

---

---

**Los Angeles County Employees  
Retirement Association**

**ACTUARIAL VALUATION OF RETIREMENT BENEFITS  
June 30, 2010**

---

---



By

Karen I. Steffen

Fellow, Society of Actuaries  
Member, American Academy of Actuaries

and

Nick J. Collier

Associate, Society of Actuaries  
Member, American Academy of Actuaries



1301 Fifth Avenue  
Suite 3800  
Seattle, WA 98101-2605  
USA

Tel +1 206 624 7940  
Fax +1 206 623 3485

milliman.com

February 28, 2011

Board of Investments  
LACERA  
300 North Lake Avenue, Suite 820  
Pasadena, CA 91101-4199

Dear Members of the Board:

As requested, we have performed an actuarial valuation of retirement benefits for the Los Angeles County Employees Retirement Association (LACERA) as of June 30, 2010 to be used in determining the contribution rates effective July 1, 2011. 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, 2010, and LACERA's 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 2010 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.

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. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations which, in combination, represent a reasonable estimate of anticipated experience under LACERA.

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. The Board of Investments has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A of this report.

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.



Actuarial computations presented in this report are for purposes of determining the recommended funding amounts of LACERA. Actuarial computations under GASB Statements No. 25 and 27 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 Statements No. 25 and 27. 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 is prepared solely for the internal business use of LACERA. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) LACERA may provide a copy of Milliman's work, in its entirety, to LACERA's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit LACERA.
- (b) LACERA may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

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,

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

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

**Los Angeles County Employees  
Retirement Association**

**Table of Contents**

	<b>Page</b>
<b>Section 1: Summary of the Findings .....</b>	<b>1</b>
Exhibit 1: Summary of Significant Valuation Results.....	10
<b>Section 2: Scope of the Report .....</b>	<b>11</b>
<b>Section 3: Assets.....</b>	<b>13</b>
Exhibit 2: Statement of Plan Net Assets For Years Ended June 30, 2010 and 2009.....	17
Exhibit 3: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2010 and 2009.....	18
Exhibit 4: Allocation of Assets by Accounting Reserve Amounts .....	19
Exhibit 5: Five-Year Smoothing of Gains and Losses on Market Value.....	20
Exhibit 6: Allocation of Valuation and Non-Valuation Assets .....	21
<b>Section 4: Actuarial Liabilities.....</b>	<b>23</b>
Exhibit 7: Actuarial Balance Sheet – June 30, 2010 .....	24
Exhibit 8a: Analysis of Change in Unfunded Actuarial Accrued Liability .....	30
Exhibit 8b: History of Changes in Unfunded Actuarial Accrued Liability .....	31
<b>Section 5: Member Contributions .....</b>	<b>33</b>
Exhibit 9: Sample Member Contribution Rates .....	35
<b>Section 6: Employer Contributions.....</b>	<b>37</b>
Exhibit 10: Calculated Normal Cost Contribution Rates – June 30, 2010 .....	39
Exhibit 11: Total Employer Contributions .....	40
Exhibit 12: Unfunded Actuarial Accrued Liability Detail.....	41
<b>Section 7: Accounting Information .....</b>	<b>43</b>
Exhibit 13: Schedule of Funding Progress .....	44
Exhibit 14: Schedule of Contributions from the Employer .....	45
Exhibit 15: Solvency Test .....	46
<b>Section 8: Supplemental Information .....</b>	<b>47</b>
Exhibit 16a: Cash Flow History and Projections – Dollars .....	48
Exhibit 16b: Cash Flow History and Projections – Charts .....	49

**Los Angeles County Employees  
Retirement Association**

**Table of Contents  
(continued)**

	<b>Page</b>
<b>Appendices</b>	
<b>Appendix A: Actuarial Procedures and Assumptions .....</b>	<b>A-1</b>
<b>Appendix B: Summary of Plan Provisions.....</b>	<b>B-1</b>
<b>Appendix C: Valuation Data and Schedules .....</b>	<b>C-1</b>
<b>Appendix D: Member Contribution Rates .....</b>	<b>D-1</b>
<b>Appendix E: Historical Information .....</b>	<b>E-1</b>
<b>Appendix F: Glossary .....</b>	<b>F-1</b>



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

## Section 1: Summary of the Findings



### Overview

### 2010 Valuation Results

	June 30, 2010	June 30, 2009
Required Employer Contribution Rate	16.31%	14.22%
Funded Ratio	83.3%	88.9%

We are pleased to present the results of the June 30, 2010 actuarial valuation. This valuation determines the required contribution rates payable starting July 1, 2011. Several key points are summarized as follows:

- **Investment Returns:** For the fiscal year ending in 2010, the fund returned 11.6% on a market basis, a rate of return greater than the assumed rate of 7.75%. The strong investment return for the current year was more than offset by large deferred asset losses from prior years that were partially recognized in the current valuation under the actuarial asset smoothing method. In total, there was a \$2.88 billion loss on actuarial assets.

Note that currently a \$6.2 billion net investment loss is being deferred. This is mainly due to the fact that the asset-smoothing method has recognized only two-fifths of the very large asset loss that occurred in the fiscal year ending June 30, 2009. The remaining recognition of this deferred loss will be spread over the next three valuations under the asset-smoothing method.

- **Employer Contribution Rates:** The Employer Normal Cost rate decreased from 10.10% to 9.84%; this change was due mainly to the adoption of new demographic assumptions with the 2010 Investigation of Experience. The Employer's required contribution rate to finance the Unfunded Actuarial Accrued Liability (UAAL) over 30 years increased from 4.12% to 6.47%. Additionally, new member contribution rates are being recommended based on the new demographic assumptions adopted with the 2010 Investigation of Experience.

The combined result is an increase in the total required Employer contribution rate from the prior valuation of 2.09% (from 14.22% to 16.31% of payroll). The most significant factor causing this increase was the recognition of investment losses, which resulted in a 2.29% increase. All other factors had a relatively minor impact, causing a 0.20% decrease in total.

Overview  
(continued)

- **Member Contribution Rates:** New member contribution rates are being recommended based on the new demographic assumptions adopted with the 2010 Investigation of Experience. As shown in Section 5, we are recommending small increases in the member rates for General members and small decreases for Safety members.
- **Funding:** The Funded Ratio decreased from 88.9% to 83.3%. The recognition of significant deferred investment losses caused a 6.1% decrease in the Funded Ratio. All other factors had a small impact, causing a 0.5% increase, which partially offset the asset loss.
- **2010 Investigation of Experience:** An Investigation of Experience was performed for the 3-year period ending June 30, 2010, and the Board adopted the demographic assumptions as recommended in that report. No changes were made to the economic assumptions. The June 30, 2010 actuarial valuation is the first to reflect these new assumptions. These changes resulted in a 0.27% decrease in the Employer contribution rate. A full listing of valuation assumptions, as updated with the 2010 Investigation of Experience, is contained in Appendix A of this report.

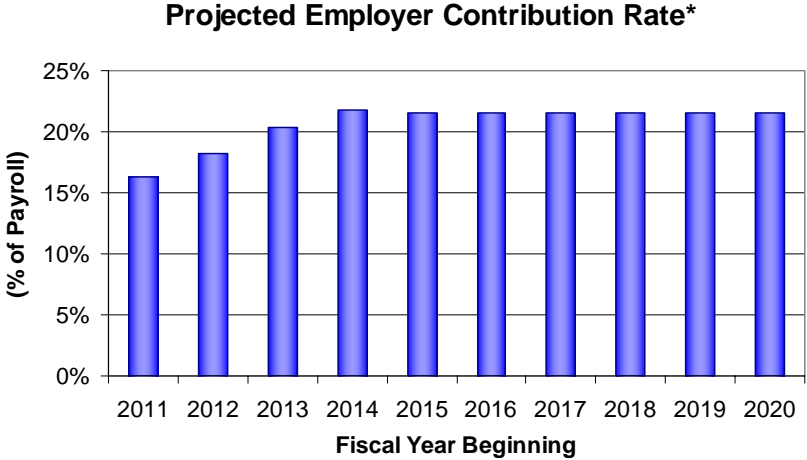
Required  
Contribution Rate

In accordance with the LACERA's Funding Policy, the required Employer contribution rate is 16.31% of payroll. This is equal to the payment of the Employer Normal Cost rate plus a layered 30-year amortization of the UAAL. It should be noted that the 16.31% is a weighted average for all LACERA plans. The actual percent of payroll to be contributed by the Employer varies by plan as shown in Exhibit 11.

The new required rate is effective for the fiscal year beginning July 1, 2011. Based on asset losses that are currently being deferred, it is expected that the Employer contribution rate will increase over the next several years if all actuarial assumptions are met. We have performed a 10-year projection of the Employer contribution rate, which assumes all actuarial assumptions are met, and reflects the projected recognition of existing deferred asset losses.

**Required  
Contribution Rate  
(continued)**

This projection is shown in the chart below.



*\*Projections assume that actuarial assumptions are met after June 30, 2010, and reflect the scheduled recognition of asset gains and losses currently being deferred.*

**Analysis of Change**

The following chart shows that the recognition of prior asset losses was by far the most significant factor affecting the Employer contribution rate and the funded status.

Sources of Change	Employer Contribution Rate	Funded Ratio
<b>June 30, 2009 Actuarial Valuation</b>	<b>14.22%</b>	<b>88.9%</b>
Expected Year-to-Year Change	0.00%	0.0%
Recognized Asset (Gain)/Loss		
From Current Year	-0.22%	0.6%
From Prior Years	2.51%	-6.7%
Liability Gain/Loss		
Salary / Payroll Variation	-0.10%	0.6%
Retiree COLAs < Expected	-0.02%	0.1%
Assumption Changes	-0.27%	-0.1%
Other	0.19%	-0.1%
Combined Liability (Gain)/Loss	-0.20%	0.5%
<b>Total Change</b>	<b>2.09%</b>	<b>-5.6%</b>
<b>June 30, 2010 Actuarial Valuation</b>	<b>16.31%</b>	<b>83.3%</b>



**Summary of the Findings  
(continued)**

**Funding Progress**

Based on the 2009 valuation, the expected UAAL amount as of June 30, 2010 was \$5.26 billion. The actual UAAL for the fiscal year ending June 30, 2010 is \$7.81 billion. The increase was primarily due to a net loss on Valuation Assets of \$2.88 billion.

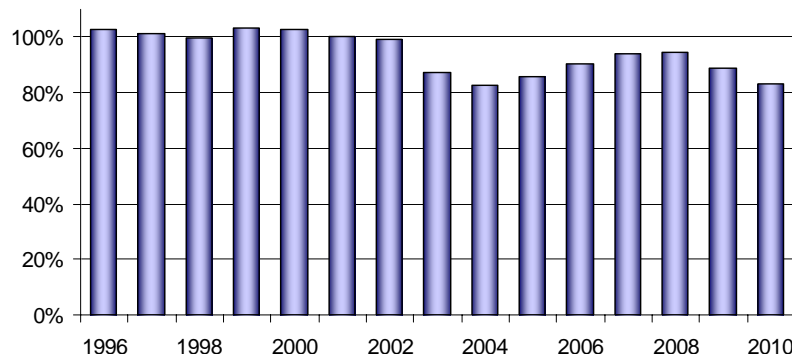
One measure of the funding adequacy of the Plan is the Funded Ratio, which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL), for all LACERA plans combined. LACERA's Funded Ratio was 94.5% as of June 30, 2008. As shown in the graph below, the Funded Ratio has decreased over the last two years to 83.3% due to the recognition of significant deferred asset losses.

On June 30, 2010, the total Market Value of the fund was \$33.4 billion. The Actuarial Value was \$39.6 billion and was split between \$0.8 billion of Non-Valuation Assets and \$38.8 billion of Valuation Assets. The Valuation Assets are equal to 83.3% of the \$46.6 billion AAL. The Actuarial Value of Assets is 119% 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		
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
2010	33.4	0.8	38.8	46.6	83.3

**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 3.8%; 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 0.5% for the prior year.

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 \$6.2 billion in asset losses. As these losses are recognized over the next three valuations, it is expected there will be significant increases in the required Employer contribution rate (unless there are large offsetting asset gains in the near future).

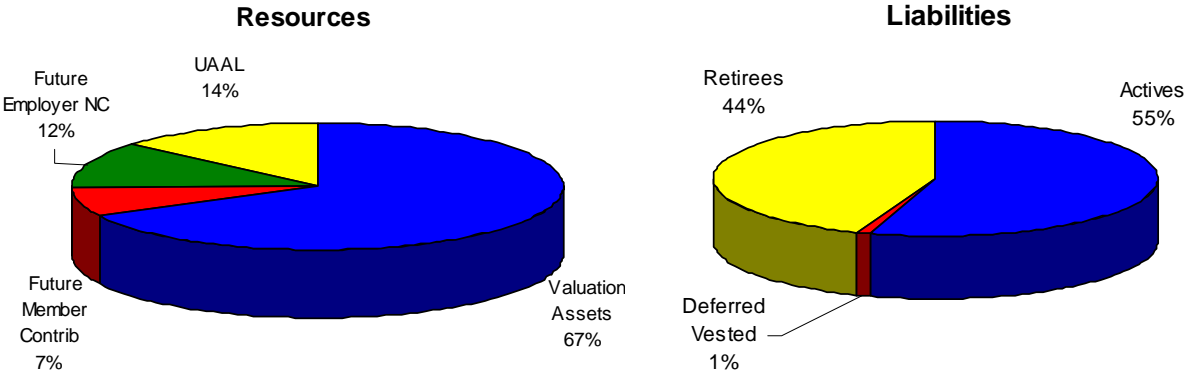
The potential future impact of the recognition of these deferred losses is illustrated in the chart on page 3.

**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 Employer 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 2010 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, first reflected in the June 30, 2009 actuarial valuation, are as follows:

- **Asset Smoothing Period:** Asset gains and losses are smoothed over a five-year period.

**Funding Policy  
(continued)**

- Amortization Period:** The new funding policy utilizes what is referred to as a “layered” amortization method. Under the policy, the 2009 UAAL amount is amortized over a closed 30-year period. Future gains and losses on the UAAL are amortized over new closed 30-year periods. The Employer contribution rate is not allowed to be less than the rate if LACERA amortized the total UAAL over a 30-year period. The June 30, 2010 actuarial valuation represents the first valuation for which multiple “layers” exist, since there has now been a year of gain/loss on the original 2009 UAAL amount. We have added Exhibit 12 to this report, which illustrates in detail the calculation of the total UAAL rate for the fiscal year beginning in 2011.

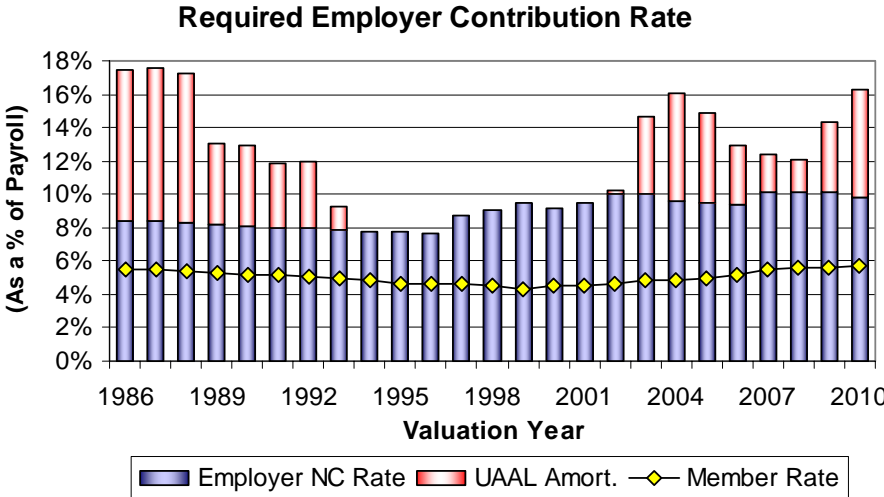
If LACERA moves to a negative UAAL position, the “surplus” amount will be amortized over an open 30-year period.

- 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 Employer contribution rate would increase by 0.52% to 16.83% and the Funded Ratio would decrease by 1.4% to 81.9%.

**Employer  
Contribution Rates**

Based on the results of the valuation, the required Employer contribution rate will increase for the fiscal year beginning in 2011 to a rate of 16.31% of pay. A historical perspective of the Employer contribution rates is shown in the following graph.

