Alameda County Employees' Retirement Association

Actuarial Valuation and Review as of December 31, 2013



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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April 2, 2014

Board of Retirement Alameda County Employees' Retirement Association 475 14th Street, Suite 1000 Oakland, CA 94612

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2013. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2014-2015 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.

Paul Angelo, FSA, MAAA, FCA, EA Senior Vice President and Actuary Andy Yeung, ASA, MAAA, FCA, EA Vice President and Associate Actuary

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SECTION 1

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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, 2013. 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, 2013, provided by the Retirement Association;
- The assets of the Plan as of December 31, 2013, 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, 2013 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 23.75% of payroll. In this valuation, we have applied the 7.80% net investment earnings, 3.50% inflation, and 0.50% across-the-board salary increase assumptions carried over by the Board from the December 31, 2012 valuation. The 7.80% 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. The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2014 through June 30, 2015.



Significant Issues in Valuation Year

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

> In March 2013, the Alameda County Medical Center (ACMC) officially changed its name to the Alameda Health System (AHS) and that name change is reflected in this report.

On September 13, 2013, Assembly Bill No. 1008 (AB 1008), relating to AHS, was approved by the Governor. Section 4 of AB 1008 prescribes the eligibility of an employee of the hospital authority (which is dedicated to the management, administration, and control of the AHS) to participate in the Alameda County Employees' Retirement Association (ACERA). The magnitude of this potential change in ACERA membership has not yet been determined by ACERA. We note that the results in this valuation reflect the ACERA membership, including ACERA-eligible AHS employees, as of November 30, 2013 (i.e., the date as of which the membership data was collected).

- As directed by ACERA, we have continued to assume in this valuation that the current members in the non-CalPEPRA tiers will be able to convert the same amount of terminal pay during their final average compensation period as assumed in the last valuation. It is our understanding that the Association is deferring the implementation of the compensation earnable provisions found in AB 197 until some legal issues raised in a subsequent lawsuit are resolved.
- In the December 31, 2012 valuation, the ratio of the valuation value of assets to actuarial accrued liabilities was 73.9%. In this December 31, 2013 valuation, the funding ratio has increased to 75.9%. The funded ratio if measured on a market value of assets basis increased from 74.8%² as of December 31, 2012 to 80.9% as of December 31, 2013.

Ref: Pg. 61



Based on information provided by ACERA, the following employees shall not become ACERA members upon employment by AHS in the following circumstances: (1) Current employees of the facilities AHS acquires (or merges with/into); (2) Future employees of the facility merged into/with or acquired by AHS; (3) Employees who are ACERA members (with a "membership covered facility" or other ACERA participating employer) on the date of acquisition/merger and subsequently transition employment to one of the newly acquired facilities; (4) Current or future employees with one of the newly acquired/merged facilities who subsequently transition employment to a "membership covered" facility; and (5) Persons not subjected to an MOU/Unrepresented employees hired by any AHS facilities as of the AB 1008 effective date.

AB 1008 provides some exceptions to the rules listed above.

² We have restated the December 31, 2012 funded ratio calculated using market value of assets to assume that only 50% (instead of 100%) of deferred market gains would be available to the pension plan.

- > The Association's unfunded actuarial accrued liability (UAAL) as of December 31, 2012 was \$1,729.1 million. In this year's valuation, the UAAL has decreased to \$1,650.7 million.
- > The Plan had a net actuarial experience gain of about \$115.6 million since the prior actuarial valuation. A reconciliation of the Association's UAAL is provided in Section 3, Exhibit H.
- > 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 \$7.0 million for the implicit retiree health benefit subsidy paid by the County for 2013 (note that this is an estimated amount provided by ACERA). The \$7.0 million and the unused credit from prior years' transfers (the balance of prior transfers was about \$36.3 million as of December 31, 2013) have been recognized over separate 20-year periods (i.e., 19 years is the remaining period as of December 31, 2013 for the unused credit from prior years' transfers).
- > The aggregate employer rate calculated in this valuation has decreased from 24.03% of payroll to 23.75% of payroll. This change is due primarily to higher than expected return on investments (after smoothing) and lower than expected salary increases for active members. These gains were partially offset by losses from amortizing the prior year's UAAL over a smaller than expected projected total payroll and the scheduled delay in implementing last year's employer contribution rates after the date of the valuation. 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.
- The <u>aggregate</u> member rate calculated in this valuation remained unchanged at 8.58% of payroll. 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, 2013. Also of note is that, based on our recommendation, the Board has exercised the discretion made available by AB 1380 to no longer round the member's contribution rates for Tier 4 members to the nearest 1/4% as previously required by the California Public Employees' Pension Reform Act of 2013 (CalPEPRA). This should allow for exactly one-half of the Normal Cost to be paid by the employees and by the employers covered under the CalPEPRA plans.

The detailed member rates are provided in Appendix A of this report.

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

Ref: Pg. 8 and Pg. 53

Ref: Pg. 25 and Pg. 101

Ref: Pg. 26 and Pg. 81

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, 2013 is \$686.8 million (in the previous valuation, this amount was a \$124.9 million 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, 2013. This implies that if the Association earns the assumed net rate of investment return of 7.80% 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 7.80% rate and all other actuarial assumptions are met, the contribution requirements would decrease in each of the next few years.

The net deferred gains of \$686.8 million represent 10.3% of the market value of assets as of December 31, 2013. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$686.8 million 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 gains were recognized immediately in the valuation value of assets, the funded percentage would increase from 75.9% to 80.9%.
- If one-half of the net deferred gains were recognized immediately in the valuation value of assets, the aggregate employer rate would decrease from 23.75% to about 21.1% of payroll.
- > The actuarial valuation report as of December 31, 2013 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. It is important to note that the new GASB rules only redefine pension expense for financial reporting purposes, and do not apply to contribution amounts for actual pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices. Because these new Statements are not effective until the calendar year ending December 31, 2014 for plan reporting and the fiscal year ending June 30, 2015 for employer reporting, the financial reporting information in this report continues to be in accordance with Statements 25 and 27.



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.

Summary of Key Valuation Results (Dollar amoun		<u>)</u> ber 31, 2013	Decem	ber 31, 2012
Employer Contribution Rates:	Decem	Estimated	Deceiii	Estimated
County Only	Total Rate	Annual Amount (1)	Total Rate	Annual Amount (1)
General Tier 1	19.58%	\$4,456	19.86%	\$4,521
General Tier 2	18.66	82,952	19.19	85,309
General Tier 4	17.45	4,898	17.77	4,989
Safety Tier 1	66.88	1,060	62.25	986
Safety Tier 2	49.57	64,251	48.91	63,396
Safety Tier 2C	52.29	1,729	51.05	1,689
Safety Tier 2D	47.01	3,358	46.61	3,330
Safety Tier 4	50.68	1,377	47.27	1,284
County Combined	25.65	164,081	25.87	165,504
AHS, Court & First 5 Only	20.00	101,001	20.07	100,00.
General Tier 1	20.08	1,334	20.27	1,347
General Tier 2	19.16	47,237	19.60	48,321
General Tier 4	17.95	2,763	18.18	2,799
Other Districts		,		,
General Tier 1	25.32	1,210	25.38	1,213
General Tier 2	24.40	66	24.71	66
General Tier 3	30.37	971	30.94	990
General Tier 4 (Housing Authority, Office of Education)	23.19	21	23.29	21
General Tier 4 (LARPD Only)	23.69	34	24.06	34
All Categories Combined	23.75	217,717	24.03	220,295
Average Member Contribution Rates:		Estimated		Estimated
	Total Rate	Annual Amount (1)	Total Rate (2)	Annual Amount (1)
General Tier 1	8.97%	\$3,066	8.99%	\$3,073
General Tier 2	7.28	50,330	7.28	50,330
General Tier 3	12.69	406	12.73	407
General Tier 4	8.12	3,548	8.25	3,605
Safety Tier 1	12.24	194	12.33	196
Safety Tier 2	14.72	19,080	14.72	19,080
Safety Tier 2C	12.57	416	12.55	415
Safety Tier 2D	16.39	1,171	16.41	1,172
Safety Tier 4	16.77	456	13.75	374
All Categories Combined	8.58	78,667	8.58	78,652

⁽¹⁾ Based on December 31, 2013 projected annual compensation.

Average rates have been recalculated by applying the individual entry age based member rates determined in the December 31, 2012 valuation to the Association membership as of December 31, 2013.



Summary of Key Valuation Results - continued (Dollar amounts in thousands)						
	December 31, 2013	December 31, 2012				
Funded Status:						
Actuarial Accrued Liability (AAL) (3)	\$6,861,687	\$6,612,929				
Valuation Value of Assets (VVA) (4)	5,210,944	4,883,872				
Market Value of Assets (MVA) (4)	5,554,364	$4,946,322^{(5)}$				
Funded Percentage on VVA Basis	75.9%	73.9%				
Funded Percentage on MVA Basis	80.9%	74.8% ⁽⁵⁾				
Unfunded Actuarial Accrued Liability (UAAL) on VVA Basis	\$1,650,743	\$1,729,057				
Unfunded Actuarial Accrued Liability (UAAL) on MVA Basis	1,307,323	1,666,607 ⁽⁵⁾				
Key Economic Assumptions:						
Interest Rate	7.80%	7.80%				
Inflation Rate	3.50%	3.50%				
Across-the-Board Salary Increase	0.50%	0.50%				

⁽³⁾ Excludes liabilities held for SRBR and other non-valuation reserves.



⁽⁴⁾ 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.

⁽⁵⁾ Restated to include only 50% (instead of 100%) of deferred market gains to the pension plan.

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

	December 31, 2013	December 31, 2012	Percentage Change
Active Members:			
Number of members	10,877	10,800	0.7%
Average age	47.3	47.6	N/A
Average service	11.5	11.8	N/A
Projected total compensation	\$916,803,000	\$906,500,000	1.1%
Average projected compensation	\$84,288	\$83,935	0.4%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	6,593	6,234	5.8%
Disability retired	818	819	-0.1%
Beneficiaries	1,155	1,122	2.9%
Total	8,566	8,175	4.8%
Average age	70.7	70.6	N/A
Average monthly benefit (1)	\$3,442	\$3,332	3.3%
Vested Terminated Members:			
Number of vested terminated members (2)	1,902	1,835	3.7%
Average age	49.0	48.8	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets	\$6,640,295	\$5,668,204	17.1%
Return on market value of assets	19.53%	13.91%	N/A
Actuarial value of assets	\$5,953,455	\$5,543,303	7.4%
Return on actuarial value of assets	9.73%	1.67%	N/A
Valuation value of assets	\$5,210,944	\$4,883,872	6.7%
Return on valuation value of assets	8.48%	1.59%	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.

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: 2004 – 2013

Year Ended December 31	Active Members	Vested Terminated Members*	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2004	10,556	1,361	6,475	0.74
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

^{*} Includes terminated members due a refund of member contributions



Active Members

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 10,877 active members with an average age of 47.3 years, average years of service of 11.5 and average compensation of \$84,288. The 10,800 active members in the prior valuation had an average age of 47.6 years, average service of 11.8 and average compensation of \$83,935.

Inactive Members

In this year's valuation, there were 1,902 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 1,835 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, 2013 based on census data collected as of November 30, 2013.

CHART 2
Distribution of Active Members by Age as of December 31, 2013

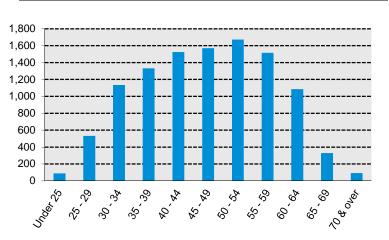
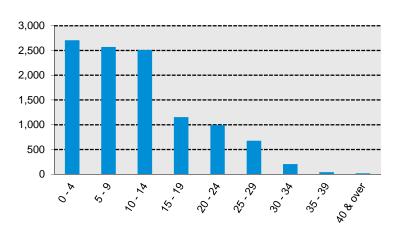


CHART 3
Distribution of Active Members by Years of Service as of December 31, 2013



Retired Members and Beneficiaries

As of December 31, 2013, 7,411 retired members and 1,155 beneficiaries were receiving total monthly benefits of \$29,487,279. For comparison, in the previous valuation, there were 7,053 retired members and 1,122 beneficiaries receiving monthly benefits of \$27,239,890. 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, 2013 based on census data collected as of November 30, 2013.

■Disability

Regular

CHART 4 Distribution of Retired Members (Excl. Beneficiaries) by Type and by Monthly Amount as of December 31, 2013

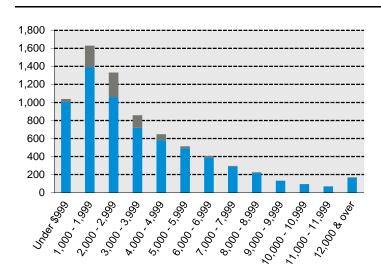
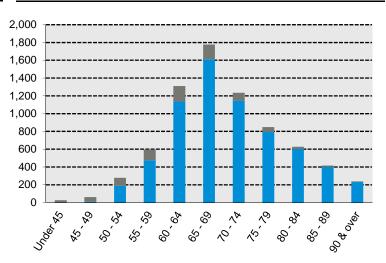


CHART 5 Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of December 31, 2013

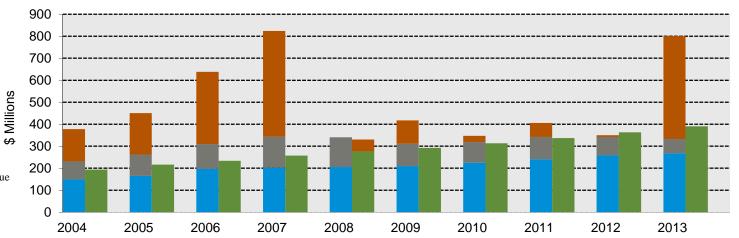


B. FINANCIAL INFORMATION

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, 2004 through 2013



■ Adjustment Toward Market Value
■ Benefits Paid
■ Note the second Division in the least of the second Division in the second Division i

■ Net Interest and Dividends

Contributions



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.

