ATTACHMENT 1

Los Angeles City Employees' Retirement System (LACERS)

Actuarial Audit as of June 30, 2012

Produced by Cheiron

June 2013

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June 27, 2013

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

Dear Members of the Board:

Cheiron is pleased to present the results of our Actuarial Audit of the Los Angeles City Employees' Retirement and Health Plan Actuarial Valuations as of June 30, 2012, the Family Death Benefit Insurance Plan Actuarial Analysis as of June 30, 2011 and the Actuarial Experience Study of these plans for the period July 1, 2008 through June 30, 2011. We direct your attention to the summary section of our report which highlights the key findings of our review of the actuarial valuations and experience study. The balance of the report provides details in support of these findings along with supplemental data, background information and discussion of the process taken in the evaluation of the work performed by the System's actuary.

We would like to take this opportunity to thank the members of the Los Angeles City Employees' Retirement System staff and the Segal Company (Segal) for their assistance in providing the data and addressing our questions during this audit process.

In performing this audit, Cheiron used actuarial assumptions and methods recommended by the actuary and adopted by the Board of Administration (the Board) based upon the most recent experience review completed in 2011.

The results of this audit report reflect a full replication of the System's June 30, 2012 Retirement and Health Actuarial Valuations and the System's June 30, 2011 Family Death Benefit Insurance Plan Actuarial Analysis. The results of these valuations are dependent upon future experience conforming to the actuarial assumptions. It is certain that actual experience will not conform exactly to these assumptions. Actual results will differ from expected results to the extent actual experience differs from expected experience.

In preparing our report, we relied, without audit, on information (some oral and some written) supplied by the Los Angeles City Employees' Retirement System and the System's actuary. This information includes, but is not limited to, plan provisions, employee census data and financial information. A detailed description of all information provided for this audit is included in the body of our report.

While the data was not explicitly audited, we did perform an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

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This report does not reflect future changes in benefits, penalties, taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations.

We hereby certify that, to the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This actuarial audit report was prepared exclusively for LACERS for the purpose described herein. This report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

Sincerely,
Cheiron

Gene Kalwarski, FSA	Michael Schionning, FSA	David Holland, FSA
Principal Consulting Actuary	Principal Consulting Actuary	Associate Actuary

SECTION I
EXECUTIVE SUMMARY

A. Scope of the Report

Cheiron's audit of the Los Angeles City Employees' Retirement System (LACERS) included the following components:

1. Audit of the LACERS Retirement Plan valuation as of June 30, 2012;
2. Audit of the LACERS Health Plan valuation as of June 30, 2012;
3. Audit of the LACERS Family Death Benefit Insurance Plan (FDBIP) analysis as of June 30, 2011; and
4. Audit of the LACERS Retirement and Health Plan Experience Study as of June 30, 2011.

The basic objectives of our review are to answer three questions:

1. Given the assumptions applied, are the valuation results (benefit flows, liabilities, and actuarial costs) accurate?

2. Are the valuation results based upon reasonable actuarial assumptions and methods, and are they in full compliance with actuarial standards of practice (ASOPs)?

3. Is the actuarial information being provided to LACERS comprehensive? Does the LACERS Board have the information required to assess the present and future financial status of the Plans?

Our review included an analysis of each of the following:

- We collected both raw member data from LACERS and edited data from Segal. We performed an independent analysis on the raw data to confirm the member information used in the actuarial valuations.

- We reviewed and evaluated the actuarial methods and assumptions displayed in the valuation reports, and reviewed the results and recommendations made in the last experience study.

- We independently determined plan liabilities, assets and costs, and compared them to those presented in the valuation reports and in separate detailed results provided to us by Segal.

- In addition to the assets, liabilities, and costs shown in the valuation reports, we also reviewed the content of the reports for completeness and compliance with actuarial standards of practice.

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EXECUTIVE SUMMARY

B. Retirement Plan Audit

Cheiron has conducted an independent actuarial audit of the Segal Company's June 30, 2012 Retirement Plan Actuarial Valuation of the Los Angeles City Employees' Retirement System (LACERS). The purpose of this study is to determine if the actuarial work is correct, reasonable, and comprehensive.

To answer these questions, Cheiron replicated the results from the valuation, assessed the reasonableness of the assumptions and methods, reviewed the information provided in the valuation report, and developed an interactive projection model to assess the sensitivity of the current and projected results to certain chosen assumptions.

Replication of Valuation Results

This is the most straightforward part of the review process. The actuarial calculations were checked using an independent valuation system to establish that the calculations of liabilities and costs are substantially correct. We can confirm that the liabilities and costs computed in the valuation as of June 30, 2012 are reasonably accurate and were computed in accordance with generally accepted actuarial principles. With respect to member data, we independently collected the data from LACERS. Although the data we used in our parallel valuation was similar to that used by Segal in their report, there are some minor differences that are described later in this Report. We do not believe that these discrepancies have a material impact on the valuation results.

Review of Assumptions and Methods

Economic Assumptions

While the actuarial assumptions cannot be characterized as unreasonable, we would like to point out that there has been a significant trend by public sector pension plans to lower their discount rates. While the 7.75% discount that LACERS utilizes is still in the mainstream of other public plans discount rates, LACERS should consider lowering the rate by 25 to 50 basis points.

At the same time, LACERS can partially offset the cost of lowering the discount rate by simultaneously reducing the assumed inflation rate and perhaps eliminating the real across the board salary increase assumption. The assumed COLA increase can also be lowered.

CPI: Segal provided evidence that both the short and long-term inflation expectations of investment market participants are significantly lower (2.2% - 2.8%) than the current inflation assumption used by the Plan (3.5%), though they did not make a recommendation to reduce the inflation assumption for the current valuation.

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EXECUTIVE SUMMARY

Salary Increases: The currently assumed total annual growth in payroll (inflation plus real across the board) is 4.25%, which is a higher growth rate than that assumed by most other public sector pension plans. Furthermore, there is currently significant downward pressure on government costs, including salary costs, and this can be expected to persist for some time. This makes government pay increases above the rate of inflation unlikely.

COLA: Finally, in the economic assumptions, Segal has recommended that the assumption for future Cost-of-Living Adjustments (COLAs) should be the same as the 3.0% cap on the COLAs. Simulation analyses we have performed for other clients suggest that expected growth in the COLA should be less than the cap – around 2.7% – due to annual variation in the Consumer Price Index (CPI), even if the CPI averages 3.5% over the long-term.

Demographic Assumptions

With respect to the non-economic assumptions (turnover, retirement, mortality, etc.), the assumptions proposed in Segal's review represent a reasonable set of assumptions. However, there are some areas where our recommended assumptions would differ, or where we wish to offer additional comments. Those comments can be found in Section IV, Assumptions and Methods Review.

Phase-in of Experience Study Results

The impact of the new actuarial assumptions resulting from the June 30, 2011 Experience Study is being phased in over five years to the City's retirement and health plan contributions. However, based on discussion with LACERS staff, experience studies will continue to be performed on a triennial basis. While we do not object to phasing in the results of an experience study over a period of time, we recommend that if they continue to be performed every three years, the phase-in period be three years or less.

Actuarial Methods

With respect to actuarial methods employed in this valuation, we find that the change from Projected Unit Credit (PUC) Funding method to Entry Age Normal (EAN) is reasonable and preferable, as EAN produces a more stable and predictable contribution pattern, and is by far the most prevalent method used in the public sector.

We do have concerns with the method to develop the actuarial value of assets. LACERS presently recognizes investment gains and losses over a seven year period. By far, most plans use a smoothing method of five years or less.

In addition, LACERS allows the actuarial value of assets to be within a 60% to 140% corridor. In the private sector, defined benefit pension plans are prohibited by federal law from having a corridor wider than 80% to 120%. A large percentage of public sector plans maintain a corridor within that same range.

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In our opinion, the use of a long asset gain or loss recognition period combined with a very wide corridor (60% to 140%) is at least questionable, if not unreasonable.

When you also consider the fact that the majority of the Plan's unfunded actuarial liabilities (UAL) are being amortized over 30 years, with payments increasing by 4.25% per year, the overall funding scheme for LACERS is questionable and is passing much of what should be funded currently to future generations of taxpayers.

For example, employer and member contributions presently are nearly $100 million less than the value of benefits earned in a year (the normal cost) plus interest on the unfunded actuarial accrued liability (UAL).

Review of Valuation Report

Did the valuation report adequately address and communicate the essential information needed by the Trustees, mandated by GASB, and required by actuaries under the Actuarial Standards of Practice (ASOPs)?

While the valuation report contained most of the essential information required by GASB and the ASOPs, we believe that the interests of the Plan Trustees, Members, and the Plan Sponsor would be much better served if Segal were to include liability and cost projections in its reports and in presentations to the Trustees.

It would also be illustrative to supplement these projections with stress testing projections that show the liabilities, cost, and funded ratios if the actuarial assumptions are not realized.

For instance, on the following pages we show projections of the Plan's assets, liabilities, and contributions over the next 30 years; first assuming that the Plan will earn the assumed 7.75% investment return, and then assuming that the Plan will earn varying returns that average approximately 7.75% over the 30-year period. The dramatic difference in the two sets of projections illustrates the kind of volatility that can be expected in the Plan's financial results, even if the assumptions are met on average over the long-term.

Note that both sets of projections are intended to be illustrative, rather than a prediction of future outcomes.