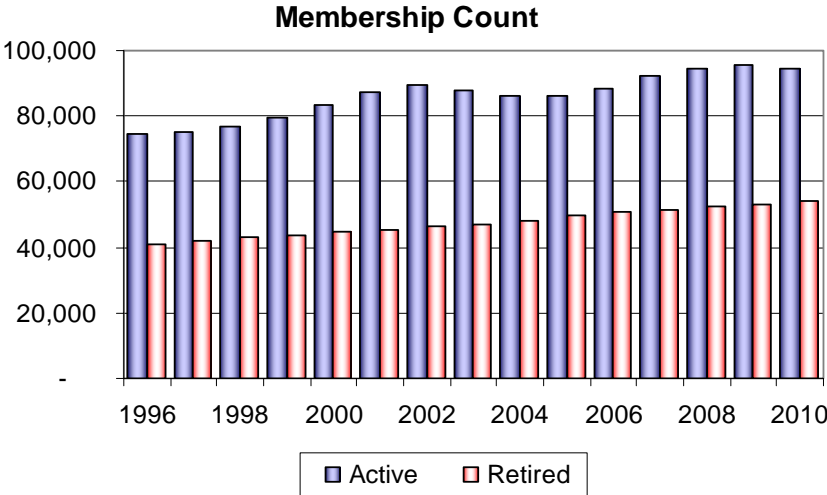


**Member Rates**

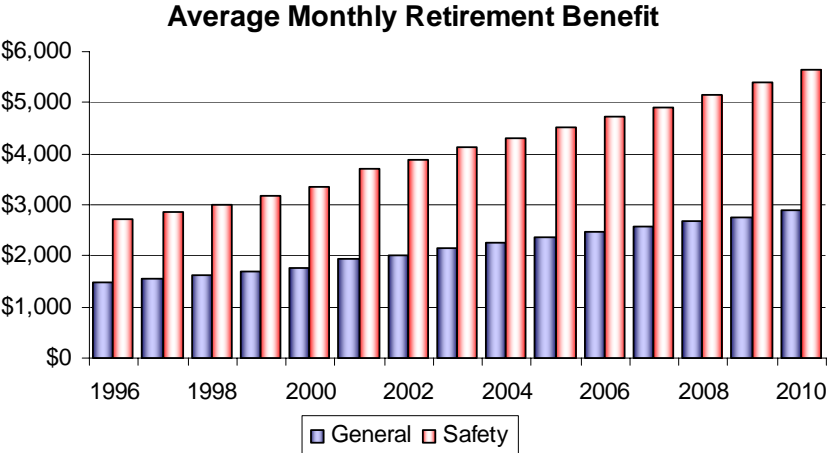
Since this is a triennial valuation year in which an Investigation of Experience was performed, we have recommended changes to the member contribution rates to reflect the new demographic assumptions adopted by the Board. Member rates for all plans are discussed in Section 5, and they are shown in detail in Appendix D.

**Member Information**

Payroll has increased slightly since 2009, although active membership has declined. As of June 30, 2010, the annualized payroll is \$6.73 billion for 94,410 active members. This increase is a result of a 2.5% increase in average pay and a 1.4% decrease in active members.



Retired member counts and average retirement benefit amounts continue to increase steadily. For 2010, there were 54,196 retired members and beneficiaries with an average benefit of \$3,414 per month. This represents a 2.1% increase in count and a 4.2% 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, 405 members (528 last year) transferred from Plan E to Plan D during the past year; and 193 members (226 last year) transferred from Plan D to Plan E.

	Active Contributing Members	Deferred Members*	Retirees, Disabilities, & Beneficiaries
<b>June 30, 2009 Valuation</b>	<b>95,788</b>	<b>11,844</b>	<b>53,069</b>
Termination without Refund	(953)	953	-
Termination with Refund	(658)	(258)	-
Active/Deferred Death with Annuity	(71)	(59)	130
Service Retirement	(1,815)	(387)	2,202
Disability Retirement	(124)	(6)	130
Retiree Death without Beneficiary	-	-	(1,332)
New Entrants	2,151	-	-
Rehires	92	(89)	(3)
<b>Total Change</b>	<b>(1,378)</b>	<b>154</b>	<b>1,127</b>
<b>June 30, 2010 Valuation</b>	<b>94,410</b>	<b>11,998</b>	<b>54,196</b>

\* 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%
<b>Employer Contribution Rate</b>	16.31%	12.89%	19.80%
Change		-3.42%	3.49%
<b>Funded Ratio</b>	83.3%	89.1%	77.7%
Change		5.8%	-5.6%

### Summary Valuation Results

The following Exhibit 1 presents a summary of key data elements on June 30, 2010 and June 30, 2009, 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, 2010	June 30, 2009	Percentage Change
I. Total Membership			
A. Active Members	94,410	95,788	(1.4)%
B. Retired Members & Beneficiaries	54,196	53,069	2.1%
C. Deferred Members	<u>11,998</u>	<u>11,844</u>	1.3%
D. Total	160,604	160,701	(0.1)%
II. Pay Rate as of June 30, 2010			
A. Annual Total (\$millions)	\$ 6,739	\$ 6,673	1.0%
B. Monthly Average	\$ 5,948	\$ 5,805	2.5%
III. Average Monthly Benefit Paid to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 3,480	\$ 3,339	4.2%
B. Disability Retirement	\$ 4,176	\$ 3,996	4.5%
C. Surviving Spouse and Dependents	\$ 2,221	\$ 2,123	4.6%
D. Total	\$ 3,414	\$ 3,275	4.2%
IV. Actuarial Accrued Liability			
A. Active Members	\$ 20,426	\$ 19,778	3.3%
B. Retired Members	\$ 25,513	\$ 23,967	6.5%
C. Vested Terminated Members	<u>\$ 707</u>	<u>\$ 724</u>	(2.3)%
D. Total	\$ 46,646	\$ 44,469	4.9%
V. Assets			
A. Market Value of Fund (\$millions)	\$ 33,434	\$ 30,499	9.6%
B. Actuarial Value (\$millions)			
1. Valuation Reserves	\$ 38,839	\$ 39,542	(1.8)%
2. Non-valuation Reserves	\$ 805	\$ 776	3.8%
C. Annual Investment Return			
1. Market Basis	11.6%	(18.3)%	na
2. Valuation (Actuarial) Basis	0.5%	1.5%	na
VI. Unfunded Actuarial Accrued Liability or (Surplus Funding) in \$millions	\$ 7,807	\$ 4,927	58.5%
VII. Required Employer contribution rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	15.59%	15.75%	(1.0)%
B. Member Contributions	<u>(5.75)%</u>	<u>(5.65)%</u>	1.8%
C. Employer Normal Cost	9.84%	10.10%	(2.6)%
D. UAAL Amortization	<u>6.47%</u>	<u>4.12%</u>	57.1%
E. Total Required Contribution Rate	16.31%	14.22%	14.7%
VIII. Funded Ratio	83.3%	88.9%	(6.3)%
IX. Results Based on Market Value (Informational Purposes Only)			
Total Required Contribution Rate	20.90%	22.64%	(7.7)%
Funded Ratio	69.9%	66.8%	4.7%

# 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, 2010. 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 2010 valuation meets this requirement. Under LACERA's Funding Policy, annual valuations determine the Employer 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, 2010. 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 Employer 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, 2010. |
| 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, 2010. 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 Employer 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	
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
2010	33.4	0.8	38.8	11.6

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

On June 30, 2010, the total market value of the fund, less current liabilities, was \$33.4 billion. The actuarial value of the fund was determined to be \$39.6 billion, including the non-valuation reserves. The average total fund return for the last ten years is 3.8%.

**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.

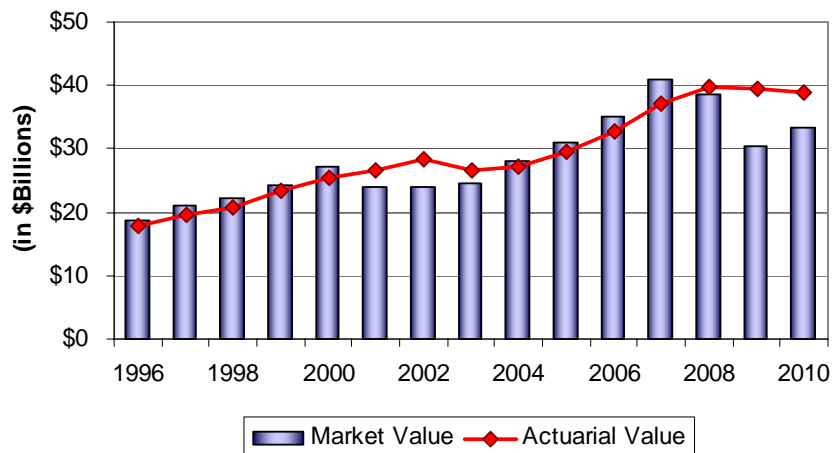
**Actuarial Asset Method**

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, 2010 actuarial value of assets is shown in Exhibit 5. Note the smoothing process is deferring significant past investment losses, and is currently in a net actuarial loss position. The result is an actuarial value of assets that is greater than the June 30, 2010 market value by \$6.2 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, 2010 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, 2011. Although the reserve value for STAR benefits is included in the 2010 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, 2010 and 2009  
(Dollars in Thousands)**

	2010	2009
<b>Assets</b>		
Cash	\$ 117,360	\$ 33,700
Collateral on Loaned Securities	1,158,925	1,219,067
Receivables		
Contributions Receivable	49,841	112,479
Accounts Receivable – Sale of Investments	820,109	765,240
Accrued Interest and Dividends	97,083	103,110
Accounts Receivable – Other	47,359	48,562
Total Receivables	1,014,392	1,029,391
Investments at Fair Value		
Stocks	16,693,082	14,854,082
Bonds	10,142,133	9,800,435
Commodities	664,464	389,940
Real Estate	2,843,804	3,057,774
Alternative Assets	3,417,212	2,815,826
Total Investments	33,760,695	30,918,057
Capital Assets Net of Depreciation	-	-
<b>Total Assets</b>	<b>36,051,372</b>	<b>33,200,215</b>
<b>Liabilities</b>		
Accounts Payable – Purchase of Investments	1,403,918	1,433,312
Retiree Payroll and Other Payables	233	185
Accrued Expenses	26,886	26,113
Tax Withholding Payable	23,406	20,021
Obligations under Securities Lending Program	1,158,925	1,219,067
Accounts Payable – Other	4,116	2,536
<b>Total Liabilities</b>	<b>2,617,484</b>	<b>2,701,234</b>
<b>Net Assets Held in Trust for Pension Benefits</b>	<b>33,433,888</b>	<b>30,498,981</b>

## Los Angeles County Employees Retirement Association

### Exhibit 3: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2010 and 2009 (Dollars in Thousands)

	2010	2009
<b>Additions</b>		
Contributions		
Employer	\$ 843,704	\$ 831,671
Member	429,612	415,545
Total Contributions	1,273,316	1,247,216
Investment Income		
<i>From Investing Activities</i>		
Net Appreciation/(Depreciation) in Fair Value of Investments	2,102,581	(8,768,573)
Investment Income	1,848,215	1,449,183
Total Investing Activity Income/(Loss)	3,950,796	(7,319,390)
Less Expenses From Investing Activities	(113,885)	(104,603)
Net Investing Activity Income/(Loss)	3,836,911	(7,423,993)
<i>From Securities Lending Activities</i>		
Securities Lending Income	5,867	38,753
Less Expenses From Securities Lending Activities		
Borrower Rebates	(1,899)	(21,212)
Management Fees	(478)	(1,338)
Total Expenses from Securities Lending Activities	(2,377)	(22,550)
Net Securities Lending Income	3,490	16,203
Total Net Investment Income/(Loss)	3,840,401	(7,407,790)
Miscellaneous	868	1,221
<b>Total Additions/(Declines)</b>	<b>5,114,585</b>	<b>(6,159,353)</b>
<b>Deductions</b>		
Retiree Payroll	2,109,660	1,994,620
Administrative Expense	48,892	49,730
Refunds	18,904	20,356
Lump Sum Death Benefits	2,174	1,388
Miscellaneous	48	243
<b>Total Deductions</b>	<b>2,179,678</b>	<b>2,066,337</b>
Transfer to OPEB Agency Fund	-	-
Net Increase/(Decrease)	2,934,907	(8,225,690)
Net Assets Held in Trust for Pension Benefits Beginning of Year	30,498,981	38,724,671
<b>End of Year</b>	<b>33,433,888</b>	<b>30,498,981</b>

## Los Angeles County Employees Retirement Association

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

	June 30, 2010	June 30, 2009
1. Member Reserves		
a. Active Members	\$ 14,027,924	\$ 13,168,256
b. Unclaimed Deposits	<u>-</u>	<u>-</u>
c. Total Member Reserves	\$ 14,027,924	\$ 13,168,256
2. Employer Reserves		
a. Actual Employer Contributions	\$ 21,317,758	\$ 20,954,314
b. Advanced Employer Contributions	<u>-</u>	<u>-</u>
c. Total Employer Contributions	\$ 21,317,758	\$ 20,954,314
3. County Contribution Credit Reserve	\$ 470,710	\$ 470,710
4. STAR Reserve	614,011	614,011
5. Contingency Reserve	<u>-</u>	<u>15,333</u>
6. Total Reserves at Book Value	\$ 36,430,403	\$ 35,222,624
7. Unrealized Investment Portfolio Appreciation	<u>(2,996,515)</u>	<u>(4,723,643)</u>
8. <b>Total Reserves at Fair Value</b>	<b>\$ 33,433,888</b>	<b>\$ 30,498,981</b>

Note: These amounts were determined by LACERA for accounting purposes and are reported in the June 30, 2010 CAFR.



## Los Angeles County Employees Retirement Association

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

June 30, 2010 Valuation					
Plan Year Ending	Contributions	Benefit Payments	Expected Market Value	Actual Market Value	Phase-Out of Gain / (Loss)*
6/30/2010	\$ 1,273,316	\$ 2,130,738	\$ 31,972,625	\$ 33,433,888	80.00% x \$ 1,461,263 = \$ 1,169,010
6/30/2009	1,247,216	2,016,364	40,927,437	30,498,981	60.00% x (10,428,456) = (6,257,074)
6/30/2008	1,202,781	1,913,272	43,340,975	38,724,671	33.33% x (4,616,304) = (1,538,614)
6/30/2007	1,099,629	1,822,022	37,162,609	40,908,106	11.11% x 3,745,497 = 416,125
6/30/2006					= 0
					Total Phase-Out of Gain / (Loss) = \$ (6,210,553)
					Total Market Value of Assets = 33,433,888
					Total Actuarial Value of Assets = \$ <b>39,644,441</b>
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
6/30/2011	0.00%	16.67%	40.00%	60.00%
6/30/2012	0.00%	0.00%	20.00%	40.00%
6/30/2013	0.00%	0.00%	0.00%	20.00%



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 20 and assumes no duty or liability to other parties who receive this work.

**Los Angeles County Employees  
Retirement Association**

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

	June 30, 2010	June 30, 2009
1. Total Market Value of Assets	\$ 36,051,372	\$ 33,200,215
2. Current Liabilities	<u>2,617,484</u>	<u>2,701,234</u>
3. Net Assets Held in Trust for Pension Benefits	\$ 33,433,888	\$ 30,498,981
4. Market Stabilization Reserve <sup>(1)</sup>	<u>(6,210,553)</u>	<u>(9,818,584)</u>
5. Actuarial Value of Fund Assets	\$ 39,644,441	\$ 40,317,565
6. Non-Valuation Reserves <sup>(2)</sup>		
a. Unclaimed Deposits	\$ -	\$ -
b. Contingency Reserve	334,339	304,990
c. Advanced Employer Contributions	-	-
d. County Contribution Credit Reserve	470,710	470,710
e. Reserve for STAR Program	<u>-</u>	<u>-</u>
f. Total	\$ 805,049	\$ 775,700
7. Valuation Assets <sup>(2)</sup>		
a. Member Reserves	\$ 14,027,924	\$ 13,168,256
b. Employer Reserves for Funding Purposes	<u>\$ 24,811,468</u>	<u>\$ 26,373,609</u>
c. Total	\$ 38,839,392	\$ 39,541,865

(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.*

This page intentionally left blank.



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

### 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, 2010. 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 Valuation Assets to the actuarial liabilities. The difference is the amount that needs to be funded by the member and employer 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 2010 Investigation of Experience Report. New assumptions were adopted by the Board effective with the June 30, 2010 actuarial valuation.

**Los Angeles County Employees  
Retirement Association**

**Exhibit 7: Actuarial Balance Sheet – June 30, 2010  
(Dollars in Millions)**

	General					Safety		All Plans
	Plan A	Plan B	Plan C	Plan D	Plan E	Plan A	Plan B	
<b>LIABILITIES</b>								
Present Value of Benefits - Inactives								
- Retirees and Beneficiaries	\$ 12,667	\$ 230	\$ 101	\$ 2,032	\$ 1,202	\$ 7,598	\$ 1,683	\$ 25,513
- Vested Terminated	45	7	2	283	305	2	63	707
- Inactive Total	12,712	237	103	2,315	1,507	7,600	1,746	26,220
Present Value of Benefits - Actives								
- Service Retirement	\$ 1,382	\$ 198	\$ 151	\$ 12,652	\$ 5,462	\$ 237	\$ 6,202	\$ 26,284
- Transfer Service (prior LACERA plan)	12	1	1	125	329	2	4	474
- Disability Retirement	25	4	3	820	N/A	65	2,926	3,843
- Death	12	2	2	379	N/A	1	73	469
- Termination (No Refund)	*	*	*	200	136	*	47	383
- Refund of Member Contributions	*	*	*	81	N/A	*	12	93
- Active Total	1,431	205	157	14,257	5,927	305	9,264	31,546
<b>Total Actuarial Liabilities</b>	<b>\$ 14,143</b>	<b>\$ 442</b>	<b>\$ 260</b>	<b>\$ 16,572</b>	<b>\$ 7,434</b>	<b>\$ 7,905</b>	<b>\$ 11,010</b>	<b>\$ 57,766</b>
<b>ASSETS</b>								
Valuation Assets	\$ 6,502	\$ 436	\$ 264	\$ 11,282	\$ 8,331	\$ 3,480	\$ 8,544	\$ 38,839
PV Future Member Contributions	16	6	5	2,974	N/A	0	1,285	4,286
PV Future Employer Normal Cost Contribs.	57	6	6	3,314	1,513	11	1,927	6,834
UAAL or (Surplus Funding)	7,568	(6)	(15)	(998)	(2,410)	4,414	(746)	7,807
<b>Total Current and Future Assets</b>	<b>\$ 14,143</b>	<b>\$ 442</b>	<b>\$ 260</b>	<b>\$ 16,572</b>	<b>\$ 7,434</b>	<b>\$ 7,905</b>	<b>\$ 11,010</b>	<b>\$ 57,766</b>

\* Less than \$0.5 million



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. 24

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

All liabilities reflect the benefits effective through June 30, 2010. This includes permanent STAR COLAs that have been adopted through the valuation date, 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 Employer.

