# Los Angeles County Employees Retirement Association 

## ACTUARIAL VALUATION

## June 30, 2005

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

December 5, 2005

Board of Investments
Los Angeles County Employees Retirement Association
300 North Lake Avenue, Suite 820
Pasadena, CA 91101-4199

Dear Members of the Board:
As requested, we have made an actuarial valuation of the Los Angeles County Employees Retirement Association (LACERA). 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, 2005, and both the Interim Funding Policy and the Retirement Benefit Enhancement Agreement. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the 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. It should be noted that if any data or other information is materially inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

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

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

Board of Investments
Los Angeles County Employees Retirement Association
December 5, 2005
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different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This information is for the exclusive use of the Los Angeles County Employees Retirement Association (LACERA) for the purposes stated herein. The information provided may not be appropriate for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

We would like to express our appreciation to Ms. Marsha Richter, Chief Executive Officer of LACERA, and to members of her 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

## Wis Coll

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

KIS/NJC/nlo

## Los Angeles County Employees Retirement Association

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## Los Angeles County Employees Retirement Association

## Section 1: Summary of the Findings



## Overview

2005 Valuation Results

|  | June 30, 2005 | June 30, 2004 |
| :--- | ---: | ---: |
| Required County Contribution Rate | $14.86 \%$ | $16.01 \%$ |
| Funded Ratio | $85.8 \%$ | $82.8 \%$ |

We are pleased to present the results of the June 30, 2005 actuarial valuation. Several key points are summarized as follows:

- Investment Returns: LACERA's investment returns have exceeded the assumed rate of $7.75 \%$ over the past two years. These investment gains led to an improvement in the system's funding status and a reduction in the required County contribution rate.
For the fiscal year ending in 2005, the fund returned about $11 \%$ on a market basis. This gain, combined with the recognition of a portion of the deferred gain from 2004, more than offset the recognition of the loss deferred from 2003, resulting in a $\$ 790$ million gain on actuarial assets. This gain is the key factor affecting this year's valuation results.

Note that currently a $\$ 1.4$ billion net asset gain is being deferred. This is because the asset-smoothing method has recognized all of the losses from earlier in this decade, but only a portion of the gains from the prior two years. These gains will be reflected over the next two valuations.

- Funding: The Funded Ratio increased from $82.8 \%$ to $85.8 \%$. Almost all of this increase is due to the investment gain.
- Contribution Rates: The County normal cost rate (9.53\%) decreased slightly due to the usual year-to-year changes in membership. The County's required contribution rate to finance the Unfunded Actuarial Accrued Liability (UAAL) over 30 years also decreased to $5.33 \%$. The result is a decrease in the required total contribution rate from the prior valuation of 1.15\% (from 16.01\% to 14.86\% of payroll). Once again, the most important factor causing this decrease was the asset gain.


## Summary of the Findings (continued)

## Required Contribution Rate

In accordance with the Retirement Benefits Enhancement Agreement, the required County contribution rate is $14.86 \%$ of payroll. This is equal to the payment of the County normal cost rate plus a 30 -year amortization of the UAAL. It should be noted that the $14.86 \%$ is a weighed average for all LACERA plans. The actual percent of payroll to be contributed by the County varies by plan.

The new required rate is effective for the fiscal year beginning July 1, 2006. The $14.86 \%$ contribution rate is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions used and satisfies the funding policies adopted by the Board. If the County were to elect to continue contributing at the current rate of $16.01 \%$, this would reduce the projected amortization period from 30 years to 22 years.

Based on the 2004 valuation, the expected funding status as of June 30, 2005 was a UAAL amount of $\$ 5.74$ billion. The actual UAAL for the fiscal year ending June 30, 2005 is $\$ 4.88$ billion. The decrease was due to a net experience gain on assets of $\$ 0.79$ billion and a gain on liabilities of $\$ 0.07$ billion. The gain on liabilities was due to an actual increase in salaries less than the assumed rate.

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, for all LACERA plans combined. LACERA had maintained a Funded Ratio of approximately $100 \%$ for 1996-2002. Due to asset losses recently recognized, the Funded Ratio decreased significantly in 2003 and 2004. Strong investment returns over the past two years resulted in an increase in the Funded Ratio to $85.8 \%$ this year, as shown on the following page.

Funding Progress (continued)

On June 30, 2005, the total Market Value of the fund was $\$ 32.0$ billion. The Actuarial Value was $\$ 30.6$ billion and was split between $\$ 1.1$ billion of Non-valuation Reserves and $\$ 29.5$ billion of Valuation Reserves. The Valuation Reserves are equal to $85.8 \%$ of the $\$ 34.4$ billion Actuarial Accrued Liability.

All dollar amounts in billions

|  | Market Value of Total Assets | Actuarial Value |  | Actuarial Accrued Liability | Funded Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | NonValuation Reserves | Valuation Reserves |  |  |
| 1996 | \$20.2 | \$1.6 | \$17.7 | \$17.3 | 102.6\% |
| 1997 | 22.9 | 1.8 | 19.6 | 19.3 | 101.3 |
| 1998 | 25.5 | 3.5 | 20.9 | 21.0 | 99.5 |
| 1999 | 28.0 | 3.7 | 23.5 | 22.8 | 103.3 |
| 2000 | 31.6 | 4.3 | 25.4 | 24.7 | 102.9 |
| 2001 | 28.4 | 4.4 | 26.5 | 26.5 | 100.0 |
| 2002 | 26.0 | 2.0 | 28.3 | 28.4 | 99.4 |
| 2003 | 26.2 | 1.6 | 26.6 | 30.5 | 87.2 |
| 2004 | 29.5 | 1.4 | 27.1 | 32.7 | 82.8 |
| 2005 | 32.0 | 1.1 | 29.5 | 34.4 | 85.8 |

Historical Funded Ratios


## Association Assets

## Actuarial Balance Sheet

Market Value: The market value of assets has increased over the past five years, as a result of contributions and investment earnings, offset by benefit payments. The average return for the fund over that period has been $3.4 \%$. 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 three-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 smoothing.

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 allowed under the new Retirement Benefits Enhancement Agreement.

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

## Actuarial Balance Sheet (continued)

## Funding Agreement

The 2005 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.

Resources


Liabilities


In 1994, the County and LACERA entered into a Funding Agreement that determined how the excess earnings were to be allocated for 1994-1998 and how County contributions were to be computed if a UAAL existed. Since LACERA met the funding requirements of the funding agreement in 1994-1998, County contributions consisted of the Normal Cost contribution only during that period.

The 1994 Funding Agreement indicated the funding policy to be followed in 1994 through 1998. It only describes the amortization of any UAAL amounts for 1999-2008. During 2000, the Board discussed a long-term funding policy and established a method of allocating earnings on the various reserve funds under their Interim Funding Policy. In 2003, along with adopting the new MOU benefit enhancements, a Retirement Benefits Enhancement Agreement set up a new funding policy for the 2002-2008 valuations.

## Funding Policy (continued)

Contribution Rates

Under the new 2002 Retirement Benefits Enhancement Agreement, all of the funds in the Contingency Reserve in excess of $1 \%$ of the actuarial value of assets of the entire fund are considered as part of the Valuation Assets. In addition, in any year in which the Funded Ratio is less than 100\% prior to its inclusion, a portion of the STAR Reserve is also to be considered as part of the Valuation Assets. The portion that is not available for treatment as Valuation Assets is the amount determined to be sufficient to fund the STAR benefits until July 1, 2009.

Note that, if the entire STAR reserve of $\$ 657$ million was excluded from the Valuation Assets, the UAAL would increase by $\$ 632$ million. Under this hypothetical scenario, the required County contribution rate would increase by $0.74 \%$ to $15.60 \%$, and the Funded Ratio would decrease to $84.0 \%$.

## The Retirement Benefits Enhancement Agreement was

 adopted as a short term funding policy, applicable through the 2008 actuarial valuation.Based on the results of the valuation, the Interim Funding Policy, and the Retirement Benefits Enhancement Agreement, the required County contribution rate will decrease for the fiscal year beginning in 2006 to a rate of $14.86 \%$ of pay. Member contribution rates are discussed in Section 5 and the rates are shown in detail in Appendix D. A historical perspective of the County contribution rates is shown in the following graph.

Required County Contribution Rate


Member Rates<br>Member Information

Since this is not a triennial valuation, we have not recommended any changes in the member rates. Member rates for all plans are discussed in Section 5.

Payroll has increased since 2004. For 2005, payroll is $\$ 5.05$ billion for 86,384 active members. This represents a $2.0 \%$ increase in average pay and a $0.2 \%$ increase in active members.

Membership Count


Retired member counts and average retirement benefit amounts continue to increase steadily. For 2005, there were 49,769 retired members with an average benefit of \$2,766 per month. This represents a 3.0\% increase in count and a 4.6\% increase in the average monthly benefit.

Average Monthly Retirement Benefit


Analysis of Change in Member Population

## Sensitivity to Investment Return

## Summary Valuation Results

The following table summarizes the year-to-year change in member population. In addition to the movement shown below, 395 members (555 last year) transferred from Plan E to Plan D during the past year; and 126 members (128 last year) transferred from Plan D to Plan E.

|  | Active <br> Contributing <br> Members | Deferred <br> Vested <br> Members | Retirees, <br>  <br> Beneficiaries |
| :--- | ---: | ---: | ---: |
| June 30, 2004 Valuation | $\mathbf{8 6 , 2 3 5}$ | $\mathbf{6 , 5 5 9}$ | $\mathbf{4 8 , 3 3 2}$ |
| Termination without Refund | $(825)$ | 825 | - |
| Termination with Refund | $(1,419)$ | $(43)$ | - |
| Active/Deferred Death with Annuity | $(77)$ | $(33)$ | 110 |
| Service Retirement | $(1,931)$ | $(259)$ | 2,190 |
| Disability Retirement | $(202)$ | $(5)$ | 207 |
| Retiree Death without Beneficiary | - | - | $(1,068)$ |
| New Entrants | 4,537 | - | - |
| Rehires | 66 | $\mathbf{1 4 9}$ | $\mathbf{4 2 1}$ |
| Total Change | $\mathbf{8 6 , 3 8 4}$ | $\mathbf{6 , 9 8 0}$ | $\mathbf{( 2 )}$ |
|  |  |  | $\mathbf{1 , 4 3 7}$ |
| June 30, 2005 Valuation |  |  |  |

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 | $\mathbf{+ 0 . 5 \%}$ | $\mathbf{- 0 . 5 \%}$ |
|  | $\mathbf{7 . 7 5 \%}$ | $\mathbf{8 . 2 5 \%}$ | $\mathbf{7 . 2 5 \%}$ |
| County Contribution Rate | $14.86 \%$ | $11.60 \%$ | $18.20 \%$ |
|  |  | $-3.26 \%$ | $3.34 \%$ |
|  |  |  |  |
| Funded Ratio | $85.8 \%$ | $90.9 \%$ | $80.8 \%$ |
| $\quad$ Change |  | $5.1 \%$ | $-5.0 \%$ |

The following Exhibit 0 presents a summary of key data elements on June 30, 2005 and June 30, 2004, 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 0: Summary of Significant Valuation Results

June 30, 2005 June 30, 2004 | Percentage |
| :---: |
| Change |

I. Total Membership

| A. Active Members | 86,384 |
| :--- | ---: |
| B. Retired Members \& Beneficiaries | 49,769 |
| C. Vested Terminated Members | 6,980 |
| D. Total | 143,133 |


| 86,235 |
| ---: |
| 48,332 |
| 6,559 |
| 141,126 |

$$
\begin{aligned}
& 0.2 \% \\
& 3.0 \%
\end{aligned}
$$

| $\$$ | 5,051 | $\$$ | 4,942 | $2.2 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| $\$$ | 4,873 | $\$$ | 4,776 | $2.0 \%$ |

III. Average Monthly Benefit to Current Retirees and Beneficiaries
A. Service Retirement
B. Disability Retirement
C. Surviving Spouse and Dependents
D. Total
IV. Actuarial Accrued Liability
A. Active Members
B. Retired Members
C. Vested Terminated Members
D. Total
V. Assets

| A. Market Value of Fund (\$millions) | $\$$ | 32,026 | $\$$ | 29,481 | $8.6 \%$ |
| :--- | :--- | ---: | :--- | ---: | ---: |
| B. Actuarial Value (\$millions) |  |  |  |  |  |
| a. Valuation Reserves | $\$$ | 29,497 | $\$$ | 27,089 | $8.9 \%$ |
| b. Non-valuation Reserves | $\$$ | 1,122 | $\$$ | 1,387 | $(19.1) \%$ |
| finunded Actuarial Accrued Liability |  |  |  |  |  |
| Surplus Funding (\$millions) | $\$$ | 4,878 | $\$$ | 5,611 | $(13.1) \%$ |

VII. Required County contribution rate for all plans
combined as a percent of total payroll
A. Gross Normal Cost
B. Member Contributions
C. County Normal Cost
D. UAAL Amortization
E. Total Required Contribution
\$ $\quad 5,611$
(13.1)\%
VI. Unfunded Actuarial Accrued Liability or Surplus Funding (\$millions)

| $\$$ | 14,138 | $\$$ | 13,843 | $2.1 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| $\$$ | 19,623 | $\$$ | 18,331 | $7.1 \%$ |
| $\$$ | 615 | $\$$ | 526 | $16.9 \%$ |
| $\$$ | 34,375 | $\$$ | 32,700 | $5.1 \%$ |


| $\begin{aligned} & 14.50 \% \\ & (4.97) \% \end{aligned}$ | $\begin{gathered} 14.48 \% \\ (4.88) \% \end{gathered}$ | $\begin{aligned} & \text { 0.1\% } \\ & \text { 1.8\% } \end{aligned}$ |
| :---: | :---: | :---: |
| 9.53\% | 9.60\% | (0.7)\% |
| 5.33\% | 6.41\% | (16.8)\% |
| 14.86\% | 16.01\% | (7.2)\% |
| 85.8\% | 82.8\% | 3.6\% |

## 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, 2005. This valuation was requested by the Board. 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 2004 valuation met this requirement. However, under the Retirement Benefit Enhancement Agreement, annual valuations redetermine the County Contribution rates each year through 2008.

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 1-3. Exhibit 4 develops the Actuarial Value of Assets as of June 30, 2005. Exhibit 5 develops the Valuation Assets used for funding benefits.

Section 4 describes the benefit obligations of LACERA. Exhibit 6 is the Actuarial Balance Sheet and Exhibit 7a analyzes the change in UAAL (Surplus Funding). Exhibit 7b shows a history of these changes.

Section 5 discusses the Member contribution rates.
Section 6 discusses the County contributions needed to fund the benefits under the actuarial cost method in use.

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

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

## Scope of the Report (continued)

This report includes several appendices:

- Appendix A A summary of the actuarial procedures, and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2005.
- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E 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, 2005. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are generally well in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and County are needed to pay all expected future benefits.
This section of the report deals with the determination of assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Sections 5 and 6 deal with 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

|  |  | Actuarial Value |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Market <br> Value of <br> Total Assets | Non- <br> Valuation <br> Reserves | Valuation <br> Reserves | Total Fund <br> Return* |
|  |  |  |  |  |
| 1996 | $\$ 20.2$ | NA | $\$ 17.7$ | N/A |
| 1997 | 22.9 | NA | 19.6 | $17.7 \%$ |
| 1998 | 25.5 | NA | 20.9 | 15.5 |
| 1999 | 28.0 | 3.7 | 23.5 | 12.9 |
| 2000 | 31.6 | 4.3 | 25.4 | 15.2 |
| 2001 | 28.4 | 4.4 | 26.5 | -5.2 |
| 2002 | 26.1 | 2.0 | 28.3 | -5.6 |
| 2003 | 26.2 | 1.6 | 26.6 | 3.6 |
| 2004 | 29.5 | 1.4 | 27.1 | 16.5 |
| 2005 | 32.0 | 1.1 | 29.5 | 11.0 |
|  |  |  |  |  |
| *As reported in the Investment Section of the CAFR. |  |  |  |  |

On June 30, 2005, the total market value of the fund, less current liabilities, was $\$ 32.0$ billion. The actuarial value of the fund was determined to be $\$ 30.6$ billion, including the nonvaluation reserves. The average total fund return for the last five years was 3.7\%.

## Financial Exhibits

## Actuarial Asset Method

Exhibit 1 presents a Statement of Plan Net Assets and Exhibit 2 presents a Statement of Changes in Plan Net Assets. Exhibit 3 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 1-3 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 for reasonableness and consistency with previous reports.

The current actuarial asset method was adopted for the June 30, 1999 valuation but applied only to the valuation reserves; all reserves set aside for other purposes were held at book value. Since the June 30, 2000 valuation, the method has been applied to all reserve values.

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 three-year period.

The development of the June 30, 2005 actuarial value of assets is shown in Exhibit 4. Note the smoothing process has recognized the investment losses from 2002 and 2003 over the last few years and is now in a net actuarial gain position. The result is an actuarial value of assets less than the June 30, 2005 market value by $\$ 1.4$ billion. The following graph shows a historical comparison of the actuarial and market assets used for valuation purposes.

Applicable Valuation Assets


## Interim Actuarial Funding Policy

## Valuation Assets

At the February 14, 2001 Board meeting, the following Interim Actuarial Funding Policy was adopted:

Earnings for a Plan Year plus recognized investment income, together with the prior balances in the Contingency Reserve will be allocated as of the Valuation Date in the following order of priority:

Priority 1: Allocate to the Member Reserve an amount equal to one year's interest at LACERA's interest crediting rate, generally the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
Priority 2: Allocate to the Employer Reserve and the Advanced Employer Contributions Reserve amounts equal to one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
Priority 3: Allocate to the Contingency Reserve an amount equal to 1\% of Actuarial Value of Assets.
Priority 4: Allocate to the County Contribution Credit Reserve an amount equal to one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
Priority 5: Allocate to the Employer Reserve an amount, if necessary, when combined with other valuation Reserves, to provide 100\% funding of the Actuarial Accrued Liability as of the Valuation Date.
Priority 6: Allocate any remaining Earnings as directed by the Board of Investments.

There were enough earnings for the year and assets in the contingency reserve to satisfy Priorities 1-4. The remainder was credited to the Employer Reserve (Priority 5); however, this was not enough to provide 100\% funding of the AAL.

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.

## Assets (continued)

## Valuation Assets (continued)

The Retirement Benefits Enhancement Agreement allows a portion of the STAR Reserve to also be allocated to the Valuation Assets, if needed. The estimated value of approving a permanent STAR benefit through July 1, 2009 is $\$ 25$ million and should be excluded from the Valuation Assets. Thus, all but $\$ 25$ million of the June 30, 2005 accounting value of the $\$ 657$ million STAR Reserve was used to determine the contribution rates for fiscal year commencing July 1, 2006. The non-valuation reserve allocations for funding purposes shown in Exhibit 5 are not the same as those shown in the annual report and in Exhibit 3.

Note that the County Contribution Credit Reserve is credited with interest under the Interim Funding Policy as shown in Exhibit 5, the allocation of Valuation Assets, and is greater than the accounting value shown in Exhibit 3.

The Retirement Benefits Enhancement Agreement expires on July 1, 2010. Commencing with the June 30, 2009 valuation, the funding policy for LACERA shall be determined by the Board of Investment as it shall deem appropriate.

## Los Angeles County Employees Retirement Association

Exhibit 1: Statement of Plan Net Assets For Years Ended June 30, 2004 and 2005
(Dollars in Thousands)


## Los Angeles County Employees Retirement Association

## Exhibit 2: Statement of Changes in Plan Net Assets

 For the Years Ended June 30, 2004 and 2005 (Dollars in Thousands)|  | 2005 | 2004 |
| :---: | :---: | :---: |
| Additions |  |  |
| Contributions |  |  |
| Employer | \$ 527,810 | \$ 395,109 |
| Member | 286,096 | 262,699 |
| Total Contributions | 813,906 | 657,808 |
| Investment Income |  |  |
| From Investing Activities |  |  |
| Net Appreciation/(Depreciation) in Fair Value of Investments | 1,597,148 | 2,740,449 |
| Investment Income | 1,850,038 | 1,444,888 |
| Total Investing Activity Income/(Loss) | 3,447,186 | 4,185,337 |
| Less Expenses From Investing Activities | $(59,664)$ | $(75,823)$ |
| Net Investing Activity Income/(Loss) | 3,387,522 | 4,109,514 |
| From Securities Lending Activities |  |  |
| Securities Lending Income | 79,263 | 36,817 |
| Less Expenses From Securities Lending Activities | $(70,592)$ | $(27,831)$ |
| Net Securities Lending Income | 8,671 | 8,986 |
| Total Net Investment Income/(Loss) | 3,396,193 | 4,118,500 |
| Miscellaneous | 3,222 | 2,605 |
| Total Additions/(Declines) | 4,213,321 | 4,778,913 |
| Deductions |  |  |
| Retiree Payroll | 1,542,087 | 1,426,944 |
| Administrative Expense | 43,182 | 38,684 |
| Refunds | 18,630 | 18,088 |
| Lump Sum Death Benefits | 1,646 | 2,479 |
| Retiree Healthcare Program | 62,318 | 59,054 |
| Miscellaneous | 536 | 287 |
| Total Deductions | 1,668,399 | 1,545,536 |
| Net Increase/(Decrease) | 2,544,922 | 3,233,377 |
| Net Assets Held in Trust for Pension Benefits Beginning of Year | 29,481,183 | 26,247,806 |
| End of Year | 32,026,105 | \$29,481,183 |

## Los Angeles County Employees Retirement Association

## Exhibit 3: Allocation of Assets by Accounting Reserve Amounts (Dollars in Thousands)

June 30, 2005 June 30, 2004

1. Member Reserves
a. Active Members
b. Unclaimed Deposits
c. Total Member Reserves

| $\$ 10,596,424$ |  |  |  |
| :---: | :---: | :---: | :---: |
| - |  | $\$ 8$ | $\$ 922,484$ |
|  |  |  | - |
| $\$ 10,596,424$ |  | $9,922,484$ |  |

2. Employer Reserves
$\begin{array}{llrrr}\text { a. Actual Employer Contributions } & \$ 13,718,254 & & \$ 13,365,323 \\ \text { b. Advanced Employer Contributions } & 431,806 & 619,883 \\ & & \$ 14,150,060 & & \$ 13,985,206\end{array}$
3. County Contribution Credit Reserve \$ 312,829 \$ 375,146
4. STAR Reserve

656,602
656,602
5. Contingency Reserve
$\begin{array}{rl}220,387 \\ , 936,302 & 49,090 \\ \$ 24,988,528\end{array}$
7. Unrealized Investment Portfolio Appreciation
8. Total Reserves at Fair Value

| 6,089,803 | 4,492,655 |
| :---: | :---: |
| \$ 32,026,105 | \$ 29,481,183 |

Note: These amounts were determined by LACERA for accounting purposes and are reported in the June 30, 2005 CAFR.

