

# Los Angeles City Employees' Retirement System

**Actuarial Valuation and Review of Retirement  
and Health Benefits as of June 30, 2014**



This report has been prepared at the request of the Board of Administration 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 Administration 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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100 MONTGOMERY STREET, SUITE 500 SAN FRANCISCO, CA 94104  
T 415.263.8200 www.segalco.com

December 3, 2014

Board of Retirement  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401

**Re: June 30, 2014 Actuarial Valuations**

Dear Board Members:

Enclosed please find the June 30, 2014 actuarial valuations for the retirement and health plans.

As requested by the System, we have attached the following supplemental schedules:

- Exhibit A - Summary of significant results for the retirement and health plans.
- Exhibit B - History of computed contribution rates for the retirement and health plans.
- Exhibit C - Solvency test for the retirement plan.<sup>1</sup>
- Exhibit D - Schedule of retirees and beneficiaries added to and removed from the rolls for the retirement plan.<sup>2</sup>

We look forward to discussing the reports and the enclosed schedules with the Board.

Sincerely,

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

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

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

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

DNA/gxk

5340176v3/05806.002

<sup>1</sup> For the health plan, a similar schedule is provided in Exhibit I of the health valuation report.

<sup>2</sup> For the health plan, a similar schedule is provided in Exhibit C of the health valuation report.

**Exhibit A**

**Los Angeles City Employees' Retirement System  
Summary of Significant Valuation Results**

	<b><u>June 30, 2014</u></b>	<b><u>June 30, 2013</u></b>	<b><u>Percent Change</u></b>
<b>I. Total Membership</b>			
A. Active Members	24,009	24,441	-1.8%
B. Pensioners and Beneficiaries	17,532	17,362	1.0%
<b>II. Valuation Salary</b>			
A. Total Annual Payroll	\$1,898,064,175	\$1,846,970,474	2.8%
B. Average Monthly Salary	6,588	6,297	4.6%
<b>III. Benefits to Current Retirees and Beneficiaries<sup>(1)</sup></b>			
A. Total Annual Benefits	\$716,556,070	\$699,064,942	2.5%
B. Average Monthly Benefit Amount	3,406	3,355	1.5%
<b>IV. Total System Assets<sup>(2)</sup></b>			
A. Actuarial Value	\$12,935,503,398	\$12,004,110,338	7.8%
B. Market Value	13,935,771,998	11,922,538,917	16.9%
<b>V. Unfunded Actuarial Accrued Liability (UAAL)</b>			
A. Retirement Benefits	\$5,304,102,525	\$4,657,702,276	13.9%
B. Health Subsidy Benefits	721,628,343	677,750,710	6.5%

<sup>(1)</sup> Includes July COLA.

<sup>(2)</sup> Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

**Exhibit A (continued)**

**Los Angeles City Employees' Retirement System  
Summary of Significant Valuation Results**

VI. Budget Items (as a Percent of Pay)	FY 2015-2016*****		FY 2014-2015**		Difference	
	Beginning of Year*	July 15	Beginning of Year	July 15	Beginning of Year	July 15
A. Retirement Benefits (Tier 1 and Tier 2 Combined)						
1. Normal Cost	6.56%	6.58%	6.86%	6.89%	(0.30)%	(0.31)%
2. Amortization of UAAL	<u>16.63%</u>	<u>16.68%</u>	<u>14.57%</u>	<u>14.61%</u>	<u>2.06%</u>	<u>2.07%</u>
3. Total Retirement Contribution	23.19%	23.26%	21.43%	21.50%	1.76%	1.76%
B. Health Subsidy Contribution (Tier 1 and Tier 2 Combined)						
1. Normal Cost	3.43%	3.44%	3.48%	3.49%	(0.05)%	(0.05)%
2. Amortization of UAAL	<u>2.17%</u>	<u>2.18%</u>	<u>2.11%</u>	<u>2.12%</u>	<u>0.06%</u>	<u>0.06%</u>
3. Total Health Subsidy Contribution	5.60%	5.62%	5.59%	5.61%	0.01%	0.01%
C. Total Contribution (A + B)	28.79%	28.88%	27.02%	27.11%	1.77%	1.77%
<b>VII. Funded Ratio</b>	<b><u>June 30, 2014</u></b>		<b><u>June 30, 2013</u></b>		<b><u>Difference</u></b>	
(Based on Valuation Value of Assets)						
A. Retirement Benefits		67.4%		68.7%		(1.3)%
B. Health Subsidy Benefits		72.9%		71.9%		1.0%
C. Total		68.1%		69.1%		(1.0)%
(Based on Market Value of Assets)						
D. Retirement Benefits		72.6%		68.2%		4.4%
E. Health Subsidy Benefits		78.5%		71.4%		7.1%
F. Total		73.4%		68.7%		4.7%

\* Alternative contribution payment date for FY 2015-2016:

	<u>Retirement</u>	<u>Health</u>	<u>Total</u>
End of Pay Periods (after reflecting additional employee contributions)	24.05%	5.81%	29.86%

\*\* Before adjustments to phase in over five years the impact of new actuarial assumptions (as a result of the June 30, 2011 Triennial Experience Study) on the City's contributions. For Fiscal Year 2015-2016 contribution rates after the phase-in adjustments, refer to our letter dated November 24, 2014.

\*\*\* Before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study. For Fiscal Year 2015-2016 contribution rates due to the phase-in, refer to our letter dated November 25, 2014.

**Exhibit B**  
**Los Angeles City Employees' Retirement System**  
**Computed Contribution Rates<sup>(1)</sup> – Historical Comparison**

<u>Valuation Date</u>	<u>Retirement</u>	<u>Health</u>	<u>Total</u>	<u>Valuation Payroll (thousands)</u>
06/30/1994	12.07%	2.99%	15.06%	\$884,951
06/30/1995	7.34%	2.30%	9.64%	911,292
06/30/1996	6.51%	3.18%	9.69%	957,423
06/30/1997	6.57%	1.85%	8.42%	990,616
06/30/1998	6.43%	1.27%	7.70%	1,011,857
06/30/1999	4.93%	0.67%	5.60%	1,068,124
06/30/2000	2.54%	2.17%	4.71%	1,182,203
06/30/2001	3.84%	1.98%	5.82%	1,293,350
06/30/2002	9.22%	1.85%	11.07%	1,334,335
06/30/2003	11.95%	4.02%	15.97%	1,405,058
06/30/2004	14.76%	4.94%	19.70%	1,575,285
06/30/2005	17.51%	7.27%	24.78%	1,589,306
06/30/2006	17.18%	6.49%	23.67%	1,733,340
06/30/2007	15.52%	5.38%	20.90%	1,896,609
06/30/2008	14.65%	5.48%	20.13%	1,977,645
06/30/2009	18.73%	6.62%	25.35%	1,816,171
06/30/2010				
Before Additional Employee Contributions	21.19%	7.45%	28.64%	1,817,662
After Additional Employee Contributions	18.67%	6.94%	25.61%	1,817,662
06/30/2011 <sup>(2)</sup>				
Before Additional Employee Contributions	24.31%	4.49%	28.80%	1,833,392
After Additional Employee Contributions	21.64%	4.49%	26.13%	1,833,392
06/30/2012 <sup>(3)</sup>	21.34%	5.74%	27.08%	1,819,270
06/30/2013	22.24%	5.80%	28.04%	1,846,970
06/30/2014 <sup>(4),(5)</sup>	24.05%	5.81%	29.86%	1,898,064

(1) Contributions are assumed to be made at the end of the pay period. Beginning with the 6/30/2014 valuation, the contribution rates are the combined rates for Tiers 1 and 2.

(2) Beginning with the 6/30/2011 valuation date, the contribution rates are before adjustments to phase in over five years the impact of new actuarial assumptions (as a result of the June 30, 2011 Triennial Experience Study) on the City's contributions.

(3) Beginning with the 6/30/2012 valuation date, the contribution rates are after additional employee contributions.

(4) For Fiscal Year 2015-2016 contribution rates after the phase-in adjustments for the June 30, 2011 Triennial Experience Study, refer to our letter dated November 24, 2014.

(5) Before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study. For Fiscal Year 2015-2016 contribution rates due to the phase-in adjustments, refer to our letter dated November 25, 2014.

## Exhibit C

### Los Angeles City Employees' Retirement System Solvency Test for Retirement Benefits For Years Ended June 30

(\$ In Thousands)

Valuation Date	<u>Aggregate Actuarial Accrued Liabilities For</u>			Valuation Value of Assets	<u>Portion of Accrued Liabilities Covered by Reported Assets</u>		
	(1) Member Contributions	(2) Retirees, Beneficiaries, & Inactives	(3) Active Members		(1) Member Contributions	(2) Retirees, Beneficiaries, & Inactives	(3) Active Members
06/30/1996	\$637,737	\$2,357,798	\$1,480,489	\$4,468,433	100.0%	100.0%	99.5%
06/30/1997	683,048	2,598,432	1,604,857	4,802,509	100.0	100.0	94.8
06/30/1998	733,680	2,772,712	1,806,526	5,362,923	100.0	100.0	100.0
06/30/1999	776,617	2,989,218	1,918,751	5,910,948	100.0	100.0	100.0
06/30/2000	827,729	3,149,392	2,035,810	6,561,365	100.0	100.0	100.0
06/30/2001	889,658	3,444,240	2,134,168	6,988,782	100.0	100.0	100.0
06/30/2002	950,002	3,756,935	2,545,181	7,060,188	100.0	100.0	92.5
06/30/2003	1,005,888	4,021,213	2,632,745	6,999,647	100.0	100.0	74.9
06/30/2004	1,062,002	4,348,252	3,123,610	7,042,108	100.0	100.0	52.2
06/30/2005	1,128,101	4,858,932	3,334,492	7,193,142	100.0	100.0	36.2
06/30/2006	1,210,246	5,149,385	3,511,031	7,674,999	100.0	100.0	37.5
06/30/2007	1,307,008	5,365,437	3,854,429	8,599,700*	100.0	100.0	50.0
06/30/2008	1,408,074	5,665,130	4,113,200	9,438,318	100.0	100.0	57.5
06/30/2009	1,282,663	7,356,302	3,403,019	9,577,747	100.0	100.0	27.6
06/30/2010	1,379,098	7,507,945	3,707,982	9,554,027	100.0	100.0	18.0
06/30/2011	1,474,824	7,765,071	4,151,809	9,691,011	100.0	100.0	10.9
06/30/2012	1,625,207	7,893,684	4,875,068	9,934,959	100.0	100.0	8.5
06/30/2013	1,757,195	8,066,564	5,057,904	10,223,961	100.0	100.0	7.9
06/30/2014	1,900,068	8,700,896	5,647,889	10,944,751	100.0	100.0	6.1

\* Excludes assets transferred for Port Police.

## Exhibit D

### Los Angeles City Employees' Retirement System Retirees and Beneficiaries Added To and Removed From the Rolls\* For Years Ended June 30

<u>Year Ended</u>	<u>No. of New Retirees/ Beneficiaries</u>	<u>Annual Allowances Added**</u>	<u>No. of Retirees/ Beneficiaries Removed</u>	<u>Annual Allowances Removed</u>	<u>No. of Retirees/ Beneficiaries at 6/30</u>	<u>Annual Allowances at 6/30</u>	<u>Percent Increase in Annual Allowances</u>	<u>Average Annual Allowance</u>
06/30/2002	844	\$23,740,829	620	\$11,316,344	13,589	\$336,437,038	6.4%	\$24,758
06/30/2003	827	24,729,535	611	12,008,132	13,805	359,036,215	6.7%	26,008
06/30/2004	986	53,452,133	654	13,220,316	14,137	399,268,032	11.2%	28,243
06/30/2005	934	43,454,836	749	14,769,736	14,322	427,953,132	7.2%	29,881
06/30/2006	890	42,821,079	642	15,061,287	14,570	455,712,924	6.5%	31,277
06/30/2007	821	34,131,744	555	13,210,740	14,836	476,633,928	4.6%	32,127
06/30/2008	748	40,680,279	609	14,956,623	14,975	502,357,584	5.4%	33,546
06/30/2009	632	36,887,854	616	17,386,042	14,991	521,859,396	3.9%	34,812
06/30/2010	2,893	144,594,918	620	17,604,486	17,264	648,849,828	24.3%	37,584
06/30/2011	528	24,282,965	595	16,585,589	17,197	656,547,204	1.2%	38,178
06/30/2012	620	38,314,256	594	17,986,700	17,223	676,874,760	3.1%	39,301
06/30/2013	772	40,966,952	633	18,776,770	17,362	699,064,942	3.3%	40,264
06/30/2014	831	38,666,905	661	21,175,777	17,532	716,556,070	2.5%	40,871

\* Does not include Family Death Benefit Plan members. Table based on valuation data.

\*\* Effective 06/30/2004, also includes the COLA granted in July.



## **Los Angeles City Employees' Retirement System**

**Actuarial Valuation and Review of Retirement  
Benefits as of June 30, 2014**

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100 MONTGOMERY STREET, SUITE 500 SAN FRANCISCO, CA 94104  
T 415.263.8200 www.segalco.com

*December 3, 2014*

*Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401*

*Dear Board Members:*

*We are pleased to submit this Actuarial Valuation and Review as of June 30, 2014. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2015/2016 and analyzes the preceding year's experience.*

*This report was prepared in accordance with generally accepted actuarial principles and practices, at the request of the Board to assist in administering the Plan. The census and unaudited financial information on which our calculations were based were prepared by LACERS. 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 directed under our supervision. 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.*

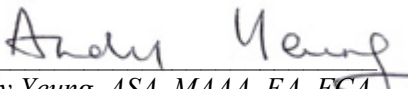
*We look forward to reviewing this report at your next meeting and to answering any questions.*

*Sincerely,*

*Segal Consulting, a Member of the Segal Group, Inc.*

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

*JRC/hy*

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

## SECTION 1

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## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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### Purpose

This report has been prepared by Segal Consulting to present an actuarial valuation of the Los Angeles City Employees' Retirement System as of June 30, 2014. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive members, and retired members and beneficiaries as of June 30, 2014, provided by LACERS;
- The assets of the Plan as of June 30, 2014, provided by LACERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

### Significant Issues in Valuation Year

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

*Ref: Pg. 36*

- The results of this valuation reflect changes in the actuarial assumptions as recommended by Segal Consulting and adopted by the Board on October 28, 2014. These changes were documented in our 2014 Triennial Actuarial Experience Study report dated October 8, 2014 and are also outlined in Section 4, Exhibit VI of this report. These assumption changes resulted in an increase in the combined (Tier 1 and Tier 2) City contribution rate of 2.85% of payroll.

Based on action taken by the Board on September 9, 2014, the amortization period for assumption and method changes was reduced from 30 years to 20 years. The costs associated with the changes in actuarial assumptions adopted from the 2014 Experience Study have been amortized over the new 20-year period in this valuation report.

*Ref: Pgs. 25 and 33*

- The ratio of the valuation value of assets to actuarial accrued liabilities decreased from 68.70% to 67.36%. On a market value of assets basis, the funded ratio increased from 68.23% to 72.57%. The unfunded actuarial accrued liability increased from \$4.658 billion to \$5.304 billion. A complete reconciliation of the System's unfunded actuarial accrued liability is provided in Section 3, Exhibit G.

*Ref: Pg. 14*

The aggregate employer rate (payable at the end of each pay period) calculated in this valuation has increased from 22.24% of payroll to 24.05% of payroll. The annual dollar contributions calculated in this valuation increased from about

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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\$410.9 million to \$456.4 million. The increase was due to: (i) the effect of the anticipated one-year delay in implementing the higher combined (i.e., employer plus employee) contribution rate calculated in the prior valuation, (ii) amortizing the prior year's UAAL over a smaller than expected projected total payroll, (iii) higher than expected salary increases for continuing active members, and (iv) the changes in the actuarial assumptions, offset somewhat by (v) the decrease in normal cost due to payroll and demographic changes (including the enrollment of new employees in Tier 2), (vi) the higher than expected return on the valuation value of assets (after smoothing), (vii) lower than expected COLA granted to retirees and beneficiaries, and (viii) other actuarial gains. A complete reconciliation of the aggregate employer contribution is provided in Section 2, Chart 15.

- On October 25, 2011, the Board elected to phase in the impact of new actuarial assumptions (adopted as a result of the June 30, 2011 Triennial Experience Study) on the City's retirement and health plan contributions over a five-year period, beginning with the 2012-2013 Fiscal Year. The recommended (i.e., pre-phase-in) contribution rates for Fiscal Year 2015-2016 (the fourth year of the phase-in) are contained in this report. In a separate letter, we provide the "phased-in" contribution rates for Fiscal Year 2015-2016.

On October 14, 2014, as part of the Board's deliberations on the actuarial assumptions for use in this valuation, the Board also discussed the possibility of phasing in the cost impact of the new actuarial assumptions adopted from the recent June 30, 2014 Triennial Experience Study on the City's retirement and health plan contributions over three alternative phase-in periods. In another separate letter, we provide the incremental phase-in contribution rates for Fiscal Year 2015-2016 resulting from the 2014 Experience Study.

- Based on additional action taken by the Board on September 9, 2014, the net amount of unrecognized investment losses as of June 30, 2013 (i.e., \$81,571,421) has been recognized in six level amounts, with five years of recognition remaining after the June 30, 2014 valuation.

*Ref: Pg. 5*

As indicated in Section 2, Subsection B of this report, the total unrecognized investment gain as of June 30, 2014 is \$1,000,268,600<sup>1</sup> for the assets for Retirement, Health, Family Death, and Larger Annuity Benefits. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next several years. This implies that earning the assumed rate of investment return of 7.50% per year (net of expenses) on a market value basis will result in net investment gains on the actuarial value of assets after June 30, 2014. Item 9 in Chart 7 shows how, under the asset smoothing method, the \$1.0 billion in unrecognized gains will be recognized in the next six years.

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<sup>1</sup> For comparison purposes, the total unrecognized investment loss as of June 20, 2013 was \$81,571,421, as referenced earlier.

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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The deferred gains of \$1.0 billion represent 7.2% of the market value of assets as of June 30, 2014. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$1.0 billion market gains is expected to have an impact on the System's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:

- If the retirement plan component of the deferred gains were recognized immediately in the valuation value of assets, the funded percentage would increase from 67.36% to 72.57%.
- If the retirement plan component of the deferred gains were recognized immediately in the valuation value of assets, the aggregate employer rate (payable at the end of each pay period) would decrease from 24.05% to about 20.3% of payroll.
- The actuarial valuation report as of June 30, 2014 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.
- As in prior years, the employer contribution rates (before adjustments for the five-year phase in of the impact of new actuarial assumptions adopted for the June 30, 2011 valuation) provided in this report have been developed assuming they will be paid by the City on any of the following dates:
  - (1) The beginning of the fiscal year, or
  - (2) On July 15, 2015, or
  - (3) Throughout the year (i.e., the City will pay contributions at the end of every pay period).
- Carrying over the prior instructions from the Board of Administration, the recommended contribution is set equal to the greater of the current funding policy or the minimum Annual Required Contribution (ARC) as determined by the then current GASB Statements 25 and 27. In particular, we have also continued to include in the calculation of the recommended contribution an additional contribution due to the application of the 40-year minimum amortization requirement for both fiscal year 2003/2004 and fiscal year 2004/2005.
- Even though the City will be paying UAAL contributions based on the Tier 2 payroll, the contributions should be maintained on a bookkeeping basis as contributions made to the Tier 1 plan. We believe this treatment is reasonable even though some of those contributions may be allocated to pay off 50% of the UAAL that the City is required to pay to Tier 2. However, we are not recommending that allocation at this time because Segal Consulting would need to work with LACERS to determine the procedure required to ensure that none of those contributions would inadvertently affect the

*Ref: Pg. 26*

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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calculation that we would perform in the June 30, 2016 valuation when the Tier 2 members are required for the first time to pay the other 50% of the UAAL starting on July 1, 2017.

- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 67 is effective with the fiscal year ending June 30, 2014 for Plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information needed to comply with Statements 67 and 68 will be provided in separate reports.

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

### Summary of Key Valuation Results

	2014	2013
<b>Contributions calculated as of June 30:<sup>(1),(2)</sup></b>		
Recommended as a percentage of pay (there is a 12-month delay until the rate is effective)		
<u>Tier 1</u>		
At the beginning of the year	23.32%	21.43%
On July 15	23.39%	21.50%
At the end of each pay period	24.18%	22.24%
<u>Tier 2</u>		
At the beginning of the year	18.07%	15.73%
On July 15	18.12%	15.77%
At the end of each pay period	18.74%	16.33%
<u>Combined</u>		
At the beginning of the year	23.19%	21.43% <sup>(3)</sup>
On July 15	23.26%	21.50% <sup>(3)</sup>
At the end of each pay period	24.05%	22.24% <sup>(3)</sup>
<b>Funding elements for plan year ended June 30:</b>		
Normal cost	\$322,380,251	\$317,185,480
Market value of assets (MVA) <sup>(4)</sup>	13,935,771,998	11,922,538,917
Actuarial value of assets (AVA) <sup>(4)</sup>	12,935,503,398	12,004,110,338
Valuation value of retirement assets (VVA)	10,944,750,574	10,223,960,886
Market value of retirement assets (MVA)	11,791,079,473	10,154,486,098
Actuarial accrued liability (AAL)	16,248,853,099	14,881,663,162
Unfunded/(overfunded) actuarial accrued liability (UAAL) on VVA basis	5,304,102,525	4,657,702,276
Unfunded/(overfunded) actuarial accrued liability (UAAL) on MVA basis	4,457,773,626	4,727,177,064
Funded ratio on VVA basis for retirement (VVA/AAL)	67.36%	68.70%
Funded ratio on MVA basis for retirement (MVA/AAL)	72.57%	68.23%
<b>Employer contributions for fiscal year ended June 30:</b>		
Actuarially determined employer contributions	\$357,649,232	\$346,180,852
Actual contributions	357,649,232	346,180,852
Percentage contributed	100.00%	100.00%

<sup>(1)</sup> Both the June 30, 2014 and the June 30, 2013 contribution rates are before adjustments to phase in over five years the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2011 Triennial Experience Study.

<sup>(2)</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Calculated using only Tier 1 rates because there were no Tier 2 members reported in the June 30, 2013 valuation.

<sup>(4)</sup> Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

**SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

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**Summary of Key Valuation Results (continued)**

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	<b>2014</b>	<b>2013</b>
<b>Demographic data for plan year ended June 30:</b>		
Number of retired members and beneficiaries	17,532	17,362
Number of inactive members	6,031	5,799
Number of active members	24,009	24,441
Projected total payroll <sup>(5)</sup>	\$1,898,064,175	\$1,846,970,474
Projected average payroll <sup>(5)</sup>	\$79,056	\$75,569

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<sup>(5)</sup> Reflects annualized salaries for part-time members.



**SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

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**Actuarial Certification**

December 3, 2014

This is to certify that Segal Consulting (Segal) has conducted an actuarial valuation of the Los Angeles City Employees' Retirement System retirement program as of June 30, 2014, in accordance with generally accepted actuarial principles and practices. Actuarial valuations are performed annually for this retirement program with the last valuation completed on June 30, 2013. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of the historical funding methods used in determination of the liability for retirement benefits.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but we conducted an examination of all participant data for reasonableness and we concluded that it was reasonable and consistent with the prior year's data.

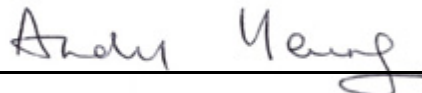
One of the general goals of an actuarial valuation is to establish contributions that fully fund the Retirement System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method.

The actuarial computations made are for funding plan benefits. Accordingly, additional determinations will be needed for other purposes, such as satisfying financial accounting requirements under GASB Statements 67 and 68 and judging benefit security at termination.

In addition to all schedules that are shown in the actuarial section of the Comprehensive Annual Financial Report (CAFR), a listing of supporting exhibits included in the statistical and financial sections of the System's CAFR that are prepared by Segal Consulting is provided below:

- 1) History of employer contributions (Exhibit II)
- 2) Schedule of funding progress (Exhibit III)
- 3) Supplementary information required by the GASB (Exhibit IV)

To the best of our knowledge, this report is complete and accurate and in our opinion presents the plan's current funding information. The undersigned is a member of the American Academy of Actuaries and is qualified to render the actuarial opinion contained herein.



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

## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive non-vested members (entitled to a refund of member contributions), inactive vested members, retired members and beneficiaries.

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

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

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

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

Year Ended June 30	Active Members	Inactive Members*	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives
2005	27,333	2,426	14,322	0.61
2006	28,839	2,903	14,570	0.61
2007	30,175	3,303	14,836	0.60
2008	30,236	4,273	14,975	0.64
2009	30,065	4,554	14,991	0.65
2010	26,245	5,344	17,264	0.86**
2011	25,449	5,623	17,197	0.90
2012	24,917	5,808	17,223	0.92
2013	24,441	5,799	17,362	0.95
2014	24,009	6,031	17,532	0.98

\* Includes terminated members due a refund of employee contributions.

\*\* Reflects 2009 Early Retirement Incentive Program.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

**Active Members**

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 24,009 active members with an average age of 48.8, average years of service of 15.0 years and average payroll of \$79,056.

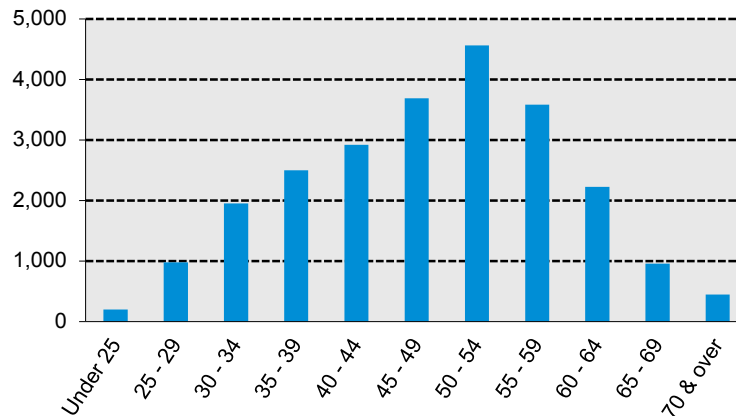
The 24,441 active members in the prior valuation had an average age of 48.3, average service of 14.5 years and average payroll of \$75,569.

**Inactive Members**

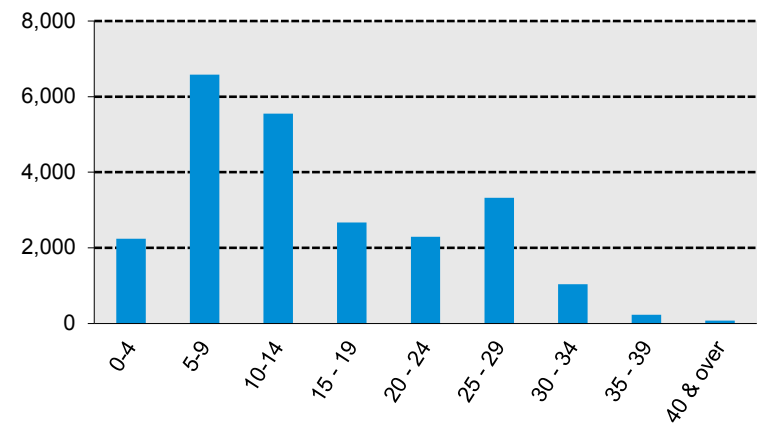
In this year's valuation, there were 6,031 members who were either non-vested and entitled to a refund of member contributions or vested with a right to a deferred or immediate benefit.

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

**CHART 2**  
**Distribution of Active Members by Age as of June 30, 2014**



**CHART 3**  
**Distribution of Active Members by Years of Service as of June 30, 2014**



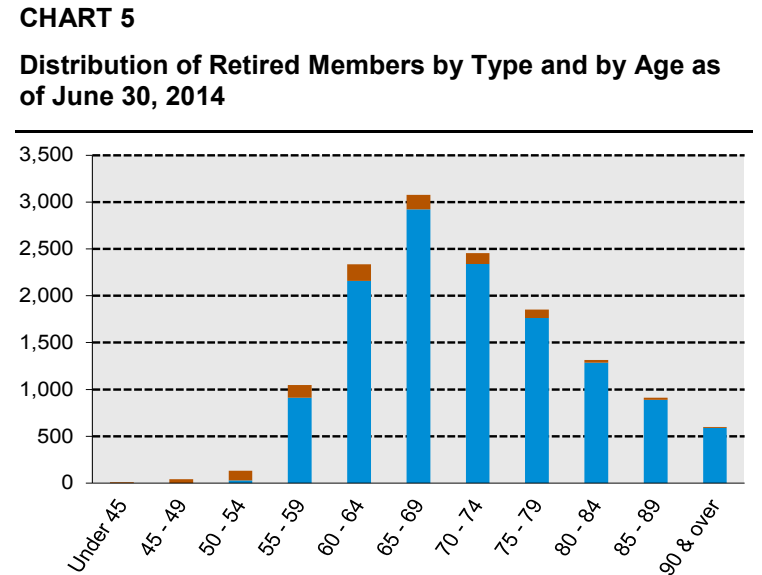
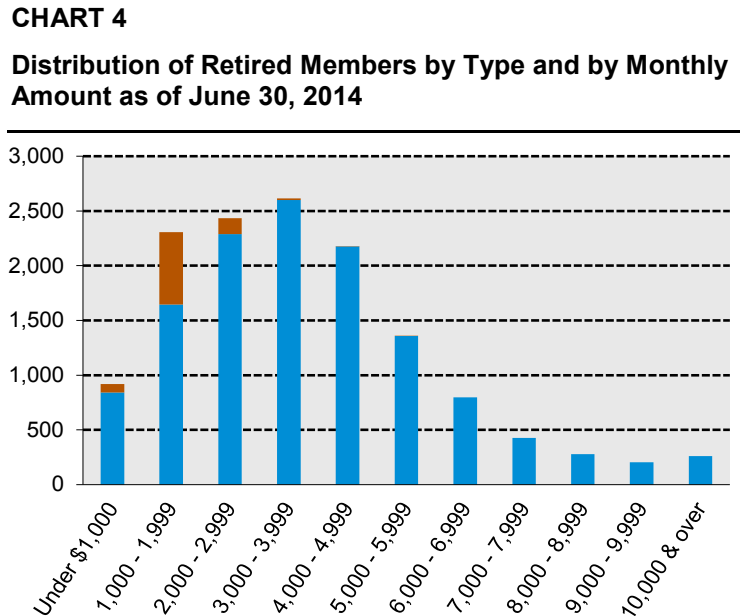
**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

**Retired Members and Beneficiaries**

As of June 30, 2014, 13,780 retired members and 3,752 beneficiaries were receiving total monthly benefits of \$59,713,006. For comparison, in the previous valuation, there were 13,669 retired members and 3,693 beneficiaries receiving monthly benefits of \$58,255,412.

Please note that the monthly benefits provided have been adjusted for the COLA granted effective for the month of July.

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



**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

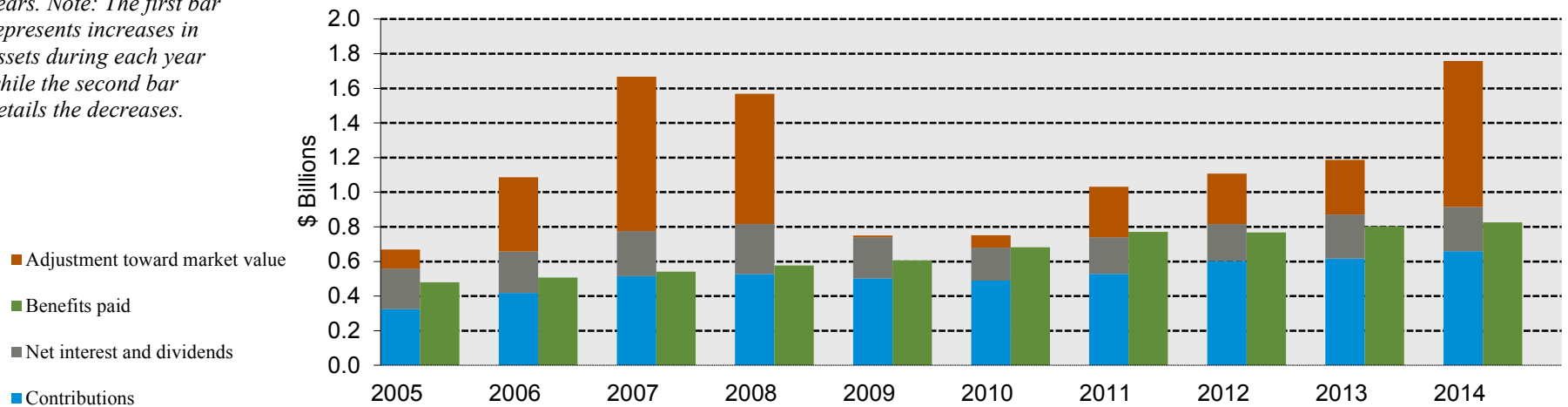
**B. FINANCIAL INFORMATION**

Retirement plan funding anticipates that, over the long term, both net 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. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

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

**CHART 6**  
**Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2005 – 2014**



## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

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

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

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

### CHART 7

#### Determination of Actuarial Value of Assets as of June 30, 2014

1. Market value of assets				\$13,935,771,998
2. Calculation of unrecognized return <sup>(1)</sup>				
	<u>Original</u>	<u>Percent Not</u>	<u>Amount Not</u>	
	<u>Amount</u>	<u>Recognized</u>	<u>Recognized</u>	
(a) Year ended June 30, 2014	\$1,246,285,581	85.71%	\$1,068,244,784	
(b) Year ended June 30, 2013	683,838,549			
(c) Year ended June 30, 2012	-770,325,267			
(d) Year ended June 30, 2011	1,208,621,516			
(e) Year ended June 30, 2010	392,956,483			
(f) Year ended June 30, 2009	-2,964,832,484	83.33%	<u>-67,976,184</u>	
(g) Total unrecognized return				\$1,000,268,600
3. Preliminary actuarial value: (1) - (2g)				\$12,935,503,398
4. Adjustment to be within 40% corridor				0
5. Final actuarial value of assets: (3) + (4)				<u>\$12,935,503,398</u>
6. Actuarial value as a percentage of market value: (5) ÷ (1)				92.8%
7. Market value of retirement assets				\$11,791,079,473
8. Valuation value of retirement assets (5) ÷ (1) x (7)				\$10,944,750,574
9. Deferred return recognized in each of the next 6 years:				
(a) Amount recognized on 6/30/2015				\$164,445,560
(b) Amount recognized on 6/30/2016				164,445,560
(c) Amount recognized on 6/30/2017				164,445,560
(d) Amount recognized on 6/30/2018				164,445,560
(e) Amount recognized on 6/30/2019				164,445,560
(f) Amount recognized on 6/30/2020				<u>178,040,797</u>
(g) Subtotal (may not total exactly due to rounding)				\$1,000,268,600

<sup>(1)</sup> Total return minus expected return on a market value basis.