**Actuarial Cost  
Method**

The Actuarial Balance sheet determines the amount of future contributions that are needed, but the method used to determine when those future contributions will 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, 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 Employer. 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 Employer'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>2010</u>	<u>2009</u>	<u>Percent Change</u>
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 57,766	\$ 55,208	4.6%
B. Actuarial present value of total future normal costs for current members	\$ 11,120	\$ 10,739	3.5%
C. Actuarial accrued liability [A-B]	\$ 46,646	\$ 44,469	4.9%
D. Valuation Assets	\$ 38,839	\$ 39,542	-1.8%
E. UAAL or Surplus Funding [C-D]	\$ 7,807	\$ 4,927	58.5%
F. Funded Ratio [D/C]	83.3%	88.9%	-6.3%

It is interesting to note the maturity of LACERA's fund. Nearly one-half, 45.4%, of the total actuarial obligation (both accrued and future benefits) is for retired and deferred vested members. Of the \$31.5 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 Employer 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 Employer 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 prior actuarial asset losses.

The 2010 actuarial valuation reflects an actuarial experience loss of \$2.55 billion for the fiscal year just ended. The loss was mainly due to a \$2.88 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 significantly less than the valuation assumption. This resulted in a gain.
- ✓ **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 less than assumed; however, many members from contributory plans had positive COLA banks to make up for this. Thus, most members received increases in their benefits equal to the assumption (3.0% for Plan A, 2.0% for Plans B-D). The group of Plan A members who did not receive the full 3.0% COLA due to insufficient accumulated COLA banks generated a gain due to CPI of \$28.8 million.
- ✓ **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

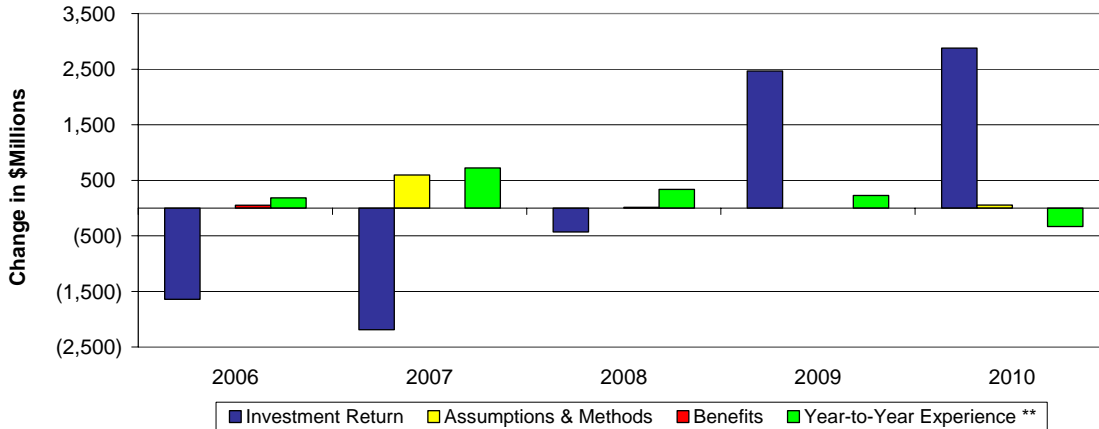
### Exhibit 8a: Analysis of Change in Unfunded Actuarial Accrued Liability (Dollars in Millions)

	Amount	As a Percent of June 30, 2010 Actuarial Accrued Liability
<b>Unfunded Actuarial Accrued Liability - June 30, 2009</b>	<b>\$ 4,927</b>	<b>10.6%</b>
Increase in UAAL due to New Assumptions	54	0.1%
Interest Accrued	382	0.8%
Benefits Accrued (Normal Cost) *	1,219	2.6%
Contributions (with Assumed Interest)		
Employer - Cash	\$ (876)	-1.9%
Employer - Contribution Credit	-	0.0%
Member	(446)	-1.0%
Total	(1,322)	-2.8%
<b>Expected Unfunded Actuarial Acc. Liability - June 30, 2010</b>	<b>\$ 5,260</b>	<b>11.3%</b>
 Source of Change		
Asset (Gains) and Losses		
(Gain)/Loss due to Investment Income	2,879	6.2%
Actuarial (Gains) and Losses		
Salary Increases	\$ (353)	-0.8%
CPI Less than Expected	(29)	-0.1%
Transfers Between Plan D & Plan E	6	0.0%
Mortality Experience	(32)	-0.1%
All Other Experience	76	0.2%
Total	(332)	-0.7%
Recognition of Liabilities due to Court Cases	-	0.0%
<b>Total Changes</b>	<b>2,547</b>	<b>5.5%</b>
<b>Unfunded Actuarial Accrued Liability - June 30, 2010</b>	<b>\$ 7,807</b>	<b>16.7%</b>

*\*Includes estimated increase in value of benefits due to service purchases.*

## Los Angeles County Employees Retirement Association

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



	2006	2007	2008	2009	2010	2006-10
<b>Prior Valuation UAAL / (Surplus) \$</b>	<b>4,878</b>	<b>3,439</b>	<b>2,461</b>	<b>2,313</b>	<b>4,927</b>	<b>4,878</b>
Increase in UAAL due to:						
Expected Increase / (Decrease)	(31)	(109)	(68)	(78)	279	(7)
Asset (Gains) and Losses	(1,642)	(2,187)	(429)	2,465	2,879	1,086
Changes in Benefits*	50	-	15	-	-	65
Changes in Assumptions	-	515	-	-	54	569
Changes in Methods	-	81	-	-	-	81
Salary Increases	156	673	298	380	(353)	1,154
CPI Less than Expected	-	-	-	(4)	(29)	(33)
Transfers Between D & E	10	4	10	(3)	6	27
Mortality Experience	(22)	(22)	(51)	(63)	(32)	(190)
All Other Experience	40	67	77	(83)	76	177
<b>Total Increase / (Decrease)</b>	<b>(1,439)</b>	<b>(978)</b>	<b>(148)</b>	<b>2,614</b>	<b>2,880</b>	<b>2,929</b>
<b>Valuation UAAL / (Surplus) \$</b>	<b>3,439</b>	<b>2,461</b>	<b>2,313</b>	<b>4,927</b>	<b>7,807</b>	<b>7,807</b>
<b>Funded Ratio</b>	<b>90.5%</b>	<b>93.8%</b>	<b>94.5%</b>	<b>88.9%</b>	<b>83.3%</b>	<b>83.3%</b>

\* *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.*

This page intentionally left blank.



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

## 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

Effective with the 2010 valuation, the mortality rates were changed, necessitating a change in the normal member contribution rates. Normal member contribution rates increased slightly at all entry ages.

### 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 Employer. 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.

## Member Contributions (continued)

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

As this is a triennial valuation, we are recommending a change in the member cost-of-living contribution rates. The cost-of-living contributions, expressed as a percentage of the normal contribution rates, are based on the June 30, 2010 actuarial valuation and are as follows:

---

General Plan A:	78.96%
General Plan B:	21.89%
General Plan C:	23.46%
General Plan D:	21.30%
Safety Plan A:	93.28%
Safety Plan B:	29.51%

---

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.

### Member Rate For Contributory Plan Members Only

The average member contribution rate for only those members in contributory plans at June 30, 2010 is 7.73% of payroll.

This number compares to 5.75% of payroll, which is the average member contribution rate among all members. This 5.75% offsets the gross normal cost to yield the Employer normal cost rate.

## Los Angeles County Employees Retirement Association

### Exhibit 9: Sample Member Contribution Rates

#### Recommended Rates (Based on 2010 Valuation)

	<u>Entry Age</u>	<u>Normal</u>	<u>Cost of Living</u>	<u>Total as a % of Pay</u>	<u>Prior Rate (Total)</u>	<u>Ratio (New/Old)</u>
<b>General Members</b>						
<b>Plan A</b>	25	2.91%	2.30%	5.21%	5.21%	100.0%
	35	3.59%	2.83%	6.42%	6.39%	100.5%
	45	4.35%	3.43%	7.78%	7.76%	100.3%
	55	4.66%	3.68%	8.34%	8.31%	100.4%
<b>Plan B</b>	25	5.83%	1.28%	7.11%	7.08%	100.4%
	35	7.17%	1.57%	8.74%	8.71%	100.3%
	45	8.70%	1.90%	10.60%	10.57%	100.3%
	55	9.32%	2.04%	11.36%	11.32%	100.4%
<b>Plan C</b>	25	4.95%	1.16%	6.11%	6.09%	100.3%
	35	6.07%	1.42%	7.49%	7.46%	100.4%
	45	7.47%	1.75%	9.22%	9.20%	100.2%
	55	8.72%	2.05%	10.77%	10.72%	100.5%
<b>Plan D</b>	25	4.95%	1.05%	6.00%	5.99%	100.2%
	35	6.07%	1.29%	7.36%	7.34%	100.3%
	45	7.47%	1.59%	9.06%	9.05%	100.1%
	55	8.72%	1.86%	10.58%	10.55%	100.3%
<b>Safety Members</b>						
<b>Plan A</b>	25	4.13%	3.85%	7.98%	8.21%	97.2%
	35	5.00%	4.66%	9.66%	9.96%	97.0%
	45	5.83%	5.44%	11.27%	11.61%	97.1%
	55	5.86%	5.47%	11.33%	11.67%	97.1%
<b>Plan B</b>	25	8.25%	2.43%	10.68%	10.72%	99.6%
	35	10.00%	2.95%	12.95%	13.00%	99.6%
	45	11.66%	3.44%	15.10%	15.16%	99.6%
	55	11.72%	3.46%	15.18%	15.23%	99.7%

Note: A portion of some of the member contribution rates is paid for ("picked up") by the Employer 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.



This page intentionally left blank.



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

### Section 6: Employer 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 Employer 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 Employer contribution rate was 14.22% for the fiscal year beginning in 2010.

For the fiscal year beginning in 2011, the required rate increased to 16.31%. This is equal to the net aggregate calculated Normal Cost contribution rate of 9.84% based on the 2010 Valuation, plus a 30-year layered amortization payment of the UAAL.

## Employer Contributions (continued)

### Employer Contribution Rate

(All values as a % of Payroll)

Employer Normal Cost	9.84%
30-year Amortization of UAAL	<u>6.47</u>
Total Employer Contribution	16.31%

The 2.09% increase in the total Employer contribution rate was primarily due to the recognition of deferred investment losses, which caused a 2.29% increase in the UAAL rate. This was somewhat offset by the new assumptions adopted with the 2010 Investigation of Experience, as well as salary increases much smaller than expected. The UAAL rate reflects a layered 30-year amortization from the valuation date with a July 1, 2011 implementation date for the new Employer contribution rate.

The change in the calculated Normal Cost contribution rates from year-to-year is generally due to two factors. This year, the Normal Cost rate was also impacted by the adoption of new demographic assumptions per the 2010 Investigation of Experience. These three factors are listed in order of magnitude (i.e., the adoption of new assumptions had the greatest impact this year):

- (1) Demographic Assumption Changes:** The new actuarial assumptions, adopted with the 2010 Investigation of Experience, decreased the normal cost rate by 0.29%.
- (2) Experience:** Normal experience from year to year, reflects differences in both the weighting between membership groups and in their characteristics, as well as 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.
- (3) 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 in the Employer's share of the Normal Cost contributions for the years in which the member has more than 30 years of service. The Employer'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, 2010**

A. Normal Cost Contribution Rate	General						Safety			Grand
	Plan A	Plan B	Plan C	Plan D	Plan E	Total	Plan A	Plan B	Total	Total
Service Retirement	16.36%	13.48%	12.21%	12.80%	8.28%	11.44%	14.32%	14.39%	14.39%	12.02%
Disability Retirement	0.88%	0.75%	0.72%	1.20%	0.00%	0.81%	9.49%	9.59%	9.59%	2.52%
Death	0.33%	0.30%	0.29%	0.47%	0.00%	0.32%	0.34%	0.32%	0.32%	0.32%
Termination (No Refund)	0.32%	0.28%	0.24%	0.48%	0.55%	0.50%	0.36%	0.43%	0.43%	0.48%
Refund of Member Contributions	0.09%	0.12%	0.11%	0.38%	0.00%	0.25%	0.18%	0.27%	0.27%	0.25%
<b>Total</b>	<b>17.98%</b>	<b>14.93%</b>	<b>13.57%</b>	<b>15.33%</b>	<b>8.83%</b>	<b>13.32%</b>	<b>24.69%</b>	<b>25.00%</b>	<b>25.00%</b>	<b>15.59%</b>
B. Member Contributions	(3.44)%	(6.40)%	(5.53)%	(7.00)%	0.00%	(4.68)%	(0.78)%	(10.33)%	(10.19)%	(5.75)%
C. Net Employer Normal Cost as of June 30, 2010 (A) - (B)	14.54%	8.53%	8.04%	8.33%	8.83%	8.64%	23.91%	14.67%	14.81%	9.84%
D. Net Employer Normal Cost as of June 30, 2009	14.65%	8.62%	8.11%	8.53%	8.55%	8.72%	25.24%	15.63%	15.87%	10.10%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.11)%	(0.09)%	(0.07)%	(0.20)%	0.28%	(0.08)%	(1.33)%	(0.96)%	(1.06)%	(0.26)%



**Los Angeles County Employees  
Retirement Association**

**Exhibit 11: Total Employer 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>
<b>A. Net Employer Normal Cost</b>										
1. Basic Benefits	10.49%	6.74%	6.42%	6.99%	7.42%	7.21%	13.98%	11.70%	11.72%	8.09%
2. Cost-of-Living Benefits	4.05%	1.79%	1.62%	1.34%	1.41%	1.43%	9.93%	2.97%	3.09%	1.75%
3. Total June 30, 2010	14.54%	8.53%	8.04%	8.33%	8.83%	8.64%	23.91%	14.67%	14.81%	9.84%
<b>B. UAAL Contribution Rate</b>	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%	6.47%
<b>C. Total June 30, 2010 Contribution Rate (A) + (B)</b>	<b>21.01%</b>	<b>15.00%</b>	<b>14.51%</b>	<b>14.80%</b>	<b>15.30%</b>	<b>15.11%</b>	<b>30.38%</b>	<b>21.14%</b>	<b>21.28%</b>	<b>16.31%</b>
<b>D. Total June 30, 2009 Contribution Rate</b>	18.77%	12.74%	12.23%	12.65%	12.67%	12.84%	29.36%	19.75%	19.99%	14.22%
<b>E. Estimated Payroll for fiscal year beginning July 1, 2011*</b>	\$ 136	\$ 24	\$ 21	\$ 3,657	\$ 1,800	\$ 5,638	\$ 24	\$ 1,347	\$ 1,371	\$ 7,009
<b>F. Estimated Annual Contribution (C x E)</b>	<b>\$ 29</b>	<b>\$ 4</b>	<b>\$ 3</b>	<b>\$ 541</b>	<b>\$ 275</b>	<b>\$ 852</b>	<b>\$ 7</b>	<b>\$ 285</b>	<b>\$ 292</b>	<b>\$ 1,144</b>
<b>G. Last Year's Estimated Annual Contribution</b>	\$ 33	\$ 4	\$ 3	\$ 447	\$ 233	\$ 719	\$ 11	\$ 258	\$ 268	\$ 987
<b>H. Increase / (Decrease) in Annual Contribution</b>	\$ (4)	\$ -	\$ -	\$ 94	\$ 42	\$ 133	\$ (4)	\$ 27	\$ 24	\$ 157

\* Estimated Payroll based upon annualized salary rate as of June 30, 2010 increased by 4.00% wage inflation. Dollar figures in millions.

**Los Angeles County Employees  
Retirement Association**

**Exhibit 12: Unfunded Actuarial Accrued Liability Detail**

Unfunded Actuarial Accrued Liability - 30 Year Layered Amortization Detail							
Date Established	Description	Balance as of June 30, 2010	Interest on Balance	Amort. Payment on June 30, 2011 <sup>1</sup>	Balance as of June 30, 2011 <sup>2</sup>	Remaining Period as of June 30, 2011	July 1, 2011 Amortization Payment
June 30, 2009	Initial UAAL	\$ 5,168.9	\$ 400.6	\$ 301.9	\$ 5,267.6	28 Years	\$ 297.1
June 30, 2010	(Gain) / Loss	\$ 2,638.5	\$ 204.5	\$ 10.1 <sup>3</sup>	\$ 2,832.9	29 Years	\$ 156.5
Total Amortization Payment July 1, 2011:							\$ 453.6
Projected Payroll July 1, 2011:							\$ 7,008.7
<b>UAAL as of June 30, 2010:</b>		<b>\$ 7,807.4</b>		<b>UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2011:</b>			<b>6.47%</b>

Explanatory Notes:

<sup>1</sup> Amortization Payments are based on a fixed schedule that increases by the payroll assumption each year.

<sup>2</sup> The assets and liabilities used in the calculation of the UAAL are as of June 30, 2010; whereas, the contribution rates are not effective until July 1, 2011. Therefore, the UAAL is adjusted to June 30, 2011 based on the actual contribution rate for the period.

<sup>3</sup> The 30-year amortization of UAAL does not begin until July 1, 2011; however, the UAAL amount is adjusted based on the July 1, 2010 contribution rate.



This page intentionally left blank.



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

### 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 13, compares actuarial assets and liabilities of the system, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 14, 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 2010 based on the triennial Investigation of Experience.