## Los Angeles County Employees <br> Retirement Association

Exhibit 4: 3-Year Smoothing of Gains and Losses on Market Value (Dollars in Thousands)

| June 30, 2005 Valuation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan Year Ending | Contributions |  | Benefit Payments |  | Expected Market Value |  | Actual Market Value |  | Phase-Out of Gain / (Loss) |  |  |  |  |
| 6/30/2005 | \$ | 813,906 | \$ | 1,624,681 | \$ | 30,924,368 | \$ | 32,026,105 | 67\% | x | \$ 1,101,737 | $=\$$ | 734,491 |
| 6/30/2004 |  | 657,808 |  | 1,506,565 |  | 27,465,576 |  | 29,481,183 | 33\% | x | 2,015,607 | $=$ | 671,869 |
| 6/30/2003 |  | 558,716 |  | 1,392,609 |  | 27,264,412 |  | 26,247,806 | 0\% | X | $(1,016,606)$ |  | 0 |
| 6/30/2002 |  |  |  |  |  |  |  | 26,047,240 |  |  |  |  | 0 |
|  |  |  |  |  |  |  |  |  | hase-O | ut | f Gain / (Loss) | $=\$$ | 1,406,360 |
|  |  |  |  |  |  |  |  |  | Mark | t | alue of Assets | $=$ | 32,026,105 |
|  |  |  |  |  |  |  |  |  | Actuari | I | alue of Assets | $=\$$ | 30,619,745 |
| $\begin{aligned} \text { Total Actuarial Value of Assets }= & \text { Total Market Value of Assets less the Total Phase-Out amount } \\ & \text { Phase-Out amounts will be recognized in future years. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^0]
## Los Angeles County Employees Retirement Association

## Exhibit 5: Allocation of Valuation and Non-Valuation Assets (Dollars in Thousands)

|  | June 30, 2005 | June 30, 2004 |
| :---: | :---: | :---: |
| 1. Total Market Value of Assets | \$ 35,616,640 | \$ 33,247,923 |
| 2. Current Liabilities | 3,590,535 | 3,766,740 |
| 3. Net Assets Held in Trust for Pension Benefits | \$ 32,026,105 | \$ 29,481,183 |
| 4. Market Stabilization Reserve ${ }^{(1)}$ | 1,406,360 | 1,004,869 |
| 5. Actuarial Value of Fund Assets | \$ 30,619,745 | \$ 28,476,314 |
| 6. Non-Valuation Reserves ${ }^{(2)}$ |  |  |
| a. Unclaimed Deposits | \$ | \$ |
| b. Contingency Reserve | 306,197 | 284,763 |
| c. Advanced Employer Contributions | 447,923 | 620,994 |
| d. County Contribution Credit Reserve | 343,440 | 469,232 |
| e. Reserve for STAR Program | 24,700 | 11,885 |
| f. Total | \$ 1,122,260 | \$ 1,386,874 |
| 7. Valuation Assets ${ }^{(2)}$ |  |  |
| a. Member Reserves | \$ 10,596,424 | \$ 9,922,484 |
| b. Employer Reserves for Funding Purposes | \$ 18,901,061 | \$ 17,166,956 |
| c. Total | \$ 29,497,485 | \$ 27,089,440 |

(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 4.
(2) The values used for funding purposes for all reserves are based on the Board's Interim Funding Policy. Amounts used for funding purposes may differ from those reported in the financial report as shown in Exhibit 3.

## Los Angeles County Employees Retirement Association

## Section 4: Actuarial Liabilities



## Actuarial Balance Sheet - 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, 2005. 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.

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

Exhibit 6 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.

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 2004 Investigation of Experience Report. New assumptions were adopted by the Board effective June 30, 2004.

## Los Angeles County Employees <br> Retirement Association

## Exhibit 6:

## Actuarial Balance Sheet - June 30, 2005

(Dollars in millions)


* Less than $\$ 0.5$ million

Actuarial Balance Sheet - Liabilities (continued)

Actuarial Balance Sheet - Assets

## Actuarial Cost Method

All liabilities reflect the benefits effective through June 30, 2005. This includes the permanent STAR COLA adopted for 2005 and the estimated retroactive benefit payments pursuant to the final Ventura settlement (\$177 million).

For the purpose of the Actuarial Balance Sheet, LACERA's assets are equal to the sum of:
(a) assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
(b) the present value of future contributions expected to be made by current active Members, and
(c) the present value of future contributions expected to be made by the County.

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

- A normal cost amount; and
- Whatever amount is left over, which is used to amortize what is called the UAAL.

The two items described above - the normal cost and UAAL - are the keys to understanding the actuarial cost method.

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.

## Normal Cost (continued)

## Actuarial Accrued Liability

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

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". The Actuarial Accrued Liability 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) | 2005 |  | 2004 |  | Percent Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors | \$ | 41,741 | \$ | 39,917 | 4.6\% |
| B. Actuarial present value of total future normal costs for current members | \$ | 7,365 | \$ | 7,217 | 2.1\% |
| C. Actuarial accrued liability [A-B] | \$ | 34,375 | \$ | 32,700 | 5.1\% |
| D. Valuation Assets | \$ | 29,497 | \$ | 27,089 | 8.4\% |
| E. UAAL or Surplus Funding [C-D] | \$ | 4,879 | \$ | 5,611 | (13.0)\% |
| F. Funded Ratio [D/C] |  | 85.8\% |  | 82.8\% | 3.6\% |

Actuarial Accrued Liability (continued)

## Unfunded Actuarial Accrued Liabilityl Surplus Funding

It is interesting to note the maturity of LACERA's fund. Nearly one half, $48.5 \%$, of the total actuarial obligation is for retired and deferred vested members. Of the $\$ 21.5$ 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.

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

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

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

Exhibit 6 shows how the UAAL, or Surplus Funding, was derived for each level of plan benefits. In the Actuarial Balance sheet, the total actuarial accrued liability for all future benefits must be equal to the current and future assets.

## Unfunded Actuarial Accrued Liabilityl Surplus Funding (continued)

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 6. The allocation is based on the relative value of each plan's employer and member reserves as reported to us by LACERA. These allocations are shown for illustrative purposes only, as the UAAL contribution rates are assumed paid by the County based on the valuation results in aggregate.

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 actuarial accrued liability to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under the new Retirement Benefits Enhancement Agreement with the County, any positive amount as of June 30, 2002 through 2008 must be amortized over a rolling 30-year period.

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.

The 1994 Funding Agreement applied to valuations in 1994 through 1998. In 2000, an Interim Funding Policy was adopted as described more fully in Section 3, Assets, and has been applied since then. The current Retirement Benefits Enhancement Agreement applies to the 2002 - 2008 valuations. This valuation reflects the combined funding policy as directed by those agreements.

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.

The funded status of LACERA from 1996 to 2002 remained at approximately $100 \%$. In the two years prior to this valuation, the funding level decreased significantly due to losses on the Valuation Assets reflected under the asset-smoothing method. This year the funding level increased somewhat due to the recognition of deferred gains under this same smoothing method.

Analysis of Change in Unfunded Actuarial Accrued Liability (continued)

The 2005 actuarial valuation reflects an actuarial experience gain of $\$ 861$ million for the fiscal year just ended. The gain was mainly due to a $\$ 790$ million gain on actuarial assets. The effect of the experience gains and losses on the UAAL or Surplus Funding is shown in Exhibit 7a. In addition to the investment return, some other factors which impacted the liabilities are:
$\checkmark$ Salary Increases - Individual salaries increased at a rate less than the valuation assumption. This resulted in a gain.
$\checkmark$ 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.
$\checkmark$ Actual CPI versus Assumption - The CPI used for retiree COLAs was greater than 3\%. Thus, all members received increases in their benefits equal to the assumption (3.0\% for Plan A, 2.0\% for Plans B-D, pro-rated portion of $2.0 \%$ for Plan E ), and there was no gain or loss due to CPI.
$\checkmark$ Transfers Between Plans D \& E - 395 members transferred from Plan E to Plan D during the past year. 126 members transferred from Plan D to Plan E. This resulted in a small increase in liabilities.
$\checkmark$ Other - Examples of this are gains and losses from termination, service retirement, disability retirement, death, service purchases, reciprocity, and data revisions.

Change in Unfunded Actuarial Accrued Liability - History

Exhibit 7b 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 7a: Analysis of Change in Unfunded Actuarial Accrued Liability (Dollars in millions)
$\left.\begin{array}{llll} & & & \begin{array}{c}\text { As a Percent of } \\ \text { June 30, } \\ \text { Actuarial }\end{array} \\ \text { Accrued Liability }\end{array}\right)$

## Los Angeles County Employees Retirement Association

Exhibit 7b: History of Changes in Unfunded Actuarial Accrued Liability (Dollars in millions)


|  | 2001 |  | 2002 | 2003 |  | 2004 |  | 2005 |  | 2001-05 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prior Valuation UAAL I (Surplus) | \$ | (706) \$ | 0 | \$ | 175 | \$ | 3,910 | \$ | 5,611 | \$ | (706) |
| Increase in UAAL due to: |  |  |  |  |  |  |  |  |  |  |  |
| Expected Increase / (Decrease) |  | 128 | (26) |  | (45) |  | 312 |  | 128 |  | 497 |
| Asset (Gains) and Losses |  | 690 | (194) |  | 3,351 |  | 871 |  | (790) |  | 3,928 |
| Changes in Benefits* |  |  | 441 |  | 207 |  |  |  |  |  | 648 |
| Changes in Assumptions |  | (239) |  |  |  |  | 697 |  | - |  | 458 |
| Changes in Methods |  |  |  |  | 40 |  |  |  |  |  | 40 |
| Salary Increases |  | 40 | (20) |  | (66) |  | (270) |  | (115) |  | (431) |
| CPI Less than Expected |  |  | (39) |  |  |  | (31) |  | - |  | (70) |
| Transfers Between D \& E |  | ** | ** |  | 29 |  | 15 |  | 13 |  | 57 |
| Mortality Experience |  | ** | ** |  | 90 |  | 61 |  | (1) |  | 150 |
| All Other Experience |  | 87 | 13 |  | 129 |  | 46 |  | 32 |  | 307 |
| Total Increase I (Decrease) |  | 706 | 175 |  | 3,735 |  | 1,701 |  | (733) |  | 5,584 |
| Valuation UAAL I (Surplus) | \$ | 0 \$ | 175 | \$ | 3,910 | \$ | 5,611 | \$ | 4,878 | \$ | 4,878 |

* Benefit changes are as follows:

2001: STAR benefits are vested; however, a transfer is made from the STAR reserve which offsets the increased liabilities. Therefore no change is shown.
2002: MOU Benefits.
2003: Domestic partner benefits and estimated increase in benefits due to Ventura lawsuit.
** Not separately measured in this year. Included with Other Experience
*** Year-to-Year Experience includes changes due to Salary, CPI, Transfers, Mortality and Other Experience.

## Los Angeles County Employees Retirement Association

## Section 5: Member Contributions

Normal Contributions

## Cost-of-Living 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:

|  | General |  | Safety |
| :--- | :--- | :--- | :--- |
|  | 31621.3 |  | 31639.5 |
| Plan A | 31621.1 |  | 31639.25 |
| Plan B |  |  | N/A |

There are no member contributions under Plan E.
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

As this is not a triennial valuation, no changes in the member rates are being recommended.

The determination of the member cost-of-living contributions is based on Section 31873 of the County Employees' Retirement Law. This section requires that the cost of this benefit be shared equally between members and the County. Unlike the member normal contributions, these rates are based on the actuarial cost of the benefits, and reflect all assumptions used in the valuation of liabilities. As this is not a triennial valuation, we are not recommending a change in the member cost-of-living contribution rates. The cost-of-living contributions, expressed as a percentage of the normal rates, are based on the June 30, 2004 actuarial valuation and are as follows:

|  |  |
| :--- | ---: |
| General Plan A: | $78.28 \%$ |
| General Plan B: | $21.96 \%$ |
| General Plan C: | $23.75 \%$ |
| General Plan D: | $20.98 \%$ |
| Safety Plan A: | $100.24 \%$ |
| Safety Plan B: | $30.86 \%$ |

Cost-of-Living Contributions (continued)

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 8.

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

## Los Angeles County Employees Retirement Association

## Exhibit 8: Sample Member Contribution Rates

|  | Current Rates (Based on 2004 Triennial Valuation) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Entry } \\ \text { Age } \end{gathered}$ | Normal | Cost of Living | $\begin{gathered} \hline \text { Total as a \% } \\ \text { of Pay } \\ \hline \end{gathered}$ |
| General Members |  |  |  |  |
| Plan A | 25 | 2.78\% | 2.18\% | 4.96\% |
|  | 35 | 3.48\% | 2.72\% | 6.20\% |
|  | 45 | 4.27\% | 3.34\% | 7.61\% |
|  | 55 | 4.62\% | 3.62\% | 8.24\% |
| Plan B | 25 | 5.57\% | 1.22\% | 6.79\% |
|  | 35 | 6.95\% | 1.53\% | 8.48\% |
|  | 45 | 8.55\% | 1.88\% | 10.43\% |
|  | 55 | 9.24\% | 2.03\% | 11.27\% |
| Plan C | 25 | 4.68\% | 1.11\% | 5.79\% |
|  | 35 | 5.83\% | 1.38\% | 7.21\% |
|  | 45 | 7.29\% | 1.73\% | 9.02\% |
|  | 55 | 8.61\% | 2.04\% | 10.65\% |
| Plan D | 25 | 4.68\% | 0.98\% | 5.66\% |
|  | 35 | 5.83\% | 1.22\% | 7.05\% |
|  | 45 | 7.29\% | 1.53\% | 8.82\% |
|  | 55 | 8.61\% | 1.81\% | 10.42\% |

Safety Members

| Plan A | 25 | $3.89 \%$ | $3.90 \%$ | $7.79 \%$ |
| :--- | ---: | ---: | ---: | ---: |
|  | 35 | $4.86 \%$ | $4.87 \%$ | $9.73 \%$ |
|  | 45 | $5.74 \%$ | $5.75 \%$ | $11.49 \%$ |
|  | 55 | $5.78 \%$ | $5.79 \%$ | $11.57 \%$ |
|  |  |  |  |  |
| Plan B | 25 | $7.78 \%$ | $2.40 \%$ | $10.18 \%$ |
|  | 35 | $9.72 \%$ | $3.00 \%$ | $12.72 \%$ |
|  | 45 | $11.48 \%$ | $3.54 \%$ | $15.02 \%$ |
|  | 55 | $11.56 \%$ | $3.57 \%$ | $15.13 \%$ |

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

## Los Angeles County Employees Retirement Association

## Section 6: County Contributions



Contributions to LACERA are determined using the Entry Age Normal Cost Funding 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 9 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 of the Association. The agreement also allowed that surplus earnings on Association 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 1994 Funding Agreement, the County's contribution rate is set equal to the County's portion of the Normal Cost contribution not payable by the member contributions and some payment towards the UAAL, but only under certain conditions. From 1995 to 2001, no UAAL contributions were required and the County contributed only their portion of the Normal Cost contribution. Under the new 2002 Retirement Benefits Enhancement Agreement, the County must pay the Normal Cost contribution adjusted for a portion of either a positive UAAL or a positive Surplus Funding.

The total calculated County contribution rates for each plan, along with a comparison to the prior year's computed rates, can be found in Exhibit 10. These results are expressed as a percentage of payroll and annual contribution dollars. Note that LACERA's UAAL contribution rate is not determined separately for each plan, but is funded evenly as a percentage of pay over salaries for all members. The total County contribution rate was $16.01 \%$ for the fiscal year beginning in 2005.

For the fiscal year beginning in 2006, the required rate decreased to $14.86 \%$. This is equal to the aggregate calculated normal cost contribution rate, of $9.53 \%$ based on the 2005 valuation, plus a 30 -year amortization payment of the UAAL.

## County Contribution Rate

(all values as a \% of Payroll)

| County Normal Cost | $9.53 \%$ |
| :--- | :---: |
| 30-year Amortization of UAAL | 5.33 |
| Total County Contribution | $14.86 \%$ |

The decrease in the total County contribution rate was primarily due to the investment gains which caused the decrease in the UAAL rate. The UAAL rate reflects a 30-year amortization from the valuation date and the one-year deferral in the implementation of the new County contribution rate effective July 1, 2006.

The change in the calculated normal cost contribution rates from year-to-year is generally due to two factors. These factors are listed in order of magnitude (i.e., experience had the greatest impact this year):
(1) Experience: Normal experience from year-to-year, reflecting differences in both the weighting between membership groups and in their characteristics, as well as on what was assumed to occur during the past fiscal year and what actually occurred, particularly with respect to salary increases. Based on current plan provisions, the aggregate normal cost rate is expected to decrease as a greater number of members are covered by General Plans D and E and Safety B. Additionally, as members transfer between Plan D and Plan E, this will also have an impact.
(2) Contribution Shut-Off: For general members hired prior to April 1973 and all Safety members, member contributions are not collected after the member has 30 years of service. Therefore, the member contributions towards the total annual normal cost is zero, resulting in a sizable increase in the County's share of the normal cost contributions for the years when the member has more than 30 years of service. The County's share of the normal cost rates for those groups can be expected to increase rather than remain level, as otherwise expected under the entry age cost method. As most general members hired prior to April 1973 have now attained 30 years of service, this statement applies mainly to Safety groups.