CHART 7

Determination of Actuarial Value of Assets for Year Ended December 31, 2013

	Six Month	Period	Total Actual Market	Expected Market	Investment	Deferred	Deferred
	From	То	Return (net)	Return (net)	Gain (Loss)	Factor	Return
	01/01/2009	06/30/2009	\$252,817,171	\$151,382,559	\$101,434,612	0.0	\$0
	07/01/2009	12/31/2009	700,848,916	159,815,655	541,033,261	0.1	54,103,326
	01/01/2010	06/30/2010	(171,083,230)	186,202,514	(357,285,743)	0.2	(71,457,149)
	07/01/2010	12/31/2010	806,700,469	175,307,561	631,392,909	0.3	189,417,873
	01/01/2011	06/30/2011	274,085,462	205,402,533	68,682,929	0.4	27,473,171
	07/01/2011	12/31/2011	(327,895,627)	214,282,574	(542,178,201)	0.5	(271,089,100)
	01/01/2012	06/30/2012	295,998,792	199,451,466	96,547,326	0.6	57,928,395
	07/01/2012	12/31/2012	402,683,765	206,354,148	196,329,617	0.7	137,430,732
	01/01/2013	06/30/2013	379,463,693	219,754,365	159,709,329	0.8	127,767,463
	07/01/2013	12/31/2013	715,724,522	232,095,516	483,629,006	0.9	435,266,106
1.	Total Deferred Re	eturn					\$686,840,817
2.	Net Market Value	;					\$6,640,295,478
3.	Actuarial Value o	f Assets (Item 2 – Iter	m 1)				\$5,953,454,661
4.	Actuarial Value a	s a Percentage of Mar	ket Value (Before Cor	rridor; Item 3 / Item 2)			89.7%
5.	Actuarial Value o	f Assets – Corridor L	imits:				
	 Lower Limit 	- 60% of Net Market	Value				\$3,984,177,287
	b. Upper Limit	– 140% of Net Marke	et Value				\$9,296,413,670
6.	Actuarial Value o	f Assets (within corrie	dor)				\$5,953,454,661
7.	Non-valuation res	erves and designation	s:				
	a. Reserve for I	Interest Fluctuations (Contingency Reserve)	, but no less than \$0			\$98,014,212
	b. Supplementa	l Retirees Benefit Re	serve (SRBR)				643,056,500
	c. Other Non-V	aluation Reserve (40	1(h) Reserve)				8,433,231
	d. SRBR Trans	fer to Employer Adva	nce Reserve**				(6,993,032)
	e. Subtotal						\$742,510,911
8.	Valuation Value of	of Assets (Item 6 – Ite	m 7e)				\$5,210,943,750

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

Note: Results may not add due to rounding.

^{**} Estimate provided by ACERA.



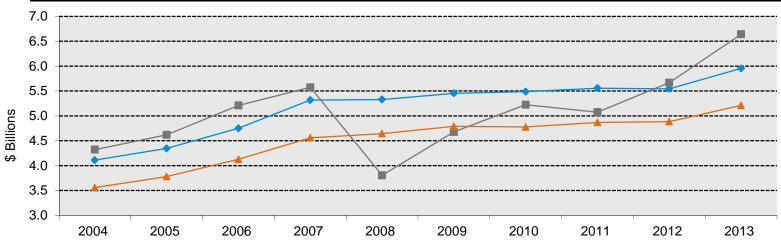
^{*} The amounts of deferred return that will be recognized in each subsequent valuation are as follows: 12/31/14: \$201,468,760 12/31/15: \$155,683,292 12/31/16: \$133,025,235 12/31/17: \$148,300,629 12/31/18: \$48,362,901

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, 2004 – 2013





Actuarial Value

── Valuation Value

—■— Market Value

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 \$115.6 million, a net gain of \$33.0 million from investments and a gain of \$82.6 million from all other sources. The net experience variation from individual sources other than investments was 1.2% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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

CHART 9

Actuarial Experience for Year Ended December 31, 2013

1.	Net gain from investments (1)	\$(32,991,000)
2.	Net gain from other experience ⁽²⁾	(82,627,000)
3.	Net experience $gain^{(3)}$: $(1) + (2)$	\$(115,618,000)

⁽¹⁾ Details in Chart 10.



⁽²⁾ See Section 3, Exhibit H.

⁽³⁾ Excludes loss from contributions less than anticipated due to scheduled delay in implementing the higher contribution rate calculated in the December 31, 2012 valuation.

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, 2012 valuation. The actual rate of return on a valuation value of assets basis for the 2013 plan year was 8.48%.

Since the actual return for the year was more than the assumed return, ACERA experienced an actuarial gain during the year ended December 31, 2013 with regard to its investments.

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

CHART 10

Investment Experience for Year Ended December 31, 2013 – Valuation Value, Actuarial Value, and Market Value of Assets

	Valuation Value	Actuarial Value	Market Value
1. Actual return	\$410,409,663	\$533,248,385	\$1,095,188,215
2. Average value of assets	\$4,838,706,511	\$5,481,754,743	\$5,606,655,730
3. Actual rate of return: $(1) \div (2)$	8.48%	9.73%	19.53%
4. Assumed rate of return	7.80%	7.80%	7.80%
5. Expected return: (2) x (4)	\$377,419,108	\$427,576,870	\$437,319,147
6. Actuarial gain/(loss): (1) - (5)	<u>\$32,990,555</u>	<u>\$105,671,515</u>	<u>\$657,869,068</u>



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: 2004 – 2013

_		Valuation Value Actuarial Value Investment Return		Market Value Investment Return		
Year Ended December 31	Amount	Percent	Amount	Percent	Amount	Percent
2004	\$195,406,503	5.79%	\$229,088,351	5.87%	\$447,795,887	11.49%
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%
Five-Year Average Return		3.59%		4.09%		13.94%
Ten-Year Average Return		5.34%		5.77%		7.02%

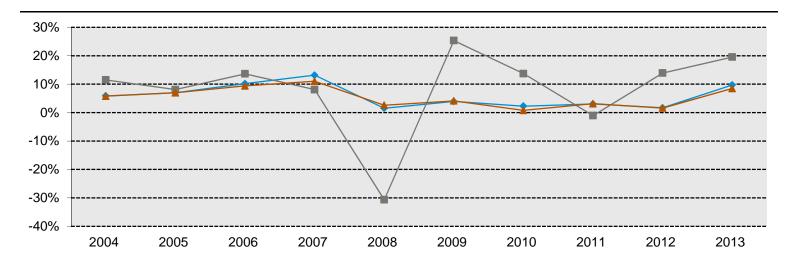


Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

This chart illustrates how this leveling effect has actually worked over the years 2004 – 2013.

CHART 12

Market, Actuarial and Valuation Value Rates of Return for Years Ended December 31, 2004 - 2013



Actuarial Value

Market Value

Valuation Value



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, 2013 amounted to \$82.6 million which is 1.2% of the actuarial accrued liability. See Exhibit H for a detailed development of the Unfunded Actuarial Accrued Liability.

D. EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is 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 4.00% (i.e., 3.50% 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 19 years remaining as of December 31, 2013). 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



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 employment and 3% of salary for each subsequent year of employment (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.

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."

Tier 4 Members



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.



CHART 13

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

			Decembe	er 31, 2013			December	31, 2012
County Only	В	ASIC	CC	DLA	TO ⁻	ΓAL	BASIC AN COMB	
	<u>Rate</u>	Estimated Annual <u>Amount</u> *	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
General Tier 1 Members								
Normal Cost	7.83%	\$1,782	2.42%	\$551	10.25%	\$2,333	10.08%	\$2,294
UAAL (Before POB Credit)	12.07%	2,747	3.00%	683	15.07%	3,430	15.30%	3,483
Pension Obligation Bond Credit	-3.62%	-824	-1.62%	-369	-5.24%	-1,193	-5.11%	-1,163
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-114</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-114</u>	<u>-0.41%</u>	<u>-93</u>
Total Contribution	15.78%	\$3,591	3.80%	\$865	19.58%	\$4,456	19.86%	\$4,521
General Tier 2 Members								
Normal Cost	7.91%	\$35,164	1.42%	\$6,312	9.33%	\$41,476	9.41%	\$41,832
UAAL (Before POB Credit)	12.07%	53,657	3.00%	13,336	15.07%	66,993	15.30%	68,016
Pension Obligation Bond Credit	-3.62%	-16,093	-1.62%	-7,201	-5.24%	-23,294	-5.11%	-22,716
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-2,223</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-2,223</u>	<u>-0.41%</u>	<u>-1,823</u>
Total Contribution	15.86%	\$70,505	2.80%	\$12,447	18.66%	\$82,952	19.19%	\$85,309
General Tier 4 Members								
Normal Cost	6.84%	\$1,920	1.28%	\$359	8.12%	\$2,279	7.99%	\$2,243
UAAL (Before POB Credit)	12.07%	3,388	3.00%	842	15.07%	4,230	15.30%	4,295
Pension Obligation Bond Credit	-3.62%	-1,016	-1.62%	-455	-5.24%	-1,471	-5.11%	-1,434
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-140</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-140</u>	<u>-0.41%</u>	<u>-115</u>
Total Contribution	14.79%	\$4,152	2.66%	\$746	17.45%	\$4,898	17.77%	\$4,989



CHART 13 (continued)
Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)

			Decembe	er 31, 2013			December 31,	2012
County Only	В	ASIC	CC	DLA	тот	AL	BASIC AN COMB	
	<u>Rate</u>	Estimated Annual <u>Amount</u> *	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
Safety Tier 1 Members								
Normal Cost	26.61%	\$422	9.36%	\$148	35.97% ⁽¹⁾	\$570	32.01%	\$508
Member Cost Sharing Contributions	-3.00%	-48	0.00%	0	-3.00%	-48	-3.00%	-48
(Adjusted for Refunds)								
UAAL (Before POB Credit)	31.96%	507	7.64%	121	39.60%	628	38.68%	613
Pension Obligation Bond Credit	-3.18%	-50	-2.01%	-32	-5.19%	-82	-5.03%	-80
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-8</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-8</u>	<u>-0.41%</u>	<u>-7</u>
Total Contribution	51.89%	\$823	14.99%	\$237	66.88%	\$1,060	62.25%	\$986
Safety Tier 2 Members								
Normal Cost	15.70%	\$20,350	2.91%	\$3,772	18.61%	\$24,122	18.62%	\$24,135
Member Cost Sharing Contributions	-2.95%	-3,824	0.00%	0	-2.95%	-3,824	-2.95%	-3,824
(Adjusted for Refunds)								
UAAL (Before POB Credit)	31.96%	41,426	7.64%	9,902	39.60%	51,328	38.68%	50,136
Pension Obligation Bond Credit	-3.18%	-4,122	-2.01%	-2,605	-5.19%	-6,727	-5.03%	-6,520
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-648</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-648</u>	<u>-0.41%</u>	<u>-531</u>
Total Contribution	41.03%	\$53,182	8.54%	\$11,069	49.57%	\$64,251	48.91%	\$63,396

⁽¹⁾ The increase in the normal cost rate is mainly due to a higher average age at entry for the 10 Safety Tier 1 members (i.e., 40.1) in the December 31, 2013 valuation compared to the average age at entry for the 19 Safety Tier 1 members (i.e., 32.2) in the December 31, 2012 valuation.



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

CHART 13 (continued)
Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)

			Decembe	er 31, 2013			December 31,	2012
County Only	В	ASIC	C	DLA	то	TAL	BASIC AN COMB	
	<u>Rate</u>	Estimated Annual <u>Amount</u> *	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
Safety Tier 2C Members								
Normal Cost	15.41%	\$510	2.97%	\$98	18.38%	\$608	17.81%	\$589
Member Cost Sharing Contributions	0.00%	0	0.00%	0	0.00%	0	0.00%	0
(Adjusted for Refunds)								
UAAL (Before POB Credit)	31.96%	1,058	7.64%	252	39.60%	1,310	38.68%	1,280
Pension Obligation Bond Credit	-3.18%	-105	-2.01%	-67	-5.19%	-172	-5.03%	-166
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-17</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-17</u>	<u>-0.41%</u>	<u>-14</u>
Total Contribution	43.69%	\$1,446	8.60%	\$283	52.29%	\$1,729	51.05%	\$1,689
Safety Tier 2D Members								
Normal Cost	14.73%	\$1,052	2.88%	\$206	17.61%	\$1,258	17.88%	\$1,277
Member Cost Sharing Contributions	-4.51%	-322	0.00%	0	-4.51%	-322	-4.51%	-322
(Adjusted for Refunds)								
UAAL (Before POB Credit)	31.96%	2,283	7.64%	546	39.60%	2,829	38.68%	2,763
Pension Obligation Bond Credit	-3.18%	-227	-2.01%	-144	-5.19%	-371	-5.03%	-359
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-36</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-36</u>	<u>-0.41%</u>	<u>-29</u>
Total Contribution	38.50%	\$2,750	8.51%	\$608	47.01%	\$3,358	46.61%	\$3,330



CHART 13 (continued)
Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)

			Decembe	er 31, 2013			December 31, 2	2012
County Only	В	ASIC	CC	DLA	тот	AL	BASIC AN COMBI	
	<u>Rate</u>	Estimated Annual <u>Amount</u> *	<u>Rate</u>	Estimated Annual <u>Amount*</u>	Rate	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
Safety Tier 4 Members								
Normal Cost	13.68%	\$372	3.09%	\$84	16.77% ⁽¹⁾	\$456	14.03%	\$381
Member Cost Sharing Contributions	0.00%	0	0.00%	0	0.00%	0	0.00%	0
(Adjusted for Refunds)								
UAAL (Before POB Credit)	31.96%	869	7.64%	207	39.60%	1,076	38.68%	1,051
Pension Obligation Bond Credit	-3.18%	-86	-2.01%	-55	-5.19%	-141	-5.03%	-137
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-14</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-14</u>	<u>-0.41%</u>	<u>-11</u>
Total Contribution	41.96%	\$1,141	8.72%	\$236	50.68%	\$1,377	47.27%	\$1,284
All County Categories Combined								
Normal Cost	9.62%	\$61,572	1.81%	\$11,530	11.43%	\$73,102	11.45%	\$73,259
Member Cost Sharing Contributions	-0.66%	-4,194	0.00%	0	-0.66%	-4,194	-0.66%	-4,194
(Adjusted for Refunds)								
UAAL (Before POB Credit)	16.56%	105,935	4.05%	25,889	20.61%	131,824	20.58%	131,637
Pension Obligation Bond Credit	-3.52%	-22,523	-1.71%	-10,928	-5.23%	-33,451	-5.09%	-32,575
Implicit Retiree Health Benefit Subsidy	<u>-0.50%</u>	<u>-3,200</u>	0.00%	<u>0</u>	<u>-0.50%</u>	<u>-3,200</u>	<u>-0.41%</u>	<u>-2,623</u>
Total Contribution	21.50%	\$137,590	4.15%	\$26,491	25.65%	\$164,081	25.87%	\$165,504

⁽¹⁾ The increase in the normal cost rate is mainly due to a higher average age at entry for <u>actual</u> Safety Tier 4 members (i.e., about age 38.8) compared to the average age at entry for the <u>hypothetical</u> Safety Tier 4 members used in the December 31, 2012 valuation (i.e., about age 32.8, based on recent hires in the last two years prior to the December 31, 2012 valuation).



