
**Los Angeles County Employees
Retirement Association**

**ACTUARIAL VALUATION
June 30, 2009**



By

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February 26, 2010

Board of Investments
LACERA
300 North Lake Avenue, Suite 820
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Dear Members of the Board:

As requested, we have made an actuarial valuation of the Los Angeles County Employees Retirement Association (LACERA) as of June 30, 2009 for determining the contribution rates effective July 1, 2010. The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2009, and LACERA's new funding policy that was adopted in December of 2009. It should be noted that under this policy, the reserve value for STAR benefits is included in the 2009 valuation assets; however, the liability for any potential STAR benefits in the future is not included in this valuation.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by LACERA's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors for LACERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of LACERA and reasonable expectations) and which, in combination, offer a reasonable estimate of anticipated experience affecting LACERA. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The Board of Investments has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A.

This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for LACERA. Actuarial computations under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations prepared for this purpose may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of LACERA's funding requirements as stated under their Funding Policy and the requirements of GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

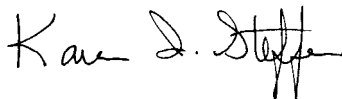
Milliman's work product was prepared exclusively for LACERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations, and uses LACERA's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

We would like to express our appreciation to Mr. Gregg Rademacher, Chief Executive Officer of LACERA, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Karen I. Steffen".

Karen I. Steffen, FSA, EA, MAAA
Consulting Actuary
KIS/NJC/nlo

A handwritten signature in black ink, appearing to read "Nick Collier".

Nick J. Collier, ASA, EA, MAAA
Consulting Actuary

**Los Angeles County Employees
Retirement Association**

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Los Angeles County Employees Retirement Association

Section 1: Summary of the Findings



Overview

2009 Valuation Results

	June 30, 2009	June 30, 2008
Required County Contribution Rate	14.22%	12.08%
Funded Ratio	88.9%	94.5%

We are pleased to present the results of the June 30, 2009 actuarial valuation. This valuation determines the required contribution rates payable starting July 1, 2010. Several key points are summarized as follows:

- **Investment Returns:** For the fiscal year ending in 2009, the fund returned a negative 18.3% on a market basis, significantly less than the assumed rate of 7.75%. In total, there was a \$2.47 billion loss on actuarial assets. The large recognized asset loss has the largest impact of any factors affecting this year's valuation results.

Note that currently a \$9.8 billion net investment loss is being deferred. This is because the asset-smoothing method has recognized only one-fifth of the loss from last year. This loss will be reflected over the next four valuations under the current asset-smoothing method.

- **New Funding Policy:** The Board of Investments adopted a new Funding Policy at their December, 2009 meeting. The most significant change from the last valuation included in the new policy was the implementation of five-year smoothing on asset gains and losses. This change resulted in a higher Funded Ratio and a lower contribution rate than would have been calculated under the previous three-year smoothing period. Other material changes are the inclusion of the STAR reserves as a valuation asset (subject to periodic review) and the adoption of a 30-year layered amortization period.
- **Funding:** The Funded Ratio decreased from 94.5% to 88.9%. The recognition of significant investment losses caused a 5.5% decrease (after reflecting the new Funding Policy) in the Funded Ratio. All other factors had only a minor impact, causing a 0.1% decrease in total.

**Overview
(continued)**

- **Contribution Rates:** The County Normal Cost rate increased slightly from 10.09% to 10.10%. The County's required contribution rate to finance the Unfunded Actuarial Accrued Liability (UAAL) over 30 years increased from 1.99% to 4.12%. The result is an increase in the required total employer contribution rate from the prior valuation of 2.14% (from 12.08% to 14.22% of payroll). The most important factor causing this increase was the recognition of investment losses combined with the new Funding Policy, which resulted in a 2.15% increase. All other factors had only a minor impact, causing a 0.01% decrease in total. There are no recommended changes to member contribution rates.

**Required
Contribution Rate**

In accordance with the LACERA's Funding Policy, the required County contribution rate is 14.22% of payroll. This is equal to the payment of the County Normal Cost rate plus a 30-year amortization of the UAAL. It should be noted that the 14.22% is a weighted average for all LACERA plans. The actual percent of payroll to be contributed by the County varies by plan as shown in Exhibit 11.

The new required rate is effective for the fiscal year beginning July 1, 2010. The 14.22% contribution rate is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions used and satisfies the Funding Policy adopted by the Board of Investments.

Analysis of Change

The following chart shows that the asset loss was the most significant factor affecting the County contribution rate and the funded status. Note that the impact of the asset loss would have been much greater if it had not been offset somewhat by the change in asset smoothing method (from three-year smoothing to five-year smoothing), as well as by the inclusion of the STAR reserves in the valuation assets.

Sources of Change	County Contribution Rate	Funded Ratio
June 30, 2008 Actuarial Valuation	12.08%	94.5%
Expected Year-to-Year Change	-0.04%	0.4%
Asset Gain/Loss		
Investment Return (Actuarial)	3.91%	-10.2%
Move to 5-Year Smoothing	-1.16%	3.0%
Inclusion of STAR Reserves	-0.52%	1.4%
Contingency Based on Market	-0.08%	0.3%
Combined Asset Gain/Loss	2.15%	-5.5%
Liability Gain/Loss		
Salary / Payroll Variation	0.21%	-0.8%
Retiree COLAs < Expected	0.00%	0.0%
Assumption Changes	0.00%	0.0%
Other	-0.18%	0.3%
Combined Liability Gain/Loss	0.03%	-0.5%
Total Change	2.14%	-5.6%
June 30, 2009 Actuarial Valuation	14.22%	88.9%

Funding Progress

Based on the 2008 valuation, the expected funding status as of June 30, 2009 was a UAAL amount of \$2.25 billion. The actual UAAL for the fiscal year ending June 30, 2009 is \$4.93 billion. The increase was primarily due to a net loss on valuation assets of \$2.47 billion.

One measure of the funding adequacy of the Plan is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all LACERA plans combined. LACERA had maintained a Funded Ratio of approximately 100% for 1996-2002. The Funded Ratio decreased significantly in 2003 and 2004 due to asset losses from earlier in the decade being recognized. Strong investment returns in subsequent years had resulted in an increase in the Funded Ratio to 94.5%. This year the Funded Ratio has decreased to 88.9% due to the recognition of significant asset losses (both current and deferred), as shown in the graph on the following page.

Summary of the Findings (continued)

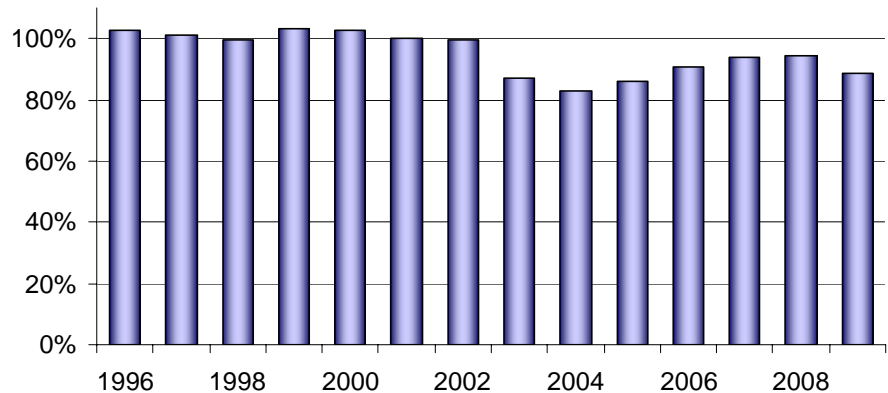
Funding Progress (continued)

On June 30, 2009, the total Market Value of the fund was \$30.5 billion. The Actuarial Value was \$40.3 billion and was split between \$0.8 billion of Non-Valuation Assets and \$39.5 billion of Valuation Assets. The Valuation Assets are equal to 88.9% of the \$44.5 billion AAL. The Actuarial Value of Assets is 132% of the Market Value of Assets.

All dollar amounts in billions

	Market Value of Total Assets	Actuarial Value		Actuarial Accrued Liability	Funded Ratio
		Non-Valuation Reserves	Valuation Assets		
2000	\$ 31.6	\$ 4.3	\$ 25.4	\$ 24.7	102.9%
2001	28.4	4.4	26.5	26.5	100.0
2002	26.0	2.0	28.3	28.4	99.4
2003	26.2	1.6	26.6	30.5	87.2
2004	29.5	1.4	27.1	32.7	82.8
2005	32.0	1.1	29.5	34.4	85.8
2006	35.2	0.9	32.8	36.3	90.5
2007	40.9	0.8	37.0	39.5	93.8
2008	38.7	0.9	39.7	42.0	94.5
2009	30.5	0.8	39.5	44.5	88.9

Historical Funded Ratios



Association Assets

Market Value: The market value of assets has increased slightly over the past ten years. The average return for the fund over that period is estimated to be 4.1%; however, due to benefit payments being greater than contributions, the total increase in the market value averaged less. This is typical of a mature retirement system. The values shown in the market value column are total assets net of liabilities, and include all reserves.

Actuarial Assets: The market value of total assets is used in calculating the actuarial value of assets. Under the actuarial asset method, the market value returns are smoothed over a five-year period.

Valuation Reserves: The reserves represent the ownership of LACERA's assets. The reserves are established in compliance with the County Employees Retirement Law of 1937 as administered by the Board of Investments. These assets also reflect five-year smoothing. On a smoothed basis, the fund returned 1.5%.

Non-Valuation Reserves: The non-valuation reserves are set aside for obligations or contingencies. They are not used to fund the retirement benefits unless explicitly stated. These assets may also reflect smoothing.

Valuation Assets: This is the combination of the valuation reserves and the portion of the non-valuation reserves that are recognized for funding purposes only as specified in LACERA's Funding Policy. It should be noted that under this policy the reserve value for STAR benefits is included in the valuation assets; however, the liability for any STAR benefits that may be granted in the future is not included in the valuation.

Future Impact of Recognition of Deferred Losses

As noted earlier, the smoothing method is currently deferring \$9.8 billion in asset losses. As these losses are recognized over the next four valuations, it is expected there will be significant increases in the required County contribution rate (unless there are large offsetting asset gains in the near future).

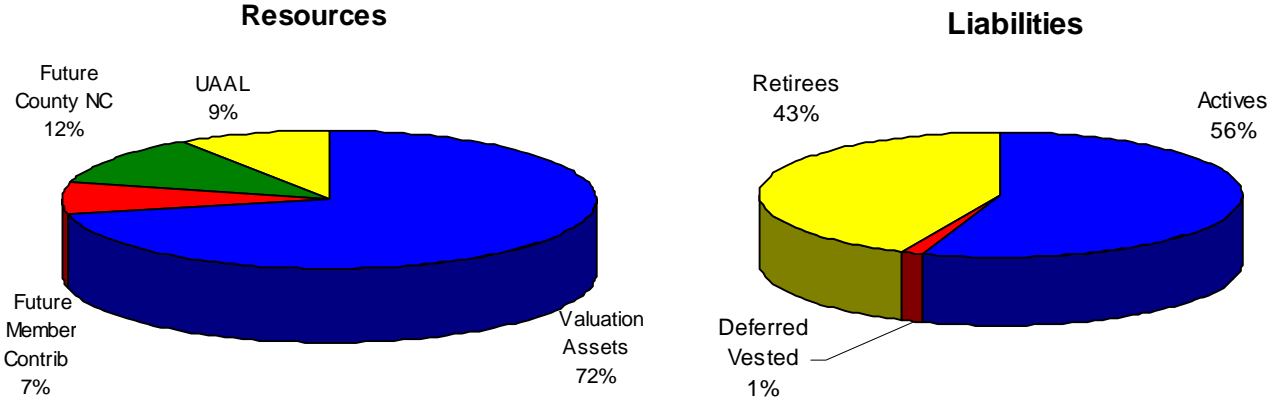
The potential future impact of the recognition of these deferred losses can be estimated by looking at the valuation results if the assets losses were immediately recognized. Using the market value of assets, the required County contribution rate would have been 22.64%, and the Funded Ratio would have been 66.8%.

Actuarial Balance Sheet

The first step in the valuation process is to compare the total actuarial assets of LACERA with its total liabilities for all plans. In this analysis, assets equal those currently on hand, at the actuarial value, and also expected future contributions by both the County and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The AAL is the total of these liabilities less expected future Normal Cost contributions.

Comparing the current and future assets to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.

The 2009 actuarial valuation indicates that LACERA's Valuation Assets are less than its AAL. The difference between these two values is the UAAL. It is discussed, along with the effect of the experience gains and losses, in detail in Section 4, Actuarial Liabilities.



Funding Policy

In 2009, the Board of Investments adopted a new Funding Policy. Significant provisions of this policy are as follows:

- **Asset Smoothing Period:** Asset gains and losses are smoothed over a five-year period (previously three years).
- **Amortization Period:** The 2009 UAAL is amortized over a closed 30-year period. Future gains and losses are amortized over new closed 30-year periods. This is referred to as “layered” amortization. The prior method used an open period. The employer contribution rate is not allowed to be less than the rate if LACERA amortized the total UAAL over a 30-year period.

If LACERA moves to a negative UAAL position, the “surplus” amount will be amortized over an open 30-year period.

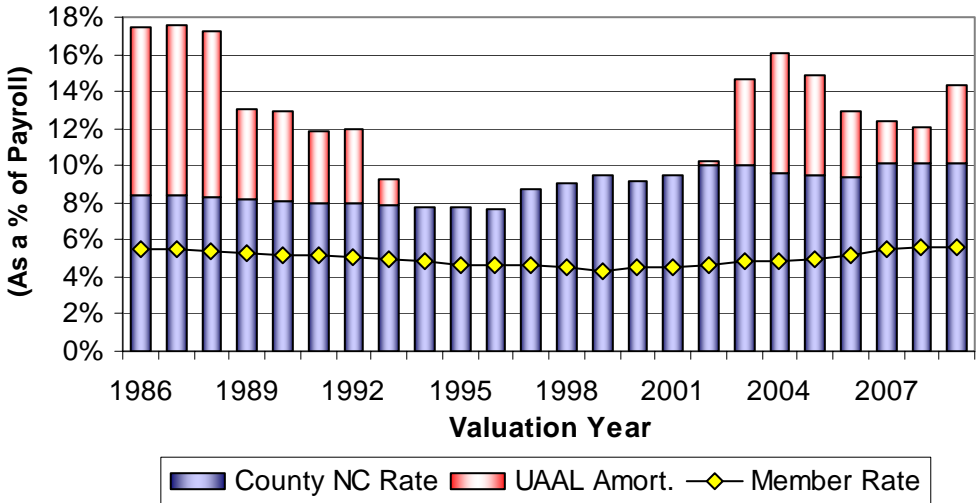
- **STAR Reserve:** The STAR reserve is included in the valuation assets (subject to periodic review). There is no corresponding liability for future STAR benefits included in the valuation.

Note that if the STAR reserve of \$614 million was excluded from the Valuation Assets, the UAAL would increase by this amount. Under this hypothetical scenario, the required 2010 County contribution rate would increase by 0.52% to 14.74%, and the Funded Ratio would decrease by 1.4% to 87.5%.

County Contribution Rates

Based on the results of the valuation, the required County contribution rate will increase for the fiscal year beginning in 2010 to a rate of 14.22% of pay. A historical perspective of the County contribution rates is shown in the following graph.

Required County Contribution Rate

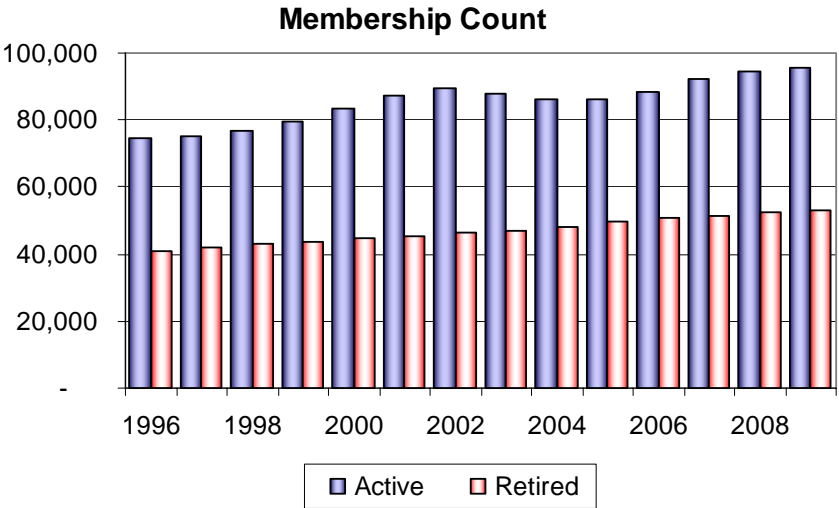


Member Rates

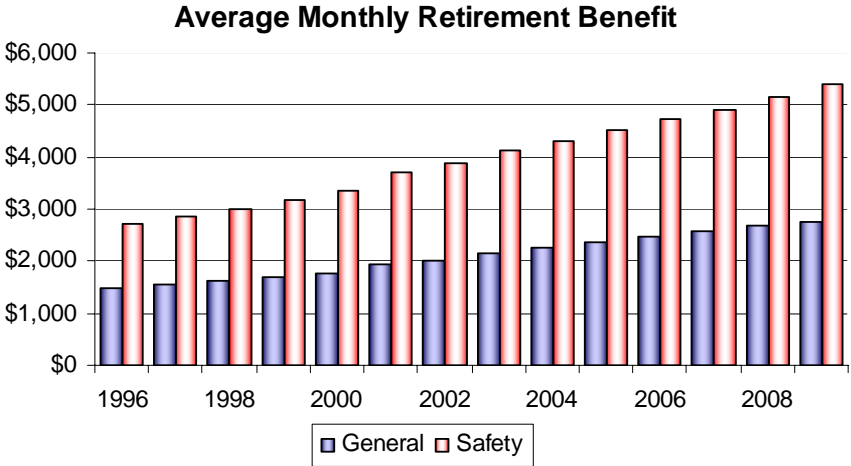
Since this is not a triennial valuation, we have not recommended any changes in member contribution rates. Member rates for all plans are discussed in Section 5, and they are shown in detail in Appendix D.

Member Information

Payroll has increased since 2008. As of June 30, 2009, the annualized payroll is \$6.67 billion for 95,788 active members. This increase is a result of a 5.2% increase in average pay and a 1.4% increase in active members.



Retired member counts and average retirement benefit amounts continue to increase steadily. For 2009, there were 53,069 retired members and beneficiaries with an average benefit of \$3,275 per month. This represents a 1.4% increase in count and a 4.0% increase in the average monthly benefit.



**Summary of the Findings
(continued)**

**Analysis of Change
in Member
Population**

The following table summarizes the year-to-year change in member population. In addition to the movement shown below, 528 members (638 last year) transferred from Plan E to Plan D during the past year; and 226 members (201 last year) transferred from Plan D to Plan E.

	Active Contributing Members	Deferred Members*	Retirees, Disabilities, & Beneficiaries
June 30, 2008 Valuation	94,492	11,834	52,350
Termination without Refund	(1,026)	1,026	-
Termination with Refund	(675)	(412)	-
Active/Deferred Death with Annuity	(67)	(59)	126
Service Retirement	(1,447)	(395)	1,842
Disability Retirement	(122)	(11)	133
Retiree Death without Beneficiary	-	-	(1,377)
New Entrants	4,489	-	-
Rehires	144	(139)	(5)
Total Change	1,296	10	719
June 30, 2009 Valuation	95,788	11,844	53,069

* Includes non-vested terminated members who have not taken a refund.

**Sensitivity to
Investment Return**

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing the ultimate cost. Of the assumptions, the investment return generally has the biggest impact. The following chart provides a simple analysis on how the costs are affected by the investment return assumption.

	Investment Return Assumption		
	Current 7.75%	+0.5% 8.25%	-0.5% 7.25%
County Contribution Rate	14.22%	10.63%	17.85%
Change		-3.59%	3.63%
Funded Ratio	88.9%	95.1%	83.0%
Change		6.2%	-5.9%

**Summary Valuation
Results**

The following Exhibit 1 presents a summary of key data elements on June 30, 2009 and June 30, 2008, and how they changed over the past year. More detail on each of these elements can be found in the following Sections and Exhibits of this report.

Los Angeles County Employees Retirement Association

Exhibit 1: Summary of Significant Valuation Results

	June 30, 2009	June 30, 2008	Percentage Change
I. Total Membership			
A. Active Members	95,788	94,492	1.4%
B. Retired Members & Beneficiaries	53,069	52,350	1.4%
C. Deferred Members	<u>11,844</u>	<u>11,834</u>	0.1%
D. Total	160,701	158,676	1.3%
II. Pay Rate as of June 30, 2009			
A. Annual Total (\$millions)	\$ 6,673	\$ 6,257	6.6%
B. Monthly Average	\$ 5,805	\$ 5,518	5.2%
III. Average Monthly Benefit Paid to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 3,339	\$ 3,210	4.0%
B. Disability Retirement	\$ 3,996	\$ 3,826	4.4%
C. Surviving Spouse and Dependents	\$ 2,123	\$ 2,014	5.4%
D. Total	\$ 3,275	\$ 3,150	4.0%
IV. Actuarial Accrued Liability			
A. Active Members	\$ 19,778	\$ 18,245	8.4%
B. Retired Members	\$ 23,967	\$ 23,026	4.1%
C. Vested Terminated Members	<u>\$ 724</u>	<u>\$ 704</u>	2.8%
D. Total	\$ 44,469	\$ 41,975	5.9%
V. Assets			
A. Market Value of Fund (\$millions)	\$ 30,499	\$ 38,725	(21.2)%
B. Actuarial Value (\$millions)			
1. Valuation Reserves	\$ 39,542	\$ 39,662	(0.3)%
2. Non-valuation Reserves	\$ 776	\$ 891	(13.0)%
C. Annual Investment Return			
1. Market Basis	(18.3)%	(1.5)%	na
2. Valuation (Actuarial) Basis	1.5%	9.0%	na
VI. Unfunded Actuarial Accrued Liability or Surplus Funding (\$millions)	\$ 4,927	\$ 2,313	113.0%
VII. Required County contribution rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	15.75%	15.68%	0.4%
B. Member Contributions	<u>(5.65)%</u>	<u>(5.59)%</u>	1.1%
C. County Normal Cost	10.10%	10.09%	0.1%
D. UAAL Amortization	<u>4.12%</u>	<u>1.99%</u>	107.0%
E. Total Required Contribution Rate	14.22%	12.08%	17.7%
VIII. Funded Ratio	88.9%	94.5%	(5.9)%
IX. Results Based on Market Value (Informational Purposes Only)			
Total Required Contribution Rate	22.64%	13.75%	64.7%
Funded Ratio	66.8%	90.1%	(25.9)%

Los Angeles County Employees Retirement Association

Section 2: Scope of the Report



This report presents the actuarial valuation of the Los Angeles County Employees Retirement Association as of June 30, 2009. This valuation was requested by the Board of Investments. Section 31453 of the County Employees Retirement Law of 1937 (the '37 Act) requires an actuarial valuation to be performed at least every three years for the purposes of setting contribution rates. The 2009 valuation meets this requirement. Under LACERA's Funding Policy, annual valuations determine the County Contribution rates each year. Member contribution rates are set each triennial valuation.

In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. The assets and investment income are presented in Exhibits 2-4. Exhibit 5 develops the Actuarial Value of Assets as of June 30, 2009. Exhibit 6 develops the Valuation Assets used for funding benefits.

Section 4 describes the benefit obligations of LACERA. Exhibit 7 is the Actuarial Balance Sheet and Exhibit 8a analyzes the change in UAAL (Surplus Funding). Exhibit 8b shows a history of these changes.