## Los Angeles County Employees <br> Retirement Association

## Exhibit 9: $\quad$ Calculated Normal Cost Contribution Rates - June 30, 2005

|  | General |  |  |  |  |  | Safety |  |  | Grand <br> Total <br> 10.34\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Normal Cost Contribution Rate | Plan A | Plan B | Plan C | Plan D | Plan E | Total | Plan A | Plan B | Total |  |
| Service Retirement | 14.77\% | 12.92\% | 11.79\% | 11.37\% | 7.36\% | 10.09\% | 11.80\% | 11.46\% | 11.48\% |  |
| Disability Retirement | 1.05\% | 0.97\% | 0.96\% | 1.49\% | 0.00\% | 0.89\% | 12.60\% | 12.23\% | 12.26\% | 2.97\% |
| Death | 0.43\% | 0.41\% | 0.39\% | 0.57\% | 0.00\% | 0.34\% | 0.31\% | 0.29\% | 0.29\% | 0.33\% |
| Termination (No Refund) | 0.37\% | 0.25\% | 0.23\% | 0.64\% | 0.63\% | 0.61\% | 0.34\% | 0.38\% | 0.38\% | 0.57\% |
| Refund of Member Contributions | 0.11\% | 0.14\% | 0.12\% | 0.51\% | 0.00\% | 0.29\% | 0.19\% | 0.29\% | 0.28\% | 0.29\% |
| Total | 16.73\% | 14.69\% | 13.49\% | 14.58\% | 7.99\% | 12.22\% | 25.24\% | 24.65\% | 24.69\% | 14.50\% |
| B. Member Contributions | (2.51)\% | (6.71)\% | (5.80)\% | (6.75)\% | 0.00\% | (3.91)\% | (2.68)\% | (10.24)\% | (9.68)\% | (4.97)\% |
| C. Net County Normal Cost as of June 30, 2005 (A) - (B) | 14.22\% | 7.98\% | 7.69\% | 7.83\% | 7.99\% | 8.31\% | 22.56\% | 14.41\% | 15.01\% | 9.53\% |
| D. Net County Normal Cost as of June 30, 2004 | 14.39\% | 8.12\% | 7.75\% | 7.84\% | 7.92\% | 8.38\% | 21.64\% | 14.28\% | 15.00\% | 9.60\% |
| E. Increase (Decrease) as a <br> Percentage of Payroll (C) - (D) | (0.17)\% | (0.14)\% | (0.06)\% | (0.01)\% | 0.07\% | (0.07)\% | 0.92\% | 0.13\% | 0.01\% | (0.07)\% |

[^1]14003 LAC 38/14.003.LAC. 10.2005 / KIS/NJC/nlo

## Los Angeles County Employees <br> Retirement Association

## Exhibit 10: Total County Contributions

A. Normal Cost

1. Basic Benefits
2. Cost-of-Living Benefits
3. Total June 30, 2005
B. UAAL Contribution Rate
C. Total June 30, 2005 Contribution Rate (A) + (B)
D. Total June 30, 2004 Contribution Rate
E. Estimated Payroll for fiscal year
beginning July 1, 2006
F. Estimated Annual Contribution* (C x E)
G. Last Year's Estimated Annual Contribution
H. Increase / (Decrease) in Annual Contribution

| General |  |  |  |  |  | Safety |  |  | All <br> Plans |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plan A | Plan B | Plan C | Plan D | Plan E | Total | Plan A | Plan B | Total |  |
| 9.43\% | 6.41\% | 6.28\% | 6.53\% | 6.73\% | 6.79\% | 15.10\% | 11.82\% | 12.05\% | 8.08\% |
| 4.79\% | 1.57\% | 1.41\% | 1.30\% | 1.26\% | 1.52\% | 7.46\% | 2.59\% | 2.96\% | 1.45\% |
| 14.22\% | 7.98\% | 7.69\% | 7.83\% | 7.99\% | 8.31\% | 22.56\% | 14.41\% | 15.01\% | 9.53\% |
| 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% | 5.33\% |
| 19.55\% | 13.31\% | 13.02\% | 13.16\% | 13.32\% | 13.64\% | 27.89\% | 19.74\% | 20.34\% | 14.86\% |
| 20.80\% | 14.53\% | 14.16\% | 14.25\% | 14.33\% | 14.80\% | 28.05\% | 20.69\% | 21.43\% | 16.01\% |
| \$ 280 | \$ 29 | \$ 20 | \$2,329 | \$1,622 | \$4,280 | \$ 73 | \$ 888 | \$ 961 | \$5,241 |
| \$ 55 | \$ 4 | \$ 3 | \$ 306 | \$ 216 | \$ 584 | \$ 20 | \$ 175 | \$ 195 | \$ 779 |
| \$ 68 | \$ 4 | \$ 3 | \$ 314 | \$ 230 | \$ 620 | \$ 27 | \$ 175 | \$ 202 | \$ 822 |
| \$ (13) | \$ | \$ | \$ (8) | \$ (14) | \$ (36) | \$ (7) | \$ | \$ (7) | \$ (43) |

* Based upon annualized salary rate as of June 30, 2005 increased by $3.75 \%$ wage inflation. Dollar figures are in millions.

[^2]
## Los Angeles County Employees Retirement Association

## Section 7: Accounting Information



For fiscal years beginning after June 15, 1996, revised GASB reporting standards are required for defined benefit pension plan reporting and disclosures (Statement No. 25). The System adopted the revised reporting standards beginning in 1996. The new 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 11, compares actuarial assets and liabilities of the System, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 12, compares the employer contributions required based on the actuarial valuation (the actuarial required contribution, or ARC) with the employer contributions actually made. 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.

For fiscal years beginning after June 15, 1997, 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, between June 30, 2000 and June 30, 2001, many actuarial assumptions were changed based on the 2001 triennial Investigation of Experience Study. Between the 2002 and 2003 valuations, benefits were enhanced under the MOU package. Assumptions were again changed in 2004 based on the triennial Investigation of Experience.

Exhibit 13 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 <br> Retirement Association

Exhibit 11: Schedule of Funding Progress (All Dollars In Thousands)

| Actuarial Valuation Date | (a) <br> Actuarial Value of Valuation Assets | (b) <br> Actuarial Accrued Liabilities |  | (b-a) funded tuarial crued ies (UAAL) | (a/b) Funded Ratio | (c) Covered Payroll ${ }^{(1)}$ |  | $[(b-a) / c]$ <br> UAAL as a Percentage of Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June 30, 1996 | \$ 17,724,744 | \$ 17,277,651 | \$ | $(447,093)$ | 102.6\% | \$ | 3,355,551 | -13.3\% |
| June 30, 1997 | 19,642,355 | 19,383,641 |  | $(258,714)$ | 101.3\% |  | 3,373,314 | -7.7\% |
| June 30, 1998 | 20,851,133 | 20,959,946 |  | 108,813 | 99.5\% |  | 3,562,416 | 3.1\% |
| June 30, 1999 | 23,536,116 | 22,784,706 |  | $(751,410)$ | 103.3\% |  | 3,858,090 | -19.5\% |
| June 30, 2000 | 25,426,507 | 24,720,380 |  | $(706,127)$ | 102.9\% |  | 4,107,964 | -17.2\% |
| June 30, 2001 | 26,490,000 | 26,489,976 |  | (24) | 100.0\% |  | 4,398,443 | 0.0\% |
| June 30, 2002 | 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 | 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\% |

(1) Covered Payroll includes compensation paid to all active employees on which contributions are calculated. 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. For years prior to 1999, Covered Payroll is estimated.

## Los Angeles County Employees Retirement Association

Exhibit 12: Schedule of Contributions from the Employer
(All Dollars In Thousands)

| Fiscal Year <br> Ending | Annual Required Contribution (ARC) | Actual Employer Contributions |  |  | Percentage of ARC Contributed |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cash Payment | Transfer from Reserve Accounts | Total |  |
| 6/30/1996 | \$287,548 | \$132,452 | \$146,309 | \$278,761 | 97\% |
| 6/30/1997 | 277,929 | 1,168 | 277,151 | 278,319 | 100\% |
| 6/30/1998 | 243,489 | 9,420 | 239,777 | 249,197 | 102\% |
| 6/30/1999 | 317,285 | 84,226 | 248,403 | 332,629 | 105\% |
| 6/30/2000 | 342,060 | 130,319 | 211,832 | 342,151 | 100\% |
| 6/30/2001 | 390,679 | 193,650 | 197,029 | 390,679 | 100\% |
| 6/30/2002 | 414,708 | 258,884 | 155,824 | 414,708 | 100\% |
| 6/30/2003 | 518,922 | 324,709 | 194,213 | 518,922 | 100\% |
| 6/30/2004 | 521,978 | 395,062 | 126,916 | 521,978 | 100\% |
| 6/30/2005 | 750,352 | 527,810 | 222,542 | 750,352 | 100\% |

## Los Angeles County Employees <br> Retirement Association

Exhibit 13: 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 <br> (A) |  | Retirees and Beneficiaries ${ }^{(1)}$ (B) |  | Active Members (Employer Financed Portion) <br> (C) |  |  |  |  |
|  |  |  | (A) | (B) |  |  | (C) |  |  |  |
| June 30, 1998 | \$ | 20,851 |  |  | \$ | 2,643 |  |  | \$ | 11,268 | \$ | 7,049 | 100\% | 100\% | 98\% |
| June 30, 1999 |  | 23,536 |  | 2,710 |  | 11,863 |  | 8,211 | 100\% | 100\% | 109\% |
| June 30, 2000 |  | 25,427 |  | 3,190 |  | 12,922 |  | 8,609 | 100\% | 100\% | 108\% |
| June 30, 2001 |  | 26,490 |  | 3,320 |  | 14,368 |  | 8,802 | 100\% | 100\% | 100\% |
| June 30, 2002 |  | 28,262 |  | 3,596 |  | 15,424 |  | 9,417 | 100\% | 100\% | 98\% |
| June 30, 2003 |  | 26,564 |  | 3,790 |  | 16,844 |  | 9,840 | 100\% | 100\% | 60\% |
| June 30, 2004 |  | 27,089 |  | 4,042 |  | 18,857 |  | 9,802 | 100\% | 100\% | 43\% |
| June 30, 2005 |  | 29,497 |  | 4,308 |  | 20,238 |  | 9,829 | 100\% | 100\% | 50\% |

(1) Includes deferred vested members.

[^3]
## Los Angeles County Employees Retirement Association

## Section 8: Supplemental Information

Cash Flow
Projection


Exhibits 14a and 14b 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 decreased over the last 10 years. It has leveled off somewhat for the past five years, but it is expected to begin to significantly decrease for the next 10 years. This is a typical pattern for a mature retirement system where it is expected that contributions will be less than benefits and that the system will begin drawing on the fund that has been built up over prior years. The projection shows that the negative projected cash flow is expected to more than double in size from 2006 to 2015.

Note that the actual cash contributions since 1996 do not reflect the transfers made between reserve funds, but only cash coming into the System. Starting in 2006, we assumed no further transfers, only full cash contributions. Thus, the actual contributions in 2005 are significantly less than those in the projections for 2006 and later.

The projected cash flows include contributions, statutory benefits and administrative expenses only. They are based on the actuarial assumptions as stated in Appendix A of this valuation report. The total County contribution rate is assumed to be $16.01 \%$ for the first year and $14.86 \%$ for the rest of the 10-year projection. The ultimate rate is equal to the required County normal cost rate plus a contribution to finance the UAAL, as calculated in the 2005 valuation. The aggregate Member rate is assumed to stay at the calculated rate for June 30, 2005 of 4.97\% of payroll. Expenses are based on the expenses for the year ended June 30, 2005, 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. STAR benefits that were vested as of January 2005 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 14A: Cash Flow History and Projections - Dollars

|  | Cash Flow History |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions |  | Benefits \& Administrative Expenses ${ }^{(2)}$ |  | Net Cash Flow |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 1996 | \$ | 316 | \$ | 857 | \$ | (541) |
| 1997 |  | 172 |  | 910 |  | (738) |
| 1998 |  | 189 |  | 968 |  | (779) |
| 1999 |  | 288 |  | 1,024 |  | (736) |
| 2000 |  | 329 |  | 1,094 |  | (765) |
| 2001 |  | 410 |  | 1,187 |  | (777) |
| 2002 |  | 564 |  | 1,276 |  | (712) |
| 2003 |  | 559 |  | 1,379 |  | (820) |
| 2004 |  | 658 |  | 1,546 |  | (888) |
| 2005 |  | 814 |  | 1,665 |  | (851) |


| Plan Year <br> Ending | Cash Flow Projections ${ }^{(1)}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Contributions |  | Benefits \& Administrative Expenses ${ }^{(2)}$ |  | Net Cash Flow |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 2006 | \$ | 1,055 | \$ | 1,697 | \$ | (642) |
| 2007 |  | 1,039 |  | 1,802 |  | (763) |
| 2008 |  | 1,078 |  | 1,921 |  | (843) |
| 2009 |  | 1,119 |  | 2,033 |  | (915) |
| 2010 |  | 1,161 |  | 2,151 |  | (990) |
| 2011 |  | 1,204 |  | 2,273 |  | $(1,069)$ |
| 2012 |  | 1,249 |  | 2,401 |  | $(1,152)$ |
| 2013 |  | 1,296 |  | 2,534 |  | $(1,238)$ |
| 2014 |  | 1,345 |  | 2,672 |  | $(1,327)$ |
| 2015 |  | 1,395 |  | 2,814 |  | $(1,419)$ |

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## Los Angeles County Employees Retirement Association

Exhibit 14B: Cash Flow History and Projections - Charts


Cash Flow Projections ${ }^{(1)}$

${ }^{(1)}$ Future contributions are assumed to be at the $9.53 \%$ normal cost rate plus a UAAL payment of 5.33\% after the first year.
${ }^{(2)}$ Investment expenses are assumed to be covered by investment return.

## 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, 2004 as a result of the 2004 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 2004 Investigation of Experience Study. The rates are the probabilities a member will leave the system for various reasons.

## Actuarial Cost Method

Records and Data<br>Replacement of Terminated Members

## Growth in Membership

## Internal Revenue Code Section 415 Limit

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

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

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL (or Surplus Funding) is amortized as a level percentage of the projected salaries of present and future members of LACERA over a 30-year period from the valuation date, this is commonly referred to as a "rolling 30 year amortization method".

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.

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.

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.

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.

## County Contributions <br> Member Contributions

## Valuation of Assets

## Investment Earnings and Expenses

## Post-retirement Benefit Increases

Interest on Member Contributions

Future Salaries

The County contribution rate is set by the Retirement Board based on actuarial valuations.

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.

The individual member rates by entry age, plan and class are illustrated in Appendix $D$ of the valuation report.

The assets are valued using a three-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 expected market-value, with three-year smoothing valuation basis for all assets was adopted effective June 30, 2000.

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.

Post-retirement 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.

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.

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 $3.75 \%$ per annum rate of increase in the general wage level of the membership. These rates were adopted June 30, 2004.

Effective June 30, 2000, increases are assumed to occur mid-year (i.e., January 1) 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.

## 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.

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 $3.75 \%$ 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, 2004.

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.

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

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

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

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

The retirement probabilities were adopted June 30, 2004.
$\left.\begin{array}{ll}\text { Disablement } & \begin{array}{l}\text { The rates of disablement used in the valuation are also illustrated } \\ \text { in Tables A-6 through A-13. These rates were adopted June 30, } \\ \text { 2004. }\end{array} \\ \text { Mortality - Other } \\ \text { Than Disabled } \\ \text { Members }\end{array} \quad \begin{array}{l}\text { The same post-retirement mortality rates are used in the valuation } \\ \text { for active members, members retired for service, and } \\ \text { beneficiaries. These rates are illustrated in Table A-2. } \\ \text { Beneficiary mortality is assumed to be the same assumption as } \\ \text { healthy members. Beneficiaries are assumed to be of the } \\ \text { opposite sex, and have the same mortality as General members. } \\ \text { These rates were adopted June 30, 2004. }\end{array}\right\}$

## 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, 2004.

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

All terminating members are assumed to not be rehired. Table A-4 gives the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions. These rates were adopted June 30, 2004.

## Probability of Eligible Survivors

## Valuation of Vested Terminated Members

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.

Complete Final Compensation data is not available to estimate the amount of vested benefit for these members. For valuation purposes, we assume the value of their deferred benefit is equal to three times their accumulated normal contributions plus one times their accumulated COLA contributions as of the valuation date.

Since Plan E is non-contributory, the value of the deferred benefit cannot be estimated under this method. Therefore, for Plan E members who are missing compensation data, Final Compensation is estimated as the average amount for all Plan E members who terminated during the same year and had a valid compensation amount. The retirement benefit is then calculated. The value of the deferred benefit is the value of this benefit deferred to age 65.

## Valuation of Annuity Purchases

Over 20 years ago, LACERA purchased single life annuities from two insurance companies for some retired members (currently less than 5\% of the retired population). The total liability for these members is calculated and then offset by the expected value of the benefit to be paid by the insurance companies.

For affected members, the insurance companies are responsible for:
(1) Straight life annuity payments
(2) Statutory COLAs

LACERA is responsible for:
(1) Benefit payments payable to any beneficiary
(2) STAR COLAs

## Member Contribution Rate Assumptions

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:
In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL, the:
A. Annuity factor used for general members is based on a $40 \%$ / $60 \%$ blend of the male and female annuity factors using current valuation assumptions. For Safety members it is based on a $90 \%$ / 10\% blend of the male and female annuity factors using current valuation assumptions.
B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.75\%.
C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.

Example: For a Plan C Member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.
D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age (for example, age 53 for General A). In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

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Table A-1: $\quad$ Summary of Valuation Assumptions as of June 30, 2005
I. Economic assumptions
A. General wage increases
3.75\%
B. Investment earnings
7.75\%
C. Growth in membership
D. Post-retirement benefit increases (varies by plan)
E. CPI inflation assumption
0.00\%
Plan COLA not greater than CPI assumption. 3.50\%
II. Demographic assumptions
A. Salary increases due to service
B. Retirement
C. Disablement

Table A-5
Tables A-6 to A-13
D. Mortality for active members after termination and service retired members.

Tables A-6 to A-13

Table A-2
Basis - RP-2000 Combined Mortality Table
for respective sexes for general members, as adjusted:

| Class of Members | Age <br> Adjustment |
| :--- | :---: |
| General - males | -2 years |
| General - females | -2 years |
| Safety - males | -3 years |
| Safety - females | -2 years |

E. Mortality among disabled members

Table A-3
Basis - RP-2000 Combined Mortality Table, as adjusted:

| General - males <br> General - females | +3 years <br> +1 year |
| :--- | :---: |
| Safety - males | 0 years |
| Safety - females | +3 years |

F. 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.
G. Other terminations of employment
H. Refund of contributions on vested termination

Tables A-6 to A-13
Table A-4

## Los Angeles County Employees Retirement Association

Table A-2: Mortality for Members Retired for Service

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

This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes.
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## Los Angeles County Employees <br> Retirement Association

Table A-3: Mortality for Members Retired for Disability

| Age | Safety Male | Safety <br> Female | General Male | General Female |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 0.035\% | 0.020\% | 0.037\% | 0.019\% |
| 25 | 0.038\% | 0.023\% | 0.039\% | 0.021\% |
| 30 | 0.044\% | 0.039\% | 0.063\% | 0.031\% |
| 35 | 0.077\% | 0.060\% | 0.096\% | 0.051\% |
| 40 | 0.108\% | 0.094\% | 0.130\% | 0.077\% |
| 45 | 0.151\% | 0.143\% | 0.186\% | 0.122\% |
| 50 | 0.214\% | 0.221\% | 0.292\% | 0.185\% |
| 55 | 0.362\% | 0.392\% | 0.527\% | 0.309\% |
| 60 | 0.675\% | 0.765\% | 1.001\% | 0.581\% |
| 65 | 1.274\% | 1.345\% | 1.787\% | 1.095\% |
| 70 | 2.221\% | 2.297\% | 3.039\% | 1.858\% |
| 75 | 3.783\% | 3.760\% | 5.212\% | 3.097\% |
| 80 | 6.437\% | 6.251\% | 8.972\% | 5.078\% |
| 85 | 11.076\% | 10.730\% | 15.059\% | 8.638\% |
| 90 | 18.341\% | 17.043\% | 23.366\% | 14.460\% |

## 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\% | 45\% |
| 6 | 35\% | 45\% |
| 7 | 35\% | 45\% |
| 8 | 33\% | 44\% |
| 9 | 31\% | 43\% |
| 10 | 29\% | 42\% |
| 11 | 27\% | 41\% |
| 12 | 25\% | 40\% |
| 13 | 20\% | 39\% |
| 14 | 15\% | 38\% |
| 15 | 10\% | 37\% |
| 16 | 5\% | 36\% |
| 17 | 0\% | 35\% |
| 18 | 0\% | 34\% |
| 19 | 0\% | 33\% |
| 20 | 0\% | 32\% |
| 21 | 0\% | 31\% |
| 22 | 0\% | 30\% |
| 23 | 0\% | 24\% |
| 24 | 0\% | 18\% |
| 25 | 0\% | 12\% |
| 26 | 0\% | 6\% |
| 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* |
| :---: | :---: | :---: |
| <1 | 6.00\% | 9.98\% |
| 1 | 5.25\% | 9.20\% |
| 2 | 4.50\% | 8.42\% |
| 3 | 3.75\% | 7.64\% |
| 4 | 3.00\% | 6.86\% |
| 5 | 2.50\% | 6.34\% |
| 6 | 2.00\% | 5.83\% |
| 7 | 1.75\% | 5.57\% |
| 8 | 1.50\% | 5.31\% |
| 9 | 1.30\% | 5.10\% |
| 10 | 1.15\% | 4.94\% |
| 11 | 1.00\% | 4.79\% |
| 12 | 0.85\% | 4.63\% |
| 13 | 0.70\% | 4.48\% |
| 14 | 0.60\% | 4.37\% |
| 15 | 0.50\% | 4.27\% |
| 16 | 0.40\% | 4.17\% |
| 17 | 0.35\% | 4.11\% |
| 18 | 0.30\% | 4.06\% |
| 19 | 0.25\% | 4.01\% |
| 20 or More | 0.25\% | 4.01\% |

* The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed $3.75 \%$ per annum increase in the general wage level of the membership. The total result is compounded rather than additive.