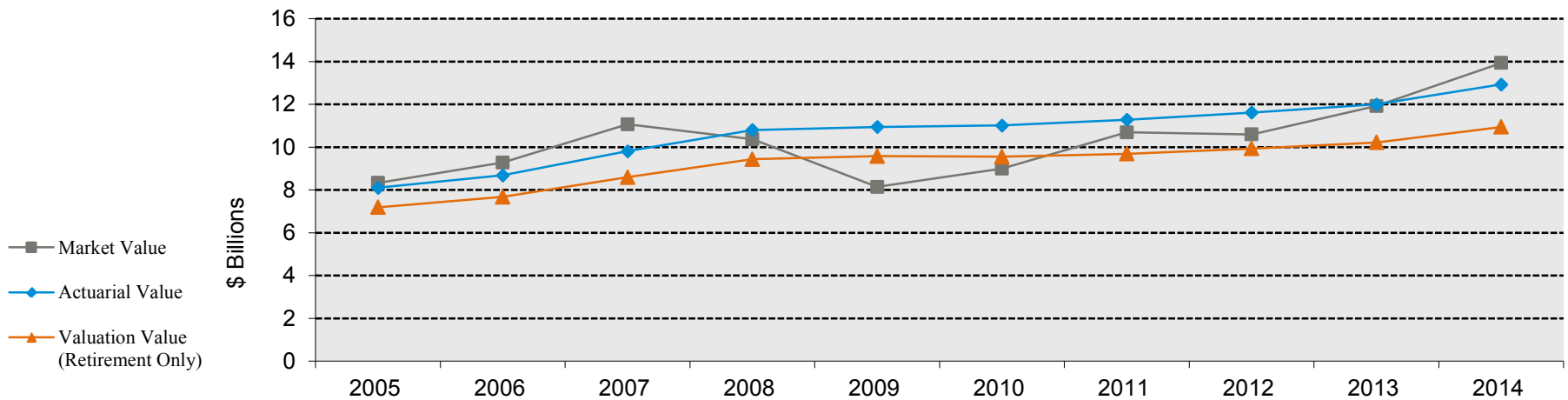
<sup>(2)</sup> Based on action taken by the Board on September 9, 2014, the net unrecognized loss as of June 30, 2013 (i.e., \$81,571,421) has been recognized in six level amounts, with five years of recognition remaining after the June 30, 2014 valuation.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

The actuarial value, market value and valuation value of assets are representations of LACERS' financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The portion of the total actuarial value of assets allocated for retirement benefits, based on a prorated share of market value, is shown as the valuation value of assets. The valuation value of assets is significant because LACERS' 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 the assets over the past ten years.*

**CHART 8**  
**Market Value, Actuarial Value, and Valuation Value (Retirement Only) of Assets as of June 30, 2005 – 2014**



## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

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### C. ACTUARIAL EXPERIENCE

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

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution

requirements to remain stable, assumptions should approximate experience.

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

The total gain of \$215,549,892 was due to an investment gain of \$83,815,425 (after smoothing) and a gain of \$131,734,467 from all other sources. The net experience variation from all other sources was 0.81% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

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

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### CHART 9

#### Actuarial Experience for Year Ended June 30, 2014

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1. Net gain from investments*	\$83,815,425
2. Net gain from other experience**	161,871,265
3. Net loss from scheduled one-year delay in implementing the higher contribution rate calculated in the June 30, 2013 valuation until fiscal year 2014/2015	<u>-30,136,798</u>
4. Net experience gain: (1) + (2) + (3)	\$215,549,892

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\* Details in Chart 10.

\*\* Details in Chart 13. The net gain is attributed to actual liability experience from July 1, 2013 through June 30, 2014 compared to the projected experience predicted by the actuarial assumptions as of June 30, 2013.



**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

**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 LACERS' investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets is 7.75% (for the June 30, 2013 valuation). The actual rate of return on the valuation value of assets basis for the 2014 plan year was 8.56%.

Since the actual return for the year was more than the assumed return, LACERS experienced an actuarial gain during the year ended June 30, 2014 with regard to its investments.

**CHART 10**

**Investment Experience for Year Ended June 30, 2014**

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

	<b>Market Value</b> (Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits)	<b>Actuarial Value</b> (Includes assets for Retirement, Health, Family Death, and Larger Annuity Benefits)	<b>Valuation Value</b> (Includes assets for Retirement Only)
1. Actual return	\$2,180,005,303	\$1,098,165,282	\$882,606,010
2. Average value of assets	\$12,047,996,416	\$12,129,567,837	\$10,306,975,290
3. Actual rate of return: (1) ÷ (2)	18.09%	9.05%	8.56%
4. Assumed rate of return	7.75%	7.75%	7.75%
5. Expected return: (2) x (4)	\$933,719,722	\$940,041,507	\$798,790,585
6. Actuarial gain: (1) – (5)	<u>\$1,246,285,581</u>	<u>\$158,123,775</u>	<u>\$83,815,425</u>

## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

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 basis compared to the market value investment return for the Retirement, Health, Family Death and Larger Annuity Benefits for the last ten years, including the five-year average.

### CHART 11

#### Investment Return – Actuarial Value vs. Market Value: 2005 – 2014

Year Ended June 30	Net Interest and Dividend Income		Recognition of Capital Appreciation		Actuarial Value Investment Return		Market Value Investment Return	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$235,062,628	2.96%	\$109,661,360	1.38%	\$344,723,988	4.34%	\$753,805,403	9.71%
2006	238,266,254	2.90%	430,034,467	5.24%	668,300,721	8.14%	1,041,664,291	12.34%
2007	261,677,229	2.95%	890,907,654	10.04%	1,152,584,883	12.99%	1,811,903,293	19.13%
2008	290,092,182	2.91%	752,500,487	7.53%	1,042,592,669	10.44%	-649,747,001	-5.78%
2009	237,249,377	2.17%	9,861,278	0.09%	247,110,655	2.26%	-2,125,637,471	-20.26%
2010	190,583,695	1.73%	71,009,369	0.64%	261,593,064	2.37%	1,049,769,484	12.79%
2011	211,685,408	1.91%	291,263,922	2.63%	502,949,330	4.54%	1,934,130,562	21.33%
2012	213,980,878	1.88%	290,831,650	2.55%	504,812,528	4.43%	67,093,447	0.62%
2013	253,877,178	2.17%	315,633,473	2.69%	569,510,651	4.86%	1,512,696,071	14.14%
2014	<u>255,284,717</u>	2.10%	<u>842,880,565</u>	6.95%	<u>1,098,165,282</u>	9.05%	<u>2,180,005,303</u>	18.09%
Total	\$2,387,759,546		\$4,004,584,225		\$6,392,343,771		\$7,575,683,382	
					Five-year average return	5.03%		13.17%
					Ten-year average return	6.29%		7.43%

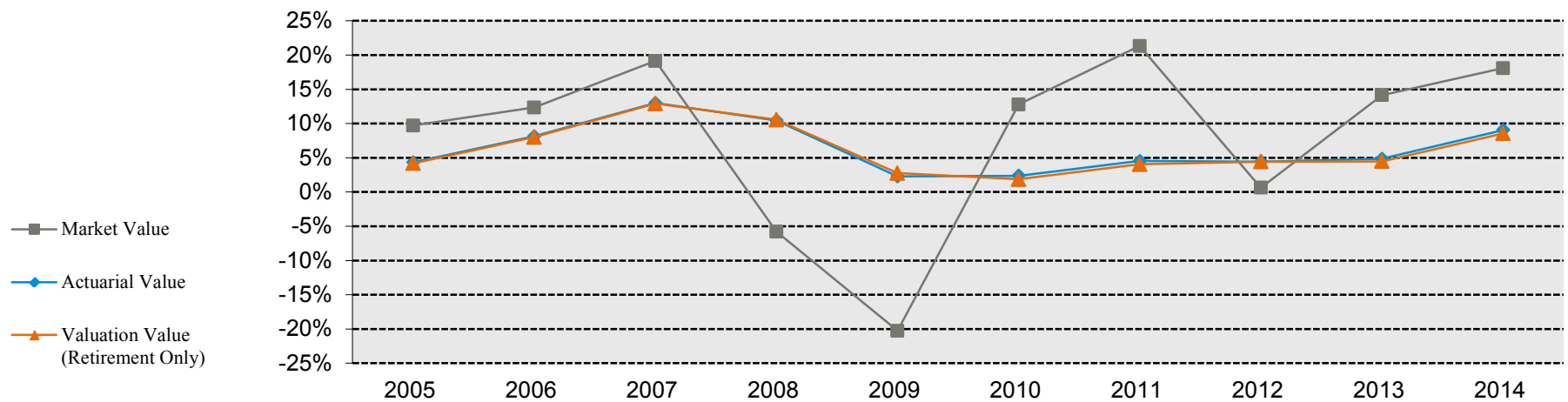
## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

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

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

**CHART 12**

**Market Value, Actuarial Value, and Valuation Value (Retirement Only) Rates of Return for Years Ended June 30, 2005 - 2014**



**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

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**Other Experience**

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

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

The net gain from this other experience for the year ended June 30, 2014 amounted to \$161,871,265 which is 1.00% of the actuarial accrued liability.

A brief summary of the demographic gain experience of LACERS for the year ended June 30, 2014 is shown in the chart below.

*The chart shows elements of the experience gain/(loss) for the most recent year.*

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**CHART 13**

**Experience Due to Changes in Demographics for Year Ended June 30, 2014**

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1. Loss due to higher than expected salary increases for continuing actives	\$(14,336,784)
2. Gain due to lower than expected COLA granted to retirees and beneficiaries	148,439,060
3. Miscellaneous gain	<u>27,768,989</u>
4. Net gain	<u>\$161,871,265</u>

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**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

**D. RECOMMENDED CONTRIBUTION**

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the funding rate of 24.05% of payroll. We have continued to follow the method used in the June 30, 2005 valuation to adjust the contribution requirement if the GASB ARC minimum contribution is greater than the amount prescribed below. For 2014, the

beginning of year minimum GASB ARC is \$399.0 million, so no additional adjustment has been made to the recommended contributions.

As shown in item 1 below for the combined results, the total normal cost rate decreased from 17.17% on June 30, 2013 to 16.98% on June 30, 2014.

*The chart compares this valuation's recommended contribution with the prior valuation.*

**CHART 14**

**Recommended Contribution<sup>(1),(2)</sup>**

	Year Ended June 30			
	2014		2013	
<b>Tier 1</b>	<b>Amount</b>	<b>% of Payroll</b>	<b>Amount</b>	<b>% of Payroll</b>
1. Total normal cost	\$317,309,773	17.13%	\$317,185,480	17.17%
2. Expected employee contributions <sup>(3)</sup>	<u>-193,285,472</u>	<u>-10.44%</u>	<u>-190,396,531</u>	<u>-10.31%</u>
3. Employer normal cost: (1) + (2)	\$124,024,301	6.69%	\$126,788,949	6.86%
4. Actuarial accrued liability	16,246,087,868		14,881,663,162	
5. Valuation value of assets	<u>-10,942,188,982</u>		<u>-10,223,960,886</u>	
6. Unfunded actuarial accrued liability	\$5,303,898,886		\$4,657,702,276	
7. Amortization of unfunded accrued liability	307,947,998	16.63% <sup>(4)</sup>	269,013,342	14.57%
8. Total recommended contribution, beginning of year: (3) + (7)	<u>\$431,972,299</u>	<u>23.32%</u>	<u>\$395,802,291</u>	<u>21.43%</u>
9. Total recommended contribution, July 15	<u>\$433,258,066</u>	<u>23.39%</u>	<u>\$397,018,296</u>	<u>21.50%</u>
10. Total recommended contribution, end of pay periods	<u>\$447,878,412</u>	<u>24.18%</u>	<u>\$410,853,455</u>	<u>22.24%</u>
11. Projected payroll	\$1,852,318,041		\$1,846,970,474	

<sup>(1)</sup> Both the June 30, 2014 and the June 30, 2013 contribution rates are *before* adjustments to phase in over five years the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2011 Triennial Experience Study.

<sup>(2)</sup> June 30, 2014 contribution rates are *before* any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Discounted to beginning of year. The average employee rate for contributions made at the end of each pay period is actually 10.71% for the June 30, 2013 valuation and 10.83% for the June 30, 2014 valuation. The increase in the average employee rate is mainly due to an increase in the proportion of Tier 1 employees paying the additional 4% employee contribution rate.

<sup>(4)</sup> In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 2 and amortized that total UAAL over the total payroll for Tier 1 and Tier 2.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

**CHART 14 (continued)**

**Recommended Contribution<sup>(1),(2)</sup>**

	Year Ended June 30			
	2014		2013	
	Amount	% of Payroll	Amount	% of Payroll
<b>Tier 2</b>				
1. Total normal cost	\$5,070,478	11.08%	\$0	10.79%
2. Expected employee contributions <sup>(3)</sup>	<u>-4,409,266</u>	<u>-9.64%</u>	<u>-0</u>	<u>-9.63%</u>
3. Employer normal cost: (1) + (2)	\$661,212	1.44%	\$0	1.16%
4. Actuarial accrued liability	2,765,231		0	
5. Valuation value of assets	<u>-2,561,592</u>		<u>-0</u>	
6. Unfunded actuarial accrued liability	\$203,639		\$0	
7. Amortization of unfunded accrued liability <sup>(5)</sup>	7,605,298	16.63% <sup>(4)</sup>	0	14.57%
8. Total recommended contribution, beginning of year: (3) + (7)	<u>\$8,266,510</u>	<u>18.07%</u>	<u>\$0</u>	<u>15.73%</u>
9. Total recommended contribution, July 15	<u>\$8,291,115</u>	<u>18.12%</u>	<u>\$0</u>	<u>15.77%</u>
10. Total recommended contribution, end of pay periods	<u>\$8,570,900</u>	<u>18.74%</u>	<u>\$0</u>	<u>16.33%</u>
11. Projected payroll	\$45,746,134		\$0	
<b>Combined</b>				
1. Total normal cost	\$322,380,251	16.98%	\$317,185,480	17.17%
2. Expected employee contributions	<u>-197,694,738</u>	<u>-10.42%</u>	<u>-190,396,531</u>	<u>-10.31%</u>
3. Employer normal cost: (1) + (2)	\$124,685,513	6.56%	\$126,788,949	6.86%
4. Actuarial accrued liability	16,248,853,099		14,881,663,162	
5. Valuation value of assets	<u>-10,944,750,574</u>		<u>-10,223,960,886</u>	
6. Unfunded actuarial accrued liability	\$5,304,102,525		\$4,657,702,276	
7. Amortization of unfunded accrued liability	315,553,296	16.63%	269,013,342	14.57%
8. Total recommended contribution, beginning of year: (3) + (7)	<u>\$440,238,809</u>	<u>23.19%</u>	<u>\$395,802,291</u>	<u>21.43%</u>
9. Total recommended contribution, July 15	<u>\$441,549,181</u>	<u>23.26%</u>	<u>\$397,018,296</u>	<u>21.50%</u>
10. Total recommended contribution, end of pay periods	<u>\$456,449,312</u>	<u>24.05%</u>	<u>\$410,853,455</u>	<u>22.24%</u>
11. Projected payroll	\$1,898,064,175		\$1,846,970,474	

<sup>(1)</sup> Both the June 30, 2014 and the June 30, 2013 contribution rates are *before* adjustments to phase in over five years the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2011 Triennial Experience Study.

<sup>(2)</sup> June 30, 2014 contribution rates are *before* any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Discounted to beginning of year. The average employee rate for contributions made at the end of each pay period is actually 10.00% for the June 30, 2013 and June 30, 2014 valuations.

<sup>(4)</sup> In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 2 and amortized that total UAAL over the total payroll for Tier 1 and Tier 2.

<sup>(5)</sup> Even though the City will be paying UAAL contributions based on the Tier 2 payroll, the contributions should be maintained on a bookkeeping basis as contributions made to the Tier 1 plan.

## SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System

If paid by the City at the beginning of the year, the calculated normal cost (including expenses) is 6.56% of payroll for Tier 1 and Tier 2 combined. The remaining 16.63% of payroll will amortize the unfunded actuarial accrued liability over an equivalent single amortization period of about 25 years.

The contribution rates as of June 30, 2014 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation.

### Reconciliation of Recommended Contribution

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

#### CHART 15

#### Reconciliation of Recommended Contribution<sup>(1),(2)</sup> from June 30, 2013 to June 30, 2014

<b>Recommended Contribution as of June 30, 2013</b>	22.24%
Effect of decrease in employer normal cost due to payroll and demographic changes (including the enrollment of new employees in Tier 2)	(0.27)%
Effect of anticipated one-year delay in implementing the higher combined contribution rate calculated in the prior valuation	0.14%
Effect of investment gain	(0.38)%
Effect of amortizing prior year's UAAL over a smaller than expected projected total payroll	0.20%
Effect of higher than expected salary increases for actives	0.07%
Effect of lower than expected COLA granted to retirees and beneficiaries	(0.67)%
Effect of other gains on accrued liability	(0.13)%
Effect of changes in actuarial assumptions	<u>2.85%</u>
<b>Total change</b>	<u>1.81%</u>
<b>Recommended Contribution as of June 30, 2014</b>	24.05%

<sup>(1)</sup> Based on contributions at the end of each pay period. The rates are *before* adjustments to phase in over five years the impact of the actuarial assumptions as a result of the June 30, 2011 Triennial Experience Study.

<sup>(2)</sup> June 30, 2014 contribution rates are *before* any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

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

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

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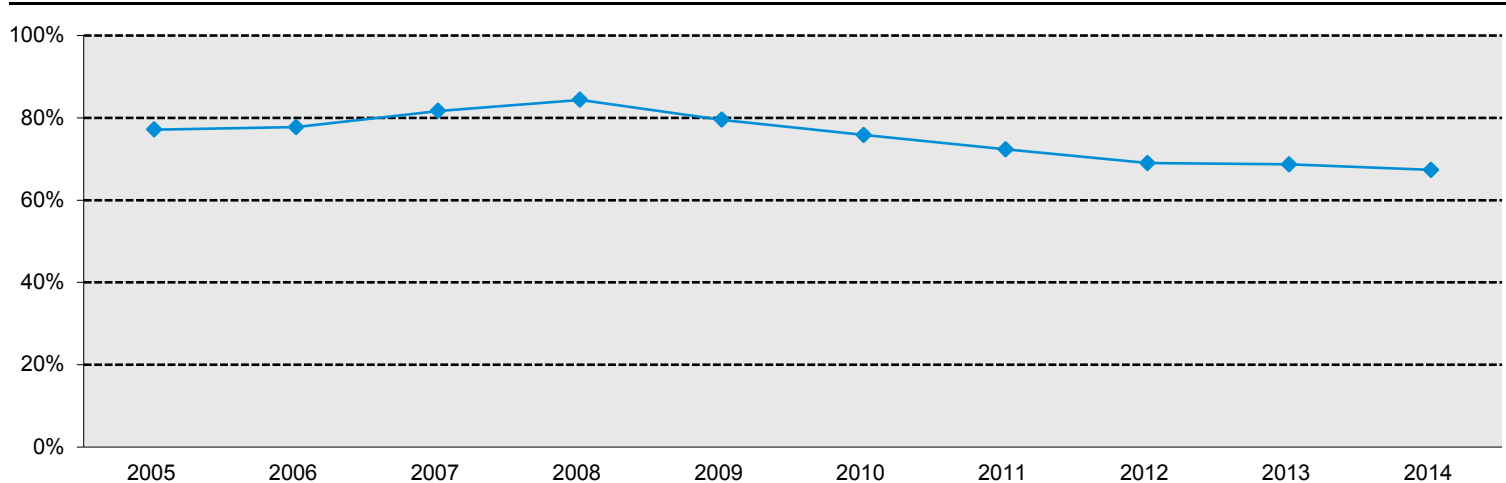
**E. FUNDED RATIO**

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

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

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**CHART 16**  
**Funded Ratio for Plan Years Ending June 30, 2005 - 2014**





**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System**

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**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 LACERS, the current AVR is about 6.2. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.2% of one-year's payroll. Since LACERS amortizes actuarial gains and losses over a period of 15 years, 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 LACERS, the current LVR is about 8.6. This is about 39% 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.*

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**CHART 17**  
**Volatility Ratios for Years Ended June 30, 2008 – 2014**

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<b>Year Ended June 30</b>	<b>Asset Volatility Ratio</b>	<b>Liability Volatility Ratio</b>
2009	3.8	6.5
2010	4.3	6.9
2011	5.0	7.3
2012	5.0	7.9
2013	5.5	8.1
2014	6.2	8.6

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**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT A**

**Table of Plan Coverage**

**i. Tier 1**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation:</b>			
Number	23,254	24,441	-4.9%
Average age	49.2	48.3	N/A
Average service	15.5	14.5	N/A
Projected total payroll*	\$1,852,318,041	\$1,846,970,474	0.3%
Projected average payroll*	\$79,656	\$75,569	5.4%
Account balances	\$1,779,024,865	\$1,652,402,923	7.7%
Total active vested members	21,784	21,901	-0.5%
<b>Inactive members:</b>			
Number	5,981	5,799	3.1%
Average age	44.6	44.3	N/A
Average contribution balance for those with under 5 years of service	\$5,047	\$4,732	6.7%
Average monthly benefit at age 60 for those with 5 or more years of service**	\$1,461	\$1,388	5.3%
<b>Retired members:</b>			
Number in pay status	12,880	12,771	0.9%
Average service at retirement	26.7	26.8	N/A
Average age at retirement	60.1	60.1	N/A
Average age	71.8	71.5	N/A
Average monthly benefit (includes July COLA)	\$3,936	\$3,885	1.3%
<b>Disabled members:</b>			
Number in pay status	900	898	0.2%
Average service at retirement	11.9	12.0	N/A
Average age at retirement	46.4	46.0	N/A
Average age	64.5	64.1	N/A
Average monthly benefit (includes July COLA)	\$1,593	\$1,570	1.5%
<b>Beneficiaries:</b>			
Number in pay status	3,752	3,693	1.6%
Average age	76.4	76.2	N/A
Average monthly benefit (includes July COLA)	\$2,020	\$1,958	3.2%

\* Reflects annualized salaries for part-time members.

\*\* Based on salary at termination from LACERS.

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT A**

**Table of Plan Coverage**

**i. Tier 2**

<b>Category</b>	<b>Year Ended June 30</b>		<b>Change From Prior Year</b>
	<b>2014</b>	<b>2013</b>	
<b>Active members in valuation:</b>			
Number	755	0	N/A
Average age	35.2	N/A	N/A
Average service	0.5	N/A	N/A
Projected total payroll*	\$45,746,134	N/A	N/A
Projected average payroll*	\$60,591	N/A	N/A
Account balances	\$2,321,012	N/A	N/A
Total active vested members	3	N/A	N/A
<b>Inactive members:</b>			
Number	50	0	N/A
Average age	35.6	N/A	N/A
Average contribution balance for those with under 5 years of service	\$1,337	N/A	N/A
Average monthly benefit at age 60 for those with 5 or more years of service**	\$0	N/A	N/A
<b>Retired members:</b>			
Number in pay status	0	0	N/A
Average service at retirement	N/A	N/A	N/A
Average age at retirement	N/A	N/A	N/A
Average age	N/A	N/A	N/A
Average monthly benefit (includes July COLA)	N/A	N/A	N/A
<b>Disabled members:</b>			
Number in pay status	0	0	N/A
Average service at retirement	N/A	N/A	N/A
Average age at retirement	N/A	N/A	N/A
Average age	N/A	N/A	N/A
Average monthly benefit (includes July COLA)	N/A	N/A	N/A
<b>Beneficiaries:</b>			
Number in pay status	0	0	N/A
Average age	N/A	N/A	N/A
Average monthly benefit (includes July COLA)	N/A	N/A	N/A

\* Reflects annualized salaries for part-time members.

\*\* Based on salary at termination from LACERS.

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT B**

**Members in Active Service as of June 30, 2014  
By Age, Years of Service, and Average Payroll**

**i. Tier 1**

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	80	74	6	--	--	--	--	--	--	--
	\$45,394	\$44,978	\$50,525	--	--	--	--	--	--	--
25 - 29	779	350	426	3	--	--	--	--	--	--
	54,320	51,021	57,074	\$48,152	--	--	--	--	--	--
30 - 34	1,807	296	1,185	321	5	--	--	--	--	--
	67,824	59,566	69,893	67,891	\$62,008	--	--	--	--	--
35 - 39	2,418	168	1,131	935	172	12	--	--	--	--
	75,844	64,205	74,396	78,947	79,465	\$81,499	--	--	--	--
40 - 44	2,845	135	961	1,016	549	166	18	--	--	--
	78,990	65,113	71,911	80,922	88,278	88,429	\$81,710	--	--	--
45 - 49	3,645	142	830	901	586	611	555	20	--	--
	82,667	66,511	70,362	78,307	89,028	98,168	88,514	\$82,181	--	--
50 - 54	4,530	130	765	835	556	637	1,189	406	12	--
	85,468	63,796	70,111	77,586	86,358	92,971	96,790	90,666	\$110,630	--
55 - 59	3,546	97	600	694	360	478	847	377	86	7
	84,817	65,242	68,890	75,293	81,677	92,135	96,470	98,223	92,815	\$96,829
60 - 64	2,209	49	413	497	260	247	470	158	87	28
	82,806	66,158	68,843	74,255	85,703	90,239	90,362	97,578	101,594	108,632
65 - 69	948	31	169	237	134	98	169	54	28	28
	77,238	65,707	58,464	67,972	83,366	85,017	86,552	93,947	98,804	115,206
70 & over	447	19	97	109	51	41	73	26	18	13
	67,796	36,436	50,362	62,743	73,225	78,466	76,248	90,176	84,011	116,462
Total	23,254	1,491	6,583	5,548	2,673	2,290	3,321	1,041	231	76
	\$79,656	\$59,310	\$69,460	\$76,679	\$85,754	\$92,899	\$93,361	\$94,447	\$97,087	\$111,306

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT B**

**Members in Active Service as of June 30, 2014  
By Age, Years of Service, and Average Payroll**

**ii. Tier 2**

Age	Years of Service									
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	117	117	--	--	--	--	--	--	--	--
	\$44,340	\$44,340	--	--	--	--	--	--	--	--
25 - 29	198	198	--	--	--	--	--	--	--	--
	49,978	49,978	--	--	--	--	--	--	--	--
30 - 34	145	145	--	--	--	--	--	--	--	--
	61,979	61,979	--	--	--	--	--	--	--	--
35 - 39	82	82	--	--	--	--	--	--	--	--
	64,174	64,174	--	--	--	--	--	--	--	--
40 - 44	76	76	--	--	--	--	--	--	--	--
	72,270	72,270	--	--	--	--	--	--	--	--
45 - 49	42	42	--	--	--	--	--	--	--	--
	81,229	81,229	--	--	--	--	--	--	--	--
50 - 54	33	33	--	--	--	--	--	--	--	--
	83,536	83,536	--	--	--	--	--	--	--	--
55 - 59	37	36	--	1	--	--	--	--	--	--
	72,928	68,814	--	\$221,051	--	--	--	--	--	--
60 - 64	17	17	--	--	--	--	--	--	--	--
	84,523	84,523	--	--	--	--	--	--	--	--
65 - 69	7	7	--	--	--	--	--	--	--	--
	81,491	81,491	--	--	--	--	--	--	--	--
70 & over	1	1	--	--	--	--	--	--	--	--
	47,036	47,036	--	--	--	--	--	--	--	--
Total	755	754	--	1	--	--	--	--	--	--
	\$60,591	\$60,378	--	\$221,051	--	--	--	--	--	--

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT C**

**Reconciliation of Member Data**

	<b>Active Members</b>	<b>Inactive Members</b>	<b>Disableds</b>	<b>Retired Members</b>	<b>Beneficiaries</b>	<b>Total</b>
Number as of June 30, 2013	24,441	5,799	898	12,771	3,693	47,602
New members	775	N/A	N/A	N/A	N/A	775
Terminations – with vested rights	-791	791	0	0	0	0
Retirements	-434	-110	N/A	544	N/A	0
New disabilities	-6	-33	39	N/A	N/A	0
Died with beneficiary	N/A	N/A	N/A	N/A	248	248
Deaths or benefits expired	-46	-78	-36	-435	-189	-784
Refund of members contributions	-196	-123	0	0	0	-319
Rehired	266	-265	-1	0	N/A	0
Data adjustments	<u>0</u>	<u>50*</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>50</u>
Number as of June 30, 2014	24,009	6,031	900	12,880	3,752	47,572

\* Includes members who were both hired and terminated during the year.

Note: For the change in the annual benefits from the retirees and beneficiaries added to and removed from the rolls, refer to Exhibit D of the supplemental schedules that accompany this report.

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT D**

**Summary Statement of Income and Expenses on an Actuarial Value Basis for Retirement, Health, Family Death, and Larger Annuity Benefits**

	June 30, 2014	June 30, 2013
<b>Contribution income:</b>		
Employer contributions	\$455,658,786	\$419,266,581
Employee contributions	<u>204,135,914</u>	<u>197,880,631</u>
Net contribution income	\$659,794,700	\$617,147,212
<b>Investment income:</b>		
Interest, dividends and other income	\$297,102,305	\$291,462,597
Recognition of capital appreciation	842,880,565	315,633,473
Less investment and administrative fees	<u>-41,817,589</u>	<u>-37,585,419</u>
Net investment income	<u>\$1,098,165,281</u>	<u>\$569,510,651</u>
<b>Total income available for benefits</b>	<b>\$1,757,959,981</b>	<b>\$1,186,657,863</b>
<b>Less benefit payments:</b>		
Payment of benefits	-\$810,584,271	-\$785,308,070
Refunds of contributions	<u>-15,982,650</u>	<u>-17,697,282</u>
Net benefit payments	-\$826,566,921	-\$803,005,352
<b>Change in reserve for future benefits</b>	<b>\$931,393,060</b>	<b>\$383,652,511</b>

*Note: Results may be slightly off due to rounding.*

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT E**

**Summary Statement of Assets for Retirement, Health, Family Death, and Larger Annuity Benefits**

	June 30, 2014	June 30, 2013
<b>Cash equivalents</b>	\$681,628,644	\$606,604,488
<b>Accounts receivable:</b>		
Investment income	\$41,214,524	\$38,025,127
Proceeds from sales	166,513,233	1,688,400,219
Other	<u>14,362,275</u>	<u>8,321,633</u>
Total accounts receivable	\$222,090,032	\$1,734,746,979
<b>Investments:</b>		
Fixed Income	\$2,860,598,505	\$2,655,956,957
Equities	8,617,236,944	7,078,720,385
Real Estate and Alternative Investment	1,967,891,805	1,889,238,399
Other	<u>1,037,019,541</u>	<u>1,157,199,068</u>
Total investments at market value	\$14,482,746,795	\$12,781,114,809
<b>Capital assets</b>	<u>\$2,667,881</u>	<u>\$1,318,307</u>
<b>Total assets</b>	\$15,389,133,352	\$15,123,784,583
<b>Less accounts payable:</b>		
Accounts payable and accrued expenses	-\$17,879,799	-\$56,204,879
Accrued investment expense	-11,993,596	-
Derivative instruments	-	-18,518
Purchases of investments	-400,955,915	-1,989,039,830
Security lending collateral	<u>-1,022,532,044</u>	<u>-1,155,982,440</u>
Total accounts payable	-\$1,453,361,354	-\$3,201,245,667
<b>Net assets at market value</b>	<u>\$13,935,771,998</u>	<u>\$11,922,538,917</u>
<b>Net assets at actuarial value</b>	<u>\$12,935,503,398</u>	<u>\$12,004,110,338</u>
<b>Net assets at valuation value (retirement benefits)</b>	<u>\$10,944,750,574</u>	<u>\$10,223,960,886</u>

*Note: Results may be slightly off due to rounding.*



**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT F**

**Development of the Fund Through June 30, 2014 for Retirement, Health, Family Death, and Larger Annuity Benefits**

<b>Year Ended June 30</b>	<b>Employer Contributions</b>	<b>Employee Contributions</b>	<b>Net Investment Return*</b>	<b>Benefit Payments</b>	<b>Actuarial Value of Assets at End of Year</b>
2009	\$383,637,842	\$118,592,071	\$247,110,655	\$605,798,000	\$10,949,384,202
2010	362,751,146	126,961,295	261,593,064	681,106,189	11,019,583,518
2011	414,133,032	114,731,434	502,949,330	770,755,578	11,280,641,736
2012	423,920,740	178,246,151	504,812,528	767,163,328	11,620,457,827
2013	419,266,581	197,880,631	569,510,651	803,005,352	12,004,110,338
2014	455,658,786	204,135,914	1,098,165,281	826,566,921	12,935,503,398

\* *Net of investment fees and administrative expenses.*

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT G**

**Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2014**

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1. Unfunded actuarial accrued liability at beginning of year	\$4,657,702,276
2. Normal cost at beginning of year	317,185,480
3. Total actual contributions	(561,624,508)
4. Interest	<u>351,086,853</u>
5. Expected unfunded actuarial accrued liability	\$4,764,350,101
6. Changes due to net experience gain*	(245,686,690)
7. Changes due to new actuarial assumptions	<u>785,439,114</u>
8. Unfunded actuarial accrued liability at end of year	<u>\$5,304,102,525</u>

\* Excludes a \$30,136,798 loss from contributions less than anticipated due to scheduled one-year delay in implementing the higher contribution rate calculated in the June 30, 2013 valuation. That loss is already included in the development of item 5.