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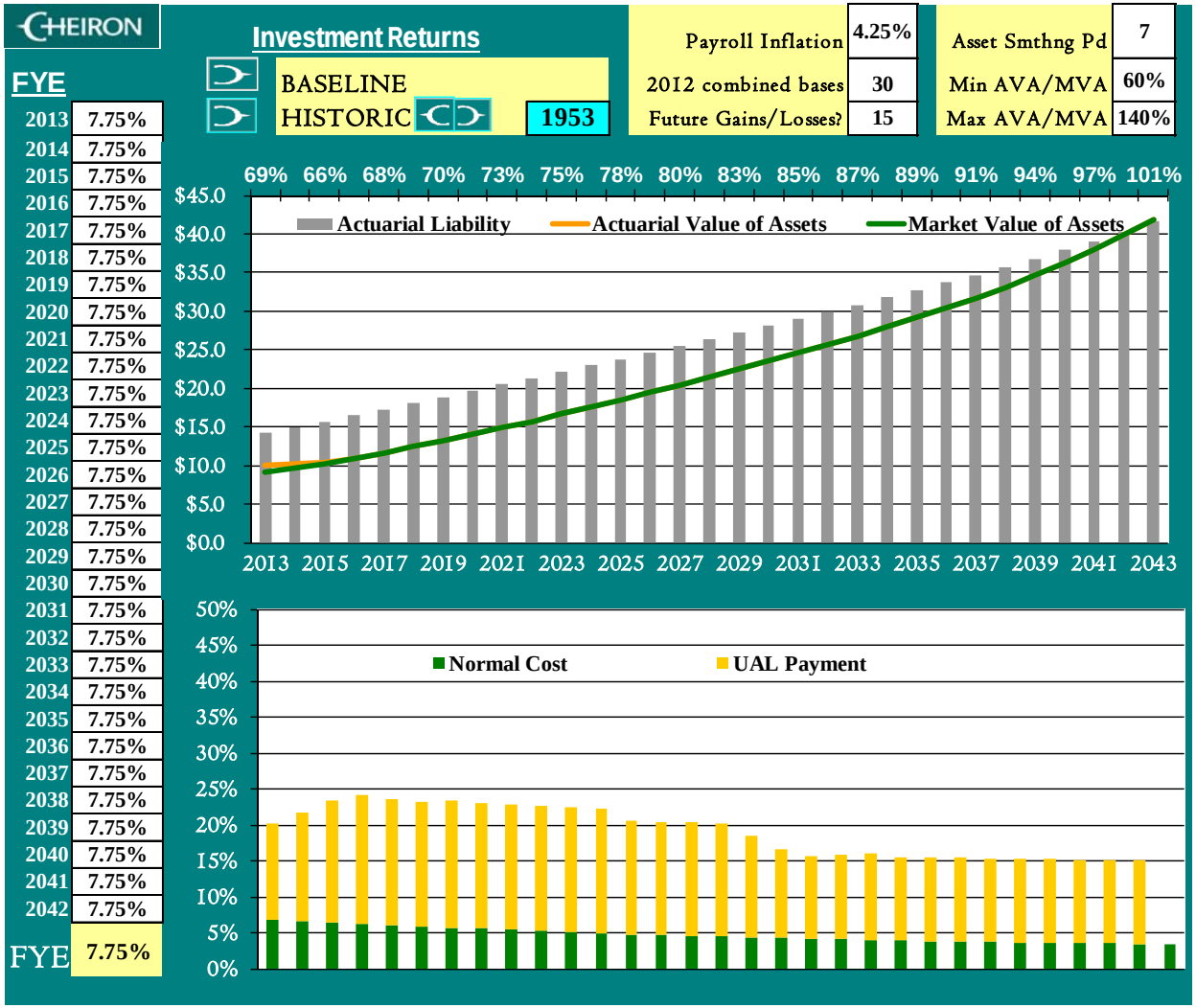

Results are intended to be illustrative and not a prediction of future outcomes. Based on actuarial assumptions in the June 30, 2012 valuation. Future results may differ to the extent the assumptions are not realized.

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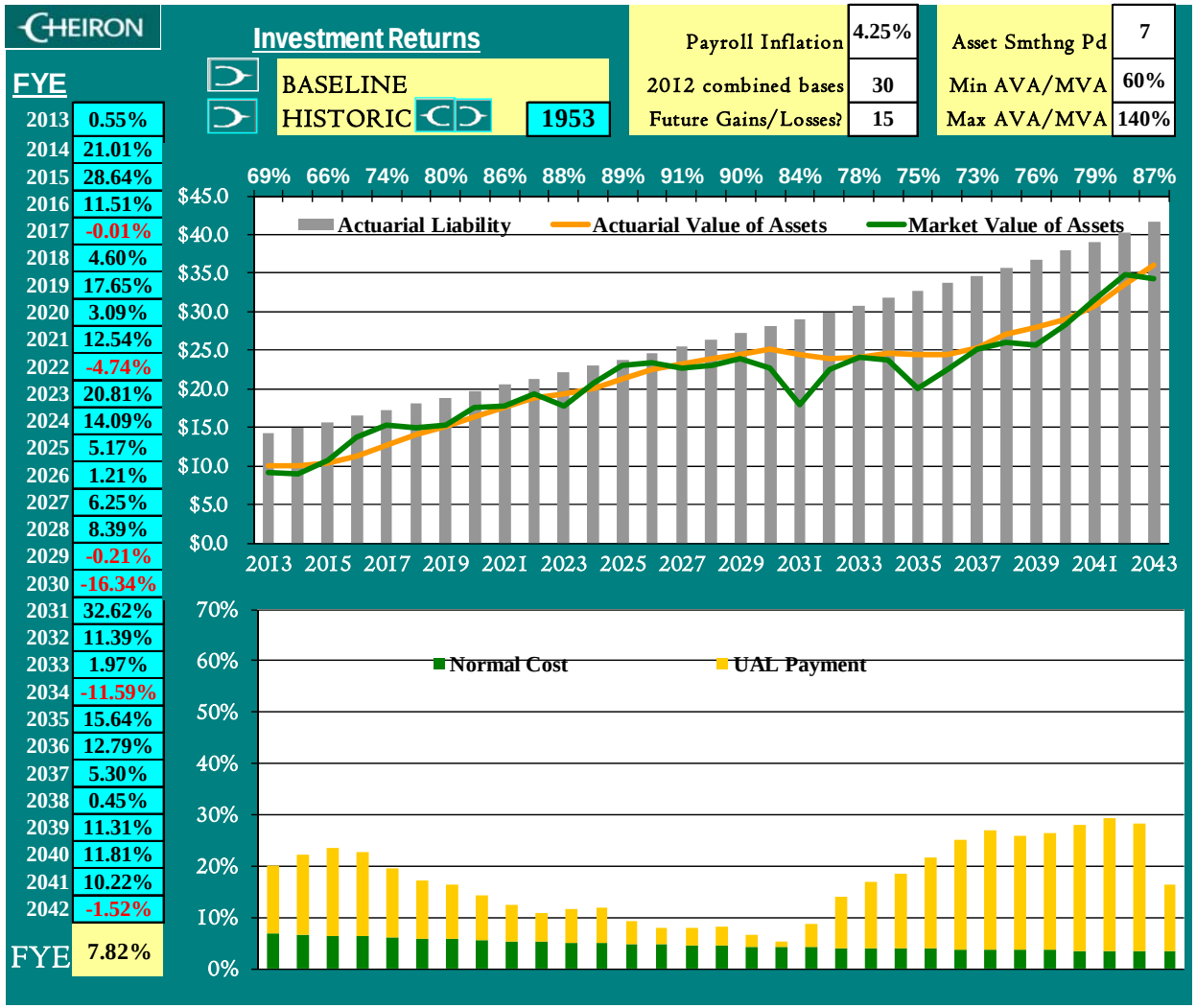

Results are intended to be illustrative and not a prediction of future outcomes. Based on actuarial assumptions in the June 30, 2012 valuation, except for investment returns, as shown. Future results may differ to the extent the assumptions are not realized.

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EXECUTIVE SUMMARY

An Overall Assessment

The actuarial reports provided by the Segal Company to LACERS appear to us to be correct and based on reasonable actuarial methods and assumptions. However, we have two principal reservations:

1. The combination of the asset smoothing method and the method used to amortize the unfunded actuarial liability may be deferring current plan costs to future generations of taxpayers, and

2. We are concerned that the reports and other materials provided to the Trustees by the Segal Company may not present a comprehensive and understandable view of the likely future status of the Plan's funding.

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EXECUTIVE SUMMARY

C. Health Plan Audit

Cheiron has conducted an independent actuarial audit of the Segal Company's June 30, 2012 Health Plan Actuarial Valuation of the Los Angeles City Employees' Retirement System (LACERS). The purpose of this study is to determine if the actuarial work is correct, reasonable, and comprehensive.

To answer these questions, Cheiron replicated the results from the valuation, assessed the reasonableness of the assumptions and methods, and reviewed the information provided in the valuation report.

Replication of Valuation Results

The actuarial calculations were checked using an independent valuation system to establish that the calculations of liabilities and costs are substantially correct. We can confirm that the liabilities and costs computed in the valuation as of June 30, 2012 are reasonably accurate and were computed in accordance with generally accepted actuarial principles. With respect to member data, we independently collected the data from LACERS. Although the data we used in our parallel valuation was similar to that used by Segal in their report, there are some minor differences that are described later in this Report. We do not believe that these discrepancies have a material impact on the valuation results.

Review of Assumptions and Methods

Overall, the assumptions and methods used by Segal are reasonable, conform with the appropriate ASOPs, and are consistent with the substantive plan as described in the documentation provided by LACERS.

However, we noted three assumptions where we recommend that the Trustees and its Actuary consider future modifications that we believe would more appropriately reflect the future liability associated with these benefits.

- In developing the projected cost of the medical benefits, ASOP 6 states that the actuary should use age-specific costs in the development of the initial per capita costs and in the projection of future health plan costs. We recommend that the actuary develop age-specific costs that are consistent with the current premium rates and use these age-specific claim costs to develop the total expected cost of the health plan benefits. Developing age-specific claim costs to assess the impact on valuation results is outside the scope of this audit; however, we do not expect that using this approach would have a significant impact on the valuation results.

- We recommend that the Actuary consider a longer grading period for the medical trends to reach the ultimate level. This is consistent with the long-term view of the health plan marketplace as represented by the Getzen trend model developed by the Society of

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EXECUTIVE SUMMARY

Actuaries and the analyses performed by the Office of the Actuary in its development of long-term cost trends for the Medicare marketplace. We recommend a grading period of between 15 and 20 years. Using the same initial and ultimate trend rates as in the valuation but grading down linearly over 15 years instead of seven years results in an increase of approximately 7% in accrued liability and an increase of approximately 10% in normal cost.

- We recommend that the Actuary consider using the projections of Part B medical costs and beneficiary premiums as developed by the Office of the Actuary in the Medicare Trustee Report as the trend rates for the Part B premium benefit. Part B premium costs are developed by the Federal Government and the Plan Sponsor has no influence on the rate of increase in these benefits. We believe that the projected future trend rates developed by the Office of the Actuary are a more appropriate estimate of the cost of the Part B premium rates. Using these rates results in a small reduction in accrued liability and normal cost, but does not materially affect the valuation results.