Exhibit 15 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 13: 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 <sup>(1)</sup>	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 2001 <sup>(2)</sup>	\$ 26,490,000	\$ 26,489,976	\$ (24)	100.0%	\$ 4,398,443	0.0%
June 30, 2002 <sup>(3)</sup>	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 <sup>(2)</sup>	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 <sup>(2)</sup>	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%
June 30, 2010 <sup>(2)</sup>	38,839,392	46,646,838	7,807,446	83.3%	6,695,439	116.6%

(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 14: 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	
6/30/2001	\$ 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%
6/30/2010	843,704	843,703	0	843,703	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 15: 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 <sup>(1)</sup> (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
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%
June 30, 2010	38,839	6,278	26,220	14,148	100%	100%	45%

(1) Includes deferred vested members.



## Los Angeles County Employees Retirement Association

### Section 8: Supplemental Information

---



#### Cash Flow Projection

Exhibits 16a and 16b 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. Over the next few years, contributions are expected to grow faster than benefit payments, as contribution rates increase due to the recognition of currently deferred asset losses. After the asset losses have been fully recognized, the cash flow is expected to become increasingly negative. 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.

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 Employer contribution rate is assumed to be 14.22% for the first year and 16.31% for the second year; total Employer contributions for the remainder of the period reflect the expected recognition of asset losses currently being deferred. The aggregate member rate is assumed to stay at the calculated rate for June 30, 2010 of 5.75% of payroll. Expenses are based on the expenses for the year ended June 30, 2010, 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 2010 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 16a: Cash Flow History and Projections – Dollars**

Plan Year <u>Ending</u>	<b>Cash Flow History</b>		
	Total	Benefits & Administrative	Net
	<u>Contributions</u>	<u>Expenses<sup>(2)</sup></u>	<u>Cash Flow</u>
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 <sup>(3)</sup>	(869)
2007	1,100	1,835	(735)
2008	1,203	1,960	(757)
2009	1,247	2,065	(818)
2010	1,273	2,177	(904)

Plan Year <u>Ending</u>	<b>Cash Flow Projections<sup>(1)</sup></b>		
	Total	Benefits & Administrative	Net
	<u>Contributions</u>	<u>Expenses<sup>(2)</sup></u>	<u>Cash Flow</u>
2011	\$ 1,339	\$ 2,377	\$ (1,038)
2012	1,546	2,487	(941)
2013	1,746	2,630	(884)
2014	1,983	2,780	(797)
2015	2,173	2,938	(765)
2016	2,242	3,104	(862)
2017	2,331	3,277	(946)
2018	2,425	3,457	(1,032)
2019	2,522	3,646	(1,124)
2020	2,622	3,842	(1,220)

<sup>(1)</sup> Future contributions reflect the expected impact of asset gains and losses currently being deferred.

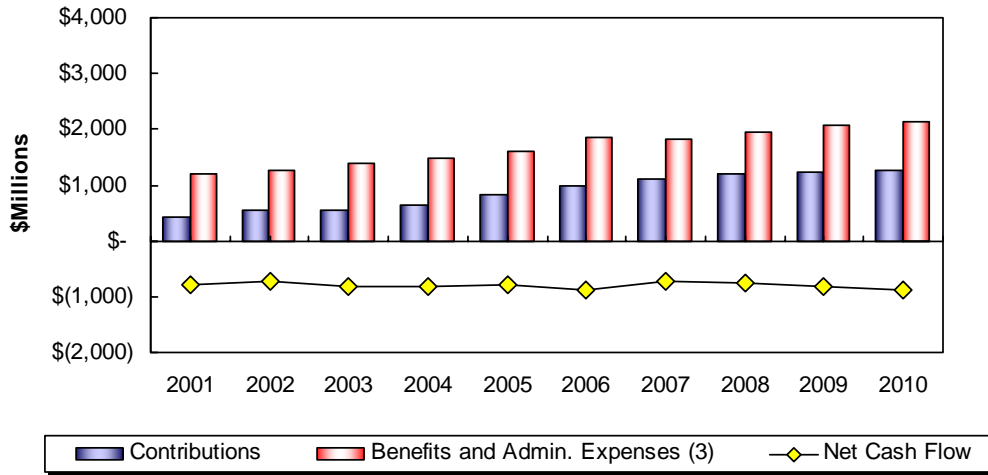
<sup>(2)</sup> Investment expenses are assumed to be covered by investment return.

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

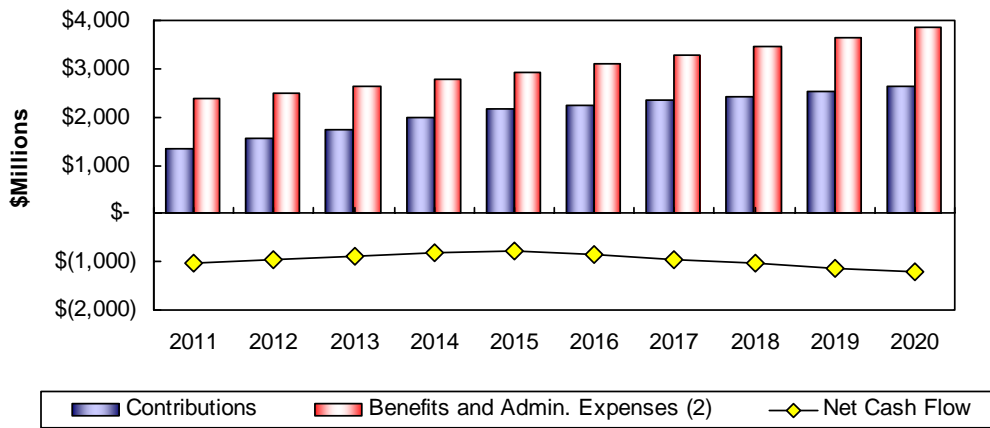
## Los Angeles County Employees Retirement Association

### Exhibit 16b: Cash Flow History and Projections – Charts

#### Cash Flow History



#### Cash Flow Projections<sup>(1)</sup>



- <sup>(1)</sup> Future contributions reflect the expected impact of asset gains and losses currently being deferred.
- <sup>(2)</sup> Investment expenses are assumed to be covered by investment return.
- <sup>(3)</sup> 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, 2010 as a result of the 2010 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 2010 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 original 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.



<b>County Contributions</b>	The County contribution rate is set by the Board of Investments based on actuarial valuations.
<b>Member Contributions</b>	<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>
<b>Valuation of Assets</b>	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.
<b>Investment Earnings and Expenses</b>	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.
<b>Postretirement Benefit Increases</b>	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.
<b>Interest on Member Contributions</b>	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.
<b>Future Salaries</b>	<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 1<sup>st</sup>) 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.

Deferred vested members are assumed to retire at the later of their current age and the assumed retirement age specified as follows:

<b>Assumption for Deferred Commencement</b>	
<b>Plan</b>	<b>Age at Commencement</b>
GA	60
GB	60
GC	60
GD	57
GE	60
SA	55
SB	50

**Retirement  
(continued)**

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, 2010.

**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, 2010.

**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, 2010.

*Males*      General members: RP-2000 Combined Mortality Table for Males, projected to 2020 using Projection Scale AA, with ages set back one year.  
Safety members: RP-2000 Combined Mortality Table for Males, projected to 2020 using Projection Scale AA, with ages set back two years.

*Females*    General members: RP-2000 Combined Mortality Table for Females, projected to 2020 using Projection Scale AA, with ages set back one year.  
Safety members: RP-2000 Combined Mortality Table for Females, projected to 2020 using Projection Scale AA, with ages set back one year.

**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, 2010.

*Males* General members: Average of RP-2000 Combined and Disabled Mortality Tables for Males, projected to 2020 using Projection Scale AA, with ages set back one year.

Safety members: RP-2000 Combined Mortality Table for Males, projected to 2020 using Projection Scale AA, with no age adjustment.

*Females* General members: Average of RP-2000 Combined and Disabled Mortality Tables for Females, projected to 2020 using Projection Scale AA, with ages set back one year.

Safety members: RP-2000 Combined Mortality Table for Females, projected to 2020 using Projection Scale AA, with no age adjustment.

**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, 2010.

Class	Gender	Proposed Table	
General	Male	RP 2000 Employee Male, Proj. 2020*	+3
General	Female	RP 2000 Employee Female, Proj. 2020*	-1
Safety	Male	RP 2000 Employee Male, Proj. 2020*	-4
Safety	Female	RP 2000 Employee Female, Proj. 2020*	-1

\* Projection using Scale AA.

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, 2010.

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.

**Other Employment  
Terminations  
(continued)**

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, 2010.

**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 the average of the member's highest monthly pensionable earnings during any 12-consecutive-month period.  
Example: For a Plan C Member who enters at age 59 or earlier, the Final Compensation (age 60) will be the monthly average of the annual salaries during age 59 (since salaries are assumed to increase, age 59 will be the highest one year).
- 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, 2010**

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 genders projected to 2020 using Projection Scale AA:	
	<u>Class of Members</u>	<u>Age Adjustment</u>
	General – males	-1 year
	General – females	-1 year
	Safety – males	-2 years
	Safety – females	-1 year
	F. Mortality among disabled members	Table A-3
	Basis – Average of RP-2000 Combined and Disabled Mortality Tables, projected to 2020 using Projection Scale AA:	
	General – males	-1 year
	General – females	-1 year
	Basis –RP-2000 Combined Mortality Table, for respective genders projected to 2020 using Projection Scale AA	
	Safety – males	0 years
	Safety – females	0 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**

<u>Age</u>	<u>Safety Male</u>	<u>Safety Female</u>	<u>General Male</u>	<u>General Female</u>
20	0.022%	0.014%	0.023%	0.014%
25	0.028%	0.015%	0.029%	0.015%
30	0.036%	0.019%	0.037%	0.019%
35	0.057%	0.036%	0.064%	0.036%
40	0.085%	0.048%	0.089%	0.048%
45	0.104%	0.076%	0.110%	0.076%
50	0.135%	0.108%	0.142%	0.108%
55	0.195%	0.198%	0.213%	0.198%
60	0.382%	0.402%	0.431%	0.402%
65	0.755%	0.780%	0.851%	0.780%
70	1.348%	1.344%	1.494%	1.344%
75	2.246%	2.212%	2.506%	2.212%
80	4.094%	3.607%	4.643%	3.607%
85	7.640%	6.041%	8.670%	6.041%
90	13.623%	11.220%	15.055%	11.220%



## Los Angeles County Employees Retirement Association

**Table A-3: Mortality for Members Retired for Disability**

<u>Age</u>	<u>Safety Male</u>	<u>Safety Female</u>	<u>General Male</u>	<u>General Female</u>
20	0.024%	0.014%	0.011%	0.007%
25	0.031%	0.016%	0.883%	0.283%
30	0.040%	0.022%	1.040%	0.302%
35	0.070%	0.038%	1.053%	0.322%
40	0.092%	0.052%	1.025%	0.299%
45	0.116%	0.081%	0.941%	0.313%
50	0.149%	0.119%	1.053%	0.424%
55	0.247%	0.231%	1.247%	0.733%
60	0.489%	0.457%	1.688%	1.140%
65	0.961%	0.878%	2.247%	1.593%
70	1.641%	1.514%	2.995%	2.270%
75	2.854%	2.393%	4.117%	3.230%
80	5.265%	3.987%	6.465%	4.749%
85	9.624%	6.866%	10.197%	7.095%
90	16.928%	12.400%	15.182%	11.777%

## 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	35%	40%
6	35%	40%
7	35%	40%
8	33%	39%
9	31%	38%
10	29%	36%
11	27%	35%
12	25%	34%
13	22%	33%
14	19%	32%
15	16%	30%
16	13%	29%
17	10%	28%
18	6%	26%
19	2%	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	0.0002
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	0.0003
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
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	0.0005
29	0.0000	0.0050	0.0002	0.0001	N/A	0.0005
30	0.0000	0.0050	0.0002	0.0001	N/A	0.0006
31	0.0000	0.0050	0.0002	0.0001	N/A	0.0006
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0007
33	0.0000	0.0050	0.0002	0.0001	N/A	0.0008
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0008
35	0.0000	0.0050	0.0003	0.0001	N/A	0.0009
36	0.0000	0.0050	0.0004	0.0001	N/A	0.0009
37	0.0000	0.0050	0.0005	0.0001	N/A	0.0009
38	0.0000	0.0050	0.0005	0.0001	N/A	0.0010
39	0.0000	0.0050	0.0006	0.0001	N/A	0.0010
40	0.0300	0.0050	0.0006	0.0002	N/A	0.0010
41	0.0300	0.0050	0.0007	0.0002	N/A	0.0011
42	0.0300	0.0050	0.0007	0.0002	N/A	0.0012
43	0.0300	0.0050	0.0008	0.0003	N/A	0.0012
44	0.0300	0.0050	0.0009	0.0003	N/A	0.0013
45	0.0300	0.0050	0.0010	0.0003	N/A	0.0013
46	0.0300	0.0050	0.0011	0.0004	N/A	0.0014
47	0.0300	0.0050	0.0012	0.0004	N/A	0.0015
48	0.0300	0.0050	0.0013	0.0004	N/A	0.0016
49	0.0300	0.0050	0.0014	0.0004	N/A	0.0016
50	0.0300	0.0050	0.0016	0.0004	N/A	0.0017
51	0.0300	0.0050	0.0017	0.0004	N/A	0.0019
52	0.0300	0.0050	0.0018	0.0004	N/A	0.0021
53	0.0300	0.0050	0.0020	0.0005	N/A	0.0023
54	0.0500	0.0050	0.0022	0.0006	N/A	0.0026
55	0.0800	0.0050	0.0025	0.0006	N/A	0.0029
56	0.1000	0.0050	0.0027	0.0007	N/A	0.0032
57	0.1400	0.0050	0.0029	0.0008	N/A	0.0035
58	0.1800	0.0050	0.0032	0.0009	N/A	0.0040
59	0.2000	0.0050	0.0036	0.0010	N/A	0.0044
60	0.2200	0.0050	0.0040	0.0010	N/A	0.0049
61	0.2800	0.0050	0.0043	0.0011	N/A	0.0053
62	0.3200	0.0050	0.0047	0.0012	N/A	0.0057
63	0.2400	0.0050	0.0047	0.0014	N/A	0.0062
64	0.2400	0.0050	0.0047	0.0015	N/A	0.0066
65	0.2500	0.0050	0.0047	0.0017	N/A	0.0068
66	0.2500	0.0050	0.0047	0.0018	N/A	0.0072
67	0.2500	0.0050	0.0047	0.0020	N/A	0.0073
68	0.2200	0.0050	0.0047	0.0022	N/A	0.0077
69	0.2200	0.0050	0.0047	0.0023	N/A	0.0083
70	0.2400	0.0050	0.0047	0.0025	N/A	0.0091
71	0.2400	0.0050	0.0047	0.0026	N/A	0.0101
72	0.2400	0.0050	0.0047	0.0028	N/A	0.0114
73	0.2400	0.0050	0.0047	0.0030	N/A	0.0127
74	0.2400	0.0050	0.0047	0.0031	N/A	0.0144
75	1.0000	0.0000	0.0047	0.0000	N/A	0.0164



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**

Age	Service Retirement	Other Terminations	Service Disability	Ordinary Disability	Service Death	Ordinary Death
18	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
19	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
20	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
21	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
25	0.0000	0.0050	0.0002	0.0001	N/A	0.0001
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	0.0002
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
33	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0003
35	0.0000	0.0050	0.0003	0.0001	N/A	0.0004
36	0.0000	0.0050	0.0004	0.0001	N/A	0.0004
37	0.0000	0.0050	0.0004	0.0001	N/A	0.0004
38	0.0000	0.0050	0.0005	0.0001	N/A	0.0004
39	0.0000	0.0050	0.0005	0.0001	N/A	0.0005
40	0.0300	0.0050	0.0005	0.0002	N/A	0.0005
41	0.0300	0.0050	0.0006	0.0002	N/A	0.0005
42	0.0300	0.0050	0.0006	0.0002	N/A	0.0006
43	0.0300	0.0050	0.0007	0.0003	N/A	0.0006
44	0.0300	0.0050	0.0008	0.0003	N/A	0.0007
45	0.0300	0.0050	0.0009	0.0003	N/A	0.0008
46	0.0300	0.0050	0.0010	0.0004	N/A	0.0008
47	0.0300	0.0050	0.0010	0.0004	N/A	0.0009
48	0.0300	0.0050	0.0011	0.0004	N/A	0.0009
49	0.0300	0.0050	0.0012	0.0004	N/A	0.0010
50	0.0300	0.0050	0.0013	0.0004	N/A	0.0011
51	0.0300	0.0050	0.0014	0.0004	N/A	0.0012
52	0.0300	0.0050	0.0014	0.0004	N/A	0.0013
53	0.0300	0.0050	0.0015	0.0005	N/A	0.0015
54	0.0500	0.0050	0.0016	0.0006	N/A	0.0017
55	0.0800	0.0050	0.0017	0.0006	N/A	0.0019
56	0.1000	0.0050	0.0018	0.0007	N/A	0.0022
57	0.1400	0.0050	0.0019	0.0008	N/A	0.0024
58	0.1800	0.0050	0.0022	0.0009	N/A	0.0027
59	0.2000	0.0050	0.0024	0.0010	N/A	0.0030
60	0.2200	0.0050	0.0027	0.0010	N/A	0.0033
61	0.2800	0.0050	0.0029	0.0011	N/A	0.0036
62	0.3200	0.0050	0.0032	0.0012	N/A	0.0039
63	0.2400	0.0050	0.0034	0.0014	N/A	0.0042
64	0.2400	0.0050	0.0038	0.0015	N/A	0.0046
65	0.2500	0.0050	0.0041	0.0017	N/A	0.0049
66	0.2500	0.0050	0.0045	0.0018	N/A	0.0053
67	0.2500	0.0050	0.0049	0.0020	N/A	0.0056
68	0.2200	0.0050	0.0053	0.0022	N/A	0.0060
69	0.2200	0.0050	0.0058	0.0023	N/A	0.0063
70	0.2400	0.0050	0.0058	0.0025	N/A	0.0066
71	0.2400	0.0050	0.0058	0.0026	N/A	0.0069
72	0.2400	0.0050	0.0058	0.0028	N/A	0.0070
73	0.2400	0.0050	0.0058	0.0030	N/A	0.0075
74	0.2400	0.0050	0.0058	0.0031	N/A	0.0081
75	1.0000	0.0000	0.0000	0.0000	N/A	0.0089