*The breakdown of the net experience gain is as follows:*

<i>Investment gain</i>	<i>\$(83,815,425)</i>
<i>Loss due to higher than expected salary increases for continuing actives</i>	<i>14,336,784</i>
<i>Gain due to lower than expected COLA granted to retirees and beneficiaries</i>	<i>(148,439,060)</i>
<i>Miscellaneous gain</i>	<i><u>(27,768,989)</u></i>
<i>Total gain</i>	<i>\$(245,686,690)</i>

**SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT H**

**Table of Amortization Bases**

Type	Date Established	Initial Years	Initial Amount	Outstanding Balance	Years Remaining	Annual Payment*
Plan amendment (2009 ERIP)	06/30/2009	15	\$300,225,354	\$266,671,953	10	\$30,810,906
Combined base	06/30/2012	30	4,173,548,280	4,352,922,132	28	234,570,463
Experience loss	06/30/2013	15	116,022,989	114,619,218	14	10,062,564
Experience gain	06/30/2014	15	-215,549,892	-215,549,892	15	-17,932,903
Change in assumptions	06/30/2014	20	785,439,114	<u>785,439,114</u>	20	<u>52,815,882</u>
Subtotal before GASB amount				\$5,304,102,525		\$310,326,912
40-year minimum GASB 25/27	06/30/2004	15	29,189,615	17,269,782	5	3,686,306
40-year minimum GASB 25/27	06/30/2005	15	12,708,684	<u>8,520,202</u>	6	<u>1,540,078</u>
Total				\$5,329,892,509		\$315,553,296

\* Beginning of year payments, based on level percentage of payroll.

Note: The equivalent single amortization period is about 25 years.

### SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System

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#### EXHIBIT I

#### Section 415 Limitations

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

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

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

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

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

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

### SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System

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#### EXHIBIT J

#### Definitions of Pension Terms

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

#### **Assumptions or Actuarial**

#### **Assumptions:**

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

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

#### **Normal Cost:**

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

#### **Actuarial Accrued Liability**

#### **For Actives:**

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

#### **Actuarial Accrued Liability**

#### **For Pensioners:**

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

#### **Unfunded Actuarial Accrued Liability:**

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

### SECTION 3: Supplemental Information for the Los Angeles City Employees' Retirement System

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**Amortization of the Unfunded Actuarial Accrued Liability:**

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

**Investment Return:**

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

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT I**

**Summary of Actuarial Valuation Results**

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

1. Retired members as of the valuation date (including 3,752 beneficiaries in pay status)		17,532
2. Inactive members during year ended June 30, 2014 (including 4,191 members with under 5 years of service eligible for a refund of contributions)		6,031
3. Members active during the year ended June 30, 2014		24,009
Fully vested	21,787	
Not vested	2,222	

The actuarial factors as of the valuation date are as follows:

**Assets**

1. Valuation value of assets (\$13,935,771,998 at market value and \$12,935,503,398 at actuarial value as reported by LACERS*)		\$10,944,750,574
2. Present value of future normal costs		
Employee	\$1,657,090,814	
Employer	<u>1,008,613,000</u>	
Total		2,665,703,814
3. Unfunded actuarial accrued liability		<u>5,304,102,525</u>
4. Present value of current and future assets		\$18,914,556,913

**Liabilities**

5. Present value of future benefits		
Retired members and beneficiaries	\$8,504,410,789	
Inactive members	315,207,699	
Active members	<u>10,094,938,425</u>	
Total		\$18,914,556,913

\* Market value and actuarial value of assets include assets for Retirement, Health, Family Death, and Larger Annuity Benefits.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT I (continued)**

**Summary of Actuarial Valuation Results<sup>(1),(2)</sup>**

The determination of the recommended contribution is as follows:

	<b><u>Tier 1</u></b>	<b><u>Tier 2</u></b>	<b><u>Combined</u></b>
1. Total normal cost	\$317,309,773	\$5,070,478	\$322,380,251
2. Expected employee contributions <sup>(3)</sup>	<u>-193,285,472</u>	<u>-4,409,266</u>	<u>-197,694,738</u>
3. Employer normal cost: (1) + (2)	\$124,024,301	\$661,212	\$124,685,513
4. Payment on projected unfunded actuarial accrued liability	\$307,947,998	\$7,605,298	\$315,553,296
5. Total recommended contribution: (3) + (4), payable beginning of year	<u>\$431,972,299</u>	<u>\$8,266,510</u>	<u>\$440,238,809</u>
6. Total recommended contribution: adjusted for July 15 payment	<u>\$433,258,066</u>	<u>\$8,291,115</u>	<u>\$441,549,181</u>
7. Total recommended contribution: adjusted for biweekly payment	<u>\$447,878,412</u>	<u>\$8,570,900</u>	<u>\$456,449,312</u>
8. Projected payroll	\$1,852,318,041	\$45,746,134	\$1,898,064,175
9. Item 5 as a percentage of projected payroll: (5) ÷ (8)	23.32%	18.07%	23.19%
10. Item 6 as a percentage of projected payroll: (6) ÷ (8)	23.39%	18.12%	23.26%
11. Item 7 as a percentage of projected payroll: (7) ÷ (8)	24.18%	18.74%	24.05%

<sup>(1)</sup> The contribution rates for the June 30, 2014 valuation are before adjustments to phase in over five years the City contribution rate impact of the actuarial assumptions adopted as recommended in the June 30, 2011 Triennial Experience Study.

<sup>(2)</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Discounted to beginning of year.



**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT II**

**History of Employer Contributions**

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<b>Plan Year Ended June 30</b>	<b>Actuarially Determined Employer Contributions (ADEC)*</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2005	\$183,241,489	\$158,131,638	86.30%
2006	227,740,600	227,740,600	100.00%
2007	277,516,400	277,516,400	100.00%
2008	288,119,041	288,119,041	100.00%
2009	274,554,786	274,554,786	100.00%
2010	258,642,795	258,642,795	100.00%
2011	303,560,953	303,560,953	100.00%
2012	308,539,905	308,539,905	100.00%
2013	346,180,852	346,180,852	100.00%
2014	357,649,232	357,649,232	100.00%

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\* Prior to plan year ending June 30, 2014, this amount was the Annual Required Contribution (ARC).

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT III**

**Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Valuation Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)</b>
06/30/2005	\$7,193,142,227	\$9,321,524,967	\$2,128,382,740	77.17%	\$1,589,305,846	133.92%
06/30/2006	7,674,999,374	9,870,662,387	2,195,663,013	77.76%	1,733,339,536	126.67%
06/30/2007	8,599,699,772*	10,526,874,184	1,927,174,412	81.69%	1,896,609,013	101.61%
06/30/2008	9,438,318,300	11,186,403,741	1,748,085,441	84.37%	1,977,644,640	88.39%
06/30/2009	9,577,747,421	12,041,983,936	2,464,236,515	79.54%	1,816,171,212	135.68%
06/30/2010	9,554,027,411	12,595,025,119	3,040,997,708	75.86%	1,817,662,284	167.30%
06/30/2011	9,691,011,496	13,391,704,000	3,700,692,504	72.37%	1,833,392,381	201.85%
06/30/2012	9,934,959,310	14,393,958,574	4,458,999,264	69.02%	1,819,269,630	245.10%
06/30/2013	10,223,960,886	14,881,663,162	4,657,702,276	68.70%	1,846,970,474	252.18%
06/30/2014	10,944,750,574	16,248,853,099	5,304,102,525	67.36%	1,898,064,175	279.45%

\* Valuation value of assets is after excluding \$5,269,481 of discounted Harbor Port Police assets transferred in October 2007.

## SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System

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### EXHIBIT IV

#### Supplementary Information Required by the GASB

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<b>Valuation date</b>	June 30, 2014
<b>Actuarial cost method</b>	Entry Age Cost Method, level percent of salary
<b>Amortization method</b>	Level percent of payroll – assuming a 4.00% increase in total covered payroll.
<b>Amortization period</b>	Multiple layers, closed amortization periods. Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 ERIP, are amortized over 15 years. Future ERIPs will be amortized over 5 years. Actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years.
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.
<b>Actuarial assumptions:</b>	
Investment rate of return	7.50%
Inflation rate	3.25%
Real across-the-board salary increase	0.75%
Projected salary increases	Ranges from 10.50% to 4.40%.
Cost of living adjustments	3.00% for Tier 1; 2.00% for Tier 2
<b>Plan membership:</b>	
Retired members and beneficiaries receiving benefits	17,532
Inactive members*	6,031
Active members	<u>24,009</u>
Total	47,572

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\* Either non-vested and entitled to a refund of member contributions or vested with a right to a deferred or immediate benefit.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT V**

**Development of the Net Pension Obligation and the Annual Pension Cost Pursuant to GASB 27**

Plan Year Ended June 30	Employer Annual Required Contribution (a)	Employer Amount Contributed (b)	Interest on NPO (h) x .08 (or .0775)* (c)	ARC Adjustment with Interest (h) / (e) x 1.08 (or 1.0775)* (d)	Amortization Factor (e)	Pension Cost (a) + (c) - (d) (f)	Change in NPO (f) - (b) (g)	NPO Balance Prior NPO + (g) (h)
2009	\$274,554,786	\$274,554,786	\$6,397,727	\$8,620,578	10.2384	\$272,331,935	\$(2,222,851)	\$77,748,734
2010**	258,642,795	258,642,795	6,219,899	8,863,501	9.7444	255,999,193	(2,643,602)	75,105,132
2011	303,560,953	303,560,953	6,008,410	9,240,200	9.0873	300,329,163	(3,231,790)	71,873,342
2012	308,539,905	308,539,905	5,749,868	9,632,908	8.4205	304,656,865	(3,883,040)	67,990,302
2013	346,180,852	346,180,852	5,269,248	9,939,221	7.7917	341,510,879	(4,669,973)	63,320,329
2014	357,649,232	357,649,232	4,907,325	6,942,672	10.5521	355,613,885	(2,035,346)	61,284,983

\* 8.00% was the interest rate before the change to 7.75% as adopted by the Board in the June 30, 2011 valuation for the 2012/2013 Fiscal Year.

\*\* The calculation of the NPO has been adjusted to reflect the 4.25% total payroll growth assumption, which was adopted by the Board for fiscal year 2009/2010 funding requirements.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT VI**

**Actuarial Assumptions and Actuarial Cost Method**

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**Post-Retirement Mortality Rates:**

*Healthy Members and All Beneficiaries:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

*Disabled Members:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.

The tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

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**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Age	Rate (%)	
	Disability	Termination*
25	0.01	5.75
30	0.03	5.75
35	0.05	4.85
40	0.09	3.50
45	0.15	2.70
50	0.19	2.50
55	0.20	2.35
60	0.20	2.25

\* Rates for members with five or more years of service. Termination rates are zero for members eligible to retire.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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Rates of termination for members with less than 5 years of service are as follows:

<b>Service</b>	<b>Rate (%)</b>
	<b>Termination (Based on Service)</b>
0	13.25
1	11.00
2	8.75
3	7.25
4	5.75

**Retirement Rates:**

<b>Age</b>	<b>Rate (%)</b>			
	<b>Tier 1</b>		<b>Tier 2</b>	
	<b>Non-55/30</b>	<b>55/30</b>	<b>Non-55/30</b>	<b>55/30</b>
50	6.0	0.0	0.0	0.0
51	3.0	0.0	0.0	0.0
52	3.0	0.0	0.0	0.0
53	3.0	0.0	0.0	0.0
54	16.0	0.0	0.0	0.0
55	6.0	20.0	3.5	8.0
56	6.0	14.0	3.5	7.0
57	6.0	14.0	3.5	7.0
58	6.0	14.0	3.5	7.0
59	6.0	14.0	3.5	7.0
60	6.0	14.0	5.5	7.0
61	6.0	14.0	5.5	9.0
62	7.0	15.0	5.5	11.0
63	7.0	15.0	5.5	13.0
64	7.0	16.0	5.5	16.0
65	12.0	17.0	12.0	19.0
66	12.0	17.0	12.0	19.0
67	12.0	17.0	12.0	19.0
68	12.0	17.0	12.0	19.0
69	12.0	17.0	12.0	19.0
70	100.0	100.0	100.0	100.0

#### SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System

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<b>Retirement Age and Benefit for Inactive Vested Participants:</b>	Pension benefit paid at the later of age 58 or the current attained age. For reciprocals, 4.40% compensation increases per annum.
<b>Exclusion of Inactive Members:</b>	All inactive participants are included in the valuation.
<b>Definition of Active Members:</b>	First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.
<b>Unknown Data for Members:</b>	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
<b>Percent Married/Domestic Partner:</b>	76% of male participants; 50% of female participants.
<b>Age of Spouse:</b>	Male retirees are assumed to be 4 years older than their female spouses. Female retirees are assumed to be 2 years younger than their male spouses.
<b>Service:</b>	Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.
<b>Future Benefit Accruals:</b>	1.0 year of service per year.
<b>Other Reciprocal Service:</b>	5% of future inactive vested members will work at a reciprocal system.
<b>Consumer Price Index:</b>	Increase of 3.25% per year; benefit increases due to CPI subject to 3.00% maximum for Tier 1 and 2.00% maximum for Tier 2.
<b>Employee Contribution Crediting Rate:</b>	Based on average of 5-year Treasury note rate. An assumption of 3.25% is used to approximate that crediting rate in this valuation.
<b>Net Investment Return:</b>	7.50%

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**Salary Increases:**

Inflation: 3.25%; plus additional 0.75% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

<u>Service</u>	<u>Percentage Increase</u>
0	6.50%
1	6.20%
2	5.10%
3	3.10%
4	2.10%
5	1.10%
6	1.00%
7	0.90%
8	0.70%
9	0.60%
10+	0.40%

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**Actuarial Value of Assets:**

The market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.



**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**Actuarial Cost Method:** Entry Age Cost Method.

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**Funding Policy:** The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability. Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an individual basis. Entry age is calculated as age on the valuation date minus years of service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15 year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 20 year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15 year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

The recommended contribution is set equal to the greater of the current funding policy or the minimum Annual Required Contribution (ARC) as determined by the then current GASB Statements 25 and 27. In particular, an additional contribution due to the application of the 40-year minimum amortization requirement for both fiscal year 2003/2004 and fiscal year 2004/2005 is included in the calculation of the recommended contribution.

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**Changes in Actuarial Assumptions:** Based on the June 30, 2014 Actuarial Experience Study, the following actuarial assumptions were changed. Previously, these assumptions were as follows:

**Post-Retirement Mortality Rates:**

*Healthy Members and  
All Beneficiaries:*

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

*Disabled Members:*

RP-2000 Combined Healthy Mortality Table, set forward five years for males and set forward six years for females.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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

**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:*

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

<b>Age</b>	<b>Rate (%)</b>
	<b>Termination*</b>
25	5.50
30	5.35
35	4.35
40	3.15
45	2.30
50	1.85
55	1.75
60	1.75

\* Rates for members with five or more years of service.  
Termination rates are zero for members eligible to retire.

*Rates of termination for members with less than 5 years of service are as follows:*

<b>Service</b>	<b>Rate (%)</b>
	<b>Termination (Based on Service)</b>
0	11.25
1	8.00
2	7.25
3	6.25
4	5.50

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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

**Retirement Rates:**

Age	Rate (%)	
	Tier 1	
	Non-55/30	55/30
50	8.0	0.0
51	4.0	0.0
52	4.0	0.0
53	4.0	0.0
54	15.0	0.0
55	8.0	20.0
56	8.0	15.0
57	8.0	15.0
58	8.0	15.0
59	8.0	15.0
60	8.0	15.0
61	8.0	16.0
62	8.0	17.0
63	8.0	18.0
64	8.0	19.0
65	13.0	20.0
66	13.0	20.0
67	13.0	20.0
68	13.0	20.0
69	13.0	20.0
70	100.0	100.0

**Retirement Age and Benefit for Inactive Vested Participants:**

Pension benefit paid at the later of age 57 or the current attained age. For reciprocals, 4.65% compensation increases per annum.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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

- Age of Spouse:** Female spouses 3 years younger than their spouses.
- Other Reciprocal Service:** 10% of future inactive vested members will work at a reciprocal system.
- Consumer Price Index:** Increase of 3.50% per year; benefit increases due to CPI subject to 3.00% maximum for Tier 1 and 2.00% maximum for Tier 2.
- Employee Contribution and Matching Account Crediting Rate:** Based on average of 5-year Treasury note rate. An assumption of 3.50% is used to approximate that crediting rate in this valuation.
- Net Investment Return:** 7.75%
- Salary Increases:** Inflation: 3.50%; plus additional 0.75% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

*For members with under 5 years of service:*

<b>Service</b>	<b>Percentage Increase</b>
0	7.00%
1	6.25%
2	4.75%
3	3.50%
4	2.25%

*For members with 5 or more years of service:*

<b>Age</b>	<b>Percentage Increase*</b>
20 – 24	2.25%
25 – 29	2.00%
30 – 34	1.25%
35 – 39	1.00%
40 – 44	0.75%
45 – 49	0.50%
50 – 54	0.40%
55 – 69	0.40%

*\* At central age in age range shown.*

## SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System

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### Changes in Actuarial Assumptions (continued):

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#### Funding Policy:

The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability. Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an individual basis. Entry age is calculated as age on the valuation date minus years of service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15 year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 30 year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15 year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

In no event will the recommended contribution be less than the minimum Annual Required Contribution (ARC) as determined under GASB Statements 25 and 27.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT VII**  
**Summary of Plan Provisions**

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

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**Plan Year:** July 1 through June 30  
**Census Date:** June 30

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**Membership Eligibility:**

*Tier 1* All employees who became members of the Retirement System before July 1, 2013, and certain non-Tier 2 employees who became members of the Retirement System on or after July 1, 2013.

*Tier 2* All employees who became members of the Retirement System on or after July 1, 2013, except as provided otherwise in Section 4.1002.1 of the LACERS Administrative Code.

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**Normal Retirement Benefit:**

*Tier 1*

*Age & Service Requirement* Age 70; or  
(§ 4.1005(a)) Age 60 with 10 years of continuous service; or  
Age 55 with at least 30 years of service.

*Amount* (§ 4.1007(a)) 2.16% per year of service credit (not greater than 100%) of the Final Average Monthly Compensation.

*Tier 2*

*Age & Service Requirement* Age 70; or  
(§ 4.1055(a)) Age 65 with 10 years of continuous service.

*Amount* (§ 4.1055(a)) 2.00% per year of service credit (not greater than 75%) of the Final Average Monthly Compensation.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**Early Retirement Benefit:**

Tier 1

*Age & Service Requirement*  
 (§ 4.1005(b))  
*Amount (§ 4.1007(b))*

Age 55 with 10 years of continuous service; or  
 Any age with 30 years of service.  
 2.16% per year of service credit (not greater than 100%) of the Final Average  
 Monthly Compensation, reduced for retirement ages below age 60 using the following  
 sample Early Retirement benefit adjustment factors:

<u>Age</u>	<u>Factor</u>
45	0.6250
50	0.7750
55	0.9250
60	1.0000

Tier 2

*Age & Service Requirement*  
 (§ 4.1055(b))  
*Amount (§ 4.1055(b))*

Age 55 with 10 years of continuous service.  
 Retirement Factor x years of service credit (not greater than 75%) x Final Average  
 Monthly Compensation. Retirement Factors are as follows:

<u>Age</u>	<u>Factor</u>	<u>Age</u>	<u>Factor</u>
55	0.7700%	60	1.2200%
56	0.8400%	61	1.3400%
57	0.9200%	62	1.4800%
58	1.0100%	63	1.6300%
59	1.1100%	64	1.8100%

## SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System

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### Service Credit:

#### Tiers 1 & 2:

(§ 4.1001(a) & § 4.1051(a))

The time component of the formula used by LACERS for purposes of calculating benefits.

---

### Final Average Monthly Compensation:

#### Tier 1

(§ 4.1001(b))

Equivalent of monthly average salary of highest continuous 12 months (one year); includes base salary plus regularly assigned bonuses or premium pay.

#### Tier 2

(§ 4.1051(b))

Equivalent of monthly average salary of highest continuous 36 months (three years); limited to base salary (excludes bonuses or premium pay).

---

### Cost of Living Benefit:

#### Tier 1

(§ 4.1022)

Based on changes to Los Angeles area Consumer Price Index, to a maximum of 3% per year; excess banked.

#### Tier 2

(§ 4.1069)

Based on changes to Los Angeles area Consumer Price Index, to a maximum of 2% per year; member can purchase additional COLA not to exceed 1% per year (paid in full by member)\*; excess not banked.

\* *It is assumed that such discretionary purchases will only happen at retirement and the cost for such purchases by the member is therefore not included in this valuation.*



**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

---

**Death after Retirement:**

Tier 1

(§ 4.1010(c))

- (i) 50% of retiree's unmodified allowance continued to an eligible spouse or a domestic partner; or a modified continuance to an eligible spouse or a domestic partner at the time of member's death (or a designated beneficiary selected by member at the time of retirement)\*;
- (ii) \$2,500 lump sum death benefit paid to a designated beneficiary; and
- (iii) Any unused contributions if the member has elected the cash refund annuity option.

Tier 2

(§ 4.1060(c))

- (i) If elected at retirement, a modified continuance to an eligible spouse, domestic partner, or designated beneficiary\*;
- (ii) \$2,500 lump sum death benefit paid to a designated beneficiary; and
- (iii) Any unused contributions if the member has elected the cash refund annuity option.

\* *The retiree may elect at the time of retirement to take a reduced allowance in order to provide for a continuance pursuant to the provisions of either Section 4.1015 (Tier 1) or Section 4.1062 (Tier 2).*

---

**Death before Retirement:**

Tier 1

(§ 4.1010(a))

Greater of:

Option #1:

- (i) Eligibility – None.
- (ii) Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

---

**Death before Retirement: (continued)**

Tier 1 (continued)

<u>Service Credit</u>	<u>Number of Monthly Payments</u>
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ years	12

Option #2:

- (i) Eligibility – Duty-related death or after 5 years of service.
- (ii) Benefit – Continuance of service or disability benefit payable under 100% joint and survivor option to an eligible spouse or qualified domestic partner.

Tier 2

(§ 4.1060(a))

Greater of:

Option #1:

- (i) Eligibility – None.
- (ii) Benefit – Refund of employee contributions plus a limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

<u>Service Credit</u>	<u>Number of Monthly Payments</u>
1 year	2
2 years	4
3 years	6
4 years	8
5 years	10
6+ years	12

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

---

**Death before Retirement: (continued)**

Tier 2 (continued)

Option #2:

- (i) Eligibility – Eligible for service retirement.
- (ii) Benefit – Modified continuance of service retirement benefit under 100% J&S option to eligible spouse or domestic partner.

---

**Member Normal Contributions:**

Tier 1

(§ 4.1003)

Effective July 1, 2011, the member normal contribution rate became 7% for all employees. The 7% member rate shall be paid until June 30, 2026 or until the ERIP Cost Obligation (defined in ERIP Ordinance 180926) is fully paid, whichever comes first\*.

Beginning January 1, 2013, all non-represented members and members in certain bargaining groups are required to pay an additional 4% member contribution rate.

Members with no eligible spouse or domestic partner at retirement can request a refund of the survivor portion of the member contributions (i.e., generally based on a contribution rate of 0.5% of pay).

\* *The member normal contribution rate will drop down to 6% afterwards.*

Tier 2

(§ 4.1053)

Actuarially determined rate to fund 75% of normal costs and 50% of UAAL for Tier 2. The initial rate is 10% of pay for the first four years of Tier 2. The rate is then established every three years thereafter, with the first determination to be effective July 1, 2017.

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**Disability:**

Tier 1

*Service Requirement (§4.1008(a))* 5 years of continuous service  
*Amount\*(§4.1008(c))* 1/70 (1.43%) of the Final Average Monthly Compensation per year of service or 1/3 of the Final Average Monthly Compensation, if greater.

Tier 2

*Service Requirement (§4.1058(a))* 10 years of continuous service  
*Amount\* (§4.1058(c))* 1/90 (1.11%) of the Final Average Monthly Compensation per year of service.

*\* The benefit calculated using the service retirement formula will be paid if the member is eligible and that benefit is greater than that calculated under the disability retirement formula.*

---

**Deferred Withdrawal Retirement Benefit (Vested):**

Tier 1

(§ 4.1006)

*Age & Service Requirement* Age 70 with 5 years of continuous service; or  
Age 60 with 5 years of continuous service and at least 10 years elapsed from first date of membership; or  
Age 55 with at least 30 years of service.  
Deferred employee who meets part-time eligibility: age 60 with at least 10 years from the first date of membership.  
*Amount* Normal retirement benefit (or refund of contributions, if greater)

**SECTION 4: Reporting Information for the Los Angeles City Employees' Retirement System**

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**Deferred Withdrawal Retirement Benefit (Vested): (continued)**

*Tier 1 (continued)*

<i>Age &amp; Service Requirement</i>	Age 55 with 5 years of continuous service and at least 10 years elapsed from first date of membership; or Age 55 with 10 years of continuous service. Deferred employee who meets part-time eligibility: age 55 with at least 10 years from the first date of membership.
<i>Amount</i>	Early retirement benefit (or refund of contributions, if greater)

*Tier 2  
(§ 4.1056)*

<i>Age &amp; Service Requirement</i>	Age 70 with 5 years of continuous service; or Age 55 with 5 years of continuous service and at least 10 years elapsed from first date of membership; or Deferred employee who meets part-time eligibility: age 55 with at least 10 years from the first date of membership; or Deferred employee who meets part-time eligibility: age 70.
<i>Amount</i>	Early or normal retirement benefit (or refund of contributions, if greater)

**Withdrawal of Contributions Benefit (Ordinary Withdrawal):**

Refund of employee contributions with interest.

**Changes in Plan Provisions:** None during July 1, 2013 to June 30, 2014.

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

5315797v5/05806.002

# Los Angeles City Employees' Retirement System

**Actuarial Valuation and Review of Other  
Postemployment Benefits (OPEB) as of  
June 30, 2014 in accordance with GASB  
Statements No. 43 and No.45**



This report has been prepared at the request of the Board of Administration 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 Administration 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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100 MONTGOMERY STREET, SUITE 500 SAN FRANCISCO, CA 94104-4208  
T 415.263.8200 www.segalco.com

*December 3, 2014*

*Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401*

*Dear Board Members:*

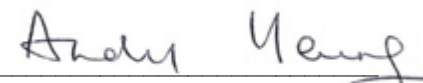
*We are pleased to submit this Actuarial Valuation and Review of Other Postemployment Benefits (OPEB) as of June 30, 2014 under Governmental Accounting Standards Board Statements No. 43 and No. 45. The report summarizes the actuarial data used in the valuation, discloses the Net OPEB Obligation (NOO) as of June 30, 2014, establishes the Annual Required Contribution (ARC) for the Fiscal Year 2015/2016, and analyzes the preceding year's experience. This report was based on the census and unaudited financial data provided by the Retirement System and the terms of the Plan as summarized in Exhibit III. The actuarial calculations were completed under the supervision of Thomas Bergman, ASA, MAAA, Enrolled Actuary and Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary.*

*This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in this valuation and described in Exhibit II are reasonably related to the experience of and the expectations for the Plan. The actuarial projections are based on these assumptions and the plan of benefits as summarized in Exhibits II and III.*

*Sincerely,*

*Segal Consulting, a Member of the Segal Group, Inc.*

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

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

*JRC/hy*

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## SECTION 1: Valuation Summary for Los Angeles City Employees' Retirement System Measurement Under GASB 43 and 45 as of June 30, 2014

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### PURPOSE

This report presents the results of our actuarial valuation of the City of Los Angeles Employees' Retirement System OPEB plan as of June 30, 2014. The results are in accordance with the Governmental Accounting Standards, which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants' active working lifetimes.

### HIGHLIGHTS OF THE VALUATION

- The recommended contribution has increased from \$103.6 million (5.61% of payroll) to \$106.6 million (5.62% of payroll), assuming contributions are made by the City on July 15. A reconciliation of the change in the recommended contribution rate is provided in Section 3, Exhibit H. Rates are shown separately for Tiers 1 and 2 in Chart 4 of Section 2.
- The results of this valuation reflect changes in the actuarial assumptions as recommended by Segal Consulting and adopted by the Board on October 28, 2014. These changes were documented in our 2014 Triennial Actuarial Experience Study report dated October 8, 2014 and are also outlined in Section 4, Exhibit II of this report.
- Based on action taken by the Board on September 9, 2014, the amortization period for assumption and method changes was reduced from 30 years to 20 years. The costs associated with the changes in actuarial assumptions adopted from the 2014 Experience Study have been amortized over the new 20-year period in this valuation report.

- The ratio of the actuarial value of assets to actuarial accrued liabilities increased from 71.91% to 72.90%. On a market value of assets basis, the funded ratio increased from 71.42% to 78.54%. The unfunded actuarial accrued liability increased from \$677.8 million to \$721.6 million. A complete reconciliation of the System's unfunded actuarial accrued liability is provided in Section 2, Chart 2.
- On October 25, 2011, the Board elected to phase in the impact of new actuarial assumptions (adopted as a result of the June 30, 2011 Triennial Experience Study) on the City's retirement and health plan contributions over a five-year period, beginning with the 2012-2013 Fiscal Year. The recommended (i.e., pre-phase-in) contribution rates for Fiscal Year 2015-2016 (the fourth year of the phase-in) are contained in this report. In a separate letter, we provide the "phased-in" contribution rates for Fiscal Year 2015-2016.

On October 14, 2014, as part of the Board's deliberations on the actuarial assumptions for use in this valuation, the Board also discussed the possibility of phasing in the cost impact of the new actuarial assumptions adopted from the recent June 30, 2014 Triennial Experience Study on the City's retirement and health plan contributions over three alternative phase-in periods. In another separate letter, we provide the incremental phase-in contribution rates for Fiscal Year 2015-2016 resulting from the 2014 Experience Study.

**SECTION 1: Valuation Summary for Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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- Based on additional action taken by the Board on September 9, 2014, the total amount of unrecognized investment losses as of June 30, 2013 (i.e., -\$81,571,421) has been recognized in six level amounts, with five years of recognition remaining after the June 30, 2014 valuation.
- As indicated in Section 3, Exhibit G, the total unrecognized investment gain as of June 30, 2014 is \$1,000,268,600 for the assets for Retirement, Health, Family Death, and Larger Annuity Benefits. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next several years. This implies that earning the assumed rate of investment return of 7.50% per year (net of expenses) on a market value basis will result in net investment gains on the actuarial value of assets after June 30, 2014. Item 9 in Exhibit G shows how, under the asset smoothing method, the \$1.0 billion in unrecognized gains will be recognized in the next six years.

The deferred gains of \$1.0 billion represent 7.2% of the market value of assets as of June 30, 2014. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$1.0 billion market gains is expected to have an impact on the System's future funded percentage and contribution rate requirements. This potential impact may be illustrated as follows:
- If the retiree health plan component of the deferred gains were recognized immediately in the actuarial value of assets, the funded percentage would increase from 72.90% to 78.54%.
- If the retiree health plan component of the deferred gains were recognized immediately in the valuation value of assets, the aggregate employer rate (payable on July 15) would decrease from 5.62% to about 4.96% of payroll.
- The actuarial valuation report as of June 30, 2014 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan.
- As in prior years, the employer contribution rates (before adjustments for the five-year phase in of the impact of new actuarial assumptions adopted for the June 30, 2011 valuation) provided in this report have been developed assuming they will be paid by the City on any of the following dates:
  - (1) The beginning of the fiscal year, or
  - (2) On July 15, 2015, or
  - (3) Throughout the year (i.e., the City will pay contributions at the end of every pay period).
- Even though the City will be paying UAAL contributions based on the Tier 2 payroll, the contributions should be maintained on a bookkeeping basis as contributions made to the Tier 1 plan. We believe this treatment is reasonable even though some of those contributions may be allocated to pay off 50% of the UAAL that the City is required to pay to Tier 2. However, we are not recommending that allocation at this time. Segal Consulting would need to work with LACERS to determine the procedure required to

**SECTION 1: Valuation Summary for Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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ensure that none of those contributions would inadvertently affect the calculation that we would perform in the June 30, 2016 valuation when the Tier 2 members are required, for the first time, to pay the remaining 50% of the UAAL starting on July 1, 2017.

**SECTION 1: Valuation Summary for Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**SUMMARY OF VALUATION RESULTS**

The key valuation results for the current and prior years are shown.

	<b>June 30, 2014</b>	<b>June 30, 2013</b>
<b>Actuarial Accrued Liability (AAL)</b>	\$2,662,853,153	\$2,412,483,968
<b>Actuarial Value of Assets</b>	1,941,224,810	1,734,733,258
<b>Unfunded Actuarial Accrued Liability</b>	721,628,343	677,750,710
<b>Funded Ratio on Actuarial Value Basis</b>	72.90%	71.91%
<b>Market Value of Assets</b>	2,091,334,640	\$1,722,945,241
<b>Funded Ratio on Market Value Basis</b>	78.54%	71.42%
<b>Annual Required Contribution (ARC)<sup>(1), (2)</sup></b>		
Normal cost (beginning of year)	\$65,077,122	\$64,319,088
Amortization of the unfunded actuarial accrued liability	<u>41,245,521</u>	<u>38,944,535</u>
Total Annual Required Contribution (beginning of year)	\$106,322,643	\$103,263,623
Total Annual Required Contribution (July 15)	\$106,643,515	103,585,288
Total Annual Required Contribution (end of each pay period)	\$110,237,663	107,190,426
Projected total payroll <sup>(3)</sup>	\$1,898,064,175	\$1,846,970,474
ARC as a percentage of pay (there is a 12-month delay until the rate is effective) <sup>(4)</sup>		
Beginning of year	5.60%	5.59%
July 15	5.62%	5.61%
End of each pay period	5.81%	5.80%
<b>Total Participants</b>	43,229	43,544
<b>Annual OPEB Cost (AOC) for Coming Year</b>		
Annual Required Contributions (July 15)	\$103,585,288	\$101,000,249
Interest on Net OPEB Obligations	0	0
ARC Adjustments	<u>0</u>	<u>0</u>
Total Annual OPEB Cost	\$103,585,288	\$101,000,249
AOC as a percent of pay	5.61%	5.55%

<sup>(1)</sup> Both the June 30, 2014 and June 30, 2013 contribution rates are before adjustments to phase-in over five years the City contribution rate impact due to the actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study.