CHART 13 (continued)
Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)

			Decembe	er 31, 2013			December	31, 2012
AHS, Court & First 5 Only	В	ASIC	CC	DLA	TO ⁻	TAL	BASIC AN COMBI	
	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
General Tier 1 Members								
Normal Cost	7.83%	\$520	2.42%	\$161	10.25%	\$681	10.08%	\$670
UAAL (Before POB Credit)	12.07%	802	3.00%	199	15.07%	1,001	15.30%	1,016
Pension Obligation Bond Credit	<u>-3.62%</u>	<u>-240</u>	<u>-1.62%</u>	<u>-108</u>	<u>-5.24%</u>	<u>-348</u>	<u>-5.11%</u>	<u>-339</u>
Total Contribution	16.28%	\$1,082	3.80%	\$252	20.08%	\$1,334	20.27%	\$1,347
General Tier 2 Members								
Normal Cost	7.91%	\$19,501	1.42%	\$3,501	9.33%	\$23,002	9.41%	\$23,199
UAAL (Before POB Credit)	12.07%	29,757	3.00%	7,396	15.07%	37,153	15.30%	37,720
Pension Obligation Bond Credit	<u>-3.62%</u>	<u>-8,925</u>	-1.62%	<u>-3,993</u>	<u>-5.24%</u>	<u>-12,918</u>	<u>-5.11%</u>	<u>-12,598</u>
Total Contribution	16.36%	\$40,333	2.80%	\$6,904	19.16%	\$47,237	19.60%	\$48,321
General Tier 4 Members								
Normal Cost	6.84%	\$1,053	1.28%	\$197	8.12%	\$1,250	7.99%	\$1,230
UAAL (Before POB Credit)	12.07%	1,858	3.00%	462	15.07%	2,320	15.30%	2,356
Pension Obligation Bond Credit	<u>-3.62%</u>	<u>-557</u>	<u>-1.62%</u>	<u>-250</u>	<u>-5.24%</u>	<u>-807</u>	<u>-5.11%</u>	<u>-787</u>
Total Contribution	15.29%	\$2,354	2.66%	\$409	17.95%	\$2,763	18.18%	\$2,799



CHART 13 (continued)
Recommended Employer Contribution Rates (Estimated - Dollar Amounts in Thousands)

			Decembe	er 31, 2013			December	31, 2012
Other Districts	В	ASIC	CC	DLA	TO [*]	TAL	BASIC AN COMB	
	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
General Tier 1 Members								
Normal Cost	7.83%	\$374	2.42%	\$116	10.25%	\$490	10.08%	\$482
UAAL	12.07%	<u>577</u>	3.00%	<u>143</u>	15.07%	<u>720</u>	15.30%	<u>731</u>
Total Contribution	19.90%	\$951	5.42%	\$259	25.32%	\$1,210	25.38%	\$1,213
General Tier 2 Members								
Normal Cost	7.91%	\$21	1.42%	\$4	9.33%	\$25	9.41%	\$25
UAAL	12.07%	<u>33</u>	3.00%	<u>8</u>	15.07%	<u>41</u>	<u>15.30%</u>	<u>41</u>
Total Contribution	19.98%	\$54	4.42%	\$12	24.40%	\$66	24.71%	\$66
General Tier 3 Members								
Normal Cost	11.16%	\$357	3.64%	\$116	14.80%	\$473	14.87%	\$476
UAAL	12.25%	<u>392</u>	3.32%	<u>106</u>	15.57%	<u>498</u>	<u>16.07%</u>	<u>514</u>
Total Contribution	23.41%	\$749	6.96%	\$222	30.37%	\$971	30.94%	\$990
General Tier 4 Members (Housing Authorit	y, Office of Education	on)						
Normal Cost	6.84%	\$6	1.28%	\$1	8.12%	\$7	7.99%	\$7
UAAL	12.07%	<u>11</u>	3.00%	<u>3</u>	15.07%	<u>14</u>	<u>15.30%</u>	<u>14</u>
Total Contribution	18.91%	\$17	4.28%	\$4	23.19%	\$21	23.29%	\$21



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

CHART 13 (continued)

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

			Decembe	er 31, 2013			December	31, 2012
Other Districts	В	ASIC	CC	DLA	то	TAL	BASIC AN COMBI	
	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>	<u>Rate</u>	Estimated Annual <u>Amount*</u>
General Tier 4 Members (LARPD Only)								
Normal Cost	6.84%	\$10	1.28%	\$2	8.12%	\$12	7.99%	\$11
UAAL	12.25%	<u>17</u>	3.32%	<u>5</u>	15.57%	<u>22</u>	<u>16.07%</u>	<u>23</u>
Total Contribution	19.09%	\$27	4.60%	\$7	23.69%	\$34	24.06%	\$34
All Categories Combined								
All Categories Combined								
Normal Cost (Net)	8.64%	\$79,220	1.71%	\$15,628	10.35%	\$94,848	10.38%	\$95,165
UAAL (Net)	11.34%	103,937	2.06%	18,932	13.40%	122,869	13.65%	125,130
Total Contribution	19.98%	\$183,157	3.77%	\$34,560	23.75%	\$217,717	24.03%	\$220,295

^{*} Amounts are in thousands and are based on the December 31, 2013 annual payroll (also in thousands) shown on the following page.



CHART 13 (continued)

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

Payroll Breakdown

		AHS, Court		
	County Only	& First 5	Other Districts	<u>Total</u>
General Tier 1	\$22,762	\$6,642	\$4,777	\$34,181
General Tier 2	444,548	246,535	270	691,353
General Tier 3			3,198	3,198
General Tier 4 (non-LARPD)	28,069	15,397	90	43,556
General Tier 4 (LARPD Only)			142	142
Safety Tier 1	1,586			1,586
Safety Tier 2	129,617			129,617
Safety Tier 2C	3,309			3,309
Safety Tier 2D	7,143			7,143
Safety Tier 4	2,718			2,718
Total	\$639,752	\$268,574	\$8,477	\$916,803



CHART 14

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

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

	General	Safety
Service and non-service connected disability benefits	11%	20%
Service retirement and other benefits	<u>89%</u>	<u>80%</u>
	100%	100%

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.



The employer contribution rates as of December 31, 2013 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, 2012 to December 31, 2013 (Dollars in Thousands)

	Contribution Rate	Estimated Amount*
Recommended Contribution Rate as of December 31, 2012	24.03%	\$220,295
Effect of actuarial experience during 2013		
1. Effect of investment gain	-0.26%	-\$2,384
2. Effect of lower than expected salary increases for actives	-0.57	-5,226
3. Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	0.41	3,759
4. Effect of other experience (gain)/loss (including scheduled delay in implementing contribution rates after date of valuation)	0.14	1,273
Subtotal	-0.28%	-\$2,578
Recommended Contribution Rate as of December 31, 2013	23.75%	\$217,717

^{*} Based on December 31, 2013 projected compensation.

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

The member contribution rates as of December 31, 2013 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.

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

CHART 16 Reconciliation of Recommended Member Contribution from December 31, 2012 to December 31, 2013 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Amount*
Average Contribution Rate as of December 31, 2012	8.58%	\$78,652
Effect of change in membership demographics	$0.00\%^{(1)}$	\$15
Average Contribution Rate as of December 31, 2013	8.58%	\$78,667

^{*} Based on December 31, 2013 projected compensation.

⁽¹⁾ The rate impact is 0.002% higher before it is rounded to 0.00%.

E. INFORMATION REQUIRED BY GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to the GASB is the historical comparison of the GASB required contributions to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with GASB funding requirements. Chart 17 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the valuation value of assets to the actuarial accrued liabilities of the plan as calculated under the GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes. The funded ratio as of December 31, 2012 was 73.9%. This year's funded ratio increased to 75.9%.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

These graphs show key GASB factors.

CHART 17
Required Versus Actual Contributions

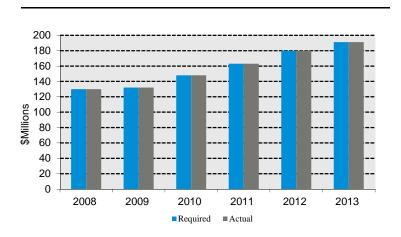
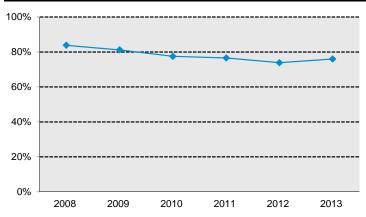


CHART 18 Funded Ratio



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 6.4. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.4% of one-year's payroll. Since ACERA amortizes actuarial gains and losses over a 20-year period, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

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 7.5. This is about 17% 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 19
Volatility Ratios for Years Ended December 31, 2008 – 2013

Year Ended December 31	Asset Volatility Ratio	Liability Volatility Ratio
2008	3.6	6.4
2009	4.5	6.7
2010	5.0	6.9
2011	4.9	7.1
2012	5.5	7.3
2013	6.4	7.5



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

EXHIBIT A

Table of Plan Coverage
i. General Tier 1

	Year Ended	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	398	519	-23.3%	
Average age	58.0	57.8	N/A	
Average service	27.9	28.0	N/A	
Projected total compensation	\$34,181,263	\$45,141,829	-24.3%	
Projected average compensation	\$85,883	\$86,978	-1.3%	
Member account balances	\$116,090,102	\$151,537,558	-23.4%	
Total active vested members	382	497	-23.1%	
Vested terminated members				
Number	103	119	-13.4%	
Average age	59.0	58.3	N/A	
Retired members				
Number in pay status	3,572	3,551	0.6%	
Average age	74.5	74.3	N/A	
Average monthly benefit ⁽¹⁾	\$3,917	\$3,728	5.1%	
Disabled members				
Number in pay status	191	198	-3.5%	
Average age	70.9	70.3	N/A	
Average monthly benefit ⁽¹⁾	\$2,680	\$2,591	3.4%	
Beneficiaries				
Number in pay status	766	775	-1.2%	
Average age	78.8	78.4	N/A	
Average monthly benefit ⁽¹⁾	\$1,746	\$1,682	3.8%	

⁽¹⁾ Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2013 actuarial valuation, the average age at retirement for the General Tier 1 service retirees and disabled retirees was 59.2 and 52.2, respectively.



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

EXHIBIT A

Table of Plan Coverage
ii. General Tier 2

	Year Ended	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	8,330	8,822	-5.6%	
Average age	48.4	47.8	N/A	
Average service	11.7	10.9	N/A	
Projected total compensation	\$691,353,368	\$714,505,925	-3.2%	
Projected average compensation	\$82,996	\$80,991	2.5%	
Member account balances	\$585,191,210	\$567,702,843	3.1%	
Total active vested members	6,550	6,408	2.2%	
Vested terminated members				
Number	1,614	1,549	4.2%	
Average age	48.7	48.4	N/A	
Retired members				
Number in pay status	1,967	1,683	16.9%	
Average age	67.6	67.5	N/A	
Average monthly benefit ⁽¹⁾	\$2,145	\$2,042	5.0%	
Disabled members				
Number in pay status	400	399	0.3%	
Average age	61.4	60.6	N/A	
Average monthly benefit ⁽¹⁾	\$2,225	\$2,145	3.7%	
Beneficiaries				
Number in pay status	168	139	20.9%	
Average age	62.4	60.8	N/A	
Average monthly benefit ⁽¹⁾	\$1,194	\$1,140	4.7%	

⁽¹⁾ Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2013 actuarial valuation, the average age at retirement for the General Tier 2 service retirees and disabled retirees was 61.9 and 50.3, respectively.



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

EXHIBIT A

Table of Plan Coverage
iii. General Tier 3

	Year Ended I	Year Ended December 31		
Category	2013	2012	– Change Fron Prior Year	
Active members in valuation				
Number	48	51	-5.9%	
Average age	51.0	50.3	N/A	
Average service	12.3	11.4	N/A	
Projected total compensation	\$3,198,380	\$3,335,457	-4.1%	
Projected average compensation	\$66,633	\$65,401	1.9%	
Member account balances	\$5,143,124	\$5,048,746	1.9%	
Total active vested members	38	39	-2.6%	
Vested terminated members				
Number	6	7	-14.3%	
Average age	46.9	48.1	N/A	
Retired members				
Number in pay status	12	10	20.0%	
Average age	62.3	61.8	N/A	
Average monthly benefit ⁽¹⁾	\$4,974	\$5,262	-5.5%	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	1	1	0.0%	
Average age	50.8	49.8	N/A	
Average monthly benefit ⁽¹⁾	\$489	\$480	1.9%	

⁽¹⁾ Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2013 actuarial valuation, the average age at retirement for the General Tier 3 service retirees was 59.2.



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

EXHIBIT A

Table of Plan Coverage
iv. General Tier 4

	Year Ended De	Year Ended December 31		
Category	2013	2012	Change From Prior Year	
Active members in valuation				
Number	709	0	N/A	
Average age	37.7	N/A	N/A	
Average service	0.6	N/A	N/A	
Projected total compensation	\$43,698,125 ⁽¹⁾	N/A	N/A	
Projected average compensation	\$61,633	N/A	N/A	
Member account balances	\$1,748,605	N/A	N/A	
Total active vested members	6	N/A	N/A	
Vested terminated members				
Number	26	0	N/A	
Average age	42.1	N/A	N/A	
Retired members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	

⁽¹⁾ Projected compensation for 2014 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 2014 is equal to \$115,064. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of \$115,064, or \$138,077). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2014. (reference: Section 7522.10(d))

Note: For all the General Tiers combined, the average age at retirement for the service retirees and disabled retirees was 60.1 and 50.9, respectively.



⁽²⁾ Excludes supplemental benefits paid from SRBR.

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

EXHIBIT A

Table of Plan Coverage
v. Safety Tier 1

	Year Ended I	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	10	19	-47.4%	
Average age	58.7	57.4	N/A	
Average service	19.3	25.7	N/A	
Projected total compensation	\$1,586,332	\$2,802,496	-43.4%	
Projected average compensation	\$158,633	\$147,500	7.5%	
Member account balances	\$4,167,493	\$9,180,615	-54.6%	
Total active vested members	9	19	-52.6%	
Vested terminated members				
Number	16	21	-23.8%	
Average age	54.0	54.2	N/A	
Retired members				
Number in pay status	677	680	-0.4%	
Average age	68.3	67.6	N/A	
Average monthly benefit ⁽¹⁾	\$7,080	\$6,881	2.9%	
Disabled members				
Number in pay status	105	108	-2.8%	
Average age	66.0	65.4	N/A	
Average monthly benefit ⁽¹⁾	\$4,981	\$4,825	3.2%	
Beneficiaries				
Number in pay status	167	162	3.1%	
Average age	71.6	71.4	N/A	
Average monthly benefit ⁽¹⁾	\$2,727	\$2,614	4.3%	

⁽¹⁾ Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2013 actuarial valuation, the average age at retirement for the Safety Tier 1 service retirees and disabled retirees was 54.9 and 48.6, respectively.