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**

<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	0.0800
19	0.0000	0.0002	0.0001	N/A	0.0003	1	0.0550
20	0.0000	0.0002	0.0001	N/A	0.0003	2	0.0375
21	0.0000	0.0002	0.0001	N/A	0.0003	3	0.0300
22	0.0000	0.0002	0.0001	N/A	0.0003	4	0.0250
23	0.0000	0.0002	0.0001	N/A	0.0003	5	0.0233
24	0.0000	0.0002	0.0001	N/A	0.0003	6	0.0217
25	0.0000	0.0002	0.0001	N/A	0.0004	7	0.0200
26	0.0000	0.0002	0.0001	N/A	0.0004	8	0.0190
27	0.0000	0.0002	0.0001	N/A	0.0004	9	0.0180
28	0.0000	0.0002	0.0001	N/A	0.0005	10	0.0170
29	0.0000	0.0002	0.0001	N/A	0.0005	11	0.0160
30	0.0000	0.0002	0.0001	N/A	0.0006	12	0.0150
31	0.0000	0.0002	0.0001	N/A	0.0006	13	0.0140
32	0.0000	0.0002	0.0001	N/A	0.0007	14	0.0130
33	0.0000	0.0002	0.0001	N/A	0.0008	15	0.0120
34	0.0000	0.0003	0.0001	N/A	0.0008	16	0.0110
35	0.0000	0.0003	0.0001	N/A	0.0009	17	0.0100
36	0.0000	0.0004	0.0001	N/A	0.0009	18	0.0092
37	0.0000	0.0005	0.0001	N/A	0.0009	19	0.0084
38	0.0000	0.0005	0.0001	N/A	0.0010	20	0.0076
39	0.0000	0.0006	0.0001	N/A	0.0010	21	0.0068
40	0.0200	0.0006	0.0002	N/A	0.0010	22	0.0060
41	0.0200	0.0007	0.0002	N/A	0.0011	23	0.0056
42	0.0200	0.0007	0.0002	N/A	0.0012	24	0.0052
43	0.0200	0.0008	0.0003	N/A	0.0012	25	0.0048
44	0.0200	0.0009	0.0003	N/A	0.0013	26	0.0044
45	0.0200	0.0010	0.0003	N/A	0.0013	27	0.0040
46	0.0200	0.0011	0.0004	N/A	0.0014	28	0.0040
47	0.0200	0.0012	0.0004	N/A	0.0015	29	0.0040
48	0.0200	0.0013	0.0004	N/A	0.0016	30 & Above	0.0000
49	0.0200	0.0014	0.0004	N/A	0.0016		
50	0.0200	0.0016	0.0004	N/A	0.0017		
51	0.0200	0.0017	0.0004	N/A	0.0019		
52	0.0200	0.0018	0.0004	N/A	0.0021		
53	0.0200	0.0020	0.0005	N/A	0.0023		
54	0.0200	0.0022	0.0006	N/A	0.0026		
55	0.0250	0.0025	0.0006	N/A	0.0029		
56	0.0250	0.0027	0.0007	N/A	0.0032		
57	0.0300	0.0029	0.0008	N/A	0.0035		
58	0.0350	0.0032	0.0009	N/A	0.0040		
59	0.0500	0.0036	0.0010	N/A	0.0044		
60	0.0600	0.0040	0.0010	N/A	0.0049		
61	0.0700	0.0043	0.0011	N/A	0.0053		
62	0.1000	0.0047	0.0012	N/A	0.0057		
63	0.0900	0.0047	0.0014	N/A	0.0062		
64	0.1200	0.0047	0.0015	N/A	0.0066		
65	0.2000	0.0047	0.0017	N/A	0.0068		
66	0.2000	0.0047	0.0018	N/A	0.0072		
67	0.1800	0.0047	0.0020	N/A	0.0073		
68	0.1600	0.0047	0.0022	N/A	0.0077		
69	0.1600	0.0047	0.0023	N/A	0.0083		
70	0.2000	0.0047	0.0025	N/A	0.0091		
71	0.2000	0.0047	0.0026	N/A	0.0101		
72	0.2000	0.0047	0.0028	N/A	0.0114		
73	0.2000	0.0047	0.0030	N/A	0.0127		
74	0.2000	0.0047	0.0031	N/A	0.0144		
75	1.0000	0.0047	0.0000	N/A	0.0164		



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**

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	0.0001	0	0.0800
19	0.0000	0.0002	0.0001	N/A	0.0001	1	0.0550
20	0.0000	0.0002	0.0001	N/A	0.0001	2	0.0375
21	0.0000	0.0002	0.0001	N/A	0.0001	3	0.0300
22	0.0000	0.0002	0.0001	N/A	0.0001	4	0.0250
23	0.0000	0.0002	0.0001	N/A	0.0001	5	0.0233
24	0.0000	0.0002	0.0001	N/A	0.0001	6	0.0217
25	0.0000	0.0002	0.0001	N/A	0.0001	7	0.0200
26	0.0000	0.0002	0.0001	N/A	0.0002	8	0.0190
27	0.0000	0.0002	0.0001	N/A	0.0002	9	0.0180
28	0.0000	0.0002	0.0001	N/A	0.0002	10	0.0170
29	0.0000	0.0002	0.0001	N/A	0.0002	11	0.0160
30	0.0000	0.0002	0.0001	N/A	0.0002	12	0.0150
31	0.0000	0.0002	0.0001	N/A	0.0002	13	0.0140
32	0.0000	0.0002	0.0001	N/A	0.0003	14	0.0130
33	0.0000	0.0002	0.0001	N/A	0.0003	15	0.0120
34	0.0000	0.0003	0.0001	N/A	0.0003	16	0.0110
35	0.0000	0.0003	0.0001	N/A	0.0004	17	0.0100
36	0.0000	0.0004	0.0001	N/A	0.0004	18	0.0092
37	0.0000	0.0004	0.0001	N/A	0.0004	19	0.0084
38	0.0000	0.0005	0.0001	N/A	0.0004	20	0.0076
39	0.0000	0.0005	0.0001	N/A	0.0005	21	0.0068
40	0.0200	0.0005	0.0002	N/A	0.0005	22	0.0060
41	0.0200	0.0006	0.0002	N/A	0.0005	23	0.0056
42	0.0200	0.0006	0.0002	N/A	0.0006	24	0.0052
43	0.0200	0.0007	0.0003	N/A	0.0006	25	0.0048
44	0.0200	0.0008	0.0003	N/A	0.0007	26	0.0044
45	0.0200	0.0009	0.0003	N/A	0.0008	27	0.0040
46	0.0200	0.0010	0.0004	N/A	0.0008	28	0.0040
47	0.0200	0.0010	0.0004	N/A	0.0009	29	0.0040
48	0.0200	0.0011	0.0004	N/A	0.0009	30 & Above	0.0000
49	0.0200	0.0012	0.0004	N/A	0.0010		
50	0.0200	0.0013	0.0004	N/A	0.0011		
51	0.0200	0.0014	0.0004	N/A	0.0012		
52	0.0200	0.0014	0.0004	N/A	0.0013		
53	0.0200	0.0015	0.0005	N/A	0.0015		
54	0.0200	0.0016	0.0006	N/A	0.0017		
55	0.0250	0.0017	0.0006	N/A	0.0019		
56	0.0250	0.0018	0.0007	N/A	0.0022		
57	0.0300	0.0019	0.0008	N/A	0.0024		
58	0.0350	0.0022	0.0009	N/A	0.0027		
59	0.0500	0.0024	0.0010	N/A	0.0030		
60	0.0600	0.0027	0.0010	N/A	0.0033		
61	0.0700	0.0029	0.0011	N/A	0.0036		
62	0.1000	0.0032	0.0012	N/A	0.0039		
63	0.0900	0.0034	0.0014	N/A	0.0042		
64	0.1200	0.0038	0.0015	N/A	0.0046		
65	0.2000	0.0041	0.0017	N/A	0.0049		
66	0.2000	0.0045	0.0018	N/A	0.0053		
67	0.1800	0.0049	0.0020	N/A	0.0056		
68	0.1600	0.0053	0.0022	N/A	0.0060		
69	0.1600	0.0058	0.0023	N/A	0.0063		
70	0.2000	0.0058	0.0025	N/A	0.0066		
71	0.2000	0.0058	0.0026	N/A	0.0069		
72	0.2000	0.0058	0.0028	N/A	0.0070		
73	0.2000	0.0058	0.0030	N/A	0.0075		
74	0.2000	0.0058	0.0031	N/A	0.0081		
75	1.0000	0.0000	0.0000	N/A	0.0089		



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	0.0002	0	0.1500
19	0.0000	N/A	N/A	N/A	0.0003	1	0.0750
20	0.0000	N/A	N/A	N/A	0.0003	2	0.0550
21	0.0000	N/A	N/A	N/A	0.0003	3	0.0450
22	0.0000	N/A	N/A	N/A	0.0003	4	0.0350
23	0.0000	N/A	N/A	N/A	0.0003	5	0.0325
24	0.0000	N/A	N/A	N/A	0.0003	6	0.0300
25	0.0000	N/A	N/A	N/A	0.0004	7	0.0275
26	0.0000	N/A	N/A	N/A	0.0004	8	0.0262
27	0.0000	N/A	N/A	N/A	0.0004	9	0.0249
28	0.0000	N/A	N/A	N/A	0.0005	10	0.0236
29	0.0000	N/A	N/A	N/A	0.0005	11	0.0223
30	0.0000	N/A	N/A	N/A	0.0006	12	0.0210
31	0.0000	N/A	N/A	N/A	0.0006	13	0.0200
32	0.0000	N/A	N/A	N/A	0.0007	14	0.0190
33	0.0000	N/A	N/A	N/A	0.0008	15	0.0180
34	0.0000	N/A	N/A	N/A	0.0008	16	0.0170
35	0.0000	N/A	N/A	N/A	0.0009	17	0.0160
36	0.0000	N/A	N/A	N/A	0.0009	18	0.0156
37	0.0000	N/A	N/A	N/A	0.0009	19	0.0152
38	0.0000	N/A	N/A	N/A	0.0010	20	0.0148
39	0.0000	N/A	N/A	N/A	0.0010	21	0.0144
40	0.0000	N/A	N/A	N/A	0.0010	22	0.0140
41	0.0000	N/A	N/A	N/A	0.0011	23	0.0136
42	0.0000	N/A	N/A	N/A	0.0012	24	0.0132
43	0.0000	N/A	N/A	N/A	0.0012	25	0.0128
44	0.0000	N/A	N/A	N/A	0.0013	26	0.0124
45	0.0000	N/A	N/A	N/A	0.0013	27	0.0120
46	0.0000	N/A	N/A	N/A	0.0014	28	0.0120
47	0.0000	N/A	N/A	N/A	0.0015	29	0.0120
48	0.0000	N/A	N/A	N/A	0.0016	30 & Above	0.0120
49	0.0000	N/A	N/A	N/A	0.0016		
50	0.0000	N/A	N/A	N/A	0.0017		
51	0.0000	N/A	N/A	N/A	0.0019		
52	0.0000	N/A	N/A	N/A	0.0021		
53	0.0000	N/A	N/A	N/A	0.0023		
54	0.0000	N/A	N/A	N/A	0.0026		
55	0.0300	N/A	N/A	N/A	0.0029		
56	0.0250	N/A	N/A	N/A	0.0032		
57	0.0250	N/A	N/A	N/A	0.0035		
58	0.0250	N/A	N/A	N/A	0.0040		
59	0.0300	N/A	N/A	N/A	0.0044		
60	0.0450	N/A	N/A	N/A	0.0049		
61	0.0600	N/A	N/A	N/A	0.0053		
62	0.0900	N/A	N/A	N/A	0.0057		
63	0.0900	N/A	N/A	N/A	0.0062		
64	0.1600	N/A	N/A	N/A	0.0066		
65	0.2500	N/A	N/A	N/A	0.0068		
66	0.1800	N/A	N/A	N/A	0.0072		
67	0.1700	N/A	N/A	N/A	0.0073		
68	0.1600	N/A	N/A	N/A	0.0077		
69	0.1600	N/A	N/A	N/A	0.0083		
70	0.2000	N/A	N/A	N/A	0.0091		
71	0.2000	N/A	N/A	N/A	0.0101		
72	0.2000	N/A	N/A	N/A	0.0114		
73	0.2000	N/A	N/A	N/A	0.0127		
74	0.2000	N/A	N/A	N/A	0.0144		
75	1.0000	N/A	N/A	N/A	0.0164		



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	0.0001	0	0.1500
19	0.0000	N/A	N/A	N/A	0.0001	1	0.0750
20	0.0000	N/A	N/A	N/A	0.0001	2	0.0550
21	0.0000	N/A	N/A	N/A	0.0001	3	0.0450
22	0.0000	N/A	N/A	N/A	0.0001	4	0.0350
23	0.0000	N/A	N/A	N/A	0.0001	5	0.0325
24	0.0000	N/A	N/A	N/A	0.0001	6	0.0300
25	0.0000	N/A	N/A	N/A	0.0001	7	0.0275
26	0.0000	N/A	N/A	N/A	0.0002	8	0.0262
27	0.0000	N/A	N/A	N/A	0.0002	9	0.0249
28	0.0000	N/A	N/A	N/A	0.0002	10	0.0236
29	0.0000	N/A	N/A	N/A	0.0002	11	0.0223
30	0.0000	N/A	N/A	N/A	0.0002	12	0.0210
31	0.0000	N/A	N/A	N/A	0.0002	13	0.0200
32	0.0000	N/A	N/A	N/A	0.0003	14	0.0190
33	0.0000	N/A	N/A	N/A	0.0003	15	0.0180
34	0.0000	N/A	N/A	N/A	0.0003	16	0.0170
35	0.0000	N/A	N/A	N/A	0.0004	17	0.0160
36	0.0000	N/A	N/A	N/A	0.0004	18	0.0156
37	0.0000	N/A	N/A	N/A	0.0004	19	0.0152
38	0.0000	N/A	N/A	N/A	0.0004	20	0.0148
39	0.0000	N/A	N/A	N/A	0.0005	21	0.0144
40	0.0000	N/A	N/A	N/A	0.0005	22	0.0140
41	0.0000	N/A	N/A	N/A	0.0005	23	0.0136
42	0.0000	N/A	N/A	N/A	0.0006	24	0.0132
43	0.0000	N/A	N/A	N/A	0.0006	25	0.0128
44	0.0000	N/A	N/A	N/A	0.0007	26	0.0124
45	0.0000	N/A	N/A	N/A	0.0008	27	0.0120
46	0.0000	N/A	N/A	N/A	0.0008	28	0.0120
47	0.0000	N/A	N/A	N/A	0.0009	29	0.0120
48	0.0000	N/A	N/A	N/A	0.0009	30 & Above	0.0120
49	0.0000	N/A	N/A	N/A	0.0010		
50	0.0000	N/A	N/A	N/A	0.0011		
51	0.0000	N/A	N/A	N/A	0.0012		
52	0.0000	N/A	N/A	N/A	0.0013		
53	0.0000	N/A	N/A	N/A	0.0015		
54	0.0000	N/A	N/A	N/A	0.0017		
55	0.0300	N/A	N/A	N/A	0.0019		
56	0.0250	N/A	N/A	N/A	0.0022		
57	0.0250	N/A	N/A	N/A	0.0024		
58	0.0250	N/A	N/A	N/A	0.0027		
59	0.0300	N/A	N/A	N/A	0.0030		
60	0.0450	N/A	N/A	N/A	0.0033		
61	0.0600	N/A	N/A	N/A	0.0036		
62	0.0900	N/A	N/A	N/A	0.0039		
63	0.0900	N/A	N/A	N/A	0.0042		
64	0.1600	N/A	N/A	N/A	0.0046		
65	0.2500	N/A	N/A	N/A	0.0049		
66	0.1800	N/A	N/A	N/A	0.0053		
67	0.1700	N/A	N/A	N/A	0.0056		
68	0.1600	N/A	N/A	N/A	0.0060		
69	0.1600	N/A	N/A	N/A	0.0063		
70	0.2000	N/A	N/A	N/A	0.0066		
71	0.2000	N/A	N/A	N/A	0.0069		
72	0.2000	N/A	N/A	N/A	0.0070		
73	0.2000	N/A	N/A	N/A	0.0075		
74	0.2000	N/A	N/A	N/A	0.0081		
75	1.0000	N/A	N/A	N/A	0.0089		