<sup>(2)</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Reflects amount calculated in the pension valuation.

<sup>(4)</sup> A breakdown of the ARC by tier is provided in Chart 4.

**SECTION 1: Valuation Summary for Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

---

December 3, 2014

**ACTUARIAL CERTIFICATION**

This is to certify that Segal Consulting (Segal) has conducted an actuarial valuation of certain benefit obligations of Los Angeles City Employees' Retirement System's other postemployment benefit programs as of June 30, 2014, in accordance with generally accepted actuarial principles and practices. Actuarial valuations are performed annually for this other postemployment benefit program with the last valuation completed as of June 30, 2013. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of Governmental Accounting Standard Board (GASB) Statements No. 43 and No. 45 for the determination of the liability for postemployment benefits other than pensions.

The actuarial valuation is based on the plan of benefits verified by LACERS and on participant, premium, claims and financial data provided by LACERS. Segal did not audit LACERS' financial statements, but conducted an examination of all participant data for reasonableness, and concluded that it was reasonable and consistent with the prior year's data.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the Retirement System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Both the Normal Cost and the Actuarial Accrued Liability are determined under the Entry Age cost method. In no event will the recommended contribution be less than the minimum Annual Required Contribution (ARC) as determined under GASB Statements 43 and 45.


The actuarial computations made are for purposes of fulfilling plan accounting and funding requirements. Determinations for purposes other than meeting financial accounting and funding requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

Segal prepared all supporting schedules in the actuarial section and the supporting schedules in the financial section of the System's CAFR. A listing of supporting schedules Segal prepared for inclusion in the financial section as Supplementary Information required by GASB Statements 43 and 45 is provided below:

- 1) Schedule of Funding Progress
- 2) Schedule of Employer Contributions


LACERS' staff prepared other trend data schedules in the statistical section based on information supplied in this valuation report.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements 43 and 45 with respect to the benefit obligations addressed. The signing actuaries are Members of the Society of Actuaries, and/or the American Academy of Actuaries, as well as other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.



---

Thomas Bergman, ASA, MAAA, EA  
Assistant Actuary



---

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

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The actuarial present value of total projected benefits uses the actuarial assumptions disclosed in Section 4 to calculate the value today of all benefits expected to be paid to current actives and retired plan members. The actuarial balance sheet shows the expected breakdown of how these benefits will be financed.

**CHART 1**

**Actuarial Present Value of Total Projected Benefits (APB) and Actuarial Balance Sheet**

	<b>Actuarial Present Value of Total Projected Benefits (APB)</b>	
	<b>June 30, 2014</b>	<b>June 30, 2013</b>
<b>Participant Category</b>		
Current retirees, beneficiaries, and dependents	\$1,196,769,321	\$1,104,832,577
Current active members	1,993,755,009	1,854,072,110
Terminated members entitled but not yet eligible	<u>41,188,181</u>	<u>26,868,636</u>
Total	\$3,231,712,511	\$2,985,773,323
	<b>June 30, 2014</b>	<b>June 30, 2013</b>
<b>Actuarial Balance Sheet</b>		
The actuarial balance sheet as of the valuation date is as follows:		
<b>Assets</b>		
1. Actuarial value of assets	\$1,941,224,810	\$1,734,733,258
2. Present value of future normal costs	568,859,358	573,289,355
3. Unfunded actuarial accrued liability	<u>721,628,343</u>	<u>677,750,710</u>
4. Present value of current and future assets	\$3,231,712,511	\$2,985,773,323
<b>Liabilities</b>		
5. Actuarial Present Value of total Projected Benefits	\$3,231,712,511	\$2,985,773,323

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The actuarial accrued liability shows that portion of the APB (Chart 1) allocated to periods prior to the valuation date by the actuarial cost method. The chart below shows the portion of the liability for active and inactive members,

and reconciles the unfunded actuarial accrued liability from last year to this year.

**CHART 2**

**Actuarial Accrued Liability (AAL) and Unfunded AAL (UAAL)**

	June 30, 2014	June 30, 2013
<b>Participant Category</b>		
Current retirees, beneficiaries, and dependents	\$1,196,769,321	\$1,104,832,577
Current active members	1,424,895,651	1,280,782,755
Terminated members entitled but not yet eligible*	<u>41,188,181</u>	<u>26,868,636</u>
Total actuarial accrued liability	\$2,662,853,153	\$2,412,483,968
<b>Unfunded Actuarial Accrued Liability</b>		
Total actuarial accrued liability	\$2,662,853,153	\$2,412,483,968
Actuarial value of assets	<u>\$1,941,224,810</u>	<u>\$1,734,733,258</u>
Unfunded actuarial accrued liability	\$721,628,343	\$677,750,710
<b>Development of Unfunded Actuarial Accrued Liability for the Year Ended June 30, 2014</b>		
1. Unfunded actuarial accrued liability as of June 30, 2013		\$677,750,710
2. Employer normal cost as of June 30, 2013		64,319,088
3. Total employer contributions during 2013/2014 fiscal year		97,840,554
4. Interest		<u>50,255,138</u>
5. Expected unfunded actuarial accrued liability as of June 30, 2014 (1 + 2 - 3 + 4)		694,484,382
6. Effect of investment gain		-72,508,896
7. Effect of demographic changes and technical amendment*		17,059,031
8. Effect of change in medical trend assumption		37,155,734
9. Effect of premiums lower than expected		-89,849,457
10. Effect of new actuarial assumptions from triennial experience study		<u>135,287,549</u>
11. Unfunded actuarial accrued liability as of June 30, 2014 (5 + 6 + 7 + 8 + 9 + 10)		\$721,628,343

\* As previously directed by LACERS, deferred vested members who separated from employment prior to having a chance to make the additional 4% contribution were valued assuming a frozen subsidy in the June 30, 2013 valuation. A technical amendment effective July 25, 2013 unfroze the subsidy for this group, and the June 30, 2014 valuation reflects this change. Excludes a \$6,170,728 loss from contributions less than anticipated due to the one-year delay in implementing the higher contribution rate calculated in the June 30, 2013 valuation.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The unfunded actuarial accrued liability may be amortized over periods of up to 30 years. Amortization payments may be calculated as level dollar amounts or as amounts designed to remain level as a percent of a growing payroll base. Los Angeles City Employees' Retirement System has elected to amortize the unfunded actuarial accrued liability using the following rules: The costs associated with the 2009 ERIP have been amortized over 15 years beginning with the June 30, 2009 valuation date. The unfunded actuarial accrued liability as of June 30, 2012 is amortized over a fixed period of 30 years beginning July 1, 2012.

Assumption changes resulting from the triennial experience study will be amortized over 20 years. Health trend and premium assumption changes, plan changes, and gains and losses will be amortized over 15 years.

**CHART 3**

**Table of Amortization Bases**

Type	Date Established	Initial Year	Initial Amount	Outstanding Balance	Annual Payment*	Years Remaining
Plan amendment (2009 ERIP)	06/30/2009	15	\$54,735,645	\$48,618,351	\$5,617,297	10
Combined base**	06/30/2012	30	597,984,614	623,685,240	33,609,178	28
Experience loss	06/30/2013	15	16,206,142	16,010,063	1,405,543	14
Change in Assumptions	06/30/2014	20	135,287,549	135,287,549	9,097,244	20
Experience Gain	06/30/2014	15	-101,972,860	<u>-101,972,860</u>	<u>-8,483,741</u>	15
Total				\$721,628,343	\$41,245,521	

\* Level percentage of pay.

\*\* On October 23, 2012, the Board elected to combine all amortization bases as of June 30, 2012, except for the base associated with the 2009 ERIP, which remains on its original schedule. In addition, the Board adopted an initial amortization period of 30 years for the combined bases as of June 30, 2012.

Note: The equivalent single amortization period is about 25 years.



**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The Annual Required Contribution (ARC) is the amount calculated to determine the annual cost of the OPEB plan for accounting purposes on an accrual basis. The calculation consists of adding the Normal Cost of the plan to an amortization payment. Both are determined as of the start of the accounting period and adjusted as if the annual cost were to be contributed throughout the fiscal year or on July 15<sup>th</sup>.

**CHART 4**

**Determination of Annual Required Contribution (ARC)**

Tier 1 - Cost Element	Determined as of June 30			
	2014 <sup>(1), (2)</sup>		2013 <sup>(1)</sup>	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	\$63,891,750	3.45%	\$64,319,088	3.48%
2. Amortization of the unfunded actuarial accrued liability	<u>40,251,443</u>	<u>2.17%</u> <sup>(3), (5)</sup>	<u>38,944,535</u>	<u>2.11%</u> <sup>(3)</sup>
3. Total Annual Required Contribution (beginning of year)	\$104,143,193	5.62%	\$103,263,623	5.59%
4. Projected Payroll <sup>(4)</sup>	\$1,852,318,041		\$1,846,970,474	
5. Adjustment for timing (July 15)	\$314,295	0.02%	321,665	0.02%
6. Total Annual Required Contribution (July 15)	\$104,457,488	5.64%	\$103,585,288	5.61%
7. Adjustment for timing (end of pay period)	\$3,834,768	0.21%	3,926,803	0.21%
8. Total Annual Required Contribution (end of pay period)	\$107,977,961	5.83%	\$107,190,426	5.80%

<sup>(1)</sup> Both the June 30, 2013 and 2014 contribution rates are *before* adjustment to phase in over five years the City Contribution rate impact of the actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study.

<sup>(2)</sup> June 30, 2014 contribution rates are *before* any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Even though the City will be paying a UAAL contribution based on the Tier 2 payroll, the contributions should be maintained on a book keeping basis as contributions made to the Tier 1 plan.

<sup>(4)</sup> Reflects amount calculated in the pension valuation.

<sup>(5)</sup> In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 2 and amortized that total UAAL over the total payroll for Tier 1 and Tier 2.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**CHART 4 (continued)**

**Determination of Annual Required Contribution (ARC)**

Tier 2 - Cost Element	Determined as of June 30			
	2014 <sup>(1), (2)</sup>		2013 <sup>(1)</sup>	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	\$1,185,372	2.59%	\$0	2.29%
2. Amortization of the unfunded actuarial accrued liability	<u>994,078</u>	<u>2.17%</u> <sup>(3), (5)</sup>	<u>0</u>	<u>2.11%</u> <sup>(3)</sup>
3. Total Annual Required Contribution (beginning of year)	\$2,179,450	4.76%	\$0	4.40%
4. Projected Payroll <sup>(4)</sup>	\$45,746,134		\$0	
5. Adjustment for timing (July 15)	\$6,577	0.02%	\$0	0.01%
6. Total Annual Required Contribution (July 15)	\$2,186,027	4.78%	\$0	4.41%
7. Adjustment for timing (end of pay period)	\$80,252	0.18%	\$0	0.16%
8. Total Annual Required Contribution (end of pay period)	\$2,259,702	4.94%	\$0	4.56%

<sup>(1)</sup> Both the June 30, 2013 and 2014 contribution rates are before adjustment to phase in over five years the City Contribution rate impact of the actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study.

<sup>(2)</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Even though the City will be paying a UAAL contribution based on the Tier 2 payroll, the contributions should be maintained on a book keeping basis as contributions made to the Tier 1 plan.

<sup>(4)</sup> Reflects amount calculated in the pension valuation.

<sup>(5)</sup> In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 2 and amortized that total UAAL over the total payroll for Tier 1 and Tier 2.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**CHART 4 (continued)**

**Determination of Annual Required Contribution (ARC)**

Combined - Cost Element	Determined as of June 30			
	2014 <sup>(1), (2)</sup>		2013 <sup>(1)</sup>	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Normal cost	\$65,077,122	3.43%	\$64,319,088	3.48%
2. Amortization of the unfunded actuarial accrued liability	<u>41,245,521</u>	<u>2.17%</u> <sup>(3), (5)</sup>	<u>38,944,535</u>	<u>2.11%</u> <sup>(3)</sup>
3. Total Annual Required Contribution (beginning of year)	\$106,322,643	5.60%	\$103,263,623	5.59%
4. Projected Payroll <sup>(4)</sup>	\$1,898,064,175		\$1,846,970,474	
5. Adjustment for timing (July 15)	\$320,872	0.02%	321,665	0.02%
6. Total Annual Required Contribution (July 15)	\$106,643,515	5.62%	\$103,585,288	5.61%
7. Adjustment for timing (end of pay period)	\$3,915,020	0.21%	3,926,803	0.21%
8. Total Annual Required Contribution (end of pay period)	\$110,237,663	5.81%	\$107,190,426	5.80%

<sup>(1)</sup> Both the June 30, 2013 and 2014 contribution rates are before adjustment to phase in over five years the City Contribution rate impact of the actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study.

<sup>(2)</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

<sup>(3)</sup> Even though the City will be paying a UAAL contribution based on the Tier 2 payroll, the contributions should be maintained on a book keeping basis as contributions made to the Tier 1 plan.

<sup>(4)</sup> Reflects amount calculated in the pension valuation.

<sup>(5)</sup> In developing the UAAL contribution rate, we have combined the UAAL for Tier 1 and Tier 2 and amortized that total UAAL over the total payroll for Tier 1 and Tier 2.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The OPEB Cost (AOC) adjusts the ARC for any past differences between the ARC and contributions in relation to the ARC as tracked in the Net OPEB Obligation (NOO). The AOC is the cost of OPEB actually recognized as an expense for the Fiscal Year under GASB 45.

**CHART 4 (continued)  
Determination of Annual OPEB Cost (AOC)**

Cost Element	Determined as of June 30			
	2014*		2013*	
	Amount	Percentage of Compensation	Amount	Percentage of Compensation
1. Annual Required Contribution (July 15)	\$106,643,515	5.62%	\$103,585,288	5.61%
2. Interest on Beginning of Year Net OPEB Obligation (NOO)	0	0.00%	0	0.00%
3. ARC adjustment	<u>0</u>	<u>0.00%</u>	<u>0</u>	<u>0.00%</u>
4. Annual OPEB Cost (July 15)	<u>\$106,643,515</u>	<u>5.62%</u>	<u>\$103,585,288</u>	<u>5.61%</u>

\* June 30, 2013 and 2014 contribution rates are *before* adjustment to phase in over five years the City Contribution rate impact of the actuarial assumptions used in the June 30, 2011 valuation.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

For GASB 43 (plan reporting) purposes, the schedule of employer contributions compares actual contributions to the ARC. For GASB 45 (employer reporting) purposes, the schedule of employer contributions compares actual

contributions to the AOC. The dollar amounts shown below reflect the contribution rates applied to actual payrolls.

**CHART 5  
Required Supplementary Information – Schedule of Employer Contributions  
GASB 43**

<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contributions</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$95,122,090	\$95,122,090	100.00%
2010	96,511,234	96,511,234	100.00%
2011	107,395,804	107,395,804	100.00%
2012	115,208,835	115,208,835	100.00%
2013	72,916,729	72,916,729	100.00%
2014	97,840,554	97,840,554	100.00%

**Required Supplementary Information – Schedule of Employer Contributions  
GASB 45**

<b>Fiscal Year Ended June 30</b>	<b>Annual OPEB Cost</b>	<b>Actual Contributions</b>	<b>Percentage Contributed</b>
2009	\$95,122,090	\$95,122,090	100.00%
2010	96,511,234	96,511,234	100.00%
2011	107,395,804	107,395,804	100.00%
2012	115,208,835	115,208,835	100.00%
2013	72,916,729	72,916,729	100.00%
2014	97,840,554	97,840,554	100.00%

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

This schedule of funding progress presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

**CHART 6**

**Required Supplementary Information – Schedule of Funding Progress**

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liability (AAL) (b)</b>	<b>Unfunded AAL (UAAL) (b) - (a)</b>	<b>Funded Ratio (a) / (b)</b>	<b>Covered Payroll* (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b) - (a) / (c)]</b>
06/30/2009	\$1,342,496,524	\$2,058,176,825	\$715,680,301	65.23%	\$1,816,171,212	39.41%
06/30/2010	1,425,726,017	2,233,874,432	808,148,415	63.82%	1,817,662,284	44.46%
06/30/2011	1,546,883,749	1,968,707,666	421,823,917	78.57%	1,833,392,381	23.01%
06/30/2012	1,642,373,560	2,292,400,227	650,026,667	71.64%	1,819,269,630	35.73%
06/30/2013	1,734,733,258	2,412,483,968	677,750,710	71.91%	1,846,970,474	36.70%
06/30/2014	1,941,224,810	2,662,853,153	721,628,343	72.90%	1,898,064,175	38.02%

\* Reflects amount calculated in the pension valuation.

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The Net OPEB obligation measures the accumulated differences between the annual OPEB cost and the actual contributions in relation to the ARC.

The dollar amounts shown below reflect the contribution rates applied to actual payrolls.

**CHART 7**

**Required Supplementary Information – Net OPEB Obligation (NOO)**

<b>Fiscal Year End</b>	<b>Annual Required Contribution (a)</b>	<b>Interest on Existing NOO (b)</b>	<b>ARC Adjustment (c)</b>	<b>Annual OPEB Cost (a) + (b) + (c) (d)</b>	<b>Actual Contribution Amount (e)</b>	<b>Net Increase in NOO (d) - (e) (f)</b>	<b>NOO as of Fiscal Year (g)</b>
06/30/2009	\$95,122,090	\$0	\$0	\$95,122,090	\$95,122,090	\$0	\$0
06/30/2010	96,511,234	0	0	96,511,234	96,511,234	0	0
06/30/2011	107,395,804	0	0	107,395,804	107,395,804	0	0
06/30/2012	115,208,835	0	0	115,208,835	115,208,835	0	0
06/30/2013	72,916,729	0	0	72,916,729	72,916,729	0	0
06/30/2014	97,840,554	0	0	97,840,554	97,840,554	0	0

**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**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 LACERS, the current AVR is about 1.10. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 1.10% of one-year's payroll. Since LACERS amortizes actuarial gains and losses over a period of 15 years, there would be a 0.09% 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 LACERS, the current LVR is about 1.40. This is about 27% 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 8**

**Volatility Ratios for Years Ended June 30, 2009 – 2014**

Year Ended June 30	Asset Volatility Ratio	Liability Volatility Ratio
2009	0.55	1.13
2010	0.64	1.23
2011	0.80	1.07
2012	0.82	1.26
2013	0.93	1.31
2014	1.10	1.40



**SECTION 2: Valuation Results for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive non-vested members (entitled to a refund of member contributions), inactive vested 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, Exhibit A.

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

**CHART 9**  
**Member Population: 2007 – 2014**

<b>Year Ended June 30</b>	<b>Active Participants</b>	<b>Inactive Members</b>	<b>Retired Members and Beneficiaries**</b>	<b>Ratio of Non-Actives to Actives</b>
2007	30,175	607	11,336	0.40
2008	30,236	703	12,004	0.42
2009	30,065	674	11,893	0.42
2010	26,245	806	13,442	0.54*
2011	25,449	813	13,436	0.56
2012	24,917	858	13,431	0.57
2013	24,441	861	13,592	0.59
2014	24,009	955	13,686	0.61

\* Reflects 2009 Early Retirement Incentive Program.

\*\* Excludes retirees and surviving spouses not yet eligible for retiree health benefits.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

*This exhibit summarizes the participant data used for the current and prior valuations.*

**EXHIBIT A  
Summary of Participant Data**

	<b>June 30, 2014</b>	<b>June 30, 2013</b>
<b>Retirees*</b>		
Number of non-disabled	11,612	11,552
Number of disabled	<u>316</u>	<u>320</u>
Total number of retirees	11,928	11,872
Average age of retirees	71.7	71.4
Number of spouses	4,579	4,650
Average age of spouses	68.4	68.1
<b>Surviving Spouses*</b>		
Number	1,758	1,720
Average age	79.1	78.8
<b>Active Participants</b>		
Number	24,009	24,441
Average age	48.8	48.3
Average years of service	15.0	14.5
<b>Inactive Vested Participants (excluding those with less than 10 years of service)</b>		
Number	955	861
Average age	51.3	51.3

\* Excludes retirees and surviving spouses not receiving retiree health benefits.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**EXHIBIT B  
Reconciliation of Participant Data with Pension Valuation**

	June 30, 2014	June 30, 2013
<b>Retirees</b>		
Pension valuation	12,880	12,771
Retirees with no subsidy due to service or decision not to enroll	-1,236	-1,186
Deferred retirees eligible for future health benefits	<u>-32</u>	<u>-33</u>
Health valuation	11,612	11,552
<b>Disableds</b>		
Pension valuation	900	898
Disableds with no subsidy due to service or decision not to enroll	-500	-485
Deferred disableds eligible for future health benefits	<u>-84</u>	<u>-93</u>
Health valuation	316	320
<b>Surviving Spouses</b>		
Pension valuation	3,752	3,693
Surviving spouses with no subsidy due to service or decision not to enroll	-1,918	-1,895
Deferred surviving spouses eligible for future health benefits	<u>-76</u>	<u>-78</u>
Health valuation	1,758	1,720
<b>Actives</b>		
Pension valuation	24,009	24,441
Health valuation	24,009	24,441
<b>Inactive Vested</b>		
Pension valuation	6,031	5,799
Inactive vesteds with less than 10 years of service	<u>-5,076</u>	<u>-4,938</u>
Health valuation	955	861

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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**EXHIBIT C**

**Retirees and Beneficiaries Added to and Removed from the Rolls**

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<u>Year Ended 6/30</u>	<u>No. of New Retirees/ Beneficiaries</u>	<u>Annual Allowances Added*</u>	<u>No. of Retirees/ Beneficiaries Removed</u>	<u>Annual Allowances Removed</u>	<u>No. of Retirees/ Beneficiaries at 6/30</u>	<u>Annual Allowances at 6/30</u>	<u>Percent Increase in Annual Allowances</u>	<u>Average Annual Allowance</u>
2009	376	\$5,542,283	487	\$2,697,150	11,893	\$73,868,501	4.0	\$6,211
2010	2,104	23,010,841	555	2,670,987	13,442	94,208,355	27.5	7,009
2011	431	5,670,390	437	2,774,684	13,436	97,104,061	3.1	7,227
2012	433	-540,583	438	2,516,835	13,431	94,046,643	-3.1	7,002
2013	635	9,263,844	474	2,463,967	13,592	100,846,520	7.2	7,420
2014	616	7,160,148	522	3,047,436	13,686	104,959,232	4.1	7,669

\* Also reflects changes in subsidies for continuing retirees and beneficiaries.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**EXHIBIT D  
Cash Flow Projections**

The ARC generally exceeds the current pay-as-you-go (“paygo”) cost of an OPEB plan. Over time the paygo cost will tend to grow and may even eventually exceed the ARC in a well-funded plan. The following table projects the paygo cost as the projected net fund payment over the next ten years.

Year Ending June 30	Projected Number of Retirees*			Projected Benefit Payments		
	Current	Future	Total	Current	Future	Total
2015	18,265	1,075	19,340	\$102,146,139	\$7,529,172	\$109,675,311
2016	17,768	1,896	19,664	101,890,839	14,777,351	116,668,190
2017	17,263	2,818	20,081	102,256,932	23,728,912	125,985,844
2018	16,726	3,786	20,512	102,152,824	34,008,700	136,161,524
2019	16,173	4,803	20,976	102,248,607	45,629,694	147,878,301
2020	15,610	5,863	21,473	101,538,061	58,796,481	160,334,542
2021	15,041	6,945	21,986	100,889,717	73,200,319	174,090,036
2022	14,465	7,981	22,446	100,442,631	87,861,430	188,304,061
2023	13,886	8,975	22,861	99,591,486	102,264,508	201,855,994
2024	13,302	9,938	23,240	98,823,676	116,770,398	215,594,074

\* Includes spouses of retirees, but excludes those not receiving a subsidy from LACERS.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**EXHIBIT E**

**Summary Statement of Income and Expenses on an Actuarial Value Basis for Retirement, Health, Family Death and Larger Annuity Benefits**

	June 30, 2014	June 30, 2013
<b>Contribution income:</b>		
Employer contributions	\$455,658,786	\$419,266,581
Employee contributions	<u>204,135,914</u>	<u>197,880,631</u>
Net contribution income	\$659,794,700	\$617,147,212
<b>Investment income:</b>		
Interest, dividends and other income	\$297,102,305	\$291,462,597
Recognition of capital appreciation	842,880,565	315,633,473
Less investment and administrative fees	<u>-41,817,589</u>	<u>-37,585,419</u>
Net investment income	<u>\$1,098,165,281</u>	<u>\$569,510,651</u>
<b>Total income available for benefits</b>	<b>\$1,757,959,981</b>	<b>\$1,186,657,863</b>
<b>Less benefit payments:</b>		
Payment of benefits	-\$810,584,271	-\$785,308,070
Refunds of contributions	<u>-15,982,650</u>	<u>-17,697,282</u>
Net benefit payments	-\$826,566,921	-\$803,005,352
<b>Change in reserve for future benefits</b>	<b>\$931,393,060</b>	<b>\$383,652,511</b>

*Note: Results may be slightly off due to rounding.*

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

**EXHIBIT F**

**Summary Statement of Assets for Retirement, Health, Family Death, and Larger Annuity Benefits**

	June 30, 2014	June 30, 2013
<b>Cash equivalents</b>	\$681,628,644	\$606,604,488
<b>Accounts receivable:</b>		
Investment income	\$41,214,524	\$38,025,127
Proceeds from sales	166,513,233	1,688,400,219
Other	<u>14,362,275</u>	<u>8,321,633</u>
Total accounts receivable	\$222,090,032	\$1,734,746,979
<b>Investments:</b>		
Fixed Income	\$2,860,598,505	\$2,655,956,957
Equities	8,617,236,944	7,078,720,385
Real Estate and Alternative Investment	1,967,891,805	1,889,238,399
Other	<u>1,037,019,541</u>	<u>1,157,199,068</u>
Total investments at market value	\$14,482,746,795	\$12,781,114,809
<b>Capital assets</b>	<u>\$2,667,881</u>	<u>\$1,318,307</u>
<b>Total assets</b>	\$15,389,133,352	\$15,123,784,583
<b>Less accounts payable:</b>		
Accounts payable and accrued expenses	-\$17,879,799	-\$56,204,879
Accrued investment expense	-11,993,596	-
Derivative investment	-	-18,518
Purchases of investments	-400,955,915	-1,989,039,830
Security lending collateral	<u>-1,022,532,044</u>	<u>-1,155,982,440</u>
Total accounts payable	-\$1,453,361,354	-\$3,201,245,667
<b>Net assets at market value</b>	<u>\$13,935,771,998</u>	<u>\$11,922,538,917</u>
<b>Net assets at actuarial value</b>	<u>\$12,935,503,398</u>	<u>\$12,004,110,338</u>
<b>Net assets at valuation value (retiree health)</b>	<u>\$1,941,224,810</u>	<u>\$1,734,733,258</u>

Note: Results may be slightly off due to rounding.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
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It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Administration has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

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

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

**EXHIBIT G  
Determination of Actuarial Value of Assets as of June 30, 2014**

1. Market value of assets				\$13,935,771,998
2. Calculation of unrecognized return <sup>(1)</sup>				
	<u>Original</u>	<u>Percent Not</u>	<u>Amount Not</u>	
	<u>Amount</u>	<u>Recognized</u>	<u>Recognized</u>	
(a) Year ended June 30, 2014	\$1,246,285,581	85.71%	\$1,068,244,784	
(b) Year ended June 30, 2013	683,838,549			
(c) Year ended June 30, 2012	-770,325,267			
(d) Year ended June 30, 2011	1,208,621,516	see footnote (2) below		
(e) Year ended June 30, 2010	392,956,483			
(f) Year ended June 30, 2009	-2,964,832,484	83.33%	<u>-67,976,184</u>	
(g) Total unrecognized return				\$1,000,268,600
3. Preliminary actuarial value: (1) - (2g)				\$12,935,503,398
4. Adjustment to be within 40% corridor				0
5. Final actuarial value of assets: (3) + (4)				<u>\$12,935,503,398</u>
6. Actuarial value as a percentage of market value: (5) ÷ (1)				92.8%
7. Market value of health assets				\$2,091,334,640
8. Valuation value of health assets (5) ÷ (1) x (7)				\$1,941,224,810
9. Deferred return recognized in each of the next 6 years:				
(a) Amount recognized on 6/30/2015				\$164,445,560
(b) Amount recognized on 6/30/2016				164,445,560
(c) Amount recognized on 6/30/2017				164,445,560
(d) Amount recognized on 6/30/2018				164,445,560
(e) Amount recognized on 6/30/2019				164,445,560
(f) Amount recognized on 6/30/2020				<u>178,040,797</u>
(g) Subtotal (may not total exactly due to rounding)				\$1,000,268,600

<sup>(1)</sup> Total return minus expected return on a market value basis.

<sup>(2)</sup> Based on action taken by the Board on September 9, 2014, the total amount not recognized as of June 30, 2013 (i.e., -\$81,571,421) has been recognized in six level amounts, with five years of recognition remaining after the June 30, 2014 valuation.



**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
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The chart below details the changes in the ARC from the prior valuation to the current year's valuation.

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**EXHIBIT H**

**Reconciliation of Recommended Contribution from June 30, 2013 to June 30, 2014<sup>1</sup>**

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<b>Recommended Contribution as of June 30, 2013<sup>2</sup></b>	5.80%
Effect of demographic gains and losses <sup>3</sup>	0.18%
Effect of investment gain <sup>3</sup>	-0.33%
Effect of new trends and new starting costs <sup>3</sup>	-0.30%
Effect of new assumptions <sup>4</sup>	0.46%
<b>Recommended Contribution as of June 30, 2014<sup>2, 5</sup></b>	<u>5.81%</u>

<sup>1</sup> Based on contributions at the end of each pay period.

<sup>2</sup> *Before* adjustments to phase in over five years the impact of the actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study.

<sup>3</sup> Changes in unfunded actuarial accrued liability were amortized over 15 years.

<sup>4</sup> Changes in unfunded actuarial accrued liability were amortized over 20 years.

<sup>5</sup> June 30, 2014 contribution rates are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

**SECTION 3: Supplemental Valuation Details for the Los Angeles City Employees' Retirement System  
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**EXHIBIT I  
Solvency Test for OPEB**

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<b>Valuation Date</b>	<b>Aggregate Actuarial Accrued Liabilities For</b>			<b>Valuation Value of Retiree Health Assets</b>	<b>Portion of Accrued Liabilities Covered by Reported Assets</b>		
	<b>(1) Terminated Members</b>	<b>(2) Retirees, Beneficiaries, &amp; Dependents</b>	<b>(3) Active Members</b>		<b>(1) Terminated Members</b>	<b>(2) Retirees, Beneficiaries, &amp; Dependents</b>	<b>(3) Active Members</b>
06/30/2009	\$26,181,886	\$1,118,519,907*	\$1,723,009,711	\$1,342,496,524	100%	100%	11%
06/30/2010	34,454,928	1,124,253,854	1,075,165,650	1,425,726,017	100	100	25
06/30/2011	19,963,811	1,066,350,888	882,392,967	1,546,883,749	100	100	52
06/30/2012	24,454,075	1,083,168,136	1,184,778,016	1,642,373,560	100	100	45
06/30/2013	26,868,636	1,104,832,577	1,280,782,755	1,734,733,258	100	100	47
06/30/2014	41,188,181	1,196,769,321	1,424,895,651	1,941,224,810	100	100	49

\*Includes liabilities for the 2,393 ERIP-electing members.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**EXHIBIT I**

**Summary of Required Supplementary Information**

<b>Valuation date</b>	June 30, 2014	
<b>Actuarial cost method</b>	Entry Age Cost Method, level percent of salary.	
<b>Amortization method</b>	Level percent of payroll – assuming a 4.00% increase in total covered payroll.	
<b>Amortization period</b>	Multiple layers, closed amortization periods. Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 ERIP, are amortized over 15 years. Future ERIPs will be amortized over 5 years. Actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers for the Retirement Plan, were combined and amortized over 30 years. Health trend and premium assumption changes are amortized over 15 years.	
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.	
<b>Actuarial assumptions:</b>		
Investment rate of return	7.50%	
Inflation rate	3.25%	
Real across-the-board salary increase	0.75%	
Projected salary increases	Ranges from 10.50% to 4.40%	
Medical cost trend rate	See table on page 35 in Exhibit II.	
Dental cost trend rate	5.00%	
Medicare Part B premium	2.50% for the 2014-15 fiscal year (calculated based on the actual increase in Medicare B premium from 2014 to 2015). 5.00% for years following the 2015 calendar year.	
<b>Plan membership:</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>
Current retirees, beneficiaries, and dependents receiving benefits	18,265	18,242
Current active participants	24,009	24,441
Terminated participants entitled but not yet eligible	<u>955</u>	<u>861</u>
<b>Total</b>	<b>43,229</b>	<b>43,544</b>

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**EXHIBIT II**

**Actuarial Assumptions and Actuarial Cost Method**

**Measurement Date:** June 30, 2014

**Data:** LACERS provided detailed census data and financial data for post-employment benefits.

**Post-Retirement Mortality Rates:**

*Healthy Members and All Beneficiaries:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

*Disabled Members:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.

The tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:* RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Age	Rate (%)	
	Disability	Termination*
25	0.01	5.75
30	0.03	5.75
35	0.05	4.85
40	0.09	3.50
45	0.15	2.70
50	0.19	2.50
55	0.20	2.35
60	0.20	2.25

\* Rates for members with five or more years of service. Termination rates are zero for members eligible to retire.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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Rates of termination for members with less than 5 years of service are as follows:

<b>Service</b>	<b>Rate (%)</b>
	<b>Termination (Based on Service)</b>
0	13.25
1	11.00
2	8.75
3	7.25
4	5.75

**Retirement Rates:**

<b>Age</b>	<b>Rate (%)</b>			
	<b>Tier 1</b>		<b>Tier 2</b>	
	<b>Non-55/30</b>	<b>55/30</b>	<b>Non-55/30</b>	<b>55/30</b>
50	6.0	0.0	0.0	0.0
51	3.0	0.0	0.0	0.0
52	3.0	0.0	0.0	0.0
53	3.0	0.0	0.0	0.0
54	16.0	0.0	0.0	0.0
55	6.0	20.0	3.5	8.0
56	6.0	14.0	3.5	7.0
57	6.0	14.0	3.5	7.0
58	6.0	14.0	3.5	7.0
59	6.0	14.0	3.5	7.0
60	6.0	14.0	5.5	7.0
61	6.0	14.0	5.5	9.0
62	7.0	15.0	5.5	11.0
63	7.0	15.0	5.5	13.0
64	7.0	16.0	5.5	16.0
65	12.0	17.0	12.0	19.0
66	12.0	17.0	12.0	19.0
67	12.0	17.0	12.0	19.0
68	12.0	17.0	12.0	19.0
69	12.0	17.0	12.0	19.0
70	100.0	100.0	100.0	100.0

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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<b>Retirement Age and Benefit for Inactive Vested Participants:</b>	Assume retiree health benefit will be paid at the later of age 58 or the current attained age.
<b>Exclusion of Inactive Vested:</b>	Inactive vested with less than 10 years of service are excluded.
<b>Definition of Active Members:</b>	First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.
<b>Unknown Data for Members:</b>	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
<hr/>	
<b>Service:</b>	Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.
<b>Future Benefit Accruals:</b>	1.0 year of service per year.
<b>Net Investment Return:</b>	7.50%
<b>Salary Increases:</b>	Inflation: 3.25%; plus additional 0.75% "across the board" salary increases (other than inflation); plus the following merit and promotional increases:

<u>Service</u>	<u>Percentage Increase</u>
0	6.50%
1	6.20%
2	5.10%
3	3.10%
4	2.10%
5	1.10%
6	1.00%
7	0.90%
8	0.70%
9	0.60%
10+	0.40%

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**Actuarial Value of Assets:** The market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

**Actuarial Cost Method:** Entry Age Cost Method, level percent of salary.

**Per Capita Cost Development:** The assumed costs on a composite basis are the future costs of providing postemployment health care benefits at each age. To determine the assumed costs on a composite basis, historical premiums are reviewed and adjusted for increases in the cost of health care services.

Maximum Dental Subsidy (same as premium)

<u>Carrier</u>	<u>Participation Percent</u>	<u>Monthly 2014-2015 Fiscal Year Subsidy</u>
Delta Dental PPO	77.6%	\$43.02
DeltaCare USA HMO	22.4%	\$12.71

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**Per Capita Cost Development – Tier 1, Not Subject to Medical Subsidy Freeze:  
Participant Under Age 65 or Not Eligible for Medicare A & B**

2014-2015 Fiscal Year	Observed and Assumed Election Percent	Single Party			Married/With Domestic Partner			Eligible Survivor		
		Monthly Premium*	Maximum Subsidy**	Subsidy	Monthly Premium*	Maximum Subsidy**	Subsidy	Monthly Premium*	Maximum Subsidy**	Subsidy
<b>CARRIER</b>										
Kaiser HMO	<b>61.5%</b>	\$758.85	\$1,522.04	<b>\$758.85</b>	\$1,517.70	\$1,522.04	<b>\$1,517.70</b>	\$758.85	\$758.85	<b>\$758.85</b>
Anthem Blue Cross PPO	<b>21.1%</b>	\$1,105.37	\$1,522.04	<b>\$1,105.37</b>	\$2,205.95	\$1,522.04	<b>\$1,522.04</b>	\$1,105.37	\$758.85	<b>\$758.85</b>
Anthem Blue Cross HMO	<b>17.4%</b>	\$881.75	\$1,522.04	<b>\$881.75</b>	\$1,758.71	\$1,522.04	<b>\$1,522.04</b>	\$881.75	\$758.85	<b>\$758.85</b>

\* With the exception of Kaiser, the amounts above reflect the inclusion of the vision insurance plan premium.

\*\* The amounts shown in the tables above apply to Tier 1 members only. For Tier 2 members hired on or after July 1, 2013, the medical plan will be for single coverage and for retiree only. In addition, that maximum subsidy will be set at an amount equal to the lowest-cost single-party plan for those not enrolled in Medicare Parts A and B (\$758.85 per month for 2014-2015).

**Participant Eligible for Medicare A & B**

2014-2015 Fiscal Year	Observed and Assumed Election Percent	Single Party			Married/With Domestic Partner			Eligible Survivor		
		Monthly Premium*	Maximum Subsidy**	Subsidy	Monthly Premium*	Maximum Subsidy**	Subsidy	Monthly Premium*	Maximum Subsidy**	Subsidy
<b>CARRIER</b>										
Kaiser Senior Adv. HMO	<b>58.2%</b>	\$229.82	\$229.82	<b>\$229.82</b>	\$459.64	\$459.64	<b>\$459.64</b>	\$229.82	\$229.82	<b>\$229.82</b>
Anthem Blue Cross Medicare Supplement	<b>30.0%</b>	\$508.50	\$508.50	<b>\$508.50</b>	\$1,012.20	\$925.17	<b>\$925.17</b>	\$508.50	\$508.50	<b>\$508.50</b>
UHC Medicare Adv. HMO***	<b>11.8%</b>	\$246.57	\$246.57	<b>\$246.57</b>	\$488.34	\$488.34	<b>\$488.34</b>	\$246.57	\$246.57	<b>\$246.57</b>

\* With the exception of Kaiser, the amounts above reflect the inclusion of the vision insurance plan premium.

\*\* The amounts shown in the tables above apply to Tier 1 members only. For Tier 2 members hired on or after July 1, 2013, the maximum medical plan premium subsidy will be for single coverage and for retiree only (for example, \$229.82 and \$508.73 per month for Kaiser HMO and Blue Cross Medicare Supplement, respectively in 2014-2015).

\*\*\* Rates for CA plan.



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Members who are subject to the retiree medical subsidy freeze will have monthly health insurance subsidy maximums fixed at the levels in effect at July 1, 2011, as shown in the table below:

	<b>Single Party</b>	<b>Married/With Domestic Partner</b>	<b>Eligible Survivor</b>
Under 65 – All Plans	\$1,190.00	\$1,190.00	\$593.62
Over 65			
Kaiser Senior Adv. HMO	\$203.27	\$406.54	\$203.27
Anthem Blue Cross	\$478.43	\$530.52	\$478.43
UHC Medicare Adv. HMO*	\$219.09	\$433.93	\$219.09

\* Rates for CA plan.

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- Marital Status:** 60% of male and 30% of female retirees who receive a subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage.
- Spouse Age Difference:** Male retirees are assumed to be 4 years older than their female spouses. Female retirees are assumed to be 2 years younger than their male spouses.
- Surviving Spouse Coverage:** With regard to members who are currently alive, 100% of eligible spouses or domestic partners are assumed to elect continued health coverage after the Member's death.
- Participation:** Retiree Medical and Dental Coverage Election:

Service Range	Percent Covered*
10 – 14	65%
15 – 19	80%
20 – 24	90%
25 and Over	95%

\* *Inactive members are assumed to elect coverages at 50% of the rates shown above.*

100% of retirees becoming eligible for Medicare are assumed to be covered by both Parts A and B.

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**Health Care Cost Subsidy Trend Rates:**

Trends to be applied in following fiscal years, to all health plans.						
Trend is to be applied to premium for shown fiscal year to calculate next fiscal year's projected premium						
First Fiscal Year (July 1, 2014 through June 30, 2015)						
PLAN	Anthem Blue Cross PPO, Under Age 65	Anthem Blue Cross Medicare Supplement	Kaiser HMO, Under Age 65	Kaiser Senior Advantage HMO	Anthem Blue Cross HMO, Under 65	UHC Medicare Adv. HMO
Trend to be applied to 2014-2015 Fiscal Year premium	0.48%	6.55%	7.52%	5.55%	7.59%	6.59%
			The fiscal year trend rates are based on the following calendar year trend rates:			
Trend (Approx.)			Trend (applied to calculate following year premium)			
Fiscal Year	Medicare	Non-Medicare	Calendar Year	Non-Medicare	Medicare	
2015-2016	6.88%	6.88%	2015	7.00%	7.00%	
2016-2017	6.63%	6.63%	2016	6.75%	6.75%	
2017-2018	6.38%	6.38%	2017	6.50%	6.50%	
2018-2019	6.13%	6.13%	2018	6.25%	6.25%	
2019-2020	5.88%	5.88%	2019	6.00%	6.00%	
2020-2021	5.63%	5.63%	2020	5.75%	5.75%	
2021-2022	5.38%	5.38%	2021	5.50%	5.50%	
2022-2023	5.13%	5.13%	2022	5.25%	5.25%	
2023 and later	5.00%	5.00%	2023 and later	5.00%	5.00%	
Dental Premium Trend		5.00% for all years				
Medicare Part B Premium Trend		2.50% for the 2014-15 fiscal year (calculated based on the actual increase in Medicare B premium from 2014 to 2015). 5.00% for years following the 2015 calendar year.				

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**Health Care Reform:**

As previously directed by LACERS, we have not reflected in the current valuation the impact of potential excise tax imposed by the Affordable Care Act (ACA) and related statutes on certain health plans was not included in calculating the contribution rates for the employer. We understand that a proposed statement currently under review by the Governmental Accounting Standards Board (GASB) for financial reporting purposes is expected to require the inclusion of the excise tax in the liability. The current exposure draft of the statement would be effective for fiscal years beginning after December 15, 2015.

**Administrative Expenses:**

No administrative expenses were valued separately from the premium costs.

**Plan Design:**

Development of plan liabilities was based on the substantive plan of benefits in effect as described in Exhibit III.

**Assumption Changes  
Since Prior Valuation:**

Health care cost trend rates have been updated.

Starting premium costs were revised to reflect updated data.

Medical and dental carrier election assumptions were updated.

Some of the demographic assumptions have been updated as a result of the experience study as of June 30, 2014.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**Change in Actuarial Assumptions:** Based on the June 30, 2014 Actuarial Experience Study, the following actuarial assumptions were changed. Previously, these assumptions were as follows:

**Post-Retirement Mortality Rates:**

*Healthy Members and  
All Beneficiaries:*

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

*Disabled Members:*

RP-2000 Combined Healthy Mortality Table, set forward five years for males and set forward six years for females.

**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:*

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

Age	Termination*
25	5.50
30	5.35
35	4.35
40	3.15
45	2.30
50	1.85
55	1.75
60	1.75

All deaths are assumed to be non-duty related.

No termination is assumed after a member is eligible for retirement.

\* *Termination rates for actives with less than 5 years of service are as follows:*

Service	Rate (%) Termination (Based on Service)
0	11.25
1	8.00
2	7.25
3	6.25
4	5.50

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

**Retirement Rates:**

<b>Age</b>	<b>Rate (%)</b>	
	<b>Tier 1</b>	
	<b>Non-55/30</b>	<b>55/30</b>
50	8.0	0.0
51	4.0	0.0
52	4.0	0.0
53	4.0	0.0
54	15.0	0.0
55	8.0	20.0
56	8.0	15.0
57	8.0	15.0
58	8.0	15.0
59	8.0	15.0
60	8.0	15.0
61	8.0	16.0
62	8.0	17.0
63	8.0	18.0
64	8.0	19.0
65	13.0	20.0
66	13.0	20.0
67	13.0	20.0
68	13.0	20.0
69	13.0	20.0
70	100.0	100.0

**Retirement Age and Benefit for  
Inactive Vested Participants:**

Assume retiree health benefit will be paid at the later of age 57 or the current attained age.

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

**Net Investment Return:** 7.75%

**Salary Increases:** Inflation: 3.50%; additional 0.75% “across the board” salary increases (other than inflation); plus the following promotional and merit increases:

*For members with under 5 years of service:*

<u>Service</u>	<u>Percentage Increase</u>
0	7.00%
1	6.25%
2	4.75%
3	3.50%
4	2.25%

*For members with 5 or more years of service:*

<u>Age</u>	<u>Percentage Increase*</u>
20 – 24	2.25%
25 – 29	2.00%
30 – 34	1.25%
35 – 39	1.00%
40 – 44	0.75%
45 – 49	0.50%
50 – 54	0.40%
55 – 69	0.40%

\* At central age in age range shown.

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**Funding Policy:** The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability. Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
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**Changes in Actuarial Assumptions (continued):**

**Funding Policy (continued):**

individual basis. Entry age is calculated as age on the valuation date minus years of service. Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15 year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 30 year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15 year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

In no event will the recommended contribution be less than the minimum Annual Required Contribution (ARC) as determined under GASB Statements 25 and 27.



**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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**EXHIBIT III**

**Summary of Plan**

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This exhibit summarizes the major benefit provisions as included in the valuation. To the best of our knowledge, the summary represents the substantive plans as of the measurement date. It is not intended to be, nor should it be interpreted as, a complete statement of all benefit provisions.

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**Membership Eligibility:**

- Tier 1 (§4.1002(a)) :* All employees who became members of the Retirement System before July 1, 2013, and certain non-Tier 2 employees who became members of the Retirement System on or after July 1, 2013.
- Tier 2 (§4.1052(a)):* All employees who became members of the Retirement System on or after July 1, 2013, except as provided otherwise in Section 4.1002.1 of the LACERS Administrative Code.

**Benefit Eligibility:**

- Tier 1 (§4.1111(a))  
and Tier 2 (§4.1121(a)):* Retired age 55 or older with at least 10 years of service (including deferred vested members who terminate employment and receive a retirement benefit from LACERS), or if retirement date is between October 2, 1996, and September 30, 1999 at age 50 or older with at least 30 years of service. Benefits are also payable to spouses, domestic partners, or other qualified dependents while the retiree is alive. Please note that the health subsidy is not payable to a disabled retiree before the member reaches age 55.

**Medical Subsidy for Members  
Not Subject to Freeze:**

*Under Age 65 or Over Age 65  
And Enrolled in Medicare Part B*

- Tier 1 (§4.1111(b)):* The System will pay 4% of the maximum health subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum health subsidy. As of July 1, 2014, the maximum health subsidy is \$1,464.00 per month, and will increase to \$1,580.08 on January 1, 2015.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

*Tier 2 (§4.1121(c)):*

The System will pay 40% of the maximum health subsidy (limited to actual premium) for a retiree with 10 years of service credit and an additional 3% for each additional year of Service Credit, up to 100% of the maximum health subsidy. As of July 1, 2014, the maximum health subsidy is \$729.83 per month and will increase to \$787.87 on January 1, 2015.

*Over Age 65 and Enrolled in  
Both Medicare Parts A and B*

*Tier 1 (§4.1111(e)) and  
Tier 2 (§4.1121(d)):*

For retirees, a maximum health subsidy limited to the highest approved single-party monthly premium of the plan per §4.1112(d) in which the member is enrolled, is provided subject to the following vesting schedule:

<u>Completed Years of Service</u>	<u>Vested Percentage</u>
10-14	75%
15-19	90%
20+	100%

**Subsidy Freeze for Tier 1:**

As of the June 30, 2011 valuation, the retiree health benefits program was changed to freeze the medical subsidy for non-retired members who did not begin to contribute an additional 2% or 4% of employee contributions to the Pension Plan.

The frozen subsidy is different for Medicare and non-Medicare retirees.

The freeze applies to the medical subsidy limits at the 2011 calendar year level.

The freeze does not apply to the dental subsidy or the Medicare Part B premium reimbursement.

**Dependents:**

*Tier 1 (§4.1122(e)(4)):*

An additional amount is added for coverage of dependents which shall not exceed the amount provided to a retiree not enrolled in Medicare Parts A and B and covered by the same medical plan with the same years of service. The combined member and dependent subsidy shall not exceed the actual premium.

*Tier 2 (§4.1121(d)(4)):*

None of the subsidy may be applied toward coverage for dependents.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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**Dental Subsidy for Members:**

*Tier 1 (§4.1114(b)):*

The System will pay 4% of the maximum dental subsidy (limited to actual premium) for each year of Service Credit, up to 100% of the maximum dental subsidy. As of July 1, 2014, the maximum dental subsidy is \$42.80 per month and will increase to \$43.24 beginning January 1, 2015.

There is no subsidy available to spouses or domestic partners. There is also no reimbursement for dental plans not sponsored by the System.

*Tier 2 (§4.1124(b)):*

The System will pay 40% of the maximum dental subsidy (limited to actual premium) for a retiree with 10 years of service credit and an additional 3% for each additional year of Service Credit, up to 100% of the maximum dental subsidy. As of July 1, 2014, the maximum dental subsidy is \$42.80 per month and will increase to \$43.24 beginning January 1, 2015.

**Medicare Part B Subsidy  
for Members:**

*Tier 1 (§4.1113) and  
Tier 2 (§4.1123):*

If a City Retiree is covered by both Medicare Parts A and B, and enrolled in a LACERS medical plan or participates in the LACERS Retiree Medical Premium Reimbursement Program, LACERS will reimburse the retiree the basic Medicare Part B premium.

**Surviving Spouse Subsidy**

*Tier 1 (§4.1115)*

The surviving spouse or domestic partner will be entitled to a health subsidy (limited to the actual single-party premium) based on the member's years of service and the surviving dependent's eligibility for Medicare.

*Under Age 65 or Over Age 65  
And Only Enrolled in  
Medicare Part B:*

The maximum health subsidy available for survivors is the Kaiser single-party premium (\$729.83 per month as of July 1, 2014, increasing to \$787.87 on January 1, 2015) or the single-party premium of the plan in which the survivor is enrolled, whichever is less.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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*Over Age 65 and Enrolled in  
Both Medicare Parts A and B:*

For survivors, a maximum health subsidy limited to the single-party monthly premium of the plan in which the survivor is enrolled, is provided subject to the following vesting schedule:

<u>Completed Years of Service</u>	<u>Vested Percentage</u>
10-14	75%
15-19	90%
20+	100%

**Surviving Spouse Subsidy  
For Tier 2:**

No medical plan premium subsidy shall be provided to the survivor of a Tier 2 retiree.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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**EXHIBIT IV  
Definitions of Terms**

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

**Assumptions or Actuarial  
Assumptions:**

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

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

**Actuarial Present Value of Total  
Projected Benefits (APB):**

Present value of all future benefit payments for current retirees and active employees taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

**Normal Cost:**

The amount of contributions required to fund the benefit 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 Retirees:**

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

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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<b>Actuarial Value of Assets (AVA):</b>	The value of assets used by the actuary in the valuation. These may be at market value or some other method used to smooth variations in market value from one valuation to the next.
<b>Funded Ratio:</b>	The ratio AVA/AAL.
<b>Unfunded Actuarial Accrued Liability (UAAL):</b>	The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
<b>Amortization of the Unfunded Actuarial Accrued Liability:</b>	Payments made over a period of years equal in value to the Plan's unfunded actuarial accrued liability.
<b>Investment Return (discount rate):</b>	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. If the plan is funded on a pay-as-you-go basis, the discount rate is tied to the expected rate of return on day-to-day employer funds.
<b>Covered Payroll:</b>	Annual reported salaries for all active participants on the valuation date.
<b>ARC as a Percentage of Covered Payroll:</b>	The ratio of the annual required contribution to covered payroll.
<b>Health Care Cost Trend Rates:</b>	The annual rate of increase in net claims costs per individual benefiting from the Plan.
<b>Annual Required Contribution (ARC):</b>	The ARC is equal to the sum of the normal cost and the amortization of the unfunded actuarial accrued liability.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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<b>Net OPEB Obligation (NOO):</b>	The NOO is the cumulative difference between the annual OPEB cost and actual contributions made. If the plan is not pre-funded, the actual contribution would be equal to the annual benefit payments less retiree contributions.
<b>Annual OPEB Cost (AOC):</b>	Annual OPEB cost is the measure required by GASB 45 of a sole or agent employer's "cost" of participating in an OPEB plan. When an employer has no net OPEB obligation, annual OPEB cost is equal to the ARC. When a net OPEB obligation has a liability (positive) balance, annual OPEB cost is equal to (a) the ARC, plus (b) one year's interest on the beginning balance of the net OPEB obligation, less (c) an adjustment to the ARC to offset, approximately, the amount included in the ARC for amortization of the past contribution deficiencies. When a net OPEB obligation has an asset (negative) balance, the interest adjustment should be deducted from and the ARC adjustment should be added to the ARC, to determine annual OPEB cost.
<b>ARC Adjustment:</b>	The ARC adjustment is an amortization payment based on the prior year NOO. The purpose of the interest and ARC adjustments is to avoid "double-counting" annual OPEB cost and liabilities. Without the adjustments, annual OPEB cost and the net OPEB obligation (liability) would be overstated by the portion of the amortization amount previously recognized in annual OPEB cost. With the adjustments, annual OPEB cost should be approximately equal to the ARC that would have been charged if all prior ARCs had been paid in full, plus one year's interest on the net OPEB obligation.
<b>Employer Contributions:</b>	For the purposes of GASB 43/45, an employer has contributed to an OPEB plan if the employer has (a) provided benefits directly to retired plan members or their beneficiaries, (b) paid insurance premiums to insure the payment of benefits, or (c) irrevocably transferred assets to a qualifying trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.

**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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**EXHIBIT V**

**Accounting Requirements**

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The Governmental Accounting Standards Board (GASB) issued Statement Number 43 -- *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, and Statement Number 45 – *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Under these statements, all state and local government entities that provide other post-employment benefits (OPEB) are required to report the cost of these benefits on their financial statements. The accounting standards supplement cash accounting, under which the expense for postemployment benefits is equal to benefit and administrative costs paid on behalf of retirees and their dependents (*i.e.*, a pay-as-you-go basis).

The statements cover postemployment benefits of health, prescription drug, dental, vision and life insurance coverage for retirees; long-term care coverage, life insurance and death benefits that are *not* offered as part of a pension plan; and long-term disability insurance for employees. The benefits valued in this report are limited to those described in Exhibit III of Section 4, which are based on those provided under the terms of the substantive plan in effect at the time of the valuation and on the pattern of sharing costs between the employer and plan members. The projection of benefits is not limited by legal or contractual limits on funding the plan unless those limits clearly translate into benefit limits on the substantive plan being valued.

The new standards introduce an accrual-basis accounting requirement, thereby recognizing the employer cost of postemployment benefits over an employee's career. The

standards also introduce a consistent accounting requirement for both pension and non-pension benefits.

The total cost of providing postemployment benefits is projected, taking into account assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions. These assumptions are summarized in Exhibit II of Section 4. This amount is then discounted to determine the actuarial present value of the total projected benefits (APB). The actuarial accrued liability (AAL) is the portion of the present value of the total projected benefits allocated to years of employment prior to the measurement date. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and actuarial value of assets in the Plan.

Once the UAAL is determined, the Annual Required Contribution (ARC) is determined as the normal cost (the APB allocated to the current year of service) and the amortization of the UAAL. This ARC is compared to actual contributions made and any difference is reported as the Net OPEB Obligation (NOO). In addition, Required Supplementary Information (RSI) must be reported, including historical information about the UAAL and the progress in funding the Plan. Exhibit IV of Section 4 contains a definition of terms as well as more information about GASB 43/45 concepts.

The calculation of an accounting obligation does not, in and of itself, imply that there is any legal liability to provide the benefits valued, nor is there any implication



**SECTION 4: Supporting Information for the Los Angeles City Employees' Retirement System  
Measurement Under GASB 43 and 45 as of June 30, 2014**

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that the Employer is required to implement a funding policy to satisfy the projected expense.

Actuarial calculations reflect a long-term perspective, and the methods and assumptions use techniques designed to reduce short-term volatility in accrued liabilities and the actuarial value of assets, if any.

Actuarial valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future, and the actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future.

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# Los Angeles City Employees' Retirement System

Governmental Accounting Standards (GAS) 67  
Actuarial Valuation as of June 30, 2014



This report has been prepared at the request of the Board of Administration 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 Administration 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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100 MONTGOMERY STREET SUITE 500 SAN FRANCISCO, CA 94104  
T 415.263.8200 www.segalco.com

*December 4, 2014*

*Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401*

*Dear Board Members:*

*We are pleased to submit this Governmental Accounting Standards (GAS) 67 Actuarial Valuation as of June 30, 2014. It contains various information that will need to be disclosed in order to comply with GAS 67.*

*This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the System. The census and financial information on which our calculations were based was prepared by LACERS. 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; and changes in plan provisions or applicable law.*

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

*We look forward to reviewing this report with you and to answering any questions.*

*Sincerely,*

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

By:

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

JRC/bqb

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

## SECTION 1

### VALUATION SUMMARY

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## SECTION 2

### GASB 67 INFORMATION

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## **SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

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### **Purpose**

This report has been prepared by Segal Consulting to present certain disclosure information required by Statement No. 67 of the Governmental Accounting Standards Board as of June 30, 2014. This valuation is based on:

- The benefit provisions of the Pension Plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2014, provided by LACERS;
- The assets of the Plan as of June 30, 2014, provided by LACERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

### **Significant Issues in Valuation Year**

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

- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 is effective with the fiscal year ending June 30, 2014 for plan reporting and Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information contained in this valuation is intended to be used (along with other information) in order to comply with Statement 67.
- It is important to note that the new GASB rules only redefine pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices.
- When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as LACERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as LACERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) calculated on a market value basis.
- Even though a change in the actuarial assumptions increased the TPL by about \$0.79 billion, the NPL still decreased from \$4.73 billion as of June 30, 2013 to \$4.46 billion as of June 30, 2014 due to the approximately 18% return on the market value of assets during 2013/2014 that exceeded the assumption of 7.75% (used in the June 30, 2013 valuation). Changes in these values during the last two fiscal years ending June 30, 2013 and June 30, 2014 can be found in Exhibit 3.
- The NPLs measured as of June 30, 2014 and 2013 have been determined from the actuarial valuations as of June 30, 2014 and June 30, 2013, respectively.
- The discount rates used to determine the TPL and NPL as of June 30, 2014 and 2013 were 7.50% and 7.75%, respectively, following the same assumptions used by the System in the pension funding valuations as of the same dates. Details on the derivation of the discount rate can be found in Exhibit 5 of Section 2. Various other information that is required to be disclosed can be found throughout Exhibits 1 through 4 in Section 2.

**SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

**Summary of Key Valuation Results**

	<b>2014</b>	<b>2013</b>
<b>Disclosure elements for fiscal year ending June 30:</b>		
Service cost <sup>(1)</sup>	\$317,185,480	\$312,372,769
Total pension liability	16,248,853,099	14,881,663,162
Plan fiduciary net position	11,791,079,473	10,154,486,098
Net pension liability	4,457,773,626	4,727,177,064
<b>Schedule of contributions for fiscal year ending June 30:</b>		
Actuarially determined contributions	\$357,649,232	\$346,180,852
Actual contributions	357,649,232	346,180,852
Contribution deficiency (excess)	0	0
<b>Demographic data for plan year ending June 30:</b>		
Number of retired members and beneficiaries	17,532	17,362
Number of vested terminated members <sup>(2)</sup>	6,031	5,799
Number of active members	24,009	24,441
<b>Key assumptions as of June 30:</b>		
Investment rate of return	7.50%	7.75%
Inflation rate	3.25%	3.50%
Projected salary increases <sup>(3)</sup>	Ranges from 4.40% to 10.50%	Ranges from 4.65% to 11.25%

<sup>(1)</sup> The service cost is always based on the previous year's assumptions, meaning both values are based on those assumptions shown as of June 30, 2013.

<sup>(2)</sup> Includes terminated members due a refund of employee contributions.

<sup>(3)</sup> Includes inflation at 3.25% (3.50% for the June 30, 2013 valuation) plus real across the board salary increase of 0.75% plus merit and promotional increases.

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

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**EXHIBIT 1**

**General Information – “Financial Statements”, Note Disclosures and Required Supplementary Information for a Single-Employer Pension Plan**

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**Plan Description**

*Plan administration.* The Los Angeles City Employees' Retirement System (LACERS) was established by City Charter in 1937. LACERS is a single employer public employee retirement system whose main function is to provide retirement benefits to the civilian employees of the City of Los Angeles.

Under the provisions of the City Charter, the Board of Administration (the "Board") has the responsibility and authority to administer the Plan and to invest its assets. The Board members serve as trustees and must act in the exclusive interest of the Plan's members and beneficiaries. The Board has seven members: four members, one of whom shall be a retired member of the system, shall be appointed by the Mayor subject to the approval of the Council; two members shall be active employee members of the system elected by the active employee members; one shall be a retired member of the system elected by the retired members of the system.

*Plan membership.* At June 30, 2014, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	17,532
Vested terminated members entitled to, but not yet receiving benefits <sup>(1)</sup>	6,031
Active members	<u>24,009</u>
Total	47,572

<sup>(1)</sup> Includes terminated members due a refund of employee contributions.

*Benefits provided.* LACERS provides service retirement, disability, death and survivor benefits to eligible employees. Employees of the City become members of LACERS on the first day of employment in a position with the City in which the employee is not excluded from membership. Members employed prior to July 1, 2013 are designated as Tier 1 and those employed on or after July 1, 2013 are designated as Tier 2 (unless a specific exemption applies to the employee, providing a right to Tier 1 status).

Tier 1 members are eligible to retire for service with a normal retirement benefit once they attain the age of 70, or the age of 60 with 10 or more years of continuous service, or the age of 55 with 30 or more years of service. Tier 2 members are eligible to



**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

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retire for service with a normal retirement benefit once they attain the age of 70, or the age of 65 with 10 or more years of continuous service.

Tier 1 members are eligible to retire for disability once they have 5 or more years of continuous service. Tier 2 members are eligible to retire for disability once they have 10 or more years of continuous service.

Under the Tier 1 formula, the monthly service retirement allowance at normal retirement age is 2.16% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 1 members reaching age 55 with 10 or more years of continuous service, or with 30 or more years of service at any age. Sample Tier 1 early retirement reduction factors, for retirement below age 60, are as follows:

<u>Age</u>	<u>Early Retirement Reduction Factor</u>
45	0.6250
50	0.7750
55	0.9250
60	1.0000

Under the Tier 2 formula, the monthly service retirement allowance at normal retirement age is 2.00% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 2 members reaching age 55 with 10 or more years of continuance service. The Tier 2 retirement factors at early retirement ages are as follows:

<u>Age</u>	<u>Retirement Factor</u>	<u>Age</u>	<u>Retirement Factor</u>
55	0.7700%	60	1.2200%
56	0.8400%	61	1.3400%
57	0.9200%	62	1.4800%
58	1.0100%	63	1.6300%
59	1.1100%	64	1.8100%

Under Tier 1, pension benefits are calculated based on the highest average salary earned during a 12-month period (including base salary plus regularly assigned bonuses or premium pay). Under Tier 2, pension benefits are calculated based on the highest average salary earned during a 36-month period (limited to base pay).

## SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System

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For Tier 1 members, the maximum monthly retirement allowance is 100% of the final average monthly compensation. For Tier 2 members, the maximum monthly retirement allowance is 75% of the final average monthly compensation.

In lieu of the service retirement allowance under the Tier 1 or Tier 2 formula (“unmodified option”), the member may choose an optional retirement allowance. The unmodified option provides the highest monthly benefit and a 50% continuance to an eligible surviving spouse or domestic partner for Tier 1 members (no continuance is provided to beneficiaries of Tier 2 members under the unmodified option). The optional retirement allowances require a reduction in the unmodified option amount in order to allow the member the ability to provide various benefits to a surviving spouse, domestic partner, or named beneficiary.

LACERS provides annual cost-of-living adjustments (COLAs) to all retirees. The cost-of-living adjustments are made each July 1 based on the percentage change in the average of the Consumer Price Index for the Los Angeles-Riverside-Orange County Area--All Items For All Urban Consumers. It is capped at 3.0% for Tier 1 and 2.0% for Tier 2. Tier 2 members may purchase additional 1% COLA protection at full actuarial cost.

LACERS contributes to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Administration. Employer contribution rates are adopted annually based upon recommendations received from LACERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2014 (based on the June 30, 2012 valuation) was 19.84% of compensation<sup>1</sup>.

All members are required to make contributions to LACERS regardless of the tier in which they are included. Currently, most Tier 1 members contribute at 11% of compensation and all Tier 2 members contribute at 10% of compensation.

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<sup>1</sup> After adjustments to phase in over five years the impact of new actuarial assumptions (as a result of the June 30, 2011 Triennial Experience Study) on the City's contributions.

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

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**EXHIBIT 2**

**Net Pension Liability**

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The components of the net pension liability of LACERS are as follows:

	<b>June 30, 2014</b>	<b>June 30, 2013</b>
Total pension liability	\$16,248,853,099	\$14,881,663,162
Plan fiduciary net position	<u>-11,791,079,473</u>	<u>-10,154,486,098</u>
System's net pension liability	\$4,457,773,626	\$4,727,177,064
Plan fiduciary net position as a percentage of the total pension liability	72.57%	68.23%

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The net pension liability was measured as of June 30, 2014 and 2013 and determined based upon the Plan fiduciary net position (plan assets) and total pension liability from actuarial valuations as of June 30, 2014 and 2013, respectively.

*Actuarial assumptions.* The total pension liabilities as of June 30, 2014 and June 30, 2013 were determined by actuarial valuations as of June 30, 2014 and June 30, 2013, respectively. The actuarial assumptions used in this June 30, 2014 valuation were based on the results of an experience study for the period from July 1, 2011 through June 30, 2014. They are the same as the assumptions used in the June 30, 2014 funding actuarial valuation for LACERS. The assumptions are outlined on page 8 of this report. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

Inflation	3.25%
Salary increases	Ranges from 4.40% to 10.50% based on years of service, including inflation
Investment rate of return	7.50%, net of pension plan investment expense, including inflation
Other assumptions	Same as those used in the June 30, 2014 actuarial valuation

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Expected Real Rate of Return</b>
U.S. Large Cap Equity	20.40%	5.94%
U.S. Small Cap Equity	3.60%	6.64%
Developed International Equity	21.75%	6.98%
Emerging Market Equity	7.25%	8.48%
Core Bonds	16.53%	0.71%
High Yield Bonds	2.47%	2.89%
Private Real Estate	5.00%	4.69%
Cash	1.00%	(0.46)%
Credit Opportunities	5.00%	3.07%
Public Real Assets	5.00%	3.41%
Private Equity	<u>12.00%</u>	10.51%
<b>Total</b>	<b>100.00%</b>	

*Discount rate:* The discount rates used to measure the total pension liability were 7.50% and 7.75% as of June 30, 2014 and June 30, 2013, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of both June 30, 2014 and June 30, 2013.