Section 5 discusses the Member contribution rates.

Section 6 discusses the County contributions needed to fund the benefits under the actuarial cost method in use.

Section 7 discloses the information required under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Section 8 shows the estimated cash flow of the system, including a projection of both contributions and benefit payments.

Scope of the Report (continued)

This report includes several appendices:

- Appendix A A summary of the actuarial procedures, and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2009.
- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E Historical information.
- Appendix F A glossary of actuarial terms used in this report.

Los Angeles County Employees Retirement Association

Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2009. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities (both accrued and future) for current members, which are generally in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and County are needed to pay all expected future benefits.

This section of the report looks at the determination of assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Sections 5 and 6 review the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities.

A historical summary of the system's assets is presented below:

	All dollar amounts in billions			
	Market Value of Total Assets	Actuarial Value		Total Fund Return*
		Non- Valuation Reserves	Valuation Assets	
2000	\$ 31.6	\$ 4.3	\$ 25.4	15.2
2001	28.4	4.4	26.5	-5.2
2002	26.1	2.0	28.3	-5.6
2003	26.2	1.6	26.6	3.6
2004	29.5	1.4	27.1	16.5
2005	32.0	1.1	29.5	11.0
2006	35.2	0.9	32.8	13.0
2007	40.9	0.8	37.0	19.1
2008	38.7	0.9	39.7	-1.5
2009	30.5	0.8	39.5	-18.3

**As reported in the Investment Section of the CAFR.*

On June 30, 2009, the total market value of the fund, less current liabilities, was \$30.5 billion. The actuarial value of the fund was determined to be \$40.3 billion, including the non-valuation reserves. The average total fund return for the last ten years is 4.1%.

Financial Exhibits

Exhibit 2 presents a Statement of Plan Net Assets and Exhibit 3 presents a Statement of Changes in Plan Net Assets. Exhibit 4 describes the allocation of LACERA's assets by the various reserve values determined for accounting purposes as disclosed in the Comprehensive Annual Financial Report (CAFR).

Exhibits 2-4 are taken directly from data furnished to us by LACERA in their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them both for the prior year and the current year for reasonableness and consistency with previous reports.

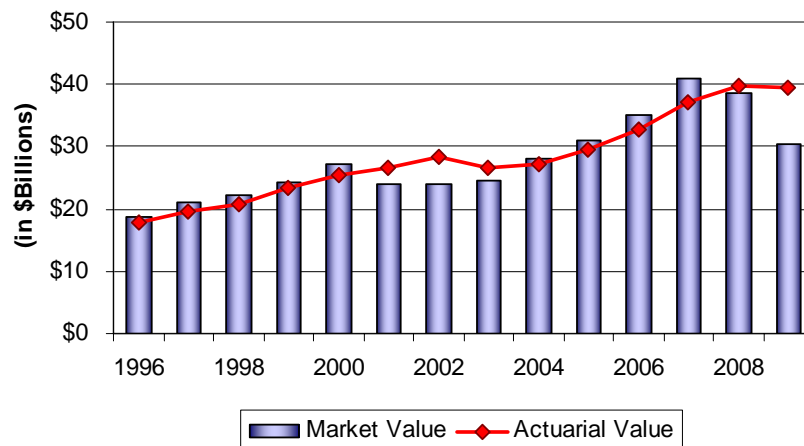
Actuarial Asset Method

The actuarial asset method computes the expected market value of assets based on the prior year's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. The current assumed rate of return is 7.75%, net of all expenses. The difference between the actual market value and the computed expected market value is smoothed, or recognized over a five-year period.

Actuarial Value of Assets

The development of the June 30, 2009 actuarial value of assets is shown in Exhibit 5. Note the smoothing process is deferring significant investment losses from the last two years and is currently in a net actuarial loss position. The result is an actuarial value of assets that is greater than the June 30, 2009 market value by \$9.8 billion. The following graph shows a historical comparison of the actuarial and market assets used for valuation purposes.

Applicable Valuation Assets



Funding Policy

At the December 2009 Board of Investments meeting, the following allocation of actuarial assets was adopted under the long-term Funding Policy. A Funded Ratio equal to 100% is the Funding Goal.

For funding purposes and for setting contributions rates, recognized earnings for a plan year is the recognized investment income as determined by the Actuarial Asset Method and includes both unrealized income and net realized income together with the prior balance in the Contingency Reserve. The allocation of recognized earnings is performed once a year as of the Valuation Date in the following order of priority:

- Priority 1: Allocate to the Member Reserve so the Actuarial Asset allocation to that Reserve equals the accounting value for that Reserve on the Valuation Date.
- Priority 2: Allocate to the Advanced Employer Contributions Reserve so the Actuarial Asset allocation to that Reserve equals the accounting value for that Reserve on the Valuation Date.
- Priority 3: Allocate to the Employer Reserve so the Actuarial Asset allocation to that reserve equals the accounting value for that Reserve on the Valuation Date.
- Priority 4: Allocate to the County Contribution Credit Reserve so the Actuarial Asset allocation to that reserve equals the accounting value for that Reserve on the Valuation Date. Note: This Reserve is not a Valuation Reserve.
- Priority 5: Allocate to the Employer Reserve so the total amounts allocated equal one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date to the extent there are positive recognized earnings to allocate.
- Priority 6: Allocate to the Contingency Reserve an amount equal to 1% of the Market Value of Assets as of the Valuation Date to the extent there are positive recognized earnings to allocate.
- Priority 7: Allocate to the Employer Reserve an amount, if necessary, when combined with other Valuation Reserves, to provide 100% funding of the AAL as of the Valuation Date to reach the Funding Goal. In the event there are negative recognized earnings, allocate the entire amount.

**Funding Policy
(continued)**

Priority 8: The Board may consider additional actions as permitted under the County Employee Retirement Law (CERL) using funds in excess of the amount needed to meet the Funding Goal for adjustments to the employer's contributions and/or funding for discretionary benefits. "Excess Earnings" as defined in the County Employees Retirement Law (CERL) may be appropriated upon reaching the Funding Goal.

Recognized earnings were sufficient to follow priorities 1-7, but were not sufficient to reach the Funding Goal of 100%.

Valuation Assets

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits that are to be funded outside of the actuarially determined contribution rates. The '37 Act requires the Contingency Reserve be set at a minimum of 1.0% of assets.

The Funding Policy allows the STAR Reserve to be allocated to the Valuation Assets (subject to periodic review), if needed. The June 30, 2009 STAR Reserve accounting value of \$614 million was included in Valuation Assets and used to determine the contribution rates for the fiscal year commencing July 1, 2010. Although the reserve value for STAR benefits is included in the 2009 valuation assets; there is no liability for STAR benefits that may be granted in the future included in this valuation.

The non-valuation reserve allocations for funding purposes shown in Exhibit 6 are not the same as those shown in the annual report and in Exhibit 4.

Los Angeles County Employees Retirement Association

**Exhibit 2: Statement of Plan Net Assets
For Years Ended June 30, 2008 and 2009
(Dollars in Thousands)**

	2009	2008
Assets		
Cash	\$ 33,700	\$ 47,965
Collateral on Loaned Securities	1,219,067	2,322,698
Receivables		
Contributions Receivable	112,479	82,562
Accounts Receivable – Sale of Investments	765,240	792,047
Accrued Interest and Dividends	103,110	132,306
Accounts Receivable – Other	48,562	57,566
Total Receivables	1,029,391	1,064,481
Investments at Fair Value		
Stocks	14,854,082	19,241,860
Bonds	9,800,435	12,299,188
Commodities	389,940	638,575
Real Estate	3,057,774	3,996,568
Alternative Assets	2,815,826	3,296,714
Total Investments	30,918,057	39,472,905
Capital Assets Net of Depreciation	-	-
Total Assets	33,200,215	42,908,049
Liabilities		
Accounts Payable – Purchase of Investments	1,433,312	1,799,138
Retiree Payroll and Other Payables	185	267
Accrued Expenses	26,113	36,302
Tax Withholding Payable	20,021	20,365
Obligations under Securities Lending Program	1,219,067	2,322,698
Accounts Payable – Other	2,536	4,608
Total Liabilities	2,701,234	4,183,378
Net Assets Held in Trust for Pension Benefits	30,498,981	38,724,671

Los Angeles County Employees Retirement Association

Exhibit 3: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2008 and 2009 (Dollars in Thousands)

	2009	2008
Additions		
Contributions		
Employer	\$ 831,671	\$ 788,029
Member	415,545	414,752
Total Contributions	<u>1,247,216</u>	<u>1,202,781</u>
Investment Income		
<i>From Investing Activities</i>		
Net Appreciation/(Depreciation) in Fair Value of Investments	(8,393,120)	(6,258,819)
Investment Income	1,073,730	4,929,295
Total Investing Activity Income/(Loss)	<u>(7,319,390)</u>	<u>(1,329,524)</u>
Less Expenses From Investing Activities	(104,603)	(114,183)
Net Investing Activity Income/(Loss)	<u>(7,423,993)</u>	<u>(1,443,707)</u>
<i>From Securities Lending Activities</i>		
Securities Lending Income	38,753	122,531
Less Expenses From Securities Lending Activities		
Borrower Rebates	(21,212)	(103,297)
Management Fees	(1,338)	(1,644)
Total Expenses from Securities Lending Activities	<u>(22,550)</u>	<u>(104,941)</u>
Net Securities Lending Income	<u>16,203</u>	<u>17,590</u>
Total Net Investment Income/(Loss)	(7,407,790)	(1,426,117)
Miscellaneous	1,221	1,767
Total Additions/(Declines)	<u>(6,159,353)</u>	<u>(221,569)</u>
Deductions		
Retiree Payroll	1,994,620	1,885,970
Administrative Expense	49,730	48,223
Refunds	20,356	25,588
Lump Sum Death Benefits	1,388	1,714
Miscellaneous	243	371
Total Deductions	<u>2,066,337</u>	<u>1,961,866</u>
Transfer to OPEB Agency Fund	-	-
Net Increase/(Decrease)	(8,225,690)	(2,183,435)
Net Assets Held in Trust for Pension Benefits Beginning of Year	38,724,671	40,908,106
End of Year	<u>30,498,981</u>	<u>38,724,671</u>

Los Angeles County Employees Retirement Association

Exhibit 4: Allocation of Assets by Accounting Reserve Amounts (Dollars in Thousands)

	June 30, 2009	June 30, 2008
1. Member Reserves		
a. Active Members	\$ 13,168,255	\$ 12,827,695
b. Unclaimed Deposits	<u> -</u>	<u> -</u>
c. Total Member Reserves	\$ 13,168,255	\$ 12,827,695
2. Employer Reserves		
a. Actual Employer Contributions	\$ 20,954,314	\$ 20,732,940
b. Advanced Employer Contributions	<u> -</u>	<u> -</u>
c. Total Employer Contributions	\$ 20,954,314	\$ 20,732,940
3. County Contribution Credit Reserve	\$ 470,710	\$ 470,710
4. STAR Reserve	614,011	629,127
5. Contingency Reserve	<u> 15,333</u>	<u> 394,721</u>
6. Total Reserves at Book Value	\$ 35,222,623	\$ 35,055,193
7. Unrealized Investment Portfolio Appreciation	<u> (4,723,642)</u>	<u> 3,669,478</u>
8. Total Reserves at Fair Value	\$ 30,498,981	\$ 38,724,671

Note: These amounts were determined by LACERA for accounting purposes and are reported in the June 30, 2009 CAFR.

**Los Angeles County Employees
Retirement Association**

**Exhibit 5: Five-Year Smoothing of Gains and Losses on Market Value
(Dollars in Thousands)**

June 30, 2009 Valuation					
Plan Year Ending	Contributions	Benefit Payments	Expected Market Value	Actual Market Value	Phase-Out of Gain / (Loss)*
6/30/2009	\$ 1,247,216	\$ 2,016,364	\$ 40,927,437	\$ 30,498,981	80.00% x \$ (10,428,456) = \$ (8,342,765)
6/30/2008	1,202,781	1,913,272	43,340,975	38,724,671	50.00% x (4,616,304) = (2,308,152)
6/30/2007	1,099,629	1,822,022	37,162,609	40,908,106	22.22% x 3,745,497 = 832,333
6/30/2006				35,185,589	= 0
					Total Phase-Out of Gain / (Loss) = \$ (9,818,584)
					Total Market Value of Assets = 30,498,981
					Total Actuarial Value of Assets = \$ 40,317,565
Total Actuarial Value of Assets = Total Market Value of Assets less the Total Phase-Out amount Phase-Out amounts will be recognized in future years.					

* Future phase-out of gains and losses follows this schedule:

Valuation Year	Phase-Out of Gain / (Loss) from Plan Year Ending		
	6/30/2007	6/30/2008	6/30/2009
6/30/2010	11.11%	33.33%	60.00%
6/30/2011	0.00%	16.67%	40.00%
6/30/2012	0.00%	0.00%	20.00%
6/30/2013	0.00%	0.00%	0.00%



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**Los Angeles County Employees
Retirement Association**

**Exhibit 6: Allocation of Valuation and Non-Valuation Assets
(Dollars in Thousands)**

	June 30, 2009	June 30, 2008
1. Total Market Value of Assets	\$ 33,200,215	\$ 42,908,049
2. Current Liabilities	<u>2,701,234</u>	<u>4,183,378</u>
3. Net Assets Held in Trust for Pension Benefits	\$ 30,498,981	\$ 38,724,671
4. Market Stabilization Reserve ⁽¹⁾	<u>(9,818,584)</u>	<u>(1,829,037)</u>
5. Actuarial Value of Fund Assets	\$ 40,317,565	\$ 40,553,708
6. Non-Valuation Reserves ⁽²⁾		
a. Unclaimed Deposits	\$ -	\$ -
b. Contingency Reserve	304,990	405,537
c. Advanced Employer Contributions	-	-
d. County Contribution Credit Reserve	470,710	470,710
e. Reserve for STAR Program	<u>-</u>	<u>15,100</u>
f. Total	\$ 775,700	\$ 891,347
7. Valuation Assets ⁽²⁾		
a. Member Reserves	\$ 13,168,255	\$ 12,827,695
b. Employer Reserves for Funding Purposes	<u>\$ 26,373,610</u>	<u>\$ 26,834,666</u>
c. Total	\$ 39,541,865	\$ 39,662,361

(1) *The Market Stabilization Reserve represents the difference between the Market Value of the fund, less Current Liabilities, and the Actuarial Value of the fund as determined in Exhibit 5.*

(2) *The values used for funding purposes for all reserves are based on the Board's Funding Policy. Amounts used for funding purposes may differ from those reported in the financial report as shown in Exhibit 4.*

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Los Angeles County Employees Retirement Association

Section 4: Actuarial Liabilities



In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of LACERA's assets as of the valuation date, June 30, 2009. In this section, the discussion will focus on the commitments of LACERA for retirement benefits, which are referred to as its actuarial liabilities.

In an active system, the actuarial liabilities will almost always exceed the actuarial assets. This is usually expected in all but a fully closed down fund, where no further contributions of any sort are anticipated. This deficiency has to be provided by future contributions and investment returns. An actuarial valuation method sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

Actuarial Balance Sheet – Liabilities

First, we need to determine the amount of the deficiency. We compare the Actuarial Value of the Valuation Assets to the Actuarial Liabilities. The difference is the amount that needs to be funded by the Member and County contributions in the future. Both the current and future assets (contributions) are compared to the actuarial liabilities in the Actuarial Balance Sheet.

Exhibit 7 contains an analysis of the actuarial present value of all future benefits for inactive members (both retired and deferred vested members) and active members. The analysis is given by class of membership, by plan and by type of benefit. Note that for purposes of this exhibit the valuation assets are shown allocated by plan in proportion to each plan's reserves (employer and member).

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries.

The actuarial assumptions used to determine the liabilities are based on the results of the 2007 Investigation of Experience Report. New assumptions were adopted by the Board effective with the June 30, 2007 actuarial valuation.

**Los Angeles County Employees
Retirement Association**

**Exhibit 7: Actuarial Balance Sheet – June 30, 2009
(Dollars in Millions)**

	General					Safety		
	Plan A	Plan B	Plan C	Plan D	Plan E	Plan A	Plan B	
LIABILITIES								
Present Value of Benefits - Inactives								
- Retirees and Beneficiaries	\$ 12,212	\$ 190	\$ 92	\$ 1,706	\$ 1,031	\$ 7,353	\$ 1,383	\$ 23,967
- Vested Terminated	57	8	2	284	313	1	59	724
- Inactive Total	12,269	198	94	1,990	1,344	7,354	1,442	24,691
Present Value of Benefits - Actives								
- Service Retirement	\$ 1,766	\$ 220	\$ 147	\$ 11,467	\$ 5,299	\$ 335	\$ 5,109	\$ 24,343
- Transfer Service (prior LACERA plan)	6	1	1	94	312	2	4	420
- Disability Retirement	42	5	4	949	N/A	131	3,546	4,677
- Death	16	2	2	364	N/A	1	66	451
- Termination (No Refund)	*	*	*	282	171	*	60	513
- Refund of Member Contributions	*	*	*	100	N/A	*	13	113
- Active Total	1,830	228	154	13,256	5,782	469	8,798	30,517
Total Actuarial Liabilities	\$ 14,099	\$ 426	\$ 248	\$ 15,246	\$ 7,126	\$ 7,823	\$ 10,240	\$ 55,208
ASSETS								
Valuation Assets	\$ 7,628	\$ 448	\$ 268	\$ 10,635	\$ 8,298	\$ 4,048	\$ 8,217	\$ 39,542
PV Future Member Contributions	20	7	5	2,796	N/A	1	1,231	4,060
PV Future County Normal Cost Contribs.	74	7	6	3,174	1,473	18	1,927	6,679
UAAL or (Surplus Funding)	6,377	(36)	(31)	(1,359)	(2,645)	3,756	(1,135)	4,927
Total Current and Future Assets	\$ 14,099	\$ 426	\$ 248	\$ 15,246	\$ 7,126	\$ 7,823	\$ 10,240	\$ 55,208

* Less than \$0.5 million



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**Actuarial Balance
Sheet – Liabilities
(continued)**

All liabilities reflect the benefits effective through June 30, 2009. This includes the permanent STAR COLA adopted as of 2009, but does not include the value of any future STAR benefits that may be granted in the future.

**Actuarial Balance
Sheet – Assets**

For the purpose of the Actuarial Balance Sheet, LACERA's assets are equal to the sum of:

- (a) assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
- (b) the present value of future contributions expected to be made by current active Members, and
- (c) the present value of future contributions expected to be made by the County.

**Actuarial Cost
Method**

The Actuarial Balance sheet determines the amount of future contributions that are needed, but the method used to determine the incidence of when those future contributions are yet to be made in future years is called the "actuarial cost method". For this valuation, the entry age actuarial cost method has been used. Under this method – or essentially any actuarial cost method – the contributions required to meet the difference between current assets and current actuarial liabilities are allocated each year between two elements:

- A normal cost amount; and
- Whatever amount is left over, which is used to amortize what is called the UAAL (Unfunded Actuarial Accrued Liability).

The two items described above – the Normal Cost and UAAL – are the keys to understanding the actuarial cost method.

Normal Cost

The Normal Cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid.

Under the entry age actuarial cost method, the Normal Cost contribution rate maintains the funding of benefits as a level percentage of pay. If experience follows the actuarial assumptions precisely, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

**Actuarial Liabilities
(continued)**

**Normal Cost
(continued)**

By applying the Normal Cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future Normal Cost contributions. Future contributions are expected to be made by both the Members and the County. The member contribution rates are determined based upon requirements established in the '37 Act and the actuarial assumptions. Based on these member contribution rates, we determine the present value of future member contributions. We subtract that value from the total future Normal Cost contributions expected, based on the entry age cost method. The remaining difference is the County's portion of the future Normal Cost contributions.

Actuarial Accrued Liability

The difference between the present value of all future obligations and the present value of the future Normal Cost contributions is referred to as the Actuarial Accrued Liability (AAL). The AAL is then compared to the value of assets available to fund benefits, and the difference is referred to as the UAAL. The results for LACERA for all plans are summarized below:

(Dollars in millions)	<u>2009</u>	<u>2008</u>	<u>Percent Change</u>
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 55,208	\$ 52,070	6.0%
B. Actuarial present value of total future normal costs for current members	\$ 10,739	\$ 10,095	6.4%
C. Actuarial accrued liability [A-B]	\$ 44,469	\$ 41,975	5.9%
D. Valuation Assets	\$ 39,542	\$ 39,662	-0.3%
E. UAAL or Surplus Funding [C-D]	\$ 4,927	\$ 2,313	113.0%
F. Funded Ratio [D/C]	88.9%	94.5%	-5.9%

It is interesting to note the maturity of LACERA's fund. Nearly one-half, 44.7%, of the total actuarial obligation (both accrued and future benefits) is for retired and deferred vested members. Of the \$30.5 billion in obligations for the active members, the cost method allocates about two-thirds to service already rendered. Of course, Plans A-C for general members and Plan A for safety members are no longer open for new employees. To the extent those older plans represent more costly plan benefits, this adds to the weighting for accrued obligations.

**Unfunded Actuarial
Accrued Liability/
Surplus Funding**

The portion allocated to service already rendered or accrued is called the Actuarial Accrued Liability (AAL). The difference between the AAL and the Valuation Assets is called the Unfunded Actuarial Accrued Liability (UAAL). If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the County had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

The term "fully funded" is often applied to a system in which contributions for everyone at the Normal Cost rate are sufficient to pay for the benefits of existing employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely paid for or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, a UAAL exists, implying that past experience has varied from what was assumed to have occurred based on the current benefit levels and actuarial assumptions.

However, even if a system does not have a positive UAAL, a portion or all of the Normal Cost contribution payments will need to be continued in order to have sufficient funds to pay future benefits. The use of the term "fully funded" may seem to imply no further contributions are required. Therefore, a better term is a "well-funded" plan. This occurs when the value of the assets equals or exceeds the AAL and the difference can be referred to as the Surplus Funding.

Exhibit 7 shows how the UAAL, or Surplus Funding, was derived for each level of plan benefits. In the Actuarial Balance sheet, the total actuarial liability for all future benefits must be equal to the current and future assets.

The Actuarial Balance Sheet for each plan, as well as its UAAL, or Surplus Funding amount, is based on an estimated allocation of the total LACERA Valuation Assets, as disclosed in Exhibit 7. The allocation is based on the relative value of each plan's employer and member reserves as reported to us by LACERA. These allocations are shown for illustrative purposes only, as the UAAL contribution rates are assumed paid by the County based on the valuation results in aggregate.

Funding Adequacy

A key consideration in determining the adequacy of the funding of LACERA is how the UAAL is being funded. If the UAAL amount is positive, that is, the AAL to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under LACERA's Funding Policy, any positive amount must be amortized over layered 30-year periods.

If future experience is more favorable than expected based on the actuarial assumptions, then LACERA may move to a Surplus Funding position. Conversely, if experience is less favorable, a larger UAAL will develop.

Analysis of Change in Unfunded Actuarial Accrued Liability

The UAAL, at any date after establishment of a system, is affected by any actuarial gains or losses arising when the actual experience of the system varies from the experience anticipated by the actuarial assumptions used in the valuations. To the extent actual experience, as it develops, differs from that expected according to the assumptions used, so also will the emerging costs differ from the estimated costs.

This year the funding level has decreased materially, primarily due to the recognition of current and prior asset losses.