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	0.0030	0.0002	0.0001	0.0002	0	0.0400
19	0.0000	0.0030	0.0002	0.0001	0.0002	1	0.0300
20	0.0000	0.0030	0.0002	0.0001	0.0002	2	0.0250
21	0.0000	0.0030	0.0002	0.0001	0.0002	3	0.0200
22	0.0000	0.0030	0.0002	0.0001	0.0002	4	0.0150
23	0.0000	0.0030	0.0002	0.0001	0.0002	5	0.0133
24	0.0000	0.0030	0.0002	0.0001	0.0002	6	0.0117
25	0.0000	0.0030	0.0002	0.0001	0.0002	7	0.0100
26	0.0000	0.0030	0.0002	0.0001	0.0003	8	0.0092
27	0.0000	0.0030	0.0002	0.0001	0.0003	9	0.0084
28	0.0000	0.0030	0.0002	0.0001	0.0003	10	0.0076
29	0.0000	0.0030	0.0002	0.0001	0.0003	11	0.0068
30	0.0000	0.0030	0.0002	0.0001	0.0003	12	0.0060
31	0.0000	0.0030	0.0002	0.0001	0.0003	13	0.0054
32	0.0000	0.0030	0.0002	0.0001	0.0004	14	0.0048
33	0.0000	0.0032	0.0002	0.0001	0.0004	15	0.0042
34	0.0000	0.0034	0.0002	0.0001	0.0004	16	0.0036
35	0.0000	0.0036	0.0002	0.0001	0.0005	17	0.0030
36	0.0000	0.0038	0.0002	0.0001	0.0005	18	0.0024
37	0.0000	0.0040	0.0002	0.0001	0.0006	19	0.0018
38	0.0000	0.0042	0.0003	0.0001	0.0006	20 & Above	0.0000
39	0.0000	0.0044	0.0003	0.0001	0.0007		
40	0.0100	0.0046	0.0003	0.0001	0.0008		
41	0.0100	0.0048	0.0003	0.0001	0.0008		
42	0.0100	0.0050	0.0003	0.0001	0.0009		
43	0.0100	0.0054	0.0003	0.0001	0.0009		
44	0.0100	0.0058	0.0004	0.0001	0.0009		
45	0.0100	0.0062	0.0004	0.0001	0.0010		
46	0.0100	0.0066	0.0004	0.0001	0.0010		
47	0.0100	0.0070	0.0004	0.0001	0.0010		
48	0.0100	0.0080	0.0004	0.0001	0.0011		
49	0.0100	0.0090	0.0005	0.0001	0.0012		
50	0.0100	0.0100	0.0005	0.0001	0.0012		
51	0.0200	0.0120	0.0006	0.0001	0.0013		
52	0.0250	0.0140	0.0006	0.0001	0.0013		
53	0.0300	0.0200	0.0007	0.0001	0.0014		
54	0.1000	0.0300	0.0008	0.0001	0.0015		
55	0.2400	0.1000	0.0016	0.0001	0.0016		
56	0.1800	0.0800	0.0018	0.0001	0.0016		
57	0.2000	0.1200	0.0019	0.0001	0.0017		
58	0.2400	0.1400	0.0019	0.0001	0.0019		
59	0.4000	0.2000	0.0019	0.0001	0.0021		
60	1.0000	0.0000	0.0000	0.0000	0.0023		

## Los Angeles County Employees Retirement Association

**Table A-13: Rate of Separation From Active Service For Safety Members  
Plan A & B – 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	0.0037	0.0005	0.0001	0.0001	0	0.0400
19	0.0000	0.0037	0.0005	0.0001	0.0001	1	0.0300
20	0.0000	0.0037	0.0005	0.0001	0.0001	2	0.0250
21	0.0000	0.0037	0.0005	0.0001	0.0001	3	0.0200
22	0.0000	0.0037	0.0005	0.0001	0.0001	4	0.0150
23	0.0000	0.0037	0.0005	0.0001	0.0001	5	0.0133
24	0.0000	0.0037	0.0005	0.0001	0.0001	6	0.0117
25	0.0000	0.0037	0.0005	0.0001	0.0001	7	0.0100
26	0.0000	0.0037	0.0005	0.0001	0.0002	8	0.0092
27	0.0000	0.0037	0.0005	0.0001	0.0002	9	0.0084
28	0.0000	0.0042	0.0005	0.0001	0.0002	10	0.0076
29	0.0000	0.0047	0.0005	0.0001	0.0002	11	0.0068
30	0.0000	0.0051	0.0005	0.0001	0.0002	12	0.0060
31	0.0000	0.0056	0.0005	0.0001	0.0002	13	0.0054
32	0.0000	0.0060	0.0005	0.0001	0.0003	14	0.0048
33	0.0000	0.0067	0.0005	0.0001	0.0003	15	0.0042
34	0.0000	0.0074	0.0005	0.0001	0.0003	16	0.0036
35	0.0000	0.0080	0.0006	0.0001	0.0004	17	0.0030
36	0.0000	0.0087	0.0006	0.0001	0.0004	18	0.0024
37	0.0000	0.0094	0.0006	0.0001	0.0004	19	0.0018
38	0.0000	0.0098	0.0007	0.0001	0.0004	20 & Above	0.0000
39	0.0000	0.0101	0.0007	0.0001	0.0005		
40	0.0100	0.0105	0.0007	0.0001	0.0005		
41	0.0100	0.0109	0.0008	0.0001	0.0005		
42	0.0100	0.0112	0.0008	0.0001	0.0006		
43	0.0100	0.0116	0.0009	0.0001	0.0006		
44	0.0100	0.0120	0.0009	0.0001	0.0007		
45	0.0100	0.0124	0.0010	0.0001	0.0008		
46	0.0100	0.0128	0.0011	0.0001	0.0008		
47	0.0100	0.0131	0.0011	0.0001	0.0009		
48	0.0100	0.0135	0.0013	0.0001	0.0009		
49	0.0100	0.0150	0.0016	0.0001	0.0010		
50	0.0100	0.0225	0.0018	0.0001	0.0011		
51	0.0200	0.0263	0.0020	0.0001	0.0012		
52	0.0250	0.0300	0.0022	0.0001	0.0013		
53	0.0300	0.0375	0.0028	0.0001	0.0015		
54	0.1000	0.0450	0.0033	0.0001	0.0017		
55	0.2400	0.0525	0.0038	0.0001	0.0019		
56	0.1800	0.0900	0.0043	0.0001	0.0022		
57	0.2000	0.0900	0.0048	0.0001	0.0024		
58	0.2400	0.0900	0.0051	0.0001	0.0027		
59	0.4000	0.0900	0.0054	0.0001	0.0030		
60	1.0000	0.0000	0.0000	0.0000	0.0033		

# 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, 2010. 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)**

<b>Plan D:</b>	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.	
<b>Plan E:</b>	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)
<b>Plan F:</b>	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**

<b>Plans A-D:</b>	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 valuation and recommendation of the actuary and the Board of Investments.	(31453, 31454 31581)
---	-------------------------

**SERVICE RETIREMENT ALLOWANCE**

<b><u>Eligibility:</u></b>		(31672)
<b>Plans A-D:</b>	<b>General members:</b> Age 50 with 10 years of County service; Any age with 30 years of service; or Age 70 regardless of service.	
	<b>Safety members:</b> 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)
<b>Plan E:</b>	Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.	(31491.3)
<b><u>Final Compensation:</u></b>		(31462.3, 31461.45)
<b>Plans A-D:</b>	Average of the member's highest monthly pensionable earnings during any 12-consecutive-month period.	
<b>PLAN E:</b>	Average of the member's highest monthly pensionable earnings during any three 12-consecutive month periods.	(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)
<b><u>Monthly Allowance:</u></b>		(31664)
	<b>Safety members:</b> 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.)	
<b>Plans A-D:</b>	<b>General members:</b> 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)**

<b>Plan E:</b>	<b>General members: (a)+(b)-(c) where:</b>	
	(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:**

<b>Plans A-C:</b>	<b>General Members:</b>	(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:**

<b>Plan</b>	<b>Age 50</b>	<b>Age 55</b>	<b>Age 60</b>	<b>Age 65 &amp; Up</b>	
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:**

<b>Plans A-D:</b>	Allowance may not exceed 100% of final compensation.	
<b>Plan E:</b>	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):**

<b>Plans A-D:</b>	Life Annuity payable to retired member with 65% continuance to an eligible survivor (or eligible children).	(31760.12, 31785.4)
<b>Plan E:</b>	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)

<b>Unmodified Plus:</b>	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)
<b>Option 1:</b>	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)
<b>Option 2:</b>	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)
<b>Option 3:</b>	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)
<b>Option 4:</b>	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. (31727(a))

(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(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)

**Normal Form Of Payment:** Life Annuity with 65% continuance to a surviving spouse (or eligible children). (31760, 31760.1, 31760.12, 31785, 31785.4)

**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)

**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 would have been entitled if the member retired or could have 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-E:** 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. (31789.3)

**DEFERRED VESTED BENEFITS**

<b><u>Eligibility:</u></b>		(31700)
<b>Plans A-D:</b>	Five years of county or reciprocal service. Member contributions must be left on deposit.	
<b>Plan E:</b>	Age 55 with 10 years of service.	(31491)
<b><u>Monthly Allowance:</u></b>		
<b>Plans A-D:</b>	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)
<b>Plan E:</b>	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)

<b>Plan A:</b>	Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	
<b>Plans B-D:</b>	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.	
<b>Plan E:</b>	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, 2010 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 decreased by 1.4% and the total salary increased by 1.0% since the last valuation. The total number of retired members and their beneficiaries increased by 2.1%, while the average retirement benefit amount increased by 4.2%.

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 2010 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, 2010 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.

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, 2010

	Sex	Vested	NonVested	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
<b>General Members</b>								
Plan A	M	474	-	474	\$ 46,836,984	61.9	\$ 8,234	34.7
	F	1,032	-	1,032	79,416,348	60.1	6,413	34.6
Plan B	M	78	-	78	7,741,236	60.1	8,271	32.5
	F	186	-	186	14,657,472	58.6	6,567	31.6
Plan C	M	64	-	64	6,439,140	59.0	8,384	31.9
	F	159	-	159	12,716,064	58.1	6,665	30.7
Plan D	M	11,862	5,422	17,284	1,214,255,508	45.1	5,854	11.1
	F	23,749	10,761	34,510	2,205,744,504	44.5	5,326	11.2
Plan E	M	5,962	3,082	9,044	636,245,700	49.5	5,863	16.0
	F	12,592	5,990	18,582	1,094,084,736	48.9	4,907	16.8
Total		56,158	25,255	81,413	\$ 5,318,137,692	46.6	\$ 5,444	13.6
<b>Safety Members</b>								
Plan A	M	141	-	141	\$ 19,628,592	56.6	\$ 11,601	33.6
	F	18	-	18	2,214,252	56.3	10,251	34.9
Plan B	M	8,550	2,565	11,115	1,076,972,004	41.5	8,074	14.6
	F	1,207	516	1,723	158,490,684	38.5	7,665	11.7
Total		9,916	3,081	12,997	\$ 1,257,305,532	41.3	\$ 8,062	14.5
<b>Grand Total</b>		66,074	28,336	94,410	\$ 6,575,443,224	45.9	\$ 5,804	13.7

**Los Angeles County Employees  
Retirement Association**

**Exhibit C-2Ret: LACERA Membership – Retired Members as of June 30, 2010**

	<b>Sex</b>	<b>Number</b>	<b>Annual Allowance</b>	<b>Average Age</b>	<b>Average Monthly Benefit</b>
<b>General Members</b>					
Plan A	M	11,327	\$ 591,956,500	74.8	\$ 4,355
	F	17,129	596,687,547	75.7	2,903
Plan B	M	185	7,717,345	69.9	3,476
	F	429	12,875,775	71.1	2,501
Plan C	M	121	3,509,568	69.8	2,417
	F	256	5,698,519	71.2	1,855
Plan D	M	2,537	71,647,222	66.0	2,353
	F	4,387	99,104,220	66.1	1,883
Plan E	M	2,509	49,695,806	69.6	1,651
	F	4,872	74,883,097	69.0	1,281
Total		43,752	\$ 1,513,775,599	72.7	\$ 2,883
<b>Safety Members</b>					
Plan A	M	6,266	\$ 497,169,395	69.8	\$ 6,612
	F	1,926	96,479,550	72.9	4,174
Plan B	M	1,709	91,371,416	53.6	4,455
	F	543	21,548,145	48.9	3,307
Total		10,444	\$ 706,568,506	66.7	\$ 5,638
<b>Grand Total</b>		54,196	\$ 2,220,344,105	71.6	\$ 3,414

**Los Angeles County Employees  
Retirement Association**

**Exhibit C-2Def: LACERA Membership – Deferred Members as of June 30, 2010  
Subtotaled by Plan and Retirement Type**

	<u>Sex</u>	<u>Number</u>	<u>Average Age</u>
<b><i>General Members</i></b>			
Plan A	M	84	62.8
	F	172	61.2
Plan B	M	10	60.9
	F	33	59.1
Plan C	M	8	59.0
	F	21	56.0
Plan D	M	2,271	44.3
	F	4,500	43.0
Plan E	M	1,276	53.5
	F	2,929	53.1
Total		11,304	47.6
<b><i>Safety Members</i></b>			
Plan A	M	9	60.6
	F	-	-
Plan B	M	521	38.9
	F	164	41.1
Total		694	39.7
<b><i>Grand Total</i></b>		11,998	47.1

## Los Angeles County Employees Retirement Association

### Exhibit C-2a: LACERA Membership – Retired Members as of June 30, 2010 Subtotaled by Plan and Retirement Type

<u>Plan</u>	<u>Retirement Type</u>	<u>Number</u>	<u>Annual Benefits in Thousands</u>	<u>Average Monthly Benefit</u>
<b>General Plans:</b>				
<b>Plan A</b>				
	Healthy	21,016	\$ 990,161	\$ 3,926
	Disabled	2,350	72,859	2,584
	Beneficiaries	5,090	125,624	2,057
	Total	<u>28,456</u>	<u>\$ 1,188,644</u>	<u>\$ 3,481</u>
<b>Plan B</b>				
	Healthy	501	\$ 18,113	\$ 3,013
	Disabled	69	1,501	1,813
	Beneficiaries	44	979	1,854
	Total	<u>614</u>	<u>\$ 20,593</u>	<u>\$ 2,795</u>
<b>Plan C</b>				
	Healthy	281	\$ 7,392	\$ 2,192
	Disabled	57	1,302	1,904
	Beneficiaries	39	514	1,098
	Total	<u>377</u>	<u>\$ 9,208</u>	<u>\$ 2,035</u>
<b>Plan D</b>				
	Healthy	5,049	\$ 129,651	\$ 2,140
	Disabled	1,269	32,684	2,146
	Beneficiaries	606	8,416	1,157
	Total	<u>6,924</u>	<u>\$ 170,751</u>	<u>\$ 2,055</u>
<b>Plan E</b>				
	Healthy	6,898	\$ 120,417	\$ 1,455
	Disabled	0	0	N/A
	Beneficiaries	483	4,162	718
	Total	<u>7,381</u>	<u>\$ 124,579</u>	<u>\$ 1,407</u>
<b>Safety Plans:</b>				
<b>Plan A</b>				
	Healthy	3,000	\$ 251,460	\$ 6,985
	Disabled	3,792	278,663	6,124
	Beneficiaries	1,400	63,527	3,781
	Total	<u>8,192</u>	<u>\$ 593,649</u>	<u>\$ 6,039</u>
<b>Plan B</b>				
	Healthy	653	\$ 44,601	\$ 5,692
	Disabled	1,453	63,485	3,641
	Beneficiaries	146	4,834	2,759
	Total	<u>2,252</u>	<u>\$ 112,920</u>	<u>\$ 4,179</u>
<b>Grand Totals</b>		<b>54,196</b>	<b>2,220,344</b>	<b>3,414</b>

**Los Angeles County Employees  
Retirement Association**

**Exhibit C-2b: LACERA Membership – Retired Members as of June 30, 2010  
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>
<b>Healthy Retirees</b>				
	General A	21,016	\$ 990,161	\$ 3,926
	General B	501	18,113	3,013
	General C	281	7,392	2,192
	General D	5,049	129,651	2,140
	General E	6,898	120,417	1,455
	Safety A	3,000	251,459	6,985
	Safety B	653	44,601	5,692
	Total	37,398	\$ 1,561,794	\$ 3,480
<b>Disabled Retirees</b>				
	General A	2,350	\$ 72,859	\$ 2,584
	General B	69	1,501	1,813
	General C	57	1,302	1,904
	General D	1,269	32,684	2,146
	Safety A	3,792	278,663	6,124
	Safety B	1,453	63,485	3,641
	Total	8,990	\$ 450,494	\$ 4,176
<b>Beneficiaries</b>				
	General A	5,090	\$ 125,624	\$ 2,057
	General B	44	979	1,854
	General C	39	514	1,098
	General D	606	8,416	1,157
	General E	483	4,162	718
	Safety A	1,400	63,527	3,781
	Safety B	146	4,834	2,759
	Total	7,808	\$ 208,056	\$ 2,221
<b>Grand Totals</b>		54,196	\$ 2,220,344	\$ 3,414

## Los Angeles County Employees Retirement Association

### Exhibit C-3: Age Distribution of Active Members as of June 30, 2010

	Age Groups						Total
	0-29	30-39	40-49	50-59	60-69	70+	
<b>General Plans:</b>							
Plan A							
Male	-	-	-	177	254	43	474
Female	-	-	-	558	425	49	1,032
Plan B							
Male	-	-	-	41	35	2	78
Female	-	-	-	118	58	10	186
Plan C							
Male	-	-	-	39	24	1	64
Female	-	-	2	97	55	5	159
Plan D							
Male	1,498	4,295	5,186	4,319	1,775	211	17,284
Female	2,939	9,230	10,735	8,451	2,890	265	34,510
Plan E							
Male	511	1,440	2,277	2,848	1,736	232	9,044
Female	934	2,914	5,240	6,277	2,934	283	18,582
<b>Safety Plans:</b>							
Plan A							
Male	-	-	-	121	20	-	141
Female	-	-	-	15	3	-	18
Plan B							
Male	1,316	3,054	4,397	2,265	80	3	11,115
Female	294	647	590	186	6	-	1,723
<b>Grand Totals:</b>	7,492	21,580	28,427	25,512	10,295	1,104	94,410