*Sensitivity of the net pension liability to changes in the discount rate.* The following presents the net pension liability of LACERS as of June 30, 2014, calculated using the discount rate of 7.50%, as well as what LACERS' net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

	<b>1% Decrease (6.50%)</b>	<b>Current Discount (7.50%)</b>	<b>1% Increase (8.50%)</b>
Net pension liability as of June 30, 2014	\$6,655,035,324	\$4,457,773,626	\$2,631,737,614

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

**EXHIBIT 3**

**Schedules of Changes in LACERS Net Pension Liability – Last Two Fiscal Years**

	<b>2014</b>	<b>2013</b>
<b>Total pension liability</b>		
Service cost	\$317,185,480	\$312,372,769
Interest	1,149,966,081	1,112,561,414
Change of benefit terms	0	0
Differences between expected and actual experience	-164,247,475	-235,829,202
Changes of assumptions	785,439,114	0
Benefit payments, including refunds of employee contributions	<u>-721,153,263</u>	<u>-701,400,393</u>
<b>Net change in total pension liability</b>	<b>\$1,367,189,937</b>	<b>\$487,704,588</b>
<b>Total pension liability – beginning</b>	<b><u>14,881,663,162</u></b>	<b><u>14,393,958,574</u></b>
<b>Total pension liability – ending (a)</b>	<b><u>\$16,248,853,099</u></b>	<b><u>\$14,881,663,162</u></b>
<b>Plan fiduciary net position</b>		
Contributions – employer	\$357,649,232	\$346,180,852
Contributions – employee	203,975,276	197,722,165
Net investment income	1,810,782,123	1,268,938,657
Benefit payments, including refunds of employee contributions	-721,153,263	-701,400,393
Administrative expense	-12,372,426	-13,280,859
Other (Transfer to Larger Annuity Reserve)	<u>-2,287,567</u>	<u>-2,513,462</u>
<b>Net change in plan fiduciary net position</b>	<b>\$1,636,593,375</b>	<b>\$1,095,646,960</b>
<b>Plan fiduciary net position – beginning</b>	<b><u>10,154,486,098</u></b>	<b><u>9,058,839,138</u></b>
<b>Plan fiduciary net position – ending (b)</b>	<b><u>\$11,791,079,473</u></b>	<b><u>\$10,154,486,098</u></b>
<b>System's net pension liability – ending (a) – (b)</b>	<b><u>\$4,457,773,626</u></b>	<b><u>\$4,727,177,064</u></b>
<b>Plan fiduciary net position as a percentage of the total pension liability</b>	<b>72.57%</b>	<b>68.23%</b>
<b>Covered employee payroll</b>	<b>\$1,802,931,195</b>	<b>\$1,736,112,598</b>
<b>Plan net pension liability as percentage of covered employee payroll</b>	<b>247.25%</b>	<b>272.29%</b>

**Notes to Schedule:**

*Benefit changes:*

All employees hired on or after July 1, 2013 enter Tier 2 (with the exceptions noted in Section 4.1052 of the LACERS Administrative Code).

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

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**EXHIBIT 4**

**Schedule of LACERS' Contributions – Last Ten Fiscal Years**

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<b>Year Ended June 30</b>	<b>Actuarially Determined Contributions</b>	<b>Contributions in Relation to the Actuarially Determined Contributions</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered-Employee Payroll</b>	<b>Contributions as a Percentage of Covered Employee Payroll</b>
2005	\$183,241,489	\$158,131,638	\$25,109,851	\$1,477,753,943	10.70%
2006	227,740,600	227,740,600	0	1,602,619,746	14.21%
2007	277,516,400	277,516,400	0	1,646,055,902	16.86%
2008	288,119,041	288,119,041	0	1,741,849,669	16.54%
2009	274,554,786	274,554,786	0	1,832,795,577	14.98%
2010	258,642,795	258,642,795	0	1,827,864,283	14.15%
2011	303,560,953	303,560,953	0	1,678,059,440	18.09%
2012	308,539,905	308,539,905	0	1,715,197,133	17.99%
2013	346,180,852	346,180,852	0	1,736,112,598	19.94%
2014	357,649,232	357,649,232	0	1,802,931,195	19.84%

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

**Notes to Exhibit 4**

**Methods and assumptions used to establish  
"actuarially determined contribution" rates:**

<b>Valuation date</b>	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported	
<b>Actuarial cost method</b>	Entry Age Actuarial Cost Method, level percent of salary	
<b>Amortization method</b>	Level percent of payroll – assuming a 4.00% increase in total covered payroll.	
<b>Amortization period</b>	Multiple layers, closed amortization periods. Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 ERIP, are amortized over 15 years. Future ERIPs will be amortized over 5 years. Actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years.	
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.	
<b>Actuarial assumptions:</b>	<u>June 30, 2014</u>	<u>June 30, 2013</u>
Investment rate of return	7.50%	7.75%
Inflation rate	3.25%	3.50%
Real across-the-board salary increase	0.75%	0.75%
Projected salary increases*	Ranges from 10.50% to 4.40%, based on years of service.	Ranges from 11.25% to 6.50% for members with less than 5 years of service. Ranges from 6.50% to 4.65% for members with 5 or more years of service.
Cost of living adjustments	3.00% for Tier 1; 2.00% for Tier 2 (actual increases are contingent upon CPI increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 2)	3.00% for Tier 1; 2.00% for Tier 2 (actual increases are contingent upon CPI increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 2)
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.	Healthy: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females.
Other assumptions	Same as those used in the June 30, 2014 funding actuarial valuation	Same as those used in the June 30, 2013 funding actuarial valuation

\* Includes inflation at 3.25% as of June 30, 2014 and 3.50% as of June 30, 2013 plus across the board salary increases of 0.75% plus merit and promotional increases.

**SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System**

**EXHIBIT 5**

**Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2014**

(\$ in millions)

Year Beginning July 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2013	\$10,154	\$562	\$721	\$12	\$1,808 *	\$11,791
2014	11,791	615	775	14	901	12,517
2015	12,517	605	799	15	954	13,262
2016	13,262	596	847	16	1,007	14,002
2017	14,002	586	899	17	1,060	14,731
2018	14,731	576	956	18	1,111	15,444
2019	15,444	560	1,018	19	1,161	16,129
2020	16,129	546	1,085	20	1,209	16,780
2021	16,780	548	1,155	20	1,256	17,408
2022	17,408	549	1,225	21	1,300	18,011
2053	15,345	2	1,874	19	1,080	14,535
2054	14,535	2	1,803	18	1,022	13,738
2055	13,738	1	1,730	17	965	12,957
2056	12,957	1	1,653	16	909	12,199
2057	12,199	1	1,574	15	855	11,465
2098	19,238	0	1	23	1,442	20,655
2099	20,655	0	1	25	1,548	22,177
2100	22,177	0	1	27	1,662	23,812
2101	23,812	0	1	29	1,785	25,567
2102	25,567	0	1	31	1,916	27,451
2115	64,462	0	0 **	79	4,832	69,216
2116	69,216					
	2116 Discounted Value:	43 ***				

\* Net of transfer to Larger Annuity Reserve.

\*\* Less than \$1 M, when rounded.

\*\*\* \$69,216 million when discounted with interest at the rate of 7.50% per annum has a value of \$43 M as of June 30, 2014.



## SECTION 2: GASB 67 Information for Los Angeles City Employees' Retirement System

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### EXHIBIT 5

#### Projection of Pension Plan's Fiduciary Net Position for Use in Calculation of Discount Rate as of June 30, 2014

(\$ in millions) - continued

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Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning July 1, 2013 row are actual amounts, based on the unaudited financial statements provided by LACERS.
- (3) Years 2023-2052, 2058-2097, and 2103-2114 have been omitted from this table.
- (4) Column (a): Except for the "discounted value" shown for 2116, all of the projected beginning plan fiduciary net position amounts shown have not been adjusted for the time value of money.
- (5) Column (b): Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of June 30, 2014), plus employer contributions to the unfunded actuarial accrued liability. Contributions have not been adjusted for the phase-in of the cost impact of the new assumptions adopted from the 2011 experience study or the possible phase-in of the cost impact of the new assumptions adopted from the 2014 experience study. Contributions are assumed to occur at the beginning of the year.
- (6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2014. The projected benefit payments reflect the cost of living increase assumption of 3.00% per annum for Tier 1 and 2.00% per annum for Tier 2. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 31.b.(1)(e) of GASB Statement No. 67, the long-term expected rate of return on Plan investments of 7.50% per annum was applied to all periods of projected benefit payments to determine the discount rate.
- (7) Column (d): Projected administrative expenses are calculated as approximately 0.12% of the projected beginning plan fiduciary net position amount. The 0.12% portion was based on the actual fiscal year 2013/2014 administrative expenses (unaudited) as a percentage of the actual beginning plan fiduciary net position as of July 1, 2013. Administrative expenses are assumed to occur halfway through the year, on average.
- (8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.50% per annum.
- (9) As illustrated in this Exhibit, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.50% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2014 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

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# Los Angeles City Employees' Retirement System

**Governmental Accounting Standards (GAS) 68  
Actuarial Valuation Based on June 30, 2014  
Measurement Date for Employer Reporting  
as of June 30, 2015**



This report has been prepared at the request of the Board of Administration to assist the sponsors of the Fund in preparing their financial report for their liabilities associated with the LACERS pension plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Administration 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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100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

*September 22, 2015*

*Board of Administration  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401*

*Dear Board Members:*

*We are pleased to submit this Governmental Accounting Standards (GAS) 68 Actuarial Valuation based on a June 30, 2014 measurement date for employer reporting as of June 30, 2015. It contains various information that will need to be disclosed in order for the three employer categories in LACERS (i.e., the City, Airports, and Harbor) to comply with GAS 68.*

*This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist the sponsors in preparing their financial report for their liabilities associated with the LACERS pension plan. The census and financial information on which our calculations were based was provided by the Retirement System. 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; and changes in plan provisions or applicable law.*


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

*We look forward to reviewing this report with you and to answering any questions.*

*Sincerely,*

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

By:   
\_\_\_\_\_  
*Paul Angelo, FSA, MAAA, FCA, EA  
Senior Vice President and Actuary*

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

JRC/hy

## SECTION 1

### VALUATION SUMMARY

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## **SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

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### **Purpose**

This report has been prepared by Segal Consulting (“Segal”) to present certain disclosure information required by Governmental Accounting Standards (GAS) 68 for employer reporting as of June 30, 2015. The results used in preparing this GAS 68 report are comparable to those used in preparing the Governmental Accounting Standards (GAS) 67 report for the plan based on a reporting date and a measurement date as of June 30, 2014. This valuation is based on:

- The benefit provisions of the Pension Plan, as administered by the Board of Administration;
- The characteristics of covered active members, inactive vested members, and retired members and beneficiaries as of June 30, 2014, provided by LACERS;
- The assets of the Plan as of June 30, 2014, provided by LACERS;
- Economic assumptions regarding future salary increases and investment earnings; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

### **Significant Issues in Valuation Year**

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

- The Governmental Accounting Standards Board (GASB) approved two new Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 substantially replaces Statement 25 and is for plan reporting. Statement 68 substantially replaces Statement 27 and is for employer reporting. Statement 67 is effective with the fiscal year ending June 30, 2014 for Plan reporting and Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information contained in this valuation is intended to be used (along with other information) in order to comply with Statement 68.
- It is important to note that the new GASB rules only redefine pension liability and expense for financial reporting purposes, and do not apply to contribution amounts for pension funding purposes. Employers and plans can still develop and adopt funding policies under current practices.
- When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as LACERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is determined on the same basis as LACERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the Normal Cost component of the annual plan cost for funding and financial reporting.

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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- The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan's Fiduciary Net Position. The Plan's Fiduciary Net Position is equal to the market value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis. The NPL reflects all investment gains and losses as of the measurement date. This is different from the UAAL calculated on an actuarial value of assets basis in the funding valuation that reflects investment gains and losses over a seven year period. The NPL decreased from \$4.73 billion as of June 30, 2013 to \$4.46 billion as of June 30, 2014 primarily due to the approximately 18% return on the market value of assets during 2013/2014 that exceeded the assumption of 7.75% (used in the June 30, 2013 valuation), offset somewhat by the changes in actuarial assumptions adopted as recommended in our 2014 experience study report.

Changes in these values during the last two fiscal years ending June 30, 2013 and June 30, 2014 can be found in Exhibit 5.

- For this report, the reporting dates for the employer are June 30, 2015 and 2014. The NPL was measured as of June 30, 2014 and 2013 and determined based upon the results of the actuarial valuations as of June 30, 2014 and 2013, respectively. Plan Fiduciary Net Position (plan assets) and the TPL were valued as of the measurement dates. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2014 and 2013 were not adjusted or rolled forward to the June 30, 2015 and 2014 reporting dates, respectively.
- The discount rates used to measure the TPL and NPL as of June 30, 2014 and 2013 were 7.50% and 7.75%, respectively, following the same assumptions used by the System in the pension funding valuations as of the same dates. The detailed calculations used in the derivation of the discount rate can be found in Appendix A of Section 3. Various other information that is required to be disclosed can be found throughout Exhibits 1 through 13 in Section 2.
- The NPLs for the three employer categories in LACERS (i.e., the City, Airports, and Harbor) as of June 30, 2013 and June 30, 2014 are allocated based on the actual employer contributions made during 2012/2013 and 2013/2014, respectively. The steps we used for the allocation are as follows:
  - First calculate the ratio of the employer category's contributions to the total contributions.
  - This ratio is multiplied by the NPL to determine the employer category's proportionate share of the NPL. The NPL allocation can be found in Exhibit 7 in Section 2.
- Results shown in this report exclude any employer contributions made after the measurement date of June 30, 2014. The employer should consult with their auditor to determine the deferred outflow that should be created for these contributions.

**SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System**

**Summary of Key Valuation Results**

<b>Reporting Date for Employer under GAS 68</b>	<b>6/30/2015<sup>(1)</sup></b>	<b>6/30/2014<sup>(2)</sup></b>
<b>Measurement Date for Employer under GAS 68</b>	<b>6/30/2014</b>	<b>6/30/2013</b>
<b>Disclosure elements for fiscal year ending June 30:</b>		
1. Service cost <sup>(3)</sup>	\$317,185,480	\$312,372,769
2. Total Pension Liability	16,248,853,099	14,881,663,162
3. Plan Fiduciary Net Position	11,791,079,473	10,154,486,098
4. Net Pension Liability	4,457,773,626	4,727,177,064
5. Pension expense	\$389,917,291	N/A
<b>Schedule of contributions for fiscal year ending June 30:</b>		
6. Actuarially determined contributions	\$357,649,232	\$346,180,852
7. Actual contributions	357,649,232	346,180,852
8. Contribution deficiency/(excess): (6) – (7)	0	0
<b>Demographic data for plan year ending June 30:</b>		
9. Number of retired members and beneficiaries	17,532	17,362
10. Number of vested terminated members <sup>(4)</sup>	6,031	5,799
11. Number of active members	24,009	24,441
<b>Key assumptions as of June 30:</b>		
12. Investment rate of return	7.50%	7.75%
13. Inflation rate	3.25%	3.50%
14. Projected salary increases <sup>(5)</sup>	Ranges from 4.40% to 10.50% based on years of service	Ranges from 4.65% to 11.25% based on years of service and age

<sup>(1)</sup> The reporting date and measurement date for the plan are June 30, 2014.

<sup>(2)</sup> The reporting date and measurement date for the plan are June 30, 2013.

<sup>(3)</sup> The service cost is always based on the previous year's assumptions, meaning both values are based on those assumptions shown as of June 30, 2013.

<sup>(4)</sup> Includes terminated members due a refund of employee contributions.

<sup>(5)</sup> Includes inflation at 3.25% (3.50% for the June 30, 2013 measurement date) plus real across the board salary increase of 0.75% plus merit and promotional increases that vary by service (and by age for the June 30, 2013 valuation).

## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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### Important Information about Actuarial Valuations

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

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

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

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



## SECTION 1: Valuation Summary for the Los Angeles City Employees' Retirement System

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

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

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 1**

**General Information – “Financial Statements”, Note Disclosures and Required Supplementary Information for a Single-Employer Pension Plan**

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**Plan Description**

*Plan administration.* The Los Angeles City Employees' Retirement System (LACERS) was established by City Charter in 1937. LACERS is a single-employer public employee retirement system whose main function is to provide retirement benefits to the civilian employees of the City of Los Angeles.

Under the provisions of the City Charter, the Board of Administration (the "Board") has the responsibility and authority to administer the Plan and to invest its assets. The Board members serve as trustees and must act in the exclusive interest of the Plan's members and beneficiaries. The Board has seven members: four members, one of whom shall be a retired member of the system, shall be appointed by the Mayor subject to the approval of the Council; two members shall be active employee members of the system elected by the active employee members; one shall be a retired member of the system elected by the retired members of the system.

*Plan membership.* At June 30, 2014, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	17,532
Vested terminated members entitled to, but not yet receiving benefits <sup>(1)</sup>	6,031
Active members	<u>24,009</u>
Total	47,572

<sup>(1)</sup> Includes terminated members due a refund of employee contributions

*Benefits provided.* LACERS provides service retirement, disability, death and survivor benefits to eligible employees. Employees of the City become members of LACERS on the first day of employment in a position with the City in which the employee is not excluded from membership. Members employed prior to July 1, 2013 are designated as Tier 1 and those employed on or after July 1, 2013 are designated as Tier 2 (unless a specific exemption applies to the employee, providing a right to Tier 1 status).

Tier 1 members are eligible for normal service retirement benefits once they attain the age of 70, or the age of 60 with 10 or more years of continuous service, or the age of 55 with 30 or more years of service. Tier 2 members are eligible for normal service retirement benefits once they attain the age of 70, or the age of 65 with 10 or more years of continuous service.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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Tier 1 members are eligible for disability retirement once they have 5 or more years of continuous service. Tier 2 members are eligible for disability retirement once they have 10 or more years of continuous service.

Under the Tier 1 formula, the monthly service retirement allowance at normal retirement age is 2.16% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 1 members reaching age 55 with 10 or more years of continuous service, or at any age with 30 or more years of service. Sample Tier 1 early retirement reduction factors, for retirement below age 60, are as follows:

<u>Age</u>	<u>Early Retirement Reduction Factor</u>
45	0.6250
50	0.7750
55	0.9250
60	1.0000

Under the Tier 2 formula, the monthly service retirement allowance at normal retirement age is 2.00% of final average monthly compensation per year of service credit. Reduced retirement allowances are available for early retirement for Tier 2 members reaching age 55 with 10 or more years of continuance service. The Tier 2 sample retirement factors at early retirement ages are as follows:

<u>Age</u>	<u>Retirement Factor</u>	<u>Age</u>	<u>Retirement Factor</u>
55	0.7700%	60	1.2200%
56	0.8400%	61	1.3400%
57	0.9200%	62	1.4800%
58	1.0100%	63	1.6300%
59	1.1100%	64	1.8100%

Under Tier 1, pension benefits are calculated based on the highest average salary earned during a 12-month period (including base salary plus regularly assigned bonuses or premium pay). Under Tier 2, pension benefits are calculated based on the highest average salary earned during a 36-month period (limited to base pay).

For Tier 1 members, the maximum monthly retirement allowance is 100% of the final average monthly compensation. For Tier 2 members, the maximum monthly retirement allowance is 75% of the final average monthly compensation.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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In lieu of the service retirement allowance under the Tier 1 or Tier 2 formula (“unmodified option”), the member may choose an optional retirement allowance. The unmodified option provides the highest monthly benefit and a 50% continuance to an eligible surviving spouse or domestic partner for Tier 1 members (no continuance is provided to beneficiaries of Tier 2 members under the unmodified option). The optional retirement allowances require a reduction in the unmodified option amount in order to allow the member the ability to provide various benefits to a surviving spouse, domestic partner, or named beneficiary.

LACERS provides annual cost-of-living adjustments (COLAs) to all retirees. The cost-of-living adjustments are made each July 1 based on the percentage change in the average of the Consumer Price Index for the Los Angeles-Riverside-Orange County Area--All Items For All Urban Consumers. It is capped at 3.0% for Tier 1 and 2.0% for Tier 2. Tier 2 members may purchase additional 1% COLA protection at full actuarial cost.

The City contributes to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Administration. Employer contribution rates are adopted annually based upon recommendations received from LACERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2014 (based on the June 30, 2012 valuation) was 19.84% of compensation<sup>(1)</sup>.

All members are required to make contributions to LACERS regardless of the tier in which they are included. Currently, most Tier 1 members contribute at 11% of compensation and all Tier 2 members contribute at 10% of compensation.

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<sup>(1)</sup> After adjustments to phase in over five years the impact of new actuarial assumptions (as a result of the June 30, 2011 Triennial Experience Study) on the City's contributions.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 2**

**Net Pension Liability**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>
The components of the Net Pension Liability are as follows:		
Total Pension Liability	\$16,248,853,099	\$14,881,663,162
Plan Fiduciary Net Position	<u>-11,791,079,473</u>	<u>-10,154,486,098</u>
Net Pension Liability	\$4,457,773,626	\$4,727,177,064
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	72.57%	68.23%

The Net Pension Liability was measured as of June 30, 2014 and 2013 and determined based upon the Plan Fiduciary Net Position (plan assets) and Total Pension Liability from actuarial valuations as of June 30, 2014 and 2013, respectively.

*Plan provisions.* The plan provisions used in the measurement of the NPL are the same as those used in the LACERS funding valuations as of June 30, 2014 and 2013, respectively.

*Actuarial assumptions for the June 30, 2014 measurement date.* The Total Pension Liability as of June 30, 2014 was measured by an actuarial valuation as of June 30, 2014 using the following actuarial assumptions<sup>(1),(2)</sup>, applied to all periods included in the measurement:

Inflation:	3.25%
Salary increases:	Ranges from 4.40% to 10.50% based on years of service, including inflation
Investment rate of return:	7.50%, net of pension plan investment expense, including inflation
Other assumptions:	Same as those used in the June 30, 2014 actuarial valuation

<sup>(1)</sup> The actuarial assumptions used in this June 30, 2014 valuation were based on the results of an experience study for the period from July 1, 2011 through June 30, 2014. They are the same as the assumptions used in the June 30, 2014 funding actuarial valuation for LACERS. The assumptions are outlined in Section 3 of this report.

<sup>(2)</sup> For the June 30, 2013 measurement date, the key actuarial assumptions are provided on page iii of this report. The other assumptions used for that measurement date are the same as those used in the June 30, 2013 actuarial valuation.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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### EXHIBIT 3

#### Target Asset Allocation

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The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation, and subtracting expected investment expenses and a risk margin. The target allocation and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term (Arithmetic) Expected Real Rate of Return</b>
U.S. Large Cap Equity	20.40%	5.94%
U.S. Small Cap Equity	3.60%	6.64%
Developed International Equity	21.75%	6.98%
Emerging Market Equity	7.25%	8.48%
Core Bonds	16.53%	0.71%
High Yield Bonds	2.47%	2.89%
Private Real Estate	5.00%	4.69%
Cash	1.00%	(0.46)%
Credit Opportunities	5.00%	3.07%
Public Real Assets	5.00%	3.41%
Private Equity	<u>12.00%</u>	10.51%
<b>Total</b>	<b>100.00%</b>	

*Discount rate:* The discount rates used to measure the Total Pension Liability were 7.50% and 7.75% as of June 30, 2014 and June 30, 2013, respectively. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employee and employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from

## **SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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future plan members, are not included. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability as of both June 30, 2014 and June 30, 2013.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 4**

**Discount Rate Sensitivity**

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*Sensitivity of the Net Pension Liability to changes in the discount rate.* The following presents the Net Pension Liability (NPL) of LACERS as of June 30, 2014, which is allocated to all employer categories, calculated using the discount rate of 7.50%, as well as what LACERS' NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

<b>Employer Category</b>	<b>Net Pension Liability</b>		
	<b>1% Decrease (6.50%)</b>	<b>Current Discount (7.50%)</b>	<b>1% Increase (8.50%)</b>
City	\$5,455,264,953	\$3,654,125,793	\$2,157,287,719
Airports	918,657,503	615,348,678	363,283,647
Harbor	<u>281,112,868</u>	<u>188,299,155</u>	<u>111,166,248</u>
Total for all Employer Categories	\$6,655,035,324	\$4,457,773,626	\$2,631,737,614



**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 5**

**Schedule of Changes in Net Pension Liability – Last Two Fiscal Years**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>
<b>Total Pension Liability</b>		
1. Service cost	\$317,185,480	\$312,372,769
2. Interest	1,149,966,081 <sup>(1)</sup>	1,112,561,414
3. Change of benefit terms	0	0
4. Differences between expected and actual experience	-164,247,475	-235,829,202
5. Changes of assumptions	785,439,114	0
6. Benefit payments, including refunds of member contributions	<u>-721,153,263</u>	<u>-701,400,393</u>
7. Net change in Total Pension Liability	\$1,367,189,937	\$487,704,588
8. Total Pension Liability – beginning	<u>14,881,663,162</u>	<u>14,393,958,574</u>
9. Total Pension Liability – ending	<u>\$16,248,853,099</u>	<u>\$14,881,663,162</u>
<b>Plan Fiduciary Net Position</b>		
10. Contributions – employer	\$357,649,232	\$346,180,852
11. Contributions – employee	203,975,276	197,722,165
12. Net investment income	1,810,782,123	1,268,938,657
13. Benefit payments, including refunds of member contributions	-721,153,263	-701,400,393
14. Administrative expense	-12,372,426	-13,280,859
15. Other (Transfer to Larger Annuity Reserve)	<u>-2,287,567</u>	<u>-2,513,462</u>
16. Net change in Plan Fiduciary Net Position	\$1,636,593,375	\$1,095,646,960
17. Plan Fiduciary Net Position – beginning	<u>10,154,486,098</u>	<u>9,058,839,138</u>
18. Plan Fiduciary Net Position – ending	<u>\$11,791,079,473</u>	<u>\$10,154,486,098</u>
19. Net Pension Liability – ending: (9) – (18)	<u>\$4,457,773,626</u>	<u>\$4,727,177,064</u>
20. Plan Fiduciary Net Position as a percentage of the Total Pension Liability	72.57%	68.23%
21. Covered-employee payroll <sup>(2)</sup>	\$1,802,931,195	\$1,736,112,598
22. Plan Net Pension Liability as percentage of covered-employee payroll	247.25%	272.29%

<sup>(1)</sup> This is the same amount provided in Exhibit 3 of Segal Consulting's June 30, 2014 GAS 67 valuation report dated December 4, 2014. This amount was calculated prior to the reclassification of the FY 2013/2014 transfer of \$2,287,567 (from the Reserve for Member Contributions to the Larger Annuity Reserve) as benefit payments, which is discussed further in footnote (1) on page 15 of this report. Note that the "Interest on the Total Pension Liability" shown on page 15 of this report was calculated after the reclassification of said transfer.

<sup>(2)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**NOTES TO EXHIBIT 5**

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*Benefit changes:* All employees hired on or after July 1, 2013 enter Tier 2 (with the exceptions noted in Section 4.1052 of the LACERS Administrative Code). The addition of a new tier of benefits did not result in a change in the Net Pension Liability of participating employer categories due to “change of benefit terms” as of June 30, 2014 and 2013.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 6**

**Schedule of LACERS' Contributions – Last Ten Fiscal Years**

<b>Year Ended June 30,</b>	<b>Actuarially Determined Contributions<sup>(1)</sup></b>	<b>Contributions in Relation to the Actuarially Determined Contributions</b>	<b>Contribution Deficiency (Excess)</b>	<b>Covered-Employee Payroll<sup>(2)</sup></b>	<b>Contributions as a Percentage of Covered-Employee Payroll</b>
2005	\$183,241,489	\$158,131,638	\$25,109,851	\$1,477,753,943	10.70%
2006	227,740,600	227,740,600	0	1,602,619,746	14.21%
2007	277,516,400	277,516,400	0	1,646,055,902	16.86%
2008	288,119,041	288,119,041	0	1,741,849,669	16.54%
2009	274,554,786	274,554,786	0	1,832,795,577	14.98%
2010	258,642,795	258,642,795	0	1,827,864,283	14.15%
2011	303,560,953	303,560,953	0	1,678,059,440	18.09%
2012	308,539,905	308,539,905	0	1,715,197,133	17.99%
2013	346,180,852	346,180,852	0	1,736,112,598	19.94%
2014	357,649,232	357,649,232	0	1,802,931,195	19.84%

<sup>(1)</sup> Prior to year ending June 30, 2014, this amount was the Annual Required Contribution (ARC).

<sup>(2)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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### Notes to Exhibit 6

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#### Methods and assumptions used to establish "actuarially determined contribution" (ADC) rates:

<b>Valuation date</b>	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported
<b>Actuarial cost method</b>	Entry Age Actuarial Cost Method, level percent of salary
<b>Amortization method</b>	Level percent of payroll – assuming a 4.00% increase in total covered payroll.
<b>Amortization period</b>	Multiple layers, closed amortization periods. Actuarial gains/losses are amortized over 15 years. Assumption or method changes are amortized over 20 years. Plan changes, including the 2009 ERIP, are amortized over 15 years. Future ERIPs will be amortized over 5 years. Actuarial surplus is amortized over 30 years. The existing layers on June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years.
<b>Asset valuation method</b>	Market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.
<b>Actuarial assumptions:</b>	<u>June 30, 2012 (for the year ended June 30, 2014 ADC)</u>
Investment rate of return	7.75%
Inflation rate	3.50%
Real across-the-board salary increase	0.75%
Projected salary increases <sup>(1)</sup>	Ranges from 11.25% to 6.50% for members with less than 5 years of service. Ranges from 6.50% to 4.65% for members with 5 or more years of service.
Cost of living adjustments	3.00% for Tier 1; 2.00% for Tier 2 (actual increases are contingent upon CPI increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 2)
Mortality	Healthy: RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females.
Other assumptions	Same as those used in the June 30, 2012 funding actuarial valuation

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<sup>(1)</sup> Includes inflation at 3.50% plus across the board salary increases of 0.75% plus merit and promotional increases.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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### EXHIBIT 7

#### Determination of Proportionate Share

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##### Actual Employer Contributions by Employer Category July 1, 2012 to June 30, 2013

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<b>Employer Category</b>	<b>Contributions</b>	<b>Percentage<sup>(1)</sup></b>
City	\$281,974,547	81.453%
Airports	49,501,258	14.299%
Harbor	<u>14,705,047</u>	<u>4.248%</u>
Total for all Employer Categories	\$346,180,852	100.000%

<sup>(1)</sup> The unrounded percentages are used in the allocation of the NPL amongst employer categories.

##### Allocation of June 30, 2013 Net Pension Liability

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<b>Employer Category</b>	<b>NPL</b>	<b>Percentage</b>
City	\$3,850,425,590	81.453%
Airports	675,950,764	14.299%
Harbor	<u>200,800,710</u>	<u>4.248%</u>
Total for all Employer Categories	\$4,727,177,064	100.000%

#### Notes:

1. Based on the July 1, 2012 through June 30, 2013 employer contributions as provided by LACERS.
2. The Net Pension Liability (NPL) is the Total Pension Liability (TPL) minus the Plan Fiduciary Net Position (plan assets).
3. The NPL is allocated based on the actual employer category contributions. The steps used for the allocation are as follows:
  - First calculate the ratio of the employer category's contributions to the total contributions.
  - This ratio is multiplied by the NPL to determine the employer category's proportionate share of the NPL.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 7 (continued)**

**Determination of Proportionate Share**

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**Actual Employer Contributions by Employer Category  
July 1, 2013 to June 30, 2014**

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<b>Employer Category</b>	<b>Contributions</b>	<b>Percentage<sup>(1)</sup></b>
City	\$293,172,196	81.972%
Airports	49,369,708	13.804%
Harbor	<u>15,107,328</u>	<u>4.224%</u>
Total for all Employer Categories	\$357,649,232	100.000%

<sup>(1)</sup> The unrounded percentages are used in the allocation of the NPL amongst employer categories.