The 2009 actuarial valuation reflects an actuarial experience loss of \$2.69 billion for the fiscal year just ended. The loss was mainly due to a \$2.47 billion loss on actuarial assets. The effect of the experience gains and losses on the UAAL or Surplus Funding is shown in Exhibit 8a. In addition to the investment return, some other factors which impacted the liabilities are:

- ✓ **Salary Increases** – Individual salaries for continuing active members increased at a rate slightly greater than the valuation assumption. This resulted in a loss.
- ✓ **Mortality Experience** – An actuarial loss due to mortality generally indicates that retired members are living longer than the current assumption would predict. This year, there was a small gain due to mortality.
- ✓ **Actual CPI versus Assumption** – The actual CPI increase was significantly less than assumed; however, almost all members from contributory plans had positive COLA banks to make up for this. Thus, almost all members received increases in their benefits equal to the assumption (3.0% for Plan A, 2.0% for Plans B-D), and there was not a material gain or loss due to CPI. Plan E does not have a COLA bank, so there was a small gain for this group.
- ✓ **Other** – Examples of this are gains and losses from termination, service retirement, disability retirement, death, service purchases, reciprocity, and transfers between plans.

**Change in Unfunded
Actuarial Accrued
Liability - History**

Exhibit 8b shows the sources of change in the UAAL over the past five valuations. As is generally the case, the biggest source of change is a return on investments that is either greater than or less than the assumption, causing asset gains and losses.

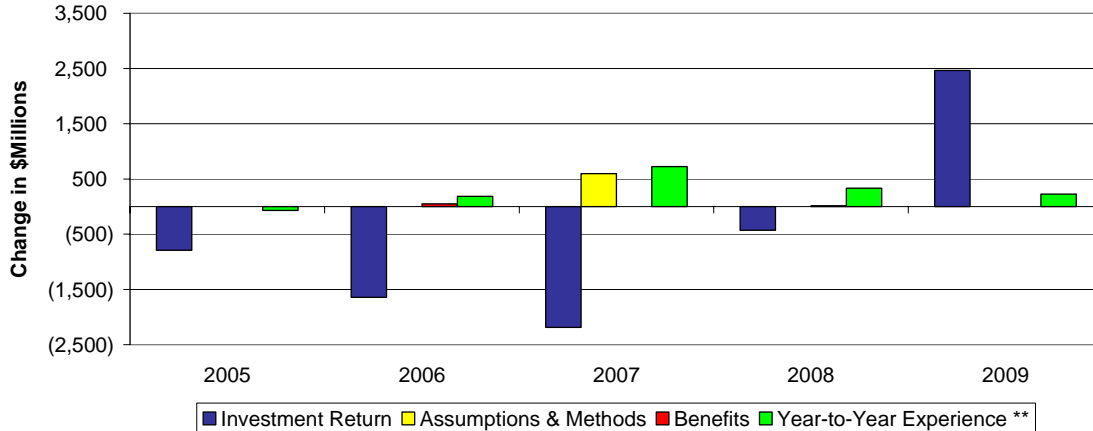
Los Angeles County Employees Retirement Association

Exhibit 8a: Analysis of Change in Unfunded Actuarial Accrued Liability (Dollars in Millions)

	Amount	As a Percent of June 30, 2009 Actuarial Accrued Liability
Unfunded Actuarial Accrued Liability - June 30, 2008	\$ 2,313	5.2%
Increase in UAAL due to new assumptions	-	0.0%
Interest Accrued	179	0.4%
Benefits Accrued (Normal Cost)	1,053	2.4%
Contributions (with Assumed Interest)		
Employer - Cash	\$ (863)	-1.9%
Employer - Contribution Credit	(16)	0.0%
Member	(431)	-1.0%
Total	(1,310)	-2.9%
Expected Unfunded Actuarial Acc. Liability - June 30, 2009	\$ 2,235	5.0%
 Source of Change		
Asset (Gains) and Losses		
(Gain)/Loss due to investment income	2,465	5.5%
Actuarial (Gains) and Losses		
Salary Increases	\$ 380	0.9%
CPI Less than Expected	(4)	0.0%
Transfers Between Plan D & Plan E	(3)	0.0%
Mortality Experience	(63)	-0.1%
All Other Experience	(83)	-0.2%
Total	227	0.5%
Recognition of Liabilities due to Court Cases	-	0.0%
Total Changes	2,692	6.1%
Unfunded Actuarial Accrued Liability - June 30, 2009	\$ 4,927	11.1%

Los Angeles County Employees Retirement Association

**Exhibit 8b: History of Changes in Unfunded Actuarial Accrued Liability
(Dollars in Millions)**



	2005	2006	2007	2008	2009	2005-09
Prior Valuation UAAL / (Surplus)	\$ 5,611	\$ 4,878	\$ 3,439	\$ 2,461	2,313	\$ 5,611
Increase in UAAL due to:						
Expected Increase / (Decrease)	128	(31)	(109)	(68)	(78)	(158)
Asset (Gains) and Losses	(790)	(1,642)	(2,187)	(429)	2,465	(2,583)
Changes in Benefits*	-	50	-	15	-	65
Changes in Assumptions	-	-	515	-	-	515
Changes in Methods	-	-	81	-	-	81
Salary Increases	(115)	156	673	298	380	1,392
CPI Less than Expected	-	-	-	-	(4)	(4)
Transfers Between D & E	13	10	4	10	(3)	35
Mortality Experience	(1)	(22)	(22)	(51)	(63)	(159)
All Other Experience	32	40	67	77	(83)	133
Total Increase / (Decrease)	(733)	(1,439)	(978)	(148)	2,614	(684)
Valuation UAAL / (Surplus)	\$ 4,878	\$ 3,439	\$ 2,461	\$ 2,313	4,927	\$ 4,927
Funded Ratio	85.8%	90.5%	93.8%	94.5%	88.9%	88.9%

* *Benefit changes are as follows:*
 2006: *Benefits due to Bugh and Local 1014 court cases.*
 2008: *Benefits due to Fire Chief (FLSA) court case.*

** *Year-to-Year Experience includes changes due to Salary, CPI, Transfers, Mortality and Other Experience.*

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Los Angeles County Employees Retirement Association

Section 5: Member Contributions



Normal Contributions

Member contributions are of two types: Normal contributions and cost-of-living contributions.

Normal contributions for each plan are defined in the following sections of the County Employees' Retirement Law:

Plan	37 Act Reference	Formula
General A	31621.3	1/240th of FAC at age 55
General B	31621.1	1/120th of FAC at age 55
General C	31621	1/120th of FAC at age 60
General D	31621	1/120th of FAC at age 60
General E	N/A	Plan E is non-contributory
Safety A	31639.5	1/200th of FAC at age 50
Safety B	31639.25	1/100th of FAC at age 50

* FAC = Final Average Compensation

Normal member contributions are determined using the Entry Age Normal Funding Method and the following actuarial assumptions:

1. Expected rate of return on assets
2. Individual salary increase rate (wage growth + merit)
3. Mortality for members on service retirement

Cost-of-Living Contributions

The determination of the member cost-of-living contributions is based on Section 31873 of the County Employees' Retirement Law. This section requires that the cost of this benefit be shared equally between members and the County. Unlike the member normal contributions, these rates are based on the actuarial cost of the benefits and reflect all assumptions used in the valuation of liabilities.

As this is not a triennial valuation, no changes in the member contribution rates (either normal or cost-of-living) are being recommended.

**Cost-of-Living
Contributions
(continued)**

The cost-of-living contributions, expressed as a percentage of the normal rates, are based on the June 30, 2007 actuarial valuation and are as follows:

General Plan A:	79.57%
General Plan B:	22.29%
General Plan C:	23.97%
General Plan D:	21.97%
Safety Plan A:	101.27%
Safety Plan B:	31.40%

The relative magnitude of these amounts reflects the differences in the normal contribution rates for each plan and the different cost-of-living benefits offered by the different plans.

A sample of the current member contribution rates (normal plus cost-of-living) can be found in Exhibit 9.

Full disclosure of the member rates, showing both the normal and the total (normal plus cost-of-living) contribution rates, can be found in Appendix D.

Los Angeles County Employees Retirement Association

Exhibit 9: Sample Member Contribution Rates

<u>Current Rates (Based on 2007 Valuation)</u>				
	<u>Entry Age</u>	<u>Normal</u>	<u>Cost of Living</u>	<u>Total as a % of Pay</u>
<i>General Members</i>				
Plan A	25	2.90%	2.31%	5.21%
	35	3.56%	2.83%	6.39%
	45	4.32%	3.44%	7.76%
	55	4.63%	3.68%	8.31%
Plan B	25	5.79%	1.29%	7.08%
	35	7.12%	1.59%	8.71%
	45	8.64%	1.93%	10.57%
	55	9.26%	2.06%	11.32%
Plan C	25	4.91%	1.18%	6.09%
	35	6.02%	1.44%	7.46%
	45	7.42%	1.78%	9.20%
	55	8.65%	2.07%	10.72%
Plan D	25	4.91%	1.08%	5.99%
	35	6.02%	1.32%	7.34%
	45	7.42%	1.63%	9.05%
	55	8.65%	1.90%	10.55%
<i>Safety Members</i>				
Plan A	25	4.08%	4.13%	8.21%
	35	4.95%	5.01%	9.96%
	45	5.77%	5.84%	11.61%
	55	5.80%	5.87%	11.67%
Plan B	25	8.16%	2.56%	10.72%
	35	9.89%	3.11%	13.00%
	45	11.54%	3.62%	15.16%
	55	11.59%	3.64%	15.23%

Note: A portion of some of the member contribution rates is paid for ("picked up") by the County and is not considered part of the member's contribution account for refund purposes. Such contributions are referred to as the surcharge amount and are subject to change each year. The rates shown in the table are prior to any surcharge payments.

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Los Angeles County Employees Retirement Association

Section 6: County Contributions



Contributions to LACERA are determined using the Entry Age Normal Cost Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibit 10 illustrates the Normal Cost Rates by type of benefit and for each plan based on this valuation. A comparison with last year is also shown.

During the fiscal year 1994-1995, a Retirement Association Funding Agreement was negotiated with the County. This agreement resulted in the issuance of approximately \$2 billion in Pension Obligation Bonds, the proceeds of which were used to fund the UAAL. The agreement also allowed that surplus earnings on LACERA's assets for the period July 1, 1994 through June 30, 1998 would be split between the County (75%) and the STAR program (25%). Those excess earnings were used to create the County Contribution Credit Reserve, which can be used by the County to meet its required contribution requirement without adding in new cash deposits to the fund.

Under the Funding Policy adopted in 2009, the total contribution rate is set equal to the Normal Cost contribution and some payment towards the UAAL. A portion of the Normal Cost contribution is funded by member contributions. The remainder is paid for by the employer.

The total calculated County contribution rates for each plan, along with a comparison to the prior year's computed rates, can be found in Exhibit 11. These results are expressed as a percentage of payroll and annual contribution dollars. Note that LACERA's UAAL contribution rate is not determined separately for each plan, but is funded evenly as a percentage of pay over salaries for all members. The total County contribution rate was 12.08% for the fiscal year beginning in 2009.

For the fiscal year beginning in 2010, the required rate increased to 14.22%. This is equal to the net aggregate calculated Normal Cost contribution rate of 10.10% based on the 2009 Valuation, plus a 30-year amortization payment of the UAAL.

**County Contributions
(continued)**

County Contribution Rate	(All values as a % of Payroll)	
	County Normal Cost	10.10%
	30-year Amortization of UAAL	<u>4.12</u>
	Total County Contribution	14.22%

The 2.14% increase in the total County contribution rate was primarily due to the recognition of both current and deferred investment losses, which caused a 3.91% increase in the UAAL rate. This was somewhat offset by changes in the Funding Policy which included the move from a three-year asset smoothing method to a five-year smoothing method, as well as the inclusion of STAR reserves in the valuation assets. The UAAL rate reflects a 30-year amortization from the valuation date with a July 1, 2010 implementation date for the new County contribution rate.

The change in the calculated Normal Cost contribution rates from year-to-year is generally due to two factors. These factors are listed in order of magnitude (i.e., experience had the greatest impact this year):

(1) Experience: Normal experience from year-to-year, reflecting differences in both the weighting between membership groups and in their characteristics, as well as on what was assumed to occur during the past fiscal year and what actually occurred, particularly with respect to salary increases. Based on current plan provisions, the aggregate Normal Cost rate is expected to decrease as a greater number of members are covered by General Plans D and E and Safety B. Additionally, as members transfer between Plan D and Plan E, this will also have an impact.

(2) Contribution Shut-Off: For general members hired prior to April 1973 and all safety members, member contributions are not collected after the member has 30 years of service. Therefore, the member contributions towards the total annual Normal Cost is zero, resulting in a sizable increase for in the County's share of the Normal Cost contributions for the years when the member has more than 30 years of service. The County's share of the Normal Cost rates for those groups can be expected to increase rather than remain level, as otherwise expected under the entry age cost method. As most general members hired prior to April 1973 have now attained 30 years of service, this statement applies mainly to safety groups.

**Los Angeles County Employees
Retirement Association**

Exhibit 10: Calculated Normal Cost Contribution Rates – June 30, 2009

A. Normal Cost Contribution Rate	General						Safety			Grand Total
	Plan A	Plan B	Plan C	Plan D	Plan E	Total	Plan A	Plan B	Total	
Service Retirement	15.88%	13.36%	12.04%	12.39%	7.88%	11.02%	12.17%	12.08%	12.08%	11.22%
Disability Retirement	1.09%	0.96%	0.92%	1.48%	0.00%	0.98%	12.92%	12.75%	12.75%	3.25%
Death	0.37%	0.35%	0.33%	0.49%	0.00%	0.32%	0.32%	0.29%	0.29%	0.32%
Termination (No Refund)	0.42%	0.31%	0.29%	0.67%	0.67%	0.66%	0.53%	0.59%	0.59%	0.65%
Refund of Member Contributions	0.09%	0.12%	0.11%	0.48%	0.00%	0.31%	0.26%	0.37%	0.37%	0.32%
Total	17.85%	15.10%	13.69%	15.51%	8.55%	13.29%	26.20%	26.08%	26.08%	15.75%
B. Member Contributions	(3.20)%	(6.48)%	(5.58)%	(6.98)%	0.00%	(4.57)%	(0.96)%	(10.45)%	(10.21)%	(5.65)%
C. Net County Normal Cost as of June 30, 2009 (A) - (B)	14.65%	8.62%	8.11%	8.53%	8.55%	8.72%	25.24%	15.63%	15.87%	10.10%
D. Net County Normal Cost as of June 30, 2008	14.66%	8.63%	7.89%	8.49%	8.46%	8.71%	25.74%	15.42%	15.79%	10.09%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.01)%	(0.01)%	0.22%	0.04%	0.09%	0.01%	(0.50)%	0.21%	0.08%	0.01%



**Los Angeles County Employees
Retirement Association**

Exhibit 11: Total County Contributions

	<u>General</u>						<u>Safety</u>			<u>All</u>
	<u>Plan A</u>	<u>Plan B</u>	<u>Plan C</u>	<u>Plan D</u>	<u>Plan E</u>	<u>Total</u>	<u>Plan A</u>	<u>Plan B</u>	<u>Total</u>	<u>Plans</u>
A. Net County Normal Cost										
1. Basic Benefits	10.09%	6.91%	6.64%	7.16%	7.22%	7.26%	14.41%	12.79%	12.81%	8.63%
2. Cost-of-Living Benefits	4.56%	1.71%	1.47%	1.37%	1.33%	1.46%	10.83%	2.84%	3.06%	1.47%
3. Total June 30, 2009	14.65%	8.62%	8.11%	8.53%	8.55%	8.72%	25.24%	15.63%	15.87%	10.10%
B. UAAL Contribution Rate	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%	4.12%
C. Total June 30, 2009 Contribution Rate (A) + (B)	18.77%	12.74%	12.23%	12.65%	12.67%	12.84%	29.36%	19.75%	19.99%	14.22%
D. Total June 30, 2008 Contribution Rate	16.65%	10.62%	9.88%	10.48%	10.45%	10.70%	27.73%	17.41%	17.78%	12.08%
E. Estimated Payroll for fiscal year beginning July 1, 2010*	\$ 175	\$ 28	\$ 21	\$ 3,534	\$ 1,841	\$ 5,599	\$ 37	\$ 1,305	\$ 1,342	\$ 6,941
F. Estimated Annual Contribution (C x E)	\$ 33	\$ 4	\$ 3	\$ 447	\$ 233	\$ 719	\$ 11	\$ 258	\$ 268	\$ 987
G. Last Year's Estimated Annual Contribution	\$ 33	\$ 3	\$ 2	\$ 336	\$ 186	\$ 560	\$ 13	\$ 214	\$ 227	\$ 787
H. Increase / (Decrease) in Annual Contribution	\$ -	\$ 1	\$ 1	\$ 111	\$ 47	\$ 159	\$ (2)	\$ 44	\$ 41	\$ 200

* Estimated Payroll based upon annualized salary rate as of June 30, 2009 increased by 4.00% wage inflation. Dollar figures in millions.

Los Angeles County Employees Retirement Association

Section 7: Accounting Information



GASB reporting standards are required for defined benefit pension plan reporting and disclosures (Statement No. 25). The reporting requirements for Statement No. 25 include certain supplementary information that must be added to the financial statements. These include:

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

The Schedule of Funding Progress, Exhibit 12, compares actuarial assets and liabilities of the System, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 13, compares the employer contributions required based on the actuarial valuation – the actuarial required contribution (ARC) – with the employer contributions actually made. Information shown in this exhibit comes from LACERA's audited financial statements. The ARC must be calculated based on certain parameters required for disclosure purposes.

We believe the actuarial methods and assumptions used in this valuation to determine the employer's contribution for funding purposes satisfy the GASB reporting requirements.

GASB Statement No. 27 is required for pension accounting by state and local governmental employers.

The comparability of the data from year-to-year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc. For example, assumptions were changed in 2007 based on the triennial Investigation of Experience.

Exhibit 14 compares the Actuarial Value of Valuation Assets to the types of Actuarial Accrued Liabilities, applying them first to Active Member contributions, then to retirees and beneficiaries, and then the remaining amount to the Active Members benefits. This is referred to as the Solvency Test. Although not required under GASB, this test is part of the CAFR guidelines specified by the Government Finance Officers Association (GFOA).

**Los Angeles County Employees
Retirement Association**

**Exhibit 12: Schedule of Funding Progress
(All Dollars In Thousands)**

Actuarial Valuation Date	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liabilities	(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll ⁽¹⁾	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 2000	\$ 25,426,507	\$ 24,720,380	\$ (706,127)	102.9%	\$ 4,107,964	-17.2%
June 30, 2001 ⁽²⁾	26,490,000	26,489,976	(24)	100.0%	4,398,443	0.0%
June 30, 2002 ⁽³⁾	28,262,129	28,437,493	175,364	99.4%	4,744,340	3.7%
June 30, 2003	26,564,328	30,474,025	3,909,697	87.2%	4,933,615	79.2%
June 30, 2004 ⁽²⁾	27,089,440	32,700,505	5,611,065	82.8%	4,919,531	114.1%
June 30, 2005	29,497,485	34,375,949	4,878,464	85.8%	4,982,084	97.9%
June 30, 2006	32,819,725	36,258,929	3,439,204	90.5%	5,205,804	66.1%
June 30, 2007 ⁽²⁾	37,041,832	39,502,456	2,460,624	93.8%	5,615,736	43.8%
June 30, 2008	39,662,361	41,975,631	2,313,270	94.5%	6,123,888	37.8%
June 30, 2009	39,541,865	44,468,636	4,926,771	88.9%	6,547,616	75.2%

(1) Covered Payroll includes compensation paid to all active employees on which contributions are calculated, as reported by LACERA. Covered Payroll differs from the Active Member Valuation Payroll shown in Table C-1, which is an annualized compensation of only those members who were active on the actuarial valuation date.

(2) Assumption changes based on triennial Investigation of Experience.

(3) Benefits were enhanced under MOU package.



**Los Angeles County Employees
Retirement Association**

**Exhibit 13: Schedule of Contributions from the Employer
(All Dollars In Thousands)**

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contributions			Percentage of ARC Contributed
		Cash Payment	Transfer from Reserve Accounts	Total	
6/30/2000	\$ 342,060	\$ 130,319	\$ 211,832	\$ 342,151	100%
6/30/2001	390,679	193,650	197,029	390,679	100%
6/30/2002	414,708	258,884	155,824	414,708	100%
6/30/2003	518,922	324,709	194,213	518,922	100%
6/30/2004	521,978	395,062	126,916	521,978	100%
6/30/2005	750,352	527,810	222,542	750,352	100%
6/30/2006	855,531	676,667	179,368	856,035*	100%
6/30/2007	863,626	751,851	111,775	863,626	100%
6/30/2008	827,911	788,029	40,601	828,630	100%
6/30/2009	847,172	831,672	15,500	847,172	100%

* Total actual employer contributions differ from the Annual Required Contribution due to transfers from CalPERS and certain adjustments for court cases.

**Los Angeles County Employees
Retirement Association**

**Exhibit 14: Solvency Test
(Dollars In Millions)**

Actuarial Valuation Date	Actuarial Value of Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries ⁽¹⁾ (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 2000	\$ 25,427	\$ 3,190	\$ 12,922	\$ 8,609	100%	100%	108%
June 30, 2001	26,490	3,320	14,368	8,802	100%	100%	100%
June 30, 2002	28,262	3,596	15,424	9,417	100%	100%	98%
June 30, 2003	26,564	3,790	16,844	9,840	100%	100%	60%
June 30, 2004	27,089	4,042	18,857	9,802	100%	100%	43%
June 30, 2005	29,497	4,308	20,238	9,829	100%	100%	50%
June 30, 2006	32,820	4,628	21,377	10,254	100%	100%	66%
June 30, 2007	37,042	4,852	22,398	12,253	100%	100%	80%
June 30, 2008	39,662	5,279	23,730	12,966	100%	100%	82%
June 30, 2009	39,542	5,795	24,692	13,982	100%	100%	65%

(1) Includes deferred vested members.



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Los Angeles County Employees Retirement Association

Section 8: Supplemental Information



Cash Flow Projection

Exhibits 15a and 15b are a chart and graph that illustrate both the cash flow history for the past 10 years and a projection on the valuation basis for the next 10 years.

Contributions include both employer and member contributions. The table shows that net cash flow has been fairly level over the last 10 years, but it is expected to begin to significantly decrease for the next 10 years. This is a typical pattern for a mature retirement system where it is expected that contributions will be less than benefits and that the system will begin drawing on the fund that has been built up over prior years. The projection shows that the negative projected cash flow is projected to almost double in size from 2010 to 2019.

Note that the actual cash contributions since 1998 do not reflect the transfers made between reserve funds, but only cash coming into the System. We are assuming no further transfers, only full cash contributions.

The projected cash flows include contributions, statutory benefits and administrative expenses only. They are based on the actuarial assumptions as stated in Appendix A of this valuation report. The total County contribution rate is assumed to be 12.08% for the first year and 14.22% for the rest of the 10-year projection. The ultimate rate is equal to the required County Normal Cost rate plus a contribution to finance the UAAL, as calculated in the 2009 valuation. The aggregate member rate is assumed to stay at the calculated rate for June 30, 2009 of 5.65% of payroll. Expenses are based on the expenses for the year ended June 30, 2009, increased annually with the actuarial inflation assumption of 3.5%.

Any increases or reductions in future contribution rates will increase or decrease the net cash flow. The projected cash flows do not include:

- Projected STAR benefits that have not yet been granted. STAR benefits that were vested as of January 2009 are included.
- Projected benefits payable under certain insurance contracts for a group of retired members. These payments are netted against the total expected retiree benefits.