## Los Angeles County Employees Retirement Association

**Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
All Plans**

<b>Count</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Total Count</b>
	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	281	292	340	174	51	12	0	0	0	0	0	0	1,150
25-29	588	1,001	1,590	1,447	921	779	16	0	0	0	0	0	6,342
30-34	363	820	1,352	1,476	1,470	3,293	1,096	10	0	0	0	0	9,880
35-39	253	547	945	1,077	959	3,439	3,751	679	50	0	0	0	11,700
40-44	166	431	637	805	698	2,794	3,498	3,192	1,727	71	0	0	14,019
45-49	132	322	461	618	566	2,036	2,405	2,831	3,838	1,102	97	0	14,408
50-54	112	260	359	493	459	1,723	1,931	1,972	2,894	2,241	1,206	94	13,744
55-59	53	147	252	321	325	1,221	1,448	1,526	2,043	1,501	1,657	1,274	11,768
60-64	35	78	120	174	159	777	956	1,105	1,290	744	966	1,299	7,703
65 & Over	10	27	38	59	88	401	515	673	724	339	362	460	3,696
<b>Total Count</b>	1,993	3,925	6,094	6,644	5,696	16,475	15,616	11,988	12,566	5,998	4,288	3,127	94,410

<b>Average Compensation</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Average Comp.</b>
	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	33,609	44,138	49,152	45,274	45,873	49,370	-	-	-	-	-	-	43,351
25-29	44,141	51,440	54,724	56,567	53,311	53,756	57,537	-	-	-	-	-	53,328
30-34	56,012	54,765	56,485	58,118	58,380	61,883	64,794	73,889	-	-	-	-	59,589
35-39	55,412	57,652	58,547	59,580	60,230	66,211	71,504	72,802	74,555	-	-	-	65,973
40-44	57,828	58,830	56,142	56,972	60,738	67,978	74,136	79,418	79,235	80,368	-	-	71,637
45-49	60,510	51,624	53,047	52,782	55,707	63,818	69,339	78,353	85,232	88,265	83,348	-	73,862
50-54	58,077	56,293	53,257	53,370	55,354	63,582	67,459	75,148	84,225	94,756	82,245	90,265	75,943
55-59	60,576	60,699	55,868	55,476	59,719	65,932	65,846	71,895	79,039	90,936	82,503	74,888	74,700
60-64	79,106	65,526	55,948	51,144	62,768	65,787	66,089	69,724	74,738	84,636	85,048	77,719	73,648
65 & Over	96,971	104,914	57,915	80,779	76,682	70,481	66,760	64,500	70,199	85,538	79,091	78,518	72,549
<b>Avg. Annual</b>	50,573	54,600	55,423	56,584	58,021	64,537	69,762	75,396	81,183	90,661	82,735	77,061	69,648



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-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
General Plan A**

<b>Count</b>														
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	0	1	4	28	29	62	
55-59	0	0	0	0	0	4	6	11	13	30	138	471	673	
60-64	0	0	0	0	0	1	16	11	32	32	94	328	514	
65 & Over	0	0	0	0	0	4	5	14	19	11	39	165	257	
<b>Total Count</b>	0	0	0	0	0	9	27	36	65	77	299	993	1,506	

<b>Compensation</b>														
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	-	-	-	-	-	-	-	-	78,036	64,731	73,203	77,101	74,557	
55-59	-	-	-	-	-	66,564	91,384	72,257	91,728	72,462	83,009	73,761	76,036	
60-64	-	-	-	-	-	159,372	96,769	88,961	85,921	90,533	104,568	83,964	88,915	
65 & Over	-	-	-	-	-	90,012	98,311	90,369	109,091	129,359	102,310	91,839	96,326	
<b>Avg. Annual Compensation</b>	-	-	-	-	-	87,297	95,858	84,405	93,734	87,698	91,386	80,233	83,834	



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-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
General Plan B**

<b>Count</b>														
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	0	2	0	41	1	45	45
55-59	0	0	0	0	0	0	2	4	2	5	90	11	114	114
60-64	0	0	0	0	0	1	2	1	2	3	57	5	71	71
65 & Over	0	0	0	0	0	0	0	0	1	2	30	1	34	34
<b>Total Count</b>	0	0	0	0	0	1	5	5	7	10	218	18	264	264

<b>Compensation</b>														
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	-	-	-	-	-	-	47,004	-	68,712	-	72,655	100,476	72,528	72,528
55-59	-	-	-	-	-	-	107,328	100,641	127,254	69,250	85,039	116,721	89,083	89,083
60-64	-	-	-	-	-	159,372	76,734	126,408	74,904	115,188	87,801	82,286	89,446	89,446
65 & Over	-	-	-	-	-	-	-	-	70,308	164,040	71,058	98,712	77,319	77,319
<b>Avg. Annual Compensation</b>	-	-	-	-	-	159,372	83,026	105,794	87,435	101,989	81,508	105,253	84,844	84,844



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-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
General Plan C**

<b>Count</b>														
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	1	0	2
50-54	0	0	0	0	0	0	1	2	0	5	35	3	46	46
55-59	0	0	0	0	0	0	1	1	0	4	77	7	90	90
60-64	0	0	0	0	0	0	1	0	2	8	54	3	68	68
65 & Over	0	0	0	0	0	0	0	0	0	0	16	1	17	17
<b>Total Count</b>	0	0	0	0	0	0	3	3	2	18	183	14	223	

<b>Compensation</b>														
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	-	-	-	-	-	-	-	-	-	141,408	81,060	-	111,234	111,234
50-54	-	-	-	-	-	-	91,272	78,816	-	60,187	67,272	67,080	67,513	67,513
55-59	-	-	-	-	-	-	108,240	127,944	-	141,864	91,365	121,294	96,531	96,531
60-64	-	-	-	-	-	-	42,456	-	95,124	104,937	72,069	155,508	79,860	79,860
65 & Over	-	-	-	-	-	-	-	-	-	-	91,177	250,008	100,520	100,520
<b>Avg. Annual Compensation</b>	-	-	-	-	-	-	80,656	95,192	95,124	102,739	80,991	126,202	85,898	85,898



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-4d: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
General Plan D**

<b>Count</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Total Count</b>
	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	188	173	175	92	28	4	0	0	0	0	0	0	660
25-29	389	661	913	789	579	437	9	0	0	0	0	0	3,777
30-34	256	583	883	898	1,047	2,091	559	4	0	0	0	0	6,321
35-39	176	386	633	717	684	2,157	2,076	348	27	0	0	0	7,204
40-44	109	318	467	548	522	1,806	2,077	1,521	646	34	0	0	8,048
45-49	92	241	330	446	411	1,378	1,517	1,522	1,518	368	50	0	7,873
50-54	74	182	267	348	324	1,186	1,242	1,180	1,355	642	339	28	7,167
55-59	31	105	175	222	235	843	949	910	1,025	575	368	165	5,603
60-64	19	54	78	118	100	527	608	694	649	293	199	136	3,475
65 & Over	9	14	14	35	45	257	308	382	367	147	74	14	1,666
<b>Total Count</b>	<b>1,343</b>	<b>2,717</b>	<b>3,935</b>	<b>4,213</b>	<b>3,975</b>	<b>10,686</b>	<b>9,345</b>	<b>6,561</b>	<b>5,587</b>	<b>2,059</b>	<b>1,030</b>	<b>343</b>	<b>51,794</b>

<b>Compensation</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Average Comp.</b>
	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	31,584	41,984	39,590	37,710	37,946	33,333	-	-	-	-	-	-	37,567
25-29	41,990	50,366	49,659	48,903	48,880	47,992	46,601	-	-	-	-	-	48,515
30-34	53,779	53,891	53,286	54,460	55,696	59,567	58,944	78,009	-	-	-	-	56,521
35-39	56,820	57,331	56,987	57,662	58,613	64,317	67,729	67,223	75,381	-	-	-	63,077
40-44	56,770	58,373	55,388	56,755	60,478	67,395	72,382	74,578	69,163	78,922	-	-	67,860
45-49	67,945	51,609	54,637	54,429	56,343	64,922	69,363	76,188	78,404	77,321	81,284	-	69,393
50-54	58,420	56,936	51,837	54,278	57,465	66,257	70,882	76,488	81,641	83,013	80,225	86,367	72,058
55-59	67,689	60,695	55,429	56,207	60,909	67,979	68,070	74,555	80,503	92,747	82,222	85,764	74,061
60-64	87,342	62,651	55,695	52,507	65,239	65,604	68,224	72,119	77,210	91,289	90,984	92,156	73,585
65 & Over	98,384	113,934	45,513	78,986	76,042	72,144	67,911	64,388	72,879	90,201	85,241	73,998	72,454
<b>Avg. Annual Compensation</b>	<b>50,219</b>	<b>54,037</b>	<b>52,811</b>	<b>54,120</b>	<b>56,698</b>	<b>64,062</b>	<b>68,974</b>	<b>74,050</b>	<b>77,990</b>	<b>86,337</b>	<b>83,429</b>	<b>87,868</b>	<b>66,031</b>



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, 2010  
General Plan E**

<b>Count</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Total Count</b>
	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	53	64	62	46	12	4	0	0	0	0	0	0	241
25-29	114	207	287	231	175	187	3	0	0	0	0	0	1,204
30-34	57	158	232	270	225	680	255	3	0	0	0	0	1,880
35-39	56	119	183	200	182	764	786	170	14	0	0	0	2,474
40-44	47	92	109	182	133	620	778	868	521	24	0	0	3,374
45-49	37	73	113	151	136	519	651	847	1,232	353	31	0	4,143
50-54	37	74	87	139	132	484	611	651	1,049	715	516	20	4,515
55-59	22	40	72	94	88	354	469	567	880	648	798	578	4,610
60-64	16	24	40	54	59	233	321	390	596	390	547	809	3,479
65 & Over	1	13	24	23	43	139	196	274	334	179	203	277	1,706
<b>Total Count</b>	<b>440</b>	<b>864</b>	<b>1,209</b>	<b>1,390</b>	<b>1,185</b>	<b>3,984</b>	<b>4,070</b>	<b>3,770</b>	<b>4,626</b>	<b>2,309</b>	<b>2,095</b>	<b>1,684</b>	<b>27,626</b>

<b>Compensation</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Average Comp.</b>
	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	29,861	38,249	35,616	35,686	37,979	35,769	-	-	-	-	-	-	35,183
25-29	39,761	44,852	44,894	42,871	44,165	45,490	53,372	-	-	-	-	-	44,020
30-34	60,200	51,784	49,866	47,164	50,578	51,784	52,106	44,316	-	-	-	-	51,027
35-39	48,935	55,224	53,118	50,589	54,399	56,335	58,437	57,949	58,773	-	-	-	56,062
40-44	59,339	57,686	49,123	48,214	54,464	55,038	61,704	65,781	60,985	63,506	-	-	59,868
45-49	41,647	50,288	44,282	43,947	49,808	53,178	59,780	68,968	71,676	66,946	64,801	-	63,361
50-54	57,047	52,811	55,462	49,821	49,618	53,824	57,005	66,558	75,402	76,571	63,595	69,758	65,689
55-59	50,553	59,232	53,381	51,164	55,925	59,268	59,250	65,729	72,994	80,819	70,123	67,120	68,211
60-64	69,326	71,995	53,615	45,701	58,580	62,685	59,431	64,325	70,855	77,361	79,223	70,923	69,786
65 & Over	84,252	95,200	65,149	81,854	77,353	66,752	62,187	62,662	64,253	78,138	72,622	68,534	67,939
<b>Avg. Annual Compensation</b>	<b>47,803</b>	<b>51,744</b>	<b>48,898</b>	<b>47,405</b>	<b>52,098</b>	<b>55,106</b>	<b>59,014</b>	<b>65,876</b>	<b>70,887</b>	<b>76,411</b>	<b>71,055</b>	<b>69,211</b>	<b>62,634</b>



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-4f: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010  
Safety Plan A**

<b>Count</b>														
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	0	7	23	8	39	
55-59	0	0	0	0	0	0	0	0	1	6	57	33	97	
60-64	0	0	0	0	0	0	0	1	0	0	3	17	21	
65 & Over	0	0	0	0	0	0	0	0	0	0	0	2	2	
<b>Total Count</b>	0	0	0	0	0	0	0	2	1	13	83	60	159	

<b>Compensation</b>														
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	-	120,672	129,494	193,951	140,562	
55-59	-	-	-	-	-	-	-	-	113,604	120,326	131,291	135,071	131,716	
60-64	-	-	-	-	-	-	-	91,404	-	-	136,800	146,240	142,281	
65 & Over	-	-	-	-	-	-	-	-	-	-	-	298,278	298,278	
<b>Avg. Annual Compensation</b>	-	-	-	-	-	-	-	99,324	113,604	120,512	130,992	151,527	137,376	



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-4g: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2010 Safety Plan B

<b>Count</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Total Count</b>
	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	40	55	103	36	11	4	0	0	0	0	0	0	249
25-29	85	133	390	427	167	155	4	0	0	0	0	0	1,361
30-34	50	79	237	308	198	522	282	3	0	0	0	0	1,679
35-39	21	42	129	160	93	518	889	161	9	0	0	0	2,022
40-44	10	21	61	75	43	368	643	803	560	13	0	0	2,597
45-49	3	8	18	21	19	139	237	462	1,088	380	15	0	2,390
50-54	1	4	5	6	3	53	76	138	487	868	224	5	1,870
55-59	0	2	5	5	2	20	21	33	122	233	129	9	581
60-64	0	0	2	2	0	15	8	8	9	18	12	1	75
65 & Over	0	0	0	1	0	1	6	3	3	0	0	0	14
<b>Total Count</b>	210	344	950	1,041	536	1,795	2,166	1,611	2,278	1,512	380	15	12,838

<b>Compensation</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Average Comp.</b>
	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	48,095	57,765	73,548	76,856	74,662	79,008	-	-	-	-	-	-	66,588
25-29	59,863	67,026	73,815	78,138	78,255	79,979	85,266	-	-	-	-	-	74,917
30-34	62,673	67,175	74,881	78,387	81,439	84,318	87,863	97,968	-	-	-	-	80,727
35-39	60,882	67,478	73,902	79,412	83,533	88,667	91,872	100,542	96,625	-	-	-	88,418
40-44	62,260	70,773	74,464	79,811	83,297	92,636	94,842	103,325	107,834	115,280	-	-	98,632
45-49	65,144	64,242	78,915	81,326	84,184	92,604	95,444	102,694	110,109	118,527	128,711	-	106,755
50-54	70,800	91,458	90,727	82,874	79,660	92,847	95,525	103,935	110,495	118,548	128,640	116,436	114,577
55-59	-	90,276	107,016	104,102	86,790	97,460	99,368	99,213	107,922	115,814	130,725	125,464	115,083
60-64	-	-	112,476	117,750	-	107,906	109,917	88,975	109,324	109,391	131,636	143,424	111,282
65 & Over	-	-	-	118,824	-	83,208	130,772	125,984	157,904	-	-	-	131,309
<b>Avg. Annual Compensation</b>	58,634	66,218	74,547	78,815	80,928	88,128	92,986	102,795	109,522	117,984	129,445	123,652	96,235



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-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
All Plans**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	1	0	3	8	22	65	5	104	\$ 1,527
35-39	0	0	0	1	0	0	3	43	58	3	108	2,709
40-44	0	0	0	0	1	17	74	123	109	7	331	2,834
45-49	0	0	0	0	5	76	145	169	158	21	574	2,737
50-54	0	0	0	13	45	114	152	181	480	86	1,071	2,567
55-59	0	0	14	65	94	127	184	508	1,965	389	3,346	3,575
60-64	0	11	119	213	171	242	756	2,446	3,795	524	8,277	4,097
65-69	4	30	178	239	262	784	2,078	3,429	3,159	380	10,543	3,987
70-74	19	60	178	235	625	1,690	2,213	2,383	1,564	136	9,103	3,516
75-79	52	91	219	655	1,199	2,136	1,620	1,019	703	65	7,759	3,212
80-84	83	110	518	1,107	1,282	1,446	719	502	494	63	6,324	2,883
85-89	61	196	778	989	898	483	307	297	316	47	4,372	2,582
90-94	53	177	470	437	154	111	118	142	109	16	1,787	2,204
95-99	49	88	153	48	6	20	26	27	21	2	440	2,116
100 & Over	14	20	11	0	0	2	4	5	1	0	57	1,584
<b>Total Count</b>	335	783	2,638	4,003	4,742	7,251	8,407	11,296	12,997	1,744	<b>54,196</b>	
<b>Avg Monthly Benefit</b>	\$ 1,524	\$ 1,948	\$ 2,422	\$ 2,538	\$ 2,960	\$ 3,608	\$ 3,412	\$ 3,943	\$ 3,530	\$ 4,098		<b>\$ 3,414</b>