In addition, we noted four technical items that we believe more correctly reflect the actual operation of the Plan and recommend that they be reflected in future valuations:

- For retirees eligible for less than 100% of the maximum subsidy, the valuation does not calculate the subsidy amounts payable for Medicare-eligible spousal coverage in the same way that actual subsidies are determined by LACERS. The actual subsidy mechanics should be reflected.

- The data provided by LACERS identified retirees who are not yet age 55 and are currently receiving a subsidy from LACERS (primarily due to the recent ERIP). These individuals should be valued based on their actual, immediate benefits rather than assuming deferral of their benefit coverage until age 55.
- The valuation should use the actual subsidy amounts as reported by LACERS in the census data rather than relying solely on calculated amounts based on age and service using the formulas found in the substantive plan documentation.

- The service-based subsidy percentages should be applied for the Safeguard dental benefit.

The impact of these four changes in aggregate would increase the reported liability by approximately 1.2% and as such do not have a material impact on the results of the valuation or our assessment as to the reasonableness of the reported results.

Review of Valuation Report

While the valuation report contained most of the essential information required by GASB and the ASOPs, we believe that the interests of the Plan Trustees, Members, and the Plan Sponsor would be better served if some additional information was included in the report.

SECTION I
EXECUTIVE SUMMARY

These include:

- Show the development of the market value of assets for the health plan separately, providing the same information shown in Exhibits D and E of the valuation report for the health plan assets. This will provide additional information on the changes in the health plan assets due to the contributions made to the Plan and the benefit payments made from the Plan, which are likely different from that of the pension plan.

- As stated in the November 8, 2011 report to the Trustees, the Board directed Segal to disclose the "Cadillac" excise tax liability pursuant to health care reform legislation in the Retiree Health Actuarial Valuation as a contingency footnote only, and defer consideration of including the liability on a cost basis until it is deemed actuarially necessary by LACERS' consulting actuary. Segal discloses that such a liability may be present on page 29 of its valuation but does not provide any information on the possible magnitude to the liability. We recommend that the valuation include an estimate of the possible magnitude of this liability in the discussion on page 29, so that readers of the report can understand the magnitude of the likely liability once the excise tax is reflected in the valuation.

- Provide the calculation of the ARC and Annual OPEB costs shown in Chart 5 and Chart 7 of the valuation report. The valuation report provides no supporting documentation for these amounts and they are inconsistent with the amounts shown in Chart 4. The CAFR states that the Fiscal Year 2012 ARC and Annual OPEB costs are based on the June 30, 2010 valuation, but there is no calculation supporting this assertion. We believe that users of the report would be better served if the valuation included the actual calculation of the data presented in Chart 5 and Chart 7.

- Include disclosure of the current and projected future salary information used in the valuation. Since the actuarial cost method is Entry Age Normal, level percentage of pay, the salary information is important to understand in developing the Annual Required Cost and employer contributions for the health benefits.

- Provide the actual counts of deferred retirees, disabled retirees, and survivors in the data table for Exhibit A. These members are included in the valuation so we recommend that the actual counts of these members be included as well for completeness of disclosure.

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EXECUTIVE SUMMARY

An Overall Assessment

The actuarial report provided by the Segal Company to LACERS appears to us to be correct and based on reasonable actuarial methods and assumptions. However, we have two principal observations:

1. We believe that the Plan and its actuary should consider modifications to some of the assumptions that are specific to the health plan benefits to better reflect the expected future cost of the program; and

2. We believe that there is additional information that should be included in the valuation report to assist Plan Trustees, Members, and the Plan Sponsor in understanding the liabilities and cost of the health benefit program.

SECTION I
EXECUTIVE SUMMARY

D. Family Death Benefit Insurance Plan (FDBIP) Audit

Cheiron has conducted an independent actuarial audit of the Segal Company's June 30, 2011 actuarial analysis of the Family Death Benefit Insurance Plan (FDBIP) of the Los Angeles City Employees' Retirement System (LACERS). The purpose of this study is to determine if the actuarial work is correct, reasonable, and comprehensive.

To answer these questions, Cheiron replicated the results from the analysis, assessed the reasonableness of the assumptions and methods, and reviewed the information provided in Segal's analysis.

Replication of Results

This is the most straightforward part of the review process. The actuarial calculations were checked using an independent valuation system to establish that the calculations of liabilities and costs are substantially correct. We were able to confirm the calculations of the liability reserve and term cost as of June 30, 2011 within a reasonable tolerance.

Review of Assumptions and Cost Analysis

In addition to the use of a 7.75% discount rate and the same mortality tables used in the retirement plan valuation, Segal made a number of assumptions regarding the number of expected survivors following an eligible member's death, as well as the amount and length of time they would collect benefits. We note that Segal has indicated their exclusion of the additional benefits available to a surviving spouse or domestic partner if an active member dies with at least 10 years of contributory membership. However, our assessment is that despite this, the assumptions still appear to be somewhat on the conservative side, and we find the results to be reasonable.

Segal's analysis indicates that the Plan is funded on a term cost basis, meaning that the premium charged for a particular year is only intended to pay for the present value of the FDBIP costs for members expected to die during that period. However, our understanding is that LACERS has relied on the premium level recommended by the actuary.

In their letter to the Board of Retirement dated December 7, 2011, Segal notes that the FDBIP has surplus assets of $5.5 million, and that the Board does not currently have a funding policy on how (or whether) the monthly premium should be adjusted to reflect this surplus. However, in recommending that the $3.70 monthly premium be maintained for fiscal years 2013 and 2014, it appears that a self-determined policy was applied to not allow the premium to increase if there is a surplus, since the premium would not otherwise be sufficient to pay for expected death claims in fiscal years 2013 and 2014.

We recommend that a discussion take place with the Board regarding how the FDBIP should be funded and how surplus should be used to offset premiums.

SECTION II
RETIREMENT VALUATION RECONCILIATION

In this section we present detailed results of the replication of the June 30, 2012 Actuarial Valuation of the LACERS Retirement Plan. A review of the assumptions and methods used in the valuation can be found in Section IV of this report.

Using the same actuarial assumptions and methods from the 2012 valuation report we have attempted to replicate Segal's valuation results, including the following:

- Present value of future benefits
- Actuarial accrued liability
- Unfunded actuarial accrued liability
- Normal cost
- Contribution rates as a percentage of payroll

When testing against different valuation systems, there is a generally acceptable tolerance of plus/minus 5.0%. With a larger plan, minor differences in actuarial procedures have a smaller impact on the key results. Given the size of LACERS plan, we anticipated our results would be much closer than 5.0%.

The results for the LACERS plan fall within generally acceptable tolerances. We were farther off than desired on the Normal Cost and Present Value of Future Normal Costs for the active withdrawal decrement, but this is not a significant issue, as the total Present Value of Future Benefits for withdrawal was not materially different, and withdrawal itself only represents approximately 3% of liabilities.

Technical Valuation Issues

There were a couple areas where we believe the valuation should be calculated in a manner different than done by Segal. For our analysis we modified the following two items, neither of which had a material impact on the valuation results.

- In determining eligibility and calculating benefits, Segal used Employment Service for active employees and Benefit Service for terminated vested employees. It is our understanding that for both groups, Employment Service should be used to determine eligibility to retire and Benefit Service should be used to determine the amount of the benefit.

- We made modifications to the contribution rates for three Bargaining Units based on discussions with LACERS staff and review of the current Memorandums of Understanding (MOUs). Our understanding is that employees of Bargaining Unit 38 are making the additional 4% contribution, while employees of Bargaining Units 26 and 31 are not.

SECTION II
RETIREMENT VALUATION RECONCILIATION

Additional Disclosures

There are a few additional disclosures that we recommend Segal include in future valuation reports. These are not material omissions, but they would help readers better understand the assumptions and methods used in the valuation:

- IRC 415(b) regulations limiting the benefits payable to an individual from a defined benefit plan were not applied in the valuation.

- For the percentage of members assumed to be single, a refund of the 0.5% surviving spouse contributions at retirement was valued.

- For active, non-duty related deaths with at least five years of service, it was assumed that members would take the more valuable of Option 1 (refund) or Option 2 (continuance).

- Terminated vested participants are assumed to elect the more valuable of a refund of contributions or a deferred benefit.

On the following pages we show detailed charts comparing the results of our valuation to Segal's, as well as a comparison of the data used in the two valuations. In reviewing the data, we took the raw data from the System and attempted to independently match the processed data that Segal used in its valuation. We found the raw census data from LACERS to be very clean and easy to understand.

SECTION II
RETIREMENT VALUATION RECONCILIATION

Table II - 1
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Present Value of Future Benefits Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Present Value of Future Benefits				
Active				
Retirement	$ 8,120,811	$ 8,016,358	$ (104,453)	98.7%
Withdrawal	549,719	565,321	15,602	102.8%
Death	285,846	288,084	2,238	100.8%
Disability	177,930	175,420	(2,510)	98.6%
Total Actives	$ 9,134,307	$ 9,045,184	$ (89,123)	99.0%
Inactive	$ 267,239	$ 272,148	$ 4,909	101.8%
In Pay Status				
Retired	$ 6,786,255	$ 6,786,840	$ 585	100.0%
Disability	192,946	192,954	8	100.0%
Survivors	750,418	755,328	4,910	100.7%
Total In Pay Status	$ 7,729,619	$ 7,735,122	$ 5,503	100.1%
Total	$ 17,131,165	$ 17,052,453	$ (78,712)	99.5%

SECTION II
RETIREMENT VALUATION RECONCILIATION

Table II - 2
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Normal Cost Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Normal Cost (BOY)				
Retirement	$ 239,061	$ 240,174	$ 1,112	100.5%
Withdrawal	50,318	46,641	(3,677)	92.7%
Death	13,118	13,216	99	100.8%
Disability	9,876	9,870	(6)	99.9%
Total	$ 312,373	$ 309,901	$ (2,472)	99.2%
Present Value of Future Normal Costs				
Retirement	$ 2,070,570	$ 2,100,134	$ 29,564	101.4%
Withdrawal	469,084	431,020	(38,064)	91.9%
Death	109,283	112,826	3,543	103.2%
Disability	88,270	88,716	446	100.5%
Total	$ 2,737,207	$ 2,732,695	$ (4,512)	99.8%