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

EXHIBIT A

Table of Plan Coverage
vi. Safety Tier 2

	Year Ended	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	1,229	1,298	-5.3%	
Average age	43.3	42.9	N/A	
Average service	12.5	12.0	N/A	
Projected total compensation	\$129,616,788	\$133,608,428	-3.0%	
Projected average compensation	\$105,465	\$102,934	2.5%	
Member account balances	\$200,765,483	\$195,802,631	2.5%	
Total active vested members	1,181	1,187	-0.5%	
Vested terminated members				
Number	133	138	-3.6%	
Average age	45.4	44.5	N/A	
Retired members				
Number in pay status	365	310	17.7%	
Average age	60.6	60.6	N/A	
Average monthly benefit ⁽¹⁾	\$5,328	\$5,073	5.0%	
Disabled members				
Number in pay status	122	114	7.0%	
Average age	56.1	55.5	N/A	
Average monthly benefit ⁽¹⁾	\$3,766	\$3,486	8.0%	
Beneficiaries				
Number in pay status	53	45	17.8%	
Average age	54.4	54.3	N/A	
Average monthly benefit ⁽¹⁾	\$1,927	\$1,942	-0.8%	

⁽¹⁾ Excludes supplemental benefits paid from SRBR.

Note: Based on the data provided for the December 31, 2013 actuarial valuation, the average age at retirement for the Safety Tier 2 service retirees and disabled retirees was 56.0 and 46.5, respectively.



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

EXHIBIT A

Table of Plan Coverage
vii. Safety Tier 2C

	Year Ended I	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	35	24	45.8%	
Average age	39.8	38.3	N/A	
Average service	3.0	1.8	N/A	
Projected total compensation	\$3,309,039	\$2,101,116	57.5%	
Projected average compensation	\$94,544	\$87,547	8.0%	
Member account balances	\$803,550	\$326,012	146.5%	
Total active vested members	4	1	300.0%	
Vested terminated members				
Number	2	1	100.0%	
Average age	41.4	33.4	N/A	
Retired members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	

⁽¹⁾ 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

	Year Ended I	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	86	67	28.4%	
Average age	33.9	33.2	N/A	
Average service	3.0	2.3	N/A	
Projected total compensation	\$7,143,083	\$5,005,970	42.7%	
Projected average compensation	\$83,059	\$74,716	11.2%	
Member account balances	\$2,174,413	\$1,051,056	106.9%	
Total active vested members	15	11	36.4%	
Vested terminated members				
Number	1	0	N/A	
Average age	26.0	N/A	N/A	
Retired members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽¹⁾	N/A	N/A	N/A	

⁽¹⁾ 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

	Year Ended De	Year Ended December 31		
Category	2013	2012	– Change From Prior Year	
Active members in valuation				
Number	32	0	N/A	
Average age	38.8	N/A	N/A	
Average service	0.4	N/A	N/A	
Projected total compensation	\$2,717,993 ⁽¹⁾	N/A	N/A	
Projected average compensation	\$84,937	N/A	N/A	
Member account balances	\$111,940	N/A	N/A	
Total active vested members	0	N/A	N/A	
Vested terminated members				
Number	1	0	N/A	
Average age	30.6	N/A	N/A	
Retired members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit ⁽²⁾	N/A	N/A	N/A	

⁽¹⁾ Projected compensation for 2014 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 2014 is equal to \$115,064. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of \$115,064, or \$138,077). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2014. (reference: Section 7522.10(d))

Notes: For all the Safety Tiers combined, the average age at retirement for the service retirees and disabled retirees was 55.3 and 47.5, respectively. For all the General and Safety Tiers combined, the average age at retirement for the service retirees and disabled retirees was 59.4 and 50.0, respectively.



⁽²⁾ Excludes supplemental benefits paid from SRBR.

EXHIBIT B

i. General Tier 1

Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25										
25 - 29	2	2								
	\$55,541	\$55,542								
30 - 34	3	2	1							
	57,685	60,048	\$52,961							
35 - 39	5	4		1						
	62,712	59,539		\$75,404						
40 - 44	6	1	4	1						
	75,495	51,670	76,727	94,391						
45 - 49	17	2	3	6	2		2	2		
	61,863	57,953	63,082	63,727	\$58,912		\$54,136	\$69,030		
50 - 54	56	1	3	2	4	4	9	32	1	
	75,189	90,982	66,271	64,446	81,274	\$75,558	76,910	75,052	\$70,753	
55 - 59	169	4	4	4	4	14	27	89	18	5
	89,182	71,392	94,451	68,237	89,057	79,827	102,117	90,003	84,560	\$74,426
60 - 64	106		5	2	5	11	19	43	18	3
	89,420		82,249	73,345	71,216	118,881	78,742	86,051	103,896	63,464
65 - 69	24		4	2	2		3	2	4	7
	93,136		93,310	61,821	108,794		97,951	125,403	95,254	85,018
70 & over	10						1	3	1	5
	108,270						84,870	105,386	49,908	126,353
Total	398	16	24	18	17	29	61	171	42	20
	\$85,883	\$63,341	\$79,592	\$68,018	\$80,754	\$94,052	\$89,057	\$86,650	\$92,711	\$89,471



EXHIBIT B

ii. General Tier 2

				Yea	rs of Serv	ice			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35 & over
Under 25	23	23							
	\$58,923	\$58,923							
25 - 29	308	239	69						
	64,165	64,187	\$64,090						
30 - 34	762	359	349	53	1				
	73,568	74,183	74,316	\$64,680	\$62,813				
35 - 39	958	296	378	257	27				
	80,325	81,454	83,889	75,177	67,045				
40 - 44	1,135	218	336	411	124	45	1		
	83,424	86,275	84,281	81,820	86,256	\$70,766	\$51,487		
45 - 49	1,234	214	256	358	206	157	43		
	85,341	91,159	84,818	83,498	87,674	80,087	82,854		
50 - 54	1,389	182	246	367	174	242	176	2	
	85,415	88,911	88,830	79,010	84,117	88,954	86,678	\$95,780	
55 - 59	1,238	145	208	298	181	224	168	13	1
	87,900	101,211	80,342	84,152	85,468	89,985	90,706	110,267	\$57,944
60 - 64	922	84	164	240	126	168	130	10	
	87,002	91,496	82,901	81,270	87,203	87,001	97,815	111,002	
65 - 69	281	21	59	89	44	40	24	4	
	81,304	90,273	82,285	71,626	79,437	83,398	95,441	149,817	
70 & over	80	10	14	27	10	17	2		
	83,810	100,118	80,072	82,135	79,999	80,064	101,926		
Total	8,330	1,791	2,079	2,100	893	893	544	29	1
	\$82,996	\$82,185	\$81,883	\$80,210	\$85,127	\$85,952	\$90,659	\$114,976	\$57,944



EXHIBIT B

iii. General Tier 3

				Years	of Service	•		
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25								
25 - 29								
30 - 34	3	1	2					
	\$56,235	\$47,723	\$60,490					
35 - 39	4	2	1		1			
	51,027	47,542	54,618		\$54,405			
40 - 44	3	1			2			
	59,569	51,631			63,538			
45 - 49	9		4	3	1	1		
	60,752		65,470	\$53,710	60,370	\$63,394		
50 - 54	11	1	2	3	1	3	1	
	68,637	75,768	71,483	66,980	77,818	64,707	\$63,394	
55 - 59	10	3	1	1	3	1		1
	73,177	72,732	96,996	77,818	68,536	69,219		\$63,932
60 - 64	8	2	1	3			1	1
	76,664	79,175	60,637	86,983			77,818	55,562
65 - 69								
70 & over								
Total	48	10	11	10	8	5	2	2
	\$66,633	\$64,675	\$67,098	\$70,084	\$65,660	\$65,347	\$70,606	\$59,747



EXHIBIT B

iv. General Tier 4

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over				
Under 25	53	53										
	\$49,951	\$49,951										
25 - 29	146	146										
	55,081	55,081										
30 - 34	158	158										
	56,017	56,017										
35 - 39	106	106										
	65,547	65,547										
40 - 44	80	78		1	1							
	72,798	72,620		\$115,064	\$44,416							
45 - 49	55	54	1									
	63,230	62,637	\$95,235									
50 - 54	48	47	1									
	64,838	64,148	97,259									
55 - 59	37	37										
	77,827	77,827										
60 - 64	18	18										
	69,131	69,131										
65 - 69	6	6										
	79,397	79,397										
70 & over	2	2										
	98,088	98,088										
Total	709	705	2	1	1							
	\$61,633	\$61,484	\$96,247	\$115,064	\$44,416							



EXHIBIT B

v. Safety Tier 1

					Years o	of Service		
Age	Total	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					1	1	
	\$145,976					\$110,902	\$181,050	
55 - 59	4	1*		1		1		1
	189,869	\$224,197		\$131,231		100,271		\$303,775
60 - 64	3			2		1		
	146,120			167,877		102,606		
65 - 69	1						1	
	96,546						96,546	
70 & over								
Total	10	1		3		3	2	1
	\$158,633	\$224,197		\$155,661		\$104,593	\$138,798	\$303,775



^{*} Employee returned to work from retired status.

EXHIBIT B

vi. Safety Tier 2

				Years of	Service			
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over
Under 25								
25 - 29	31	4	27					
	\$102,228	\$96,628	\$103,057					
30 - 34	182	11	153	18				
	100,865	93,459	100,204	\$111,005				
35 - 39	237	10	108	97	22			
	104,895	93,330	99,595	107,952	\$122,687			
40 - 44	289	5	78	120	81	5		
	104,364	99,868	97,874	102,208	113,272	\$117,551		
45 - 49	246	6	30	84	69	25	32	
	108,377	92,210	99,327	101,342	111,483	106,463	\$133,160	
50 - 54	143	7	17	31	42	17	26	3
	109,451	118,777	98,531	102,965	107,480	116,687	113,659	\$166,716
55 - 59	55	4	20	8	8	7	7	1
	105,227	121,902	112,041	99,705	95,455	104,529	97,594	82,941
60 - 64	29	1	7	9	9	2	1	
	103,294	72,491	116,935	115,702	91,448	84,804	70,538	
65 - 69	17		1	6	4	5	1	
	116,102		166,089	118,130	149,838	81,544	91,781	
70 & over					´			
Total	1,229	48	441	373	235	61	67	4
	\$105,465	\$99,833	\$100,645	\$104,522	\$111,773	\$107,247	\$120,324	\$145,773



EXHIBIT B

vii. Safety Tier 2C

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over			
Under 25	1	1									
	\$79,939	\$79,939									
25 - 29	8	7	1								
	82,750	85,846	\$61,076								
30 - 34	3	2	1								
	64,281	62,367	68,108								
35 - 39	8	8									
	98,140	98,140									
40 - 44	4	3	1								
	81,339	78,638	89,443								
45 - 49	2	2									
	97,551	97,551									
50 - 54	8	7		1							
	116,945	121,533		\$84,827							
55 - 59	1	1									
	133,130	133,130									
60 - 64	·										
65 - 69											
70 & over											
Total	35	31	3	1							
101111	\$94,544	\$96,954	\$72,876	\$84,827							



EXHIBIT B

viii. Safety Tier 2D

	Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over				
Under 25	8	8										
	\$80,179	\$80,179										
25 - 29	30	29	1									
	80,108	79,952	\$84,627									
30 - 34	18	14	4									
	79,897	77,682	87,649									
35 - 39	12	10	2									
	89,754	92,652	75,265									
40 - 44	8	3	3	2								
	77,071	84,846	75,260	\$68,125								
45 - 49	3	1	1			1						
	79,599	88,332	70,958			\$79,506						
50 - 54	6	5		1								
	100,690	107,187		68,206								
55 - 59	1	1										
	123,719	123,719										
60 - 64												
65 - 69												
70 & over												
Total	86	71	11	3		1						
	\$83,059	\$84,178	\$80,226	\$68,152		\$79,506						



EXHIBIT B

ix. Safety Tier 4

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30 & Over			
Under 25	3	3									
	\$79,500	\$79,500									
25 - 29	7	7									
	62,518	62,518									
30 - 34	6	6									
	66,917	66,917									
35 - 39	2	2									
	86,413	86,413									
40 - 44											
45 - 49	4	4									
	113,244	113,244									
50 - 54	9	9									
	100,571	100,571									
55 - 59	1	1									
	109,429	109,429									
60 - 64											
65 - 69											
70 & over											
Total	32	32									
10111	\$84,937	\$84,937									



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

EXHIBIT C
Reconciliation of Member Data – December 31, 2012 to December 31, 2013

	Active Members	Vested Terminated Members	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2012	10,800	1,835	6,234	819	1,122	20,810
New members	827	0	0	0	87	914
Terminations – with vested rights	-192	192	0	0	0	0
Contributions refunds	-111	-55	0	0	0	-166
Retirements	-450	-72	522	0	0	0
New disabilities	-11	-3	-5	19	0	0
Return to work	26	-25	-1	0	0	0
Died with or without beneficiary	-13	-11	-159	-20	-50	-253
Data adjustments	1	41*	2	0	-4	40
Number as of December 31, 2013	10,877	1,902	6,593	818	1,155	21,345

^{*} Out of the 41 data adjustments, 32 were for members who were hired and terminated employment after November 30, 2012 (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 D	ecember 31,	
	20^	13	20	12
Contribution income:				
Employer contributions	\$191,180,146		\$179,648,812	
Employee contributions	76,230,024		78,608,004	
Contribution income		\$267,410,171		\$258,256,815
Investment income:				
Interest, dividends and other income	\$117,773,112		\$129,827,102	
Adjustment toward market value	467,702,142		7,952,766	
Less investment and administrative fees	<u>-52,226,869</u>		<u>-45,842,888</u>	
Net investment income		\$533,248,385		\$91,936,980
Total income available for benefits		\$800,658,556		\$350,193,795
Less benefit payments:				
Service retirement	-\$349,019,309		-\$318,993,372	
Death payments	-2,532,870		-3,208,633	
Supplemental cost of living	-2,067,219		-2,345,527	
Members refunds	-6,318,512		-5,893,555	
Health insurance subsidies	<u>-30,569,194</u>		<u>-32,692,271</u>	
Benefit payments		-\$390,507,104		-\$363,133,358
Change in reserve for future benefits		\$410,151,452		-\$12,939,563

Note: Results may not total properly due to rounding.