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-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
General Plan A**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	0	0	1	0	5	17	1	24	\$ 1,516
35-39	0	0	0	0	0	0	1	1	5	0	7	2,060
40-44	0	0	0	0	1	1	2	3	5	3	15	1,921
45-49	0	0	0	0	0	0	4	2	7	2	15	2,047
50-54	0	0	0	1	5	2	10	12	34	5	69	2,220
55-59	0	0	6	24	19	18	32	166	368	82	715	3,489
60-64	0	4	62	74	50	75	397	874	1,547	209	3,292	4,466
65-69	2	17	84	94	102	502	991	1,848	994	57	4,691	4,431
70-74	8	36	101	114	457	1,094	1,332	1,149	410	39	4,740	3,869
75-79	23	52	140	482	840	1,628	973	375	289	35	4,837	3,376
80-84	40	64	377	809	1,051	1,146	389	260	272	42	4,450	2,892
85-89	39	140	625	885	809	347	199	219	242	35	3,540	2,506
90-94	28	153	449	429	139	83	99	117	94	15	1,606	2,177
95-99	33	79	153	48	5	17	24	24	18	0	401	2,041
100 & Over	12	20	11	0	0	2	4	4	1	0	54	1,589
<b>Total Count</b>	185	565	2,008	2,960	3,478	4,916	4,457	5,059	4,303	525	<b>28,456</b>	
<b>Avg Monthly Benefit</b>	\$ 1,181	\$ 1,527	\$ 2,063	\$ 2,138	\$ 2,680	\$ 3,596	\$ 3,496	\$ 4,548	\$ 4,481	\$ 4,998		<b>\$ 3,481</b>



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-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
General Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit	
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14			
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	0	0	-
50-54	0	0	0	0	0	0	1	0	12	2	15	1,962	
55-59	0	0	0	0	1	2	1	7	19	3	33	2,389	
60-64	0	0	0	3	5	4	8	25	65	14	124	3,538	
65-69	0	0	0	2	3	6	17	45	37	10	120	3,356	
70-74	0	0	0	1	3	6	22	53	22	2	109	3,283	
75-79	0	0	0	2	10	18	39	12	11	1	93	2,372	
80-84	0	0	0	3	10	31	17	10	5	0	76	1,747	
85-89	0	0	0	1	16	11	2	2	2	0	34	1,400	
90-94	0	0	0	4	2	1	1	2	0	0	10	766	
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	-	
<b>Total Count</b>	0	0	0	16	50	79	108	156	173	32	<b>614</b>		
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ 1,046	\$ 1,016	\$ 1,515	\$ 2,038	\$ 2,915	\$ 3,879	\$ 5,714		<b>\$ 2,795</b>	



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-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
General Plan C**

Age	Retirement Year										Total Count	Average Monthly Benefit	
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14			
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	1	0	0	0	1	3,730
50-54	0	0	0	0	1	0	1	0	4	0	0	6	1,128
55-59	0	0	1	2	4	2	3	7	16	1	36	1,891	
60-64	0	0	0	3	2	1	2	18	26	3	55	2,629	
65-69	0	0	0	1	3	8	10	17	33	4	76	2,305	
70-74	0	0	0	0	6	12	14	31	10	1	74	2,005	
75-79	0	0	0	1	5	10	21	15	10	0	62	2,137	
80-84	0	0	0	3	7	17	5	6	4	0	42	1,350	
85-89	0	0	0	2	5	9	2	0	2	0	20	870	
90-94	0	0	0	0	1	1	0	2	1	0	5	2,818	
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	-
<b>Total Count</b>	0	0	1	12	34	60	58	97	106	9	<b>377</b>		
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ 1,515	\$ 919	\$ 822	\$ 1,205	\$ 1,711	\$ 2,396	\$ 2,682	\$ 4,284		\$	<b>2,035</b>



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, 2010  
General Plan D**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	0	0	1	3	7	15	0	26	\$ 1,129
35-39	0	0	0	0	0	0	2	12	13	0	27	1,648
40-44	0	0	0	0	0	3	5	22	25	2	57	1,753
45-49	0	0	0	0	0	11	30	49	56	6	152	1,762
50-54	0	0	0	2	5	17	39	62	259	49	433	1,571
55-59	0	0	1	4	14	28	50	188	493	73	851	1,833
60-64	0	0	0	0	16	41	150	321	694	143	1,365	2,287
65-69	0	0	0	7	14	56	182	362	816	123	1,560	2,440
70-74	0	0	0	4	21	55	174	418	489	50	1,211	2,120
75-79	0	0	0	1	18	60	211	261	149	11	711	1,812
80-84	0	0	0	7	13	83	137	67	65	7	379	1,504
85-89	0	0	0	6	18	40	33	18	15	1	131	1,314
90-94	0	0	0	0	2	9	2	3	3	0	19	957
95-99	0	0	0	0	0	1	0	0	1	0	2	1,605
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	1	31	121	405	1,018	1,790	3,093	465	<b>6,924</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ 2,360	\$ 1,201	\$ 1,231	\$ 1,349	\$ 1,585	\$ 1,896	\$ 2,299	\$ 2,960		<b>\$ 2,055</b>



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-5e: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
General Plan E**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	0	0	0	2	1	9	1	13	\$ 703
35-39	0	0	0	0	0	0	0	0	2	0	2	564
40-44	0	0	0	0	0	0	0	2	6	0	8	756
45-49	0	0	0	0	0	0	0	2	5	3	10	840
50-54	0	0	0	0	0	0	0	2	10	1	13	846
55-59	0	0	0	0	0	0	4	8	490	88	590	631
60-64	0	0	0	0	0	1	7	383	831	121	1,343	1,061
65-69	0	0	0	0	0	3	227	492	1,184	173	2,079	1,862
70-74	0	0	0	0	1	86	285	651	570	43	1,636	1,658
75-79	0	0	0	1	33	130	324	297	172	11	968	1,288
80-84	0	0	0	4	37	131	141	94	81	3	491	1,070
85-89	0	0	0	4	37	59	43	24	16	5	188	855
90-94	0	0	0	2	10	12	6	2	4	1	37	822
95-99	0	0	0	0	1	0	1	0	1	0	3	422
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	11	119	422	1,040	1,958	3,381	450	<b>7,381</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ 332	\$ 378	\$ 695	\$ 881	\$ 1,312	\$ 1,645	\$ 2,205		<b>\$ 1,407</b>



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-5f: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
Safety Plan A**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	1	0	0	1	0	3	0	5	\$ 2,965
35-39	0	0	0	1	0	0	0	0	0	0	1	595
40-44	0	0	0	0	0	1	1	3	0	0	5	4,929
45-49	0	0	0	0	0	2	0	2	0	0	4	3,797
50-54	0	0	0	2	1	2	2	5	7	0	19	4,996
55-59	0	0	6	24	26	25	49	52	303	56	541	7,519
60-64	0	7	57	126	82	101	164	762	461	16	1,776	6,966
65-69	2	13	94	132	138	200	640	633	87	11	1,950	6,549
70-74	11	24	77	116	136	434	384	78	60	1	1,321	5,936
75-79	29	39	79	167	292	286	51	58	72	7	1,080	5,267
80-84	43	46	141	281	164	37	30	65	66	11	884	4,613
85-89	22	56	153	91	13	17	28	34	39	6	459	4,401
90-94	25	24	21	2	0	5	10	16	7	0	110	3,371
95-99	16	9	0	0	0	2	1	3	1	2	34	3,179
100 & Over	2	0	0	0	0	0	0	1	0	0	3	1,494
<b>Total Count</b>	150	218	628	943	852	1,112	1,361	1,712	1,106	110	<b>8,192</b>	
<b>Avg Monthly Benefit</b>	\$ 1,946	\$ 3,039	\$ 3,570	\$ 3,924	\$ 4,989	\$ 6,042	\$ 6,705	\$ 7,638	\$ 7,747	\$ 7,600		<b>\$ 6,039</b>



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-5g: Distribution of Retired Members by Age and Retirement Year as of June 30, 2010  
Safety Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1969	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14		
Under 35	0	0	0	0	0	1	2	9	21	3	36	\$ 1,919
35-39	0	0	0	0	0	0	0	30	38	3	71	3,267
40-44	0	0	0	0	0	12	66	93	73	2	246	3,165
45-49	0	0	0	0	5	63	111	113	90	10	392	3,177
50-54	0	0	0	8	33	93	99	100	154	29	516	3,437
55-59	0	0	0	11	30	52	45	80	276	86	580	5,724
60-64	0	0	0	7	16	19	28	63	171	18	322	5,305
65-69	0	0	0	3	2	9	11	32	8	2	67	3,419
70-74	0	0	0	0	1	3	2	3	3	0	12	3,258
75-79	0	0	0	1	1	4	1	1	0	0	8	1,696
80-84	0	0	0	0	0	1	0	0	1	0	2	877
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	-
<b>Total Count</b>	0	0	0	30	88	257	365	524	835	153	<b>2,252</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ 1,980	\$ 2,159	\$ 2,849	\$ 3,107	\$ 3,440	\$ 5,264	\$ 7,169		<b>\$ 4,178</b>



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

## 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	2.42%	4.85%	4.11%	4.11%	3.62%	7.25%
17	2.47%	4.95%	4.20%	4.20%	3.62%	7.25%
18	2.53%	5.05%	4.28%	4.28%	3.62%	7.25%
19	2.58%	5.16%	4.37%	4.37%	3.69%	7.38%
20	2.63%	5.26%	4.46%	4.46%	3.76%	7.52%
21	2.69%	5.37%	4.56%	4.56%	3.83%	7.66%
22	2.74%	5.48%	4.65%	4.65%	3.90%	7.80%
23	2.80%	5.60%	4.75%	4.75%	3.97%	7.95%
24	2.86%	5.71%	4.85%	4.85%	4.05%	8.10%
25	2.91%	5.83%	4.95%	4.95%	4.13%	8.25%
26	2.98%	5.95%	5.05%	5.05%	4.20%	8.41%
27	3.04%	6.07%	5.15%	5.15%	4.28%	8.56%
28	3.10%	6.20%	5.26%	5.26%	4.36%	8.73%
29	3.16%	6.33%	5.37%	5.37%	4.45%	8.89%
30	3.23%	6.46%	5.48%	5.48%	4.53%	9.06%
31	3.30%	6.59%	5.59%	5.59%	4.62%	9.24%
32	3.37%	6.73%	5.71%	5.71%	4.71%	9.42%
33	3.44%	6.87%	5.83%	5.83%	4.80%	9.61%
34	3.51%	7.02%	5.95%	5.95%	4.90%	9.80%
35	3.59%	7.17%	6.07%	6.07%	5.00%	10.00%
36	3.66%	7.32%	6.20%	6.20%	5.10%	10.19%
37	3.74%	7.48%	6.33%	6.33%	5.19%	10.39%
38	3.82%	7.64%	6.46%	6.46%	5.29%	10.57%
39	3.90%	7.79%	6.60%	6.60%	5.38%	10.76%
40	3.98%	7.95%	6.74%	6.74%	5.47%	10.94%
41	4.05%	8.11%	6.88%	6.88%	5.55%	11.11%
42	4.13%	8.26%	7.03%	7.03%	5.64%	11.27%
43	4.21%	8.41%	7.18%	7.18%	5.71%	11.43%
44	4.28%	8.56%	7.33%	7.33%	5.78%	11.56%
45	4.35%	8.70%	7.47%	7.47%	5.83%	11.66%
46	4.42%	8.84%	7.62%	7.62%	5.86%	11.72%
47	4.48%	8.97%	7.76%	7.76%	5.86%	11.72%
48	4.54%	9.09%	7.91%	7.91%	5.86%	11.72%
49	4.60%	9.19%	8.04%	8.04%	5.86%	11.72%
50	4.64%	9.27%	8.18%	8.18%	5.86%	11.72%
51	4.66%	9.32%	8.30%	8.30%	5.86%	11.72%
52	4.66%	9.32%	8.43%	8.43%	5.86%	11.72%
53	4.66%	9.32%	8.54%	8.54%	5.86%	11.72%
54	4.66%	9.32%	8.64%	8.64%	5.86%	11.72%
55	4.66%	9.32%	8.72%	8.72%	5.86%	11.72%
56	4.66%	9.32%	8.76%	8.76%	5.86%	11.72%
57	4.66%	9.32%	8.76%	8.76%	5.86%	11.72%
58	4.66%	9.32%	8.76%	8.76%	5.86%	11.72%
59	4.66%	9.32%	8.76%	8.76%	5.86%	11.72%
60	4.66%	9.32%	8.76%	8.76%	5.86%	11.72%

*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.*



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 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%	5.91%	5.07%	4.99%	7.00%	9.39%
17	4.42%	6.03%	5.19%	5.09%	7.00%	9.39%
18	4.53%	6.16%	5.28%	5.19%	7.00%	9.39%
19	4.62%	6.29%	5.40%	5.30%	7.13%	9.56%
20	4.71%	6.41%	5.51%	5.41%	7.27%	9.74%
21	4.81%	6.55%	5.63%	5.53%	7.40%	9.92%
22	4.90%	6.68%	5.74%	5.64%	7.54%	10.10%
23	5.01%	6.83%	5.86%	5.76%	7.67%	10.30%
24	5.12%	6.96%	5.99%	5.88%	7.83%	10.49%
25	5.21%	7.11%	6.11%	6.00%	7.98%	10.68%
26	5.33%	7.25%	6.23%	6.13%	8.12%	10.89%
27	5.44%	7.40%	6.36%	6.25%	8.27%	11.09%
28	5.55%	7.56%	6.49%	6.38%	8.43%	11.31%
29	5.66%	7.72%	6.63%	6.51%	8.60%	11.51%
30	5.78%	7.87%	6.77%	6.65%	8.76%	11.73%
31	5.91%	8.03%	6.90%	6.78%	8.93%	11.97%
32	6.03%	8.20%	7.05%	6.93%	9.10%	12.20%
33	6.16%	8.37%	7.20%	7.07%	9.28%	12.45%
34	6.28%	8.56%	7.35%	7.22%	9.47%	12.69%
35	6.42%	8.74%	7.49%	7.36%	9.66%	12.95%
36	6.55%	8.92%	7.65%	7.52%	9.86%	13.20%
37	6.69%	9.12%	7.82%	7.68%	10.03%	13.46%
38	6.84%	9.31%	7.98%	7.84%	10.22%	13.69%
39	6.98%	9.50%	8.15%	8.01%	10.40%	13.94%
40	7.12%	9.69%	8.32%	8.18%	10.57%	14.17%
41	7.25%	9.89%	8.49%	8.35%	10.73%	14.39%
42	7.39%	10.07%	8.68%	8.53%	10.90%	14.60%
43	7.53%	10.25%	8.86%	8.71%	11.04%	14.80%
44	7.66%	10.43%	9.05%	8.89%	11.17%	14.97%
45	7.78%	10.60%	9.22%	9.06%	11.27%	15.10%
46	7.91%	10.78%	9.41%	9.24%	11.33%	15.18%
47	8.02%	10.93%	9.58%	9.41%	11.33%	15.18%
48	8.12%	11.08%	9.77%	9.59%	11.33%	15.18%
49	8.23%	11.20%	9.93%	9.75%	11.33%	15.18%
50	8.30%	11.30%	10.10%	9.92%	11.33%	15.18%
51	8.34%	11.36%	10.25%	10.07%	11.33%	15.18%
52	8.34%	11.36%	10.41%	10.23%	11.33%	15.18%
53	8.34%	11.36%	10.54%	10.36%	11.33%	15.18%
54	8.34%	11.36%	10.67%	10.48%	11.33%	15.18%
55	8.34%	11.36%	10.77%	10.58%	11.33%	15.18%
56	8.34%	11.36%	10.82%	10.63%	11.33%	15.18%
57	8.34%	11.36%	10.82%	10.63%	11.33%	15.18%
58	8.34%	11.36%	10.82%	10.63%	11.33%	15.18%
59	8.34%	11.36%	10.82%	10.63%	11.33%	15.18%
60	8.34%	11.36%	10.82%	10.63%	11.33%	15.18%

*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.*



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

### 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
2010	81,413	\$ 5,318	46.6	13.6	\$ 5,444	12,997	\$ 1,257	41.3	14.5	\$ 8,062	94,410	\$ 6,575	45.9	13.7	\$ 5,804



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 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
2010	43,752	\$ 1,514	72.7	\$ 2,883	10,444	\$ 706	66.7	\$ 5,638	54,196	\$ 2,220	71.6	\$ 3,414



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 E-3: Contribution Rates

Valuation Date (June 30)	General Members					Safety Members					Total All Members				
	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%
2010	13.32%	4.68%	8.64%	6.47%	15.11%	25.00%	10.19%	14.81%	6.47%	21.28%	15.59%	5.75%	9.84%	6.47%	16.31%



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

## 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.

<b>Accrued Benefit</b>	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.
<b>Actuarial Accrued Liability</b>	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.
<b>Actuarial Assumptions</b>	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.
<b>Actuarial Gain (Loss)</b>	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.
<b>Actuarial Present Value</b>	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.
<b>Actuarial Valuation</b>	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.
<b>Actuarial Value of Assets</b>	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.
<b>Actuarially Equivalent</b>	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
<b>Amortization Payment</b>	That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.



<b>Contingency Reserve</b>	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.
<b>County Contribution Credit Reserve</b>	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).
<b>Employer Reserve</b>	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.
<b>Entry Age Actuarial Cost Method</b>	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.
<b>Funded Ratio</b>	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.
<b>Funding Goal</b>	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.
<b>Member Reserve</b>	The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.

<b>Non-Valuation Reserves</b>	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.
<b>Normal Cost</b>	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.
<b>Open Amortization Period</b>	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.
<b>Plan Year</b>	A twelve-month period beginning July 1 and ending June 30.
<b>Projected Benefits</b>	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.
<b>STAR Reserve</b>	Reserves accumulated for the payment of cost-of-living benefits as defined in California Government Code Section 31874.3.
<b>Supplemental Targeted Adjustment for Retirees (STAR) Benefits</b>	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.
<b>Surplus Funding</b>	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”.
<b>Unfunded Actuarial Accrued Liability</b>	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
<b>Valuation Date</b>	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.
<b>Valuation Reserves</b>	All reserves excluding the Non-Valuation Reserves.