SECTION II
RETIREMENT VALUATION RECONCILIATION

Table II - 3
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Contribution Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Projected Total Payroll	$ 1,819,270	$ 1,819,270	$ (0)	100.0%
Employer Normal Cost	$ 125,130	$ 122,586	$ (2,544)	98.0%
Employer Normal Cost Rate (as a % of Projected Pay)	6.878%	6.738%	-0.14%	
Actuarial Liability	$ 14,393,959	$ 14,319,758	$ (74,200)	99.5%
Actuarial Value of Assets	9,934,959	9,934,959	-	100.0%
Unfunded Actuarial Liability	$ 4,458,999	$ 4,384,799	$ (74,200)	98.3%
Amortization Amount ($)	$ 248,792	$ 244,958	$ (3,834)	98.5%
Amortization Rate (as a % of Projected Pay)	13.675%	13.465%	-0.21%	
Total Calculated Contribution ($)	$ 373,922	$ 367,544	$ (6,378)	98.3%
Total Calculated Contribution Rate (as a % of Projected Pay)*	20.55%	20.20%	-0.35%	

**Prior to adjustment to reflect phase-in of the impact of the June 30, 2011 experience study over five years*

SECTION II
RETIREMENT VALUATION RECONCILIATION

Table II-4
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Data Comparison

		Segal		Cheiron	Ratio of Cheiron/Segal
Active Members					
Count		24,917		24,917	100.00%
Vested Count		21,410		21,353	99.73%
Average Age		47.8		47.8	100.00%
Average Employment Service		13.9		13.9	100.00%
Total Projected Salaries (Thousands)	$	1,819,270	$	1,819,270	100.00%
Average Projected Salary	$	73,013	$	73,013	100.00%
Inactive Members					
Count		5,808		5,817	100.15%
Average Age		43.8		43.8	100.00%
Average Contribution Balance (Less Than 5 YOS)	$	4,762	$	4,607	96.74%
Average Benefit (At Age 60, 5 or More YOS)	$	1,399	$	1,404	100.36%
Retired Members					
Count		12,634		12,635	100.01%
Average Age		71.2		71.2	100.00%
Average Benefit*	$	3,804	$	3,804	100.00%
Disabled Members					
Count		897		897	100.00%
Average Age		63.6		63.6	100.00%
Average Benefit*	$	1,534	$	1,534	100.00%
Beneficiaries					
Count		3,692		3,697	100.14%
Average Age		76.2		76.2	100.00%
Average Benefit*	$	1,888	$	1,888	100.00%

**Includes July 2012 COLA*

SECTION III
HEALTH VALUATION RECONCILIATION

In this section we present detailed results of the replication of the June 30, 2012 Actuarial Valuation of the LACERS Health Plan.

Using the same actuarial assumptions and methods from the 2012 valuation report we have attempted to replicate Segal's valuation results, including the following:

- Present value of future benefits
- Actuarial accrued liability
- Unfunded actuarial accrued liability
- Normal cost

When testing against different valuation systems, there is a generally acceptable tolerance of plus/minus 5.0%. With a larger plan, minor differences in actuarial procedures have a smaller impact on the key results. Given the size of LACERS plan, we anticipated our results would be much closer than 5.0%.

The results for the LACERS plan fall within generally acceptable tolerances. We were farther off than desired on the present value of future benefits for inactive members, but this is not a significant issue as inactive members account for less than 1% of the total present value of future benefits.

Technical Valuation Issues

There were a few areas where we believe the valuation should be calculated in a manner different than done by Segal. For our analysis we modified the following four items, none of which had a material impact on the valuation results.

- For retirees eligible for less than 100% of the maximum subsidy, the valuation does not calculate the subsidy amounts payable for Medicare-eligible spousal coverage in the same way that actual subsidies are determined by LACERS. The actual subsidy mechanics should be reflected.

- The data provided by LACERS identified retirees who are not yet age 55 and are currently receiving a subsidy from LACERS (primarily due to the recent ERIP). These individuals were included in the valuation as if they would begin receiving a health subsidy at age 55. We believe they should be valued based on their actual, immediate benefits instead.

- The valuation did not use the actual subsidy amounts as reported by LACERS in the census data. Instead, the valuation calculated subsidy amounts based on reported age and service data using the formulas found in the substantive plan documentation. In many cases this approach will produce the same amount as the actual but not all. We believe that the valuation should use the actual reported amounts as these are the amounts actually being used to calculate the total premium payments made by LACERS and the retired employee.

SECTION III
HEALTH VALUATION RECONCILIATION

- The dental subsidy was calculated as if the service-based percentages applied only to the MetLife plan premium to determine a maximum subsidy. Based on the substantive plan documentation, the service-based subsidy percentages should be applied to the dental premium for which the member is enrolled.

We estimate the impact of these four changes in aggregate would increase the reported liability by approximately 1.2%.

On the following pages we show detailed charts comparing the results of our valuation (reflecting the changes described above) to Segal's, as well as a comparison of the data used in the two valuations. In reviewing the data, we took the raw data from the System and attempted to independently match the processed data that Segal used in its valuation.

SECTION III
HEALTH VALUATION RECONCILIATION

Table III - 1
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Present Value of Future Benefits (OPEB) Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Present Value of Future Benefits				
Active				
Retirement	$ 1,630,187	$ 1,629,033	$ (1,154)	99.9%
Withdrawal	107,801	110,490	2,690	102.5%
Disability	40,580	40,733	153	100.4%
Total Active	$ 1,778,567	$ 1,780,256	$ 1,689	100.1%
Inactive	$ 24,454	$ 22,638	$ (1,816)	92.6%
In Pay Status				
Retired	$ 988,740	$ 998,379	$ 9,639	101.0%
Disability	26,833	26,825	(8)	100.0%
Survivors	67,595	68,413	818	101.2%
Total In Pay Status	$ 1,083,168	$ 1,093,617	$ 10,449	101.0%
Total	$ 2,886,189	$ 2,896,510	$ 10,321	100.4%

SECTION III
HEALTH VALUATION RECONCILIATION

Table III - 2
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Normal Cost (OPEB) Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Normal Cost (BOY)				
Retirement	$ 55,572	$ 54,825	$ (747)	98.7%
Withdrawal	7,248	7,192	(56)	99.2%
Disability	1,803	1,813	11	100.6%
Total	$ 64,622	$ 63,831	$ (791)	98.8%
Present Value of Future Normal Costs				
Retirement	$ 501,674	$ 492,221	$ (9,454)	98.1%
Withdrawal	74,497	71,798	(2,699)	96.4%
Disability	17,617	17,388	(230)	98.7%
Total	$ 593,789	$ 581,407	$ (12,382)	97.9%

SECTION III
HEALTH VALUATION RECONCILIATION

Table III - 3
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Contribution (OPEB) Comparison
(in thousands)

	Segal	Cheiron	Difference	Ratio
Projected Total Payroll	$ 1,819,270	$ 1,819,270	$ -	100.0%
Employer Normal Cost	$ 64,622	$ 63,831	$ (791)	98.8%
Employer Normal Cost Rate (as a % of Projected Pay)	3.55%	3.51%	-0.04%	
Actuarial Liability	$ 2,292,400	$ 2,315,103	$ 22,703	101.0%
Actuarial Value of Assets	1,642,374	1,642,374	-	100.0%
Unfunded Actuarial Liability	$ 650,027	$ 672,730	$ 22,703	103.5%
Amortization Amount ($)	$ 36,064	$ 37,098	$ 1,034	102.9%
Amortization Rate (as a % of Projected Pay)	1.98%	2.04%	0.06%	
Total Calculated Contribution ($)	$ 100,687	$ 100,929	$ 242	100.2%
Total Calculated Contribution Rate (as a % of Projected Pay)*	5.53%	5.55%	0.01%	

**Prior to adjustment to reflect phase-in of the impact of the June 30, 2011 experience study over five years*

SECTION III
HEALTH VALUATION RECONCILIATION

Table III-4
Los Angeles City Employees' Retirement System
Actuarial Valuation as of June 30, 2012
Data Comparison

	Segal	Cheiron	Ratio of Cheiron/Segal
Retired Members			
Count (Non-Disabled)	11,439	11,478	100.3%
Count (Disabled)	300	300	100.0%
Total Count	11,739	11,778	100.3%
Average Age*	71.6	71.1	99.3%
Surviving Spouses			
Count	1,692	1,718	101.5%
Average Age	79.2	78.8	99.5%
Retired Members Eligible for Future Health Subsidy			
Count (Non-Disabled)	71	25	35.2%
Count (Disabled)	99	109	110.1%
Count(Surviving Spouses)	102	80	78.4%
Total Count	272	189	69.5%
Average Age	50.5	49.9	98.9%
Active Members			
Count	24,917	24,917	100.0%
Average Age	47.8	47.8	100.0%
Average Employment Service	13.9	13.9	100.0%
Inactive Members			
Count	858	858	100.0%
Average Age	50.7	50.3	99.1%

**Includes Disabled Retirees*

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

In this section we discuss our review of the assumptions and methods used in the Retirement Plan and Health Plan valuations, as well as our review of the Experience Study for the period July 1, 2008 to June 30, 2011. Comments concerning the assumptions and methods used in the June 30, 2011 analysis of the FDBIP can be found in Section I. In reviewing the experience study we were able to replicate Segal's results within a reasonable range, to the extent data was available. We have therefore focused our experience study commentary on the analysis and recommendations that Segal made.

An actuarial valuation is designed to assess the ability of the system to meet its obligations. The validity of this assessment is only as good as the assumptions and methods it is based upon. The purpose of an experience study is thus to determine actuarial assumptions that are reasonable to predict future experience. The assumptions underlying an actuarial valuation can be divided into two types: economic and demographic, which deal with the characteristics and behavior of the system's members.

It should be noted the setting of actuarial assumptions involves a great deal of professional judgment and that setting such assumptions is both art and science. Two actuaries reviewing the same experience may reach different conclusions with respect to recommendations of actuarial assumptions. It is not our intent to substitute our judgment for the judgment of the consulting actuary to LACERS. Rather it is our intent to determine whether the actuarial assumptions are reasonable based upon all of the data available.