**Los Angeles County Employees
Retirement Association**

Exhibit 15a: Cash Flow History and Projections – Dollars

Cash Flow History			
Plan Year	Benefits & Administrative		Net
<u>Ending</u>	<u>Contributions</u>	<u>Expenses⁽²⁾</u>	<u>Cash Flow</u>
2000	\$ 329	\$ 1,094	\$ (765)
2001	410	1,187	(777)
2002	564	1,276	(712)
2003	559	1,379	(820)
2004	658	1,484	(826)
2005	814	1,601	(787)
2006	973	1,842 ⁽³⁾	(869)
2007	1,100	1,835	(735)
2008	1,203	1,960	(757)
2009	1,247	2,065	(818)

Cash Flow Projections⁽¹⁾			
Plan Year	Benefits & Administrative		Net
<u>Ending</u>	<u>Contributions</u>	<u>Expenses⁽²⁾</u>	<u>Cash Flow</u>
2010	\$ 1,179	\$ 2,237	\$ (1,058)
2011	1,379	2,358	(979)
2012	1,434	2,508	(1,074)
2013	1,492	2,661	(1,169)
2014	1,551	2,820	(1,269)
2015	1,613	2,985	(1,371)
2016	1,678	3,157	(1,479)
2017	1,745	3,335	(1,591)
2018	1,815	3,519	(1,705)
2019	1,887	3,710	(1,823)

⁽¹⁾ Future contributions are assumed to be at the 10.10% Normal Cost rate plus a UAAL payment of 4.12% after the first year.

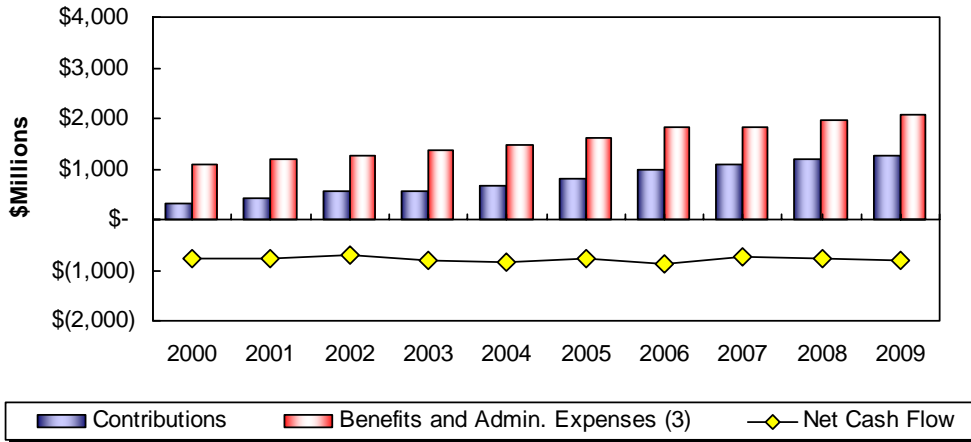
⁽²⁾ Investment expenses are assumed to be covered by investment return.

⁽³⁾ Benefit payments for the Plan Year ending 2006 include approximately \$94 million in retroactive benefit payments pursuant to the Ventura settlement.

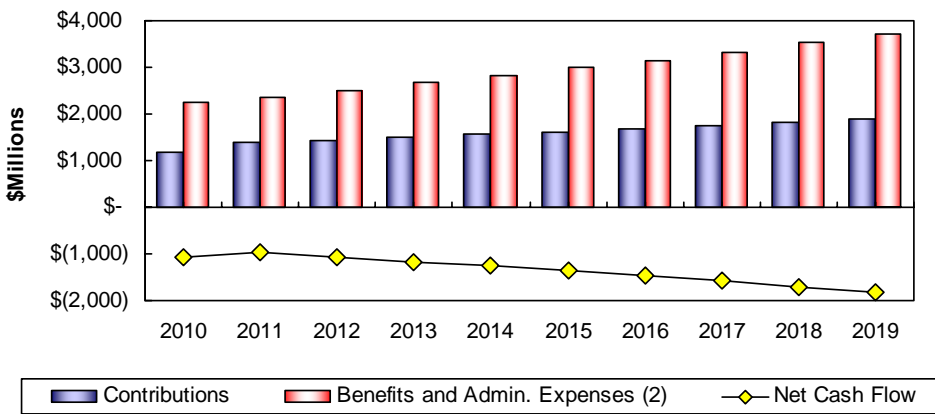
Los Angeles County Employees Retirement Association

Exhibit 15b: Cash Flow History and Projections – Charts

Cash Flow History



Cash Flow Projections⁽¹⁾



- ⁽¹⁾ Future contributions are assumed to be at the 10.10% Normal Cost rate plus a UAAL payment of 4.12% after the first year.
- ⁽²⁾ Investment expenses are assumed to be covered by investment return.
- ⁽³⁾ Benefit payments for the Plan Year ending 2006 include approximately \$94 million in retroactive benefit payments pursuant to the Ventura settlement

Los Angeles County Employees Retirement Association

Appendix A: Actuarial Procedures and Assumptions



The actuarial procedures and assumptions used in this valuation are described in this section. The assumptions were reviewed and changed June 30, 2007 as a result of the 2007 triennial Investigation of Experience Study.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of LACERA and of LACERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of LACERA's benefits.

Table A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Tables A-2 and A-3 show how members are expected to leave retired status due to death.

Table A-4 presents the probability of refund of contributions upon termination of employment while vested.

Table A-5 presents the expected annual percentage increase in salaries.

Tables A-6 to A-13 were developed from the experience as measured by the 2007 Investigation of Experience Study. The rates are the probabilities a member will leave the system for various reasons.

**Actuarial Cost
Method**

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

For members who transferred between plans, entry age is based on original entry into the system.

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL as of June 30, 2009 is amortized as a level percentage of the projected salaries of present and future members of LACERA over a closed 30-year period. Future gains and losses are amortized over new closed 30-year periods. This is referred to as "layered" amortization.

Records and Data

The data used in this valuation consist of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by LACERA and are accepted for valuation purposes without audit.

**Replacement of
Terminated Members**

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants.

**Growth in
Membership**

For benefit determination purposes, no growth in the membership of LACERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

**Internal Revenue
Code Section 415
Limit**

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

**Internal Revenue
Code Section
401(a)(17)**

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

County Contributions	The County contribution rate is set by the Board of Investments based on actuarial valuations.
Member Contributions	<p>The member contribution rates vary by entry age and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.</p> <p>The individual member rates by entry age, plan and class are illustrated in Appendix D of the valuation report.</p>
Valuation of Assets	The assets are valued using a five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. The five-year smoothing valuation basis for all assets was adopted effective June 30, 2009.
Investment Earnings and Expenses	The future investment earnings of the assets of LACERA are assumed to accrue at an annual rate of 7.75% compounded annually, net of both investment and administrative expenses. This rate was adopted June 30, 2004.
Postretirement Benefit Increases	Postretirement increases are assumed for the valuation in accordance with the benefits provided as described in Appendix B. These adjustments are assumed payable each year in the future as they are less than the expected increase in the Consumer Price Index of 3.5% per year. This rate was adopted June 30, 2004.
Interest on Member Contributions	The annual credited interest rate on member contributions is assumed to be 7.75% compounded semi-annually for an annualized rate of 7.90%. This rate was adopted June 30, 2004.
Future Salaries	<p>The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Table A-5. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 4.00% per annum rate of increase in the general wage level of the membership. These rates were adopted June 30, 2007.</p> <p>Increases are assumed to occur mid-year (i.e., January 1st) and only apply to base salary, excluding megaflex compensation. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.</p>

**Future Salaries
(Continued)**

For plans with a one-year final average compensation period, actual average annual compensation is used. For Plan E, the monthly rate as of June of the valuation year was annualized. Due to irregular compensation payments now included as pensionable earnings, actual annual pay is preferred over annualizing a single monthly payment amount.

**Social Security Wage
Base**

Plan E members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 4.00% per year. Note, statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement. This rate was adopted June 30, 2007.

Note that it is assumed all Plan E members born after 1950 have less than 10 years of Social Security-covered service and, therefore, do not have their benefit offset.

Retirement

After members attain age 50 (55 for Plan E members) and have ten years of service, they may retire with a benefit commencing immediately. All members, except Plan E members, may also retire regardless of age after 20 years of service for safety members and after 30 years of service for general members. The retirement rates vary by age and are shown by plan in Tables A-6 through A-13.

All general members who attain or who have attained age 75 in active service and all safety members who have attained age 60 in active service are assumed to retire immediately.

All deferred vested members are assumed to retire at the later of age 50 and earliest eligibility, except for Plan E who are assumed to retire at age 65.

The assumptions regarding termination of employment, early retirement, and unreduced service retirement are treated as a single set of decrements in regards to a particular member. For example, a general member hired at age 30 has a probability to withdraw from LACERA due to death, disability or *other termination of employment* until age 50. After age 50, the member could still withdraw due to death, disability or *retirement*. Thus, in no year during the member's projected employment would they be eligible for both a probability of other termination of employment and a probability of retirement.

The retirement probabilities were adopted June 30, 2007.

Disablement

The rates of disablement used in the valuation are also illustrated in Tables A-6 through A-13. These rates were adopted June 30, 2007.

Post-Retirement Mortality – Other Than Disabled Members

The same post-retirement mortality rates are used in the valuation for active members, members retired for service, and beneficiaries. These rates are illustrated in Table A-2. Current beneficiary mortality is assumed to be the same assumption as healthy members of the same sex. Future beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members. These rates were adopted June 30, 2004.

Males General members: RP-2000 Combined Mortality Table for Males, with ages set back two years.
Safety members: RP-2000 Combined Mortality Table for Males, with ages set back three years.

Females General members: RP-2000 Combined Mortality Table for Females, with ages set back two years.
Safety members: RP-2000 Combined Mortality Table for Females, with ages set back two years.

Post-Retirement Mortality – Disabled Members

For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3. These rates were adopted June 30, 2007.

Males General members: RP-2000 Combined Mortality Table for Males, with ages set forward one year.
Safety members: RP-2000 Combined Mortality Table for Males, with ages set back two years.

Females General members: RP-2000 Combined Mortality Table for Females with no age adjustment.
Safety members: RP-2000 Combined Mortality Table for Females with ages set back two years.

Mortality while in Active Status

For active members, the mortality rates used in the valuation rates are illustrated in Tables A-6 through A-13. These rates were adopted June 30, 2007.

Class	Sex	Mortality Table	Adjustment
General	Male	RP2000 Employee Male	+0
General	Female	RP2000 Employee Female	-1
Safety	Male	RP2000 Employee Male	-9
Safety	Female	RP2000 Employee Female	-1

Note that Safety members have an additional service-connected mortality rate of 0.01% per year.

**Other Employment
Terminations**

Tables A-6 to A-13 show, for all ages, the rates assumed in this valuation for future termination from active service other than for death, disability or retirement. These rates do not apply to members eligible for service retirement. These rates were adopted June 30, 2007.

Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions with LACERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work or may remain inactive until becoming eligible to receive a retirement benefit under either LACERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately.

All terminating members are assumed to not be rehired. Table A-4 gives the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions. These rates were adopted June 30, 2007.

**Probability of Eligible
Survivors**

For members not currently in pay status, 82% of all males and 65% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be four years younger than male members and four years older than female members. Survivors are assumed to be of the opposite sex as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.

**Valuation of Vested
Terminated Members**

The deferred retirement benefit is calculated based on the member's final compensation and service at termination. The compensation amount is projected until the assumed retirement age for members who are assumed to be employed by a reciprocal agency. For members who are missing compensation data, Final Compensation is estimated as the average amount for all members who terminated during the same year and had a valid compensation amount.

**Reciprocal
Employment**

15% of General and 35% of Safety current and future deferred vested members are assumed to work for a reciprocal employer. Current vested reciprocal members are assumed to receive annual salary increases of 5%. Future reciprocal vested members are assumed to receive the same salary increases they would have received if they had stayed in active employment with LACERA and retired at the assumed retirement age.

**Valuation of Annuity
Purchases**

Over 30 years ago, LACERA purchased single life annuities from two insurance companies for some retired members (currently less than 5% of the retired population). The total liability for these members is calculated and then offset by the expected value of the benefit to be paid by the insurance companies.

For affected members, the insurance companies are responsible for:

- (1) Straight life annuity payments
- (2) Statutory COLAs

LACERA is responsible for:

- (1) Benefit payments payable to any beneficiary
- (2) STAR COLAs

**Member Contribution
Rate Assumptions**

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL, the:

- A. Annuity factor used for general members is based on a 40% / 60% blend of the male and female annuity factors using current valuation assumptions. For Safety members it is based on a 90% / 10% blend of the male and female annuity factors using current valuation assumptions.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.75%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.
Example: For a Plan C Member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.
- D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age (for example, age 53 for General A). In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

Los Angeles County Employees Retirement Association

Table A-1: Summary of Valuation Assumptions as of June 30, 2009

I.	Economic assumptions											
	A. General wage increases	4.00%										
	B. Investment earnings	7.75%										
	C. Growth in membership	0.00%										
	D. Post-retirement benefit increases (varies by plan)	Plan COLA not greater than CPI assumption.										
	E. CPI inflation assumption	3.50%										
II.	Demographic assumptions											
	A. Salary increases due to service	Table A-5										
	B. Retirement	Tables A-6 to A-13										
	C. Disablement	Tables A-6 to A-13										
	D. Mortality during active employment	Tables A-6 to A-13										
	E. Mortality for active members after termination and service retired members	Table A-2										
	Basis – RP-2000 Combined Mortality Table for respective sexes for general members, as adjusted:											
	<table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;"><u>Class of Members</u></th> <th style="text-align: center;"><u>Age Adjustment</u></th> </tr> </thead> <tbody> <tr> <td>General – males</td> <td style="text-align: center;">-2 years</td> </tr> <tr> <td>General – females</td> <td style="text-align: center;">-2 years</td> </tr> <tr> <td>Safety – males</td> <td style="text-align: center;">-3 years</td> </tr> <tr> <td>Safety – females</td> <td style="text-align: center;">-2 years</td> </tr> </tbody> </table>	<u>Class of Members</u>	<u>Age Adjustment</u>	General – males	-2 years	General – females	-2 years	Safety – males	-3 years	Safety – females	-2 years	
<u>Class of Members</u>	<u>Age Adjustment</u>											
General – males	-2 years											
General – females	-2 years											
Safety – males	-3 years											
Safety – females	-2 years											
	F. Mortality among disabled members	Table A-3										
	Basis – RP-2000 Combined Mortality Table, as adjusted:											
	<table border="0" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>General – males</td> <td style="text-align: center;">+1 year</td> </tr> <tr> <td>General – females</td> <td style="text-align: center;">0 years</td> </tr> <tr> <td>Safety – males</td> <td style="text-align: center;">-2 years</td> </tr> <tr> <td>Safety – females</td> <td style="text-align: center;">-2 years</td> </tr> </tbody> </table>	General – males	+1 year	General – females	0 years	Safety – males	-2 years	Safety – females	-2 years			
General – males	+1 year											
General – females	0 years											
Safety – males	-2 years											
Safety – females	-2 years											
	G. Mortality for beneficiaries	Table A-2										
	Basis – Beneficiaries are assumed to have the same mortality as a general member of the opposite sex who has taken a service retirement.											
	H. Other terminations of employment	Tables A-6 to A-13										
	I. Refund of contributions on vested termination	Table A-4										

Los Angeles County Employees Retirement Association

Table A-2: Mortality for Members Retired for Service

Age	Safety Male	Safety Female	General Male	General Female
20	0.030%	0.019%	0.032%	0.019%
25	0.037%	0.020%	0.037%	0.020%
30	0.038%	0.023%	0.039%	0.023%
35	0.056%	0.039%	0.063%	0.039%
40	0.090%	0.060%	0.096%	0.060%
45	0.122%	0.094%	0.130%	0.094%
50	0.173%	0.143%	0.186%	0.143%
55	0.267%	0.221%	0.292%	0.221%
60	0.469%	0.392%	0.527%	0.392%
65	0.876%	0.765%	1.001%	0.765%
70	1.608%	1.345%	1.787%	1.345%
75	2.728%	2.297%	3.039%	2.297%
80	4.691%	3.760%	5.212%	3.760%
85	8.049%	6.251%	8.972%	6.251%
90	13.604%	10.730%	15.059%	10.730%

**Los Angeles County Employees
Retirement Association**

Table A-3: Mortality for Members Retired for Disability

Age	Safety Male	Safety Female	General Male	General Female
20	0.032%	0.019%	0.036%	0.019%
25	0.037%	0.020%	0.038%	0.021%
30	0.039%	0.023%	0.050%	0.026%
35	0.063%	0.039%	0.084%	0.048%
40	0.096%	0.060%	0.114%	0.071%
45	0.130%	0.094%	0.162%	0.112%
50	0.186%	0.143%	0.245%	0.168%
55	0.292%	0.221%	0.420%	0.272%
60	0.527%	0.392%	0.768%	0.506%
65	1.001%	0.765%	1.441%	0.971%
70	1.787%	1.345%	2.457%	1.674%
75	3.039%	2.297%	4.217%	2.811%
80	5.212%	3.760%	7.204%	4.588%
85	8.972%	6.251%	12.280%	7.745%
90	15.059%	10.730%	19.977%	13.168%

Los Angeles County Employees Retirement Association

**Table A-4: Immediate Refund of Contributions Upon Termination of Employment
(Excludes Plan E)**

Years of Service	Safety	General
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	30%	40%
6	30%	40%
7	30%	40%
8	28%	39%
9	26%	38%
10	24%	36%
11	22%	35%
12	20%	34%
13	16%	33%
14	12%	32%
15	8%	30%
16	4%	29%
17	0%	28%
18	0%	26%
19	0%	25%
20	0%	23%
21	0%	22%
22	0%	20%
23	0%	16%
24	0%	12%
25	0%	8%
26	0%	4%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

Los Angeles County Employees Retirement Association

Table A-5: Annual Increase in Salary*

Years of Service	Due to Promotion and Longevity		Total Annual Increase*	
	General	Safety	General	Safety
<1	6.00%	6.00%	10.24%	10.24%
1	5.25%	5.25%	9.46%	9.46%
2	4.50%	4.50%	8.68%	8.68%
3	3.75%	3.75%	7.90%	7.90%
4	3.00%	3.00%	7.12%	7.12%
5	2.50%	2.50%	6.60%	6.60%
6	2.00%	2.00%	6.08%	6.08%
7	1.75%	1.75%	5.82%	5.82%
8	1.50%	1.50%	5.56%	5.56%
9	1.30%	1.30%	5.35%	5.35%
10	1.15%	1.15%	5.20%	5.20%
11	1.00%	1.00%	5.04%	5.04%
12	0.85%	0.85%	4.88%	4.88%
13	0.70%	0.70%	4.73%	4.73%
14	0.60%	0.60%	4.62%	4.62%
15	0.50%	0.50%	4.52%	4.52%
16	0.40%	0.50%	4.42%	4.52%
17	0.35%	0.50%	4.36%	4.52%
18	0.30%	0.50%	4.31%	4.52%
19	0.25%	0.50%	4.26%	4.52%
20 or More	0.25%	0.50%	4.26%	4.52%

* The total expected increase in salary includes both merit (shown above) and the general wage increase assumption of 4.00% per annum. The total result is compound rather than additive. For example, the total increase to service less than one year is 10.24%.

Los Angeles County Employees Retirement Association

Appendix A: Rates of Separation From Active Service Tables A-6 to A-13

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred vested retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each rate represents the probability that a member will separate from service at each age due to the particular cause. For example, a rate of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each table represents the detailed rates needed for each LACERA plan by sex:

Table A-6: General Plan A, B & C Males	A-10: General Plan E Males
A-7: General Plan A, B & C Females	A-11: General Plan E Females
A-8: General Plan D Males	A-12: Safety Plan A & B Males
A-9: General Plan D Females	A-13: Safety Plan A & B Females

Los Angeles County Employees Retirement Association

**Table A-6: Rate of Separation From Active Service For General Members
Plans A, B & C - Male**

Age	Service Retirement	Other Terminations	Service Disability	Ordinary Disability	Service Death	Ordinary Death
18	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
19	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
20	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
21	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
25	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
26	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
27	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
28	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
29	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
30	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
31	0.0000	0.0050	0.0002	0.0001	N/A	0.0005
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0006
33	0.0000	0.0050	0.0003	0.0001	N/A	0.0006
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0007
35	0.0000	0.0050	0.0004	0.0001	N/A	0.0008
36	0.0000	0.0050	0.0004	0.0002	N/A	0.0008
37	0.0000	0.0050	0.0005	0.0001	N/A	0.0009
38	0.0000	0.0050	0.0006	0.0002	N/A	0.0010
39	0.0000	0.0050	0.0006	0.0002	N/A	0.0010
40	0.0300	0.0050	0.0006	0.0002	N/A	0.0011
41	0.0300	0.0050	0.0007	0.0003	N/A	0.0011
42	0.0300	0.0050	0.0008	0.0003	N/A	0.0012
43	0.0300	0.0050	0.0009	0.0003	N/A	0.0013
44	0.0300	0.0050	0.0010	0.0004	N/A	0.0014
45	0.0300	0.0050	0.0011	0.0004	N/A	0.0015
46	0.0300	0.0050	0.0012	0.0005	N/A	0.0016
47	0.0300	0.0050	0.0013	0.0005	N/A	0.0017
48	0.0300	0.0050	0.0014	0.0005	N/A	0.0019
49	0.0300	0.0050	0.0016	0.0006	N/A	0.0020
50	0.0300	0.0050	0.0017	0.0006	N/A	0.0021
51	0.0300	0.0050	0.0018	0.0007	N/A	0.0023
52	0.0300	0.0050	0.0020	0.0008	N/A	0.0024
53	0.0300	0.0050	0.0022	0.0008	N/A	0.0026
54	0.0500	0.0050	0.0025	0.0009	N/A	0.0028
55	0.0800	0.0050	0.0027	0.0010	N/A	0.0030
56	0.1000	0.0050	0.0030	0.0011	N/A	0.0033
57	0.1400	0.0050	0.0032	0.0012	N/A	0.0036
58	0.1800	0.0050	0.0036	0.0013	N/A	0.0040
59	0.2000	0.0050	0.0040	0.0015	N/A	0.0044
60	0.2200	0.0050	0.0044	0.0016	N/A	0.0049
61	0.2500	0.0050	0.0048	0.0018	N/A	0.0054
62	0.3500	0.0050	0.0052	0.0019	N/A	0.0059
63	0.2500	0.0050	0.0052	0.0024	N/A	0.0065
64	0.2500	0.0050	0.0052	0.0029	N/A	0.0070
65	0.3000	0.0050	0.0052	0.0034	N/A	0.0076
66	0.2400	0.0050	0.0052	0.0039	N/A	0.0081
67	0.2400	0.0050	0.0052	0.0044	N/A	0.0086
68	0.2400	0.0050	0.0052	0.0049	N/A	0.0091
69	0.2400	0.0050	0.0052	0.0054	N/A	0.0095
70	0.3000	0.0050	0.0052	0.0059	N/A	0.0099
71	0.3000	0.0050	0.0052	0.0064	N/A	0.0104
72	0.3000	0.0050	0.0052	0.0069	N/A	0.0112
73	0.3000	0.0050	0.0052	0.0074	N/A	0.0123
74	0.3000	0.0050	0.0052	0.0079	N/A	0.0137
75	1.0000	0.0000	0.0000	0.0084	N/A	0.0151



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-7: Rate of Separation From Active Service For General Members
Plans A, B & C - Female**