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

EXHIBIT ESummary Statement of Assets

		Year Ended [December 31,		
ASSETS	20	13	2012		
Cash		\$839,239		\$399,260	
Securities Lending Collateral		337,579,008		257,433,004	
Accounts Receivable:					
Contributions	\$18,249,841		\$16,925,855		
Investment Receivables	16,048,484		13,605,143		
Investments Sold	9,045,114		29,232,715		
Foreign Exchange Contracts	1,856,883		3,147,991		
Others	<u>271,071</u>		<u>290,634</u>		
Total Accounts Receivable		\$45,471,393		\$63,202,339	
Prepaid Expenses		607,128		567,407	
Investments:					
Short-Term Investments	\$132,890,323		\$180,853,549		
Equities	4,398,440,617		3,593,731,169		
Fixed Income Investments	961,109,507		949,035,923		
Real Estate	421,526,894		294,628,580		
Capital Assets	4,524,122		5,562,763		
Private Equity and Alternative Investments	698,026,880		637,299,326		
Total Investments at Market Value		\$6,616,518,343		\$5,661,111,309	
Total Assets		\$7,001,015,111		\$5,982,713,320	

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

	Year Ended December 31,						
LIABILITIES	20	113	2012				
Less Accounts Payable:							
Securities Lending & Investments Purchased	-\$345,096,556		-\$302,648,982				
Investment-Related Payables	-8,516,145		-5,599,494				
Futures Contracts & Equity Swaps	-1,883,725		-571,493				
Foreign Exchange Contracts	-541,919		-1,306,833				
Accrued Administration Expense	-1,987,132		-1,948,046				
Members Benefits & Refunds, and Retirement Payroll Deductions Payable	-2,694,157		<u>-2,434,276</u>				
Total Accounts Payable		-\$360,719,633		-\$314,509,124			
NET ASSETS							
Net Assets at Market Value		<u>\$6,640,295,478</u>		\$5,668,204,196			
Net Assets at Actuarial Value		\$5,953,454,661		\$5,543,303,209			
Net Assets at Valuation Value		\$5,210,943,750		<u>\$4,883,871,966</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)

Assets	<u>Basic</u>	COLA	<u>Total</u>
1. Total valuation assets	\$3,504,519	\$1,706,425	\$5,210,944
2. Present value of future contributions by members	547,332	124,099	671,431
3. Present value of future employer contributions for:			
a. entry age normal cost	608,795	119,654	728,449
b. unfunded actuarial accrued liability	1,397,260	253,483	1,650,743
4. Total current and future assets	\$6,057,906	\$2,203,661	\$8,261,567
Liabilities			
5. Present value of benefits already granted	\$2,661,334	\$1,470,214	\$4,131,548
6. Present value of benefits to be granted to present non-retired members	3,396,572	733,447	4,130,019
7. Total liabilities	\$6,057,906	\$2,203,661	\$8,261,567



EXHIBIT G

Summary of Reported Asset Information as of December 31, 2013

	Reserves
Used in Development of Valuation Value of Assets	
Members deposit-basic	\$925,900,651
Members cost-of-living	207,276,271
Employer advance (before transfer from SRBR to employer advance)	486,564,383
Pension reserve-current	1,304,796,405
Pension reserve-prior	3,544,935
Annuity reserve	770,407,360
Cost-of-living reserve	1,499,148,287
Survivor death benefit	6,312,426
SRBR transfer to employer advance	6,993,032
Reserve for interest fluctuations (contingency reserve), if negative	0
Subtotal	\$5,210,943,750
Not Used in Development of Valuation Value of Assets	
401(h) account	\$8,433,231
Supplemental retirees benefit reserve (before transfer from SRBR to employer advance)	643,056,500
Reserve for interest fluctuations (contingency reserve), if positive	98,014,212
Market stabilization reserve	686,840,817
SRBR transfer to employer advance	-6,993,032
Subtotal	\$1,429,351,728
Total	\$6,640,295,478

^{*} Estimate provided by ACERA.



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

EXHIBIT H

Development of Unfunded Actuarial Accrued Liability as of December 31, 2013

		(Dollar Amounts in Thousands)
1.	Unfunded actuarial accrued liability at beginning of year	\$1,729,057
2.	Total Normal Cost at middle of year	173,510
3.	Actual employer and member contributions	-267,410
4.	Interest (whole year on (1) plus half year on $(2) + (3)$)	<u>131,204</u>
5.	Expected unfunded actuarial accrued liability at end of year	\$1,766,361
6.	Actuarial (gain)/loss due to all changes*:	
	a. Gain from investments as recognized on December 31, 2013	-\$32,991
	b. Gain from lower than expected salary increases for actives	-72,279
	c. Other experience gain	<u>-10,348</u>
	d. Subtotal**	-\$115,618
7.	Actual unfunded actuarial accrued liability at end of year (5) + (6d)	\$1,650,743

^{*} The "net gain from other experience" of \$(82,627) from Chart 9 is equal to the sum of items 6b and 6c.



^{**} Excludes loss of about \$30.7 million from contributions less than anticipated due to scheduled delay in implementing the higher contribution rate calculated in the December 31, 2012 valuation. 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)

Туре	Date Established	Initial Years	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment*
General (All, Excluding LARPI	D Tier 3 and Tier 4)					
Combined Bases	12/31/2011	21	\$885,036	\$893,920	19	\$66,394
Experience Loss	12/31/2012	20	165,501	166,129	19	12,339
Experience Gain	12/31/2013	20	-75,003	<u>-75,003</u>	20	<u>-5,377</u>
Total				\$985,046		\$73,356
General (LARPD Tier 3 and Ti	er 4 Only)**					
Combined Bases	12/31/2011	21	\$7,060	\$7,131	19	\$530
Experience Loss	12/31/2012	20	370	372	19	28
Experience Gain	12/31/2013	20	-534	<u>-534</u>	20	<u>-38</u>
Total				\$6,969		\$520
General (All General Members	Combined)					
Combined Bases	12/31/2011	21	\$892,096	\$901,051	19	\$66,924
Experience Loss	12/31/2012	20	165,871	166,501	19	12,367
Experience Gain	12/31/2013	20	-75,537	<u>-75,537</u>	20	<u>-5,415</u>
Total				\$992,015		\$73,876
Safety						
Combined Bases	12/31/2011	21	\$598,698	\$604,708	19	\$44,914
Experience Loss	12/31/2012	20	63,130	63,370	19	4,707
Experience Gain	12/31/2013	20	-9,350	<u>-9,350</u>	20	<u>-670</u>
Total				\$658,728		\$48,951
Total						
Combined Bases	12/31/2011	21	\$1,490,794	\$1,505,759	19	\$111,838
Experience Loss	12/31/2012	20	229,001	229,871	19	17,074
Experience Gain	12/31/2013	20	-84,887	-84,887	20	-6,085
Total				\$1,650,743		\$122,827

^{*} Level percentage of payroll.

Note: The equivalent single amortization period is 19 years.



^{**} 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).

EXHIBIT J

Section 415 Limitations

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$205,000 for 2013 and \$210,000 for 2014. 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.



EXHIBIT K

Definitions of Pension Terms

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

Assumptions or Actuarial Assumptions:

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

- (a) <u>Investment return</u> 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) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age; and
- (d) <u>Turnover rates</u> 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

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

EXHIBIT I		
Summary of Actuarial Valuation Results		
The valuation was made with respect to the following data supplied	o us:	
1. Retired members as of the valuation date (including 1,155 beneficiaries in pay	status)	8,566
2. Members inactive during year ended December 31, 2013 with vested rights		1,902
3. Members active during the year ended December 31, 2013		10,877
The actuarial factors as of the valuation date are as follows (amounts	in 000s):	
1. Normal cost		\$173,515
2. Present value of future benefits		8,261,567
3. Present value of future normal costs		1,399,880
4. Actuarial accrued liability*		6,861,687
Retired members and beneficiaries	\$4,131,548	
Inactive members with vested rights	176,215	
Active members	2,553,924	
5. Valuation value of assets** (\$6,640,295 at market value as reported by Retirer	nent Association)	5,210,944
6. Unfunded actuarial accrued liability		\$1,650,743

^{*} 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

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

Th	e determination of the recommended average employer contribution is as follows		
(ar	nounts in 000s):	Dollar Amount	% of Payroll
1.	Total normal cost	\$173,515	18.93%
2.	Expected employee contributions	<u>-78,667</u>	<u>-8.58%</u>
3.	Employer normal cost: $(1) + (2)$	\$94,848	10.35%
4.	Amortization of unfunded actuarial accrued liability	122,869	13.40%
5.	Total recommended average employer contribution: (3) + (4)	\$217,717	23.75%
6.	Projected compensation	\$916,803	



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

EXHIBIT II

Supplementary Information Required by GASB – Schedule of Employer Contributions (Dollar Amounts in Millions)

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions	Percentage Contributed
2008	\$130	\$130	100.0%
2009	132	132	100.0%
2010	148	148	100.0%
2011	163	163	100.0%
2012	180	180	100.0%
2013	191	191	100.0%



EXHIBIT III

Supplementary Information Required by GASB – Schedule of Funding Progress (Dollar Amounts in Thousands)

Actuarial Valuation Date	Valuation Value of Assets ⁽¹⁾ (a)	Actuarial Accrued Liability (AAL) ⁽²⁾ (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (%) (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll (%) [(b) - (a)] / (c)
12/31/2008	\$4,644,010 ⁽³⁾	\$5,537,919	\$893,909	83.9%	\$864,260	103.4%
12/31/2009	$4,789,000^{(4)}$	5,899,331	1,110,331	81.2	882,606	125.8
12/31/2010	4,776,128 ⁽⁵⁾	6,162,740	1,386,612	77.5	898,342	154.4
12/31/2011	4,868,689 ⁽⁶⁾	6,359,483	1,490,794	76.6	892,489	167.0
12/31/2012	4,883,872 ⁽⁷⁾	6,612,929	1,729,057	73.9	906,500	190.7
12/31/2013	5,210,944 ⁽⁸⁾	6,861,687	1,650,743	75.9	916,803	180.1

⁽¹⁾ Excludes assets for SRBR and other non-valuation reserves.



⁽²⁾ Excludes liabilities for SRBR and other non-valuation reserves.

⁽³⁾ Includes \$4,149,463 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2008.

⁽⁴⁾ Includes \$5,287,767 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2009.

⁽⁵⁾ Includes \$4,500,000 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2010 (estimate, provided by ACERA).

⁽⁶⁾ Includes \$4,411,206 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2011 (estimate, provided by ACERA).

⁽estimate, provided by ACERA). The land the first implication of implicit retiree health benefit subsidy paid by the County for 2012 (estimate, provided by ACERA).

⁽⁹⁾ Includes \$6,993,032 in reimbursement of implicit retiree health benefit subsidy paid by the County for 2013 (estimate, provided by ACERA).

EXHIBIT IV

Supplementary Information Required by GASB

Valuation date	December 31, 2013		
Actuarial cost method	Entry Age Cost Method		
Amortization method	Level percent of payroll		
Remaining amortization period	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 19 years remaining as of December 31, 2013). 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.		
Asset valuation method	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.		
Actuarial assumptions:			
Investment rate of return	7.80%		
Inflation rate	3.50%		
Real across-the-board salary increase	0.50%		
Projected salary increases*	General: 4.60% to 7.20% and Safety: 4.70% to 10.20%		
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		
Plan membership:			
Retired members and beneficiaries receiving benefits	8,566		
Terminated members entitled to, but not yet receiving benefits	1,902		
Active members	<u>10,877</u>		
Total	21,345		

^{*} Includes inflation at 3.50% plus real across-the-board salary increase of 0.50% plus merit and longevity increases. See Exhibit V for these increases.



EXHIBIT V

Actuarial Assumptions and Actuarial Cost Method

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.

Disabled: 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.

The mortality tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future morality improvement, based on a review of the mortality experience in the December 1, 2007 - November 30, 2010 Actuarial

Experience Study.

Employee Contribution Rates: 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.

Optional Forms of Benefit:

Service Retirement and All Beneficiaries

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.

General beneficiaries: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females, weighted 70% male and 30% female.



Service Retirement and All Beneficiaries (continued)

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.

Safety beneficiaries: RP-2000 Combined Healthy Mortality Table set back two years

for males and one year for females, weighted 25% male and 75% female.

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:

Rate (%)
Mortality

	General		Saf	ety
Age	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.



Termination Rates Before Retirement (continued):

Rate (%)
Disability

	2100.01.11	
Age	General ⁽¹⁾	Safety ⁽²⁾
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

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

⁽²⁾ 100% of Safety disabilities are assumed to be service connected disabilities.

Termination Rates Before Retirement (continued):

Rate (%)
Termination (< 5 Years of Service)⁽¹⁾

General	Safety
13.00	5.00
9.00	3.00
8.00	3.00
6.00	2.00
5.00	2.00
	13.00 9.00 8.00 6.00

Termination (5+ Years of Service)(2)

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

^{(1) 70%} of all terminated members will choose a refund of contributions and 30% will choose a deferred vested benefit.



^{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.

Retirement Rates:

	Rate (%)							
Age	General Tier 1	General Tier 2	General Tier 3	General Tier 4	Safety Tier 1 ⁽¹⁾	Safety Tier 2, 2D ⁽¹⁾	Safety Tier 2C ⁽¹⁾	Safety Tier 4
50	3.00	2.00	6.00	0.00	35.00	10.00	4.00	4.00
51	3.00	2.00	3.00	0.00	25.00	10.00	2.00	2.00
52	3.00	2.00	5.00	4.00	25.00	10.00	2.00	2.00
53	3.00	2.00	6.00	1.50	35.00	10.00	3.00	3.00
54	3.00	2.00	6.00	1.50	40.00	10.00	6.00	6.00
55	6.00	3.00	12.00	2.50	40.00	10.00	10.00	10.00
56	8.00	3.00	13.00	2.50	40.00	15.00	12.00	12.00
57	10.00	4.00	13.00	3.50	40.00	20.00	20.00	20.00
58	10.00	5.00	14.00	4.50	40.00	20.00	10.00	10.00
59	13.00	5.00	16.00	4.50	40.00	20.00	15.00	15.00
60	20.00	5.00	21.00	4.50	100.00	40.00	60.00	60.0
61	20.00	8.00	20.00	7.50	100.00	40.00	60.00	60.0
62	35.00	20.00	30.00	19.00	100.00	40.00	60.00	60.00
63	30.00	16.00	25.00	15.00	100.00	40.00	60.00	60.0
64	30.00	18.00	25.00	17.00	100.00	100.00	100.00	100.00
65	35.00	22.00	30.00	21.00	100.00	100.00	100.00	100.00
66	30.00	20.00	25.00	20.00	100.00	100.00	100.00	100.00
67	25.00	20.00	25.00	20.00	100.00	100.00	100.00	100.00
68	20.00	30.00	25.00	30.00	100.00	100.00	100.00	100.00
69	40.00	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

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



Retirement Age and Benefit for Deferred Vested Members:

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

General Age: 59 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 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.

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.

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: 7.80%, 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.



Salary Increases:

Annual Rate of Compensation Increase (%)

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.

Service	General	Safety
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

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.



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:

	Service Retirement	Disability Retirement
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

EXHIBIT VI

Summary of Plan Provisions

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.

lembership 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 may elect to continue membership at ACERA.
General and Safety Tier 1	All General and Safety members hired on or before June 30, 1983 ⁽¹⁾ .
General and Safety Tier 2	All General and Safety members hired after June 30, 1983 ⁽²⁾ , and not in any of the other Tiers listed below.
General Tier 3	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.
General and Safety Tier 4	All General and Safety members with membership dates or after January 1, 2013.
Safety Tier 2C	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.
Safety Tier 2D	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.

⁽¹⁾ 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).

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



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 10 years of service, 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 10 years of service, 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).