In general, assumptions should be recommended based on the actuary's professional judgment combined with the system's experience during the study period, the system's earlier experience, national experience and future trends. We found that the process used by Segal to prepare the Experience Study and to recommend the valuation assumptions was appropriate and that the assumptions developed generally comply with the guidance provided by the Actuarial Standards of Practice (ASOPs) applicable.

Specific comments regarding each assumption follow.

ECONOMIC ASSUMPTIONS

The questions guiding our review of the economic assumptions were the following:

1) Are the economic assumptions individually reasonable and reasonable as a set?
2) Are the economic assumptions reasonable given the System's experience?

We reviewed the valuation economic assumptions as well as their development in Segal's 2011 Experience Study Report and found them reasonable and appropriate overall. However, we did identify some areas for consideration for improvement for the 2014 Experience Study and for future evaluations.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

The primary basis of our review was Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, which provides guidance on the process for selecting and evaluating economic assumptions for measuring obligations under defined benefit plans. Since the future is uncertain, there is no right answer for these assumptions and the actuary is instead to come up with their best estimates of the future economic conditions. Estimates should be based on a combination of past experience of both the system and the greater economy, future expectations of both the system and the economy as a whole, and professional judgment. The actuary should develop a best-estimate range for each assumption and then recommend a specific point within that range. The selected assumptions should be appropriate to the purpose and nature of the measurement and all of the assumptions together need to be consistent as a set. We found that Segal's process and results satisfy this ASOP.

Inflation

Inflation is a key assumption as it is a component of several other assumptions: investment return, general wage increase, and payroll increase. Segal's recommended rate of 3.5% is significantly higher than what is expected by most investment professionals and economists, but as noted by Segal, the time horizon for LACERS is longer than these individuals are typically considering. We concur with Segal's assessment of recent historical trends and with the lowering of the inflation assumption. However, we believe that a range for reasonable assumptions for inflation is between 2.0% and 3.5% and Segal's 3.5% recommendation is at the high end of our reasonable range and so we would recommend consideration of dropping this assumption further.

As noted by Segal, the expected increase in the CPI given in the 2011 Trustees Report for the Social Security Administration was 2.8% with the high cost assumption using a rate of 3.8%. The 3.5% recommendation by Segal is closer to this high cost estimate. Segal also provides evidence that both the short and long-term inflation expectations of investment market participants are significantly lower (2.2%-2.8%) than the current inflation assumptions used by the System (3.5%).

We further note that while LACERS should not base their assumptions on what other systems are doing, it is informative to consider what they are doing and in the case of inflation, many systems, including CalPERS and CalSTRS, have recently decreased their inflation assumption to 3.00% or lower. Similarly, data available from the Public Plans Survey of large public funds for FY2011 has an average inflation rate of 3.31% and a median rate of 3.25% and shows a downward trend from prior years.

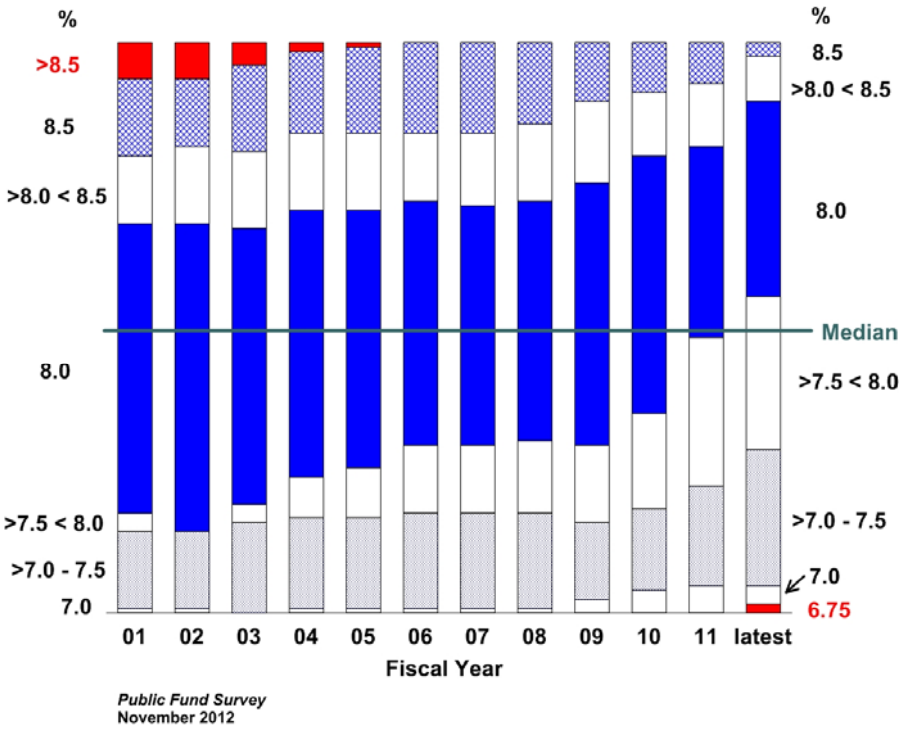
We believe that while Segal's current inflation assumption is reasonable, the combined available information related to this assumption supports consideration of lowering it further.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

Investment Return

The investment return assumption is key to developing the expected cost of the System as it determines the impact of the time value of money in discounting expected benefit payments. It is comprised of two pieces, the inflation assumption previously discussed and the assumed net real rate of return. We concur with Segal's "building block" approach to developing this assumption and find that their recommendation of 7.75% is reasonable based on the asset allocation in place. However, the investment return assumption should also be considered in conjunction with the Board's risk preference, as lowering the discount rate further would reduce the plan's funding and contribution volatility. If LACERS decides to drop their inflation rate further as we have recommended, this will result in decreasing the investment return as well.

It should be noted that there has been a significant trend by public sector pension plans to lower their discount rates. The following graph is based upon surveys performed by the National Association of State Retirement Administrators (NASRA). The colored bars represent the percentage of funds using a particular discount rate (e.g., blue is 8.0%).



The investment return assumption is adjusted by 0.40% for the payment of administrative and investment expenses. This assumption seems reasonable. However, the expenses for 2010 seems relatively higher compared to past years; therefore, this assumption should be carefully monitored.

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ASSUMPTIONS AND METHODS REVIEW

General Wage Growth

In addition to determining the rate of payroll growth for contribution payments, this is also a component of the individual salary increase assumption. We will discuss this general wage growth, the combination of price inflation plus real pay growth here, while the longevity and promotion component of the individual salary increase assumption will be discussed in the demographic assumptions section.

The first component of the general wage growth assumption, price inflation, has been discussed previously. The remaining piece, real pay growth, is the amount by which it is expected that wages will grow more rapidly than general price levels. We find Segal's 0.75% recommendation for the real pay growth to be reasonable, but recommend consideration be given to lowering it, as budget pressures may continue to depress productivity increases in the public sector.

We further note that caution should be exercised in drawing any conclusions on the basis of LACERS own experience of average increases as shown in Segal's report as wage growth is typically reasonably homogenous across the nation rather than varied by individual employers. Segal's report properly notes this fact in their description of the real pay increase assumption as a more macroeconomic assumption.

Also, caution regarding using LACERS own experience to evaluate the real pay increase is necessary due to the fact that Segal is comparing the average salary of all members in the system at the beginning of each year with the average salary of all members in the system at the end of each year rather than looking at the average of the change in salary for members present at both the beginning and end of each year. Unusual events such as the early retirement window and layoffs of 2009 make this atypical approach even more problematic. We recommend that Segal consider evaluating the System's experience of pay growth based on individual member's actual salaries in the future rather than changes in aggregate salaries.

Finally, we note that the total general wage growth assumption for LACERS (4.25%) is a higher growth rate than that assumed by most public pension plans. Given the current significant downward pressure on government costs, this combined assumption should be carefully considered with the 2014 Experience Study. Note that increasing the general wage growth assumption and decreasing the inflation assumption have offsetting impacts, so both assumptions must be considered individually and in combination.

COLA

Segal assumes a retiree Cost-of-Living Adjustment (COLA) of 3% per year. Although they do not discuss the COLA assumption in any detail within the June 30, 2011 Experience Study, we assume this is because the recommended rate of inflation (3.5%) is above the COLA maximum of 3%.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

However, the growth in retiree benefits is expected to be less than the cap, due to annual variation in the Consumer Price Index (CPI), even if the CPI averages the assumed 3.5% over the long-term. Since members will not accumulate enough in COLA banks to offset years in which actual inflation is below the 3% cap, an assumption lower than 3% would be more appropriate. Simulation analyses we have performed for other clients suggest that based on the 3% cap and 3.5% CPI assumption, a COLA growth rate of around 2.7% per year is reasonable.

We therefore recommend this assumption be included in the next experience study with consideration of performing a simulation analysis to study it. This approach is suggested in the Actuarial Standard of Practice governing the measurement of pension obligations (ASOP No. 4), where the impact of using a deterministic procedure (i.e. assuming inflation will be 3.5% every year) could result in a poor measurement of the impact of certain benefit provisions.

Crediting Rate for Member Contributions

An assumption of 3.5% is used to approximate the crediting rate on member contributions. As described in Los Angeles City Charter Section 1162, the crediting rate is based on the yield of five-year Treasury Notes as of the last day of each month. Although the historically low Treasury rates of the past few years may not continue into the future, we do recommend that an analysis of this assumption be included in the next experience study.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

DEMOGRAPHIC ASSUMPTIONS

The questions guiding our review of the demographic assumptions were the following:

1) Do the demographic assumptions, including rates of termination from active service due to retirement, withdrawal, disability, and death, follow reasonable patterns?
2) Do the demographic assumptions reflect the experience of the System?
3) Are the experience of the system and the resulting assumption recommendations clearly communicated?

Based on our review of the June 30, 2012 valuation and the 2011 Experience Study, we believe that the demographic assumptions recommended by Segal are reasonable both individually and as an assumption set. However, there are some areas where our recommended assumptions would differ or where we wish to offer additional comments which are provided within this section.