## 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 <br> requirements for reasons other than disability. |
| :--- | :--- |
| Withdrawal: | Member terminates and elects a refund of member <br> contributions, or a deferred vested retirement <br> benefit. |
| Service Disability: | Member receives disability retirement; disability is <br> service related. |
| Ordinary Disability: | Member receives disability retirement; disability is <br> not service related. |
| Service Death: | Member dies before retirement; death is service <br> related. |
| Ordinary Death: | Member dies before retirement; death is not <br> 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-7: General Plan A, B \& C Females
A-8: General Plan D Males
A-9: General Plan D Females

A-10: General Plan E Males
A-11: General Plan E Females
A-12: Safety Plan A \& B Males
A-13: Safety Plan A \& B Females

## Los Angeles County Employees Retirement Association

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

| Age | Service Retirement | Other Terminations | Service Disability | Ordinary Disability | Service Death | Ordinary Death |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0003 |
| 19 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 20 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 21 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 22 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 23 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 24 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 25 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 26 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 27 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 28 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0004 |
| 29 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0005 |
| 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 | 0.0003 | 0.0001 | N/A | 0.0008 |
| 34 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | N/A | 0.0008 |
| 35 | 0.0000 | 0.0050 | 0.0004 | 0.0001 | N/A | 0.0009 |
| 36 | 0.0000 | 0.0050 | 0.0004 | 0.0002 | N/A | 0.0010 |
| 37 | 0.0000 | 0.0050 | 0.0005 | 0.0001 | N/A | 0.0010 |
| 38 | 0.0000 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0011 |
| 39 | 0.0000 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0011 |
| 40 | 0.0300 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0012 |
| 41 | 0.0300 | 0.0050 | 0.0007 | 0.0003 | N/A | 0.0013 |
| 42 | 0.0300 | 0.0050 | 0.0008 | 0.0003 | N/A | 0.0014 |
| 43 | 0.0300 | 0.0050 | 0.0009 | 0.0003 | N/A | 0.0015 |
| 44 | 0.0300 | 0.0050 | 0.0010 | 0.0004 | N/A | 0.0016 |
| 45 | 0.0300 | 0.0050 | 0.0011 | 0.0004 | N/A | 0.0017 |
| 46 | 0.0300 | 0.0050 | 0.0012 | 0.0005 | N/A | 0.0019 |
| 47 | 0.0300 | 0.0050 | 0.0013 | 0.0005 | N/A | 0.0020 |
| 48 | 0.0300 | 0.0050 | 0.0014 | 0.0005 | N/A | 0.0021 |
| 49 | 0.0300 | 0.0050 | 0.0016 | 0.0006 | N/A | 0.0023 |
| 50 | 0.0300 | 0.0050 | 0.0017 | 0.0006 | N/A | 0.0024 |
| 51 | 0.0300 | 0.0050 | 0.0018 | 0.0007 | N/A | 0.0026 |
| 52 | 0.0300 | 0.0050 | 0.0020 | 0.0008 | N/A | 0.0028 |
| 53 | 0.0300 | 0.0050 | 0.0022 | 0.0008 | N/A | 0.0030 |
| 54 | 0.0450 | 0.0050 | 0.0025 | 0.0009 | N/A | 0.0033 |
| 55 | 0.0700 | 0.0050 | 0.0027 | 0.0010 | N/A | 0.0036 |
| 56 | 0.1000 | 0.0050 | 0.0030 | 0.0011 | N/A | 0.0040 |
| 57 | 0.1200 | 0.0050 | 0.0032 | 0.0012 | N/A | 0.0044 |
| 58 | 0.1500 | 0.0050 | 0.0036 | 0.0013 | N/A | 0.0049 |
| 59 | 0.1800 | 0.0050 | 0.0040 | 0.0015 | N/A | 0.0054 |
| 60 | 0.2400 | 0.0050 | 0.0044 | 0.0016 | N/A | 0.0059 |
| 61 | 0.2400 | 0.0050 | 0.0048 | 0.0018 | N/A | 0.0065 |
| 62 | 0.3500 | 0.0050 | 0.0052 | 0.0019 | N/A | 0.0070 |
| 63 | 0.2100 | 0.0050 | 0.0052 | 0.0024 | N/A | 0.0076 |
| 64 | 0.2800 | 0.0050 | 0.0052 | 0.0029 | N/A | 0.0081 |
| 65 | 0.3500 | 0.0050 | 0.0052 | 0.0034 | N/A | 0.0086 |
| 66 | 0.2500 | 0.0050 | 0.0052 | 0.0039 | N/A | 0.0091 |
| 67 | 0.2500 | 0.0050 | 0.0052 | 0.0044 | N/A | 0.0095 |
| 68 | 0.2500 | 0.0050 | 0.0052 | 0.0049 | N/A | 0.0099 |
| 69 | 0.2500 | 0.0050 | 0.0052 | 0.0054 | N/A | 0.0104 |
| 70 | 0.2500 | 0.0050 | 0.0052 | 0.0059 | N/A | 0.0112 |
| 71 | 0.2500 | 0.0050 | 0.0052 | 0.0064 | N/A | 0.0123 |
| 72 | 0.2500 | 0.0050 | 0.0052 | 0.0069 | N/A | 0.0137 |
| 73 | 0.2500 | 0.0050 | 0.0052 | 0.0074 | N/A | 0.0151 |
| 74 | 0.2500 | 0.0050 | 0.0052 | 0.0079 | N/A | 0.0169 |
| 75 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | N/A | 0.0000 |

[^5]
## 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 <br> 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 | 0.0002 |
| 20 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 21 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 22 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 23 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 24 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 25 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 26 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 27 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 28 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 29 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0002 |
| 30 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0003 |
| 31 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0003 |
| 32 | 0.0000 | 0.0050 | 0.0002 | 0.0001 | N/A | 0.0003 |
| 33 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | N/A | 0.0004 |
| 34 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | N/A | 0.0004 |
| 35 | 0.0000 | 0.0050 | 0.0004 | 0.0001 | N/A | 0.0005 |
| 36 | 0.0000 | 0.0050 | 0.0004 | 0.0002 | N/A | 0.0005 |
| 37 | 0.0000 | 0.0050 | 0.0005 | 0.0001 | N/A | 0.0006 |
| 38 | 0.0000 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0006 |
| 39 | 0.0000 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0006 |
| 40 | 0.0300 | 0.0050 | 0.0006 | 0.0002 | N/A | 0.0007 |
| 41 | 0.0300 | 0.0050 | 0.0007 | 0.0003 | N/A | 0.0008 |
| 42 | 0.0300 | 0.0050 | 0.0008 | 0.0003 | N/A | 0.0009 |
| 43 | 0.0300 | 0.0050 | 0.0009 | 0.0003 | N/A | 0.0009 |
| 44 | 0.0300 | 0.0050 | 0.0010 | 0.0004 | N/A | 0.0010 |
| 45 | 0.0300 | 0.0050 | 0.0011 | 0.0004 | N/A | 0.0011 |
| 46 | 0.0300 | 0.0050 | 0.0012 | 0.0005 | N/A | 0.0012 |
| 47 | 0.0300 | 0.0050 | 0.0013 | 0.0005 | N/A | 0.0013 |
| 48 | 0.0300 | 0.0050 | 0.0014 | 0.0006 | N/A | 0.0014 |
| 49 | 0.0300 | 0.0050 | 0.0014 | 0.0006 | N/A | 0.0016 |
| 50 | 0.0300 | 0.0050 | 0.0016 | 0.0006 | N/A | 0.0017 |
| 51 | 0.0300 | 0.0050 | 0.0017 | 0.0007 | N/A | 0.0018 |
| 52 | 0.0300 | 0.0050 | 0.0018 | 0.0008 | N/A | 0.0020 |
| 53 | 0.0400 | 0.0050 | 0.0019 | 0.0009 | N/A | 0.0021 |
| 54 | 0.0700 | 0.0050 | 0.0020 | 0.0010 | N/A | 0.0023 |
| 55 | 0.0900 | 0.0050 | 0.0022 | 0.0011 | N/A | 0.0025 |
| 56 | 0.1000 | 0.0050 | 0.0022 | 0.0011 | N/A | 0.0028 |
| 57 | 0.1200 | 0.0050 | 0.0024 | 0.0012 | N/A | 0.0030 |
| 58 | 0.1500 | 0.0050 | 0.0027 | 0.0014 | N/A | 0.0033 |
| 59 | 0.1800 | 0.0050 | 0.0030 | 0.0015 | N/A | 0.0036 |
| 60 | 0.2000 | 0.0050 | 0.0034 | 0.0017 | N/A | 0.0039 |
| 61 | 0.2000 | 0.0050 | 0.0037 | 0.0019 | N/A | 0.0043 |
| 62 | 0.2800 | 0.0050 | 0.0040 | 0.0020 | N/A | 0.0047 |
| 63 | 0.2200 | 0.0050 | 0.0043 | 0.0022 | N/A | 0.0050 |
| 64 | 0.2200 | 0.0050 | 0.0047 | 0.0024 | N/A | 0.0054 |
| 65 | 0.3000 | 0.0050 | 0.0051 | 0.0026 | N/A | 0.0058 |
| 66 | 0.2400 | 0.0050 | 0.0056 | 0.0028 | N/A | 0.0062 |
| 67 | 0.2400 | 0.0050 | 0.0061 | 0.0030 | N/A | 0.0066 |
| 68 | 0.2400 | 0.0050 | 0.0066 | 0.0032 | N/A | 0.0069 |
| 69 | 0.2400 | 0.0050 | 0.0072 | 0.0034 | N/A | 0.0073 |
| 70 | 0.2400 | 0.0050 | 0.0072 | 0.0036 | N/A | 0.0076 |
| 71 | 0.2400 | 0.0050 | 0.0072 | 0.0038 | N/A | 0.0079 |
| 72 | 0.2400 | 0.0050 | 0.0072 | 0.0040 | N/A | 0.0085 |
| 73 | 0.2400 | 0.0050 | 0.0072 | 0.0042 | N/A | 0.0093 |
| 74 | 0.2400 | 0.0050 | 0.0072 | 0.0044 | N/A | 0.0103 |
| 75 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | N/A | 0.0000 |

[^6]
## Los Angeles County Employees Retirement Association

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

| Age | Service Retirement | Service Disability | Ordinary Disability | Service Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0003 | 0 | 0.0700 |
| 19 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 1 | 0.0550 |
| 20 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 2 | 0.0425 |
| 21 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 3 | 0.0350 |
| 22 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 4 | 0.0300 |
| 23 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 5 | 0.0283 |
| 24 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 6 | 0.0267 |
| 25 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 7 | 0.0250 |
| 26 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 8 | 0.0240 |
| 27 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 9 | 0.0230 |
| 28 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0004 | 10 | 0.0220 |
| 29 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0005 | 11 | 0.0210 |
| 30 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0006 | 12 | 0.0200 |
| 31 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0006 | 13 | 0.0190 |
| 32 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0007 | 14 | 0.0180 |
| 33 | 0.0000 | 0.0003 | 0.0001 | N/A | 0.0008 | 15 | 0.0170 |
| 34 | 0.0000 | 0.0003 | 0.0001 | N/A | 0.0008 | 16 | 0.0160 |
| 35 | 0.0000 | 0.0004 | 0.0001 | N/A | 0.0009 | 17 | 0.0150 |
| 36 | 0.0000 | 0.0004 | 0.0002 | N/A | 0.0010 | 18 | 0.0144 |
| 37 | 0.0000 | 0.0005 | 0.0001 | N/A | 0.0010 | 19 | 0.0138 |
| 38 | 0.0000 | 0.0006 | 0.0002 | N/A | 0.0011 | 20 | 0.0132 |
| 39 | 0.0000 | 0.0006 | 0.0002 | N/A | 0.0011 | 21 | 0.0126 |
| 40 | 0.0200 | 0.0006 | 0.0002 | N/A | 0.0012 | 22 | 0.0120 |
| 41 | 0.0200 | 0.0007 | 0.0003 | N/A | 0.0013 | 23 | 0.0116 |
| 42 | 0.0200 | 0.0008 | 0.0003 | N/A | 0.0014 | 24 | 0.0112 |
| 43 | 0.0200 | 0.0009 | 0.0003 | N/A | 0.0015 | 25 | 0.0108 |
| 44 | 0.0200 | 0.0010 | 0.0004 | N/A | 0.0016 | 26 | 0.0104 |
| 45 | 0.0200 | 0.0011 | 0.0004 | N/A | 0.0017 | 27 | 0.0100 |
| 46 | 0.0200 | 0.0012 | 0.0005 | N/A | 0.0019 | 28 | 0.0100 |
| 47 | 0.0200 | 0.0013 | 0.0005 | N/A | 0.0020 | 29 | 0.0100 |
| 48 | 0.0200 | 0.0014 | 0.0005 | N/A | 0.0021 | 30 \& Above | 0.0000 |
| 49 | 0.0200 | 0.0016 | 0.0006 | N/A | 0.0023 |  |  |
| 50 | 0.0200 | 0.0017 | 0.0006 | N/A | 0.0024 |  |  |
| 51 | 0.0200 | 0.0018 | 0.0007 | N/A | 0.0026 |  |  |
| 52 | 0.0200 | 0.0020 | 0.0008 | N/A | 0.0028 |  |  |
| 53 | 0.0200 | 0.0022 | 0.0008 | N/A | 0.0030 |  |  |
| 54 | 0.0200 | 0.0025 | 0.0009 | N/A | 0.0033 |  |  |
| 55 | 0.0300 | 0.0027 | 0.0010 | N/A | 0.0036 |  |  |
| 56 | 0.0300 | 0.0030 | 0.0011 | N/A | 0.0040 |  |  |
| 57 | 0.0300 | 0.0032 | 0.0012 | N/A | 0.0044 |  |  |
| 58 | 0.0300 | 0.0036 | 0.0013 | N/A | 0.0049 |  |  |
| 59 | 0.0400 | 0.0040 | 0.0015 | N/A | 0.0054 |  |  |
| 60 | 0.0500 | 0.0044 | 0.0016 | N/A | 0.0059 |  |  |
| 61 | 0.0500 | 0.0048 | 0.0018 | N/A | 0.0065 |  |  |
| 62 | 0.1000 | 0.0052 | 0.0019 | N/A | 0.0070 |  |  |
| 63 | 0.0800 | 0.0052 | 0.0024 | N/A | 0.0076 |  |  |
| 64 | 0.1000 | 0.0052 | 0.0029 | N/A | 0.0081 |  |  |
| 65 | 0.2000 | 0.0052 | 0.0034 | N/A | 0.0086 |  |  |
| 66 | 0.1500 | 0.0052 | 0.0039 | N/A | 0.0091 |  |  |
| 67 | 0.1500 | 0.0052 | 0.0044 | N/A | 0.0095 |  |  |
| 68 | 0.1500 | 0.0052 | 0.0049 | N/A | 0.0099 |  |  |
| 69 | 0.1500 | 0.0052 | 0.0054 | N/A | 0.0104 |  |  |
| 70 | 0.2000 | 0.0052 | 0.0059 | N/A | 0.0112 |  |  |
| 71 | 0.2000 | 0.0052 | 0.0064 | N/A | 0.0123 |  |  |
| 72 | 0.2000 | 0.0052 | 0.0069 | N/A | 0.0137 |  |  |
| 73 | 0.2000 | 0.0052 | 0.0074 | N/A | 0.0151 |  |  |
| 74 | 0.2000 | 0.0052 | 0.0079 | N/A | 0.0169 |  |  |
| 75 | 1.0000 | 0.0000 | 0.0000 | N/A | 0.0000 |  |  |

## Los Angeles County Employees Retirement Association

Table A-9: Rate of Separation From Active Service For General Members

| Age | Service Retirement | Service Disability | Ordinary Disability | Service <br> Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 0 | 0.0700 |
| 19 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 1 | 0.0550 |
| 20 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 2 | 0.0425 |
| 21 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 3 | 0.0350 |
| 22 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 4 | 0.0300 |
| 23 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 5 | 0.0283 |
| 24 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 6 | 0.0267 |
| 25 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 7 | 0.0250 |
| 26 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 8 | 0.0240 |
| 27 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 9 | 0.0230 |
| 28 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 10 | 0.0220 |
| 29 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0002 | 11 | 0.0210 |
| 30 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0003 | 12 | 0.0200 |
| 31 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0003 | 13 | 0.0190 |
| 32 | 0.0000 | 0.0002 | 0.0001 | N/A | 0.0003 | 14 | 0.0180 |
| 33 | 0.0000 | 0.0003 | 0.0001 | N/A | 0.0004 | 15 | 0.0170 |
| 34 | 0.0000 | 0.0003 | 0.0001 | N/A | 0.0004 | 16 | 0.0160 |
| 35 | 0.0000 | 0.0004 | 0.0001 | N/A | 0.0005 | 17 | 0.0150 |
| 36 | 0.0000 | 0.0004 | 0.0002 | N/A | 0.0005 | 18 | 0.0144 |
| 37 | 0.0000 | 0.0005 | 0.0001 | N/A | 0.0006 | 19 | 0.0138 |
| 38 | 0.0000 | 0.0006 | 0.0002 | N/A | 0.0006 | 20 | 0.0132 |
| 39 | 0.0000 | 0.0006 | 0.0002 | N/A | 0.0006 | 21 | 0.0126 |
| 40 | 0.0200 | 0.0006 | 0.0002 | N/A | 0.0007 | 22 | 0.0120 |
| 41 | 0.0200 | 0.0007 | 0.0003 | N/A | 0.0008 | 23 | 0.0116 |
| 42 | 0.0200 | 0.0008 | 0.0003 | N/A | 0.0009 | 24 | 0.0112 |
| 43 | 0.0200 | 0.0009 | 0.0003 | N/A | 0.0009 | 25 | 0.0108 |
| 44 | 0.0200 | 0.0010 | 0.0004 | N/A | 0.0010 | 26 | 0.0104 |
| 45 | 0.0200 | 0.0011 | 0.0004 | N/A | 0.0011 | 27 | 0.0100 |
| 46 | 0.0200 | 0.0012 | 0.0005 | N/A | 0.0012 | 28 | 0.0100 |
| 47 | 0.0200 | 0.0013 | 0.0005 | N/A | 0.0013 | 29 | 0.0100 |
| 48 | 0.0200 | 0.0014 | 0.0006 | N/A | 0.0014 | 30 \& Above | 0.0000 |
| 49 | 0.0200 | 0.0014 | 0.0006 | N/A | 0.0016 |  |  |
| 50 | 0.0200 | 0.0016 | 0.0006 | N/A | 0.0017 |  |  |
| 51 | 0.0200 | 0.0017 | 0.0007 | N/A | 0.0018 |  |  |
| 52 | 0.0200 | 0.0018 | 0.0008 | N/A | 0.0020 |  |  |
| 53 | 0.0200 | 0.0019 | 0.0009 | N/A | 0.0021 |  |  |
| 54 | 0.0200 | 0.0020 | 0.0010 | N/A | 0.0023 |  |  |
| 55 | 0.0300 | 0.0022 | 0.0011 | N/A | 0.0025 |  |  |
| 56 | 0.0300 | 0.0022 | 0.0011 | N/A | 0.0028 |  |  |
| 57 | 0.0300 | 0.0024 | 0.0012 | N/A | 0.0030 |  |  |
| 58 | 0.0300 | 0.0027 | 0.0014 | N/A | 0.0033 |  |  |
| 59 | 0.0400 | 0.0030 | 0.0015 | N/A | 0.0036 |  |  |
| 60 | 0.0600 | 0.0034 | 0.0017 | N/A | 0.0039 |  |  |
| 61 | 0.0600 | 0.0037 | 0.0019 | N/A | 0.0043 |  |  |
| 62 | 0.0800 | 0.0040 | 0.0020 | N/A | 0.0047 |  |  |
| 63 | 0.0800 | 0.0043 | 0.0022 | N/A | 0.0050 |  |  |
| 64 | 0.1200 | 0.0047 | 0.0024 | N/A | 0.0054 |  |  |
| 65 | 0.2200 | 0.0051 | 0.0026 | N/A | 0.0058 |  |  |
| 66 | 0.1800 | 0.0056 | 0.0028 | N/A | 0.0062 |  |  |
| 67 | 0.1300 | 0.0061 | 0.0030 | N/A | 0.0066 |  |  |
| 68 | 0.2000 | 0.0066 | 0.0032 | N/A | 0.0069 |  |  |
| 69 | 0.2000 | 0.0072 | 0.0034 | N/A | 0.0073 |  |  |
| 70 | 0.2000 | 0.0072 | 0.0036 | N/A | 0.0076 |  |  |
| 71 | 0.2000 | 0.0072 | 0.0038 | N/A | 0.0079 |  |  |
| 72 | 0.2000 | 0.0072 | 0.0040 | N/A | 0.0085 |  |  |
| 73 | 0.2000 | 0.0072 | 0.0042 | N/A | 0.0093 |  |  |
| 74 | 0.2000 | 0.0072 | 0.0044 | N/A | 0.0103 |  |  |
| 75 | 1.0000 | 0.0000 | 0.0000 | N/A | 0.0000 |  |  |

(W) Milliman | This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. A-17 |
| :--- |
| Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. |