<u>Age</u>	<u>Service Retirement</u>	<u>Other Terminations</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>
18	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
19	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
20	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
21	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
25	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
26	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
27	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
28	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
29	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
30	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
31	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
33	0.0000	0.0050	0.0003	0.0001	N/A	0.0003
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0004
35	0.0000	0.0050	0.0004	0.0001	N/A	0.0004
36	0.0000	0.0050	0.0004	0.0002	N/A	0.0005
37	0.0000	0.0050	0.0005	0.0001	N/A	0.0005
38	0.0000	0.0050	0.0006	0.0002	N/A	0.0006
39	0.0000	0.0050	0.0006	0.0002	N/A	0.0006
40	0.0300	0.0050	0.0006	0.0002	N/A	0.0006
41	0.0300	0.0050	0.0007	0.0003	N/A	0.0007
42	0.0300	0.0050	0.0008	0.0003	N/A	0.0008
43	0.0300	0.0050	0.0009	0.0003	N/A	0.0009
44	0.0300	0.0050	0.0010	0.0004	N/A	0.0009
45	0.0300	0.0050	0.0011	0.0004	N/A	0.0010
46	0.0300	0.0050	0.0012	0.0005	N/A	0.0011
47	0.0300	0.0050	0.0013	0.0005	N/A	0.0012
48	0.0300	0.0050	0.0014	0.0006	N/A	0.0013
49	0.0300	0.0050	0.0014	0.0006	N/A	0.0014
50	0.0300	0.0050	0.0016	0.0006	N/A	0.0016
51	0.0300	0.0050	0.0017	0.0007	N/A	0.0017
52	0.0300	0.0050	0.0018	0.0008	N/A	0.0018
53	0.0300	0.0050	0.0019	0.0009	N/A	0.0020
54	0.0500	0.0050	0.0020	0.0010	N/A	0.0021
55	0.0800	0.0050	0.0022	0.0011	N/A	0.0023
56	0.1000	0.0050	0.0022	0.0011	N/A	0.0025
57	0.1400	0.0050	0.0024	0.0012	N/A	0.0028
58	0.1800	0.0050	0.0027	0.0014	N/A	0.0030
59	0.2000	0.0050	0.0030	0.0015	N/A	0.0033
60	0.2200	0.0050	0.0034	0.0017	N/A	0.0036
61	0.2500	0.0050	0.0037	0.0019	N/A	0.0039
62	0.3500	0.0050	0.0040	0.0020	N/A	0.0043
63	0.2500	0.0050	0.0043	0.0022	N/A	0.0047
64	0.2500	0.0050	0.0047	0.0024	N/A	0.0050
65	0.3000	0.0050	0.0051	0.0026	N/A	0.0054
66	0.2400	0.0050	0.0056	0.0028	N/A	0.0058
67	0.2400	0.0050	0.0061	0.0030	N/A	0.0062
68	0.2400	0.0050	0.0066	0.0032	N/A	0.0066
69	0.2400	0.0050	0.0072	0.0034	N/A	0.0069
70	0.3000	0.0050	0.0072	0.0036	N/A	0.0073
71	0.3000	0.0050	0.0072	0.0038	N/A	0.0076
72	0.3000	0.0050	0.0072	0.0040	N/A	0.0079
73	0.3000	0.0050	0.0072	0.0042	N/A	0.0085
74	0.3000	0.0050	0.0072	0.0044	N/A	0.0093
75	1.0000	0.0000	0.0000	0.0046	N/A	0.0103



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-8: Rate of Separation From Active Service For General Members
Plan D - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0002	0.0001	N/A	0.0003	0	0.0900
19	0.0000	0.0002	0.0001	N/A	0.0003	1	0.0650
20	0.0000	0.0002	0.0001	N/A	0.0003	2	0.0500
21	0.0000	0.0002	0.0001	N/A	0.0004	3	0.0400
22	0.0000	0.0002	0.0001	N/A	0.0004	4	0.0300
23	0.0000	0.0002	0.0001	N/A	0.0004	5	0.0283
24	0.0000	0.0002	0.0001	N/A	0.0004	6	0.0267
25	0.0000	0.0002	0.0001	N/A	0.0004	7	0.0250
26	0.0000	0.0002	0.0001	N/A	0.0004	8	0.0236
27	0.0000	0.0002	0.0001	N/A	0.0004	9	0.0222
28	0.0000	0.0002	0.0001	N/A	0.0004	10	0.0208
29	0.0000	0.0002	0.0001	N/A	0.0004	11	0.0194
30	0.0000	0.0002	0.0001	N/A	0.0004	12	0.0180
31	0.0000	0.0002	0.0001	N/A	0.0005	13	0.0168
32	0.0000	0.0002	0.0001	N/A	0.0006	14	0.0156
33	0.0000	0.0003	0.0001	N/A	0.0006	15	0.0144
34	0.0000	0.0003	0.0001	N/A	0.0007	16	0.0132
35	0.0000	0.0004	0.0001	N/A	0.0008	17	0.0120
36	0.0000	0.0004	0.0002	N/A	0.0008	18	0.0112
37	0.0000	0.0005	0.0001	N/A	0.0009	19	0.0104
38	0.0000	0.0006	0.0002	N/A	0.0010	20	0.0096
39	0.0000	0.0006	0.0002	N/A	0.0010	21	0.0088
40	0.0200	0.0006	0.0002	N/A	0.0011	22	0.0080
41	0.0200	0.0007	0.0003	N/A	0.0011	23	0.0076
42	0.0200	0.0008	0.0003	N/A	0.0012	24	0.0072
43	0.0200	0.0009	0.0003	N/A	0.0013	25	0.0068
44	0.0200	0.0010	0.0004	N/A	0.0014	26	0.0064
45	0.0200	0.0011	0.0004	N/A	0.0015	27	0.0060
46	0.0200	0.0012	0.0005	N/A	0.0016	28	0.0060
47	0.0200	0.0013	0.0005	N/A	0.0017	29	0.0060
48	0.0200	0.0014	0.0005	N/A	0.0019	30 & Above	0.0000
49	0.0200	0.0016	0.0006	N/A	0.0020		
50	0.0200	0.0017	0.0006	N/A	0.0021		
51	0.0200	0.0018	0.0007	N/A	0.0023		
52	0.0200	0.0020	0.0008	N/A	0.0024		
53	0.0200	0.0022	0.0008	N/A	0.0026		
54	0.0200	0.0025	0.0009	N/A	0.0028		
55	0.0250	0.0027	0.0010	N/A	0.0030		
56	0.0250	0.0030	0.0011	N/A	0.0033		
57	0.0300	0.0032	0.0012	N/A	0.0036		
58	0.0400	0.0036	0.0013	N/A	0.0040		
59	0.0600	0.0040	0.0015	N/A	0.0044		
60	0.0600	0.0044	0.0016	N/A	0.0049		
61	0.0700	0.0048	0.0018	N/A	0.0054		
62	0.1000	0.0052	0.0019	N/A	0.0059		
63	0.0900	0.0052	0.0024	N/A	0.0065		
64	0.1500	0.0052	0.0029	N/A	0.0070		
65	0.2400	0.0052	0.0034	N/A	0.0076		
66	0.2000	0.0052	0.0039	N/A	0.0081		
67	0.2000	0.0052	0.0044	N/A	0.0086		
68	0.2000	0.0052	0.0049	N/A	0.0091		
69	0.2000	0.0052	0.0054	N/A	0.0095		
70	0.2500	0.0052	0.0059	N/A	0.0099		
71	0.2500	0.0052	0.0064	N/A	0.0104		
72	0.2500	0.0052	0.0069	N/A	0.0112		
73	0.2500	0.0052	0.0074	N/A	0.0123		
74	0.2500	0.0052	0.0079	N/A	0.0137		
75	1.0000	0.0000	0.0084	N/A	0.0151		



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-9: Rate of Separation From Active Service For General Members
Plan D - Female**

<u>Age</u>	<u>Service Retirement</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>	<u>Years of Service</u>	<u>Other Terminations</u>
18	0.0000	0.0002	0.0001	N/A	0.0002	0	0.0900
19	0.0000	0.0002	0.0001	N/A	0.0002	1	0.0650
20	0.0000	0.0002	0.0001	N/A	0.0002	2	0.0500
21	0.0000	0.0002	0.0001	N/A	0.0002	3	0.0400
22	0.0000	0.0002	0.0001	N/A	0.0002	4	0.0300
23	0.0000	0.0002	0.0001	N/A	0.0002	5	0.0283
24	0.0000	0.0002	0.0001	N/A	0.0002	6	0.0267
25	0.0000	0.0002	0.0001	N/A	0.0002	7	0.0250
26	0.0000	0.0002	0.0001	N/A	0.0002	8	0.0236
27	0.0000	0.0002	0.0001	N/A	0.0002	9	0.0222
28	0.0000	0.0002	0.0001	N/A	0.0002	10	0.0208
29	0.0000	0.0002	0.0001	N/A	0.0002	11	0.0194
30	0.0000	0.0002	0.0001	N/A	0.0002	12	0.0180
31	0.0000	0.0002	0.0001	N/A	0.0003	13	0.0168
32	0.0000	0.0002	0.0001	N/A	0.0003	14	0.0156
33	0.0000	0.0003	0.0001	N/A	0.0003	15	0.0144
34	0.0000	0.0003	0.0001	N/A	0.0004	16	0.0132
35	0.0000	0.0004	0.0001	N/A	0.0004	17	0.0120
36	0.0000	0.0004	0.0002	N/A	0.0005	18	0.0112
37	0.0000	0.0005	0.0001	N/A	0.0005	19	0.0104
38	0.0000	0.0006	0.0002	N/A	0.0006	20	0.0096
39	0.0000	0.0006	0.0002	N/A	0.0006	21	0.0088
40	0.0200	0.0006	0.0002	N/A	0.0006	22	0.0080
41	0.0200	0.0007	0.0003	N/A	0.0007	23	0.0076
42	0.0200	0.0008	0.0003	N/A	0.0008	24	0.0072
43	0.0200	0.0009	0.0003	N/A	0.0009	25	0.0068
44	0.0200	0.0010	0.0004	N/A	0.0009	26	0.0064
45	0.0200	0.0011	0.0004	N/A	0.0010	27	0.0060
46	0.0200	0.0012	0.0005	N/A	0.0011	28	0.0060
47	0.0200	0.0013	0.0005	N/A	0.0012	29	0.0060
48	0.0200	0.0014	0.0006	N/A	0.0013	30 & Above	0.0000
49	0.0200	0.0014	0.0006	N/A	0.0014		
50	0.0200	0.0016	0.0006	N/A	0.0016		
51	0.0200	0.0017	0.0007	N/A	0.0017		
52	0.0200	0.0018	0.0008	N/A	0.0018		
53	0.0200	0.0019	0.0009	N/A	0.0020		
54	0.0200	0.0020	0.0010	N/A	0.0021		
55	0.0250	0.0022	0.0011	N/A	0.0023		
56	0.0250	0.0022	0.0011	N/A	0.0025		
57	0.0300	0.0024	0.0012	N/A	0.0028		
58	0.0400	0.0027	0.0014	N/A	0.0030		
59	0.0600	0.0030	0.0015	N/A	0.0033		
60	0.0600	0.0034	0.0017	N/A	0.0036		
61	0.0700	0.0037	0.0019	N/A	0.0039		
62	0.1000	0.0040	0.0020	N/A	0.0043		
63	0.0900	0.0043	0.0022	N/A	0.0047		
64	0.1500	0.0047	0.0024	N/A	0.0050		
65	0.2400	0.0051	0.0026	N/A	0.0054		
66	0.2000	0.0056	0.0028	N/A	0.0058		
67	0.2000	0.0061	0.0030	N/A	0.0062		
68	0.2000	0.0066	0.0032	N/A	0.0066		
69	0.2000	0.0072	0.0034	N/A	0.0069		
70	0.2500	0.0072	0.0036	N/A	0.0073		
71	0.2500	0.0072	0.0038	N/A	0.0076		
72	0.2500	0.0072	0.0040	N/A	0.0079		
73	0.2500	0.0072	0.0042	N/A	0.0085		
74	0.2500	0.0072	0.0044	N/A	0.0093		
75	1.0000	0.0000	0.0046	N/A	0.0103		



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-10: Rate of Separation From Active Service For General Members
Plan E - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.0003	0	0.1500
19	0.0000	N/A	N/A	N/A	0.0003	1	0.0900
20	0.0000	N/A	N/A	N/A	0.0003	2	0.0700
21	0.0000	N/A	N/A	N/A	0.0004	3	0.0550
22	0.0000	N/A	N/A	N/A	0.0004	4	0.0450
23	0.0000	N/A	N/A	N/A	0.0004	5	0.0407
24	0.0000	N/A	N/A	N/A	0.0004	6	0.0363
25	0.0000	N/A	N/A	N/A	0.0004	7	0.0320
26	0.0000	N/A	N/A	N/A	0.0004	8	0.0304
27	0.0000	N/A	N/A	N/A	0.0004	9	0.0288
28	0.0000	N/A	N/A	N/A	0.0004	10	0.0272
29	0.0000	N/A	N/A	N/A	0.0004	11	0.0256
30	0.0000	N/A	N/A	N/A	0.0004	12	0.0240
31	0.0000	N/A	N/A	N/A	0.0005	13	0.0228
32	0.0000	N/A	N/A	N/A	0.0006	14	0.0216
33	0.0000	N/A	N/A	N/A	0.0006	15	0.0204
34	0.0000	N/A	N/A	N/A	0.0007	16	0.0192
35	0.0000	N/A	N/A	N/A	0.0008	17	0.0180
36	0.0000	N/A	N/A	N/A	0.0008	18	0.0174
37	0.0000	N/A	N/A	N/A	0.0009	19	0.0168
38	0.0000	N/A	N/A	N/A	0.0010	20	0.0162
39	0.0000	N/A	N/A	N/A	0.0010	21	0.0156
40	0.0000	N/A	N/A	N/A	0.0011	22	0.0150
41	0.0000	N/A	N/A	N/A	0.0011	23	0.0144
42	0.0000	N/A	N/A	N/A	0.0012	24	0.0138
43	0.0000	N/A	N/A	N/A	0.0013	25	0.0132
44	0.0000	N/A	N/A	N/A	0.0014	26	0.0126
45	0.0000	N/A	N/A	N/A	0.0015	27	0.0120
46	0.0000	N/A	N/A	N/A	0.0016	28	0.0120
47	0.0000	N/A	N/A	N/A	0.0017	29	0.0120
48	0.0000	N/A	N/A	N/A	0.0019	30 & Above	0.0120
49	0.0000	N/A	N/A	N/A	0.0020		
50	0.0000	N/A	N/A	N/A	0.0021		
51	0.0000	N/A	N/A	N/A	0.0023		
52	0.0000	N/A	N/A	N/A	0.0024		
53	0.0000	N/A	N/A	N/A	0.0026		
54	0.0000	N/A	N/A	N/A	0.0028		
55	0.0300	N/A	N/A	N/A	0.0030		
56	0.0300	N/A	N/A	N/A	0.0033		
57	0.0300	N/A	N/A	N/A	0.0036		
58	0.0300	N/A	N/A	N/A	0.0040		
59	0.0350	N/A	N/A	N/A	0.0044		
60	0.0500	N/A	N/A	N/A	0.0049		
61	0.0700	N/A	N/A	N/A	0.0054		
62	0.1000	N/A	N/A	N/A	0.0059		
63	0.0900	N/A	N/A	N/A	0.0065		
64	0.1600	N/A	N/A	N/A	0.0070		
65	0.2500	N/A	N/A	N/A	0.0076		
66	0.1800	N/A	N/A	N/A	0.0081		
67	0.1800	N/A	N/A	N/A	0.0086		
68	0.1800	N/A	N/A	N/A	0.0091		
69	0.1800	N/A	N/A	N/A	0.0095		
70	0.2500	N/A	N/A	N/A	0.0099		
71	0.2500	N/A	N/A	N/A	0.0104		
72	0.2500	N/A	N/A	N/A	0.0112		
73	0.2500	N/A	N/A	N/A	0.0123		
74	0.2500	N/A	N/A	N/A	0.0137		
75	1.0000	N/A	N/A	N/A	0.0151		



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-11: Rate of Separation From Active Service For General Members
Plan E - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.0002	0	0.1500
19	0.0000	N/A	N/A	N/A	0.0002	1	0.0900
20	0.0000	N/A	N/A	N/A	0.0002	2	0.0700
21	0.0000	N/A	N/A	N/A	0.0002	3	0.0550
22	0.0000	N/A	N/A	N/A	0.0002	4	0.0450
23	0.0000	N/A	N/A	N/A	0.0002	5	0.0407
24	0.0000	N/A	N/A	N/A	0.0002	6	0.0363
25	0.0000	N/A	N/A	N/A	0.0002	7	0.0320
26	0.0000	N/A	N/A	N/A	0.0002	8	0.0304
27	0.0000	N/A	N/A	N/A	0.0002	9	0.0288
28	0.0000	N/A	N/A	N/A	0.0002	10	0.0272
29	0.0000	N/A	N/A	N/A	0.0002	11	0.0256
30	0.0000	N/A	N/A	N/A	0.0002	12	0.0240
31	0.0000	N/A	N/A	N/A	0.0003	13	0.0228
32	0.0000	N/A	N/A	N/A	0.0003	14	0.0216
33	0.0000	N/A	N/A	N/A	0.0003	15	0.0204
34	0.0000	N/A	N/A	N/A	0.0004	16	0.0192
35	0.0000	N/A	N/A	N/A	0.0004	17	0.0180
36	0.0000	N/A	N/A	N/A	0.0005	18	0.0174
37	0.0000	N/A	N/A	N/A	0.0005	19	0.0168
38	0.0000	N/A	N/A	N/A	0.0006	20	0.0162
39	0.0000	N/A	N/A	N/A	0.0006	21	0.0156
40	0.0000	N/A	N/A	N/A	0.0006	22	0.0150
41	0.0000	N/A	N/A	N/A	0.0007	23	0.0144
42	0.0000	N/A	N/A	N/A	0.0008	24	0.0138
43	0.0000	N/A	N/A	N/A	0.0009	25	0.0132
44	0.0000	N/A	N/A	N/A	0.0009	26	0.0126
45	0.0000	N/A	N/A	N/A	0.0010	27	0.0120
46	0.0000	N/A	N/A	N/A	0.0011	28	0.0120
47	0.0000	N/A	N/A	N/A	0.0012	29	0.0120
48	0.0000	N/A	N/A	N/A	0.0013	30 & Above	0.0120
49	0.0000	N/A	N/A	N/A	0.0014		
50	0.0000	N/A	N/A	N/A	0.0016		
51	0.0000	N/A	N/A	N/A	0.0017		
52	0.0000	N/A	N/A	N/A	0.0018		
53	0.0000	N/A	N/A	N/A	0.0020		
54	0.0000	N/A	N/A	N/A	0.0021		
55	0.0300	N/A	N/A	N/A	0.0023		
56	0.0300	N/A	N/A	N/A	0.0025		
57	0.0300	N/A	N/A	N/A	0.0028		
58	0.0300	N/A	N/A	N/A	0.0030		
59	0.0350	N/A	N/A	N/A	0.0033		
60	0.0500	N/A	N/A	N/A	0.0036		
61	0.0700	N/A	N/A	N/A	0.0039		
62	0.1000	N/A	N/A	N/A	0.0043		
63	0.0900	N/A	N/A	N/A	0.0047		
64	0.1600	N/A	N/A	N/A	0.0050		
65	0.2500	N/A	N/A	N/A	0.0054		
66	0.1800	N/A	N/A	N/A	0.0058		
67	0.1800	N/A	N/A	N/A	0.0062		
68	0.1800	N/A	N/A	N/A	0.0066		
69	0.1800	N/A	N/A	N/A	0.0069		
70	0.2500	N/A	N/A	N/A	0.0073		
71	0.2500	N/A	N/A	N/A	0.0076		
72	0.2500	N/A	N/A	N/A	0.0079		
73	0.2500	N/A	N/A	N/A	0.0085		
74	0.2500	N/A	N/A	N/A	0.0093		
75	1.0000	N/A	N/A	N/A	0.0103		



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-12: Rate of Separation From Active Service For Safety Members
Plan A & B - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0050	0.0003	0.0001	0.0002	0	0.0500
19	0.0000	0.0050	0.0003	0.0001	0.0002	1	0.0425
20	0.0000	0.0050	0.0003	0.0001	0.0002	2	0.0350
21	0.0000	0.0050	0.0003	0.0001	0.0002	3	0.0300
22	0.0000	0.0050	0.0003	0.0001	0.0002	4	0.0250
23	0.0000	0.0050	0.0003	0.0001	0.0003	5	0.0217
24	0.0000	0.0050	0.0003	0.0001	0.0003	6	0.0183
25	0.0000	0.0050	0.0003	0.0001	0.0003	7	0.0150
26	0.0000	0.0050	0.0003	0.0001	0.0003	8	0.0132
27	0.0000	0.0050	0.0003	0.0001	0.0003	9	0.0114
28	0.0000	0.0050	0.0003	0.0001	0.0003	10	0.0096
29	0.0000	0.0050	0.0003	0.0001	0.0003	11	0.0078
30	0.0000	0.0050	0.0003	0.0001	0.0004	12	0.0060
31	0.0000	0.0050	0.0003	0.0001	0.0004	13	0.0056
32	0.0000	0.0050	0.0003	0.0001	0.0004	14	0.0052
33	0.0000	0.0052	0.0003	0.0001	0.0004	15	0.0048
34	0.0000	0.0054	0.0003	0.0001	0.0004	16	0.0044
35	0.0000	0.0056	0.0003	0.0001	0.0004	17	0.0040
36	0.0000	0.0058	0.0003	0.0001	0.0004	18	0.0032
37	0.0000	0.0060	0.0003	0.0001	0.0004	19	0.0024
38	0.0000	0.0064	0.0003	0.0001	0.0004	20 & Above	0.0000
39	0.0000	0.0068	0.0003	0.0001	0.0004		
40	0.0100	0.0072	0.0004	0.0001	0.0005		
41	0.0100	0.0076	0.0004	0.0001	0.0006		
42	0.0100	0.0080	0.0004	0.0001	0.0006		
43	0.0100	0.0088	0.0004	0.0001	0.0007		
44	0.0100	0.0096	0.0004	0.0001	0.0008		
45	0.0100	0.0104	0.0005	0.0001	0.0008		
46	0.0100	0.0112	0.0005	0.0001	0.0009		
47	0.0100	0.0120	0.0005	0.0001	0.0010		
48	0.0100	0.0136	0.0005	0.0001	0.0010		
49	0.0100	0.0152	0.0006	0.0001	0.0011		
50	0.0100	0.0168	0.0007	0.0001	0.0011		
51	0.0200	0.0184	0.0007	0.0001	0.0012		
52	0.0250	0.0200	0.0008	0.0001	0.0013		
53	0.0300	0.0300	0.0009	0.0001	0.0014		
54	0.1200	0.0500	0.0010	0.0001	0.0015		
55	0.2400	0.1500	0.0020	0.0001	0.0016		
56	0.1800	0.1500	0.0022	0.0001	0.0017		
57	0.1800	0.1500	0.0024	0.0001	0.0019		
58	0.2000	0.1500	0.0024	0.0001	0.0020		
59	0.3000	0.1500	0.0024	0.0001	0.0021		
60	1.0000	0.0000	0.0000	0.0000	0.0000		



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Table A-13: Rate of Separation From Active Service For Safety Members
Plan A & B – Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0050	0.0006	0.0001	0.0002	0	0.0500
19	0.0000	0.0050	0.0006	0.0001	0.0002	1	0.0425
20	0.0000	0.0050	0.0006	0.0001	0.0002	2	0.0350
21	0.0000	0.0050	0.0006	0.0001	0.0002	3	0.0300
22	0.0000	0.0050	0.0006	0.0001	0.0002	4	0.0250
23	0.0000	0.0050	0.0006	0.0001	0.0002	5	0.0217
24	0.0000	0.0050	0.0006	0.0001	0.0002	6	0.0183
25	0.0000	0.0050	0.0006	0.0001	0.0002	7	0.0150
26	0.0000	0.0050	0.0006	0.0001	0.0002	8	0.0132
27	0.0000	0.0050	0.0006	0.0001	0.0002	9	0.0114
28	0.0000	0.0050	0.0006	0.0001	0.0002	10	0.0096
29	0.0000	0.0050	0.0006	0.0001	0.0002	11	0.0078
30	0.0000	0.0060	0.0006	0.0001	0.0002	12	0.0060
31	0.0000	0.0070	0.0006	0.0001	0.0003	13	0.0056
32	0.0000	0.0080	0.0006	0.0001	0.0003	14	0.0052
33	0.0000	0.0090	0.0006	0.0001	0.0003	15	0.0048
34	0.0000	0.0100	0.0006	0.0001	0.0004	16	0.0044
35	0.0000	0.0110	0.0008	0.0001	0.0004	17	0.0040
36	0.0000	0.0120	0.0008	0.0001	0.0005	18	0.0032
37	0.0000	0.0125	0.0008	0.0001	0.0005	19	0.0024
38	0.0000	0.0130	0.0008	0.0001	0.0006	20 & Above	0.0000
39	0.0000	0.0135	0.0008	0.0001	0.0006		
40	0.0100	0.0140	0.0010	0.0001	0.0006		
41	0.0100	0.0145	0.0010	0.0001	0.0007		
42	0.0100	0.0150	0.0010	0.0001	0.0008		
43	0.0100	0.0155	0.0010	0.0001	0.0009		
44	0.0100	0.0160	0.0012	0.0001	0.0009		
45	0.0100	0.0165	0.0012	0.0001	0.0010		
46	0.0100	0.0170	0.0014	0.0001	0.0011		
47	0.0100	0.0175	0.0014	0.0001	0.0012		
48	0.0100	0.0180	0.0016	0.0001	0.0013		
49	0.0100	0.0185	0.0020	0.0001	0.0014		
50	0.0100	0.0190	0.0022	0.0001	0.0016		
51	0.0200	0.0300	0.0026	0.0001	0.0017		
52	0.0250	0.0350	0.0028	0.0001	0.0018		
53	0.0300	0.0400	0.0034	0.0001	0.0020		
54	0.1200	0.0450	0.0040	0.0001	0.0021		
55	0.2400	0.0700	0.0048	0.0001	0.0023		
56	0.1800	0.1200	0.0054	0.0001	0.0025		
57	0.1800	0.1200	0.0060	0.0001	0.0028		
58	0.2000	0.1200	0.0066	0.0001	0.0030		
59	0.3000	0.1200	0.0072	0.0001	0.0033		
60	1.0000	0.0000	0.0000	0.0000	0.0000		

Los Angeles County Employees Retirement Association

Appendix B: Summary of Plan Provisions



All actuarial calculations are based on our understanding of the statutes governing the LACERA as contained in the County Employees Retirement Plan (CERL) of 1937, with provisions adopted by the LACERA Board, effective through July 1, 2008. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the State Code. This summary does not attempt to cover all the detailed provisions of the law.