Overall, Segal does a good job of explaining how decrements and exposures should be compared in examining actual experience versus expected experience in their introduction to demographic assumptions in the experience study, but they do not consistently show this information for each decrement within their report. We recommend that they include both actual number of terminations, expected number of terminations, exposure counts and the ratios of actual decrements to expected for each assumption within the body of their report. In addition, while they highlight that the number of exposures and number of decrements determines the reliability of the observed experience in their introduction, they do not include analysis of this credibility within their evaluation of the decrements. We recommend that they add this information to help communicate how heavily the experience should be considered for each approach. We also believe Segal could strengthen their report by providing more explanation of the process for how prior rates were adjusted based on the observed experience to get the proposed assumptions.

Finally, we found Segal's approach of using a longer period than just the three-year experience study period in examining some of the decrements to be appropriate and valid. We also agree with their rationale in omitting 2009 from their examination of retirement and termination experience due to the unusual plan events in that year, but we believe their work would be strengthened had they provided details of the experience in that year despite it being omitted from the comparison of actual versus expected incidences of these decrements.

The basis for the development of these demographic assumptions is Actuarial Standard of Practice No. 35, *Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations*. Based on this ASOP, the actuary is to use their professional judgment to select assumptions for expected future outcomes based on past experience and future expectations and these assumptions should be reasonable and not expected to result in significant cumulative actuarial gains and losses. Further, an experience study is to be used to compare actual experience with the expected experience given by the demographic assumptions. We found that Segal met the standards set by this document.

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ASSUMPTIONS AND METHODS REVIEW

Mortality Assumptions

Based on the ratios of actual versus expected deaths, we find that Segal's recommendations for retired and disabled mortality result in a reasonable margin, with the expectation being that less deaths will occur than the historical experience suggests. This margin is consistent with actuarial best practices and ASOP No. 35. While we find Segal's mortality assumptions to be reasonable, there are some areas that we recommend be considered for improvement.

While the proposed tables provide a reasonable level of conservatism in aggregate, details should be provided by gender in order for this conservatism to be better evaluated. Segal should split out the experience by sex to make this section of their report more informative. Since the mortality has different assumptions by gender, this would allow better understanding of the differences between the expected death incidences and the observed. This also would allow for better examination of the margin for conservatism as it is possible that while the total actual/expected ratio under the proposed assumptions is 105%, one of the genders could have a ratio less than 100% this is being offset by the other gender. We do not know this to be the case, but it should be examined and the information about mortality experience should be presented with details by gender.

We also recommend that Segal consider examining the mortality experience weighted by benefit amounts rather than just the participant counts for future experience studies. This can provide additional information about the relative impact of the actual mortality experience to the projected on the cost of the System relatively simply. An alternative to this benefit amount weighted analysis of experience would be to examine the mortality experience of various age groups.

Withdrawal Assumptions

We found Segal's termination rates to be reasonable. However, we would recommend studying rates based on service for all rates rather than switching to an age-based table after a select period. We also find Segal's assumption of no termination when eligible for retirement to be appropriate as well as their assumption that terminating members will take the more valuable of a refund of their contributions or a deferred benefit.

We recommend that Segal provide actual versus expected ratios based on counts in their experience study report in order to facilitate the understanding of the implications of this assumption by Board members. Providing this information will also allow better assessment of what credibility to give the observed experience versus the rates developed based on the historical experience. As mentioned previously, we believe Segal should have provided information on the exposures and terminations in 2009 even though it was excluded from their analysis.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

Disability Assumptions

We found Segal's disability rates to be reasonable. The rates generally increase with age as would be expected and are reasonable in terms of the System's recent experience. We would recommend that Segal provide information about the actual counts of disability incidence in their narrative instead of just including these in the accompanying chart as well as information about the exposure counts.

In addition, we feel Segal should consider adding additional narrative in their experience study report regarding how they developed their proposed recommendations to allow Board members better understanding. In particular, it appears that they considered the experience of the groups from ages 50 to 69 together instead of as the four separate age groups outlined in their report to determine what their recommendation of disability rates at these ages would be. This basis for combining the recent experience with the prior rates should be more clearly communicated. In general, the narrative should make clear how the proposed rates were set and in general what was the change from the prior rates.

Rates of Retirement

We believe Segal's rates are reasonable and reflect significant patterns in the occurrence of the System's retirements as well as significant plan provisions. However, there are some aspects of the presentation of their results in the experience study report that we believe could be improved.

Segal does not provide significant exposition of how they adjusted their proposed retirement rates (only the non-55/30 group changes), and we recommend they provide additional narrative explaining how they developed their recommendations.

Normal retirement eligibility is the earlier of age 70, age 60 with 10 years of service, and age 55 with 30 years of service. Early retirement is the earlier of age 55 with 10 years of service, and 30 years. Early retirement benefits are reduced for commencement prior to age 60. We would recommend further analysis to determine whether rates should be adjusted based on first eligibility for early retirement and first eligibility for unreduced benefits.

Further, Segal should add exposure counts as well as actual versus expected ratios of retirements to their report. In addition to this, we recommend that they consider examining the retirement experience in the 2014 study to see if the retirement behavior varies by sex since LACERS has significant populations of both genders.

We also believe Segal's 2011 report would have been strengthened by providing details about the 2009 retirements so the behavior can be evaluated even given these aberrant events as previously mentioned. Not reflecting atypical behavior in setting the assumption is appropriate, but the experience still should be analyzed and recorded.

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

Inactive vested members are assumed to retire at age 57. This assumption seems reasonable given past experience; however, it would be helpful if the report provided details about the number of inactive vested who retire at various ages.

Promotion and Longevity

This assumption represents the expected increases to an individual's salary in addition to the general increases due to inflation and real wage increases discussed previously in the section on economic assumptions. We found the general pattern developed by Segal to be reasonable with decreasing increases with higher services and ages and found Segal's methodology to be appropriate with respect to actuarial standards of practice.

However, while Segal's methodology for studying this assumption is reasonable, we believe the observed experience may not be accurate since it is based on subtracting the calculated average total salary increases that we identified as potentially flawed in the general wage growth section. We strongly recommend that Segal examine the actual salary increases on the basis of the salaries of actual individuals rather than in aggregate.

We also note that we were unable to match Segal's experience study results for this assumption, particularly for members with less than five years of service, with our data analysis consistently showing lower increases for those members. However, our analysis was much closer for members with at least five years of service. Although we were not able to resolve this difference, we do not think it is a significant concern.

We are in support of Segal's intent to monitor this assumption to determine whether a switch to all service-based rates is appropriate. From our experience, service tends to be a better indicator of salary increase amounts and timing than age.

Other Assumptions

In general, we find the remaining assumptions made by Segal to be appropriate.

Segal's assumptions related to family composition are reasonable. This includes the percentage of active members assumed married/domestic partner and the assumed average age difference between spouses. The percent married is well supported by the experience and we agree with Segal's recommendation. Segal's recommendation regarding the age difference between spouses is reasonable, but we recommend they consider varying the assumption based on the gender of the member based on the significant difference in observed values when the member is the male versus when the member is the female. Finally, while there is no discussion of the breakdown of spouses by same-sex and opposite sex, we believe this assumption is reasonable.

We found the assumptions regarding reciprocity to be reasonable based on our review of the experience. We also agree with Segal's use of 4.65% as the salary growth assumption for vested

SECTION IV
ASSUMPTIONS AND METHODS REVIEW

terminated members working in a reciprocal system, as it is consistent with the remainder of their assumptions regarding salary growth.

We believe the sex composition assumption used to determine actuarial equivalence, that actives are assumed to be 60% male and 40% female, is very reasonable based on the experience of the system.

Finally, the valuation report assumes 1.0 year of service per year for future accruals. While there is no discussion of this in the experience study, we believe this assumption is reasonable.

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ASSUMPTIONS AND METHODS REVIEW

ACTUARIAL METHODS

The actuarial methods include the asset method, the cost method and the funding policy, including amortization of the unfunded accrued liability (UAL).

Actuarial Asset Method

The market value of assets represents a "snap-shot" value as of the last day of the fiscal year that provides the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. Because these fluctuations would cause volatility in employer contributions, an actuarial value of assets is developed.

The actuarial value of assets typically represents an asset value based on averaging or smoothing year-to-year market value returns for purposes of reducing the resulting volatility on contributions.

The actuarial value of assets for LACERS is determined as 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. (For fiscal years prior to June 30, 2009, the unrecognized returns have been calculated by taking the unrecognized returns developed using a five-year smoothing period and extending the period for an additional two years). The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

Based on our review this method is being applied accurately. However, we do have concerns with this method. In our opinion, the use of a long asset gain or loss recognition period combined with a very wide corridor (60% to 140%) is at least questionable, if not unreasonable.

The Actuarial Standard of Practice which governs asset valuation methods (ASOP No. 44) requires that the actuarial asset value should fall within a "reasonable range around the corresponding market value" and that differences between the actuarial and the market value should be "recognized within a reasonable period of time."

The standard also states that in lieu of satisfying both requirements above, the actuarial smoothing method can be deemed acceptable if the method either "(i) produces values within a sufficiently narrow range around market value or (ii) recognizes differences from market value in a sufficiently short period." Our view is that it is a stretch to consider the seven-year smoothing period "sufficiently short," or to consider the 60%/140% corridor to produce "values within a sufficiently narrow range" around market value. We recommend that Segal reconsider the use of these methods at the time of the next experience study.

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ASSUMPTIONS AND METHODS REVIEW

Actuarial Cost and Amortization Methods

The System's cost method is Entry Age Normal (EAN). The recommended contribution rate is based on the Normal Cost, plus amounts needed to amortize any surplus or Unfunded Actuarial Liability (UAL). The UAL is amortized in layers, with gains and losses amortized over 15 years, assumptions and method changes amortized over 30 years, plan changes amortized over 15 years (future ERIPs will be amortized over five years), and actuarial surplus, if any, amortized over 30 years. However, all 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 UAL is amortized as a level percentage of pay, with payments assumed to grow by 4.25% per year (the assumption for inflation plus real wage growth).

With respect to the actuarial cost method, we find that the change from Projected Unit Credit (PUC) Funding method to Entry Age Normal (EAN) Funding method is reasonable and preferable, as EAN produces a more stable and predictable contribution pattern, and is by far the most prevalent method used in the public sector.

The amortization method used to develop the Annual Required Contribution (ARC) meets the minimum requirements of the present GASB standards; however, the new GASB Statements No. 67 and No. 68 will require a number of changes for disclosure purposes, including shorter amortization periods.