# Los Angeles County Employees Retirement Association 

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

| Age | Service Retirement | Service Disability | Ordinary Disability | Service Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | N/A | N/A | N/A | 0.0003 | 0 | 0.1300 |
| 19 | 0.0000 | N/A | N/A | N/A | 0.0004 | 1 | 0.0700 |
| 20 | 0.0000 | N/A | N/A | N/A | 0.0004 | 2 | 0.0600 |
| 21 | 0.0000 | N/A | N/A | N/A | 0.0004 | 3 | 0.0500 |
| 22 | 0.0000 | N/A | N/A | N/A | 0.0004 | 4 | 0.0400 |
| 23 | 0.0000 | N/A | N/A | N/A | 0.0004 | 5 | 0.0373 |
| 24 | 0.0000 | N/A | N/A | N/A | 0.0004 | 6 | 0.0347 |
| 25 | 0.0000 | N/A | N/A | N/A | 0.0004 | 7 | 0.0320 |
| 26 | 0.0000 | N/A | N/A | N/A | 0.0004 | 8 | 0.0304 |
| 27 | 0.0000 | N/A | N/A | N/A | 0.0004 | 9 | 0.0288 |
| 28 | 0.0000 | N/A | N/A | N/A | 0.0004 | 10 | 0.0272 |
| 29 | 0.0000 | N/A | N/A | N/A | 0.0005 | 11 | 0.0256 |
| 30 | 0.0000 | N/A | N/A | N/A | 0.0006 | 12 | 0.0240 |
| 31 | 0.0000 | N/A | N/A | N/A | 0.0006 | 13 | 0.0232 |
| 32 | 0.0000 | N/A | N/A | N/A | 0.0007 | 14 | 0.0224 |
| 33 | 0.0000 | N/A | N/A | N/A | 0.0008 | 15 | 0.0216 |
| 34 | 0.0000 | N/A | N/A | N/A | 0.0008 | 16 | 0.0208 |
| 35 | 0.0000 | N/A | N/A | N/A | 0.0009 | 17 | 0.0200 |
| 36 | 0.0000 | N/A | N/A | N/A | 0.0010 | 18 | 0.0196 |
| 37 | 0.0000 | N/A | N/A | N/A | 0.0010 | 19 | 0.0192 |
| 38 | 0.0000 | N/A | N/A | N/A | 0.0011 | 20 | 0.0188 |
| 39 | 0.0000 | N/A | N/A | N/A | 0.0011 | 21 | 0.0184 |
| 40 | 0.0000 | N/A | N/A | N/A | 0.0012 | 22 | 0.0180 |
| 41 | 0.0000 | N/A | N/A | N/A | 0.0013 | 23 | 0.0176 |
| 42 | 0.0000 | N/A | N/A | N/A | 0.0014 | 24 | 0.0172 |
| 43 | 0.0000 | N/A | N/A | N/A | 0.0015 | 25 | 0.0168 |
| 44 | 0.0000 | N/A | N/A | N/A | 0.0016 | 26 | 0.0164 |
| 45 | 0.0000 | N/A | N/A | N/A | 0.0017 | 27 | 0.0160 |
| 46 | 0.0000 | N/A | N/A | N/A | 0.0019 | 28 | 0.0160 |
| 47 | 0.0000 | N/A | N/A | N/A | 0.0020 | 29 | 0.0160 |
| 48 | 0.0000 | N/A | N/A | N/A | 0.0021 | 30 \& Above | 0.0160 |
| 49 | 0.0000 | N/A | N/A | N/A | 0.0023 |  |  |
| 50 | 0.0000 | N/A | N/A | N/A | 0.0024 |  |  |
| 51 | 0.0000 | N/A | N/A | N/A | 0.0026 |  |  |
| 52 | 0.0000 | N/A | N/A | N/A | 0.0028 |  |  |
| 53 | 0.0000 | N/A | N/A | N/A | 0.0030 |  |  |
| 54 | 0.0000 | N/A | N/A | N/A | 0.0033 |  |  |
| 55 | 0.0300 | N/A | N/A | N/A | 0.0036 |  |  |
| 56 | 0.0300 | N/A | N/A | N/A | 0.0040 |  |  |
| 57 | 0.0300 | N/A | N/A | N/A | 0.0044 |  |  |
| 58 | 0.0300 | N/A | N/A | N/A | 0.0049 |  |  |
| 59 | 0.0300 | N/A | N/A | N/A | 0.0054 |  |  |
| 60 | 0.0300 | N/A | N/A | N/A | 0.0059 |  |  |
| 61 | 0.0600 | N/A | N/A | N/A | 0.0065 |  |  |
| 62 | 0.1100 | N/A | N/A | N/A | 0.0070 |  |  |
| 63 | 0.0700 | N/A | N/A | N/A | 0.0076 |  |  |
| 64 | 0.1400 | N/A | N/A | N/A | 0.0081 |  |  |
| 65 | 0.2600 | N/A | N/A | N/A | 0.0086 |  |  |
| 66 | 0.1700 | N/A | N/A | N/A | 0.0091 |  |  |
| 67 | 0.1700 | N/A | N/A | N/A | 0.0095 |  |  |
| 68 | 0.1700 | N/A | N/A | N/A | 0.0099 |  |  |
| 69 | 0.1700 | N/A | N/A | N/A | 0.0104 |  |  |
| 70 | 0.2500 | N/A | N/A | N/A | 0.0112 |  |  |
| 71 | 0.2500 | N/A | N/A | N/A | 0.0123 |  |  |
| 72 | 0.2500 | N/A | N/A | N/A | 0.0137 |  |  |
| 73 | 0.2500 | N/A | N/A | N/A | 0.0151 |  |  |
| 74 | 0.2500 | N/A | N/A | N/A | 0.0169 |  |  |
| 75 | 1.0000 | N/A | N/A | N/A | 0.0000 |  |  |

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## Los Angeles County Employees Retirement Association

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

| Age | Service Retirement | Service Disability | Ordinary Disability | Service Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | N/A | N/A | N/A | 0.0002 | 0 | 0.1300 |
| 19 | 0.0000 | N/A | N/A | N/A | 0.0002 | 1 | 0.0700 |
| 20 | 0.0000 | N/A | N/A | N/A | 0.0002 | 2 | 0.0600 |
| 21 | 0.0000 | N/A | N/A | N/A | 0.0002 | 3 | 0.0500 |
| 22 | 0.0000 | N/A | N/A | N/A | 0.0002 | 4 | 0.0400 |
| 23 | 0.0000 | N/A | N/A | N/A | 0.0002 | 5 | 0.0373 |
| 24 | 0.0000 | N/A | N/A | N/A | 0.0002 | 6 | 0.0347 |
| 25 | 0.0000 | N/A | N/A | N/A | 0.0002 | 7 | 0.0320 |
| 26 | 0.0000 | N/A | N/A | N/A | 0.0002 | 8 | 0.0304 |
| 27 | 0.0000 | N/A | N/A | N/A | 0.0002 | 9 | 0.0288 |
| 28 | 0.0000 | N/A | N/A | N/A | 0.0002 | 10 | 0.0272 |
| 29 | 0.0000 | N/A | N/A | N/A | 0.0002 | 11 | 0.0256 |
| 30 | 0.0000 | N/A | N/A | N/A | 0.0003 | 12 | 0.0240 |
| 31 | 0.0000 | N/A | N/A | N/A | 0.0003 | 13 | 0.0232 |
| 32 | 0.0000 | N/A | N/A | N/A | 0.0003 | 14 | 0.0224 |
| 33 | 0.0000 | N/A | N/A | N/A | 0.0004 | 15 | 0.0216 |
| 34 | 0.0000 | N/A | N/A | N/A | 0.0004 | 16 | 0.0208 |
| 35 | 0.0000 | N/A | N/A | N/A | 0.0005 | 17 | 0.0200 |
| 36 | 0.0000 | N/A | N/A | N/A | 0.0005 | 18 | 0.0196 |
| 37 | 0.0000 | N/A | N/A | N/A | 0.0006 | 19 | 0.0192 |
| 38 | 0.0000 | N/A | N/A | N/A | 0.0006 | 20 | 0.0188 |
| 39 | 0.0000 | N/A | N/A | N/A | 0.0006 | 21 | 0.0184 |
| 40 | 0.0000 | N/A | N/A | N/A | 0.0007 | 22 | 0.0180 |
| 41 | 0.0000 | N/A | N/A | N/A | 0.0008 | 23 | 0.0176 |
| 42 | 0.0000 | N/A | N/A | N/A | 0.0009 | 24 | 0.0172 |
| 43 | 0.0000 | N/A | N/A | N/A | 0.0009 | 25 | 0.0168 |
| 44 | 0.0000 | N/A | N/A | N/A | 0.0010 | 26 | 0.0164 |
| 45 | 0.0000 | N/A | N/A | N/A | 0.0011 | 27 | 0.0160 |
| 46 | 0.0000 | N/A | N/A | N/A | 0.0012 | 28 | 0.0160 |
| 47 | 0.0000 | N/A | N/A | N/A | 0.0013 | 29 | 0.0160 |
| 48 | 0.0000 | N/A | N/A | N/A | 0.0014 | 30 \& Above | 0.0160 |
| 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 | 0.0018 |  |  |
| 52 | 0.0000 | N/A | N/A | N/A | 0.0020 |  |  |
| 53 | 0.0000 | N/A | N/A | N/A | 0.0021 |  |  |
| 54 | 0.0000 | N/A | N/A | N/A | 0.0023 |  |  |
| 55 | 0.0400 | N/A | N/A | N/A | 0.0025 |  |  |
| 56 | 0.0400 | N/A | N/A | N/A | 0.0028 |  |  |
| 57 | 0.0400 | N/A | N/A | N/A | 0.0030 |  |  |
| 58 | 0.0400 | N/A | N/A | N/A | 0.0033 |  |  |
| 59 | 0.0400 | N/A | N/A | N/A | 0.0036 |  |  |
| 60 | 0.0400 | N/A | N/A | N/A | 0.0039 |  |  |
| 61 | 0.0600 | N/A | N/A | N/A | 0.0043 |  |  |
| 62 | 0.0900 | N/A | N/A | N/A | 0.0047 |  |  |
| 63 | 0.0600 | N/A | N/A | N/A | 0.0050 |  |  |
| 64 | 0.1500 | N/A | N/A | N/A | 0.0054 |  |  |
| 65 | 0.2500 | N/A | N/A | N/A | 0.0058 |  |  |
| 66 | 0.1500 | N/A | N/A | N/A | 0.0062 |  |  |
| 67 | 0.1500 | N/A | N/A | N/A | 0.0066 |  |  |
| 68 | 0.1500 | N/A | N/A | N/A | 0.0069 |  |  |
| 69 | 0.1500 | N/A | N/A | N/A | 0.0073 |  |  |
| 70 | 0.2500 | N/A | N/A | N/A | 0.0076 |  |  |
| 71 | 0.2500 | N/A | N/A | N/A | 0.0079 |  |  |
| 72 | 0.2500 | N/A | N/A | N/A | 0.0085 |  |  |
| 73 | 0.2500 | N/A | N/A | N/A | 0.0093 |  |  |
| 74 | 0.2500 | N/A | N/A | N/A | 0.0103 |  |  |
| 75 | 1.0000 | N/A | N/A | N/A | 0.0000 |  |  |

## Los Angeles County Employees Retirement Association

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

| Age | Service Retirement | Service Disability | Ordinary Disability | Service Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 0 | 0.0400 |
| 19 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 1 | 0.0350 |
| 20 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 2 | 0.0300 |
| 21 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 3 | 0.0250 |
| 22 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 4 | 0.0150 |
| 23 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 5 | 0.0133 |
| 24 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 6 | 0.0117 |
| 25 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 7 | 0.0100 |
| 26 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 8 | 0.0092 |
| 27 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 9 | 0.0084 |
| 28 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 10 | 0.0076 |
| 29 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0003 | 11 | 0.0068 |
| 30 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0004 | 12 | 0.0060 |
| 31 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0004 | 13 | 0.0056 |
| 32 | 0.0000 | 0.0050 | 0.0003 | 0.0001 | 0.0004 | 14 | 0.0052 |
| 33 | 0.0000 | 0.0052 | 0.0003 | 0.0001 | 0.0004 | 15 | 0.0048 |
| 34 | 0.0000 | 0.0054 | 0.0003 | 0.0001 | 0.0004 | 16 | 0.0044 |
| 35 | 0.0000 | 0.0056 | 0.0003 | 0.0001 | 0.0004 | 17 | 0.0040 |
| 36 | 0.0000 | 0.0058 | 0.0003 | 0.0001 | 0.0004 | 18 | 0.0032 |
| 37 | 0.0000 | 0.0060 | 0.0004 | 0.0001 | 0.0004 | 19 | 0.0024 |
| 38 | 0.0000 | 0.0064 | 0.0004 | 0.0001 | 0.0004 | 20 \& Above | 0.0000 |
| 39 | 0.0000 | 0.0068 | 0.0004 | 0.0001 | 0.0004 |  |  |
| 40 | 0.0100 | 0.0072 | 0.0004 | 0.0001 | 0.0005 |  |  |
| 41 | 0.0100 | 0.0076 | 0.0004 | 0.0001 | 0.0006 |  |  |
| 42 | 0.0100 | 0.0080 | 0.0005 | 0.0001 | 0.0006 |  |  |
| 43 | 0.0100 | 0.0088 | 0.0005 | 0.0001 | 0.0007 |  |  |
| 44 | 0.0100 | 0.0096 | 0.0005 | 0.0001 | 0.0008 |  |  |
| 45 | 0.0100 | 0.0104 | 0.0006 | 0.0001 | 0.0008 |  |  |
| 46 | 0.0100 | 0.0112 | 0.0006 | 0.0001 | 0.0009 |  |  |
| 47 | 0.0100 | 0.0120 | 0.0007 | 0.0001 | 0.0010 |  |  |
| 48 | 0.0100 | 0.0136 | 0.0007 | 0.0001 | 0.0010 |  |  |
| 49 | 0.0100 | 0.0152 | 0.0008 | 0.0001 | 0.0011 |  |  |
| 50 | 0.0100 | 0.0168 | 0.0014 | 0.0001 | 0.0011 |  |  |
| 51 | 0.0200 | 0.0184 | 0.0019 | 0.0001 | 0.0012 |  |  |
| 52 | 0.0250 | 0.0200 | 0.0025 | 0.0001 | 0.0013 |  |  |
| 53 | 0.0300 | 0.0300 | 0.0030 | 0.0001 | 0.0014 |  |  |
| 54 | 0.1200 | 0.0500 | 0.0036 | 0.0001 | 0.0015 |  |  |
| 55 | 0.2400 | 0.1500 | 0.0036 | 0.0001 | 0.0016 |  |  |
| 56 | 0.1800 | 0.1500 | 0.0036 | 0.0001 | 0.0017 |  |  |
| 57 | 0.1800 | 0.1500 | 0.0036 | 0.0001 | 0.0019 |  |  |
| 58 | 0.2000 | 0.1500 | 0.0036 | 0.0001 | 0.0020 |  |  |
| 59 | 0.3000 | 0.1500 | 0.0036 | 0.0001 | 0.0021 |  |  |
| 60 | 1.0000 | 0.0000 | 0.0038 | 0.0000 | 0.0000 |  |  |

[^7]
## Los Angeles County Employees Retirement Association

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

| Age | Service <br> Retirement | Service <br> Disability | Ordinary Disability | Service Death | Ordinary Death | Years of Service | Other Terminations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 0 | 0.0400 |
| 19 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 1 | 0.0350 |
| 20 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 2 | 0.0300 |
| 21 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 3 | 0.0250 |
| 22 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 4 | 0.0150 |
| 23 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 5 | 0.0133 |
| 24 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 6 | 0.0117 |
| 25 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 7 | 0.0100 |
| 26 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 8 | 0.0092 |
| 27 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 9 | 0.0084 |
| 28 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 10 | 0.0076 |
| 29 | 0.0000 | 0.0050 | 0.0006 | 0.0001 | 0.0002 | 11 | 0.0068 |
| 30 | 0.0000 | 0.0060 | 0.0006 | 0.0001 | 0.0003 | 12 | 0.0060 |
| 31 | 0.0000 | 0.0070 | 0.0006 | 0.0001 | 0.0003 | 13 | 0.0056 |
| 32 | 0.0000 | 0.0080 | 0.0006 | 0.0001 | 0.0003 | 14 | 0.0052 |
| 33 | 0.0000 | 0.0090 | 0.0006 | 0.0001 | 0.0004 | 15 | 0.0048 |
| 34 | 0.0000 | 0.0100 | 0.0006 | 0.0001 | 0.0004 | 16 | 0.0044 |
| 35 | 0.0000 | 0.0110 | 0.0008 | 0.0001 | 0.0005 | 17 | 0.0040 |
| 36 | 0.0000 | 0.0120 | 0.0008 | 0.0001 | 0.0005 | 18 | 0.0032 |
| 37 | 0.0000 | 0.0125 | 0.0008 | 0.0001 | 0.0006 | 19 | 0.0024 |
| 38 | 0.0000 | 0.0130 | 0.0008 | 0.0001 | 0.0006 | 20 \& Above | 0.0000 |
| 39 | 0.0000 | 0.0135 | 0.0008 | 0.0001 | 0.0006 |  |  |
| 40 | 0.0500 | 0.0140 | 0.0010 | 0.0001 | 0.0007 |  |  |
| 41 | 0.0500 | 0.0145 | 0.0010 | 0.0001 | 0.0008 |  |  |
| 42 | 0.0500 | 0.0150 | 0.0010 | 0.0001 | 0.0009 |  |  |
| 43 | 0.0500 | 0.0155 | 0.0010 | 0.0001 | 0.0009 |  |  |
| 44 | 0.0500 | 0.0160 | 0.0012 | 0.0001 | 0.0010 |  |  |
| 45 | 0.0500 | 0.0165 | 0.0012 | 0.0001 | 0.0011 |  |  |
| 46 | 0.0500 | 0.0170 | 0.0014 | 0.0001 | 0.0012 |  |  |
| 47 | 0.0500 | 0.0175 | 0.0014 | 0.0001 | 0.0013 |  |  |
| 48 | 0.0500 | 0.0180 | 0.0016 | 0.0001 | 0.0014 |  |  |
| 49 | 0.0500 | 0.0185 | 0.0020 | 0.0001 | 0.0016 |  |  |
| 50 | 0.0500 | 0.0190 | 0.0022 | 0.0001 | 0.0017 |  |  |
| 51 | 0.0300 | 0.0300 | 0.0026 | 0.0001 | 0.0018 |  |  |
| 52 | 0.0300 | 0.0350 | 0.0028 | 0.0001 | 0.0020 |  |  |
| 53 | 0.0500 | 0.0400 | 0.0034 | 0.0001 | 0.0021 |  |  |
| 54 | 0.1200 | 0.0450 | 0.0040 | 0.0001 | 0.0023 |  |  |
| 55 | 0.2200 | 0.0700 | 0.0048 | 0.0001 | 0.0025 |  |  |
| 56 | 0.1800 | 0.1200 | 0.0054 | 0.0001 | 0.0028 |  |  |
| 57 | 0.2400 | 0.1200 | 0.0060 | 0.0001 | 0.0030 |  |  |
| 58 | 0.3200 | 0.1200 | 0.0066 | 0.0001 | 0.0033 |  |  |
| 59 | 0.4000 | 0.1200 | 0.0072 | 0.0001 | 0.0036 |  |  |
| 60 | 1.0000 | 0.0000 | 0.0078 | 0.0000 | 0.0000 |  |  |

## Los Angeles County Employees Retirement Association

## Appendix B: Summary of Plan Provisions

All actuarial calculations are based on our understanding of the statutes governing the LACERA as contained in the County Employees Retirement Plan (CERL) of 1937, with provisions adopted by the LACERA Board, effective through July 1, 2002. 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. In addition to those benefits in effect through July 1, 2003, we have also reflected the new domestic partner provisions in this valuation.

## MEMBERSHIP

Permanent employees of Los Angeles County (County) and participating districts who work $3 / 4$ time or more are eligible for membership in LACERA.

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.

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.

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

Plan A: General and safety members - prior to September 1977.
Plan B: $\quad$ General members - September 1977 through September 1978. Safety members - September 1977 to present.

Plan C: $\quad$ General members - October 1978 through May 1979.

## Government Code Sections or Board of Investments Bylaws

(31551, 31552, Bylaws)
(31493, 31493.5, 31493.6, Bylaws)
(31553, 31562)
(31494.1,
31494.3)

## RETIREMENT PLANS (Continued)

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

## MEMBER CONTRIBUTIONS

Plans A-D: Contributions are based on the entry age and class of each member and are required of all members in Plans A, $B, C$, and $D$. Current member rates are shown in Appendix D.
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.

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.

## EMPLOYER CONTRIBUTIONS

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

## SERVICE RETIREMENT ALLOWANCE

## Eligibility:

## Plans A- D: General members:

Age 50 with 10 years of County service;
Any age with 30 years of service; or Age 70 regardless of service.

## Safety members:

(31672)

Age 50 with 10 years of County service;
(31662.4,

Any age with 20 years of service; or 31663.25)

Age 60 regardless of service (Mandatory retirement age for members hired before April 1, 1997). No mandatory retirement for members hired on or after April 1, 1997.

Plan E:
Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.

## Final Compensation:

Plans A-D:
Monthly average of a member's compensation during the last year of service.

Plan E: $\quad$ Monthly average of a member's compensation for the last three years of service.

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.

## Monthly Allowance:

## Safety members:

$1 / 50 \times$ Final Compensation x Safety age factor $x$ Years of service. (The Safety Plan A and Safety Plan B age factors are the same.)

Plans A-D: General members:
1/60 x Final Compensation x a Plan specific age factor x years of service.

## SERVICE RETIREMENT ALLOWANCE (Continued)

## Plan E:

General members: (a)+(b)-(c) where:
(a) $2 \% \times$ Final Compensation $\times$ (Years of Service, (up to 35 years), plus
(b) $1 \% \times$ Final Compensation $\times$ Years of Service in excess of 35 (up to 10)
(c) Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35) divided by 35.
The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 62.