Benefit Formula:

	Retirement Age	Benefit Formula
General Tier 1 (§31676.12)	50	(1.34% x FAS1 – 1/3 x 1.34% x \$350 x 12) x Yrs
	55	(1.77% x FAS1 – 1/3 x 1.77% x \$350 x 12) x Yrs
	60	(2.34% x FAS1 – 1/3 x 2.34% x \$350 x 12) x Yrs
	62 or later	(2.62% x FAS1 – 1/3 x 2.62% x \$350 x 12) x Yrs
	Retirement Age	Benefit Formula
General Tier 2 (§31676.1)	50	(1.18% x FAS3 – 1/3 x 1.18% x \$350 x 12) x Yrs
	55	(1.49% x FAS3 – 1/3 x 1.49% x \$350 x 12) x Yrs
	60	(1.92% x FAS3 – 1/3 x 1.92% x \$350 x 12) x Yrs
	62	(2.09% x FAS3 – 1/3 x 2.09% x \$350 x 12) x Yrs
	65	(2.43% x FAS3 – 1/3 x 2.43% x \$350 x 12) x Yrs
	Retirement Age	Benefit Formula
General Tier 3 (§31676.18)	50	2.00% x FAS1 x Yrs
	55 or later	2.50% x FAS1 x Yrs
	Retirement Age	Benefit Formula
General Tier 4 (§7522.20(a))	52	1.00% x FAS3 x Yrs
	55	1.30% x FAS3 x Yrs
	60	1.80% x FAS3 x Yrs
	62	2.00% x FAS3 x Yrs
	65	2.30% x FAS3 x Yrs
	67 or later	2.50% x FAS3 x Yrs



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

	Retirement Age	Benefit Formula
Safety Tier 1 (Non-Integrated)	50	3.00% x FAS1 x Yrs
(§31664.1)	55 or later	3.00% x FAS1 x Yrs
Safety Tier 2 (Non-Integrated)	50	3.00% x FAS3 x Yrs
(§31664.1)	55 or later	3.00% x FAS3 x Yrs
Safety Tier 2C (Non-Integrated)	50	2.00% x FAS3 x Yrs
(§31664)	55 or later	2.62% x FAS3 x Yrs
Safety Tier 2D (Non-Integrated)	50	2.29% x FAS3 x Yrs
(§31664.2)	55 or later	3.00% x FAS3 x Yrs
Safety Tier 4 (Non-Integrated)	50	2.00% x FAS3 x Yrs
(§7522.25(d))	55	2.50% x FAS3 x Yrs
	57 or later	2.70% x FAS3 x Yrs

Maximum Benefit:

Non-Tier 4 100% of Highest Average Compensation (§31676.1, §31676.12, §31676.18, §31664,

§31664.1, and §31664.2).

Tier 4 None



Ordinary Disability:

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

Eligibility Five years of service (§31720).

Benefit Formula 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

Eligibility Five years of service (§31720).

Benefit Formula 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

Eligibility No age or service requirements (§31720).

Benefit Formula 50% of the Final Compensation or 100% of Service Retirement benefit, if greater

(§31727.4).



Pre-Retirement Death:

All Members

Eligibility None.

Basic lump sum benefit Refund of employee contributions with interest, plus one month's compensation for

each year of service, to a maximum of six month's compensation (§31781).

Death in line of duty 50% of Final Compensation or 100% of Service Retirement benefit, if greater,

payable to spouse or minor children (§31787).

OR

Vested Members

Eligibility Five years of service.

Basic benefit 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.

Death in line of duty 50% of Final compensation or 100% of Service Retirement benefit, if greater, payable

to spouse or minor children (§31787).



Death After Retirement:	
<u>All Members</u>	
Service or Ordinary Disability Retirement	60% of member's unmodified allowance continued to eligible spouse (§31760.1) and lump sum death burial benefit ⁽¹⁾ 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).
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).
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).

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



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.
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.
Please refer to Appendix A for specific rates.
Provide for an average annuity at age 60 equal to 1/100 of FAS1 (§31621.2).
Provide for one-half of future Cost-of-Living costs.
Provide for an average annuity at age 60 equal to 1/120 of FAS3 (§31621).
Provide for one-half of future Cost-of-Living costs.
Provide for an average annuity at age 55 equal to 1/100 of FAS1 (§31621.8).
Provide for one-half of future Cost-of-Living costs.
50% of the total Normal Cost rate.



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.



Appendix A

Member Contribution Rates

Comparison of Total Member Rate⁽¹⁾ from December 31, 2013 (New) and December 31, 2012 (Current) Valuations

	Genera	l Tier 1			Genera	l Tier 2	
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	8.81%	8.79%	-0.02%	25	5.99%	5.99%	0.00%
35	10.52%	10.49%	-0.03%	35	7.15%	7.14%	-0.01%
45	12.55%	12.52%	-0.03%	45	8.53%	8.52%	-0.01%
	Genera	l Tier 3			Genera	l Tier 4	
Entry Age	Current	New	Change	Entry Age ⁽²⁾	Current	New	Change
25	10.25%	10.22%	-0.03%	Any	8.25%	8.12%	-0.13%
35	12.23%	12.19%	-0.04%	·			
45	14.58%	14.54%	-0.04%				
	Safety	Tier 1			Safety	Tier 2	
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	16.60%	16.46%	-0.14%	25	13.78%	13.79%	0.01%
30	17.83%	17.68%	-0.15%	30	14.76%	14.76%	0.00%
35	19.22%	19.06%	-0.16%	35	15.84%	15.85%	0.01%
	Safety '	Tier 2C		Safety Tier 2I) (with less tha	an 5 years of ve	sting service)
Entry Age	Current	New	Change	Entry Age	Current	New	Change
25	10.34%	10.36%	0.02%	25	15.61%	15.59%	-0.02%
30	11.28%	11.29%	0.01%	30	16.57%	16.55%	-0.02%
35	12.32%	12.33%	0.01%	35	17.64%	17.62%	-0.02%
Safety Tier 2	D (with 5 or m	ore years of ve	sting service)		Safety	Tier 4	
Entry Age	Current	New	Change	Entry Age ⁽²⁾	Current	New ⁽³⁾	Change
25	13.61%	13.59%	-0.02%	Any	13.75%	16.77%	3.02%
30	14.57%	14.55%	-0.02%				
35	15.64%	15.62%	-0.02%				

⁽¹⁾ 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.

⁽³⁾ The increase in the rate is mainly due to a higher average age at entry for <u>actual</u> Safety Tier 4 members (i.e., about age 38.8) compared to the average age at entry for the <u>hypothetical</u> Safety Tier 4 members used in the December 31, 2012 valuation (i.e., about age 32.8, based on recent hires in the last two years prior to the December 31, 2012 valuation).



⁽²⁾ Tier 4 member rates are independent of entry age.

Breakdown of member rate between basic and COLA calculated in the December 31, 2013 and December 31, 2012 valuations:

			Dece	ember 31, 201	13 Actuarial	Valuation					Decemi	ber 31, 2012 <i>i</i>	Actuarial Va	aluation ⁽¹⁾		
	В	ASIC	C	OLA	COST SI	_	TO	OTAL	В	ASIC	C	OLA		SHARING BUTIONS	TO	OTAL
	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*
General Tier 1 Members	6.59%	\$2,253	2.38%	\$813			8.97%	\$3,066	6.59%	\$2,253	2.40%	\$820			8.99%	\$3,073
General Tier 2 Members	5.97%	41,274	1.31%	9,056			7.28%	50,330	5.97%	41,274	1.31%	9,056			7.28%	50,330
General Tier 3 Members	9.35%	299	3.34%	107			12.69%	406	9.35%	299	3.38%	108			12.73%	407
General Tier 4 Members	6.84%	2,989	1.28%	559			8.12%	3,548	6.91%	3,020	1.34%	585			8.25%	3,605
Safety Tier 1 Members	6.05%	96	3.19%	50	3.00%	\$48	12.24%	194	6.05%	96	3.28%	52	3.00%	\$48	12.33%	196
Safety Tier 2 Members	8.77%	11,367	2.95%	3,824	3.00%	3,889	14.72%	19,080	8.77%	11,367	2.95%	3,824	3.00%	3,889	14.72%	19,080
Safety Tier 2C Members	9.79%	324	2.78%	92	0.00%	0	12.57%	416	9.79%	324	2.76%	91	0.00%	0	12.55%	415
Safety Tier 2D Members	8.93%	638	2.79%	199	4.67% ⁽²⁾	334	16.39%	1,171	8.93%	638	2.81%	200	4.67% (2)	334	16.41%	1,172
Safety Tier 4 Members	13.68%	372	3.09%	84	0.00%	0	16.77%	456	11.15%	303	2.60%	71	0.00%	0	13.75%	374
All Member Categories Combined	6.50%	\$59,612	1.61%	\$14,784	0.47%	\$4,271	8.58%	\$78,667	6.50%	\$59,574	1.61%	\$14,807	0.47%	\$4,271	8.58%	\$78,652

These rates have been re-calculated by applying the individual entry age based member rates determined in December 31, 2012 valuation to the Association membership as of December 31, 2013.



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).

^{*} Amounts are in thousands and are based on December 31, 2013 annual payroll (also in thousands):

	County Only	AHS, Court & First 5	Other Districts	<u>Total</u>
General Tier 1	\$22,762	\$ 6,642	\$4,777	\$ 34,181
General Tier 2	444,548	246,535	270	691,353
General Tier 3			3,198	3,198
General Tier 4	28,069	15,397	232	43,698
Safety Tier 1	1,586			1,586
Safety Tier 2	129,617			129,617
Safety Tier 2C	3,309			3,309
Safety Tier 2D	7,143			7,143
Safety Tier 4	2,718			2,718
Total	\$639,752	\$268,574	\$8,477	\$916,803



Appendix A

Member Contribution Rates (Continued)

Ge	eneral Tier 1 Memb	ers' Contribution Rates	s Based on the Decem	ber 31, 2013 Actuarial V	Valuation (as a % of p	oayroll)
	Basic Only		COL	A Only	Te	otal
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	3.65%	5.48%	1.32%	1.98%	4.97%	7.46%
16	3.65%	5.48%	1.32%	1.98%	4.97%	7.46%
17	3.72%	5.58%	1.35%	2.02%	5.07%	7.60%
18	3.79%	5.68%	1.37%	2.05%	5.16%	7.73%
19	3.86%	5.79%	1.39%	2.09%	5.25%	7.88%
20	3.93%	5.90%	1.42%	2.13%	5.35%	8.03%
21	4.00%	6.01%	1.45%	2.17%	5.45%	8.18%
22	4.08%	6.12%	1.47%	2.21%	5.55%	8.33%
23	4.15%	6.23%	1.50%	2.25%	5.65%	8.48%
24	4.23%	6.34%	1.53%	2.29%	5.76%	8.63%
25	4.30%	6.46%	1.55%	2.33%	5.85%	8.79%
26	4.38%	6.57%	1.58%	2.37%	5.96%	8.94%
27	4.46%	6.69%	1.61%	2.42%	6.07%	9.11%
28	4.54%	6.81%	1.64%	2.46%	6.18%	9.27%
29	4.62%	6.93%	1.67%	2.50%	6.29%	9.43%
30	4.71%	7.06%	1.70%	2.55%	6.41%	9.61%
31	4.79%	7.18%	1.73%	2.60%	6.52%	9.78%
32	4.88%	7.31%	1.76%	2.64%	6.64%	9.95%
33	4.96%	7.44%	1.79%	2.69%	6.75%	10.13%
34	5.05%	7.58%	1.83%	2.74%	6.88%	10.32%
35	5.14%	7.71%	1.85%	2.78%	6.99%	10.49%
36	5.23%	7.85%	1.89%	2.83%	7.12%	10.68%
37	5.32%	7.98%	1.92%	2.88%	7.24%	10.86%
38	5.42%	8.13%	1.96%	2.94%	7.38%	11.07%
39	5.51%	8.27%	1.99%	2.99%	7.50%	11.26%



Appendix A
Member Contribution Rates (Continued)

General Tier 1 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued **Basic Only** COLA Only Total Entry Age First \$161 Over \$161* First \$161 Over \$161* First \$161 Over \$161* 40 8.42% 2.03% 3.04% 7.64% 11.46% 5.61% 41 5.71% 8.57% 2.06% 3.09% 7.77% 11.66% 42 5.81% 8.72% 2.10% 3.15% 7.91% 11.87% 43 5.92% 8.87% 3.21% 8.06% 12.08% 2.14% 44 9.03% 3.26% 8.19% 12.29% 6.02% 2.17% 45 9.20% 2.21% 3.32% 8.34% 12.52% 6.13% 46 6.24% 9.37% 2.25% 3.38% 8.49% 12.75% 9.54% 2.30% 3.45% 12.99% 47 6.36% 8.66% 48 9.72% 2.34% 3.51% 8.82% 13.23% 6.48% 49 6.59% 9.88% 2.38% 3.57% 8.97% 13.45% 50 6.69% 10.03% 2.41% 3.62% 9.10% 13.65% 51 6.80% 10.20% 2.45% 3.68% 9.25% 13.88% 52 2.49% 9.37% 6.88% 10.33% 3.73% 14.06% 53 6.97% 10.45% 2.52% 3.78% 9.49% 14.23% 54 7.04% 10.56% 3.82% 9.59% 14.38% 2.55% 55 7.10% 10.65% 2.57% 3.85% 9.67% 14.50% 56 7.14% 10.72% 2.58% 3.87% 9.72% 14.59% 57 7.13% 10.70% 2.57% 3.86% 9.70% 14.56% 58 7.06% 10.59% 2.55% 3.83% 9.61% 14.42% 6.82% 10.23% 3.69% 9.28% 13.92% 59 & Over 2.46%

Interest: 7.80% per annum

COLA: 3.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females,

weighted 30% male and 70% female

Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 36.12% Terminal Pay: 8.0%



^{*} Use these rates for Non-Integrated Members

Appendix A
Member Contribution Rates (Continued)

General Tier 2 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll)

<u>B</u>		Basic Only		A Only	Total		
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	
15	2.78%	4.17%	0.61%	0.91%	3.39%	5.08%	
16	2.78%	4.17%	0.61%	0.91%	3.39%	5.08%	
17	2.83%	4.24%	0.62%	0.93%	3.45%	5.17%	
18	2.88%	4.32%	0.63%	0.95%	3.51%	5.27%	
19	2.93%	4.40%	0.65%	0.97%	3.58%	5.37%	
20	2.99%	4.48%	0.65%	0.98%	3.64%	5.46%	
21	3.04%	4.57%	0.67%	1.00%	3.71%	5.57%	
22	3.10%	4.65%	0.68%	1.02%	3.78%	5.67%	
23	3.16%	4.73%	0.69%	1.04%	3.85%	5.77%	
24	3.21%	4.82%	0.71%	1.06%	3.92%	5.88%	
25	3.27%	4.91%	0.72%	1.08%	3.99%	5.99%	
26	3.33%	5.00%	0.73%	1.10%	4.06%	6.10%	
27	3.39%	5.09%	0.75%	1.12%	4.14%	6.21%	
28	3.45%	5.18%	0.76%	1.14%	4.21%	6.32%	
29	3.51%	5.27%	0.77%	1.16%	4.28%	6.43%	
30	3.58%	5.37%	0.79%	1.18%	4.37%	6.55%	
31	3.64%	5.46%	0.80%	1.20%	4.44%	6.66%	
32	3.71%	5.56%	0.81%	1.22%	4.52%	6.78%	
33	3.77%	5.66%	0.83%	1.24%	4.60%	6.90%	
34	3.84%	5.76%	0.84%	1.26%	4.68%	7.02%	
35	3.91%	5.86%	0.85%	1.28%	4.76%	7.14%	
36	3.98%	5.96%	0.87%	1.31%	4.85%	7.27%	
37	4.05%	6.07%	0.89%	1.33%	4.94%	7.40%	
38	4.12%	6.18%	0.90%	1.35%	5.02%	7.53%	
39	4.19%	6.28%	0.92%	1.38%	5.11%	7.66%	