While we do not consider the amortization method to be unreasonable, with the majority of the Plan's UAL being amortized over 30 years with payments increasing by 4.25% per year, in combination with the long smoothing period and wide corridor for the actuarial value of assets as described above, the overall funding scheme for LACERS is questionable and is passing much of what should be funded currently to future generations of taxpayers.

For example, employer and member contributions presently are nearly $100 million less than the value of benefits earned in a year (the normal cost) plus interest on the unfunded actuarial accrued liability (UAL). We recommend that the funding method be reconsidered at the time of the next experience study.

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

A. Actuarial Assumptions

In our audit process, we applied the following assumptions which are the same as those applied in the June 30, 2012 valuation by Segal.

1. Investment Return Assumption

7.75% compounded annually, net of expenses

2. Inflation

4.25% annual increases are used for projecting payroll for amortization of the UAL.

Consumer Price Index (CPI): 3.50% compounded annually

3. Interest Crediting Rate on Member Contributions

The crediting rate is based on the rate for five-year Treasury Notes, with 3.5% used as the approximation to that rate for the valuation.

4. Cost-of-Living Adjustment (COLA)

3% per year

5. Family Composition

76% of male participants and 50% of female participants are assumed to be married.

Spouses of male members are assumed to be three years younger than the member and spouses of female members are assumed to be three years older than the member.

6. Salary Increase Rate

Wage inflation component: 3.50%
Real across-the-board component: 0.75%

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

The additional merit component:

Service Based Salary Merit Increases Less than 5 Years of Service	
Service	**Rate**
0	7.00%
1	6.25%
2	4.75%
3	3.50%
4	2.25%

Age Based Salary Merit Increases 5 Years of Service or More	
Age	**Rate**
20	2.25%
25	2.10%
30	1.55%
35	1.10%
40	0.85%
45	0.60%
50	0.44%
55	0.40%

7. Rates of Termination

Rates of Termination Less than 5 Years of Service	
Service	**Rate**
0	11.25%
1	8.00%
2	7.25%
3	6.25%
4	5.50%

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RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

Rates of Termination 5 Years of Service or More	
Age	**Rate**
25	5.50%
30	5.35%
35	4.35%
40	3.15%
45	2.30%
50	1.85%
55	1.75%
60	1.75%

Termination rate is zero for members that are eligible to retire.

10% of future inactive vested members will work at a reciprocal system and receive 4.65% compensation increases per annum.

8. Rates of Disability

Rates of Disability	
Age	**Rate**
25	0.01%
30	0.03%
35	0.05%
40	0.09%
45	0.15%
50	0.19%
55	0.20%
60	0.20%

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RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

9. Rates of Mortality for Healthy Lives

Postretirement mortality rates for healthy lives are based on the RP-2000 Combined Healthy Mortality Table, set back two years for males and set back one year for females.

The table below provides a sample of the postretirement rates.

Postretirement Rates of Mortality Healthy Lives at Select Ages		
Age	**Male**	**Female**
20	0.03%	0.02%
25	0.04%	0.02%
30	0.04%	0.02%
35	0.06%	0.04%
40	0.10%	0.06%
45	0.13%	0.10%
50	0.19%	0.16%
55	0.29%	0.24%
60	0.53%	0.44%
65	1.00%	0.86%
70	1.79%	1.49%
75	3.04%	2.55%
80	5.21%	4.15%
85	8.97%	6.95%
90	15.06%	11.92%
95	23.37%	18.28%
100	31.53%	23.14%

Preretirement mortality rates are equivalent to the Postretirement mortality rates for healthy lives at all ages.

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RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

10. Rates of Mortality for Disabled Lives

Postretirement mortality rates for disabled lives are based on RP-2000 Combined Healthy Mortality Table, set forward five years for males and set forward six years for females.

The table below provides a sample of the postretirement rates.

Postretirement Rates of Mortality Disabled Lives at Select Ages		
Age	**Male**	**Female**
20	0.04%	0.02%
25	0.04%	0.03%
30	0.08%	0.05%
35	0.11%	0.08%
40	0.15%	0.12%
45	0.21%	0.19%
50	0.36%	0.31%
55	0.67%	0.58%
60	1.27%	1.10%
65	2.22%	1.86%
70	3.78%	3.10%
75	6.44%	5.08%
80	11.08%	8.64%
85	18.34%	14.46%
90	26.75%	20.54%
95	34.46%	24.48%
100	39.79%	30.78%

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RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

11. Rates of Retirement

Rates of Retirement		
Age	**Non-55/30**	**55/30**
50	8.00%	0.00%
51	4.00%	0.00%
52	4.00%	0.00%
53	4.00%	0.00%
54	15.00%	0.00%
55	8.00%	20.00%
56	8.00%	15.00%
57	8.00%	15.00%
58	8.00%	15.00%
59	8.00%	15.00%
60	8.00%	15.00%
61	8.00%	16.00%
62	8.00%	17.00%
63	8.00%	18.00%
64	8.00%	19.00%
65	13.00%	20.00%
66	13.00%	20.00%
67	13.00%	20.00%
68	13.00%	20.00%
69	13.00%	20.00%
70	100.00%	100.00%

Inactive vested members are assumed to retire at age 55.

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

B. Actuarial Methods

1. Asset Valuation Method

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. (For fiscal years prior to June 30, 2009, the unrecognized returns have been calculated by taking the unrecognized returns developed using a five-year smoothing period and extending the period for an additional two years). The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

2. Actuarial Funding Method

The Entry Age Normal actuarial funding method is used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of assets.

Changes in UAL due to actuarial gains and losses are amortized over separate 15 year periods. Any changes in the UAL 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 as determined under GASB Statements 25 and 27.

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

C. Summary of Key Substantive Plan Provisions

1. Final Average Monthly Compensation (§ 4.1010)

Final Average Monthly Compensation is the equivalent of monthly average salary of highest continuous 12 months (one year).

2. Normal Retirement – Unreduced Benefit (§ 4.1020)

Eligibility

The earlier of:

1. Age 70; or
2. Age 60 with 10 years of continuous service; or
3. Age 55 with at least 30 years of service.

Amount

2.16% per year of service (not greater than 100%) of the Final Average Monthly Compensation.

3. Early Retirement – Reduced Benefit (§ 4.1020 & § 4.1056.2)

Eligibility

The earlier of:

1. Age 55 with 10 years of continuous service; or
2. Any age with 30 years of service.

Amount

Normal retirement benefit reduced for retirement ages below age 60 using prescribed Early Retirement Benefit Adjustment Factors.

4. Disability (§ 4.1055)

Eligibility

Five years of continuous service

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

Amount

The greater of:

1. 1/70 (1.43%) of the Final Average Monthly Compensation per year of service; or
2. 1/3 of the Final Average Monthly Compensation.

5. Death After Retirement (§ 4.1044)

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); plus
ii. $2,500 lump sum death benefit paid to a designated beneficiary; plus
iii. Any unused contributions if the member has elected the cash refund annuity option.

6. Death Prior to Retirement (§ 4.1062 & § 4.1054)

Option #1

Eligibility

None

Benefit

i. Refund of employee contributions; plus
ii. A limited pension benefit equal to 50% of monthly salary paid, according to the following schedule:

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

Option #2

Eligibility

Duty-related death or after five years of service

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

Benefit

Continuance of service or disability benefit payable under 100% joint and survivor option to an eligible spouse or qualified domestic partner

7. Vested Deferred Benefits (§ 4.1020 & § 4.1059.1)

Eligibility

The earlier of:

1. Age 70 with five years of continuous service; or
2. Age 60 with five years of continuous service and at least 10 years elapsed from first data of membership; or
3. Age 55 with at least 30 years of service; or
4. Deferred employee who meets part-time eligibility: Age 60 with at least 10 years from the first date of membership

Amount

Normal retirement benefit

Eligibility

The earlier of:

1. Age 55 with 5 years of continuous service and at least 10 years elapsed from the first date of membership; or
2. Age 55 with 10 years of continuous service; or
3. Deferred employee who meets part-time eligibility: Age 55 with at least 10 years from the first data of membership.

Amount

Early retirement benefit

8. Withdrawal of Contributions Benefit

Refund of employee contributions with interest.

9. Post-Retirement Benefit Adjustments (§ 4.1044)

Based on changes to Los Angeles area consumer price index, to a maximum of 3% per year; excess banked.

APPENDIX A
RETIREMENT ASSUMPTIONS, METHODS AND PLAN PROVISIONS

10. Contributions (§ 4.1031)

If an employee became a plan member on or after January 1, 1983, the member normal contribution rate is 6%.

If an employee became a plan member before January 1, 1983, the rate is based on age at entry.

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.

In addition, members in certain bargaining groups are required to an additional 4% member contribution rate, beginning July 1, 2011. All non-represented members and members of one particular bargaining group are required to pay an additional 2% member contribution rate retroactive to July 1, 2011. For these members, the additional member contribution rate will increase to 4% beginning January 1, 2013.

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

A. Actuarial Assumptions (health-specific)

In our audit process, we applied the following assumptions which are the same as those applied in the June 30, 2012 valuation by Segal. All assumptions not shown here are the same as in the June 30, 2012 retirement plan valuation.

1. Health Care Cost Subsidy Trend Rates

Medical
For the fiscal year ending June 30, 2013, the following plan-specific trend rates are applied:

Plan	Blue Cross PPO Under Age 65	Blue Cross PPO Age 65 and Over	Kaiser HMO Under Age 65	Senior Advantage	Blue Cross HMO Under Age 65	UHC Medicare HMO
2012-2013 Fiscal Year	7.99%	7.76%	11.45%	5.52%	5.77%	4.25%

The following trend rates apply to all medical plans:

Fiscal Year	Trend (Approx.)
2013-2014	8.25%
2014-2015	7.75%
2015-2016	7.25%
2016-2017	6.75%
2017-2018	6.25%
2018-2019	5.75%
2019-2020	5.25%
2020 and later	5.00%

Dental
5.00% for all years

Medicare Part B Premium Trend
5.00% for all years

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

2. Participation

Participants who have left or are assumed to leave active employment and are immediately eligible for retirement benefits are assumed to elect health coverage and begin receiving a subsidy at the earliest eligibility at the following rates:

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

Participants who have left or are assumed to leave active coverage and are eligible for a deferred retirement benefit are assumed to elect coverage at 50% of the rates shown above.