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

## Social Security Integration:

Plans A-C: General Members:
For County service covered by Social Security prior

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

## Sample Plan Age Factors

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

## Maximum Allowance:

Plans A-D:
Allowance may not exceed 100\% of final compensation.
Plan E: $\quad$ 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.

## SERVICE RETIREMENT ALLOWANCE (Continued)

## Unmodified Retirement Allowance (Normal Form):

Plans A-D: Life Annuity payable to retired member with 65\% continuance to an eligible survivor (or eligible children).

Plan E: Life Annuity payable to retired member with 55\% continuance to an eligible survivor (or eligible children).
(31760.12, 31785.4)
(31491, 31492.1)

Eligible survivor includes certain domestic partners.

Unmodified Plus: Members with eligible survivors may elect a higher percent than the standard unmodified continuance, up to $100 \%$. The benefit is actuarially reduced from the unmodified amount. The elected percent of the member's reduced allowance is payable to the eligible survivor.

Option 1: $\quad$ 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.

Option 2: $100 \%$ of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.
$50 \%$ of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.

Option 4: Other \% of member's reduced allowance is payable to a surviving spouse or beneficiary(ies) having an insurable interest in the life of the member.

## SERVICE RETIREMENT ALLOWANCE (Continued)

A member may not revoke and name another beneficiary if the member elects

| Pension: | The Pension Advance Option is available to |
| :--- | :--- |
| Advance | members who are fully insured under Social |
| Option | 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. |

## All Allowances:

(31600)

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.

# SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE 

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: $\quad$ Not available under Plan E.

Monthly Allowance:
Normal Form Of Payment:

Greater of (1) $50 \%$ of final compensation, and (2) the service retirement allowance, if eligible to retire.
Life Annuity with $100 \%$ continuance to a surviving spouse (or eligible children).

## NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

 Eligibility:Plans A-D: $\quad$ Any age with 5 years of service, and permanently incapacitated for the performance of duty.

Plan E: $\quad$ Not available under Plan E.
Monthly Allowance:
General Members:
The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:
(31720, 31836)
-
(a) $90 \%$ of $1 / 60$ of Final Compensation $x$ years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds $1 / 3$ of final compensation.
(b) $90 \% 1 / 60$ of Final Compensation $x$ years of service projected to age 65, not to exceed $1 / 3$ of Final Compensation.

Safety Members: $\quad 1 / 60$ is replaced by $1 / 50$ and age 65 is replaced by age 55 in (a) and (b) above.

Normal Form Of Payment: Life Annuity with 65\% continuance to a surviving spouse (or eligible children).

## SERVICE-CONNECTED DEATH BENEFITS

Eligibility:
Plans A-D: $\quad$ Active members who die in service as a result of injury or disease arising out of and in the course of employment.

Plan E: $\quad$ Not available under Plan E.
An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to $50 \%$ of the member's Final Compensation.

## SERVICE-CONNECTED DEATH BENEFITS (Continued)

## Optional Combined Benefit:

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):

The member's normal contributions and 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:

$25 \%$ 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.

## 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 $12 \times$ 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: $\quad$ Active members who die while in service or while physically or mentally incapacitated for the performance of duty.

Plan E: $\quad$ Not available under Plan E.

## NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

## Death Benefit (Lump Sum):

The member's normal contributions and 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.

## 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).

## 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
(b) A monthly payment equal to $65 \%$ of the monthly retirement allowance to which the member have been entitled if the member retired or been retired for a non-service-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of surviving spouse.
(31781.1, 31781.12)
(31781.2,
31765.2)

## NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

## Fourth Optional Death Benefit:

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

## 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.

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.

## POST-RETIREMENT DEATH BENEFIT

| Plans A-D: | A one-time lump-sum benefit of $\$ 5,000$ is <br> payable to the estate or to the beneficiary <br> designated by the member upon the death <br> of any member while receiving a retirement <br> allowance. This is in addition to any other <br> death or survivor benefits. The amount <br> may be paid from surplus earnings of the <br> retirement system, if any, but is currently <br> paid by the County based on agreement <br> with LACERA. It is not included for <br> valuation purposes. |
| :--- | :--- |
| Plan E: | The only death benefits payable after <br> retirement are the continuance allowances <br> described above under Unmodified and |
| Optional Retirement Allowances. There is |  |
| no $\$ 5,000$ lump-sum payment under |  |
| Plan $E$. |  |

## DEFERRED VESTED BENEFITS

Eligibility:

Plans A-D:

Plan E:

Monthly Allowance:
Plans A-D:

Plan E:

5 years of county or reciprocal service. member contributions must be left on deposit.

Age 55 with 10 years of service.

Same as service retirement allowance; payable anytime after the member would have been eligible for service retirement.

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.
Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55 .
(31703, 31704, 31705)

## TRANSFERS BETWEEN PLAN D AND PLAN E

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

## RECIPROCITY:

Plans A-E:
Reciprocal benefits are may be granted to (31830, 31840.4, 31840.8) 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.

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

Deferred members are eligible for disability and death benefits from LACERA, if disabled while a member of CaIPERS 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 CaIPERS 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.

## 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 $1 / 2$ of $1 \%$.

| Plan A: | Members (and their beneficiaries) are limited to a maximum 3\% cost-of-living increase. |  |
| :---: | :---: | :---: |
| Plans B-D: | Members (and their beneficiaries) are limited to a maximum 2\% cost-of-living increase. | $\begin{aligned} & (31870, \\ & 31870.1) \end{aligned}$ |
|  | When the CPI exceeds 2 or 3\%, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation. It may be used in future years to provide cost-of-living increases when the CPI falls below 2 or $3 \%$, depending on the retirement plan. |  |
| Plan E: | Members (and their beneficiaries) are limited to a maximum $2 \%$ cost of living increase. The 2\% is pro-rated based on service earned after June 4, 2002. <br> "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 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 Investments.

## Los Angeles County Employees Retirement Association

## Appendix C: Valuation Data and Schedules



Data on LACERA membership as of June 30, 2005 was supplied to us by the system staff. On the following table, Exhibit C-1, we present a summary of LACERA membership at June 30, 2005 for active members. Similar information is shown in Exhibit C-2Ret for retired members and C-2Def for deferred vested members.

The number of total active members increased by $0.2 \%$ and the total salary increased by $2.0 \%$ since the last valuation. The total number of retired members and their beneficiaries increased by $3.0 \%$, while the average retirement benefit amount increased by $4.6 \%$.

Note that salary amounts shown are the prior year annual pensionable earnings for those members of plans with a oneyear final compensation period. For plans with a three-year final compensation period (Plan E only), the monthly rate of pay at June 2005 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.

## Los Angeles County Employees Retirement Association

Exhibit C-1: LACERA Membership - Active Members as of June 30, 2005

|  |  |  |  |  | Average | Average |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex | Vested | NonVested | Number | Annual Salary | Average | Age | Monthly |
| Salary | Credited |  |  |  |  |  |  |
| Service |  |  |  |  |  |  |  |

## General Members

| Plan A | M | 1,415 | 2 | 1,417 | $\$$ | $113,212,680$ | 58.2 | $\$$ | 6,658 |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | F | 2,399 | 4 | 2,403 |  | $151,690,260$ | 56.9 | 5,260 | 31.6 |
| Plan B | M | 133 | 1 | 134 |  | $10,859,208$ | 56.7 | 6,753 | 27.6 |
|  | F | 263 | - | 263 | $16,312,068$ | 55.1 | 5,169 | 27.1 |  |
| Plan C | M | 98 | - | 98 | $7,505,616$ | 55.9 | 6,382 | 26.6 |  |
|  | F | 199 | - | 199 | $11,803,992$ | 55.0 | 4,943 | 26.2 |  |
| Plan D | M | 9,392 | 4,254 | 13,646 | $783,486,972$ | 44.3 | 4,785 | 9.8 |  |
|  | F | 18,841 | 8,463 | 27,304 | $1,389,251,460$ | 43.2 | 4,240 | 9.8 |  |
| Plan E | M | 5,839 | 1,827 | 7,666 | $477,306,180$ | 49.6 | 5,189 | 17.3 |  |
|  | F | 13,533 | 8,504 | 22,037 | $1,085,098,296$ | 46.2 | 4,103 | 14.5 |  |
| Total |  | 52,112 | 23,055 | 75,167 | $\$ 4,046,526,732$ | 45.8 | $\$$ | 4,486 | 13.2 |

## Safety Members

| Plan A | M | 610 | - | 610 | $\$$ | $62,635,548$ | 54.5 | $\$$ | 8,557 | 32.4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | F | 62 | - | 62 |  | $6,043,560$ | 53.4 | 8,123 | 30.7 |  |
| Plan B | M | 7,859 | 1,450 | 9,309 |  | $742,834,608$ | 40.4 | 6,650 | 14.1 |  |
|  | F | 971 | 265 | 1,236 |  | $93,350,496$ | 38.2 | 6,294 | 11.5 |  |
|  | 9,502 | 1,715 | 11,217 | $\$$ | $904,864,212$ | 41.0 | $\$$ | 6,722 | 14.9 |  |
| Total |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Grand Total | 61,614 | 24,770 | 86,384 | $\$ 4,951,390,944$ | 45.2 | $\$$ | 4,777 | 13.4 |  |  |

## Los Angeles County Employees Retirement Association

Exhibit C-2Ret: LACERA Membership - Retired Members as of June 30, 2005

| Sex |  | Annual Allowance |  | Average |
| :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Average Age | Monthly Benefit |
|  |  |  |  | Benefit |

## General Members

| Plan A | M | 12,696 | $\$$ | $517,212,611$ | 72.7 | $\$$ |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
|  | F | 18,231 |  | $469,395,282$ | 74.4 | 3,395 |
| Plan B | M | 129 | $3,551,522$ | 68.8 | 2,294 |  |
|  | F | 340 | $7,349,498$ | 69.3 | 1,801 |  |
| Plan C | M | 107 | $2,276,882$ | 68.6 | 1,773 |  |
|  | F | 227 | $3,833,272$ | 69.2 | 1,407 |  |
| Plan D | M | 1,456 | $31,198,248$ | 64.2 | 1,786 |  |
|  | F | 2,460 | $41,905,902$ | 64.4 | 1,420 |  |
| Plan E | M | 1,686 | $26,706,530$ | 68.7 | 1,320 |  |
|  | F | 2,919 | $34,177,301$ | 68.1 | 976 |  |
| Total |  | 40,251 | $\$ 1,137,607,048$ | 72.1 | $\$$ | 2,355 |

## Safety Members

| Plan A | M | 6,370 | $\$$ | $399,472,659$ | 66.8 | $\$$ | 5,226 |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | F | 1,790 |  | $68,935,751$ | 69.7 | 3,209 |  |
| Plan B | M | 1,023 |  | $35,868,362$ | 48.0 | 2,922 |  |
|  | F | 335 |  | $10,124,475$ | 45.1 | 2,519 |  |
|  | Total |  | 9,518 | $\$$ | $514,401,247$ | 64.6 | $\$$ |


| Grand Total | 49,769 | $\$$ | $1,652,008,295$ | 70.7 | $\$$ | 2,766 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Los Angeles County Employees Retirement Association

Exhibit C-2Def: LACERA Membership - Deferred Vested Members as of June 30, 2005 Subtotaled by Plan and Retirement Type

|  | Sex | Number | Average Age |
| :---: | :---: | :---: | :---: |
| General Members |  |  |  |
| Plan A | M | 172 | 59.2 |
|  | F | 294 | 56.5 |
| Plan B | M | 19 | 56.7 |
|  | F | 41 | 53.5 |
| Plan C | M | 9 | 56.2 |
|  | F | 22 | 53.0 |
| Plan D | M | 693 | 46.2 |
|  | F | 1,335 | 44.0 |
| Plan E | M | 1,251 | 51.6 |
|  | F | 2,755 | 50.5 |
| Total |  | 6,591 | 49.5 |
| Safety Members |  |  |  |
| Plan A | M | 18 | 56.2 |
|  | F | - | - |
| Plan B | M | 281 | 38.6 |
|  | F | 90 | 38.5 |
| Total |  | 389 | 39.4 |
| Grand Total |  | 6,980 | 48.9 |

## Los Angeles County Employees Retirement Association

Exhibit C-2a: LACERA Membership - Retired Members as of June 30, 2005 Subtotaled by Plan and Retirement Type

| Plan | Retirement Type | Number | Annual Benefits in Thousands |  | Average <br> Monthly <br> Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General Plans: |  |  |  |  |  |  |
| Plan A |  |  |  |  |  |  |
|  | Healthy | 22,882 | \$ | 819,635 | \$ | 2,985 |
|  | Disabled | 2,905 |  | 70,549 |  | 2,024 |
|  | Beneficiaries | 5,140 |  | 96,423 |  | 1,563 |
|  | Total | 30,927 | \$ | 986,607 | \$ | 2,658 |
| Plan B |  |  |  |  |  |  |
|  | Healthy | 375 | \$ | 9,334 | \$ | 2,074 |
|  | Disabled | 68 |  | 1,239 |  | 1,518 |
|  | Beneficiaries | 26 |  | 328 |  | 1,051 |
|  | Total | 469 | \$ | 10,901 | \$ | 1,937 |
| Plan C |  |  |  |  |  |  |
|  | Healthy | 247 | \$ | 4,749 | \$ | 1,602 |
|  | Disabled | 59 |  | 1,096 |  | 1,548 |
|  | Beneficiaries | 28 |  | 266 |  | 792 |
|  | Total | 334 | \$ | 6,111 | \$ | 1,525 |
| Plan D |  |  |  |  |  |  |
|  | Healthy | 2,609 | \$ | 48,332 | \$ | 1,544 |
|  | Disabled | 968 |  | 21,215 |  | 1,826 |
|  | Beneficiaries | 339 |  | 3,557 |  | 874 |
|  | Total | 3,916 | \$ | 73,104 | \$ | 1,556 |
| Plan E |  |  |  |  |  |  |
|  | Healthy | 4,354 | \$ | 59,177 | \$ | 1,133 |
|  | Disabled | 0 |  | 0 |  | N/A |
|  | Beneficiaries | 251 |  | 1,707 |  | 567 |
|  | Total | 4,605 | \$ | 60,884 | \$ | 1,102 |
| Safety Plans: |  |  |  |  |  |  |
| Plan A |  |  |  |  |  |  |
|  | Healthy | 2,995 | \$ | 196,000 | \$ | 5,454 |
|  | Disabled | 3,886 |  | 228,074 |  | 4,891 |
|  | Beneficiaries | 1,279 |  | 44,334 |  | 2,889 |
|  | Total | 8,160 | \$ | 468,408 | \$ | 4,784 |
| Plan B |  |  |  |  |  |  |
|  | Healthy | 175 | \$ | 6,507 | \$ | 3,099 |
|  | Disabled | 1,109 |  | 37,691 |  | 2,832 |
|  | Beneficiaries | 74 |  | 1,796 |  | 2,023 |
|  | Total | 1,358 | \$ | 45,994 | \$ | 2,822 |
| Grand Totals |  | 49,769 |  | 1,652,009 |  | 2,766 |

## Los Angeles County Employees Retirement Association

Exhibit C-2b: LACERA Membership - Retired Members as of June 30, 2005 Subtotaled by Retirement Type and Plan

| Type | Plan | Number | Annual Benefits in Thousands |  | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Healthy Retirees |  |  |  |  |  |  |
|  | General A | 22,882 | \$ | 819,635 | \$ | 2,985 |
|  | General B | 375 |  | 9,334 |  | 2,074 |
|  | General C | 247 |  | 4,749 |  | 1,602 |
|  | General D | 2,609 |  | 48,332 |  | 1,544 |
|  | General E | 4,354 |  | 59,177 |  | 1,133 |
|  | Safety A | 2,995 |  | 196,000 |  | 5,454 |
|  | Safety B | 175 |  | 6,507 |  | 3,099 |
|  | Total | 33,637 | \$ | 1,143,734 | \$ | 2,834 |
| Disabled Retirees |  |  |  |  |  |  |
|  | General A | 2,905 | \$ | 70,549 | \$ | 2,024 |
|  | General B | 68 |  | 1,239 |  | 1,518 |
|  | General C | 59 |  | 1,096 |  | 1,548 |
|  | General D | 968 |  | 21,215 |  | 1,826 |
|  | Safety A | 3,886 |  | 228,074 |  | 4,891 |
|  | Safety B | 1,109 |  | 37,691 |  | 2,832 |
|  | Total | 8,995 | \$ | 359,864 | \$ | 3,334 |
| Beneficiaries |  |  |  |  |  |  |
|  | General A | 5,140 | \$ | 96,423 | \$ | 1,563 |
|  | General B | 26 |  | 328 |  | 1,051 |
|  | General C | 28 |  | 266 |  | 792 |
|  | General D | 339 |  | 3,557 |  | 874 |
|  | General E | 251 |  | 1,707 |  | 567 |
|  | Safety A | 1,279 |  | 44,334 |  | 2,889 |
|  | Safety B | 74 |  | 1,796 |  | 2,023 |
|  | Total | 7,137 | \$ | 148,411 | \$ | 1,733 |
| Grand Totals |  | 49,769 | \$ | 1,652,009 | \$ | 2,766 |

## Los Angeles County Employees Retirement Association

Exhibit C-3: Age Distribution of Active Members as of June 30, 2005

| Age Groups |
| :---: |
| $-\frac{30-39}{0-29}-\frac{40-49}{50-59} \xrightarrow{60-69} \xrightarrow{70+} \quad$ Total |

## General Plans:

| Plan A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | - | - | 12 | 960 | 409 | 36 | 1,417 |
| Female | - | - | 61 | 1,788 | 507 | 47 | 2,403 |
| Plan B |  |  |  |  |  |  |  |
| Male | - | - | 4 | 95 | 34 | 1 | 134 |
| Female | - | - | 51 | 159 | 47 | 6 | 263 |
| Plan C |  |  |  |  |  |  |  |
| Male | - | - | 8 | 73 | 13 | 4 | 98 |
| Female | - | - | 39 | 122 | 32 | 6 | 199 |
| Plan D |  |  |  |  |  |  |  |
| Male | 1,161 | 3,811 | 4,255 | 3,213 | 1,075 | 131 | 13,646 |
| Female | 2,692 | 8,159 | 8,599 | 5,987 | 1,702 | 165 | 27,304 |
| Plan E |  |  |  |  |  |  |  |
| Male | 246 | 1,053 | 2,300 | 2,795 | 1,151 | 121 | 7,666 |
| Female | 1,472 | 4,751 | 6,875 | 6,699 | 2,030 | 210 | 22,037 |
| Safety Plans: |  |  |  |  |  |  |  |
| Plan A |  |  |  |  |  |  |  |
| Male | - | - | 8 | 592 | 10 | - | 610 |
| Female | - | - | 3 | 58 | 1 | - | 62 |
| Plan B |  |  |  |  |  |  |  |
| Male | 721 | 3,522 | 3,957 | 1,092 | 17 | - | 9,309 |
| Female | 159 | 558 | 422 | 97 | - | - | 1,236 |
| Grand Totals: | 6,451 | 21,854 | 26,594 | 23,730 | 7,028 | 727 | 86,384 |

## Los Angeles County Employees Retirement Association

Exhibit C-4: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 All Plans


Average Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over | Comp. |
| Under 25 | 30,895 | 33,591 | 32,486 | 33,507 | 36,100 | 39,781 | - | - | - | - | - | - | 32,408 |
| 25-29 | 37,666 | 39,508 | 42,416 | 42,702 | 43,218 | 45,686 | 40,817 | - | - | - | - | - | 42,037 |
| 30-34 | 40,902 | 43,548 | 46,566 | 47,229 | 48,205 | 52,685 | 54,729 | 55,480 | - | - | - | - | 49,779 |
| 35-39 | 42,720 | 48,245 | 49,559 | 48,618 | 50,072 | 56,116 | 60,868 | 60,496 | 61,594 | 88,904 | - | - | 56,045 |
| 40-44 | 42,536 | 45,001 | 46,035 | 47,298 | 48,386 | 52,947 | 61,401 | 66,641 | 67,259 | 65,227 | 90,276 | 93,492 | 59,201 |
| 45-49 | 46,388 | 46,011 | 49,568 | 47,120 | 46,055 | 52,262 | 58,793 | 66,648 | 72,987 | 62,226 | 67,641 | 93,112 | 60,830 |
| 50-54 | 50,999 | 47,624 | 50,118 | 49,273 | 49,371 | 51,484 | 57,425 | 62,375 | 71,322 | 69,183 | 62,749 | 72,963 | 61,503 |
| 55-59 | 49,756 | 47,586 | 51,417 | 50,843 | 48,351 | 52,977 | 55,527 | 59,972 | 68,107 | 68,370 | 68,875 | 65,569 | 62,055 |
| 60-64 | 56,057 | 55,158 | 54,521 | 59,709 | 50,782 | 53,496 | 53,542 | 60,246 | 66,000 | 61,244 | 62,818 | 68,171 | 60,196 |
| 65 \& Over | 85,112 | 82,128 | 56,713 | 53,769 | 61,518 | 55,323 | 51,945 | 54,970 | 65,327 | 60,271 | 61,962 | 62,773 | 58,241 |
| Avg. Annual Compensation | 41,106 | 43,658 | 46,292 | 46,815 | 47,761 | 52,907 | 58,663 | 63,583 | 70,012 | 66,169 | 65,622 | 67,504 | 57,318 |