Government Code Section

MEMBERSHIP

Permanent employees of Los Angeles County (County) and participating districts who work $\frac{3}{4}$ time or more are eligible for membership in LACERA. (31551, 31552, Bylaws)

Employees eligible for safety membership (law enforcement, fire fighting and lifeguards) become safety members on the first day of the month after date of hire. (31558)

All other employees become general members on the first day of the month after date of hire, or the first day of the month after they make an election of either Plan D or Plan E, depending on the law in effect at that time. (31493, 31493.5, 31493.6, Bylaws)

Elective officers become members on the first day of the month after filing a declaration with the Board of Retirement (Board). (31553, 31562)

General members in Plan E may transfer all their Plan E service credit to Plan D during an approved transfer period by making the required contributions. Transferred members relinquish, waive, and forfeit any and all vested or accrued benefits available under any other retirement plan and are entitled only to the benefits of Plan D.

RETIREMENT PLANS

The County has established seven defined benefit plans (General Plans A, B, C, D and E and Safety Plans A and B) and two defined contribution plans (General Plan F and Safety Plan F) based on a member's date of entry into LACERA. (31494.1, 31494.3)

Plan A: General and safety members – prior to September 1977.

Plan B: General members – September 1977 through September 1978. Safety members – September 1977 to present.

Plan C: General members – October 1978 through May 1979.

RETIREMENT PLANS (Continued)

Plan D:	General members – Hired June 1979 through January 3, 1982; and those hired on or after January 4, 1982 and elect Plan D instead of Plan E; or, former Plan E general members who elected to transfer to Plan D.	
Plan E:	General members – Hired on or after January 4, 1982, unless they elect Plan D; or, former general members in Plans A-D who elected to transfer to Plan E.	(31487, 31496)
Plan F:	General members in Plan D and safety members in Plan B who first became members on or after January 1, 1990, and are subject to the limitations set forth in Section 415 of the Internal Revenue Code of 1986. Currently there are no members participating in Plan F. No further description of Plan F is included here.	(31510)

MEMBER CONTRIBUTIONS

Plans A-D:	Contributions are based on the entry age and class of each member and are required of all members in Plans A, B, C, and D. Current member rates are shown in Appendix D. Section 5 provides additional detail on how these rates are calculated.	(31620)
	Contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of LACERA or a reciprocal system on March 7, 1973, and continuously thereafter. All safety member are eligible for the 30-year cessation of contributions.	(31625.2, 31836.1)
	Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Investments on amounts that have been on deposit for at least six months.	(31591, 31700)
	In addition to the normal contributions, members pay one-half of the cost of their plan’s COLA. This is discussed further in Section 5 of this report.	(31873)

EMPLOYER CONTRIBUTIONS

The employer (County or district) contributes to the retirement fund a percent of the total compensation provided for all members based on an actuarial investigation, valuation and recommendation of the actuary.	(31453, 31454 31581)
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SERVICE RETIREMENT ALLOWANCE

<u>Eligibility:</u>		(31672)
Plans A-D:	General members: Age 50 with 10 years of County service; Any age with 30 years of service; or Age 70 regardless of service.	
	Safety members: Age 50 with 10 years of County service; Any age with 20 years of service; or Age 60 regardless of service.	(31662.4, 31662.6, 31663.25)
Plan E:	Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.	(31491.3)
<u>Final Compensation:</u>		
Plans A-D:	Monthly average of a member's compensation during the last year of service.	(31462.3, 31461.45)
Plan E:	Monthly average of a member's compensation for the last three years of service.	(31488)
The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code.		(31671)
<u>Monthly Allowance:</u>		
	Safety members: 1/50 x Final Compensation x Safety age factor x Years of service. (The Safety Plan A and Safety Plan B age factors are the same.)	(31664)
Plans A-D:	General members: 1/60 x Final Compensation x a Plan specific age factor x years of service.	(31676.1) (31676.11) (31676.14)

SERVICE RETIREMENT ALLOWANCE (Continued)

- Plan E:** **General members: (a)+(b)-(c) where:**
- (a) 2% x Final Compensation x (Years of Service (up to 35 years), plus (31491,
 - (b) 1 % x Final Compensation x Years of Service in excess of 35 (up to 10) 31491.3 (b)&(c))
 - (c) Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35) divided by 35.

The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 62.

If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).

Social Security Integration:

- Plans A-C:** **General Members:** (31808)
 For County service covered by Social Security prior to January 1, 1983, the 1/60 factor is replaced by 1/90 for the first \$350 of compensation.

- Plan D:** The 1/90 factor is applied to the first \$1,050 of compensation.

Sample Plan Age Factors:

Plan	Age 50	Age 55	Age 60	Age 65 & Up	
General A	0.885	1.169	1.464	1.567	(31676.14)
General B	0.745	1.000	1.309	1.567	(31676.11)
General C&D	0.709	0.895	1.150	1.459	(31676.1)
General E	N/A	0.375	0.601	1.000	(31491.3(a))
Safety A&B	1.000	1.310	1.310	1.310	(31664)

Maximum Allowance:

- Plans A-D:** Allowance may not exceed 100% of final compensation.
- Plan E:** The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation if service exceeds 35 years. (31491.3)

SERVICE RETIREMENT ALLOWANCE (Continued)

Unmodified Retirement Allowance (Normal Form):

Plans A-D:	Life Annuity payable to retired member with 65% continuance to an eligible survivor (or eligible children).	(31760.12, 31785.4)
Plan E:	Life Annuity payable to retired member with 55% continuance to an eligible survivor (or eligible children).	(31491, 31492.1)
Eligible survivor includes certain domestic partners.		(31780.2)

Optional Retirement Allowance:

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional survivor allowance. (31760)

Unmodified Plus:	Members with eligible survivors may elect a higher percent than the standard unmodified continuance, up to 100%. The benefit is actuarially reduced from the unmodified amount. The elected percent of the member's reduced allowance is payable to the eligible survivor.	(31760.5)
Option 1:	Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member.	(31761)
Option 2:	100% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31762)
Option 3:	50% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31763)
Option 4:	Other % of member's reduced allowance is payable to a surviving spouse or beneficiary(ies) having an insurable interest in the life of the member.	(31764)

SERVICE RETIREMENT ALLOWANCE (Continued)

A member may not revoke and name another beneficiary if the member elects Option 2, 3 or 4. (31782)

Pension Advance Option: The Pension Advance Option is available to members who are fully insured under Social Security for the purpose of coordinating a member's retirement allowance with benefits receivable from Social Security. It is not available to disability retirees or members who elect Option 2, 3 or 4. The allowance is increased prior to age 62 and then reduced after 62 by amounts which have equivalent actuarial values. The automatic 65% continuance for eligible spouses of members who elect the Pension Advance Option is based on the unmodified allowance the member would have received if the member had not elected the option. (31810, 31811)

All Allowances: All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that occur mid-month, the full month's payment is made. (31600)

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility: (31720, 31720.5)

Plans A-D: Any age or years of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.

Plan E: Not available under Plan E. (31487)

Monthly Allowance: Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire. (31727.4)

Normal Form Of Payment: Life Annuity with 100% continuance to a surviving spouse (or eligible children). (31760, 31786)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility:

Plans A-D:	Any age with 5 years of service, and permanently incapacitated for the performance of duty.	(31720, 31836)
Plan E:	Not available under Plan E.	(31487)

Monthly Allowance:

	The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:	(31726, 31726.5)
General Members:	(a) 90% of 1/60 of Final Compensation x years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation. (b) 90% of 1/60 of Final Compensation x years of service projected to age 65, not to exceed 1/3 of Final Compensation.	(31727(a)) (31727(b))
Safety Members:	1/60 is replaced by 1/50 and age 65 is replaced by age 55 in (a) and (b) above.	(31727.2)

<u>Normal Form Of Payment:</u>	Life Annuity with 65% continuance to a surviving spouse (or eligible children).	(31760, 31760.1, 31760.12, 31785, 31785.4)
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SERVICE-CONNECTED DEATH BENEFITS

Eligibility:

Plans A-D:	Active members who die in service as a result of injury or disease arising out of and in the course of employment.	(31787)
Plan E:	Not available under Plan E.	(31487)

Monthly Allowance:

	An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to 50% of the member's Final Compensation.	(31787)
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SERVICE-CONNECTED DEATH BENEFITS (Continued)

Optional Combined Benefit: (31781.3)

In lieu of the monthly allowance above, a surviving spouse may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of surviving spouse.

Death Benefit (Lump Sum): (31781)

The member's accumulated contributions with interest, plus 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation).

Additional Allowance for Children: (31787.5)

25% of death allowance (whether or not the monthly allowance or combined benefit is chosen) for one child, 40% for two children, and 50% for three or more children.

(31787.6)

Additional Amount for Spouse of Safety Member:

A surviving spouse of a safety member is also entitled to receive a lump-sum death benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other benefits.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility: (31780)

Plans A-D: Active members who die while in service or while physically or mentally incapacitated for the performance of duty.

Plan E: Not available under Plan E. (31487)

NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Death Benefit (Lump Sum): (31781)

The member's accumulated contributions with interest, plus 1/12 of the compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

Optional Death Benefit:

In lieu of the lump-sum death benefit, the following several optional death benefits are available to provide flexibility to survivors.

First Optional Death Benefit:

If a member who would have been entitled to a non-service-connected disability retirement allowance dies prior to retirement as a result of such disability, the surviving spouse (or eligible children) may elect to receive an optional death allowance equal to 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31781.1, 31781.12)

Second Optional Death Benefit:

If a member dies prior to reaching the minimum retirement age but has 10 or more years of County service, a surviving spouse (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in Section 31765 (an Option 3 benefit) or 31765.2 (a 65% continuance). (31781.2, 31765.2)

Third Optional Death Benefit:

A surviving spouse of a member who dies after five years of County service may elect a combined benefit equal to:

- (a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus (31781.3)
- (b) A monthly payment equal to 65% of the monthly retirement allowance to which the member have been entitled if the member retired or been retired for a non-service-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of surviving spouse. (31781.1, 31781.12)

NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

Fourth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary, the spouse (or eligible children) may elect to receive 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31765.1, 31765.2)

Fifth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary and survives the member by not less than 30 days the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3. (31765)

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the first optional death benefit or the lump sum, whichever is more valuable.

POSTRETIREMENT DEATH BENEFIT

Plans A-D: A one-time lump-sum benefit of \$5,000 is payable to the estate or to the beneficiary designated by the member upon the death of any member while receiving a retirement allowance. This is in addition to any other death or survivor benefits. The amount may be paid from surplus earnings of the retirement system, if any, but is currently paid by the County based on agreement with LACERA. It is not included for valuation purposes. (31789.1)

Plan E: The only death benefits payable after retirement are the continuance allowances described above under Unmodified and Optional Retirement Allowances. There is no \$5,000 lump-sum payment under Plan E. (31492)

DEFERRED VESTED BENEFITS

<u>Eligibility:</u>		(31700)
Plans A-D:	Five years of county or reciprocal service. member contributions must be left on deposit.	
Plan E:	Age 55 with 10 years of service.	(31491)
<u>Monthly Allowance:</u>		
Plans A-D:	Same as service retirement allowance; payable anytime after the member would have been eligible for service retirement.	(31703, 31704, 31705)
	If a terminated member dies before the effective date of the deferred retirement allowance, the member's accumulated contributions are paid to the estate or to the named beneficiary.	(31702)
Plan E:	Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55.	(31491)

TRANSFERS BETWEEN PLAN D AND PLAN E

Members in Plan D may transfer to Plan E on a prospective basis. Members in Plan E may transfer to Plan D on a prospective basis. (31494.2, 31494.5)

RECIPROCITY:

Plans A-E:

Reciprocal benefits are may be granted to members who are entitled to retirement benefits from two or more retirement systems established under the CERL or from a County retirement system and the California Public Employees' Retirement System (CalPERS). Reciprocity also applies to the members of the State Teachers' Retirement System Defined Benefit Plan. (31830, 31840.4, 31840.8)

Final Compensation may be based on service with CalPERS or another County retirement system, if greater. (31835)

Deferred members are eligible for disability and death benefits from LACERA, if disabled while a member of CalPERS or another County retirement system, but combined benefits are limited.

TRANSFER FROM CALPERS

Whenever firefighting or law enforcement functions performed by a city of the state subject to the California Public Employees Retirement Law are transferred to the County, fire authority, or district, employees performing those functions become members of LACERA. LACERA and CalPERS may enter into an agreement whereby the members' service credit plus the members' and the cities' or states' retirement contributions are transferred from CalPERS to LACERA. (31657)

COST-OF-LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%. (31870, 31870.1)

Plan A:	Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	
Plans B-D:	Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.	(31870, 31870.1)
	When the CPI exceeds 2 or 3%, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation. It may be used in future years to provide cost-of-living increases when the CPI falls below 2 or 3%, depending on the retirement plan.	
Plan E:	Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase. The 2% is pro-rated based on service earned after June 4, 2002. "Elective COLA" increases for service earned prior to June 4, 2002 may be purchased by the member.	(31495.5)

STAR PROGRAM

Members who have a COLA Accumulation of more than 20% resulting from CPI increases that exceeded the maximum cost-of-living increases that could be granted are eligible for a supplemental cost-of-living increase effective January 1 known as the Supplemental Targeted Adjustment for Retirees Cost-of-Living Adjustment (STAR COLA). These benefits are not evaluated in this report, or as part of the actuarially required funding amount, unless they have been vested by the Board of Retirement. (318874.3(b))

Los Angeles County Employees Retirement Association

Appendix C: Valuation Data and Schedules



On the following table, Exhibit C-1, we present a summary of LACERA membership at June 30, 2009 for active members. Similar information is shown in Exhibit C-2Ret for retired members and C-2Def for deferred vested members.

The number of total active members increased by 1.4% and the total salary increased by 6.2% since the last valuation. The total number of retired members and their beneficiaries increased by 1.4%, while the average retirement benefit amount increased by 4.0%.

Note that salary amounts shown are the prior year annual pensionable earnings for those members of plans with a one-year final compensation period. For plans with a three-year final compensation period (Plan E only), the monthly rate of pay at June 2009 is shown.

Additional statistical data on both active and retired members is shown in the following tables. Additional detailed summaries are supplied to the system staff in a supplementary report.

Exhibit C-3: Age Distribution of Active Members

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members

Exhibits C-4 and C-5 are shown for all plans combined as well as for each plan separately.

Data on LACERA membership as of June 30, 2009 was supplied to us by the system staff. Based on our review of this data and discussions with LACERA staff, all retiree and beneficiary records were included in our valuation. However, benefit amounts were zeroed for records of retirees who have returned to work and who were valued as active participants.

All active and deferred records supplied by LACERA were included in the valuation.

Los Angeles County Employees Retirement Association

Exhibit C-1: LACERA Membership – Active Members as of June 30, 2009

	Sex	Vested	NonVested	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
General Members								
Plan A	M	640	1	641	\$ 62,431,944	61.1	\$ 8,116	34.2
	F	1,327	-	1,327	103,694,820	59.5	6,512	34.2
Plan B	M	99	-	99	9,958,872	59.5	8,383	31.5
	F	208	-	208	16,324,560	58.2	6,540	30.8
Plan C	M	70	-	70	6,964,104	58.3	8,291	30.7
	F	165	-	165	12,958,080	57.4	6,544	29.9
Plan D	M	11,513	5,892	17,405	1,206,373,068	44.7	5,776	10.4
	F	22,580	11,900	34,480	2,158,934,052	43.9	5,218	10.5
Plan E	M	5,838	3,491	9,329	651,594,960	49.0	5,821	15.5
	F	12,288	6,866	19,154	1,118,324,136	48.2	4,865	16.2
Total		54,728	28,150	82,878	\$ 5,347,558,596	46.1	\$ 5,377	13.1
Safety Members								
Plan A	M	220	-	220	\$ 30,221,964	56.0	\$ 11,448	32.8
	F	22	-	22	2,845,272	55.4	10,778	33.7
Plan B	M	8,348	2,627	10,975	1,053,333,096	40.9	7,998	14.0
	F	1,171	522	1,693	153,254,760	37.9	7,544	11.2
Total		9,761	3,149	12,910	\$ 1,239,655,092	40.8	\$ 8,002	14.0
Grand Total		64,489	31,299	95,788	\$ 6,587,213,688	45.4	\$ 5,731	13.2



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**Los Angeles County Employees
Retirement Association**

Exhibit C-2Ret: LACERA Membership – Retired Members as of June 30, 2009

	Sex	Number	Annual Allowance	Average Age	Average Monthly Benefit
General Members					
Plan A	M	11,617	\$ 578,725,694	74.4	\$ 4,151
	F	17,294	568,100,808	75.4	2,737
Plan B	M	166	6,058,745	69.8	3,042
	F	405	11,098,401	70.8	2,284
Plan C	M	123	3,197,365	70.0	2,166
	F	251	5,239,789	70.6	1,740
Plan D	M	2,264	59,474,511	65.6	2,189
	F	3,964	83,769,912	65.7	1,761
Plan E	M	2,323	43,694,287	69.5	1,567
	F	4,418	63,247,151	68.9	1,193
Total		42,825	\$ 1,422,606,663	72.6	\$ 2,768
Safety Members					
Plan A	M	6,319	\$ 479,924,928	69.2	\$ 6,329
	F	1,900	90,914,649	72.2	3,987
Plan B	M	1,538	74,292,361	52.5	4,025
	F	487	17,986,114	48.2	3,078
Total		10,244	\$ 663,118,052	66.3	\$ 5,394
Grand Total		53,069	\$ 2,085,724,715	71.4	\$ 3,275



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**Los Angeles County Employees
Retirement Association**

**Exhibit C-2Def: LACERA Membership – Deferred Members as of June 30, 2009
Subtotaled by Plan and Retirement Type**

	<u>Sex</u>	<u>Number</u>	<u>Average Age</u>
<i>General Members</i>			
Plan A	M	105	62.2
	F	205	60.3
Plan B	M	11	61.2
	F	37	58.0
Plan C	M	8	58.0
	F	22	55.0
Plan D	M	2,194	43.8
	F	4,288	42.7
Plan E	M	1,283	53.0
	F	2,998	52.0
Total		11,151	47.2
 <i>Safety Members</i>			
Plan A	M	10	59.7
	F	-	-
Plan B	M	521	38.1
	F	162	38.0
Total		693	38.4
 <i>Grand Total</i>		 11,844	 46.7

Los Angeles County Employees Retirement Association

Exhibit C-2a: LACERA Membership – Retired Members as of June 30, 2009 Subtotaled by Plan and Retirement Type

Plan	Retirement Type	Number	Annual Benefits in Thousands	Average Monthly Benefit
General Plans:				
Plan A				
	Healthy	21,384	\$ 954,615	\$ 3,720
	Disabled	2,455	72,791	2,471
	Beneficiaries	<u>5,072</u>	<u>119,420</u>	<u>1,962</u>
	Total	28,911	\$ 1,146,827	\$ 3,306
Plan B				
	Healthy	464	\$ 15,028	\$ 2,699
	Disabled	66	1,366	1,725
	Beneficiaries	<u>41</u>	<u>763</u>	<u>1,551</u>
	Total	571	\$ 17,157	\$ 2,504
Plan C				
	Healthy	275	\$ 6,643	\$ 2,013
	Disabled	60	1,346	1,869
	Beneficiaries	<u>39</u>	<u>448</u>	<u>957</u>
	Total	374	\$ 8,437	\$ 1,880
Plan D				
	Healthy	4,463	\$ 105,250	\$ 1,965
	Disabled	1,217	30,724	2,104
	Beneficiaries	<u>548</u>	<u>7,270</u>	<u>1,106</u>
	Total	6,228	\$ 143,244	\$ 1,917
Plan E				
	Healthy	6,302	\$ 103,435	\$ 1,368
	Disabled	0	0	N/A
	Beneficiaries	<u>439</u>	<u>3,506</u>	<u>666</u>
	Total	6,741	\$ 106,941	\$ 1,322
Safety Plans:				
Plan A				
	Healthy	3,025	\$ 242,693	\$ 6,686
	Disabled	3,821	268,808	5,863
	Beneficiaries	<u>1,373</u>	<u>59,338</u>	<u>3,601</u>
	Total	8,219	\$ 570,840	\$ 5,788
Plan B				
	Healthy	524	\$ 32,148	\$ 5,113
	Disabled	1,377	56,361	3,411
	Beneficiaries	<u>124</u>	<u>3,769</u>	<u>2,533</u>
	Total	2,025	\$ 92,279	\$ 3,797
Grand Totals		53,069	2,085,725	3,275



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**Los Angeles County Employees
Retirement Association**