3. Family Composition

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. Male retirees are assumed to be four years older than their female spouses. Female retirees are assumed to be two years younger than their male spouses.

4. 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.

5. Medicare Eligibility

100% of retirees are assumed to be covered by both Medicare Parts A and B beginning at age 65.

6. Administrative Expenses

No administrative expenses separate from the premium costs are assumed.

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

B. Actuarial Methods

1. Asset Valuation Method

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. (For fiscal years prior to June 30, 2009, the unrecognized returns have been calculated by taking the unrecognized returns developed using a five-year smoothing period and extending the period for an additional two years). The actuarial value of assets cannot be less than 60% or greater than 140% of the market value of assets.

2. Actuarial Funding Method

The Entry Age Normal actuarial funding method is used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund the retirement benefits between each member's date of hire and assumed retirement. The actuarial liability is the difference between the present value of future benefits and the present value of future normal cost. The unfunded actuarial liability (UAL) is the difference between the actuarial liability and the actuarial value of assets.

Changes in UAL due to actuarial gains and losses are amortized over separate 15-year periods. Any changes in the UAL 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. All the bases on or before June 30, 2012, except those arising from the 2009 ERIP, were combined and amortized over 30 years effective June 30, 2012.

3. Claims Costs Development

No age-graded claims costs were developed. The valuation is based strictly on the expected health subsidy payments.

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

C. Summary of Key Substantive Plan Provisions

Eligibility:

All retirees and survivors receiving a monthly allowance from LACERS are eligible to participant in a LACERS medical and/or dental plan. Participants who are age 55 or older (regardless of age at benefit commencement) and have at least 10 years of service are eligible for a premium subsidy.

Eligibility for retirement allowances is as follows:

- **Retirement:**
  - Age 55 and 10 years of service; or
  - 30 years of service; or
  - Age 70.

- **Disablement:** five years of service

- **Vested Termination:** five years of service

In some instances, members who retired under the Early Retirement Incentive Program (ERIP) were granted additional years of "age" for benefit eligibility purposes so may begin receiving a health subsidy prior to actual age 55.

Medical Subsidy Amount:

For **Pre-Medicare retirees**, the medical subsidy is 4% of the maximum medical subsidy for each whole year of service, up to 100% of the maximum medical subsidy. The subsidy is limited to the medical plan premium; however, any difference may be applied toward the cost of dependent coverage.

For Medicare-eligible retirees covering **spouses** (regardless of whether the spouse is Medicare-eligible or not), the dependent premium subsidy is based on the amount that would have been available for dependent coverage if the retiree was also enrolled in pre-Medicare coverage.

The maximum pre-Medicare subsidy amount was $1,190 per month in 2012 and $1,367 per month in 2013.

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

For **Medicare-eligible retirees**, the medical subsidy is equal to a percentage of the single-party premium in which the retiree is enrolled, as shown below:

Years of Service	Subsidy Percent
10-14	75%
15-19	90%
20 +	100%

Surviving spouses are eligible for a medical subsidy based on the age and service of the deceased member. The maximum pre-Medicare subsidy amount for surviving spouses was $593.62 per month in 2012 and $681.72 per month in 2013.

Medicare Part B Premium Reimbursement:

Retired members who are enrolled in Medicare Parts A and B and participate in a LACERS medical plan are reimbursed for the basic Medicare Part B premium. Neither dependents nor surviving spouses are eligible for the Medicare Part B premium reimbursement.

Dental Subsidy Amount:

The dental subsidy is 4% of the maximum dental subsidy amount for each whole year of service, up to 100% of the maximum medical subsidy. The maximum monthly dental subsidy amount is based on the plan elected and was $44.14 in 2012 and $42.80 in 2013 for the MetLife PPO Plan and $13.53 in 2012 and 2013 for the Safeguard HMO Plan.

Premiums:

	2012 Premiums			
	Pre-Medicare Coverage		Medicare-Eligible Coverage	
	Retiree Only	Retiree + 1 Dependent	Retiree Only	Retiree + 1 Dependent
Medical Plans:				
Anthem BC PPO	$990.15	$1,975.78	$423.45	$842.38
Kaiser HMO CA	593.62	1,187.24	208.75	417.50
Anthem BC HMO CA	736.47	1,468.42	NA	NA
SCAN	NA	NA	223.29	442.05
UHC HMO CA	NA	NA	242.57	480.62
UHC HMO NV	NA	NA	203.54	402.56
UHC HMO AZ	NA	NA	291.08	577.64
Dental Plans:				
MetLife PPO	48.79	96.76	48.79	96.76
SafeGuard HMO	13.53	25.26	13.53	25.26

APPENDIX B
HEALTH ASSUMPTIONS, METHODS AND PLAN PROVISIONS

	2013 Premiums			
	Pre-Medicare Coverage		Medicare-Eligible Coverage	
	Retiree Only	Retiree + 1 Dependent	Retiree Only	Retiree + 1 Dependent
Medical Plans:				
Anthem BC PPO	$1,063.79	$2,123.06	$452.93	$901.34
Kaiser HMO CA	681.72	1,363.44	213.90	427.80
Anthem BC HMO CA	758.32	1,512.11	NA	NA
SCAN	NA	NA	223.29	442.05
UHC HMO CA	NA	NA	242.57	480.62
UHC HMO NV	NA	NA	217.21	429.90
UHC HMO AZ	NA	NA	305.22	605.92
Dental Plans:	NA	NA		
MetLife PPO	49.52	98.21	49.52	98.21
SafeGuard HMO	13.53	25.26	13.53	25.26

APPENDIX C
FDBIP ASSUMPTIONS, METHODS AND PLAN PROVISIONS

A. Actuarial Assumptions

In addition to all applicable pension assumptions from the June 30, 2012 valuation, the following additional assumptions apply:

1. Each participating active member is assumed to have two children with an average age of about 13.

2. The children are assumed to be eligible for a monthly benefit of about $938 each until they reach age 18.

3. A surviving spouse is assumed to be eligible for a monthly benefit of about $312 until the children reach age 16.

4. Those employees who are currently eligible to retire under the pension plan do not have an FDBIP liability in the valuation.

B. Actuarial Methods

According to Segal's December 7, 2011 analysis, the plan is funded on a term cost basis, so that the premium charged for the current year is intended to cover the present value of the projected FDBIP costs for the portion of the eligible membership expected to die during that year.

Segal's analysis also indicates that the Board does not have a policy on how funding surplus is treated.

C. Summary of Key Substantive Plan Provisions

1. Eligibility

An active employee is eligible to join the plan after completing at least 18 months of service. Following an additional 18 months of contributory membership, an employee is entitled to basic coverage under the plan.

APPENDIX C
FDBIP ASSUMPTIONS, METHODS AND PLAN PROVISIONS

2. Benefit

Normal

Conditions	Monthly Payment
Surviving spouse/domestic partner with 1 child	$1,875.00
Surviving spouse/domestic partner with 2 or more children	$2,186.90
No surviving spouse/domestic partner; 1 child (paid to legal guardian)	$ 937.50
No surviving spouse/domestic partner; 2 children (paid to legal guardian)	$1,875.00
More than 2 children (paid to legal guardian)	$2,186.90

At employee death, above payments will be provided to children and appropriate caretaker until the age of 16. Although payments to the appropriate caretaker will cease at age 16, payments to children will continue until age 18 or 19 as long as they remain enrolled full-time in secondary school.

3. Disabled

If at the time of employee death or before a child reaches age 22, the child is or becomes physically or mentally disabled, the child will receive benefit payments as long as the condition continues given approval by the LACERS Board of Administration.

4. Surviving Spouse

If the employee has paid premiums for 10 or more years (120 months), above payments, dependent on elected start age, will be provided to a surviving spouse for life if and only if the spouse has not remarried before age 60 and does not receive a continuance benefit on the employee's LACERS Service Retirement Allowance.

Age	Monthly Payment
60	$613.04
61	$661.93
62	$710.78
63	$759.66
64	$808.52
65	$857.40

APPENDIX C
FDBIP ASSUMPTIONS, METHODS AND PLAN PROVISIONS

5. Dependent Parents

If the employee does not have a surviving spouse or domestic partner, the above benefit may be paid to dependent parents. Dependent parents are defined as being at least 62 years old and receiving ½ of their necessary living expenses from the employee during the last year of his or her City Service.

Number of Dependent Parents	Monthly Payment
1	$1,031.25
2	$1,875.00

6. Contributions

The City and participating employees currently contribute $3.70 per month each.

APPENDIX D
GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of all future system benefits and the present value of total future normal costs. This is also referred to by some actuaries as the "accrued liability" or "actuarial accrued liability".

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

3. Accrued Service

Service credited under the System which was rendered before the date of the actuarial valuation.

4. Actuarial Equivalent

A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

5. Actuarial Funding Method

A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of a retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

6. Actuarial Gain (Loss)

The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

7. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment.

APPENDIX D
GLOSSARY OF TERMS

8. Amortization

Paying off an interest-discounted amount with periodic payments of interest and principal—as opposed to paying off with a lump sum payment.

9. Annual Required Contribution (ARC) under GASB 25

The Governmental Accounting Standards Board (GASB) Statement No. 25 defines the Plan Sponsor's "Annual Required Contribution" (ARC) that must be disclosed annually.

10. Normal Cost

The actuarial present value of retirement system benefits allocated to the current year by the actuarial funding method.

11. Set back/Set forward

Set back is a period of years that a standard published table (i.e. mortality) is referenced backwards in age. For instance, if the set back period is two years and the participant's age is currently 40, then the table value for age 38 is used from the standard published table. It is the opposite for set forward. A system would use set backs or set forwards to compensate for mortality experience in their work force.

12. Unfunded Actuarial Liability (UAL)

The unfunded actuarial liability represents the difference between actuarial liability and valuation assets. This value is sometimes referred to as "unfunded actuarial accrued liability".

Most retirement systems have unfunded actuarial liabilities. They typically arise each time new benefits are added and each time experience losses are realized.

The existence of unfunded actuarial accrued liability is not in itself an indicator of poor funding. Also, unfunded actuarial liabilities do not represent a debt that is payable today. What is important is the ability of the plan sponsor to amortize the unfunded actuarial liability and the trend in its amount (after due allowance for devaluation of the dollar).