**Allocation of June 30, 2014 Net Pension Liability**

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<b>Employer Category</b>	<b>NPL</b>	<b>Percentage</b>
City	\$3,654,125,793	81.972%
Airports	615,348,678	13.804%
Harbor	<u>188,299,155</u>	<u>4.224%</u>
Total for all Employer Categories	\$4,457,773,626	100.000%

**Notes:**

1. Based on the July 1, 2013 through June 30, 2014 employer contributions as provided by LACERS.
2. The Net Pension Liability (NPL) is the Total Pension Liability (TPL) minus the Plan Fiduciary Net Position (plan assets).
3. The NPL is allocated based on the actual employer category contributions. The steps used for the allocation are as follows:
  - First calculate the ratio of the employer category's contributions to the total contributions.
  - This ratio is multiplied by the NPL to determine the employer category's proportionate share of the NPL.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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### EXHIBIT 7 (continued)

#### Determination of Proportionate Share

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##### Notes:

For purposes of the above results, the reporting date for the employer under GAS 68 is June 30, 2015. The reporting date and measurement date for the plan under GAS 67 are June 30, 2014. Consistent with the provisions of GAS 68, the assets and liabilities measured as of June 30, 2014 are not adjusted or rolled forward to the June 30, 2015 reporting date. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

The following items are allocated based on the corresponding proportionate share:

- 1) Net Pension Liability
- 2) Service Cost
- 3) Interest on the Total Pension Liability
- 4) Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- 5) Expensed portion of current-period changes of assumptions or other inputs
- 6) Member contributions
- 7) Projected earnings on plan investments
- 8) Expensed portion of current-period differences between actual and projected earnings on plan investments
- 9) Administrative expense
- 10) Recognition of beginning of year deferred outflows of resources as pension expense
- 11) Recognition of beginning of year deferred inflows of resources as pension expense

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 8**

**Pension Expense – Total for all Employer Categories**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Components of Pension Expense</b>	
1. Service cost	\$317,185,480
2. Interest on the Total Pension Liability	1,149,877,438
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0
4. Expensed portion of current-period benefit changes	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(28,802,716) <sup>(1)</sup>
6. Expensed portion of current-period changes of assumptions or other inputs	139,757,849
7. Actual member contributions	(203,975,276)
8. Projected earnings on plan investments	(792,926,857)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(203,571,053)
10. Administrative expense	12,372,426
11. Other	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	0
13. Recognition of beginning of year deferred inflows of resources as pension expense	0
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0
<b>Pension Expense</b>	<b>\$389,917,291</b>

<sup>(1)</sup> Based on clarification provided by LACERS subsequent to the completion of our GAS 67 report dated December 4, 2014, we understand that the transfer of \$2,287,567 during fiscal year 2013/2014 from the (Pension Plan's) Reserve for Member Contributions to the (non-Pension Plan related) Larger Annuity Reserve (as referenced in Exhibit 3 as "Other (Transfer to Larger Annuity Reserve)" on page 6 of that report) represents voluntary contributions of members retired during the reporting fiscal year including funds that were transferred from members' deferred compensation accounts into the Pension Plan just prior to those members' retirements. Those funds were then transferred to the Larger Annuity Reserve to pay the additional benefits payable from that plan. Contributions at those amounts were included in Exhibit 3 as "Contributions – employee" and treated by Segal Consulting as if they were made to the Pension Plan. For purposes of determining the deferred inflows of resources and the pension expense in this report, we have reclassified these amounts as benefit payments, to reflect the clarification provided by LACERS. This has the impact of lowering the treatment of the actuarial experience gain for 2013/2014 (referenced in that Exhibit 3 as "Differences between expected and actual experience") by that same amount plus expected interest (or by \$2,376,210).



**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – City**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Components of Pension Expense</b>	
1. Service cost	\$260,003,252
2. Interest on the Total Pension Liability	942,577,429
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	4,365,759
4. Expensed portion of current-period benefit changes	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(23,610,160)
6. Expensed portion of current-period changes of assumptions or other inputs	114,562,292
7. Actual member contributions	(167,202,594)
8. Projected earnings on plan investments	(649,977,931)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(166,871,245)
10. Administrative expense	10,141,924
11. Other	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	0
13. Recognition of beginning of year deferred inflows of resources as pension expense	0
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>0</u>
<b>Pension Expense</b>	<b>\$323,988,726</b>

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Airports**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Components of Pension Expense</b>	
1. Service cost	\$43,784,115
2. Interest on the Total Pension Liability	158,728,464
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(4,166,153)
4. Expensed portion of current-period benefit changes	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(3,975,911)
6. Expensed portion of current-period changes of assumptions or other inputs	19,292,098
7. Actual member contributions	(28,156,638)
8. Projected earnings on plan investments	(109,455,198)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(28,100,839)
10. Administrative expense	1,707,883
11. Other	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	0
13. Recognition of beginning of year deferred inflows of resources as pension expense	0
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0
<b>Pension Expense</b>	<b>\$49,657,821</b>

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 8 (continued)**

**Pension Expense – Harbor**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Components of Pension Expense</b>	
1. Service cost	\$13,398,113
2. Interest on the Total Pension Liability	48,571,545
3. Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	(199,606)
4. Expensed portion of current-period benefit changes	0
5. Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	(1,216,645)
6. Expensed portion of current-period changes of assumptions or other inputs	5,903,459
7. Actual member contributions	(8,616,044)
8. Projected earnings on plan investments	(33,493,728)
9. Expensed portion of current-period differences between actual and projected earnings on plan investments	(8,598,969)
10. Administrative expense	522,619
11. Other	0
12. Recognition of beginning of year deferred outflows of resources as pension expense	0
13. Recognition of beginning of year deferred inflows of resources as pension expense	0
14. Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0
<b>Pension Expense</b>	<b>\$16,270,744</b>

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 9**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Total for all Employer Categories**

<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Deferred Outflows of Resources</b>	
1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$20,169,805
2. Changes of assumptions or other inputs	645,681,265
3. Net difference between projected and actual earnings on pension plan investments	0
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>
5. Total deferred outflows of resources	\$665,851,070
<b>Deferred Inflows of Resources</b>	
6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$20,169,805
7. Changes of assumptions or other inputs	0
8. Net difference between projected and actual earnings on pension plan investments	814,284,213
9. Difference between expected and actual experience in the Total Pension Liability	<u>133,068,549<sup>(2)</sup></u>
10. Total deferred inflows of resources	\$967,522,567

Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:

<b>Reporting Date for Employer under GAS 68, Year Ended June 30:</b>	
2016	\$(92,615,920)
2017	(92,615,920)
2018	(92,615,920)
2019	(92,615,921)
2020	68,792,184
Thereafter	0

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GAS 68.

<sup>(2)</sup> See footnote 1 on page 15.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – City**

**Reporting Date for Employer under GAS 68** **June 30, 2015**

**Measurement Date for Employer under GAS 68** **June 30, 2014**

**Deferred Outflows of Resources**

1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$20,169,805
2. Changes of assumptions or other inputs	529,277,788
3. Net difference between projected and actual earnings on pension plan investments	0
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>
5. Total deferred outflows of resources	\$549,447,593

**Deferred Inflows of Resources**

6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$0
7. Changes of assumptions or other inputs	0
8. Net difference between projected and actual earnings on pension plan investments	667,484,981
9. Difference between expected and actual experience in the Total Pension Liability	<u>109,078,939</u>
10. Total deferred inflows of resources	\$776,563,920

Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:

**Reporting Date for Employer under GAS 68, Year Ended June 30:**

2016	\$(71,553,354)
2017	(71,553,354)
2018	(71,553,354)
2019	(71,553,355)
2020	59,097,090
Thereafter	0

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GAS 68.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Airports**

**Reporting Date for Employer under GAS 68** **June 30, 2015**

**Measurement Date for Employer under GAS 68** **June 30, 2014**

**Deferred Outflows of Resources**

1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$0
2. Changes of assumptions or other inputs	89,129,495
3. Net difference between projected and actual earnings on pension plan investments	0
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>
5. Total deferred outflows of resources	\$89,129,495

**Deferred Inflows of Resources**

6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$19,247,627
7. Changes of assumptions or other inputs	0
8. Net difference between projected and actual earnings on pension plan investments	112,403,356
9. Difference between expected and actual experience in the Total Pension Liability	<u>18,368,711</u>
10. Total deferred inflows of resources	\$150,019,694

Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:

**Reporting Date for Employer under GAS 68, Year Ended June 30:**

2016	\$(16,950,805)
2017	(16,950,805)
2018	(16,950,805)
2019	(16,950,805)
2020	6,913,021
Thereafter	0

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GAS 68.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 9 (continued)**

**Deferred Outflows of Resources and Deferred Inflows of Resources – Harbor**

**Reporting Date for Employer under GAS 68** **June 30, 2015**

**Measurement Date for Employer under GAS 68** **June 30, 2014**

**Deferred Outflows of Resources**

1. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$0
2. Changes of assumptions or other inputs	27,273,982
3. Net difference between projected and actual earnings on pension plan investments	0
4. Difference between expected and actual experience in the Total Pension Liability	<u>0</u>
5. Total deferred outflows of resources	\$27,273,982

**Deferred Inflows of Resources**

6. Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>(1)</sup>	\$922,178
7. Changes of assumptions or other inputs	0
8. Net difference between projected and actual earnings on pension plan investments	34,395,876
9. Difference between expected and actual experience in the Total Pension Liability	<u>5,620,899</u>
10. Total deferred inflows of resources	\$40,938,953

Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:

**Reporting Date for Employer under GAS 68, Year Ended June 30:**

2016	\$(4,111,761)
2017	(4,111,761)
2018	(4,111,761)
2019	(4,111,761)
2020	2,782,073
Thereafter	0

<sup>(1)</sup> Calculated in accordance with Paragraphs 54 and 55 of GAS 68.

## SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System

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### EXHIBIT 9 (continued)

#### Deferred Outflows of Resources and Deferred Inflows of Resources

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There are changes in each employer category's proportionate share of the total Net Pension Liability during the measurement period ended June 30, 2014. The net effect of the change on the employer category's proportionate share of the collective Net Pension Liability and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through LACERS which is 5.62 years determined as of June 30, 2013 (the beginning of the measurement period ending June 30, 2014).

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended June 30, 2014 is recognized over the same period. This is zero because the proportionate share was determined using the actual employer contributions.

The average of the expected service lives of all employees is determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

We did not attempt to determine the beginning balances for deferred inflows of resources and deferred outflows of resources as of the beginning of the fiscal year. Per Paragraph 137 of GAS 68, these balances are assumed to be zero.



**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 10**

**Schedule of Proportionate Share of the Net Pension Liability – Total for all Employer Categories**

<b>Reporting Date for Employer under GAS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	100.0%	\$4,727,177,064	\$1,736,112,598	272.29%	68.23%
2015	100.0%	4,457,773,626	1,802,931,195	247.25%	72.57%

<sup>(1)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – City**

<b>Reporting Date for Employer under GAS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	81.453%	\$3,850,425,590	\$ 1,414,115,080	272.3%	68.23%
2015	81.972%	3,654,125,793	1,477,663,755	247.3%	72.57%

<sup>(1)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Airports**

<b>Reporting Date for Employer under GAS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	14.299%	\$675,950,764	\$248,251,046	272.3%	68.23%
2015	13.804%	615,348,678	249,227,877	246.9%	72.57%

<sup>(1)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 10 (continued)**

**Schedule of Proportionate Share of the Net Pension Liability – Harbor**

<b>Reporting Date for Employer under GAS 68 as of June 30</b>	<b>Proportion of the Net Pension Liability</b>	<b>Proportionate share of Net Pension Liability</b>	<b>Covered-employee payroll<sup>(1)</sup></b>	<b>Proportionate share of the Net Pension Liability as a percentage of its covered-employee payroll</b>	<b>Plan Fiduciary Net Position as a percentage of the Total Pension Liability</b>
2014	4.248%	\$200,800,710	\$73,746,472	272.3%	68.23%
2015	4.224%	188,299,155	76,039,563	247.6%	72.57%

<sup>(1)</sup> Covered-employee payroll represents the collective total of the LACERS eligible wages of all LACERS membership tiers.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 11**

**Schedule of Reconciliation of Net Pension Liability – Total for all Employer Categories**

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<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Reconciliation of Net Pension Liability</b>	
1. Beginning Net Pension Liability	\$4,727,177,064
2. Pension Expense	389,917,291
3. Employer Contributions	(357,649,232)
4. New Net Deferred Inflows/Outflows	(301,671,497)
5. New Net Deferred Flows Due to Change in Proportion	0
6. Recognition of Prior Deferred Inflows/Outflows	<u>0</u>
7. Ending Net Pension Liability	\$4,457,773,626

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – City**

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<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Reconciliation of Net Pension Liability</b>	
1. Beginning Net Pension Liability	\$3,850,425,590
2. Pension Expense	323,988,726
3. Employer Contributions	(293,172,196)
4. New Net Deferred Inflows/Outflows	(247,286,132)
5. New Net Deferred Flows Due to Change in Proportion	20,169,805
6. Recognition of Prior Deferred Inflows/Outflows	<u>0</u>
7. Ending Net Pension Liability	\$3,654,125,793

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Airports**

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<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Reconciliation of Net Pension Liability</b>	
1. Beginning Net Pension Liability	\$675,950,764
2. Pension Expense	49,657,821
3. Employer Contributions	(49,369,708)
4. New Net Deferred Inflows/Outflows	(41,642,572)
5. New Net Deferred Flows Due to Change in Proportion	(19,247,627)
6. Recognition of Prior Deferred Inflows/Outflows	<u>0</u>
7. Ending Net Pension Liability	\$615,348,678

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

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**EXHIBIT 11 (continued)**

**Schedule of Reconciliation of Net Pension Liability – Harbor**

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<b>Reporting Date for Employer under GAS 68</b>	<b>June 30, 2015</b>
<b>Measurement Date for Employer under GAS 68</b>	<b>June 30, 2014</b>
<b>Reconciliation of Net Pension Liability</b>	
1. Beginning Net Pension Liability	\$200,800,710
2. Pension Expense	16,270,744
3. Employer Contributions	(15,107,328)
4. New Net Deferred Inflows/Outflows	(12,742,793)
5. New Net Deferred Flows Due to Change in Proportion	(922,178)
6. Recognition of Prior Deferred Inflows/Outflows	<u>0</u>
7. Ending Net Pension Liability	\$188,299,155



**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 12**

**Schedule of Recognition of Changes in Total Net Pension Liability**

<b>Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability</b>									
<b>Reporting Date for Employer under GAS 68, Year Ended June 30</b>	<b>Differences between Expected and Actual Experience</b>	<b>Recognition Period (Years)</b>	<b>Reporting Date for Employer under GAS 68, Year Ended June 30:</b>						
			<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Thereafter</b>
2015	\$(161,871,265)	5.62	<u>\$(28,802,716)</u>	<u>\$(28,802,716)</u>	<u>\$(28,802,716)</u>	<u>\$(28,802,716)</u>	<u>\$(28,802,716)</u>	<u>\$(17,857,685)</u>	-
Net increase (decrease) in pension expense			\$(28,802,716)	\$(28,802,716)	\$(28,802,716)	\$(28,802,716)	\$(28,802,716)	\$(17,857,685)	-

<b>Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes</b>									
<b>Reporting Date for Employer under GAS 68, Year Ended June 30</b>	<b>Effects of Assumption Changes</b>	<b>Recognition Period (Years)</b>	<b>Reporting Date for Employer under GAS 68, Year Ended June 30:</b>						
			<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Thereafter</b>
2015	\$785,439,114	5.62	<u>\$139,757,849</u>	<u>\$139,757,849</u>	<u>\$139,757,849</u>	<u>\$139,757,849</u>	<u>\$139,757,849</u>	<u>\$86,649,869</u>	-
Net increase (decrease) in pension expense			\$139,757,849	\$139,757,849	\$139,757,849	\$139,757,849	\$139,757,849	\$86,649,869	-

As described in Exhibit 9, the average of the expected remaining service lives of all employees that are provided with pensions through LACERS (active and inactive employees) determined as of June 30, 2013 (the beginning of the measurement period ending June 30, 2014) is 5.62 years.

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 12 (continued)**

**Schedule of Recognition of Changes in Total Net Pension Liability**

**Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Pension Plan Investments**

Reporting Date for Employer under GAS 68, Year Ended June 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	Reporting Date for Employer under GAS 68, Year Ended June 30:						
			2015	2016	2017	2018	2019	2020	Thereafter
2015	\$(1,017,855,266)	5.00	<u>\$(203,571,053)</u>	<u>\$(203,571,053)</u>	<u>\$(203,571,053)</u>	<u>\$(203,571,053)</u>	<u>\$(203,571,054)</u>	-	-
Net increase (decrease) in pension expense			\$(203,571,053)	\$(203,571,053)	\$(203,571,053)	\$(203,571,053)	\$(203,571,054)	-	-

The differences between projected and actual earnings on pension plan investments are recognized over a five-year period per Paragraph 33b. of GASB 68.

**Increase (Decrease) in Pension Expense**

Reporting Date for Employer under GAS 68, Year Ended June 30	Total Differences and Changes	Reporting Date for Employer under GAS 68, Year Ended June 30:						
		2015	2016	2017	2018	2019	2020	Thereafter
2015	\$(394,287,417)	<u>\$(92,615,920)</u>	<u>\$(92,615,920)</u>	<u>\$(92,615,920)</u>	<u>\$(92,615,920)</u>	<u>\$(92,615,921)</u>	<u>\$68,792,184</u>	-
Net increase (decrease) in pension expense		\$(92,615,920)	\$(92,615,920)	\$(92,615,920)	\$(92,615,920)	\$(92,615,921)	\$68,792,184	-

**SECTION 2: GAS 68 Information for the Los Angeles City Employees' Retirement System**

**EXHIBIT 13**

**Allocation of Changes in Total Net Pension Liability**

In addition to the amounts shown in Exhibit 12, there are changes in each location's proportionate share of the total Net Pension Liability during the measurement period ending on June 30, 2014. The net effect of the change on the employer's proportionate share of the collective Net Pension Liability and collective deferred outflows of resources and deferred inflows of resources is also recognized over the average of the expected remaining service lives of all employees shown above. The difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ending on June 30, 2014 is recognized over the same periods. These amounts are shown below. While these amounts are different for each employer, they sum to zero over the entire Retirement System.

**Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for the Reporting Date for Employer under GAS 68, Year Ended June 30, 2015**

<b>Employer Category</b>	<b>Total Change to be Recognized</b>	<b>Recognition Period (Years)</b>	<b>Reporting Date for Employer under GAS 68, Year Ended June 30:</b>					
			<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
City	\$24,535,564	5.62	\$4,365,759	\$4,365,759	\$4,365,759	\$4,365,759	\$4,365,759	\$2,706,769
Airports	(23,413,780)	5.62	(4,166,153)	(4,166,153)	(4,166,153)	(4,166,153)	(4,166,153)	(2,583,015)
Harbor	(1,121,784)	5.62	(199,606)	(199,606)	(199,606)	(199,606)	(199,606)	(123,754)
Total for all Employer Categories	\$0		\$0	\$0	\$0	\$0	\$0	\$0

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

**Actuarial Assumptions and Methods**

**For June 30, 2014 Measurement Date and Employer Reporting as of June 30, 2015**

**Post-Retirement Mortality Rates:**

*Healthy Members and All Beneficiaries:*

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

*Disabled Members:*

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set forward seven years for males and set forward eight years for females.

The tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience as of the measurement date.

**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:*

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020, set back one year for males and with no setback for females.

Age	Rate (%)	
	Disability	Termination*
25	0.01	5.75
30	0.03	5.75
35	0.05	4.85
40	0.09	3.50
45	0.15	2.70
50	0.19	2.50
55	0.20	2.35
60	0.20	2.25

\* Rates for members with five or more years of service. Termination rates are zero for members eligible to retire.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

Rates of termination for members with less than 5 years of service are as follows:

<b>Service</b>	<b>Rate (%)</b>
	<b>Termination (Based on Service)</b>
0	13.25
1	11.00
2	8.75
3	7.25
4	5.75

**Retirement Rates:**

<b>Age</b>	<b>Rate (%)</b>			
	<b>Tier 1</b>		<b>Tier 2</b>	
	<b>Non-55/30</b>	<b>55/30</b>	<b>Non-55/30</b>	<b>55/30</b>
50	6.0	0.0	0.0	0.0
51	3.0	0.0	0.0	0.0
52	3.0	0.0	0.0	0.0
53	3.0	0.0	0.0	0.0
54	16.0	0.0	0.0	0.0
55	6.0	20.0	3.5	8.0
56	6.0	14.0	3.5	7.0
57	6.0	14.0	3.5	7.0
58	6.0	14.0	3.5	7.0
59	6.0	14.0	3.5	7.0
60	6.0	14.0	5.5	7.0
61	6.0	14.0	5.5	9.0
62	7.0	15.0	5.5	11.0
63	7.0	15.0	5.5	13.0
64	7.0	16.0	5.5	16.0
65	12.0	17.0	12.0	19.0
66	12.0	17.0	12.0	19.0
67	12.0	17.0	12.0	19.0
68	12.0	17.0	12.0	19.0
69	12.0	17.0	12.0	19.0
70	100.0	100.0	100.0	100.0

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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<b>Retirement Age and Benefit for Inactive Vested Participants:</b>	Pension benefit paid at the later of age 58 or the current attained age. For reciprocals, 4.40% compensation increases per annum.
<b>Exclusion of Inactive Members:</b>	All inactive participants are included in the valuation.
<b>Definition of Active Members:</b>	First day of biweekly payroll following employment for new department employees or immediately following transfer from other city department.
<b>Unknown Data for Members:</b>	Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male.
<b>Percent Married/Domestic Partner:</b>	76% of male participants; 50% of female participants.
<b>Age of Spouse:</b>	Male retirees are assumed to be 4 years older than their female spouses. Female retirees are assumed to be 2 years younger than their male spouses.
<b>Service:</b>	Employment service is used for eligibility determination purposes. Benefit service is used for benefit calculation purposes.
<b>Future Benefit Accruals:</b>	1.0 year of service per year.
<b>Other Reciprocal Service:</b>	5% of future inactive vested members will work at a reciprocal system.
<b>Consumer Price Index:</b>	Increase of 3.25% per year; benefit increases due to CPI subject to 3.00% maximum for Tier 1 and 2.00% maximum for Tier 2.
<b>Employee Contribution Crediting Rate:</b>	Based on average of 5-year Treasury note rate. An assumption of 3.25% is used to approximate that crediting rate in this valuation.
<b>Net Investment Return:</b>	7.50%

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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**Salary Increases:**

Inflation: 3.25%; plus additional 0.75% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

<u>Service</u>	<u>Percentage Increase</u>
0	6.50%
1	6.20%
2	5.10%
3	3.10%
4	2.10%
5	1.10%
6	1.00%
7	0.90%
8	0.70%
9	0.60%
10+	0.40%

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**Actuarial Value of Assets:**

The market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual and expected returns on a market value basis and is recognized over a seven year period. The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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**Actuarial Cost Method:** Entry Age Cost Method.

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**Funding Policy:** The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability. Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an individual basis. Entry age is calculated as age on the valuation date minus years of service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15 year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 20 year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15 year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

The recommended contribution is set equal to the greater of the current funding policy or the minimum Annual Required Contribution (ARC) as determined by the then current GASB Statements 25 and 27. In particular, an additional contribution due to the application of the 40-year minimum amortization requirement for both fiscal year 2003/2004 and fiscal year 2004/2005 is included in the calculation of the recommended contribution.

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**Changes in Actuarial Assumptions:** Based on the June 30, 2014 Actuarial Experience Study, the following actuarial assumptions were changed. Previously, these assumptions were as follows:

**Post-Retirement Mortality Rates:**

*Healthy Members and All Beneficiaries:*

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

*Disabled Members:*

RP-2000 Combined Healthy Mortality Table, set forward five years for males and set forward six years for females.



**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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

**Termination Rates Before Retirement:**

*Pre-Retirement Mortality:*

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

<b>Age</b>	<b>Rate (%)</b>
	<b>Termination*</b>
25	5.50
30	5.35
35	4.35
40	3.15
45	2.30
50	1.85
55	1.75
60	1.75

\* Rates for members with five or more years of service. Termination rates are zero for members eligible to retire.

Rates of termination for members with less than 5 years of service are as follows:

<b>Service</b>	<b>Rate (%)</b>
	<b>Termination (Based on Service)</b>
0	11.25
1	8.00
2	7.25
3	6.25
4	5.50

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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

**Retirement Rates:**

<b>Age</b>	<b>Rate (%)</b>	
	<b>Tier 1</b>	
	<b>Non-55/30</b>	<b>55/30</b>
50	8.0	0.0
51	4.0	0.0
52	4.0	0.0
53	4.0	0.0
54	15.0	0.0
55	8.0	20.0
56	8.0	15.0
57	8.0	15.0
58	8.0	15.0
59	8.0	15.0
60	8.0	15.0
61	8.0	16.0
62	8.0	17.0
63	8.0	18.0
64	8.0	19.0
65	13.0	20.0
66	13.0	20.0
67	13.0	20.0
68	13.0	20.0
69	13.0	20.0
70	100.0	100.0

**Retirement Age and Benefit for Inactive Vested Participants:**

Pension benefit paid at the later of age 57 or the current attained age. For reciprocals, 4.65% compensation increases per annum.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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

- Age of Spouse:** Female spouses 3 years younger than their spouses.
- Other Reciprocal Service:** 10% of future inactive vested members will work at a reciprocal system.
- Consumer Price Index:** Increase of 3.50% per year; benefit increases due to CPI subject to 3.00% maximum for Tier 1 and 2.00% maximum for Tier 2.
- Employee Contribution and Matching Account Crediting Rate:** Based on average of 5-year Treasury note rate. An assumption of 3.50% is used to approximate that crediting rate in this valuation.
- Net Investment Return:** 7.75%
- Salary Increases:** Inflation: 3.50%; plus additional 0.75% “across the board” salary increases (other than inflation); plus the following merit and promotional increases:

*For members with under 5 years of service:*

<b>Service</b>	<b>Percentage Increase</b>
0	7.00%
1	6.25%
2	4.75%
3	3.50%
4	2.25%

*For members with 5 or more years of service:*

<b>Age</b>	<b>Percentage Increase*</b>
20 – 24	2.25%
25 – 29	2.00%
30 – 34	1.25%
35 – 39	1.00%
40 – 44	0.75%
45 – 49	0.50%
50 – 54	0.40%
55 – 69	0.40%

*\* At central age in age range shown.*

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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

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**Funding Policy:**

The plan sponsor of the City of Los Angeles Employees' Retirement System makes contributions equal to the normal cost adjusted by an amount to amortize any surplus or unfunded actuarial accrued liability. Both the normal cost and the actuarial accrued liability are determined under the Entry Age cost method and are calculated on an individual basis. Entry age is calculated as age on the valuation date minus years of service.

Under the current funding policy, changes in the UAAL due to actuarial gains/losses are amortized over separate 15 year periods. Any changes in the UAAL due to assumption or method changes are amortized over separate 30 year periods. Plan changes, including the 2009 ERIP, are amortized over separate 15 year periods. Future ERIPs will be amortized over 5 years. Any actuarial surplus is amortized over 30 years. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP and the two GASB 25/27 layers, were combined and amortized over 30 years effective June 30, 2012.

In no event will the recommended contribution be less than the minimum Annual Required Contribution (ARC) as determined under GASB Statements 25 and 27.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

**APPENDIX A**

**Calculation of Discount Rate as of June 30, 2014  
Projection of Pension Plan's Fiduciary Net Position (\$ in millions)**

Year Beginning July 1,	Projected Beginning Plan Fiduciary Net Position (a)	Projected Total Contributions (b)	Projected Benefit Payments (c)	Projected Administrative Expenses (d)	Projected Investment Earnings (e)	Projected Ending Plan Fiduciary Net Position (f) = (a) + (b) - (c) - (d) + (e)
2013	\$10,154	\$562	\$721	\$12	\$1,808 *	\$11,791
2014	11,791	615	775	14	901	12,517
2015	12,517	605	799	15	954	13,262
2016	13,262	596	847	16	1,007	14,002
2017	14,002	586	899	17	1,060	14,731
2018	14,731	576	956	18	1,111	15,444
2019	15,444	560	1,018	19	1,161	16,129
2020	16,129	546	1,085	20	1,209	16,780
2021	16,780	548	1,155	20	1,256	17,408
2022	17,408	549	1,225	21	1,300	18,011
2053	15,345	2	1,874	19	1,080	14,535
2054	14,535	2	1,803	18	1,022	13,738
2055	13,738	1	1,730	17	965	12,957
2056	12,957	1	1,653	16	909	12,199
2057	12,199	1	1,574	15	855	11,465
2098	19,238	0	1	23	1,442	20,655
2099	20,655	0	1	25	1,548	22,177
2100	22,177	0	1	27	1,662	23,812
2101	23,812	0	1	29	1,785	25,567
2102	25,567	0	1	31	1,916	27,451
2115	64,462	0	0 **	79	4,832	69,216
2116	69,216					
2116 Discounted Value:	43 ***					

\* Net of transfer to Larger Annuity Reserve.

\*\* Less than \$1 M, when rounded.

\*\*\* \$69,216 million when discounted with interest at the rate of 7.50% per annum has a value of \$43 M as of June 30, 2014.

### SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System

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#### APPENDIX A (continued)

#### Calculation of Discount Rate as of June 30, 2014 Projection of Pension Plan's Fiduciary Net Position (\$ in millions)

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Notes:

- (1) Amounts may not total exactly due to rounding.
- (2) Amounts shown in the year beginning July 1, 2013 row are actual amounts, based on the unaudited financial statements provided by LACERS.
- (3) Years 2023-2052, 2058-2097, and 2103-2114 have been omitted from this table.
- (4) Column (a): Except for the "discounted value" shown for 2116, all of the projected beginning plan fiduciary net position amounts shown have not been adjusted for the time value of money.
- (5) Column (b): Projected total contributions include employee and employer normal cost rates applied to closed group projected payroll (based on covered active members as of June 30, 2014), plus employer contributions to the unfunded actuarial accrued liability. Contributions have not been adjusted for the phase-in of the cost impact of the new assumptions adopted from the 2011 experience study or the possible phase-in of the cost impact of the new assumptions adopted from the 2014 experience study. Contributions are assumed to occur at the beginning of the year.
- (6) Column (c): Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive vested, retired members, and beneficiaries as of June 30, 2014. The projected benefit payments reflect the cost of living increase assumption of 3.00% per annum for Tier 1 and 2.00% per annum for Tier 2. Benefit payments are assumed to occur halfway through the year, on average. In accordance with paragraph 31.b.(1)(e) of GASB Statement No. 67, the long-term expected rate of return on Plan investments of 7.50% per annum was applied to all periods of projected benefit payments to determine the discount rate.
- (7) Column (d): Projected administrative expenses are calculated as approximately 0.12% of the projected beginning plan fiduciary net position amount. The 0.12% portion was based on the actual fiscal year 2013/2014 administrative expenses (unaudited) as a percentage of the actual beginning plan fiduciary net position as of July 1, 2013. Administrative expenses are assumed to occur halfway through the year, on average.
- (8) Column (e): Projected investment earnings are based on the assumed investment rate of return of 7.50% per annum.
- (9) As illustrated in this Exhibit, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected "cross-over date" when projected benefits are not covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 7.50% per annum was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2014 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B**

#### **Glossary of Terms**

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Definitions of certain terms *as they are used in Statement 68*; the terms may have different meanings in other contexts.

#### **Active employees**

Individuals employed at the end of the reporting or measurement period, as applicable.

#### **Actual contributions**

Cash contributions recognized as additions to a pension plan's fiduciary net position.

#### **Actuarial present value of projected benefit payments**

Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

#### **Actuarial valuation**

The determination, as of a point in time (the actuarial valuation date), of the service cost, total pension liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.

#### **Actuarial valuation date**

The date as of which an actuarial valuation is performed.

#### **Actuarially determined contribution**

A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.

#### **Ad hoc cost-of-living adjustments (ad hoc COLAs)**

**Cost-of-living adjustments** that require a decision to grant by the authority responsible for making such decisions.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B (continued)**

#### **Glossary of Terms**

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##### **Ad hoc postemployment benefit changes**

**Postemployment benefit changes** that require a decision to grant by the authority responsible for making such decisions.

##### **Agent employer**

An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.

##### **Agent multiple-employer defined benefit pension plan (agent pension plan)**

A multiple-employer defined benefit pension plan in which pension plan assets are pooled for investment purposes but separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of only its employees.

##### **Allocated insurance contract**

A contract with an insurance company under which related payments to the insurance company are currently used to purchase immediate or deferred annuities for individual employees. Also may be referred to as an annuity contract.

##### **Automatic cost-of-living adjustments (automatic COLAs)**

Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

##### **Automatic postemployment benefit changes**

Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

##### **Closed period**

A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.



### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B (continued)**

##### **Glossary of Terms**

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##### **Collective deferred outflows of resources and deferred inflows of resources related to pensions**

Deferred outflows of resources and deferred inflows of resources related to pensions arising from certain changes in the collective net pension liability.

##### **Collective net pension liability**

The net pension liability for benefits provided through (1) a cost-sharing pension plan or (2) a single-employer or agent pension plan in circumstances in which there is a special funding situation.

##### **Collective pension expense**

Pension expense arising from certain changes in the collective net pension liability.

##### **Contributions**

Additions to a pension plan's fiduciary net position for amounts from employers, nonemployer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.

##### **Cost-of-living adjustments**

Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.

##### **Cost-sharing employer**

An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.

##### **Cost-sharing multiple-employer defined benefit pension plan (cost-sharing pension plan)**

A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.

##### **Covered-employee payroll**

The payroll of employees that are provided with pensions through the pension plan.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B (continued)**

#### **Glossary of Terms**

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##### **Deferred retirement option program (DROP)**

A program that permits an employee to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The employee continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the employee (if the employee had retired and not entered the DROP) are credited to an individual employee account within the defined benefit pension plan until the end of the DROP period.

##### **Defined benefit pension plans**

Pension plans that are used to provide defined benefit pensions.

##### **Defined benefit pensions**

Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of Statement 68.)

##### **Defined contribution pension plans**

Pension plans that are used to provide defined contribution pensions.

##### **Defined contribution pensions**

Pensions having terms that (1) provide an individual account for each employee; (2) define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and (3) provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.

## **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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### **APPENDIX B (continued)**

#### **Glossary of Terms**

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##### **Discount rate**

The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following:

1. The actuarial present value of benefit payments projected to be made in future periods in which (a) the amount of the pension plan's fiduciary net position is projected (under the requirements of Statement 68) to be greater than the benefit payments that are projected to be made in that period and (b) pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments.
2. The actuarial present value of projected benefit payments not included in (1), calculated using the municipal bond rate.

##### **Entry age actuarial cost method**

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the *normal cost*. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the *actuarial accrued liability*.

##### **Inactive employees**

Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.

##### **Measurement period**

The period between the prior and the current measurement dates.

##### **Multiple-employer defined benefit pension plan**

A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B (continued)**

##### **Glossary of Terms**

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##### **Net pension liability**

The liability of employers and nonemployer contributing entities to employees for benefits provided through a defined benefit pension plan.

##### **Nonemployer contributing entities**

Entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities. For purposes of Statement 68, employees are not considered nonemployer-contributing entities.

##### **Other postemployment benefits**

All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.

##### **Pension plans**

Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed, and benefits are paid as they come due.

##### **Pensions**

Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.

##### **Plan members**

Individuals that are covered under the terms of a pension plan. Plan members generally include (1) employees in active service (active plan members) and (2) terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).

##### **Postemployment**

The period after employment.

**SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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**APPENDIX B (continued)**

**Glossary of Terms**

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**Postemployment benefit changes**

Adjustments to the pension of an inactive employee.