[^8]
## Los Angeles County Employees Retirement Association

Exhibit C-4a: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 General Plan A


Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 25-29 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30-34 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35-39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 40-44 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 45-49 | - | - | - | - | - | - | - | 58,128 | 52,434 | 57,150 | 61,401 | - | 58,769 |
| 50-54 | - | 65,856 | - | 30,336 | - | 68,898 | 57,718 | 61,819 | 58,973 | 67,112 | 60,898 | 67,681 | 62,429 |
| 55-59 | - | - | 124,524 | - | - | 70,765 | 74,721 | 81,263 | 73,952 | 74,897 | 70,891 | 68,065 | 71,038 |
| 60-64 | - | - | - | - | 50,856 | 61,414 | 77,812 | 87,635 | 76,346 | 77,026 | 68,497 | 75,104 | 72,678 |
| 65 \& Over | - | - | - | - | 112,980 | 55,768 | 68,222 | 95,441 | 91,544 | 94,850 | 73,718 | 72,123 | 76,737 |
| Avg. Annual Compensation | - | 65,856 | 124,524 | 30,336 | 92,272 | 65,731 | 70,004 | 81,595 | 72,386 | 72,657 | 67,439 | 70,454 | 69,346 |

## Los Angeles County Employees Retirement Association

Exhibit C-4b: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 General Plan B

| Count | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Total Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 |
| 25-29 | 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 |
| 35-39 | 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 |
| 45-49 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 51 | 0 | 0 | 55 |
| 50-54 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 3 | 109 | 4 | 0 | 122 |
| 55-59 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 119 | 8 | 0 | 132 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 53 | 3 | 0 | 58 |
| 65 \& Over | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 1 | 0 | 30 |
| Total Count | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 7 | 7 | 361 | 16 | 0 | 397 |

Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 25-29 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30-34 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 35-39 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 40-44 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 45-49 | - | - | - | - | - | 23,184 | 78,168 | 40,764 | 52,740 | 55,046 | - | - | 54,585 |
| 50-54 | - | - | - | - | - | - | 90,114 | 81,435 | 60,624 | 69,115 | 100,947 | - | 70,698 |
| 55-59 | - | - | - | - | 131,640 | 87,792 | - | 43,128 | 150,498 | 70,692 | 89,859 | - | 73,445 |
| 60-64 | - | - | - | - | - | - | - | 58,668 | 154,104 | 68,530 | 61,508 | - | 69,472 |
| 65 \& Over | - | - | - | - | - | - | - | - | - | 61,329 | 41,280 | - | 60,660 |
| Avg. Annual Compensation | - | - | - | - | 131,640 | 55,488 | 86,132 | 66,900 | 98,530 | 66,936 | 84,279 | - | 68,442 |

## Los Angeles County Employees Retirement Association

Exhibit C-4c: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 General Plan C

| Count | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Total Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 |
| 25-29 | 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 |
| 35-39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40-44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 45-49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 42 | 1 | 0 | 46 |
| 50-54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 92 | 2 | 0 | 97 |
| 55-59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 84 | 2 | 1 | 98 |
| 60-64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 2 | 0 | 34 |
| 65 \& Over | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 17 | 1 | 0 | 21 |
| Total Count | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 13 | 268 | 8 | 1 | 297 |

Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Average } \\ \text { Comp. } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | - | - | - | - | - | - | - | - | - | 59,364 | - | - | 59,364 |
| 45-49 | - | - | - | - | - | - | - | 41,640 | 40,188 | 51,604 | 47,520 | - | 50,802 |
| 50-54 | - | - | - | - | - | - | - | - | 93,272 | 72,820 | 95,502 | - | 73,920 |
| 55-59 | - | - | - | - | - | - | - | 77,847 | 83,961 | 61,621 | 120,240 | 53,088 | 64,989 |
| 60-64 | - | - | - | - | - | - | - | - | - | 59,862 | 159,774 | - | 65,739 |
| 65 \& Over | - | - | - | - | - | - | - | 66,552 | 33,132 | 51,763 | 92,856 | - | 54,241 |
| Avg. Annual Compensation | - | - | - | - | - | - | - | 69,447 | 75,465 | 63,052 | 111,426 | 53,088 | 65,016 |

[^9]
## Los Angeles County Employees Retirement Association

Exhibit C-4d: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 General Plan D


Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 29,080 | 31,415 | 30,486 | 30,137 | 34,368 | 37,055 | - | - | - | - | - | - | 30,251 |
| 25-29 | 36,869 | 40,054 | 41,396 | 39,822 | 40,025 | 41,030 | 37,380 | - | - | - | - | - | 39,643 |
| 30-34 | 39,897 | 43,486 | 45,754 | 45,102 | 46,188 | 49,406 | 49,338 | 50,632 | - | - | - | - | 46,956 |
| 35-39 | 43,050 | 49,827 | 48,119 | 47,356 | 48,332 | 53,933 | 56,355 | 51,262 | 52,873 | - | - | - | 52,178 |
| 40-44 | 41,569 | 45,589 | 46,272 | 47,261 | 48,782 | 51,725 | 58,831 | 60,302 | 55,685 | 61,304 | - | - | 54,298 |
| 45-49 | 44,962 | 47,210 | 47,571 | 48,837 | 47,241 | 53,909 | 59,013 | 63,414 | 63,236 | 57,804 | 60,535 | - | 56,652 |
| 50-54 | 45,676 | 47,913 | 47,055 | 48,331 | 50,856 | 53,390 | 58,549 | 62,147 | 70,072 | 62,716 | 62,696 | 68,329 | 58,218 |
| 55-59 | 43,664 | 47,407 | 49,062 | 51,413 | 48,847 | 53,982 | 56,903 | 61,403 | 72,057 | 66,390 | 69,286 | 70,904 | 58,649 |
| 60-64 | 58,386 | 52,592 | 54,799 | 59,401 | 52,139 | 54,088 | 54,015 | 61,329 | 65,885 | 61,942 | 76,573 | 77,447 | 58,575 |
| 65 \& Over | 71,991 | 91,757 | 58,177 | 51,560 | 61,734 | 58,030 | 51,865 | 56,478 | 63,818 | 66,142 | 33,816 | 76,764 | 57,740 |
| Avg. Annual Compensation | 39,776 | 44,332 | 45,215 | 45,798 | 46,977 | 51,820 | 57,076 | 60,459 | 66,002 | 62,596 | 66,493 | 73,109 | 53,058 |

## Los Angeles County Employees Retirement Association

Exhibit C-4e: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 General Plan E


Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 28,244 | 34,979 | 30,353 | 30,928 | 33,403 | 32,802 | - | - | - | - | - | - | 30,744 |
| 25-29 | 35,588 | 37,098 | 40,291 | 38,218 | 38,206 | 39,437 | 41,676 | - | - | - | - | - | 38,020 |
| 30-34 | 40,222 | 40,006 | 45,392 | 43,217 | 40,647 | 45,211 | 45,267 | 46,288 | - | - | - | - | 43,582 |
| 35-39 | 38,830 | 42,245 | 50,633 | 43,921 | 41,107 | 49,595 | 52,895 | 48,441 | 48,639 | - | - | - | 48,794 |
| 40-44 | 43,276 | 39,810 | 42,958 | 42,110 | 42,614 | 48,147 | 56,802 | 58,596 | 53,256 | 50,199 | - | - | 53,402 |
| 45-49 | 49,256 | 42,377 | 54,588 | 39,946 | 41,746 | 46,136 | 54,337 | 61,871 | 60,128 | 52,200 | 53,078 | - | 54,644 |
| 50-54 | 60,178 | 46,198 | 57,437 | 50,292 | 44,555 | 46,014 | 54,472 | 58,979 | 64,450 | 56,599 | 54,226 | 57,661 | 56,118 |
| 55-59 | 58,992 | 48,324 | 53,925 | 48,581 | 43,688 | 49,093 | 52,136 | 56,604 | 61,793 | 61,634 | 57,664 | 57,101 | 56,762 |
| 60-64 | 52,257 | 61,922 | 53,686 | 60,290 | 46,967 | 50,270 | 51,449 | 56,479 | 64,790 | 56,412 | 55,121 | 62,141 | 56,895 |
| 65 \& Over | 98,233 | 48,426 | 53,542 | 56,656 | 57,080 | 50,619 | 51,523 | 51,229 | 64,707 | 52,474 | 51,212 | 53,297 | 53,974 |
| Avg. Annual Compensation | 41,732 | 40,177 | 46,864 | 43,301 | 41,735 | 46,892 | 53,666 | 57,618 | 61,144 | 56,581 | 55,605 | 58,772 | 52,601 |

## Los Angeles County Employees Retirement Association

Exhibit C-4f: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 Safety Plan A


## Los Angeles County Employees Retirement Association

Exhibit C-4g: Age \& Service Distribution of Active Members by Count and Average Compensation as of June 30, 2005 Safety Plan B


Compensation

| Age | Years of Service |  |  |  |  |  |  |  |  |  |  |  | Average Comp. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35\&Over |  |
| Under 25 | 48,348 | 45,045 | 42,992 | 51,972 | 55,232 | 58,176 | - | - | - | - | - | - | 48,401 |
| 25-29 | 51,799 | 48,372 | 53,519 | 58,177 | 62,062 | 64,432 | - | - | - | - | - | - | 59,592 |
| 30-34 | 53,985 | 54,720 | 57,057 | 60,313 | 65,693 | 70,158 | 76,726 | 78,964 | - | - | - | - | 67,955 |
| 35-39 | 57,674 | 57,819 | 59,329 | 65,404 | 69,641 | 73,148 | 80,210 | 82,837 | 83,575 | 88,904 | - | - | 76,745 |
| 40-44 | 56,908 | 60,140 | 58,812 | 65,304 | 68,303 | 74,094 | 81,583 | 85,739 | 90,519 | 85,906 | 90,276 | 93,492 | 83,263 |
| 45-49 | 58,668 | 55,430 | 70,236 | 68,157 | 68,961 | 74,882 | 83,291 | 87,751 | 91,054 | 97,247 | 97,467 | 93,112 | 89,304 |
| 50-54 | 65,244 | 59,700 | 76,548 | 73,747 | 71,666 | 77,717 | 83,839 | 86,185 | 90,053 | 97,498 | 93,634 | 90,349 | 91,110 |
| 55-59 | 81,189 | 44,244 | - | 94,680 | 78,001 | 87,133 | 74,565 | 85,240 | 87,179 | 92,282 | 94,229 | 90,394 | 88,317 |
| 60-64 | - | - | - | - | 159,552 | 109,618 | 98,172 | 151,278 | - | 79,896 | - | - | 116,949 |
| 65 \& Over | - | - | - | 67,224 | - | 100,744 | - | - | 95,352 | 71,232 | - | - | 89,340 |
| Avg. Annual Compensation | 53,286 | 53,650 | 55,186 | 60,967 | 66,568 | 71,326 | 80,567 | 85,523 | 90,471 | 96,043 | 93,933 | 92,363 | 79,297 |

## Los Angeles County Employees Retirement Association

Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 All Plans

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average <br> Monthly <br> Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1960 |  | 1960-64 | 1965-69 | 1970-74 | 1975-79 | 1980-84 |  | 1985-89 |  | 1990-94 |  | 1995-99 |  | 2000-05 |  |  |  |
| Under 35 |  | 0 | 0 | 0 | 0 | 0 |  | 2 |  | 0 |  | 11 |  | 20 | 85 | 118 | \$ | 1,490 |
| 35-39 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |  | 1 |  | 17 |  | 74 | 117 | 209 |  | 2,579 |
| 40-44 |  | 0 | 0 | 0 | 0 | 0 |  | 0 |  | 5 |  | 77 |  | 147 | 165 | 394 |  | 2,491 |
| 45-49 |  | 0 | 0 | 0 | 0 | 0 |  | 13 |  | 49 |  | 116 |  | 153 | 192 | 523 |  | 2,437 |
| 50-54 |  | 0 | 0 | 0 | 0 | 14 |  | 68 |  | 98 |  | 135 |  | 191 | 622 | 1,128 |  | 2,213 |
| 55-59 |  | 0 | 0 | 0 | 11 | 130 |  | 219 |  | 179 |  | 254 |  | 787 | 3,059 | 4,639 |  | 3,339 |
| 60-64 |  | 0 | 1 | 3 | 37 | 198 |  | 260 |  | 282 |  | 818 |  | 2,168 | 4,121 | 7,888 |  | 3,646 |
| 65-69 |  | 0 | 1 | 23 | 71 | 203 |  | 272 |  | 678 |  | 1,838 |  | 2,400 | 2,857 | 8,343 |  | 3,096 |
| 70-74 |  | 3 | 12 | 52 | 114 | 261 |  | 769 |  | 1,389 |  | 2,399 |  | 1,839 | 1,292 | 8,130 |  | 2,759 |
| 75-79 |  | 1 | 35 | 75 | 137 | 688 |  | 1,431 |  | 1,595 |  | 1,811 |  | 901 | 698 | 7,372 |  | 2,446 |
| 80-84 |  | 8 | 32 | 61 | 296 | 1,157 |  | 1,503 |  | 1,265 |  | 740 |  | 448 | 477 | 5,987 |  | 2,172 |
| 85-89 |  | 7 | 22 | 79 | 358 | 932 |  | 845 |  | 298 |  | 207 |  | 213 | 270 | 3,231 |  | 1,836 |
| 90-94 |  | 9 | 24 | 112 | 299 | 510 |  | 147 |  | 21 |  | 63 |  | 76 | 76 | 1,337 |  | 1,593 |
| 95-99 |  | 11 | 22 | 84 | 172 | 38 |  | 2 |  | 1 |  | 14 |  | 24 | 20 | 388 |  | 1,316 |
| 100 \& Over |  | 11 | 16 | 28 | 19 | 1 |  | 1 |  | 0 |  | 1 |  | 3 | 2 | 82 |  | 1,003 |
| Total Count |  | 50 | 165 | 517 | 1,514 | 4,132 |  | 5,532 |  | 5,861 |  | 8,501 |  | 9,444 | 14,053 | 49,769 |  |  |
| Avg Monthly Benefit | \$ | 975 | \$ 1,143 | \$ 1,346 | \$ 1,560 | \$ 1,973 | \$ | 2,110 | \$ | 2,504 | \$ | 2,989 | \$ | 2,857 | \$ 3,379 |  | \$ | 2,766 |

## Los Angeles County Employees Retirement Association

Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 General Plan A

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average <br> Monthly <br> Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1960 | 1960-64 | 1965-69 | 1970-74 | 1975-79 | 1980-84 |  | 985-89 | 1990-94 |  | 1995-99 |  | 2000-05 |  |  |  |  |
| Under 35 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 |  | 5 |  | 7 |  | 15 | 27 | \$ | 1,209 |
| 35-39 | 0 | 0 | 0 | 0 | 0 | 0 |  | 1 |  | 1 |  | 2 |  | 5 | 9 |  | 1,412 |
| 40-44 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 |  | 0 |  | 4 |  | 2 | 6 |  | 1,392 |
| 45-49 | 0 | 0 | 0 | 0 | 0 | 1 |  | 6 |  | 2 |  | 10 |  | 15 | 34 |  | 1,803 |
| 50-54 | 0 | 0 | 0 | 0 | 6 | 25 |  | 19 |  | 21 |  | 33 |  | 210 | 314 |  | 1,937 |
| 55-59 | 0 | 0 | 0 | 4 | 70 | 79 |  | 52 |  | 81 |  | 408 |  | 1,158 | 1,852 |  | 2,990 |
| 60-64 | 0 | 1 | 1 | 18 | 97 | 102 |  | 109 |  | 525 |  | 1,008 |  | 2,200 | 4,061 |  | 3,701 |
| 65-69 | 0 | 0 | 11 | 45 | 117 | 135 |  | 499 |  | 1,189 |  | 1,419 |  | 1,298 | 4,713 |  | 3,267 |
| 70-74 | 1 | 4 | 20 | 69 | 170 | 569 |  | 970 |  | 1,829 |  | 1,075 |  | 477 | 5,184 |  | 2,856 |
| 75-79 | 1 | 13 | 37 | 84 | 509 | 1,049 |  | 1,303 |  | 1,418 |  | 480 |  | 370 | 5,264 |  | 2,428 |
| 80-84 | 4 | 18 | 38 | 217 | 930 | 1,362 |  | 1,143 |  | 529 |  | 292 |  | 350 | 4,883 |  | 2,108 |
| 85-89 | 0 | 13 | 45 | 304 | 888 | 831 |  | 258 |  | 157 |  | 180 |  | 232 | 2,908 |  | 1,801 |
| 90-94 | 3 | 18 | 78 | 269 | 510 | 146 |  | 17 |  | 58 |  | 64 |  | 64 | 1,227 |  | 1,521 |
| 95-99 | 6 | 20 | 74 | 171 | 38 | 2 |  | 0 |  | 14 |  | 24 |  | 17 | 366 |  | 1,265 |
| 100 \& Over | 8 | 16 | 28 | 19 | 1 | 1 |  | 0 |  | 1 |  | 3 |  | 2 | 79 |  | 1,001 |
| Total Count | 23 | 103 | 332 | 1,200 | 3,336 | 4,302 |  | 4,377 |  | 5,830 |  | 5,009 |  | 6,415 | 30,927 |  |  |
| Avg Monthly | \$ 811 | \$ 945 | \$ 1,030 | \$ 1,277 | \$ 1,708 | \$ 1,821 | \$ | 2,289 | \$ | 2,997 | \$ | 2,925 | \$ | 3,827 |  | \$ | 2,658 |

## Los Angeles County Employees <br> Retirement Association

Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 General Plan B

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1960 |  | 60-64 | 1965-69 |  | 1970-74 |  | 1975-79 |  | 1980-84 |  | 1985-89 |  | 1990-94 | 1995-99 | 2000-05 |  |  |  |
| Under 35 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | \$ | - |
| 35-39 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | - |
| 40-44 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | - |
| 45-49 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 1 | 1 | 0 | 2 |  | 1,962 |
| 50-54 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 | 2 | 1 | 9 | 13 |  | 2,078 |
| 55-59 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3 |  | 4 | 4 | 11 | 29 | 51 |  | 1,531 |
| 60-64 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 2 |  | 3 | 6 | 18 | 51 | 80 |  | 2,312 |
| 65-69 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 2 |  | 3 | 7 | 21 | 60 | 93 |  | 2,607 |
| 70-74 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 2 |  | 12 | 18 | 41 | 18 | 91 |  | 1,985 |
| 75-79 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3 |  | 11 | 34 | 19 | 13 | 80 |  | 1,574 |
| 80-84 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 19 | 13 | 5 | 5 | 43 |  | 1,248 |
| 85-89 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 4 |  | 5 | 2 | 2 | 3 | 16 |  | 734 |
| 90-94 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | - |
| 95-99 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | - |
| 100 \& Over |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 |  | - |
| Total Count |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 17 |  | 58 | 87 | 119 | 188 | 469 |  |  |
| Avg Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 862 | \$ | 842 | \$ 1,351 | \$ 1,838 | \$2,705 |  |  | 1,937 |

[^10]14003 LAC 38/14.003.LAC. 10.2005 / KIS/NJC/nlo

## Los Angeles County Employees <br> Retirement Association

Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 General Plan C

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average Monthly Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1960 |  | 60-64 | 1965-69 |  | 1970-74 |  | 1975-79 | 1980-84 |  | 1985-89 |  | 1990-94 | 1995-99 | 2000-05 |  |  |
| Under 35 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | \$ - |
| 35-39 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | - |
| 40-44 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 1 | 1 | 3,378 |
| 45-49 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 1 | 0 | 1 | 0 | 2 | 804 |
| 50-54 |  | 0 |  | 0 |  | 0 |  | 0 | 1 |  | 2 |  | 4 | 2 | 3 | 9 | 21 | 1,421 |
| 55-59 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 3 |  | 3 | 1 | 2 | 20 | 29 | 1,645 |
| 60-64 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 1 |  | 3 | 8 | 11 | 26 | 49 | 1,693 |
| 65-69 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 6 | 13 | 15 | 38 | 72 | 1,827 |
| 70-74 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 1 |  | 6 | 12 | 22 | 20 | 61 | 1,647 |
| 75-79 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 3 |  | 11 | 27 | 6 | 12 | 59 | 1,214 |
| 80-84 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 4 |  | 9 | 11 | 2 | 1 | 27 | 815 |
| 85-89 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 7 | 1 | 1 | 3 | 12 | 1,391 |
| 90-94 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 1 | 0 | 1 | 1,373 |
| 95-99 |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | - |
| 100 \& Over |  | 0 |  | 0 |  | 0 |  | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | - |
| Total Count |  | 0 |  | 0 |  | 0 |  | 0 | 1 |  | 14 |  | 50 | 75 | 64 | 130 | 334 |  |
| Avg Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ 1,244 | \$ | 721 | \$ | 755 | \$ 1,071 | \$ 1,573 | \$2,147 |  | \$ 1,524 |

[^11]
## Los Angeles County Employees <br> Retirement Association

Exhibit C-5d: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 General Plan D

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average <br> Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | -1960 |  | 6-64 | 1965-69 |  | 1970-74 |  | 1975-79 | 1980-84 | 1985-89 | 1990-94 | 1995-99 | 2000-05 |  |  |  |
| Under 35 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 2 | 5 | 21 | 28 | \$ | 880 |
| 35-39 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 3 | 5 | 18 | 26 |  | 1,350 |
| 40-44 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 11 | 31 | 45 | 87 |  | 1,574 |
| 45-49 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 2 | 6 | 17 | 37 | 46 | 108 |  | 1,711 |
| 50-54 |  | 0 |  | 0 |  | 0 |  | 0 | 1 | 4 | 15 | 30 | 52 | 214 | 316 |  | 1,313 |
| 55-59 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 16 | 44 | 155 | 368 | 583 |  | 1,594 |
| 60-64 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 7 | 15 | 58 | 201 | 467 | 748 |  | 1,775 |
| 65-69 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 4 | 22 | 65 | 194 | 525 | 810 |  | 1,722 |
| 70-74 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 1 | 18 | 69 | 245 | 308 | 641 |  | 1,497 |
| 75-79 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 7 | 17 | 104 | 157 | 91 | 376 |  | 1,215 |
| 80-84 |  | 0 |  | 0 |  | 0 |  | 0 | 1 | 8 | 24 | 58 | 39 | 29 | 159 |  | 1,238 |
| 85-89 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 1 | 5 | 18 | 3 | 4 | 31 |  | 905 |
| 90-94 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 |  | 759 |
| 95-99 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | - |
| 100 \& Over |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | - |
| Total Count |  | 0 |  | 0 |  | 0 |  | 0 | 2 | 34 | 138 | 481 | 1,124 | 2,137 | 3,916 |  |  |
| Avg Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$3,906 | \$ 1,171 | \$1,114 | \$1,205 | \$ 1,435 | \$ 1,730 |  | \$ | 1,556 |

## Los Angeles County Employees <br> Retirement Association

Exhibit C-5e: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 General Plan E

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1960 |  | 1960-64 |  | 1965-69 |  | 1970-74 |  | 1975-79 |  | 1980-84 |  | 1985-89 |  | 1990-94 |  | 1995-99 |  | 2000-05 |  |  |  |
| Under 35 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 2 | 3 | 5 | \$ | 686 |
| 35-39 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 2 | 2 |  | 556 |
| 40-44 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 2 | 2 |  | 443 |
| 45-49 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 3 | 3 |  | 502 |
| 50-54 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 4 | 11 | 15 |  | 670 |
| 55-59 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 8 | 494 | 503 |  | 613 |
| 60-64 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 3 |  | 254 | 642 | 899 |  | 956 |
| 65-69 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 102 |  | 345 | 844 | 1,292 |  | 1,408 |
| 70-74 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 43 |  | 151 |  | 397 | 394 | 986 |  | 1,238 |
| 75-79 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 8 |  | 45 |  | 184 |  | 190 | 125 | 552 |  | 1,019 |
| 80-84 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 6 |  | 57 |  | 104 |  | 67 | 40 | 274 |  | 843 |
| 85-89 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 7 |  | 23 |  | 19 |  | 9 | 5 | 63 |  | 830 |
| 90-94 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 4 |  | 0 |  | 2 | 1 | 8 |  | 479 |
| 95-99 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 1 |  | 0 |  | 0 | 0 | 1 |  | 110 |
| 100 \& Over |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 |  | - |
| Total Count |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 |  | 23 |  | 174 |  | 564 |  | 1,278 | 2,566 | 4,605 |  |  |
| Avg Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 326 | \$ | 381 | \$ | 733 | \$ | 903 | \$ 1,337 |  | \$ | 1,102 |

## Los Angeles County Employees <br> Retirement Association

Exhibit C-5f: $\begin{aligned} & \text { Distribution of Retired Members by Age and Retirement Year as of June 30, } 2005 \\ & \text { Safety Plan A }\end{aligned}$

| Age | Retirement Year |  |  |  |  |  |  |  |  |  | Total Count | Average Monthly Benefit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pre-1960 | 1960-64 | 1965-69 | 1970-74 | 1975-79 | 1980-84 | 1985-89 | 1990-94 | 1995-99 | 2000-05 |  |  |  |
| Under 35 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 | 8 | 14 | \$ | 1,322 |
| 35-39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 5 |  | 4,185 |
| 40-44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |  | 3,242 |
| 45-49 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 3 | 5 | 14 |  | 3,505 |
| 50-54 | 0 | 0 | 0 | 0 | 6 | 26 | 28 | 25 | 52 | 71 | 208 |  | 3,555 |
| 55-59 | 0 | 0 | 0 | 7 | 60 | 127 | 88 | 103 | 172 | 904 | 1,461 |  | 5,501 |
| 60-64 | 0 | 0 | 2 | 19 | 101 | 145 | 150 | 208 | 664 | 694 | 1,983 |  | 5,579 |
| 65-69 | 0 | 1 | 12 | 26 | 86 | 131 | 146 | 459 | 403 | 89 | 1,353 |  | 5,039 |
| 70-74 | 2 | 8 | 32 | 45 | 91 | 194 | 338 | 316 | 58 | 73 | 1,157 |  | 4,449 |
| 75-79 | 0 | 22 | 38 | 53 | 179 | 361 | 206 | 43 | 49 | 87 | 1,038 |  | 3,879 |
| 80-84 | 4 | 14 | 23 | 79 | 226 | 121 | 13 | 25 | 43 | 52 | 600 |  | 3,678 |
| 85-89 | 7 | 9 | 34 | 54 | 44 | 2 | 0 | 10 | 18 | 23 | 201 |  | 2,920 |
| 90-94 | 6 | 6 | 34 | 30 | 0 | 0 | 0 | 3 | 9 | 10 | 98 |  | 2,614 |
| 95-99 | 5 | 2 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 21 |  | 2,267 |
| 100 \& Over | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |  | 1,044 |
| Total Count | 27 | 62 | 185 | 314 | 793 | 1,111 | 971 | 1,198 | 1,475 | 2,024 | 8,160 |  |  |
| Avg Monthly Benefit | \$ 1,115 | \$ 1,473 | \$ 1,913 | \$2,643 | \$3,081 | \$3,345 | \$4,303 | \$5,066 | \$5,558 | \$6,484 |  | \$ | 4,784 |

[^12]
## Los Angeles County Employees <br> Retirement Association

Exhibit C-5g: Distribution of Retired Members by Age and Retirement Year as of June 30, 2005 Safety Plan B

| Age | Retirement Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Total Count | Average Monthly Benefit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1960 |  | 0-64 | 1965-69 |  | 1970-74 |  | 1975-79 |  | 1980-84 | 1985-89 | 1990-94 | 1995-99 | 2000-05 |  |  |
| Under 35 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 3 | 3 | 38 | 44 | \$ 2,194 |
| 35-39 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 12 | 66 | 89 | 167 | 2,809 |
| 40-44 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 5 | 64 | 112 | 113 | 294 | 2,785 |
| 45-49 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 8 | 34 | 94 | 101 | 123 | 360 | 2,701 |
| 50-54 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 11 | 31 | 55 | 46 | 98 | 241 | 2,766 |
| 55-59 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 7 | 16 | 20 | 31 | 86 | 160 | 3,455 |
| 60-64 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 3 | 2 | 10 | 12 | 41 | 68 | 3,058 |
| 65-69 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 1 | 3 | 3 | 3 | 10 | 2,895 |
| 70-74 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 1 | 2 | 4 | 1 | 2 | 10 | 1,465 |
| 75-79 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 1,382 |
| 80-84 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 897 |
| 85-89 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 90-94 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 95-99 |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| 100 \& Over |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |
| Total Count |  | 0 |  | 0 |  | 0 |  | 0 |  | 0 | 31 | 93 | 266 | 375 | 593 | 1,358 |  |
| Avg Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ 1,605 | \$1,836 | \$2,521 | \$2,788 | \$3,197 |  | \$ 2,822 |

## 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 | 2.28\% | 4.56\% | 3.83\% | 3.83\% | 3.34\% | 6.67\% |
| 17 | 2.33\% | 4.67\% | 3.92\% | 3.92\% | 3.34\% | 6.67\% |
| 18 | 2.39\% | 4.77\% | 4.00\% | 4.00\% | 3.34\% | 6.67\% |
| 19 | 2.44\% | 4.88\% | 4.10\% | 4.10\% | 3.41\% | 6.82\% |
| 20 | 2.49\% | 4.99\% | 4.19\% | 4.19\% | 3.49\% | 6.97\% |
| 21 | 2.55\% | 5.10\% | 4.28\% | 4.28\% | 3.56\% | 7.13\% |
| 22 | 2.61\% | 5.21\% | 4.38\% | 4.38\% | 3.64\% | 7.29\% |
| 23 | 2.66\% | 5.33\% | 4.48\% | 4.48\% | 3.72\% | 7.45\% |
| 24 | 2.72\% | 5.45\% | 4.58\% | 4.58\% | 3.81\% | 7.61\% |
| 25 | 2.78\% | 5.57\% | 4.68\% | 4.68\% | 3.89\% | 7.78\% |
| 26 | 2.85\% | 5.69\% | 4.79\% | 4.79\% | 3.98\% | 7.96\% |
| 27 | 2.91\% | 5.82\% | 4.89\% | 4.89\% | 4.07\% | 8.14\% |
| 28 | 2.97\% | 5.95\% | 5.00\% | 5.00\% | 4.16\% | 8.32\% |
| 29 | 3.04\% | 6.08\% | 5.11\% | 5.11\% | 4.25\% | 8.51\% |
| 30 | 3.11\% | 6.22\% | 5.23\% | 5.23\% | 4.35\% | 8.70\% |
| 31 | 3.18\% | 6.36\% | 5.34\% | 5.34\% | 4.45\% | 8.90\% |
| 32 | 3.25\% | 6.50\% | 5.46\% | 5.46\% | 4.55\% | 9.11\% |
| 33 | 3.32\% | 6.65\% | 5.58\% | 5.58\% | 4.66\% | 9.31\% |
| 34 | 3.40\% | 6.80\% | 5.71\% | 5.71\% | 4.76\% | 9.52\% |
| 35 | 3.48\% | 6.95\% | 5.83\% | 5.83\% | 4.86\% | 9.72\% |
| 36 | 3.56\% | 7.11\% | 5.96\% | 5.96\% | 4.96\% | 9.92\% |
| 37 | 3.64\% | 7.27\% | 6.10\% | 6.10\% | 5.06\% | 10.13\% |
| 38 | 3.72\% | 7.44\% | 6.24\% | 6.24\% | 5.16\% | 10.32\% |
| 39 | 3.80\% | 7.60\% | 6.38\% | 6.38\% | 5.26\% | 10.51\% |
| 40 | 3.88\% | 7.76\% | 6.52\% | 6.52\% | 5.35\% | 10.70\% |
| 41 | 3.96\% | 7.93\% | 6.67\% | 6.67\% | 5.44\% | 10.89\% |
| 42 | 4.04\% | 8.09\% | 6.83\% | 6.83\% | 5.53\% | 11.06\% |
| 43 | 4.12\% | 8.24\% | 6.98\% | 6.98\% | 5.61\% | 11.23\% |
| 44 | 4.20\% | 8.40\% | 7.13\% | 7.13\% | 5.68\% | 11.37\% |
| 45 | 4.27\% | 8.55\% | 7.29\% | 7.29\% | 5.74\% | 11.48\% |
| 46 | 4.35\% | 8.69\% | 7.44\% | 7.44\% | 5.78\% | 11.55\% |
| 47 | 4.42\% | 8.83\% | 7.59\% | 7.59\% | 5.78\% | 11.56\% |
| 48 | 4.48\% | 8.97\% | 7.74\% | 7.74\% | 5.78\% | 11.56\% |
| 49 | 4.54\% | 9.08\% | 7.88\% | 7.88\% | 5.78\% | 11.56\% |
| 50 | 4.58\% | 9.17\% | 8.02\% | 8.02\% | 5.78\% | 11.56\% |
| 51 | 4.61\% | 9.23\% | 8.16\% | 8.16\% | 5.78\% | 11.56\% |
| 52 | 4.62\% | 9.24\% | 8.29\% | 8.29\% | 5.78\% | 11.56\% |
| 53 | 4.62\% | 9.24\% | 8.41\% | 8.41\% | 5.78\% | 11.56\% |
| 54 | 4.62\% | 9.24\% | 8.52\% | 8.52\% | 5.78\% | 11.56\% |
| 55 | 4.62\% | 9.24\% | 8.61\% | 8.61\% | 5.78\% | 11.56\% |
| 56 | 4.62\% | 9.24\% | 8.66\% | 8.66\% | 5.78\% | 11.56\% |
| 57 | 4.62\% | 9.24\% | 8.67\% | 8.67\% | 5.78\% | 11.56\% |
| 58 | 4.62\% | 9.24\% | 8.67\% | 8.67\% | 5.78\% | 11.56\% |
| 59 | 4.62\% | 9.24\% | 8.67\% | 8.67\% | 5.78\% | 11.56\% |
| 60 | 4.62\% | 9.24\% | 8.67\% | 8.67\% | 5.78\% | 11.56\% |

*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 .

## 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 | 4.06\% | 5.56\% | 4.74\% | 4.63\% | 6.69\% | 8.73\% |
| 17 | 4.15\% | 5.70\% | 4.85\% | 4.74\% | 6.69\% | 8.73\% |
| 18 | 4.26\% | 5.82\% | 4.95\% | 4.84\% | 6.69\% | 8.73\% |
| 19 | 4.35\% | 5.95\% | 5.07\% | 4.96\% | 6.83\% | 8.92\% |
| 20 | 4.44\% | 6.09\% | 5.19\% | 5.07\% | 6.99\% | 9.12\% |
| 21 | 4.55\% | 6.22\% | 5.30\% | 5.18\% | 7.13\% | 9.33\% |
| 22 | 4.65\% | 6.35\% | 5.42\% | 5.30\% | 7.29\% | 9.54\% |
| 23 | 4.74\% | 6.50\% | 5.54\% | 5.42\% | 7.45\% | 9.75\% |
| 24 | 4.85\% | 6.65\% | 5.67\% | 5.54\% | 7.63\% | 9.96\% |
| 25 | 4.96\% | 6.79\% | 5.79\% | 5.66\% | 7.79\% | 10.18\% |
| 26 | 5.08\% | 6.94\% | 5.93\% | 5.79\% | 7.97\% | 10.42\% |
| 27 | 5.19\% | 7.10\% | 6.05\% | 5.92\% | 8.15\% | 10.65\% |
| 28 | 5.29\% | 7.26\% | 6.19\% | 6.05\% | 8.33\% | 10.89\% |
| 29 | 5.42\% | 7.42\% | 6.32\% | 6.18\% | 8.51\% | 11.14\% |
| 30 | 5.54\% | 7.59\% | 6.47\% | 6.33\% | 8.71\% | 11.38\% |
| 31 | 5.67\% | 7.76\% | 6.61\% | 6.46\% | 8.91\% | 11.65\% |
| 32 | 5.79\% | 7.93\% | 6.76\% | 6.61\% | 9.11\% | 11.92\% |
| 33 | 5.92\% | 8.11\% | 6.91\% | 6.75\% | 9.33\% | 12.18\% |
| 34 | 6.06\% | 8.29\% | 7.07\% | 6.91\% | 9.53\% | 12.46\% |
| 35 | 6.20\% | 8.48\% | 7.21\% | 7.05\% | 9.73\% | 12.72\% |
| 36 | 6.35\% | 8.67\% | 7.38\% | 7.21\% | 9.93\% | 12.98\% |
| 37 | 6.49\% | 8.87\% | 7.55\% | 7.38\% | 10.13\% | 13.26\% |
| 38 | 6.63\% | 9.07\% | 7.72\% | 7.55\% | 10.33\% | 13.50\% |
| 39 | 6.77\% | 9.27\% | 7.90\% | 7.72\% | 10.53\% | 13.75\% |
| 40 | 6.92\% | 9.46\% | 8.07\% | 7.89\% | 10.71\% | 14.00\% |
| 41 | 7.06\% | 9.67\% | 8.25\% | 8.07\% | 10.89\% | 14.25\% |
| 42 | 7.20\% | 9.87\% | 8.45\% | 8.26\% | 11.07\% | 14.47\% |
| 43 | 7.35\% | 10.05\% | 8.64\% | 8.44\% | 11.23\% | 14.70\% |
| 44 | 7.49\% | 10.24\% | 8.82\% | 8.63\% | 11.37\% | 14.88\% |
| 45 | 7.61\% | 10.43\% | 9.02\% | 8.82\% | 11.49\% | 15.02\% |
| 46 | 7.76\% | 10.60\% | 9.21\% | 9.00\% | 11.57\% | 15.11\% |
| 47 | 7.88\% | 10.77\% | 9.39\% | 9.18\% | 11.57\% | 15.13\% |
| 48 | 7.99\% | 10.94\% | 9.58\% | 9.36\% | 11.57\% | 15.13\% |
| 49 | 8.09\% | 11.07\% | 9.75\% | 9.53\% | 11.57\% | 15.13\% |
| 50 | 8.17\% | 11.18\% | 9.92\% | 9.70\% | 11.57\% | 15.13\% |
| 51 | 8.22\% | 11.26\% | 10.10\% | 9.87\% | 11.57\% | 15.13\% |
| 52 | 8.24\% | 11.27\% | 10.26\% | 10.03\% | 11.57\% | 15.13\% |
| 53 | 8.24\% | 11.27\% | 10.41\% | 10.17\% | 11.57\% | 15.13\% |
| 54 | 8.24\% | 11.27\% | 10.54\% | 10.31\% | 11.57\% | 15.13\% |
| 55 | 8.24\% | 11.27\% | 10.65\% | 10.42\% | 11.57\% | 15.13\% |
| 56 | 8.24\% | 11.27\% | 10.72\% | 10.48\% | 11.57\% | 15.13\% |
| 57 | 8.24\% | 11.27\% | 10.73\% | 10.49\% | 11.57\% | 15.13\% |
| 58 | 8.24\% | 11.27\% | 10.73\% | 10.49\% | 11.57\% | 15.13\% |
| 59 | 8.24\% | 11.27\% | 10.73\% | 10.49\% | 11.57\% | 15.13\% |
| 60 | 8.24\% | 11.27\% | 10.73\% | 10.49\% | 11.57\% | 15.13\% |

[^13]
## Los Angeles County Employees Retirement Association

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

Accrued Benefit The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued
Liability
Actuarial
Assumptions

Actuarial Gain
(Loss)

Actuarial Present Value

Actuarial
Valuation
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.

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.

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.

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.

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

Actuarial Value of Assets

Actuarially
Equivalent

## Amortization

Payment
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.

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

| Contingency | Reserves accumulated for future earning deficiencies, investment <br> losses, and other contingencies. Additions include investment <br> income and other revenues; deductions include investment <br> expense, administrative expense, interest allocated to other <br> reserves, funding the STAR Reserve, and distributions to the <br> Contribution Credit Reserve. The Contingency Reserve is used to <br> satisfy the California Government Code requirement for (31592 and <br> 31592.2) LACERA to reserve 1\% of the assets against earning <br> deficiencies, investment losses, and other contingencies. |
| :--- | :--- |
|  | The accumulated balance of the County's proportionate share of <br> excess earnings as stipulated in Retirement System Funding |
| County |  |
| Contribution |  |
| Credit Reserve | Agreement between LACERA and the County. Additions include <br> distributions from excess earning during the fiscal years ending |
|  | 1994 through 1998 and related earnings. Deductions include <br> payments, as the County authorizes, for future employer <br> contributions due LACERA and for funding a portion of the Retiree |
| Healthcare Program under the provisions of Internal Revenue Code |  |


| Normal Cost | That portion of the Actuarial Present Value of pension plan benefits <br> and expenses which is allocated to a valuation year by the Actuarial <br> Cost Method. |
| :--- | :--- |
| Open |  |
| Amortization <br> Period | As discussed in the Actuarial Cost Method section of Appendix C, <br> LACERA uses an open (often referred to as "rolling") 30-year <br> amortization period. That is, the amortization begins again or is <br> recalculated at each valuation date. This is as opposed to a closed <br> (or "fixed") amortization period which is a specific number of years <br> that is counted from one date and declines to zero with the passage <br> of time. |
| Plan Year | A twelve-month period beginning July 1 and ending June 30. |
| Projected Benefits | Those pension plan benefit amounts which are expected to be paid <br> 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. |  |


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[^1]:    000 Milliman to other parties who receive this work.

[^2]:    (00) Milliman

[^3]:    00 Milliman

[^4]:    ${ }^{(1)}$ Future contributions are assumed to be at the $9.53 \%$ normal cost rate plus a UAAL payment of $5.33 \%$ after the first year.
    ${ }^{(2)}$ Investment expenses are assumed to be covered by investment return.

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[^8]:    aca0255 Appendix C.doc
    14003 LAC 38/14.003.LAC. 10.2005 / KIS/NJC/nlo

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[^11]:    (00) Milliman

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[^13]:    *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.