**Exhibit C-2b: LACERA Membership – Retired Members as of June 30, 2009
Subtotaled by Retirement Type and Plan**

<u>Type</u>	<u>Plan</u>	<u>Number</u>	<u>Annual Benefits in Thousands</u>	<u>Average Monthly Benefit</u>
Healthy Retirees				
	General A	21,384	\$ 954,616	\$ 3,720
	General B	464	15,028	2,699
	General C	275	6,643	2,013
	General D	4,463	105,250	1,965
	General E	6,302	103,435	1,368
	Safety A	3,025	242,694	6,686
	Safety B	524	32,148	5,113
	Total	36,437	\$ 1,459,814	\$ 3,339
Disabled Retirees				
	General A	2,455	\$ 72,791	\$ 2,471
	General B	66	1,366	1,725
	General C	60	1,346	1,869
	General D	1,217	30,724	2,104
	Safety A	3,821	268,808	5,863
	Safety B	1,377	56,362	3,411
	Total	8,996	\$ 431,397	\$ 3,996
Beneficiaries				
	General A	5,072	\$ 119,420	\$ 1,962
	General B	41	763	1,551
	General C	39	448	957
	General D	548	7,270	1,106
	General E	439	3,506	666
	Safety A	1,373	59,338	3,601
	Safety B	124	3,769	2,533
	Total	7,636	\$ 194,514	\$ 2,123
Grand Totals		53,069	\$ 2,085,725	\$ 3,275



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Los Angeles County Employees Retirement Association

Exhibit C-3: Age Distribution of Active Members as of June 30, 2009

	Age Groups						Total
	0-29	30-39	40-49	50-59	60-69	70+	
General Plans:							
Plan A							
Male	-	-	-	278	319	44	641
Female	-	-	-	767	501	59	1,327
Plan B							
Male	-	-	-	57	40	2	99
Female	-	-	1	139	58	10	208
Plan C							
Male	-	-	-	45	24	1	70
Female	-	-	8	104	49	4	165
Plan D							
Male	1,674	4,478	5,139	4,254	1,670	190	17,405
Female	3,429	9,550	10,528	8,079	2,651	243	34,480
Plan E							
Male	574	1,558	2,403	2,953	1,625	216	9,329
Female	1,086	3,199	5,572	6,304	2,744	249	19,154
Safety Plans:							
Plan A							
Male	-	-	-	203	17	-	220
Female	-	-	-	21	1	-	22
Plan B							
Male	1,452	3,123	4,340	2,003	55	2	10,975
Female	328	642	552	168	3	-	1,693
Grand Totals:	8,543	22,550	28,543	25,375	9,757	1,020	95,788

Los Angeles County Employees Retirement Association

Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009 All Plans

Count														
Age	Years of Service												Total Count	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	460	599	358	114	44	1	0	0	0	0	0	0	0	1,576
25-29	1,058	1,775	1,670	1,203	530	716	15	0	0	0	0	0	0	6,967
30-34	810	1,314	1,422	1,409	884	3,611	822	11	0	0	0	0	0	10,283
35-39	568	915	1,046	928	589	4,026	3,300	869	26	0	0	0	0	12,267
40-44	409	600	735	659	514	3,039	3,077	3,570	1,569	40	0	0	0	14,212
45-49	298	446	617	555	352	2,307	2,174	2,995	3,397	1,125	65	0	0	14,331
50-54	252	350	459	452	329	1,863	1,689	2,233	2,597	2,271	1,112	77	0	13,684
55-59	147	220	297	295	192	1,348	1,302	1,653	1,819	1,487	1,739	1,192	0	11,691
60-64	67	104	153	147	112	854	849	1,073	1,083	768	911	1,149	0	7,270
65 & Over	24	27	39	74	46	438	488	649	620	340	345	417	0	3,507
Total Count	4,093	6,350	6,796	5,836	3,592	18,203	13,716	13,053	11,111	6,031	4,172	2,835	0	95,788

Average Compensation														
Age	Years of Service												Average Comp.	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	43,029	46,669	46,723	42,006	45,204	40,092	-	-	-	-	-	-	-	45,236
25-29	48,769	52,223	54,144	52,910	51,817	55,100	53,377	-	-	-	-	-	-	52,545
30-34	52,940	53,012	55,272	56,629	59,066	61,991	65,592	73,639	-	-	-	-	-	58,516
35-39	54,331	55,650	57,182	58,273	59,858	66,381	73,446	73,917	75,327	-	-	-	-	65,765
40-44	54,314	54,311	53,842	57,201	61,071	66,458	74,740	78,921	79,344	90,150	-	-	-	70,732
45-49	50,454	49,903	48,913	53,571	58,556	63,748	71,187	78,432	85,594	87,712	82,495	-	-	73,222
50-54	54,903	52,076	52,993	54,652	62,292	62,776	67,575	75,345	85,667	91,672	81,546	78,588	-	75,147
55-59	59,038	55,342	53,385	58,088	60,932	64,603	66,737	71,840	80,176	85,909	84,565	75,425	-	74,316
60-64	65,062	53,032	50,780	62,467	60,944	65,750	67,640	69,313	76,317	81,554	84,335	79,953	-	73,670
65 & Over	114,084	66,501	85,985	81,090	83,969	68,944	65,243	63,653	72,986	82,183	74,899	81,406	-	72,449
Avg. Annual Compensation	51,794	52,565	53,945	55,990	58,966	64,276	70,874	75,414	82,210	87,679	82,879	78,226	0	68,769



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Los Angeles County Employees Retirement Association

**Exhibit C-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
General Plan A**

Count														
Age	Years of Service												Total Count	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	1	2	4	13	94	30	144	
55-59	0	0	0	0	0	6	10	16	19	37	322	491	901	
60-64	0	0	0	0	1	7	14	18	39	31	191	351	652	
65 & Over	0	0	0	0	0	3	6	4	19	15	65	159	271	
Total Count	0	0	0	0	1	16	31	40	81	96	672	1,031	1,968	

Compensation														
Age	Years of Service												Average Comp.	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	97,548	39,204	80,577	72,354	70,487	70,030	70,594	
55-59	-	-	-	-	-	70,946	98,102	73,591	90,728	80,908	81,390	76,696	78,986	
60-64	-	-	-	-	113,820	118,114	89,262	95,474	89,595	84,173	93,270	90,062	91,164	
65 & Over	-	-	-	-	-	55,740	83,436	72,018	121,430	117,344	82,601	94,111	93,564	
Avg. Annual Compensation	-	-	-	-	113,820	88,731	91,253	81,562	96,883	86,497	83,358	83,738	84,414	



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Los Angeles County Employees Retirement Association

**Exhibit C-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
General Plan B**

Count														
Age	Years of Service												Total Count	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	1	0	0	1
50-54	0	0	0	0	0	0	1	0	2	1	61	1	0	66
55-59	0	0	0	0	0	1	2	4	3	8	104	8	0	130
60-64	0	0	0	0	0	0	2	0	1	2	61	4	0	70
65 & Over	0	0	0	0	0	0	0	0	3	2	34	1	0	40
Total Count	0	0	0	0	0	1	5	4	9	13	261	14	0	307

Compensation														
Age	Years of Service												Average Comp.	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	67,896	-	-	67,896
50-54	-	-	-	-	-	-	44,664	-	68,712	77,484	75,462	100,476	-	75,200
55-59	-	-	-	-	-	159,372	103,578	102,837	102,040	85,909	88,224	111,570	-	91,070
60-64	-	-	-	-	-	-	75,714	-	94,788	91,848	86,218	99,972	-	86,987
65 & Over	-	-	-	-	-	-	-	-	137,524	124,218	76,184	72,852	-	83,103
Avg. Annual Compensation	-	-	-	-	-	159,372	80,650	102,837	105,656	92,069	83,126	104,698	-	85,614



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Los Angeles County Employees Retirement Association

**Exhibit C-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
General Plan C**

Count														
Age	Years of Service												Total Count	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	1	0	0	2	5	0	0	8
50-54	0	0	0	0	0	0	0	1	1	6	47	3	0	58
55-59	0	0	0	0	0	0	1	1	2	7	77	3	0	91
60-64	0	0	0	0	0	1	0	1	3	6	45	3	0	59
65 & Over	0	0	0	0	0	0	0	0	0	1	17	1	0	19
Total Count	0	0	0	0	0	1	2	3	6	22	191	10	0	235

Compensation														
Age	Years of Service												Average Comp.	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	53,304	-	-	90,690	61,303	-	-	67,650
50-54	-	-	-	-	-	-	-	104,748	102,660	81,216	70,227	88,680	-	73,472
55-59	-	-	-	-	-	-	105,000	121,188	106,224	98,426	90,592	102,756	-	92,434
60-64	-	-	-	-	-	42,456	-	83,208	114,008	94,148	76,006	156,924	-	83,451
65 & Over	-	-	-	-	-	-	-	-	-	298,704	73,084	243,348	-	93,920
Avg. Annual Compensation	-	-	-	-	-	42,456	79,152	103,048	109,522	100,966	79,819	128,843	-	84,775



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Los Angeles County Employees Retirement Association

**Exhibit C-4d: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
General Plan D**

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	274	316	183	65	16	1	0	0	0	0	0	0	855
25-29	703	1,064	960	785	337	390	9	0	0	0	0	0	4,248
30-34	575	882	885	1,003	619	2,124	440	8	0	0	0	0	6,536
35-39	415	625	718	657	397	2,472	1,789	405	14	0	0	0	7,492
40-44	292	432	514	499	337	1,943	1,783	1,544	579	26	0	0	7,949
45-49	219	334	439	395	241	1,547	1,363	1,506	1,300	346	28	0	7,718
50-54	180	252	327	329	233	1,274	1,116	1,285	1,163	635	208	16	7,018
55-59	101	148	203	207	138	904	846	962	888	538	240	140	5,315
60-64	43	69	100	96	75	591	533	661	517	325	103	97	3,210
65 & Over	14	8	24	33	31	278	274	371	306	151	41	13	1,544
Total Count	2,816	4,130	4,353	4,069	2,424	11,524	8,153	6,742	4,767	2,021	620	266	51,885

Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	41,948	40,857	37,677	36,070	36,181	40,092	-	-	-	-	-	-	40,074
25-29	48,475	48,348	48,239	49,410	47,696	49,576	50,403	-	-	-	-	-	48,606
30-34	52,026	50,768	52,348	54,614	58,131	59,160	59,702	77,974	-	-	-	-	55,742
35-39	53,158	54,602	56,074	56,500	57,846	64,454	68,809	68,114	71,901	-	-	-	62,407
40-44	54,653	53,803	53,461	57,337	61,511	66,394	72,077	73,327	70,347	85,658	-	-	66,639
45-49	51,248	51,595	50,837	54,679	59,752	64,720	71,373	75,413	79,464	75,420	84,518	-	68,608
50-54	56,517	50,490	53,488	56,385	64,238	65,715	70,304	75,716	83,506	80,365	83,029	85,018	71,268
55-59	56,029	54,613	54,754	58,442	61,517	66,553	68,721	73,958	82,313	87,136	88,648	81,353	72,913
60-64	63,063	51,787	51,249	65,830	60,076	66,188	69,667	71,890	78,905	87,598	97,934	95,592	73,093
65 & Over	106,467	57,097	80,149	84,267	85,678	70,093	65,890	65,068	73,439	84,192	90,086	97,762	71,980
Avg. Annual Compensation	51,408	50,501	51,745	54,802	58,312	63,864	69,594	73,435	79,404	82,838	88,214	87,567	64,861



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Exhibit C-4e: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
General Plan E**

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	106	131	73	28	17	0	0	0	0	0	0	0	355
25-29	231	308	268	217	106	171	4	0	0	0	0	0	1,305
30-34	163	239	267	239	174	843	169	2	0	0	0	0	2,096
35-39	115	183	196	184	144	900	694	239	6	0	0	0	2,661
40-44	104	116	159	122	134	722	725	1,049	513	6	0	0	3,650
45-49	74	100	164	148	94	618	598	982	1,161	367	19	0	4,325
50-54	67	93	127	119	85	552	508	764	1,009	774	491	18	4,607
55-59	45	68	89	88	48	424	420	650	818	683	801	516	4,650
60-64	24	33	50	51	34	246	289	392	519	390	498	686	3,212
65 & Over	10	19	15	41	15	156	202	272	292	171	188	241	1,622
Total Count	939	1,290	1,408	1,237	851	4,632	3,609	4,350	4,318	2,391	1,997	1,461	28,483

Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	37,493	36,118	33,651	34,584	36,644	-	-	-	-	-	-	-	35,925
25-29	42,656	43,827	42,207	44,197	44,326	46,203	45,009	-	-	-	-	-	43,704
30-34	52,240	47,600	45,400	49,443	50,383	51,635	52,380	47,946	-	-	-	-	50,130
35-39	55,765	50,908	48,322	54,273	57,060	55,655	61,796	58,415	62,270	-	-	-	56,638
40-44	52,054	48,304	46,862	49,602	50,574	53,755	64,574	65,058	61,230	75,564	-	-	59,461
45-49	46,837	42,233	41,124	48,462	49,291	55,015	61,414	70,650	71,764	65,044	56,463	-	63,492
50-54	48,375	54,177	49,992	49,685	50,905	53,929	58,067	68,294	77,408	72,741	64,343	60,579	65,856
55-59	64,875	54,199	47,585	57,256	54,660	59,177	59,872	67,262	74,403	75,231	71,436	66,894	68,052
60-64	68,644	52,058	46,059	56,135	59,488	61,232	61,002	63,666	71,848	74,760	77,423	71,297	69,152
65 & Over	124,747	70,461	95,321	78,533	80,438	67,058	61,443	61,436	68,697	75,568	68,856	69,706	68,281
Avg. Annual Compensation	49,724	46,922	45,365	50,622	51,580	54,990	60,999	66,493	72,121	72,809	70,800	69,348	62,139



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Los Angeles County Employees Retirement Association

**Exhibit C-4f: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009
Safety Plan A**

Count														
Age	Years of Service												Total Count	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	1	2	12	57	5	77	
55-59	0	0	0	0	0	0	1	1	2	13	101	29	147	
60-64	0	0	0	0	0	0	0	0	0	0	8	8	16	
65 & Over	0	0	0	0	0	0	0	0	0	0	0	2	2	
Total Count	0	0	0	0	0	0	1	2	4	25	166	44	242	

Compensation														
Age	Years of Service												Average Comp.	
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over		
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	107,244	125,052	118,852	128,496	130,879	126,782	
55-59	-	-	-	-	-	-	114,576	91,404	105,168	122,895	137,391	155,679	138,811	
60-64	-	-	-	-	-	-	-	-	-	-	137,728	150,216	143,972	
65 & Over	-	-	-	-	-	-	-	-	-	-	-	298,140	298,140	
Avg. Annual Compensation	-	-	-	-	-	-	114,576	99,324	115,110	120,954	134,353	158,343	136,641	



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Los Angeles County Employees Retirement Association

Exhibit C-4g: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2009 Safety Plan B

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	80	152	102	21	11	0	0	0	0	0	0	0	366
25-29	124	403	442	201	87	155	2	0	0	0	0	0	1,414
30-34	72	193	270	167	91	644	213	1	0	0	0	0	1,651
35-39	38	107	132	87	48	654	817	225	6	0	0	0	2,114
40-44	13	52	62	38	43	374	569	977	477	8	0	0	2,613
45-49	5	12	14	12	17	142	212	507	936	410	12	0	2,279
50-54	5	5	5	4	11	37	63	180	416	830	154	4	1,714
55-59	1	4	5	0	6	13	22	19	87	201	94	5	457
60-64	0	2	3	0	2	9	11	1	4	14	5	0	51
65 & Over	0	0	0	0	0	1	6	2	0	0	0	0	9
Total Count	338	930	1,035	530	316	2,029	1,915	1,912	1,926	1,463	265	9	12,668

Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	54,064	67,847	72,307	70,276	71,558	-	-	-	-	-	-	-	66,328
25-29	61,827	68,871	74,208	75,987	76,909	78,816	83,496	-	-	-	-	-	72,539
30-34	61,816	69,968	74,621	79,017	82,029	84,884	88,242	90,336	-	-	-	-	80,142
35-39	62,797	69,884	76,366	80,121	84,894	88,427	93,497	100,829	96,380	-	-	-	89,154
40-44	64,783	71,932	74,903	79,811	90,332	91,312	96,037	102,647	109,747	115,687	-	-	98,929
45-49	69,230	66,714	79,807	80,083	92,822	91,160	97,640	102,472	111,262	118,360	129,038	-	107,336
50-54	84,245	92,947	96,857	59,895	109,047	93,570	95,775	102,687	111,641	117,979	129,632	119,691	114,117
55-59	100,272	101,736	101,016	-	97,656	95,838	100,016	109,548	108,416	117,001	131,155	125,359	116,041
60-64	-	112,056	113,864	-	91,836	122,321	114,799	94,152	159,195	117,823	117,862	-	119,271
65 & Over	-	-	-	-	-	83,208	145,450	85,878	-	-	-	-	125,296
Avg. Annual Compensation	60,765	69,555	74,875	77,640	83,700	87,580	94,550	102,431	110,893	117,937	129,923	122,840	95,247



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Los Angeles County Employees Retirement Association

**Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
All Plans**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	2	0	5	12	28	73	120	\$ 1,400
35-39	0	0	0	0	0	0	1	7	60	54	122	2,634
40-44	0	0	0	0	0	1	25	87	131	101	345	2,791
45-49	0	0	0	0	0	11	80	162	175	142	570	2,705
50-54	0	0	0	1	21	55	123	148	182	547	1,077	2,467
55-59	0	0	0	28	84	109	142	209	681	2,232	3,485	3,425
60-64	0	1	16	143	231	196	274	955	2,961	3,429	8,206	3,992
65-69	1	3	41	176	243	272	996	2,355	3,295	2,797	10,179	3,837
70-74	1	28	62	187	260	796	1,934	2,153	2,179	1,218	8,818	3,364
75-79	16	49	109	223	851	1,328	2,117	1,489	883	612	7,677	3,041
80-84	29	55	114	678	1,233	1,274	1,264	621	450	430	6,148	2,736
85-89	30	44	244	825	967	815	422	295	299	273	4,214	2,428
90-94	17	44	209	465	384	101	98	103	130	90	1,641	2,120
95-99	12	47	98	145	34	3	19	20	19	11	408	1,957
100 & Over	6	7	18	2	0	0	1	4	12	9	59	1,283
Total Count	112	278	911	2,873	4,310	4,961	7,501	8,620	11,485	12,018	53,069	
Avg Monthly Benefit	\$ 1,344	\$ 1,536	\$ 1,892	\$ 2,349	\$ 2,448	\$ 2,874	\$ 3,475	\$ 3,305	\$ 3,823	\$ 3,452		\$ 3,275



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Los Angeles County Employees Retirement Association

**Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
General Plan A**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	0	0	3	2	6	22	33	\$ 1,305
35-39	0	0	0	0	0	0	0	1	1	4	6	1,912
40-44	0	0	0	0	0	1	1	1	3	4	10	1,761
45-49	0	0	0	0	0	0	0	4	3	7	14	1,714
50-54	0	0	0	0	4	7	3	11	14	49	88	2,323
55-59	0	0	0	16	33	25	26	37	252	509	898	3,340
60-64	0	1	9	64	79	63	93	540	1,105	1,473	3,427	4,235
65-69	1	0	21	92	101	115	690	1,110	1,874	817	4,821	4,223
70-74	0	14	36	112	131	612	1,232	1,377	958	346	4,818	3,660
75-79	5	22	64	144	643	923	1,694	834	335	268	4,932	3,172
80-84	13	28	69	502	915	1,089	975	337	259	262	4,449	2,688
85-89	15	30	185	685	902	728	307	211	228	218	3,509	2,366
90-94	8	27	179	451	376	94	74	87	109	78	1,483	2,087
95-99	9	32	91	145	34	2	17	19	16	9	374	1,867
100 & Over	4	7	18	2	0	0	1	4	8	5	49	1,435
Total Count	55	161	672	2,213	3,218	3,659	5,116	4,575	5,171	4,071	28,911	
Avg Monthly Benefit	\$ 1,135	\$ 1,133	\$ 1,492	\$ 2,011	\$ 2,062	\$ 2,610	\$ 3,463	\$ 3,380	\$ 4,392	\$ 4,372		\$ 3,306



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Los Angeles County Employees Retirement Association

**Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
General Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit	
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09			
Under 35	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
35-39	0	0	0	0	0	0	0	0	0	0	0	0	-
40-44	0	0	0	0	0	0	0	0	0	0	0	0	-
45-49	0	0	0	0	0	0	0	0	0	0	1	1	1,628
50-54	0	0	0	0	0	0	1	1	0	14	16	1,547	
55-59	0	0	0	0	1	2	2	1	13	23	42	2,629	
60-64	0	0	0	0	3	5	4	13	27	55	107	3,019	
65-69	0	0	0	0	1	4	6	17	49	31	108	3,044	
70-74	0	0	0	0	2	2	9	26	44	18	101	2,903	
75-79	0	0	0	0	1	12	15	33	13	12	86	2,142	
80-84	0	0	0	0	3	10	34	14	8	2	71	1,633	
85-89	0	0	0	0	1	15	9	2	2	3	32	1,360	
90-94	0	0	0	0	4	1	0	2	0	0	7	617	
95-99	0	0	0	0	0	0	0	0	0	0	0	-	
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-	
Total Count	0	0	0	0	16	51	80	109	156	159	571		
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ 1,024	\$ 988	\$ 1,480	\$ 1,998	\$ 2,858	\$ 3,654		\$ 2,504	



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Los Angeles County Employees Retirement Association

**Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
General Plan C**

Age	Retirement Year										Total Count	Average Monthly Benefit	
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09			
Under 35	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
35-39	0	0	0	0	0	0	0	0	0	0	0	0	-
40-44	0	0	0	0	0	0	0	0	0	0	0	0	-
45-49	0	0	0	0	0	0	0	0	0	1	0	1	3,657
50-54	0	0	0	0	1	2	1	1	1	0	7	12	1,082
55-59	0	0	0	1	2	3	2	3	10	16	37	37	2,043
60-64	0	0	0	0	3	2	1	6	19	23	54	54	2,092
65-69	0	0	0	0	0	3	10	9	20	27	69	69	2,166
70-74	0	0	0	0	0	7	12	15	30	11	75	75	2,046
75-79	0	0	0	0	1	7	10	20	14	7	59	59	1,941
80-84	0	0	0	0	3	7	20	4	5	5	44	44	1,168
85-89	0	0	0	0	2	7	6	1	1	3	20	20	1,317
90-94	0	0	0	0	0	1	1	0	1	0	3	3	930
95-99	0	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	0	-
Total Count	0	0	0	1	12	39	63	59	101	99	374		
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ 1,472	\$ 899	\$ 846	\$ 1,192	\$ 1,690	\$ 2,322	\$ 2,510		\$	1,880



This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

Los Angeles County Employees Retirement Association

**Exhibit C-5d: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
General Plan D**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	0	0	1	3	10	16	30	\$ 926
35-39	0	0	0	0	0	0	1	3	14	12	30	1,538
40-44	0	0	0	0	0	0	3	5	27	26	61	1,836
45-49	0	0	0	0	0	0	10	36	52	44	142	1,737
50-54	0	0	0	0	2	7	25	41	61	306	442	1,554
55-59	0	0	0	1	4	16	30	55	240	454	800	1,722
60-64	0	0	0	0	2	16	37	176	317	644	1,192	2,097
65-69	0	0	0	0	5	14	63	179	377	754	1,392	2,307
70-74	0	0	0	0	4	21	62	181	420	375	1,063	1,916
75-79	0	0	0	0	3	19	62	227	222	119	652	1,712
80-84	0	0	0	0	7	13	79	110	46	46	301	1,434
85-89	0	0	0	0	4	17	37	21	13	10	102	1,199
90-94	0	0	0	0	1	2	7	2	3	3	18	1,103
95-99	0	0	0	0	0	0	1	0	0	0	1	1,089
100 & Over	0	0	0	0	0	0	0	0	1	1	2	388
Total Count	0	0	0	1	32	125	418	1,039	1,803	2,810	6,228	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ 2,293	\$ 1,157	\$ 1,240	\$ 1,320	\$ 1,554	\$ 1,863	\$ 2,213		\$ 1,917



