>\$136,795</b>	<b>\$925</b>	<b>\$18,367</b>	<b>\$1,175</b>	<b>\$67,619</b>	<b>\$1,896</b>	<b>\$4,944</b>	<b>\$4,615</b>	<b>\$242,717</b>

Dollar Contribution<sup>(1)</sup> - Based on December 31, 2013 Valuation

<u>Employer Name (Code)</u>	<u>General</u>				<u>Safety</u>					<u>Total</u>
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>	<u>Tier 4</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 2C</u>	<u>Tier 2D</u>	<u>Tier 4</u>	
Alameda County (101)	\$3,722	\$81,175		\$10,246	\$1,094	\$62,073	\$1,778	\$4,521	\$4,436	\$169,045
Health System (106)	599	37,016		5,533						43,148
Superior Court (632)	521	7,899		693						9,113
First 5 (714)		725		74						799
Housing Authority (103)	952	70		46						1,068
LARPD (104)	189		\$958	93						1,240
Office of Education (105)	18									18
<b>Total</b>	<b>\$6,001</b>	<b>\$126,885</b>	<b>\$958</b>	<b>\$16,685</b>	<b>\$1,094</b>	<b>\$62,073</b>	<b>\$1,778</b>	<b>\$4,521</b>	<b>\$4,436</b>	<b>\$224,431</b>



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

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<sup>(1)</sup> Contribution calculated using projected compensation provided below for the December 31, 2014 valuation:

December 31, 2014 Projected Total Compensation (\$000s)

<u>Employer Name (Code)</u>	<u>General</u>				<u>Safety</u>					<u>Total</u>
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 3</u>	<u>Tier 4</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 2C</u>	<u>Tier 2D</u>	<u>Tier 4</u>	
Alameda County (101)	\$19,008	\$435,021		\$58,718	\$1,636	\$125,221	\$3,398	\$9,617	\$8,752	\$661,371
Health System (106)	2,982	193,195		30,821						226,998
Superior Court (632)	2,594	41,226		3,857						47,677
First 5 (714)		3,785		414						4,199
Housing Authority (103)	3,757	284		196						4,237
LARPD (104)	747		3,154	393						4,294
Office of Education (105)	72									72
<b>Total</b>	<b>\$29,160</b>	<b>\$673,511</b>	<b>\$3,154</b>	<b>\$94,399</b>	<b>\$1,636</b>	<b>\$125,221</b>	<b>\$3,398</b>	<b>\$9,617</b>	<b>\$8,752</b>	<b>\$948,848</b>

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