Appendix A
Member Contribution Rates (Continued)

General Tier 2 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued								
	Basi	c Only	COL	A Only	Total			
Entry Age	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*		
40	4.26%	6.40%	0.93%	1.40%	5.19%	7.80%		
41	4.34%	6.51%	0.95%	1.43%	5.29%	7.94%		
42	4.42%	6.63%	0.97%	1.45%	5.39%	8.08%		
43	4.50%	6.74%	0.99%	1.48%	5.49%	8.22%		
44	4.58%	6.86%	1.01%	1.51%	5.59%	8.37%		
45	4.66%	6.99%	1.02%	1.53%	5.68%	8.52%		
46	4.74%	7.12%	1.04%	1.56%	5.78%	8.68%		
47	4.83%	7.24%	1.06%	1.59%	5.89%	8.83%		
48	4.91%	7.36%	1.07%	1.61%	5.98%	8.97%		
49	4.98%	7.47%	1.09%	1.64%	6.07%	9.11%		
50	5.06%	7.58%	1.11%	1.66%	6.17%	9.24%		
51	5.12%	7.68%	1.12%	1.68%	6.24%	9.36%		
52	5.18%	7.77%	1.13%	1.70%	6.31%	9.47%		
53	5.23%	7.85%	1.15%	1.72%	6.38%	9.57%		
54	5.27%	7.91%	1.15%	1.73%	6.42%	9.64%		
55	5.30%	7.95%	1.16%	1.74%	6.46%	9.69%		
56	5.30%	7.95%	1.16%	1.74%	6.46%	9.69%		
57	5.28%	7.92%	1.16%	1.74%	6.44%	9.66%		
58	5.47%	8.21%	1.20%	1.80%	6.67%	10.01%		

1.25%

1.87%

6.93%

59 & Over

Interest: 7.80% per annum

5.68%

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females,

weighted 30% male and 70% female

8.52%

Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 21.93% Terminal Pay: 3.0%



10.39%

^{*} Use these rates for Non-Integrated Members

Appendix A
Member Contribution Rates (Continued)

General Tier 3 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of page 1)	General Tier 3 Members	Contribution Rates Based on the	e December 31, 2013 Actuarial	Valuation (as a % of payre
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	Basic	Basic Only		A Only	Total		
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	
15	4.27%	6.41%	1.53%	2.29%	5.80%	8.70%	
16	4.27%	6.41%	1.53%	2.29%	5.80%	8.70%	
17	4.35%	6.53%	1.55%	2.33%	5.90%	8.86%	
18	4.43%	6.64%	1.58%	2.37%	6.01%	9.01%	
19	4.51%	6.77%	1.61%	2.42%	6.12%	9.19%	
20	4.59%	6.89%	1.64%	2.46%	6.23%	9.35%	
21	4.68%	7.01%	1.67%	2.51%	6.35%	9.52%	
22	4.76%	7.14%	1.70%	2.55%	6.46%	9.69%	
23	4.85%	7.27%	1.73%	2.60%	6.58%	9.87%	
24	4.93%	7.40%	1.76%	2.64%	6.69%	10.04%	
25	5.02%	7.53%	1.79%	2.69%	6.81%	10.22%	
26	5.11%	7.67%	1.83%	2.74%	6.94%	10.41%	
27	5.20%	7.80%	1.86%	2.79%	7.06%	10.59%	
28	5.29%	7.94%	1.89%	2.84%	7.18%	10.78%	
29	5.39%	8.08%	1.93%	2.89%	7.32%	10.97%	
30	5.48%	8.23%	1.96%	2.94%	7.44%	11.17%	
31	5.58%	8.37%	1.99%	2.99%	7.57%	11.36%	
32	5.68%	8.52%	2.03%	3.04%	7.71%	11.56%	
33	5.78%	8.67%	2.07%	3.10%	7.85%	11.77%	
34	5.88%	8.82%	2.10%	3.15%	7.98%	11.97%	
35	5.99%	8.98%	2.14%	3.21%	8.13%	12.19%	
36	6.09%	9.14%	2.18%	3.27%	8.27%	12.41%	
37	6.20%	9.30%	2.21%	3.32%	8.41%	12.62%	
38	6.31%	9.47%	2.25%	3.38%	8.56%	12.85%	
39	6.43%	9.64%	2.29%	3.44%	8.72%	13.08%	



Appendix A
Member Contribution Rates (Continued)

General Tier 3 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued Basic Only COLA Only Total Entry Age First \$161 Over \$161* First \$161 Over \$161* First \$161 Over \$161* 40 6.54% 9.81% 2.34% 3.51% 8.88% 13.32% 41 6.66% 9.99% 2.38% 3.57% 9.04% 13.56% 42 6.79% 10.18% 2.43% 3.64% 9.22% 13.82% 43 6.91% 10.37% 2.47% 3.71% 9.38% 14.08% 44 3.77% 9.54% 14.31% 7.03% 10.54% 2.51% 45 7.14% 10.71% 2.55% 3.83% 9.69% 14.54% 46 7.25% 10.88% 2.59% 3.89% 9.84% 14.77% 47 7.35% 11.02% 2.63% 3.94% 9.98% 14.96% 7.43% 3.98% 10.08% 15.13% 48 11.15% 2.65% 49 7.51% 11.27% 2.69% 4.03% 10.20% 15.30% 50 7.57% 11.36% 2.71% 4.06% 10.28% 15.42% 51 7.62% 11.43% 2.73% 4.09% 10.35% 15.52% 52 2.72% 4.08% 7.61% 11.42% 10.33% 15.50% 53 7.53% 11.30% 2.69% 4.04% 10.22% 15.34%

2.60%

3.90%

9.87%

54 & over

Interest: 7.80% per annum

7.27%

COLA: 3.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females,

weighted 30% male and 70% female

10.91%

Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 35.73% Terminal Pay: 8.0%



14.81%

^{*} Use these rates for Non-Integrated Members

Appendix A

Member Contribution Rates (Continued)

General Tier 4 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of eligible payroll)*

<u> </u>	Basic Only	COLA Only	Total
	Eligible Pay	Eligible Pay	Eligible Pay
All General Tier 4 Members	6.84%	1.28%	8.12%

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year for females,

weighted 30% male and 70% female

Salary Increase: Inflation (3.50%) + Across-the-Board Increase (0.50%) + Merit (See Exhibit V)

COLA Loading Factor: 18.71% 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 2014 is equal to \$115,064. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of \$115,064, or \$138,077). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2014. (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, 2013 Actuarial Valuation (as a % of payroll)

	Basic	c Only	Cost Sharing	Contributions	COL	A Only	Total	
Entry Age	<u>First \$161</u>	Over \$161*	<u>First \$161</u>	Over \$161*	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*
15	5.03%	7.54%	3.00%	3.00%	2.65%	3.97%	10.68%	14.51%
16	5.03%	7.54%	3.00%	3.00%	2.65%	3.97%	10.68%	14.51%
17	5.12%	7.68%	3.00%	3.00%	2.69%	4.04%	10.81%	14.72%
18	5.21%	7.81%	3.00%	3.00%	2.74%	4.11%	10.95%	14.92%
19	5.30%	7.95%	3.00%	3.00%	2.79%	4.18%	11.09%	15.13%
20	5.39%	8.09%	3.00%	3.00%	2.84%	4.26%	11.23%	15.35%
21	5.49%	8.23%	3.00%	3.00%	2.89%	4.33%	11.38%	15.56%
22	5.58%	8.37%	3.00%	3.00%	2.94%	4.41%	11.52%	15.78%
23	5.68%	8.52%	3.00%	3.00%	2.99%	4.48%	11.67%	16.00%
24	5.78%	8.67%	3.00%	3.00%	3.04%	4.56%	11.82%	16.23%
25	5.88%	8.82%	3.00%	3.00%	3.09%	4.64%	11.97%	16.46%
26	5.98%	8.97%	3.00%	3.00%	3.15%	4.72%	12.13%	16.69%
27	6.09%	9.13%	3.00%	3.00%	3.21%	4.81%	12.30%	16.94%
28	6.19%	9.29%	3.00%	3.00%	3.26%	4.89%	12.45%	17.18%
29	6.30%	9.45%	3.00%	3.00%	3.32%	4.98%	12.62%	17.43%
30	6.41%	9.62%	3.00%	3.00%	3.37%	5.06%	12.78%	17.68%
31	6.53%	9.79%	3.00%	3.00%	3.43%	5.15%	12.96%	17.94%
32	6.64%	9.96%	3.00%	3.00%	3.49%	5.24%	13.13%	18.20%
33	6.76%	10.14%	3.00%	3.00%	3.56%	5.34%	13.32%	18.48%
34	6.89%	10.33%	3.00%	3.00%	3.63%	5.44%	13.52%	18.77%
35	7.01%	10.52%	3.00%	3.00%	3.69%	5.54%	13.70%	19.06%
36	7.14%	10.72%	3.00%	3.00%	3.76%	5.64%	13.90%	19.36%
37	7.28%	10.92%	3.00%	3.00%	3.83%	5.75%	14.11%	19.67%
38	7.42%	11.14%	3.00%	3.00%	3.91%	5.86%	14.33%	20.00%
39	7.55%	11.33%	3.00%	3.00%	3.97%	5.96%	14.52%	20.29%



Appendix A Member Contribution Rates (Continued)

Safety Tier 1 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued

	Basic Only		Cost Sharing Contributions		COLA Only		Total	
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*
40	7.69%	11.54%	3.00%	3.00%	4.05%	6.07%	14.74%	20.61%
41	7.84%	11.76%	3.00%	3.00%	4.13%	6.19%	14.97%	20.95%
42	7.99%	11.99%	3.00%	3.00%	4.21%	6.31%	15.20%	21.30%
43	8.12%	12.19%	3.00%	3.00%	4.27%	6.41%	15.39%	21.60%
44	8.19%	12.29%	3.00%	3.00%	4.31%	6.47%	15.50%	21.76%
45	8.25%	12.37%	3.00%	3.00%	4.34%	6.51%	15.59%	21.88%
46	8.27%	12.40%	3.00%	3.00%	4.35%	6.53%	15.62%	21.93%
47	8.16%	12.25%	3.00%	3.00%	4.30%	6.45%	15.46%	21.70%
48	7.97%	11.95%	3.00%	3.00%	4.19%	6.29%	15.16%	21.24%
49 & Over	7.58%	11.36%	3.00%	3.00%	3.99%	5.98%	14.57%	20.34%

^{*} Use these rates for Non-Integrated Members

Interest: 7.80% per annum

COLA: 3.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 52.64%
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, 2013 Actuarial Valuation (as a % of payroll)

	Basic	e Only	Cost Sharing	Contributions	COLA	A Only	To	otal
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	4.60%	6.91%	3.00%	3.00%	1.55%	2.32%	9.15%	12.23%
16	4.60%	6.91%	3.00%	3.00%	1.55%	2.32%	9.15%	12.23%
17	4.69%	7.03%	3.00%	3.00%	1.58%	2.37%	9.27%	12.40%
18	4.77%	7.15%	3.00%	3.00%	1.61%	2.41%	9.38%	12.56%
19	4.85%	7.28%	3.00%	3.00%	1.63%	2.45%	9.48%	12.73%
20	4.94%	7.40%	3.00%	3.00%	1.66%	2.49%	9.60%	12.89%
21	5.02%	7.53%	3.00%	3.00%	1.69%	2.54%	9.71%	13.07%
22	5.11%	7.66%	3.00%	3.00%	1.72%	2.58%	9.83%	13.24%
23	5.20%	7.80%	3.00%	3.00%	1.75%	2.62%	9.95%	13.42%
24	5.29%	7.93%	3.00%	3.00%	1.78%	2.67%	10.07%	13.60%
25	5.38%	8.07%	3.00%	3.00%	1.81%	2.72%	10.19%	13.79%
26	5.47%	8.21%	3.00%	3.00%	1.84%	2.76%	10.31%	13.97%
27	5.57%	8.35%	3.00%	3.00%	1.87%	2.81%	10.44%	14.16%
28	5.67%	8.50%	3.00%	3.00%	1.91%	2.86%	10.58%	14.36%
29	5.76%	8.65%	3.00%	3.00%	1.94%	2.91%	10.70%	14.56%
30	5.87%	8.80%	3.00%	3.00%	1.97%	2.96%	10.84%	14.76%
31	5.97%	8.95%	3.00%	3.00%	2.01%	3.01%	10.98%	14.96%
32	6.07%	9.11%	3.00%	3.00%	2.05%	3.07%	11.12%	15.18%
33	6.18%	9.28%	3.00%	3.00%	2.08%	3.12%	11.26%	15.40%
34	6.29%	9.44%	3.00%	3.00%	2.12%	3.18%	11.41%	15.62%
35	6.41%	9.61%	3.00%	3.00%	2.16%	3.24%	11.57%	15.85%
36	6.53%	9.79%	3.00%	3.00%	2.20%	3.30%	11.73%	16.09%
37	6.65%	9.97%	3.00%	3.00%	2.24%	3.36%	11.89%	16.33%
38	6.76%	10.14%	3.00%	3.00%	2.27%	3.41%	12.03%	16.55%
39	6.88%	10.32%	3.00%	3.00%	2.31%	3.47%	12.19%	16.79%



Appendix A

Member Contribution Rates (Continued)

Safety Tier 2 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued

	Basic Only		Cost Sharing Contributions		COLA Only		Total	
Entry Age	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.00%	10.50%	3.00%	3.00%	2.35%	3.53%	12.35%	17.03%
41	7.12%	10.67%	3.00%	3.00%	2.39%	3.59%	12.51%	17.26%
42	7.21%	10.81%	3.00%	3.00%	2.43%	3.64%	12.64%	17.45%
43	7.27%	10.90%	3.00%	3.00%	2.45%	3.67%	12.72%	17.57%
44	7.29%	10.94%	3.00%	3.00%	2.45%	3.68%	12.74%	17.62%
45	7.27%	10.91%	3.00%	3.00%	2.45%	3.67%	12.72%	17.58%
46	7.19%	10.78%	3.00%	3.00%	2.42%	3.63%	12.61%	17.41%
47	7.05%	10.57%	3.00%	3.00%	2.37%	3.56%	12.42%	17.13%
48	7.30%	10.96%	3.00%	3.00%	2.46%	3.69%	12.76%	17.65%
49 & Over	7.58%	11.36%	3.00%	3.00%	2.55%	3.83%	13.13%	18.19%