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Los Angeles County Employees Retirement Association

**Exhibit C-5e: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
General Plan E**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	0	0	0	2	1	10	13	\$ 356
35-39	0	0	0	0	0	0	0	0	0	1	1	868
40-44	0	0	0	0	0	0	0	0	2	8	10	752
45-49	0	0	0	0	0	0	0	0	2	3	5	1,147
50-54	0	0	0	0	0	0	0	0	3	10	13	663
55-59	0	0	0	0	0	0	0	5	8	567	580	620
60-64	0	0	0	0	0	0	2	7	501	752	1,262	1,021
65-69	0	0	0	0	0	0	5	304	475	1,107	1,891	1,727
70-74	0	0	0	0	0	1	119	263	671	414	1,468	1,569
75-79	0	0	0	0	1	46	121	337	237	135	877	1,214
80-84	0	0	0	0	4	32	133	124	71	59	423	1,089
85-89	0	0	0	0	4	44	53	31	22	11	165	717
90-94	0	0	0	0	3	3	10	5	1	3	25	745
95-99	0	0	0	0	0	1	0	0	0	1	2	239
100 & Over	0	0	0	0	0	0	0	0	3	3	6	423
Total Count	0	0	0	0	12	127	443	1,078	1,997	3,084	6,741	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ 381	\$ 371	\$ 697	\$ 882	\$ 1,312	\$ 1,615		\$ 1,322



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Los Angeles County Employees Retirement Association

**Exhibit C-5f: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
Safety Plan A**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	2	0	0	2	2	1	7	\$ 2,046
35-39	0	0	0	0	0	0	0	0	0	0	0	-
40-44	0	0	0	0	0	0	1	1	3	0	5	4,786
45-49	0	0	0	0	0	0	2	0	2	0	4	3,686
50-54	0	0	0	1	4	2	3	7	7	11	35	4,468
55-59	0	0	0	10	35	37	37	72	89	393	673	6,871
60-64	0	0	7	79	135	98	118	184	929	368	1,918	6,713
65-69	0	3	20	84	135	135	215	730	471	54	1,847	6,265
70-74	1	14	26	75	123	152	496	289	55	54	1,285	5,620
75-79	11	27	45	79	201	320	211	38	60	70	1,062	4,906
80-84	16	27	45	176	300	123	23	32	61	56	859	4,425
85-89	15	14	59	140	54	4	10	29	33	28	386	4,194
90-94	9	17	30	14	0	0	6	7	16	6	105	3,228
95-99	3	15	7	0	0	0	1	1	3	1	31	3,183
100 & Over	2	0	0	0	0	0	0	0	0	0	2	1,042
Total Count	57	117	239	658	989	871	1,123	1,392	1,731	1,042	8,219	
Avg Monthly Benefit	\$ 1,545	\$ 2,091	\$ 3,014	\$ 3,487	\$ 3,832	\$ 4,865	\$ 5,856	\$ 6,480	\$ 7,376	\$ 7,517		\$ 5,788



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Los Angeles County Employees Retirement Association

**Exhibit C-5g: Distribution of Retired Members by Age and Retirement Year as of June 30, 2009
Safety Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1964	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09		
Under 35	0	0	0	0	0	0	1	3	9	24	37	\$ 2,112
35-39	0	0	0	0	0	0	0	3	45	37	85	3,092
40-44	0	0	0	0	0	0	20	80	96	63	259	3,095
45-49	0	0	0	0	0	11	68	122	115	87	403	3,090
50-54	0	0	0	0	10	37	90	87	97	150	471	3,319
55-59	0	0	0	0	9	26	45	36	69	270	455	5,254
60-64	0	0	0	0	9	12	19	29	63	114	246	4,661
65-69	0	0	0	0	1	1	7	6	29	7	51	3,295
70-74	0	0	0	0	0	1	4	2	1	0	8	2,625
75-79	0	0	0	0	1	1	4	0	2	1	9	1,218
80-84	0	0	0	0	1	0	0	0	0	0	1	1,068
85-89	0	0	0	0	0	0	0	0	0	0	0	-
90-94	0	0	0	0	0	0	0	0	0	0	0	-
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
Total Count	0	0	0	0	31	89	258	368	526	753	2,025	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ 1,913	\$ 2,115	\$ 2,793	\$ 3,040	\$ 3,367	\$ 5,089		\$ 3,797



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Los Angeles County Employees Retirement Association

Appendix D: Member Contribution Rates



This section illustrates the member normal contribution rates and the normal plus cost-of-living contribution rates by entry age.

Los Angeles County Employees Retirement Association

Exhibit D-1: Normal Member Contribution Rates

Entry Age	General				Safety	
	Plan A	Plan B	Plan C	Plan D	Plan A	Plan B
16	2.41%	4.82%	4.08%	4.08%	3.59%	7.17%
17	2.46%	4.92%	4.16%	4.16%	3.59%	7.17%
18	2.51%	5.02%	4.25%	4.25%	3.59%	7.17%
19	2.56%	5.12%	4.34%	4.34%	3.65%	7.31%
20	2.62%	5.23%	4.43%	4.43%	3.72%	7.44%
21	2.67%	5.34%	4.52%	4.52%	3.79%	7.58%
22	2.72%	5.45%	4.62%	4.62%	3.86%	7.72%
23	2.78%	5.56%	4.71%	4.71%	3.93%	7.87%
24	2.84%	5.68%	4.81%	4.81%	4.01%	8.01%
25	2.90%	5.79%	4.91%	4.91%	4.08%	8.16%
26	2.96%	5.91%	5.01%	5.01%	4.16%	8.32%
27	3.02%	6.03%	5.11%	5.11%	4.24%	8.47%
28	3.08%	6.16%	5.22%	5.22%	4.32%	8.63%
29	3.14%	6.29%	5.33%	5.33%	4.40%	8.80%
30	3.21%	6.42%	5.44%	5.44%	4.48%	8.97%
31	3.28%	6.55%	5.55%	5.55%	4.57%	9.14%
32	3.34%	6.69%	5.66%	5.66%	4.66%	9.32%
33	3.41%	6.83%	5.78%	5.78%	4.75%	9.51%
34	3.49%	6.97%	5.90%	5.90%	4.85%	9.70%
35	3.56%	7.12%	6.02%	6.02%	4.95%	9.89%
36	3.64%	7.28%	6.15%	6.15%	5.04%	10.09%
37	3.72%	7.43%	6.28%	6.28%	5.14%	10.28%
38	3.79%	7.59%	6.41%	6.41%	5.23%	10.46%
39	3.87%	7.75%	6.55%	6.55%	5.32%	10.64%
40	3.95%	7.90%	6.69%	6.69%	5.41%	10.82%
41	4.03%	8.06%	6.83%	6.83%	5.50%	10.99%
42	4.10%	8.21%	6.97%	6.97%	5.58%	11.15%
43	4.18%	8.36%	7.12%	7.12%	5.65%	11.31%
44	4.25%	8.50%	7.27%	7.27%	5.72%	11.44%
45	4.32%	8.64%	7.42%	7.42%	5.77%	11.54%
46	4.39%	8.78%	7.56%	7.56%	5.80%	11.59%
47	4.45%	8.91%	7.70%	7.70%	5.80%	11.59%
48	4.52%	9.03%	7.84%	7.84%	5.80%	11.59%
49	4.57%	9.14%	7.98%	7.98%	5.80%	11.59%
50	4.61%	9.21%	8.11%	8.11%	5.80%	11.59%
51	4.63%	9.26%	8.24%	8.24%	5.80%	11.59%
52	4.63%	9.26%	8.36%	8.36%	5.80%	11.59%
53	4.63%	9.26%	8.47%	8.47%	5.80%	11.59%
54	4.63%	9.26%	8.57%	8.57%	5.80%	11.59%
55	4.63%	9.26%	8.65%	8.65%	5.80%	11.59%
56	4.63%	9.26%	8.69%	8.69%	5.80%	11.59%
57	4.63%	9.26%	8.69%	8.69%	5.80%	11.59%
58	4.63%	9.26%	8.69%	8.69%	5.80%	11.59%
59	4.63%	9.26%	8.69%	8.69%	5.80%	11.59%
60	4.63%	9.26%	8.69%	8.69%	5.80%	11.59%

For general members entering after age 60, the rate equals the rate at age 60. Likewise, for safety members entering after age 50, the rate equals the rate at age 50.



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Los Angeles County Employees Retirement Association

Exhibit D-2: Normal Plus Cost-of-Living Member Contribution Rates

Entry Age	General				Safety	
	Plan A	Plan B	Plan C	Plan D	Plan A	Plan B
16	4.33%	5.89%	5.06%	4.98%	7.23%	9.42%
17	4.42%	6.02%	5.16%	5.07%	7.23%	9.42%
18	4.51%	6.14%	5.27%	5.18%	7.23%	9.42%
19	4.60%	6.26%	5.38%	5.29%	7.35%	9.61%
20	4.70%	6.40%	5.49%	5.40%	7.49%	9.78%
21	4.79%	6.53%	5.60%	5.51%	7.63%	9.96%
22	4.88%	6.66%	5.73%	5.64%	7.77%	10.14%
23	4.99%	6.80%	5.84%	5.74%	7.91%	10.34%
24	5.10%	6.95%	5.96%	5.87%	8.07%	10.53%
25	5.21%	7.08%	6.09%	5.99%	8.21%	10.72%
26	5.32%	7.23%	6.21%	6.11%	8.37%	10.93%
27	5.42%	7.37%	6.33%	6.23%	8.53%	11.13%
28	5.53%	7.53%	6.47%	6.37%	8.69%	11.34%
29	5.64%	7.69%	6.61%	6.50%	8.86%	11.56%
30	5.76%	7.85%	6.74%	6.64%	9.02%	11.79%
31	5.89%	8.01%	6.88%	6.77%	9.20%	12.01%
32	6.00%	8.18%	7.02%	6.90%	9.38%	12.25%
33	6.12%	8.35%	7.17%	7.05%	9.56%	12.50%
34	6.27%	8.52%	7.31%	7.20%	9.76%	12.75%
35	6.39%	8.71%	7.46%	7.34%	9.96%	13.00%
36	6.54%	8.90%	7.62%	7.50%	10.14%	13.26%
37	6.68%	9.09%	7.79%	7.66%	10.35%	13.51%
38	6.81%	9.28%	7.95%	7.82%	10.53%	13.74%
39	6.95%	9.48%	8.12%	7.99%	10.71%	13.98%
40	7.09%	9.66%	8.29%	8.16%	10.89%	14.22%
41	7.24%	9.86%	8.47%	8.33%	11.07%	14.44%
42	7.36%	10.04%	8.64%	8.50%	11.23%	14.65%
43	7.51%	10.22%	8.83%	8.68%	11.37%	14.86%
44	7.63%	10.39%	9.01%	8.87%	11.51%	15.03%
45	7.76%	10.57%	9.20%	9.05%	11.61%	15.16%
46	7.88%	10.74%	9.37%	9.22%	11.67%	15.23%
47	7.99%	10.90%	9.55%	9.39%	11.67%	15.23%
48	8.12%	11.04%	9.72%	9.56%	11.67%	15.23%
49	8.21%	11.18%	9.89%	9.73%	11.67%	15.23%
50	8.28%	11.26%	10.05%	9.89%	11.67%	15.23%
51	8.31%	11.32%	10.22%	10.05%	11.67%	15.23%
52	8.31%	11.32%	10.36%	10.20%	11.67%	15.23%
53	8.31%	11.32%	10.50%	10.33%	11.67%	15.23%
54	8.31%	11.32%	10.62%	10.45%	11.67%	15.23%
55	8.31%	11.32%	10.72%	10.55%	11.67%	15.23%
56	8.31%	11.32%	10.77%	10.60%	11.67%	15.23%
57	8.31%	11.32%	10.77%	10.60%	11.67%	15.23%
58	8.31%	11.32%	10.77%	10.60%	11.67%	15.23%
59	8.31%	11.32%	10.77%	10.60%	11.67%	15.23%
60	8.31%	11.32%	10.77%	10.60%	11.67%	15.23%

For general members entering after age 60, the rate equals the rate at age 60. Likewise, for safety members entering after age 50, the rate equals the rate at age 50.



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Los Angeles County Employees Retirement Association

Appendix E: Historical Information



This section presents historical statistical information on LACERA's membership and the calculated contribution rates.

Los Angeles County Employees Retirement Association

Exhibit E-1: Active Membership Data

General Members						Safety Members					Total Members				
Valuation Date (June 30)	Number	Annual Salary (in millions)	Average Age	Average Credited Service	Average Monthly Salary	Number	Annual Salary (in millions)	Average Age	Average Credited Service	Average Monthly Salary	Number	Annual Salary (in millions)	Average Age	Average Credited Service	Average Monthly Salary
1998	65,782	\$ 2,837	44.7	12.9	\$ 3,594	10,947	\$ 725	39.9	13.8	\$ 5,519	76,729	\$ 3,562	44.0	13.0	\$ 3,870
1999	68,652	\$ 3,105	44.6	12.7	\$ 3,769	11,024	\$ 753	40.0	13.7	\$ 5,696	79,676	\$ 3,858	43.9	12.8	\$ 4,035
2000	71,940	\$ 3,353	44.4	12.5	\$ 3,884	11,264	\$ 790	39.8	13.8	\$ 5,849	83,204	\$ 4,143	43.8	12.6	\$ 4,150
2001	75,048	\$ 3,608	44.5	12.3	\$ 4,006	12,021	\$ 860	39.6	13.0	\$ 5,967	87,069	\$ 4,468	43.9	12.4	\$ 4,277
2002	77,062	\$ 3,833	44.7	12.3	\$ 4,145	12,190	\$ 894	39.6	13.8	\$ 6,115	89,252	\$ 4,727	44.0	12.5	\$ 4,414
2003	75,995	\$ 3,954	45.2	12.7	\$ 4,336	11,765	\$ 899	40.1	13.7	\$ 6,370	87,760	\$ 4,853	44.5	12.9	\$ 4,609
2004	74,826	\$ 3,967	45.6	13.1	\$ 4,418	11,409	\$ 885	40.6	14.7	\$ 6,467	86,235	\$ 4,852	44.9	13.3	\$ 4,689
2005	75,167	\$ 4,046	45.8	13.2	\$ 4,486	11,217	\$ 905	41.0	14.9	\$ 6,722	86,384	\$ 4,951	45.2	13.4	\$ 4,777
2006	77,167	\$ 4,267	45.7	13.0	\$ 4,608	11,464	\$ 969	41.2	15.0	\$ 7,047	88,631	\$ 5,236	45.1	13.3	\$ 4,924
2007	79,829	\$ 4,673	45.7	12.8	\$ 4,878	12,267	\$ 1,104	40.8	14.4	\$ 7,499	92,096	\$ 5,777	45.1	13.0	\$ 5,227
2008	81,664	\$ 5,017	45.8	12.8	\$ 5,119	12,828	\$ 1,187	40.5	13.7	\$ 7,714	94,492	\$ 6,204	45.1	12.9	\$ 5,471
2009	82,878	\$ 5,348	46.1	13.1	\$ 5,377	12,910	\$ 1,240	40.8	14.0	\$ 8,002	95,788	\$ 6,588	45.4	13.2	\$ 5,731



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**Los Angeles County Employees
Retirement Association**

Exhibit E-2: Retired Membership Data

General Members					Safety Members				Total Members			
Valuation Date (June 30)	Number	Annual Allowance (in millions)	Average Age	Average Monthly Benefit	Number	Annual Allowance (in millions)	Average Age	Average Monthly Benefit	Number	Annual Allowance (in millions)	Average Age	Average Monthly Benefit
1998	35,462	\$ 692	71.1	\$ 1,626	7,425	\$ 267	62.5	\$ 3,001	42,887	\$ 959	69.6	\$ 1,864
1999	35,837	\$ 725	71.4	\$ 1,686	7,674	\$ 291	63.1	\$ 3,166	43,511	\$ 1,016	70.0	\$ 1,947
2000	36,596	\$ 780	71.4	\$ 1,778	8,032	\$ 324	63.1	\$ 3,358	44,628	\$ 1,104	69.9	\$ 2,062
2001	37,077	\$ 890	71.6	\$ 2,001	8,319	\$ 382	63.4	\$ 3,828	45,396	\$ 1,272	70.1	\$ 2,336
2002	37,618	\$ 914	71.8	\$ 2,025	8,624	\$ 403	63.7	\$ 3,892	46,242	\$ 1,317	70.3	\$ 2,374
2003	38,283	\$ 984	71.9	\$ 2,142	8,949	\$ 443	63.9	\$ 4,128	47,232	\$ 1,427	70.4	\$ 2,518
2004	39,097	\$ 1,056	72.0	\$ 2,250	9,235	\$ 478	64.2	\$ 4,318	48,332	\$ 1,534	70.5	\$ 2,645
2005	40,251	\$ 1,138	72.1	\$ 2,355	9,518	\$ 514	64.6	\$ 4,504	49,769	\$ 1,652	70.7	\$ 2,766
2006	41,309	\$ 1,224	72.2	\$ 2,469	9,683	\$ 549	65.0	\$ 4,728	50,992	\$ 1,773	70.8	\$ 2,898
2007	41,584	\$ 1,280	72.2	\$ 2,565	9,808	\$ 578	65.4	\$ 4,914	51,392	\$ 1,858	70.9	\$ 3,013
2008	42,298	\$ 1,356	72.4	\$ 2,671	10,052	\$ 623	65.8	\$ 5,167	52,350	\$ 1,979	71.1	\$ 3,150
2009	42,825	\$ 1,423	72.6	\$ 2,768	10,244	\$ 663	66.3	\$ 5,394	53,069	\$ 2,086	71.4	\$ 3,275



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Los Angeles County Employees Retirement Association

Exhibit E-3: Contribution Rates

General Members						Safety Members					Total All Members				
Valuation Date (June 30)	Calculated Normal Cost	Member Contributions	Net County Normal Cost	UAAL Rate	Total Annual Contribution	Calculated Normal Cost	Member Contributions	Net County Normal Cost	UAAL Rate	Total Annual Contribution	Calculated Normal Cost	Member Contributions	Net County Normal Cost	UAAL Rate	Total Annual Contribution
1998	10.27%	3.06%	7.21%	0.00%	7.21%	25.00%	8.70%	16.30%	0.00%	16.30%	13.27%	4.21%	9.06%	0.00%	9.06%
1999	10.98%	3.20%	7.78%	0.00%	7.78%	25.41%	9.12%	16.29%	0.00%	16.29%	13.81%	4.36%	9.45%	0.00%	9.45%
2000	10.91%	3.33%	7.58%	0.00%	7.58%	25.22%	9.44%	15.78%	0.00%	15.78%	13.66%	4.51%	9.15%	0.00%	9.15%
2001	11.27%	3.45%	7.82%	0.00%	7.82%	25.47%	9.27%	16.20%	0.00%	16.20%	14.01%	4.57%	9.44%	0.00%	9.44%
2002	12.04%	3.53%	8.51%	0.21%	8.72%	25.92%	9.37%	16.55%	0.21%	16.76%	14.66%	4.63%	10.03%	0.21%	10.24%
2003	12.25%	3.72%	8.53%	4.66%	13.19%	25.89%	9.55%	16.34%	4.66%	21.00%	14.80%	4.81%	9.99%	4.66%	14.65%
2004	12.20%	3.82%	8.38%	6.41%	14.79%	24.61%	9.61%	15.00%	6.41%	21.41%	14.48%	4.88%	9.60%	6.41%	16.01%
2005	12.22%	3.91%	8.31%	5.33%	13.64%	24.69%	9.68%	15.01%	5.33%	20.34%	14.50%	4.97%	9.53%	5.33%	14.86%
2006	12.22%	4.07%	8.15%	3.49%	11.64%	24.70%	9.70%	15.00%	3.49%	18.49%	14.54%	5.12%	9.42%	3.49%	12.91%
2007	13.15%	4.38%	8.77%	2.24%	11.01%	26.04%	10.18%	15.86%	2.24%	18.10%	15.67%	5.51%	10.16%	2.24%	12.40%
2008	13.18%	4.47%	8.71%	1.99%	10.70%	26.01%	10.22%	15.79%	1.99%	17.78%	15.68%	5.59%	10.09%	1.99%	12.08%
2009	13.29%	4.57%	8.72%	4.12%	12.84%	26.08%	10.21%	15.87%	4.12%	19.99%	15.75%	5.65%	10.10%	4.12%	14.22%



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Los Angeles County Employees Retirement Association

Appendix F: Glossary



The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to LACERA and include terms used exclusively by LACERA. Defined terms are capitalized throughout this Appendix.

Accrued Benefit	The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.
Actuarial Accrued Liability	That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.
Actuarial Gain (Loss)	A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.
Actuarial Present Value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.
Actuarial Value of Assets	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
Actuarially Equivalent	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
Amortization Payment	That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Contingency Reserve	Reserves accumulated for future earning deficiencies, investment losses, and other contingencies. Additions include investment income and other revenues; deductions include investment expense, administrative expense, interest allocated to other reserves, funding the STAR Reserve, and distributions to the Contribution Credit Reserve. The Contingency Reserve is used to satisfy the California Government Code requirement for (31592 and 31592.2) LACERA to reserve 1% of the assets against earning deficiencies, investment losses, and other contingencies.
County Contribution Credit Reserve	The accumulated balance of the County's proportionate share of excess earnings as stipulated in Retirement System Funding Agreement between LACERA and the County. Additions include distributions from excess earning during the fiscal years ending 1994 through 1998 and related earnings. Deductions include payments, as the County authorizes, for future employer contributions due LACERA and for funding a portion of the Retiree Healthcare Program under the provisions of Internal Revenue Code 401(h).
Employer Reserve	The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.
Entry Age Actuarial Cost Method	A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.
Funded Ratio	A measurement of the funded status of the system. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.
Funding Goal	The Funding Goal is the funded status the Board of Investments would like LACERA to achieve. The main goal is to provide benefit security for its members as well as to achieve and maintain stable employer contributions that are as low as possible. A Funded Ratio equal to 100% is the Funding Goal.
Member Reserve	The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.

Non-Valuation Reserves	Reserves excluded from the calculation of contribution rates, including the Contingency Reserve, the STAR reserve, the County Contribution Credit Reserve, and any other reserves specifically excluded by the Board of Investments.
Normal Cost	That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
Open Amortization Period	As discussed in the Actuarial Cost Method section of Appendix C, LACERA uses an open (often referred to as “rolling”) 30-year amortization period. That is, the amortization begins again or is recalculated at each valuation date. This is as opposed to a closed (or “fixed”) amortization period which is a specific number of years that is counted from one date and declines to zero with the passage of time.
Plan Year	A twelve-month period beginning July 1 and ending June 30.
Projected Benefits	Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
STAR Reserve	Reserves accumulated for the payment of cost-of-living benefits as defined in California Government Code Section 31874.3.
Supplemental Targeted Adjustment for Retirees (STAR) Benefits	Supplemental cost-of-living payments to retired members to restore purchasing power at a specified percentage level, as described in California Government Code Section 31874.3.
Surplus Funding	The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability. Standard actuarial terminology defines this as the “Funding Excess”. LACERA uses the term “Surplus Funding”.
Unfunded Actuarial Accrued Liability	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
Valuation Date	The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.
Valuation Reserves	All reserves excluding the Non-Valuation Reserves.