**Postemployment healthcare benefits**

Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.

**Projected benefit payments**

All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.

**Public employee retirement system**

A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.

**Real rate of return**

The rate of return on an investment after adjustment to eliminate inflation.

**Service costs**

The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.

**Single employer**

An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.

**Single-employer defined benefit pension plan (single-employer pension plan)**

A defined benefit pension plan that is used to provide pensions to employees of only one employer.

### **SECTION 3: Actuarial Assumptions and Methods and Appendices for the Los Angeles City Employees' Retirement System**

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#### **APPENDIX B (continued)**

#### **Glossary of Terms**

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##### **Special funding situations**

Circumstances in which a nonemployer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity or entities and either of the following conditions exists:

1. The amount of contributions for which the nonemployer entity legally is responsible is *not* dependent upon one or more events or circumstances unrelated to the pensions.
2. The nonemployer entity is the only entity with a legal obligation to make contributions directly to a pension plan.

##### **Termination benefits**

Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.

##### **Total pension liability**

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of Statement 68.

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**LOS ANGELES CITY EMPLOYEES'  
RETIREMENT SYSTEM**

**GOVERNMENTAL ACCOUNTING STANDARDS  
BOARD (GASB) STATEMENT NO. 68 REPORT**

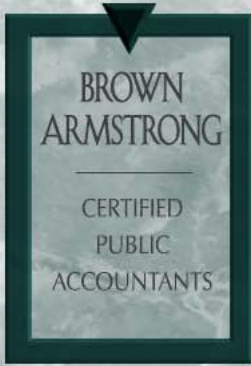
**FOR THE FISCAL YEAR ENDED  
JUNE 30, 2014**

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
GOVERNMENTAL ACCOUNTING STANDARDS  
BOARD (GASB) STATEMENT NO. 68 REPORT  
FOR THE FISCAL YEAR ENDED  
JUNE 30, 2014**

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# BROWN ARMSTRONG

*Certified Public Accountants*

## INDEPENDENT AUDITOR'S REPORT

To the Audit Committee and Board of Administration of  
Los Angeles City Employees' Retirement System  
Los Angeles, California

### Report on the Schedules

We have audited the accompanying schedule of employer allocations of the Los Angeles City Employees' Retirement System (LACERS) for the years ended June 30, 2014 and 2013, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (\$4,457,773,626, \$665,851,070, \$967,522,567, \$389,917,291, respectively) included in the accompanying schedule of pension amounts by employer of LACERS as of and for the year ended June 30, 2014, and the related notes.

### Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of schedules that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

Our audit involved performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to LACERS preparation and fair presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of LACERS internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer.

#### BAKERSFIELD OFFICE (MAIN OFFICE)

4200 TRUXTUN AVENUE  
SUITE 300  
BAKERSFIELD, CA 93309  
TEL 661.324.4971  
FAX 661.324.4997  
EMAIL [info@bacpas.com](mailto:info@bacpas.com)

#### FRESNO OFFICE

7673 N. INGRAM AVENUE  
SUITE 101  
FRESNO, CA 93711  
TEL 559.476.3592  
FAX 559.476.3593

#### PASADENA OFFICE

260 S. LOS ROBLES AVENUE  
SUITE 310  
PASADENA, CA 91101  
TEL 626.204.6542  
FAX 626.204.6547

#### STOCKTON OFFICE

5250 CLAREMONT AVENUE  
SUITE 237  
STOCKTON, CA 95207  
TEL 209.451.4833

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### **Opinions**

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations as of June 30, 2014 and 2013, and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for LACERS as of June 30, 2014, in accordance with accounting principles generally accepted in the United States of America.

### **Other Matters**

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of LACERS as of and for the year ended June 30, 2014, and our report thereon, dated December 26, 2014, expressed an unmodified opinion on those financial statements.

### **Restriction on Use**

Our report is intended solely for the information and use of LACERS management, the Audit Committee of LACERS, the Board of Administration of LACERS, and LACERS employers and their auditors and is not intended to be, and should not be, used by anyone other than these specified parties.

BROWN ARMSTRONG  
ACCOUNTANCY CORPORATION

*Brown Armstrong*  
*Accountancy Corporation*

Bakersfield, California  
September 22, 2015

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
SCHEDULE OF EMPLOYER ALLOCATIONS  
FOR THE FISCAL YEARS ENDED JUNE 30, 2014 AND 2013**

Employer	Proportionate Shares					
	2014			2013		
	Actual Contributions	Percentage*	Net Pension Liability	Actual Contributions	Percentage*	Net Pension Liability
City	\$ 293,172,196	81.972%	\$ 3,654,125,793	\$ 281,974,547	81.453%	\$ 3,850,425,590
Airports	49,369,708	13.804%	615,348,678	49,501,258	14.299%	675,950,764
Harbor	15,107,328	4.224%	188,299,155	14,705,047	4.248%	200,800,710
Total for all Employers	<u>\$ 357,649,232</u>	<u>100.000%</u>	<u>\$ 4,457,773,626</u>	<u>\$ 346,180,852</u>	<u>100.000%</u>	<u>\$ 4,727,177,064</u>

\* The unrounded percentages are used in the allocation of the Net Pension Liability among employers.

See accompanying notes and independent auditor's report.

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS  
FOR THE FISCAL YEARS ENDED JUNE 30, 2014 AND 2013**

**NOTE 1 – PLAN DESCRIPTION**

The Los Angeles City Employees' Retirement System (LACERS) is under the exclusive management and control of its Board of Administration (the Board), whose authority is granted by statute in Article XVI, Section 17 of the California State Constitution, and Article XI of the Los Angeles City Charter. LACERS is a Department of the Municipality of the City of Los Angeles (the City). LACERS financial statements are included in the City's Annual Financial Report as a pension trust fund. LACERS operates a single-employer defined benefit plan. Changes to the benefit terms require approval by the City Council.

LACERS covers all full-time personnel and department-certified part-time employees of the City, except for sworn employees of the Fire and Police departments, Department of Water and Power employees, and elected officials who elected to participate in an alternative Defined Contribution Plan, and certain Port Police officers of the Harbor Department including those who elected to opt out of LACERS. For the presentation of the detailed allocation, the City has requested to break out three individual entities separately, which are the City, Airports, and Harbor (Employers).

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING POLICIES**

Basis of Presentation and Basis of Accounting

Employers participating in LACERS are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*. The Schedule of Employer Allocations along with LACERS audited financial statements, the GASB Statement No. 67 Actuarial Valuation as of June 30, 2014, and the GASB Statement No. 68 Actuarial Valuation Based on June 30, 2014 Measurement Date for Employer Reporting as of June 30, 2015 prepared by LACERS independent actuary, provide the required information for financial reporting related to LACERS that Employers may use in their financial statements.

The accompanying schedule was prepared by LACERS independent actuary and was derived from information provided by LACERS in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations.

LACERS funding policy under Article XI Sections 1158 and 1160 of the City Charter provides for periodic Employer contributions at actuarially-determined rates that, expressed as percentages of annual covered payroll together with certain fixed amounts, are sufficient to accumulate the required assets to pay benefits when due. For the year ended June 30, 2014, the actuarially determined contributions of Employers to LACERS by the City was 19.84% of covered payroll, based on the June 30, 2012 actuarial valuation. Contributions for Employers contributing to LACERS are reported on an accrual basis of accounting.

The employer allocation schedule includes the proportionate shares for each Employer, reflecting a methodology that allocates the Net Pension Liability and Pension Amounts based on each Employer's share of the total Employer contributions among the three Employers. Each Employer's share as of June 30, 2014 and 2013, is determined by the Employer's contributions for the 2013/2014 and 2012/2013 fiscal years, respectively.

Use of Estimates in the Preparation of the Schedule

The preparation of this schedule in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts and disclosures during the reporting period. Actual results could differ from those estimates.

**NOTE 3 – RELATIONSHIP TO THE BASIC FINANCIAL STATEMENTS**

LACERS policy for contributions states that actuarially determined rates expressed as a percentage of employee pensionable wages are required to finance the costs of benefits earned by LACERS Members during the year, with an additional amount to finance any unfunded liability. Employer contributions are reported in the basic financial statements and are the basis for the proportionate share calculation.

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
SCHEDULE OF PENSION AMOUNTS BY EMPLOYER  
AS OF AND FOR THE FISCAL YEAR ENDED JUNE 30, 2014**

Employer	Deferred Outflows of Resources						Deferred Inflows of Resources					Pension Expense		
	Net Pension Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes in Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes in Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
City	\$ 3,654,125,793	\$ -	\$ -	\$ 529,277,788	\$ 20,169,805	\$ 549,447,593	\$ 109,078,939	\$ 667,484,981	\$ -	\$ -	\$ 776,563,920	\$ 319,622,967	\$ 4,365,759	\$ 323,988,726
Airports	615,348,678	-	-	89,129,495	-	89,129,495	18,368,711	112,403,356	-	19,247,627	150,019,694	53,823,974	(4,166,153)	49,657,821
Harbor	188,299,155	-	-	27,273,982	-	27,273,982	5,620,899	34,395,876	-	922,178	40,938,953	16,470,350	(199,606)	16,270,744
<b>Total for All Employers</b>	<b>\$ 4,457,773,626</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 645,681,265</b>	<b>\$ 20,169,805</b>	<b>\$ 665,851,070</b>	<b>\$ 133,068,549</b>	<b>\$ 814,284,213</b>	<b>\$ -</b>	<b>\$ 20,169,805</b>	<b>\$ 967,522,567</b>	<b>\$ 389,917,291</b>	<b>\$ -</b>	<b>\$ 389,917,291</b>

See accompanying notes and independent auditor's report.

**LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM  
NOTES TO SCHEDULE OF PENSION AMOUNTS BY EMPLOYER  
AS OF AND FOR THE FISCAL YEAR ENDED JUNE 30, 2014**

**NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING POLICIES**

Basis of Presentation and Basis of Accounting

For the presentation of the detailed allocation, the City of Los Angeles (the City) has requested to break out three individual entities separately, which are the City, Airports, and Harbor (Employers). Employers participating in Los Angeles City Employees' Retirement System (LACERS) are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – an Amendment of GASB Statement No. 27*. The Schedule of Pension Amounts by Employer along with LACERS audited financial statements, the GASB Statement No. 67 Actuarial Valuation as of June 30, 2014, and the GASB Statement No. 68 Actuarial Valuation Based on June 30, 2014 Measurement Date for Employer Reporting as of June 30, 2015 prepared by LACERS independent actuary, provide the required information for financial reporting related to LACERS that Employers may use in their financial statements.

The accompanying schedule was prepared by LACERS independent actuary and was derived from information provided by LACERS in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations.

Use of Estimates in the Preparation of the Schedule

The preparation of this schedule in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts and disclosures during the reporting period. Actual results could differ from those estimates.

**NOTE 2 – ACTUARIAL ASSUMPTIONS**

Actuarial Methods and Assumptions Used to Determine Total Pension Liability

The actuarial assumptions used in the June 30, 2014 valuation were based on the results of an actuarial experience study for the period July 1, 2011, through June 30, 2014. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2014, and the Total Pension Liability as of the valuation date June 30, 2014.

The components of the Plan's Net Pension Liability at June 30, 2014, were as follows:

	Fiscal Year Ended June 30, 2014
Total Pension Liability	\$ 16,248,853,099
Plan Fiduciary Net Position	(11,791,079,473)
Plan's Net Pension Liability	\$ 4,457,773,626
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	72.57%

**NOTE 2 – ACTUARIAL ASSUMPTIONS** (Continued)

Actuarial Methods and Assumptions Used to Determine Total Pension Liability (Continued)

The Total Pension Liability for June 30, 2014, was determined based on the June 30, 2014 actuarial valuation, using the following actuarial assumptions, applied to all periods included in the measurement:

**ACTUARIAL VALUATION ASSUMPTIONS**

Valuation Date	June 30, 2014
Investment Rate of Return	7.50%, net of pension plan investment expense, including inflation
Projected Salary Increases	Ranges from 4.40% to 10.50% based on years of service
Inflation	3.25%
Cost-of-Living Adjustments	Tier 1: 3.00%, Tier 2: 2.00%, actual increases are contingent upon Consumer Price Index (CPI) increases with a 3.00% maximum for Tier 1 and a 2.00% maximum for Tier 2.

Postemployment mortality rates for healthy retirees and beneficiaries were based on the RP-2000 Combined Healthy Mortality Table projected with scale BB to the year 2020, set back one year for males and with no setback for females. Postemployment mortality rates for disabled retirees were based on the RP-2000 Combined Healthy Mortality Table projected with scale BB to the year 2020, set forward seven years for males and set forward eight years for females.

For pre-retirement mortality, withdrawal rates, disability rates, and service retirement rates, the rates vary by age, gender, and/or service.

Discount Rate

The discount rate used to measure the Total Pension Liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from plan Members will be made at the current contribution rate and that contributions from the Employers will be made at contractually required rates, actuarially determined. For this purpose, only Employer contributions that are intended to fund benefits for current plan Members and their beneficiaries are included. Projected Employer contributions that are intended to fund the service costs for future plan Members and their beneficiaries, as well as projected contributions from future plan Members, are not included. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan Members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability as of June 30, 2014.

Amortization of Deferred Outflows and Deferred Inflows of Resources

The difference between projected and actual investment earnings on pension plan investments is amortized over 5 years on a straight-line basis. One-fifth was recognized in pension expense during the measurement period, and the remaining difference between projected and actual investment earnings on pension plan investments at June 30, 2014, is to be amortized over the remaining 4-year period.

The assumption changes about future economic and demographic changes and differences between expected and actual experience are recognized over the average of the expected remaining service lives of all employees that are provided with pensions through LACERS is determined as of June 30, 2013 (the beginning of the measurement period ending June 30, 2014) and is 5.62 years.



**NOTE 2 – ACTUARIAL ASSUMPTIONS** (Continued)

Amortization of Deferred Outflows and Deferred Inflows of Resources (Continued)

In addition, the difference between the actual Employer contributions and the proportionate share of the Employer contributions during the measurement period ended June 30, 2014 is recognized over the same period which is 5.62 years. The Schedule of Pension Amounts by Employer does not reflect contributions made to LACERS subsequent to the measurement date as defined in GASB Statement No. 68 paragraphs 54, 55, and 57. Appropriate treatment of such amounts is the responsibility of the Employers.

**NOTE 3 – RELATIONSHIP TO THE BASIC FINANCIAL STATEMENTS**

The components of the schedule associated with pension expense and deferred outflows and inflows of resources have been determined based on the net increase in fiduciary net position for the LACERS as shown in the LACERS Statement of Changes in Fiduciary Net Position for the year ended June 30, 2014 and in accordance with requirements promulgated by GASB Statements No. 67 and No. 68. The net pension liability at June 30, 2014, is reported in the Notes to Los Angeles City Employees' Retirement System Basic Financial Statements and Required Supplementary Information following the Notes.



100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

November 24, 2014

Mr. Tom Moutes  
General Manager  
Los Angeles City Employees' Retirement System  
202 W. 1<sup>st</sup> Street, Suite 500  
Los Angeles, CA 90012-4401

**Re: Los Angeles City Employees' Retirement System  
FY 2015-2016 Retirement and Health Plan Contributions  
with Adjustments to Reflect Five-Year Phase-in of City Contribution Rates  
for June 30, 2011 Triennial Experience Study**

Dear Tom:

On October 25, 2011, the Board elected to phase in the impact of new actuarial assumptions (adopted as recommended in the June 30, 2011 Triennial Experience Study) on the City's retirement and health plan contributions over a five-year period, beginning with the 2012-2013 Fiscal Year. The recommended pre-phase-in contribution rates for Fiscal Year 2015-2016 are contained in Segal's June 30, 2014 reports entitled *Actuarial Valuation and Review of Retirement Benefits* and *Actuarial Valuation and Review of Other Postemployment Benefits (OPEB)*. This letter provides the "phased-in" contribution rates for Fiscal Year 2015-2016 (i.e., the fourth year of the phase-in) and an analysis of the financial reporting and future contribution rate impact of the five-year phase-in.<sup>1</sup>

#### **PHASE-IN CONTRIBUTION RATES FOR 2015-2016**

Table A below shows the full impact of the new actuarial assumptions on the City's retirement and health plan contributions for Fiscal Year 2012-2013 as determined in the June 30, 2011 valuations, assuming payment at the beginning of the year, on July 15, 2012, or at the end of each pay period. This is the portion of the increase over the current contribution rates that will be phased-in over five years.

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<sup>1</sup> On October 14, 2014, as part of the Board's deliberations on the actuarial assumptions for use in the June 30, 2014 valuation, the Board also discussed the possibility of phasing in the cost impact of the new actuarial assumptions adopted from the recent June 30, 2014 Triennial Experience Study on the City's retirement and health plan contributions over three alternative phase-in periods. In a separate letter, dated November 25, 2014, we provide the phase-in contribution rates for Fiscal Year 2015-2016 resulting from the 2014 Experience Study. That is, all of the rates provided herein are before any adjustments that may be considered by the Board to phase in the City contribution rate impact of new actuarial assumptions adopted as recommended in the June 30, 2014 Triennial Experience Study.

**Table A**

<b>Plan:</b>	<b>Full Impact of the New Actuarial Assumptions Adopted from the 2011 Experience Study (% of payroll):</b>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
Retirement	1.20%	1.21%	1.23%
Health	<u>0.18%</u>	<u>0.18%</u>	<u>0.19%</u>
Total	1.38%	1.39%	1.42%

The decreases in the contribution rates for the fourth year of the phase-in are simply 20% of the rates shown in Table A. The adjustments to the contribution rates as provided in the June 30, 2014 reports are shown below in Table B.

**Table B**

<b>Plan:</b>	<b>Fourth-Year Deferred Portion of the Impact of the New Actuarial Assumptions Adopted from the 2011 Experience Study (% of payroll):</b>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
Retirement	0.24%	0.24%	0.25%
Health	<u>0.04%</u>	<u>0.04%</u>	<u>0.04%</u>
Total	0.28%	0.28%	0.29%

The phased-in City contribution rates for 2015-2016 are provided in Table D. For your convenience, we have also provided in Table C the City contribution rates for 2015-2016 before the phase-in. The rates in Table D (after the phase-in) are developed by taking the rates in Table C (before the phase-in) minus the rates in Table B.

**Table C**

<b>Plan:</b>	<b>City Contribution Rates for 2015-2016, Before Reflecting Five-Year Phase-In of the Impact of the New Actuarial Assumptions Adopted from the 2011 Experience Study (% of payroll):</b>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	23.32%	23.39%	24.18%
Health	<u>5.62%</u>	<u>5.64%</u>	<u>5.83%</u>
Total	28.94%	29.03%	30.01%
<u>Tier 2</u>			
Retirement	18.07%	18.12%	18.74%
Health	<u>4.76%</u>	<u>4.78%</u>	<u>4.94%</u>
Total	22.83%	22.90%	23.68%
<u>Combined</u>			
Retirement	23.19%	23.26%	24.05%
Health	<u>5.60%</u>	<u>5.62%</u>	<u>5.81%</u>
Total	28.79%	28.88%	29.86%

**Table D**  
**City Contribution Rates for 2015-2016,**  
**After Reflecting Five-Year Phase-In of the Impact of the**  
**New Actuarial Assumptions**  
**Adopted from the 2011 Experience Study (% of payroll):**

<u>Plan:</u>	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	23.08%	23.15%	23.93%
Health	<u>5.58%</u>	<u>5.60%</u>	<u>5.79%</u>
Total	28.66%	28.75%	29.72%
<u>Tier 2</u>			
Retirement	17.83%	17.88%	18.49%
Health	<u>4.72%</u>	<u>4.74%</u>	<u>4.90%</u>
Total	22.55%	22.62%	23.39%
<u>Combined</u>			
Retirement	22.95%	23.02%	23.80%
Health	<u>5.56%</u>	<u>5.58%</u>	<u>5.77%</u>
Total	28.51%	28.60%	29.57%

**IMPACT OF FIVE-YEAR PHASE-IN ON FINANCIAL REPORTING FOR RETIREE HEALTH PLAN ONLY**

The health plan contribution rates recommended in Segal Consulting’s June 30, 2014 actuarial valuation report satisfy the parameters required for determining the Annual Required Contribution (ARC) under Governmental Accounting Standards Board (GASB) Statements No. 43 and 45 for the 2015-2016 Fiscal Year, including the requirement that the System’s Unfunded Actuarial Accrued Liability be amortized over an Equivalent Single Amortization Period (ESAP) of no longer than 30 years<sup>2</sup>. Those requirements are met before any phase-in, and they reflect the full contribution rate impact of the new actuarial assumptions.

We have calculated that, for the health plan, the ESAP is still shorter than 30 years even after the phase-in. This means that contributing the phase-in rates for Fiscal Year 2015-2016 will not result in the City recording a liability for the health plan (Net OPEB Obligation or “NOO”).

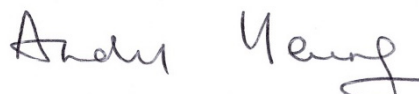
We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

If you have any questions, please let us know.

Sincerely,



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



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

DNA/bqb

<sup>2</sup> It should be noted that a similar requirement used to apply under the old GASB Statements No. 25 and 27 for the Retirement Plan. However, that requirement no longer applies under the new GASB Statements No. 67 and 68.



100 Montgomery Street Suite 500 San Francisco, CA 94104-4308  
T 415.263.8200 www.segalco.com

November 25, 2014

Mr. Tom Moutes  
General Manager  
Los Angeles City Employees' Retirement System  
202 West First Street, Suite 500  
Los Angeles, CA 90012-4401

**Re: Los Angeles City Employees' Retirement System  
Adjustments to Reflect a Two-Year, a Three-Year, or a Modified Three-Year  
Phase-In of Incremental City Contribution Rates Resulting from New Actuarial  
Assumptions Adopted from the June 30, 2014 Experience Study**

Dear Tom:

On October 14, 2014, as part of the Board's deliberations on the actuarial assumptions for use in the June 30, 2014 valuations, the Board also discussed the possibility of phasing in the cost impact of the new actuarial assumptions, adopted as recommended in the June 30, 2014 triennial experience study, on the City's retirement and health plan contributions over either a two- or three-year period, beginning with the 2015-2016 fiscal year. Subsequent to the October 14 Board meeting, LACERS' staff asked Segal Consulting to include the incremental costs for a "modified three-year" phase-in scenario, whereby none (0%) of the cost impact of the new assumptions is phased-in during the first year, 50% is phased-in during the second year, and 100% is phased-in during the third year. In our letter dated October 23, 2014, we provided the illustrative rate impacts projected based on membership data used in the June 30, 2013 valuations. In this letter, we have updated those results based on membership data used in the June 30, 2014 valuations.

The recommended contribution rates for Fiscal Year 2015-2016 before they have been adjusted to reflect either the five-year phase-in approved by the Board for the rate impact of the June 30, 2011 experience study or the rate impact of the June 30, 2014 experience study are provided in Segal Consulting's June 30, 2014 valuation reports dated December 3, 2014. In our letter dated November 24, 2014, we provided the City's contribution rates after they have been adjusted to reflect the five-year phase-in of the June 30, 2011 experience study. Using those results, this letter provides the "phased-in" contribution rates for Fiscal Year 2015-2016 reflecting the June 30, 2014 experience study cost impact under a two-year, a three-year, or a modified three-year phase-in.

**INCREMENTAL PHASE-IN CONTRIBUTION RATES FOR 2015-2016**

Table A below shows the full impact of the new actuarial assumptions adopted from the June 30, 2014 experience study on the City’s retirement and health plan contributions for Fiscal Year 2015-2016, assuming payment at the beginning of the year, on July 15, 2015, or at the end of each pay period. This is the portion of the increase in the contribution rates developed in the June 30, 2014 valuations that would be phased-in over either two or three years.

**Table A: Full Impact of the New Actuarial Assumptions  
 Adopted from the 2014 Experience Study**

Plan:	Rate (% of payroll):		
	Beginning of Year	July 15	End of Pay Periods
<u>Tier 1 and Tier 2 Combined</u>			
Retirement	2.77%	2.78%	2.85%
Health	<u>0.45%</u>	<u>0.45%</u>	<u>0.46%</u>
Total	3.22%	3.23%	3.31%

The incremental increases in the City contribution rates for the first year of the phase-in are simply one-half of the rates shown in Table A for a two-year phase-in, or one-third of the rates shown in Table A for a (“non-modified”) three-year phase-in. (Note that there are no incremental increases for the first year of the phase-in under the modified three-year phase-in scenario.) These first-year phase-in rates are shown below in Tables B-1 (two-year phase-in) and B-2 (three-year phase-in) and would apply to contributions for Fiscal Year 2015-2016:

**Table B-1 (Two-Year Phase-In): First-Year Phase-In of the Impact of the  
 New Actuarial Assumptions Adopted from the 2014 Experience Study**

Plan:	Rate (% of payroll):		
	Beginning of Year	July 15	End of Pay Periods
<u>Tier 1 and Tier 2 Combined</u>			
Retirement	1.38%	1.39%	1.43%
Health	<u>0.23%</u>	<u>0.23%</u>	<u>0.23%</u>
Total	1.61%	1.62%	1.66%

**Table B-2 (Three-Year Phase-In): First-Year Phase-In of the Impact of the  
 New Actuarial Assumptions Adopted from the 2014 Experience Study**

Plan:	Rate (% of payroll):		
	Beginning of Year	July 15	End of Pay Periods
<u>Tier 1 and Tier 2 Combined</u>			
Retirement	0.92%	0.93%	0.95%
Health	<u>0.15%</u>	<u>0.15%</u>	<u>0.15%</u>
Total	1.07%	1.08%	1.10%

Note that the actual rate impact for the remaining years of the phase-in would be slightly higher than simply adding another one-half (for the two-year phase-in), another one-third (for the three-year phase-in), or another 50% (for the modified three-year phase-in) of the full increases to the contribution rates for the preceding year. This is due to interest that would accrue on the portion of the total contribution rate increase that would not be made because of the phase-in.

The actual incremental increase in the City contribution rate due to the phase-in for the remaining years would be reflected in the new contribution rates determined at the time of each such future valuation. We have provided below in Tables C-1 (two-year phase-in), C-2 (three-year phase-in), and C-3 (modified three-year phase-in) an estimate of these incremental increases (combined for Tier 1 and Tier 2), with and without the phase-in, assuming payment by the employer on July 15<sup>th</sup>. These results illustrate the additional interest cost due to the phase-in.

**Table C-1 (Two-Year Phase-In; Payment on July 15<sup>th</sup>):  
 Combined Tier 1 and Tier 2 Contribution Increases Under Phase-In**

<u>Fiscal Year</u>	<u>Pension Plan</u>		<u>Retiree Health Plan</u>		<u>Total</u>	
	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>
2015/16	2.78%	1.39%	0.45%	0.23%	3.23%	1.62%
2016/17	2.78%	2.91%	0.45%	0.47%	3.23%	3.38%

**Table C-2 (Three-Year Phase-In; Payment on July 15<sup>th</sup>):  
 Combined Tier 1 and Tier 2 Contribution Increases Under Phase-In**

<u>Fiscal Year</u>	<u>Pension Plan</u>		<u>Retiree Health Plan</u>		<u>Total</u>	
	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>
2015/16	2.78%	0.93%	0.45%	0.15%	3.23%	1.08%
2016/17	2.78%	2.02%	0.45%	0.33%	3.23%	2.35%
2017/18	2.78%	3.03%	0.45%	0.49%	3.23%	3.52%

**Table C-3 (Modified Three-Year Phase-In; Payment on July 15<sup>th</sup>):  
 Combined Tier 1 and Tier 2 Contribution Increases Under Phase-In**

<u>Fiscal Year</u>	<u>Pension Plan</u>		<u>Retiree Health Plan</u>		<u>Total</u>	
	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>	<u>Without Phase-in</u>	<u>With Phase-in</u>
2015/16	2.78%	0.00%	0.45%	0.00%	3.23%	0.00%
2016/17	2.78%	1.63%	0.45%	0.27%	3.23%	1.90%
2017/18	2.78%	3.15%	0.45%	0.51%	3.23%	3.66%

**AFTER PHASE-IN CONTRIBUTION RATES FOR 2015-2016**

In our letter dated November 24, 2014, we provided the City contribution rates for 2015-2016, after reflecting the five-year phase-in of the impact of the new actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study. For your convenience, those rates are reproduced in Table D below:

**Table D: City Contribution Rates for 2015-2016,  
 After Reflecting Five-Year Phase-In of the Impact of the New Actuarial Assumptions  
 Adopted as Recommended in the June 30, 2011 Triennial Experience Study<sup>1</sup>:**

<u>Plan:</u>	<u>Rate (% of payroll):</u>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	23.08%	23.15%	23.93%
Health	<u>5.58%</u>	<u>5.60%</u>	<u>5.79%</u>
Total	28.66%	28.75%	29.72%
<u>Tier 2</u>			
Retirement	17.83%	17.88%	18.49%
Health	<u>4.72%</u>	<u>4.74%</u>	<u>4.90%</u>
Total	22.55%	22.62%	23.39%
<u>Combined</u>			
Retirement	22.95%	23.02%	23.80%
Health	<u>5.56%</u>	<u>5.58%</u>	<u>5.77%</u>
Total	28.51%	28.60%	29.57%

In table E-1 below, we have provided the City contribution rates for 2015-2016 after reflecting (a) the five-year phase-in of the impact of the new actuarial assumptions adopted as recommended in the June 30, 2011 triennial experience study, and (b) the possible two-year phase-in of the impact of the new actuarial assumptions adopted as recommended in the June 30, 2014 triennial experience study. These after phase-in rates are developed by taking the rates determined in Table D minus the rates in Table A (i.e., the full impact of the new 2014 actuarial assumptions) plus the rates in Table B-1 (i.e., the first-year incremental phase-in rates).

Similar results are provided below in tables E-2 (three-year phase-in) and E-3 (modified three-year phase-in).

<sup>1</sup> Before reflecting possible phase-in of the cost impact of the new actuarial assumptions adopted as recommended in the June 30, 2014 triennial experience study.



**Table E-1 (Two-Year Phase-In): City Contribution Rates for 2015-2016  
 After Reflecting Phase-In of the Impact of the New Actuarial Assumptions  
 Adopted from the 2011 and 2014 Experience Studies**

<u>Plan:</u>	<u>Rate (% of payroll):</u>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	21.69%	21.76%	22.51%
Health	<u>5.36%</u>	<u>5.38%</u>	<u>5.56%</u>
Total	27.05%	27.14%	28.07%
<u>Tier 2</u>			
Retirement	16.44%	16.49%	17.07%
Health	<u>4.50%</u>	<u>4.52%</u>	<u>4.67%</u>
Total	20.94%	21.01%	21.74%
<u>Combined</u>			
Retirement	21.56%	21.63%	22.38%
Health	<u>5.34%</u>	<u>5.36%</u>	<u>5.54%</u>
Total	26.90%	26.99%	27.92%

**Table E-2 (Three-Year Phase-In): City Contribution Rates for 2015-2016  
 After Reflecting Phase-In of the Impact of the New Actuarial Assumptions  
 Adopted from the 2011 and 2014 Experience Studies**

	<u>Rate (% of payroll):</u>		
	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	21.23%	21.30%	22.03%
Health	<u>5.28%</u>	<u>5.30%</u>	<u>5.48%</u>
Total	26.51%	26.60%	27.51%
<u>Tier 2</u>			
Retirement	15.98%	16.03%	16.59%
Health	<u>4.42%</u>	<u>4.44%</u>	<u>4.59%</u>
Total	20.40%	20.47%	21.18%
<u>Combined</u>			
Retirement	21.10%	21.17%	21.90%
Health	<u>5.26%</u>	<u>5.28%</u>	<u>5.46%</u>
Total	26.36%	26.45%	27.36%

**Table E-3 (Modified Three-Year Phase-In): City Contribution Rates for 2015-2016  
 After Reflecting Phase-In of the Impact of the New Actuarial Assumptions  
 Adopted from the 2011 and 2014 Experience Studies**

	<u>Beginning of Year</u>	<u>July 15</u>	<u>End of Pay Periods</u>
<u>Tier 1</u>			
Retirement	20.31%	20.37%	21.08%
Health	<u>5.13%</u>	<u>5.15%</u>	<u>5.33%</u>
Total	25.44%	25.52%	26.41%
<u>Tier 2</u>			
Retirement	15.06%	15.10%	15.64%
Health	<u>4.27%</u>	<u>4.29%</u>	<u>4.44%</u>
Total	19.33%	19.39%	20.08%
<u>Combined</u>			
Retirement	20.18%	20.24%	20.95%
Health	<u>5.11%</u>	<u>5.13%</u>	<u>5.31%</u>
Total	25.29%	25.37%	26.26%

**IMPACT OF TWO-YEAR OR THREE-YEAR PHASE-IN ON FINANCIAL REPORTING  
 FOR RETIREE HEALTH PLAN ONLY**

The health plan contribution rates recommended in Segal’s June 30, 2014 actuarial valuation report satisfy the parameters required for determining the Annual Required Contribution (ARC) under Governmental Accounting Standards Board (GASB) Statements No. 43 and 45 for the 2015-2016 fiscal year, including the requirement that the Equivalent Single Amortization Period (ESAP) for the System’s Unfunded Actuarial Accrued Liability be amortized over an equivalent single period of no longer than 30 years<sup>2</sup>. Those requirements are met before any phase-in, and reflect the full contribution rate impact of the new actuarial assumptions.

However, under all three phase-in scenarios described herein, applying the assumption changes adopted from the 2014 experience study in the June 30, 2014 valuation results in an ESAP that is longer than 30 years. Therefore, contributing the phase-in rates for 2015-2016 will result in the City recording a liability (Net OPEB Obligation or “NOO”).

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

<sup>2</sup> It should be noted that a similar requirement used to apply under the old GASB Statements No. 25 and 27 for the Pension Plan. However, that requirement no longer applies under the new GASB Statements No. 67 and 68.

Mr. Tom Moutes  
November 25, 2014  
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If you have any questions, please let us know.

Sincerely,



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



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

DNA/bqb