^{*}Use these rates for Non-Integrated Members

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 33.66% 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, 2013 Actuarial Valuation (as a % of payroll)

	Basic	c Only	COL	A Only	Total		
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	
15	4.60%	6.91%	1.31%	1.96%	5.91%	8.87%	
16	4.60%	6.91%	1.31%	1.96%	5.91%	8.87%	
17	4.69%	7.03%	1.33%	1.99%	6.02%	9.02%	
18	4.77%	7.15%	1.35%	2.03%	6.12%	9.18%	
19	4.85%	7.28%	1.37%	2.06%	6.22%	9.34%	
20	4.94%	7.40%	1.40%	2.10%	6.34%	9.50%	
21	5.02%	7.53%	1.42%	2.13%	6.44%	9.66%	
22	5.11%	7.66%	1.45%	2.17%	6.56%	9.83%	
23	5.20%	7.80%	1.47%	2.21%	6.67%	10.01%	
24	5.29%	7.93%	1.50%	2.25%	6.79%	10.18%	
25	5.38%	8.07%	1.53%	2.29%	6.91%	10.36%	
26	5.47%	8.21%	1.55%	2.33%	7.02%	10.54%	
27	5.57%	8.35%	1.58%	2.37%	7.15%	10.72%	
28	5.67%	8.50%	1.61%	2.41%	7.28%	10.91%	
29	5.76%	8.65%	1.63%	2.45%	7.39%	11.10%	
30	5.87%	8.80%	1.66%	2.49%	7.53%	11.29%	
31	5.97%	8.95%	1.69%	2.54%	7.66%	11.49%	
32	6.07%	9.11%	1.72%	2.58%	7.79%	11.69%	
33	6.18%	9.28%	1.75%	2.63%	7.93%	11.91%	
34	6.29%	9.44%	1.79%	2.68%	8.08%	12.12%	
35	6.41%	9.61%	1.81%	2.72%	8.22%	12.33%	
36	6.53%	9.79%	1.85%	2.77%	8.38%	12.56%	
37	6.65%	9.97%	1.88%	2.82%	8.53%	12.79%	
38	6.76%	10.14%	1.91%	2.87%	8.67%	13.01%	
39	6.88%	10.32%	1.95%	2.92%	8.83%	13.24%	



Appendix A Member Contribution Rates (Continued)

Safety Tier 2C Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of payroll) - continued

	Basic	Only	COLA	A Only	To	Total		
Entry Age	<u>First \$161</u>	Over \$161*	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*		
40	7.00%	10.50%	1.98%	2.97%	8.98%	13.47%		
41	7.12%	10.67%	2.01%	3.02%	9.13%	13.69%		
42	7.21%	10.81%	2.04%	3.06%	9.25%	13.87%		
43	7.27%	10.90%	2.06%	3.09%	9.33%	13.99%		
44	7.29%	10.94%	2.07%	3.10%	9.36%	14.04%		
45	7.27%	10.91%	2.06%	3.09%	9.33%	14.00%		
46	7.19%	10.78%	2.03%	3.05%	9.22%	13.83%		
47	7.05%	10.57%	2.00%	3.00%	9.05%	13.57%		
48	7.30%	10.96%	2.07%	3.10%	9.37%	14.06%		
49 & Over	7.58%	11.36%	2.15%	3.22%	9.73%	14.58%		

^{*} Use these rates for Non-Integrated Members

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 28.33% Terminal Pay: 4.0%



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, 2013 Actuarial Valuation (as a % of payroll)

	Basi	c Only	Cost Sharing (Contributions**	COL	A Only	To	otal
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	4.60%	6.91%	5.00%	5.00%	1.44%	2.16%	11.04%	14.07%
16	4.60%	6.91%	5.00%	5.00%	1.44%	2.16%	11.04%	14.07%
17	4.69%	7.03%	5.00%	5.00%	1.47%	2.20%	11.16%	14.23%
18	4.77%	7.15%	5.00%	5.00%	1.49%	2.24%	11.26%	14.39%
19	4.85%	7.28%	5.00%	5.00%	1.51%	2.27%	11.36%	14.55%
20	4.94%	7.40%	5.00%	5.00%	1.54%	2.31%	11.48%	14.71%
21	5.02%	7.53%	5.00%	5.00%	1.57%	2.35%	11.59%	14.88%
22	5.11%	7.66%	5.00%	5.00%	1.60%	2.40%	11.71%	15.06%
23	5.20%	7.80%	5.00%	5.00%	1.63%	2.44%	11.83%	15.24%
24	5.29%	7.93%	5.00%	5.00%	1.65%	2.48%	11.94%	15.41%
25	5.38%	8.07%	5.00%	5.00%	1.68%	2.52%	12.06%	15.59%
26	5.47%	8.21%	5.00%	5.00%	1.71%	2.57%	12.18%	15.78%
27	5.57%	8.35%	5.00%	5.00%	1.74%	2.61%	12.31%	15.96%
28	5.67%	8.50%	5.00%	5.00%	1.77%	2.66%	12.44%	16.16%
29	5.76%	8.65%	5.00%	5.00%	1.80%	2.70%	12.56%	16.35%
30	5.87%	8.80%	5.00%	5.00%	1.83%	2.75%	12.70%	16.55%
31	5.97%	8.95%	5.00%	5.00%	1.87%	2.80%	12.84%	16.75%
32	6.07%	9.11%	5.00%	5.00%	1.90%	2.85%	12.97%	16.96%
33	6.18%	9.28%	5.00%	5.00%	1.93%	2.90%	13.11%	17.18%
34	6.29%	9.44%	5.00%	5.00%	1.97%	2.95%	13.26%	17.39%
35	6.41%	9.61%	5.00%	5.00%	2.01%	3.01%	13.42%	17.62%
36	6.53%	9.79%	5.00%	5.00%	2.04%	3.06%	13.57%	17.85%
37	6.65%	9.97%	5.00%	5.00%	2.08%	3.12%	13.73%	18.09%
38	6.76%	10.14%	5.00%	5.00%	2.11%	3.17%	13.87%	18.31%
39	6.88%	10.32%	5.00%	5.00%	2.15%	3.23%	14.03%	18.55%



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, 2013 Actuarial Valuation - continued (as a % of payroll)

	Basic Only		Cost Sharing Contributions**		COLA Only		Total	
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.00%	10.50%	5.00%	5.00%	2.19%	3.28%	14.19%	18.78%
41	7.12%	10.67%	5.00%	5.00%	2.23%	3.34%	14.35%	19.01%
42	7.21%	10.81%	5.00%	5.00%	2.25%	3.38%	14.46%	19.19%
43	7.27%	10.90%	5.00%	5.00%	2.27%	3.41%	14.54%	19.31%
44	7.29%	10.94%	5.00%	5.00%	2.28%	3.42%	14.57%	19.36%
45	7.27%	10.91%	5.00%	5.00%	2.27%	3.41%	14.54%	19.32%
46	7.19%	10.78%	5.00%	5.00%	2.25%	3.37%	14.44%	19.15%
47	7.05%	10.57%	5.00%	5.00%	2.21%	3.31%	14.26%	18.88%
48	7.30%	10.96%	5.00%	5.00%	2.29%	3.43%	14.59%	19.39%
49 & Over	7.58%	11.36%	5.00%	5.00%	2.37%	3.55%	14.95%	19.91%

^{*} Use these rates for Non-Integrated Members

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 31.26% Terminal Pay: 4.0%



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

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, 2013 Actuarial Valuation (as a % of payroll)

	Basi	c Only	Cost Sharing	Contributions	COL	A Only	Te	otal
Entry Age	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
15	4.60%	6.91%	3.00%	3.00%	1.44%	2.16%	9.04%	12.07%
16	4.60%	6.91%	3.00%	3.00%	1.44%	2.16%	9.04%	12.07%
17	4.69%	7.03%	3.00%	3.00%	1.47%	2.20%	9.16%	12.23%
18	4.77%	7.15%	3.00%	3.00%	1.49%	2.24%	9.26%	12.39%
19	4.85%	7.28%	3.00%	3.00%	1.51%	2.27%	9.36%	12.55%
20	4.94%	7.40%	3.00%	3.00%	1.54%	2.31%	9.48%	12.71%
21	5.02%	7.53%	3.00%	3.00%	1.57%	2.35%	9.59%	12.88%
22	5.11%	7.66%	3.00%	3.00%	1.60%	2.40%	9.71%	13.06%
23	5.20%	7.80%	3.00%	3.00%	1.63%	2.44%	9.83%	13.24%
24	5.29%	7.93%	3.00%	3.00%	1.65%	2.48%	9.94%	13.41%
25	5.38%	8.07%	3.00%	3.00%	1.68%	2.52%	10.06%	13.59%
26	5.47%	8.21%	3.00%	3.00%	1.71%	2.57%	10.18%	13.78%
27	5.57%	8.35%	3.00%	3.00%	1.74%	2.61%	10.31%	13.96%
28	5.67%	8.50%	3.00%	3.00%	1.77%	2.66%	10.44%	14.16%
29	5.76%	8.65%	3.00%	3.00%	1.80%	2.70%	10.56%	14.35%
30	5.87%	8.80%	3.00%	3.00%	1.83%	2.75%	10.70%	14.55%
31	5.97%	8.95%	3.00%	3.00%	1.87%	2.80%	10.84%	14.75%
32	6.07%	9.11%	3.00%	3.00%	1.90%	2.85%	10.97%	14.96%
33	6.18%	9.28%	3.00%	3.00%	1.93%	2.90%	11.11%	15.18%
34	6.29%	9.44%	3.00%	3.00%	1.97%	2.95%	11.26%	15.39%
35	6.41%	9.61%	3.00%	3.00%	2.01%	3.01%	11.42%	15.62%
36	6.53%	9.79%	3.00%	3.00%	2.04%	3.06%	11.57%	15.85%
37	6.65%	9.97%	3.00%	3.00%	2.08%	3.12%	11.73%	16.09%
38	6.76%	10.14%	3.00%	3.00%	2.11%	3.17%	11.87%	16.31%
39	6.88%	10.32%	3.00%	3.00%	2.15%	3.23%	12.03%	16.55%



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, 2013 Actuarial Valuation – continued (as a % of payroll)

	Basic Only		Cost Sharing Contributions		COLA Only		Total	
Entry Age	<u>First \$161</u>	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*	First \$161	Over \$161*
40	7.00%	10.50%	3.00%	3.00%	2.19%	3.28%	12.19%	16.78%
41	7.12%	10.67%	3.00%	3.00%	2.23%	3.34%	12.35%	17.01%
42	7.21%	10.81%	3.00%	3.00%	2.25%	3.38%	12.46%	17.19%
43	7.27%	10.90%	3.00%	3.00%	2.27%	3.41%	12.54%	17.31%
44	7.29%	10.94%	3.00%	3.00%	2.28%	3.42%	12.57%	17.36%
45	7.27%	10.91%	3.00%	3.00%	2.27%	3.41%	12.54%	17.32%
46	7.19%	10.78%	3.00%	3.00%	2.25%	3.37%	12.44%	17.15%
47	7.05%	10.57%	3.00%	3.00%	2.21%	3.31%	12.26%	16.88%
48	7.30%	10.96%	3.00%	3.00%	2.29%	3.43%	12.59%	17.39%
49 & Over	7.58%	11.36%	3.00%	3.00%	2.37%	3.55%	12.95%	17.91%

^{*} Use these rates for Non-Integrated Members

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 31.26% Terminal Pay: 4.0%



Appendix A

Member Contribution Rates (Continued)

Safety Tier 4 Members' Contribution Rates Based on the December 31, 2013 Actuarial Valuation (as a % of eligible payroll)*

	Basic Only	COLA Only	Total
	Eligible Pay	Eligible Pay	Eligible Pay
All Safety Tier 4 Members	13.68%	3.09%	16.77%

Interest: 7.80% per annum

COLA: 2.00%

Mortality: RP-2000 Combined Healthy Mortality Table set back two years for males and one year 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: 22.59% 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 2014 is equal to \$115,064. (For an employer that is not enrolled in Social Security, the maximum amount is 120% of \$115,064, or \$138,077). (reference: Section 7522.10). These amounts should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2014. (reference: Section 7522.10(d))



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, 2013 Actuarial Valuation

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

		Gene	ral				Safety			
Employer Name (Code)	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 2C	Tier 2D	Tier 4	<u>Total</u>
Alameda County (101)	\$4,456	\$82,952		\$4,898	\$1,060	\$64,251	\$1,729	\$3,358	\$1,377	\$164,081
Health System (106)	687	38,080		2,319						41,086
Superior Court (632)	647	8,250		391						9,288
First 5 (714)		907		53						960
Housing Authority (103)	1,010	66		21						1,097
LARPD (104)	182		\$971	34						1,187
Office of Education (105)	18									18
Total	\$7,000	\$130,255	\$971	\$7,716	\$1,060	\$64,251	\$1,729	\$3,358	\$1,377	\$217,717

<u>Dollar Contribution⁽¹⁾</u> - Based on December 31, 2012 Valuation

	General				Safety					
Employer Name (Code)	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 2C	Tier 2D	Tier 4	<u>Total</u>
Alameda County (101)	\$4,521	\$85,309		\$4,989	\$986	\$63,396	\$1,689	\$3,330	\$1,284	\$165,504
Health System (106)	693	38,954		2,349						41,996
Superior Court (632)	654	8,439		396						9,489
First 5 (714)		928		54						982
Housing Authority (103)	1,011	66		21						1,098
LARPD (104)	183		\$990	34						1,207
Office of Education (105)	19									19
Total	\$7,081	\$133,696	\$990	\$7,843	\$986	\$63,396	\$1,689	\$3,330	\$1,284	\$220,295



December 31, 2013 Projected Total Compensation (\$000s)

	General				Safety					
Employer Name (Code)	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 2C	Tier 2D	Tier 4	<u>Total</u>
Alameda County (101)	\$22,762	\$444,548		\$28,069	\$1,586	\$129,617	\$3,309	\$7,143	\$2,718	\$639,752
Health System (106)	3,418	198,742		12,921						215,081
Superior Court (632)	3,224	43,058		2,180						48,462
First 5 (714)		4,735		296						5,031
Housing Authority (103)	3,984	270		90						4,344
LARPD (104)	720		\$3,198	142						4,060
Office of Education (105)	73									73
Total	\$34,181	\$691,353	\$3,198	\$43,698	\$1,586	\$129,617	\$3,309	\$7,143	\$2,718	\$916,803

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⁽¹⁾ Contribution calculated using projected compensation provided below for the December 31, 2013 valuation: