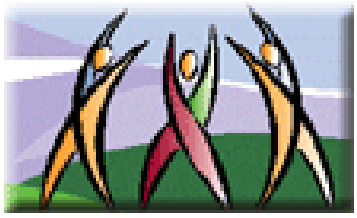
# THE LOS ANGELES CITY
# EMPLOYEES' RETIREMENT SYSTEM
# ANNUAL ACTUARIAL VALUATION
# June 30, 2003

(Revised)



Submitted to

BOARD OF ADMINISTRATION

TABLE OF CONTENTS

December 4, 2003

Board of Administration
City Employees' Retirement System
360 East Second Street, 8th Floor
Los Angeles, CA 90012

Members of the Board:

Results of the regular Annual Actuarial Valuation as of June 30, 2003 of The Los Angeles City Employees' Retirement System are summarized. The valuation is intended to provide a measure of the funding status of the retirement system and health subsidy benefits. This valuation forms the basis for the City contribution rates for the year beginning July 1, 2004.

| CONTRIBUTIONS | RETIREMENT | HEALTH |
|---|---|---|
| Normal Costs | 10.54% | 2.03% |
| Unfunded Amortization | 1.41% | 1.99% |
| TOTAL | 11.95% | 4.02% |

It is our understanding that the Retirement Board will recommend a rate 1.27% **lower** than the sum of the above rates, 15.97%, to reflect the second year of last year's phase-in of assumption changes over three years.

The member statistical data on which the valuation was based was furnished by LACERS, together with pertinent data on financial operations. Data was reviewed for reasonableness, but was not audited by the actuary.

There was an overall actuarial loss of $809.2 million, which reflects 9.9% of related actuarial accrued liabilities as of June 30, 2002 and is inclusive of some premium data refinements. Also, there is a net reduction in actuarial liabilities of $102.2 million due to a revision of lower long-term medical inflation assumptions.

The cooperation of LACERS in furnishing materials requested for this valuation is deeply acknowledged with appreciation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Rick Roeder

Rick A. Roeder, E.A., F.S.A., M.A.A.A.

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Los Angeles City Employees' Retirement System

**Summary of Significant Valuation Results**

| | June 30, 2003 | June 30, 2002 | Percent Change |
|---|---|---|---|
| I. Total Membership | | | |
| A. Active Members | 26,358 | 25,930 | 1.7% |
| B. Pensioners | 13,805 | 13,589 | 1.6% |
| II. Salaries at June 30 | | | |
| A. Total Annual Payroll | $1,405,057,848 | $1,334,335,478 | 5.3% |
| B. Average Monthly Salary | $4,442 | $4,288 | 3.6% |
| III. Benefits to Current Pensioners and | | | |
| A. Total Annual Benefits prior to 7/1 COLA | $359,036,215 | $336,437,038 | 6.7% |
| B. Average Monthly Benefit Amount | $2,167 | $2,063 | 5.0% |
| IV. Total System Assets (Incl. FDBIP reserve) | | | |
| A. Actuarial Value | $7,868,307,895 | $7,934,761,638 | (0.8)% |
| B. Market Value | $6,709,041,681 | $6,713,940,288 | (0.1)% |
| V. Unfunded Actuarial Accrued | | | |
| A. Retirement Benefits | $660,199,346 | $191,930,161 | 244.0% |
| B. Health Subsidy Benefits | $356,827,890 | $78,047,910 | 357.2% |
| VI. Budget Items | FY 2004-2005 | FY 2003-2004 | |
| A. Retirement Benefits | | | |
| 1. Normal Cost as a Percent of Pay | 10.54% | 10.58% | (0.4)% |
| 2. Amortization of Unfunded Actuarial Accrued Liability | 1.41% | (1.36%) | NA |
| 3. Total Retirement Contribution | 11.95% | 9.22% | 29.6% |
| B. Health Subsidy Contribution, as a Percent | 4.02% | 1.85% | 104.3% |
| C. Total Contribution (A+B) | 15.97% | 11.07% | 42.1% |
| VII. Funded Ratio | | | |
| (Based on Actuarial Value of Assets) | | | |
| A. Retirement Benefits | 91.4% | 97.4% | (6.2)% |
| B. Health Subsidy Benefits | 70.4% | 91.6% | (29.7)% |
| C. Total | 88.6% | 96.7% | (9.6)% |
| (Based on Market Value of Assets) | | | |
| D. Retirement Benefits | 77.9% | 82.4% | (5.5)% |
| E. Health Subsidy Benefits | 60.0% | 77.5% | (29.2)% |
| F. Total | 75.5% | 81.8% | (8.9)% |

# FINANCIAL PRINCIPLES
# AND
# OPERATIONAL TECHNIQUES

Promises Made, and To Be Paid For. As each year is completed, the Retirement System in effect hands an "IOU" to each member then acquiring a year of service credit – the "IOU" says: "The Los Angeles City Employees' Retirement System owes you one year's worth of retirement benefits, payments in cash commencing when you qualify for retirement."

The related key financial questions are:

Which generation of taxpayers contributes the money to cover the IOU?

The present taxpayers, who receive the benefit of the member's present year of service?

Or the future taxpayers, who happen to be in Los Angeles City at the time the IOU becomes a cash demand, years and decades later?

The principle of level percent of payroll financing intends that this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, the employer contribution rate will remain approximately level from generation to generation (after funding of the system's initial unfunded liability is addressed) – our children and our grandchildren will contribute the same percents of active payroll we contribute now.

(There are systems which have a design for deferring contributions to future taxpayers, lured by a lower contribution rate now and putting aside the consequence that the contribution rate must then relentlessly grow much greater over decades of time.)

An inevitable by-product of the level-cost design is the accumulation of reserve assets, for decades, and income produced when the assets are invested. Invested assets are a by-product and not the objective. Investment income becomes, in effect, the 3rd contributor for benefits to employees, and is interlocked with the contribution amounts required from employees and employer.

(Concluded on next page)

Translated to actuarial terminology, this level-cost objective means that the contribution rates must total at least the following:

Current Cost (the cost of members' service being rendered this year) . . .

plus. . .

Interest on Unfunded Accrued Liabilities (unfunded accrued liabilities are the difference between (i) liabilities for service already rendered and (ii) the accrued assets of the plan).

Computing Contributions To Support System Benefits. From a given schedule of benefits and from the employee data and asset data furnished, the actuary determines the contribution rates to support the benefits, by means of an actuarial valuation and a funding method.

An actuarial valuation has a number of ingredients such as: the rate of investment return which plan assets will earn; rates of withdrawal of active members who leave covered employment; rates of mortality; rates of disability; rates of pay increases; and the assumed age or ages at actual retirement. In an actuarial valuation assumptions must be made as to what the above rates will be, for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom behind the various financial assumptions or the skill of the actuary and the millions of calculations made. The future can be predicted with considerable but not complete precision, except for inflation which defies reliable prediction.

The System copes with these continually changing differences by having annual actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continual adjustments in the computed employer contribution rates.

## THE ACTUARIAL VALUATION PROCESS

The financing diagram on the opposite page shows the relationship between the two fundamentally different philosophies of paying for retirement benefits: the method where contributions match cash benefit payments (or barely exceed cash benefit payments, as in the Federal Social Security program) which is an increasing contribution method; and the level contribution method which equalizes contributions between the generations.

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The actuarial valuation is the mathematical process by which the level contribution rate is determined. The flow of activity constituting the valuation may be summarized as follows:

A. Covered people data, furnished by LACERS, including:
   Retired lives now receiving benefits
   Former employees with vested benefits not yet payable
   Active employees

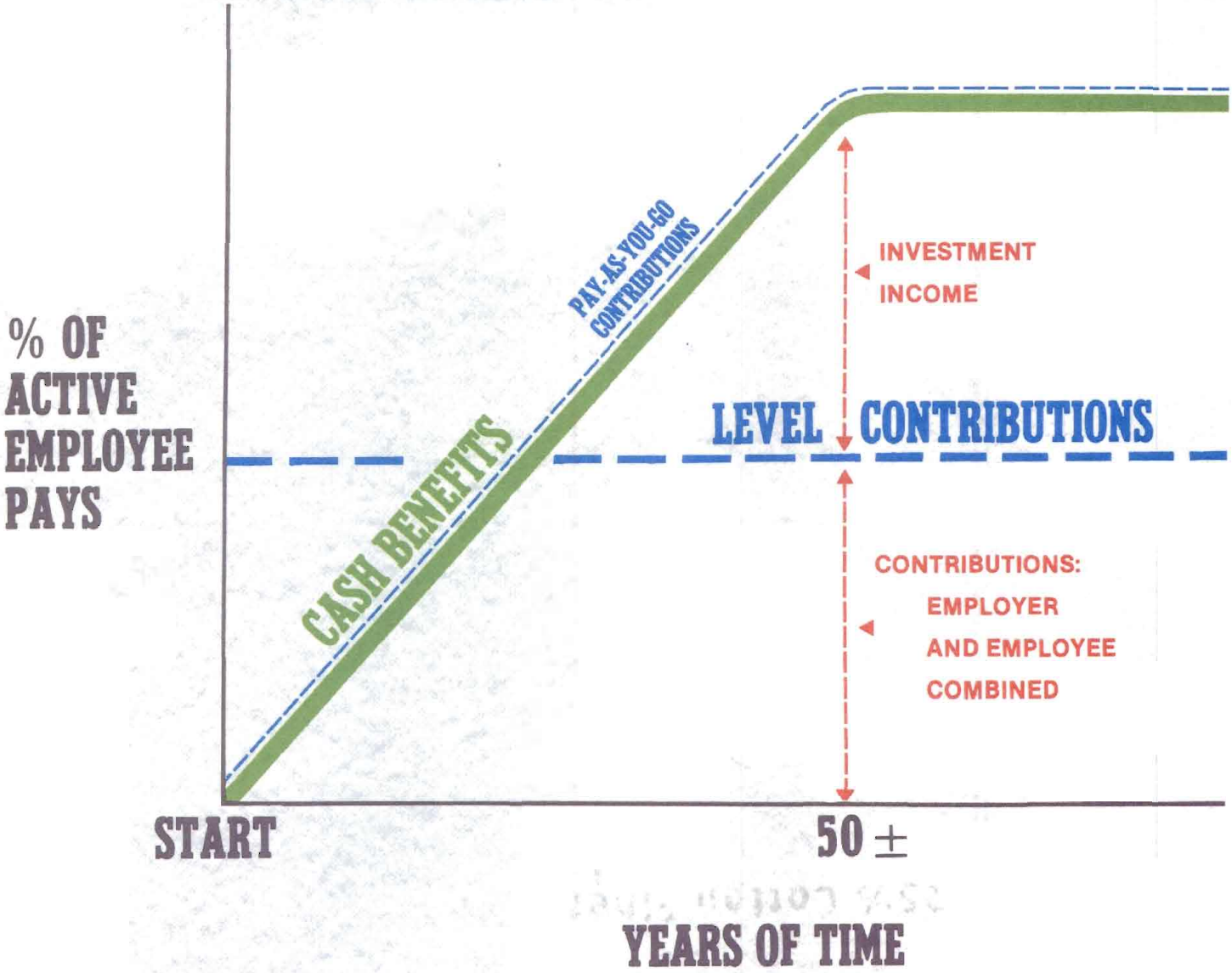
B. + Asset data (cash & investments), furnished by LACERS

C. + Assumptions concerning future experience in various risk areas, which are established by the Board after consulting with the actuary

D. + The funding method for employer contributions (the long-term, planned pattern for employer contributions)

E. + Mathematically combining the assumptions, the funding method, and the data

F. = Determination of:
   Plan Financial Position and/or
   Employer's New Contribution Rate




**CASH BENEFITS LINE.** This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

**LEVEL CONTRIBUTION LINE.** Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

- Economic Risk Areas
  - Rates of investment return
  - Rates of pay increase
  - Changes in active member group size
- Non-Economic Risk Areas
  - Ages at actual retirement
  - Rates of mortality
  - Rates of withdrawal of active members (turnover)
  - Rates of disability

# VALUATION RESULTS

# &

# COMMENTS

## FUNDING OBJECTIVE

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year to year and will not have to be increased for future generations of citizens.

## CONTRIBUTION RATES

LACERS is supported by member contributions, City contributions, and investment income from Fund assets.

Contributions which satisfy the funding objective are determined by the annual actuarial valuation and are intended to:

1. cover the actuarial present value of benefits allocated to the current year by the actuarial cost method (the normal cost); and
2. finance over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Computed contributions for the fiscal year beginning July 1, 2004 are shown on the following pages.

Los Angeles City Employees' Retirement System

**Computed Contribution Rates**

(Expressed as Percents of Active Payroll)

| | Retirement | | Health Subsidy | |
|---|---|---|---|---|
| Valuation Date | **2003** | **2002** | **2003** | **2002** |
| Applying to Fiscal Year | 2004-05 | 2003-04 | 2004-05 | 2003-04 |
| Normal Cost | 10.54% | 10.58% | 2.03% | 1.83% |
| UAAL Amortization | 1.41% | (1.36)% | 1.99% | 0.02% |
| **Total City Contribution** | 11.95% | 9.22% | 4.02% | 1.85% |

The above contributions are **exclusive** of applicable "picked up" employee contributions (defrayals) and assume contributions are made, on average, mid-year.

Ongoing unfunded actuarial accrued liabilities (UAAL) are a byproduct of actuarial gains and losses, as well as benefit, assumption and methodology changes. Each valuation generates an actuarial gain (loss) for each group valued. Each year's gain (loss) is amortized over fifteen years. Liability changes due to assumption changes and most benefit increases have been amortized over thirty years. Amortization is expressed as a percent-of-payroll and added to (or subtracted from) computed normal costs.

Los Angeles City Employees' Retirement System

**Computed Contribution Rates**

June 30, 2003

(Expressed as Percents of Active Payroll)

**Elements of Normal Costs for**

**Retirement Benefits**

| | |
|---|---|
| Normal Retirement | 14.52% |
| Vested Deferred Retirement | 1.25 |
| Death-In-Service[1] | 0.60 |
| Disability [1] | 0.43 |
| Contribution Refunds | 0.18 |
| **Total Normal Cost** | **16.98%** |
| Less | |
| Employee Contributions[2] | 6.44 |
| Equals | |
| **Employer Normal Cost** | **10.54%** |

[1] These figures could be viewed as overstated, and Normal Retirement figures understated, since, in many cases, an active member, who dies or becomes disabled will have significant service credit accrued and may be eligible for service retirement at time of disability or death benefit grant.

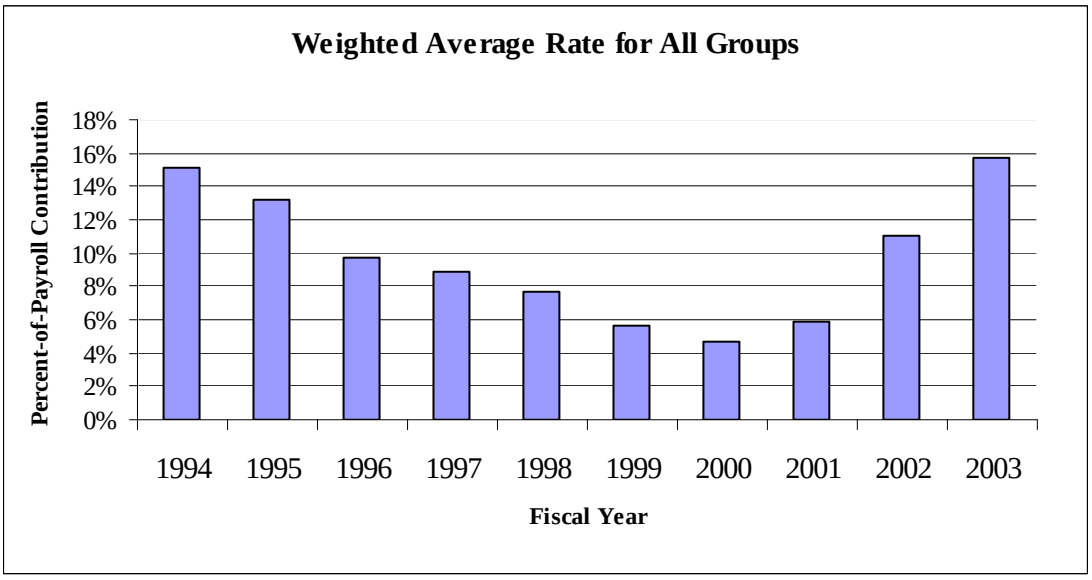
[2] Shown employee contributions will be reduced by applicable employee pick ups. Pick ups (aka, "defrayals") averaged 6.58% for pre-1983 hires, as a percentage of present value of future payroll. We recommend that the City take a 1% discount on pick ups to reflect anticipated savings from refunds.

Los Angeles City Employees' Retirement System

**Computed Contribution Rates - Historic Comparison**

| Valuation Date | Retirement | Health | Total | Valuation Payroll (thousands) |
|---|---|---|---|---|
| 6/30/94 | 12.07% | 2.99% | 15.06% | $884,951 |
| 6/30/95 | 7.34% | 2.30% | 9.64% | $911,292 |
| 6/30/96 | 6.51% | 3.18% | 9.69% | $957,423 |
| 6/30/97 | 6.57% | 1.85% | 8.42% | $990,616 |
| 6/30/98 | 6.43% | 1.27% | 7.70% | $1,011,857 |
| 6/30/99 | 4.93% | 0.67% | 5.60% | $1,068,124 |
| 6/30/00 | 2.54% | 2.17% | 4.71% | $1,182,203 |
| 6/30/01 | 3.84% | 1.98% | 5.82% | $1,293,350 |
| 6/30/02 | 9.22% | 1.85% | 11.07 % | $1,334,335 |
| 6/30/03 | 11.95% | 4.73% | 16.68% | $1,405,058 |
| 6/30/03[1] | 11.95% | 4.02% | 15.97% | $1,405,058 |

[1]Reflects overall lowering of medical inflation assumptions



Los Angeles City Employees' Retirement System

**Member Contributions as of June 30, 2003**

In addition to City contributions, LACERS is also funded by member contributions. The rate is 6% for those hired after January 1, 1983. For other members, the contribution is expressed as a percent of pay and varies according to age of entry into the system. For pre-1983 members, a portion of the contributions are picked up by the City. Picked up contributions (defrayals) are nonrefundable to members.

Please refer to the Appendix for a detailed list of these rates. We recommend a 1% discount on pick ups to reflect anticipated savings from refunds.

| | (Percents of Pay) | |
|---|---|---|
| | All Active Members | |
| | 2002 | 2003 |
| Overall employee contribution rate | 6.49% | 6.44% |
| | Pre-January 1, 1983 Active Members | |
| Weighted gross contribution rate | 9.25% | 9.24% |
| Weighted pick up rate | 6.58% | 6.58% |
| Weighted rate after pick ups | 2.67% | 2.66% |

Los Angeles City Employees' Retirement System

**Unfunded Actuarial Accrued Liability**

June 30, 2003

## Derivation of Experience Gain (Loss)

The actuarial gains or losses realized in the operation of LACERS provide an experience test. Gains and losses are expected to cancel each other over a period of years and sizable year-to-year fluctuations are common.

| | Retirement | Health |
|---|---|---|
| (1) UAAL* at beginning of year | $191,930,161 | $78,047,910 |
| (2) Normal Cost for the year | $117,246,034 | $34,790,295 |
| (3) City Contributions net of defrayals | $51,604,669 | $26,607,924 |
| (4) Interest Accrual | $17,929,555 | $6,564,831 |
| (5) Adjustments for one year lag | $49,390,845 | $8,825,419 |
| (6) Assumption Change | $0 | ($102,227,491) |
| (7) Expected UAAL at the end of year (1) + (2) - (3) + (4) - (5) + (6) | $226,110,237 | ($18,257,798) |
| (8) Actual End of Year UAAL | $660,199,346 | $356,827,890 |
| (9) Total (Gain)/Loss | $434,089,109 | $375,085,688 |
| (10) (Gain)/loss as percentage actuarial accrued liabilities at beginning of year | 6.0% | 40.2% |
| Note: | | |
| Asset Loss | 398,959,034 | 48,102,157 |
| - percentage of AAL at beginning of year | 5.5% | 5.2% |
| Liability Loss/(Gain) | 35,130,075 | 326,983,531 |
| - percentage of AAL at beginning of year | 0.5% | 35.0% |

## Unfunded Actuarial Accrued Liability

### Components of Actuarial Gain (Loss) for Retirement Benefits

| | |
|---|---|
| Estimated Loss attributed to investment experience | $398,959,000 |
| Estimated Loss attributed to pay increases | $21,801,000 |
| Estimated Loss attributed to post-retirement mortality | $14,928,000 |
| Estimated Loss attributed to lag in actual versus expected contributions | $73,690,000 |
| Estimated (Gain) attributed to employee turnover, pre-retirement mortality, retirement incidence, and miscellaneous factors | ($75,289,000) |
| Total Estimated Experience Loss | $434,089,000 |

### Unfunded Actuarial Accrued Liability

| | |
|---|---|
| Total actuarial accrued liabilities | $7,659,846,696 |
| Assets allocated to retirement plan | $6,999,647,350 |
| Unfunded Actuarial Accrued Liability | $660,199,346 |

### Comparative Schedule – Experience (Gain)/Loss

| Valuation Date | (Gain)/Loss | Beginning of Year Accrued Liabilities | (Gain)/Loss Percentage |
|---|---|---|---|
| 6/30/98 | $ (356,764,069) | $ 4,886,336,641 | (7.3)% |
| 6/30/99 | (185,388,031) | 5,312,918,078 | (3.5) |
| 6/30/00 | (332,557,507) | 5,684,586,071 | (5.9) |
| 6/30/01 | 12,134,422 | 6,012,931,343 | 0.2 |
| 6/30/02 | 190,564,594 | 6,468,065,894 | 2.9 |
| 6/30/03 | 434,089,109 | 7,252,117,949 | 6.0 |

Los Angeles City Employees' Retirement System
**Unfunded Actuarial Accrued Liability**

## Components of Actuarial Loss for Health Benefits

| | |
|---|---|
| Estimated Loss attributed to erroneous 2002 age 65+ HMO premium rates | $132,572,680 |
| Estimated Loss attributed to post-retirement mortality | $4,602,307 |
| Estimated (Gain) attributed to lag in actual versus expected contributions | ($1,780,606) |
| Estimated Loss attributed to employee turnover, pre-retirement mortality, retirement incidence, premium increases and miscellaneous factors | $191,589,150 |
| Estimated Loss attributed to investment experience | $48,102,157 |
| Total Estimated Experience Loss | $375,085,688 |

## Unfunded Actuarial Accrued Liability

| | |
|---|---|
| Total actuarial accrued liabilities | $1,205,811,297 |
| Assets allocated to retirement plan | $848,983,407 |
| Unfunded Actuarial Accrued Liability | $356,827,890 |

## Comparative Schedule - Experience (Gain)/Loss

| Valuation Date | (Gain)/Loss | Beginning of Year Accrued Liability | (Gain)/Loss Percentage |
|---|---|---|---|
| 6/30/99 | ($103,379,627) | $552,122,744 | (18.7)% |
| 6/30/00 | $105,614,184 | $614,093,168 | 17.2% |
| 6/30/01 | ($84,150,192) | $854,065,575 | (9.9)% |
| 6/30/02 | $50,481,385 | $807,904,508 | 6.2% |
| 6/30/03[1] | $375,085,688 | $931,963,709 | 40.2% |

[1]Reflects some incorrect premium rates provided for 2002 valuation

Los Angeles City Employees' Retirement System

**Detail of Amortization of Unfunded Actuarial Accrued Liability**

**Retirement Benefits**

| Item | Years Left | Remaining Balance 6/30/03 | Amortization Amount |
|---|---|---|---|
| Combined Bases at 6/30/97 | 9 | $61,058,238 | $8,158,460 |
| Gain at 6/30/98 | 10 | (317,025,618) | (38,806,756) |
| Change in Assumptions at 6/30/98 | 25 | 246,185,759 | 15,511,271 |
| Gain at 6/30/99 | 11 | (171,738,375) | (19,451,048) |
| Plan Change at 6/30/99 | 26 | 23,470,777 | 1,444,705 |
| Change in Assumptions at 6/30/99 | 26 | (10,260,003) | (631,538) |
| Gain at 6/30/00 | 12 | (316,335,690) | (33,422,548) |
| Loss at 6/30/01 | 13 | 11,773,683 | 1,168,409 |
| Loss at 6/30/02 | 14 | 188,180,162 | 17,643,062 |
| Plan Changes at 6/30/02 | 29 | 38,439,021 | 2,223,345 |
| Change in Assumptions at 6/30/02 | 29 | 472,362,283 | 27,321,831 |
| Loss at 6/30/03 | 15 | 434,089,109 | 38,642,681 |
| **Total** | | **$660,199,346** | **$19,801,874** |

**Health Subsidy**

| Item | Years Left | Remaining Balance 6/30/03 | Amortization Amount |
|---|---|---|---|
| Combined Bases at 6/30/97 | 9 | $45,793,377 | $6,118,805 |
| Gain at 6/30/98 | 10 | (97,478,965) | (11,932,293) |
| Change in Assumptions at 6/30/98 | 25 | 49,157,752 | 3,097,252 |
| Gain at 6/30/99 | 11 | (95,768,045) | (10,846,666) |
| Plan Change at 6/30/99 | 26 | 3,418,020 | 210,391 |
| Change in Assumptions at 6/30/00 | 27 | 48,898,449 | 2,944,475 |
| Loss at 6/30/00 | 12 | 100,462,431 | 10,614,390 |
| Gain at 6/30/01 | 13 | (81,648,521) | (8,102,720) |
| Loss at 6/30/02 | 14 | 49,849,738 | 4,673,723 |
| Change in Assumptions at 6/30/02 | 29 | 61,285,456 | 3,544,802 |
| Loss at 6/30/03 | 15 | 375,085,688 | 33,390,187 |
| Change in Assumptions at 6/30/03 | 30 | (102,227,491) | (5,804,758) |
| **Total** | | **$356,827,890** | **$27,907,588** |

Los Angeles City Employees' Retirement System

**Funding Progress Indicators**

June 30, 2003

There is no single all-encompassing indicator which measures a retirement system's funding progress and current funded status. A traditional measure has been the relationship of valuation assets to unfunded actuarial accrued liability – a measure that is influenced by the choice of actuarial cost method.

We believe a better understanding of funding progress and status can be achieved using the following indicators which are independent of the actuarial cost method.

1. The ratio of valuation assets to the actuarial present value of credited projected benefits allocated in the proportion accrued service is to projected total service – a plan continuation indicator.

2. The ratio of the unfunded actuarial present value of credited projected benefits to member payroll – a plan continuation indicator. In a soundly financed retirement system, the amount of the unfunded actuarial present value of credited projected benefits will be controlled and prevented from increasing in the absence of benefit improvements or strengthening of actuarial assumptions. However, in an inflationary environment it is seldom practical to impose this control on dollar amounts which are depreciating in value. The ratio is a relative index of condition where inflation is present in both items. The ratio is expected to decrease in the absence of benefit improvements or strengthening of actuarial assumptions.

Los Angeles City Employees' Retirement System

**Funding Progress Indicators – Historic Comparison**

($ in Thousands)

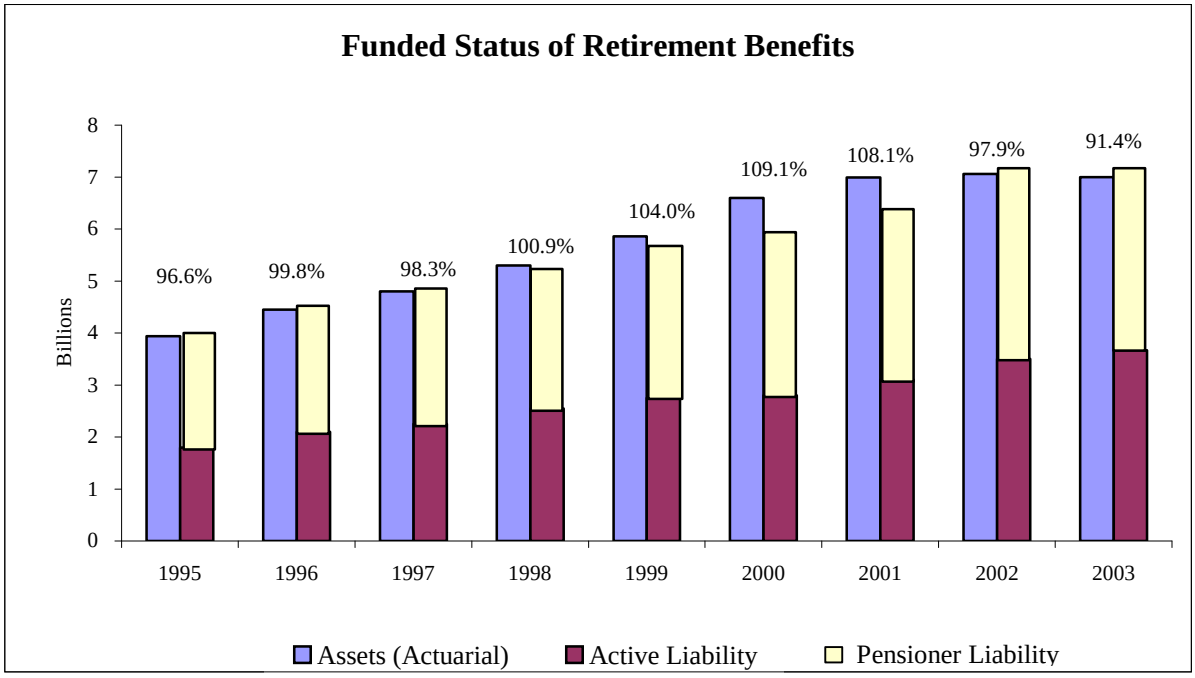
**Retirement**

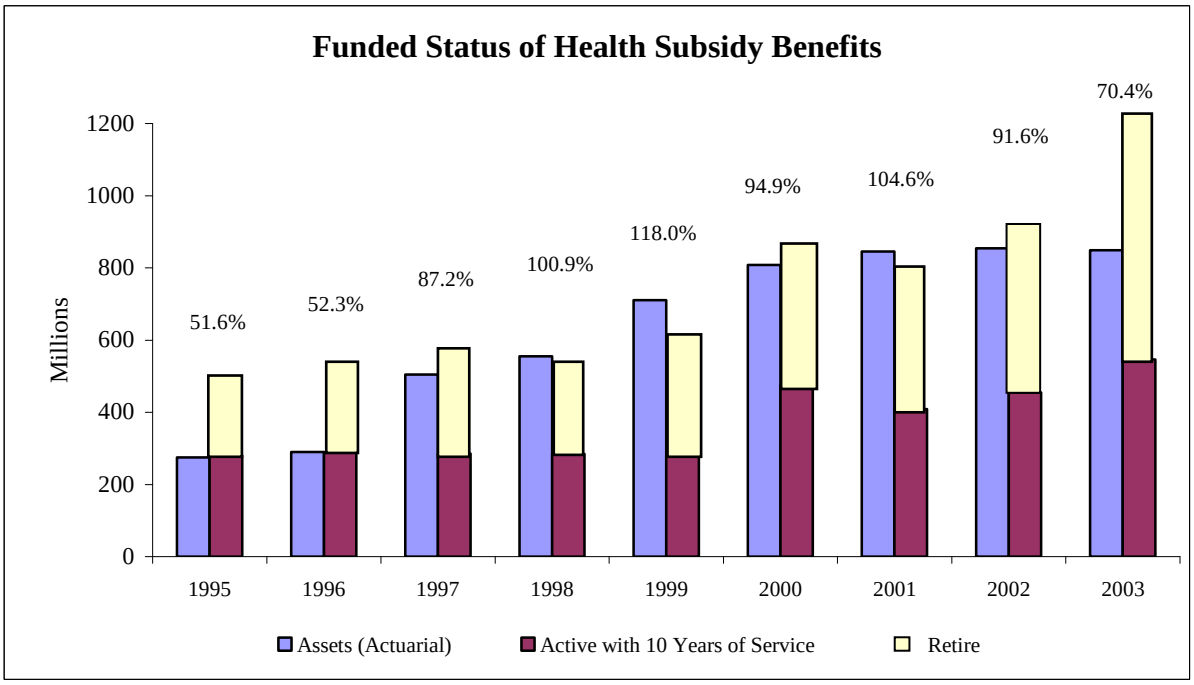
| Valuation Date | Valuation Assets | Actuarial Accrued Liability | Unfunded AAL | Funded Ratio | Member Payroll | UAAL Ratio to Payroll |
|---|---|---|---|---|---|---|
| 6/30/99 | $5,910,948 | $5,684,586 | ($226,362) | 104.0% | $1,068,124 | (21.2)% |
| 6/30/00 | 6,561,365 | 6,012,931 | (548,434) | 109.1 | 1,182,203 | (46.4) |
| 6/30/01 | 6,988,782 | 6,468,066 | (520,716) | 108.1 | 1,293,350 | (40.3) |
| 6/30/02[2] | 7,060,188 | 7,252,118 | 191,930 | 97.4 | 1,334,335 | 14.4 |
| 6/30/03 | 6,999,647 | 7,659,846 | 660,199 | 91.4 | 1,405,058 | 47.0 |

**Health Subsidy**

| Valuation Date | Valuation Assets | Actuarial Accrued Liability | Unfunded AAL | Funded Ratio | Member Payroll | UAAL Ratio to Payroll |
|---|---|---|---|---|---|---|
| 6/30/99 | $724,429 | $614,093 | ($110,336) | 118.0% | $1,068,124 | (10.3)% |
| 6/30/00[1] | 810,303 | 854,066 | 43,763 | 94.9 | 1,182,203 | 3.7 |
| 6/30/01 | 844,984 | 807,905 | (37,079) | 104.6 | 1,293,350 | (2.9) |
| 6/30/02[2] | 853,916 | 931,964 | 78,048 | 91.6 | 1,334,335 | 5.8 |
| 6/30/03[2,3] | 848,983 | 1,205,811 | 356,828 | 70.4 | 1,405,058 | 25.4 |

[1] Reflects significant increase in maximum benefits
[2] Reflects assumption changes
[3] Reflects significant increase in maximum benefits and underreporting of certain 2002 subsidies


Funded Status of Retirement Benefits
Billions
8
7
6
5
4
3
2
1
0
96.6%
99.8%
98.3%
100.9%
104.0%
109.1%
108.1%
97.9%
91.4%
1995
1996
1997
1998
1999
2000
2001
2002
2003
Assets (Actuarial)
Active Liability
Pensioner Liability


Funded Status of Health Subsidy Benefits
Millions
1200
1000
800
600
400
200
0
51.6%
52.3%
87.2%
100.9%
118.0%
94.9%
104.6%
91.6%
70.4%
1995
1996
1997
1998
1999
2000
2001
2002
2003
Assets (Actuarial)
Active with 10 Years of Service
Retire

Los Angeles City Employees' Retirement System

**Actuarial Balance Sheet – June 30, 2003**

($ in Thousands)

**Present Resources and Expected Future Resources**

| | | Retirement | Health | Total |
|---|---|---|---|---|
| A. | Actuarial value of system assets | $6,999,647 | $848,983 | $7,848,630[2] |
| B. | Present value of expected future contributions | | | |
| | 1. Normal costs for present actives[1] | $1,414,900 | $272,509 | $1,687,409 |
| | 2. For unfunded actuarial accrued liability | $660,199 | $356,828 | $1,017,027 |
| | 3. Totals | $2,075,099 | $629,337 | $2,704,436 |
| C. | Present value of expected future member contributions[1] | $865,029 | $0 | $865,029 |
| D. | Total Present and Expected Future Resources | $9,939,775 | $1,478,320 | $11,418,095 |
| A. | To retirants and beneficiaries | $3,991,159 | $645,242 | $4,636,401 |
| B. | To vested terminated members | $91,749 | $14,896 | $106,645 |
| C. | To present active members | | | |
| | 1. Allocated to service rendered prior to valuation date | $3,576,939 | $545,673 | $4,122,612 |
| | 2. Allocated to service to be rendered after valuation date | $2,279,928 | $272,509 | $2,552,437 |
| | 3. Totals | $5,856,867 | $818,182 | $6,675,049 |
| D | Total Present Value of Expected Future Benefit Payments | $9,939,775 | $1,478,320 | $11,418,095 |

[1] Prior to any employer pick-up contributions.
[2] This excludes the Family Death Benefit Insurance Reserve.

## Family Death Benefit Insurance Plan Contribution Rate

Section 511.1 of the City Charter establishes the Family Death Benefit Insurance Plan. This Plan provides protection for the families of Members who die before becoming eligible for service retirement. The benefits provided by the Plan are similar to those provided to survivors under Social Security. Members are eligible for dependent benefits after 18 months of participation in the Family Death Benefit Plan. They are eligible for surviving spouse benefits after ten years of participation in the Plan.

Currently, the City and Members share the cost of the Plan. Each contributes $3.46 per month. This contribution rate is reviewed every two years to determine if the level of contributions is appropriate.
In our opinion, a contribution of $3.70 per month from Members and the City would be sufficient to fund benefits under this plan. This rate will be reviewed next on June 30, 2005.

Los Angeles City Employees' Retirement System

**Comments & Recommendations**

June 30, 2003

**COMMENT A**: At the request of retirement staff, we are issuing an updated valuation report to reflect an assumption change to assumed health inflation. The overall City computed rate again increased significantly from 11.07% to 15.97%. Both rates are **before** the phase-in, adopted by the Retirement Board last fall. This phase-in over three years reflects the contribution increase due to assumption changes resulting from last year's experience study. After the phase-in is considered, the Board policy rates increased from 8.53% (11.07% - 2.54%) to 14.70% (15.97% - 1.27%). For purposes of expensing on City financial statements, this may create a Net Pension Obligation for the shortfall, other factors equal.

We predicted the likelihood of a contribution rate increase last year due to the $1.2 billion of deferred losses (excess of actuarial value of assets over market value due to asset smoothing) as of last year's valuation date. Over the past two years, the valuation rates have increased by almost 10% of payroll. This is likely unprecedented in LACERS' history and is part of a national phenomena.

The retirement contribution increased from 9.22% to 11.95%. About 90% of this increase is due to investment yields falling well short of the assumed net investment return of 8%. The return on actuarial value of assets was 2.26%. This resulted in an actuarial investment loss of $399 million for retirement benefits.

The portion of the contribution related to the Health Subsidy also increased substantially from 1.85% to 4.02%. The reasons for this increase were three-fold:

1. There was a $48.1 million dollar actuarial loss on investments.

2. The 16% change in the valued dollar maximum from $751 to $872 per month was substantially higher than the assumed trend in the 2002 valuation. In certain categories, premiums increased by 20+%. Many premium categories are below the maximum and, thus, are not directly impacted by changes in the maximum.

3. Even though the funded ratio fell significantly from 104.6% to 91.6% in **last** year's valuation, a couple of the updated 2002 HMO premiums were not accurately reported to us. Thus, the increase in this year's health subsidy rate is greater than it should be on a comparative basis to 2002. Similarly, the 2002 increase was lower than it should have been compared to 2001. Please see page 44 for details in regard to the derivation of the subsidy. Both staff and Deloitte/Touche have carefully reviewed this.

**COMMENT B:** We have been directed to use a new long-term medical inflation assumption, decreasing from 6% to 4%, and are assuming such refinement has been or will be adopted by the Retirement Board. This partly offsets the significant increase in the health subsidy contribution rate increase. The new ultimate medical inflation rate is consistent with the inflation assumption for retirement benefits, also at 4%. We have recommended such lower inflation assumption in each of the past two valuations. We also increased some of the HMO premium rates over the next several years to reflect the likelihood of higher near-term increases.

The net impact of the change in assumptions was to lower the contribution rate from 4.73% to 4.02%. In the original valuation report, we showed a rate of 4.84%. However, upon review, it was discovered that one of the 2003 premium rates provided us was overstated.

The implementation of our recommendation may seem counterintuitive given recent sharp increases in medical care. However, we do not believe that it is structurally possible for medical inflation to run at 150% of general inflation in the long-term (LACERS' existing inflation assumption is 4%). For example, the percent of Gross National Product currently spent on medical care is between 14-15%. Given the assumptions before revision, the percent of GNP spent on health care would be roughly 25% in the year 2025. We think such scenario is unlikely.

**COMMENT C**: The aggregate actuarial investment loss of $447 million comes on the heels of last year's loss of $305 million loss. For this purpose, it is helpful to remember that "loss" is compared to your 8% return assumption, not zero.

Even though the market has strongly rebounded in the six months ended September 30, LACERS should be prepared for at least one more year where there will be some more upward pressure on computed rates. There are still $1.16 billion in deferred losses due to smoothing of short-term market performance. In the past three valuations, market returns have lagged the assumed investment rate by **over** two billion dollars.

**COMMENT D**: The funded ratio for retirement benefits decreased from 97.4% to 91.4%. The funded ratio for the health subsidy has decreased from 91.6% to 70.4%. The overall funded ratio dropped from 96.7% to 88.6%. This is markedly higher than the overall 75.5% funded ratio if the ratio instead used market value of assets.

**COMMENT E:** While the overall financial picture is significantly less favorable than two years ago, are there any optimistic signs? Yes, even if they are very faint right now. This valuation does not reflect the economic results of a second consecutive strong quarter just ended. For the first time in three years, market-to-market returns were positive, roughly 3.6%. While still shy of the assumed return, it is much better than the negative market returns reflected in the two previous valuations.

Even though the existing deferred losses of $1.16 billion is daunting, it is slightly less than the 2002 deferred losses.

Also, bear in mind that LACERS, unlike many other entities, does actuarially advance fund for health subsidy benefits. Most governmental entities fund such obligations on either a "pay as you go" or "as funds are available" basis. Thus, LACERS is more conservative in this regard than many counterparts.

**COMMENT F**: We recommend that the discount for pick ups (aka, "defrayals") continue to be 1%.

**COMMENT G:** We again recommend to make the health subsidy valuation more consistent with the retirement valuation if it is desired to be consistent with the manner retirement benefits are valued. We

inherited methodology where only those active members with 10+ years of service are valued. For retirement benefits, all actives are valued.

Last, it is possible with the significant changes in the medical arena that LACERS is experiencing greater utilization than has been assumed. We will review this experience and offer future comments. Ironically, LACERS is affected by the relative attractiveness (or lack thereof) of other retiree medical plans. This is because we assume that there is less than 100% participation. For example, we assume 20% of members will decline medical coverage and 35% will decline dental coverage. Since many other medical plans have passed along some of the recent substantial cost increases to employees, the LACERS plan probably looks more attractive today than several years ago. This is particularly true for those who have less than 25 years of service and thus receive less than the maximum benefit.

# SUMMARY OF BENEFIT PROVISIONS

# &

# VALUATION DATA SUBMITTED BY RETIREMENT SYSTEM

Los Angeles City Employees' Retirement System

**Summary of Benefit Provisions – Retirement**

Effective June 30, 2003

1. Membership Requirements – First day of employment

2. Final Compensation for Benefit Determination

   Highest consecutive twelve months of compensation earnable

3. Service Retirement

   A. Eligibility: Age 55 with 10 years of service, or age 70 regardless of service, or after 30 years, regardless of age

   B. Benefit Formula Per Year of Service : 2.16% of Final Compensation

   Reduced: For retirement ages below age 60

| Age | Reduction | Age | Reduction |
|---|---|---|---|
| 50 | 22.5% | 55 | 7.5% |
| 51 | 19.5 | 56 | 6.0 |
| 52 | 16.5 | 57 | 4.5 |
| 53 | 13.5 | 58 | 3.0 |
| 54 | 10.5 | 59 | 1.5 |

   C. Maximum Benefit – 100% of Final Average Compensation

4. Ordinary Disability

   A. Eligibility – Five years of continuous service.

   B. Benefit Formula – $1/70^{th}$ of Final Compensation for each year of service. This is compared to a minimum benefit, based on projected years of service to age 65. Such minimum is subject to a maximum projection of 23 1/3 years.

(Continued on Next Page)

(Continued)

5. Death

   A. Eligibility – None.

      Benefit – Refund of employee contributions with interest and a limited pension equal to one month of final compensation for each year of service to a maximum of six years payable over two years.

   or

   A1. Eligibility – Duty-related death or if qualified for Disability Retirement

      Benefit – Accrued Joint & 100% disability survivor benefit to Qualified Surviving Spouse or Domestic Partner.

      In either case, applicable Family Death Insurance Benefits will also be paid.

   or

   A2. Eligibility – Qualified for Service Retirement.

   B2. Benefit – Accrued Joint and 100% survivor benefit to Qualified Surviving Spouse or Domestic Partner.

6. Death After Retirement

   A. Service or Disability Retirement

   - 50% of member's unmodified allowance continued to eligible spouse or domestic partner or modified continuance selected by the member at the time of retirement.
   - $2,500 lump sum benefit payable to member's beneficiary
   - If applicable, return of any unused employee contributions and interest

(Continued on Next Page)

Los Angeles City Employees' Retirement System

**Summary of Benefit Provisions - Retirement**

Effective June 30, 2003

(Continued)

7. Withdrawal Benefits

   A. Less than Five Years of Service

      Refund of accumulated employee contributions with interest.

   B. Five or More Years of Service

      If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire. The benefit payable is the same as Service Retirement, except that there must be at least ten years elapsed from original membership (unless the member has attained age 70).

8. Post-retirement Cost-of-Living Benefits

   Each July 1, benefits are increased by a maximum of 3% based on increases in the local CPI.

9. City Contributions

   Determined by Projected Unit Credit cost method with funding of each year's actuarial gain (loss) spread as a level percent of payroll over 15 years. Liability changes due to benefit and assumption changes are amortized over 30 years.

10. Member Contributions

    6% of pay for post-January 1, 1983 hires. Please refer to Appendix A for entry-age based rates for earlier hires.

NOTE: The summary of major plan provisions is designed to outline principal plan benefits. If the City should find the plan summary not in accordance with the actual provisions, the City should alert the actuary immediately so proper provisions are valued.

Los Angeles City Employees' Retirement System

**Summary of Health Subsidy Benefits**

Division 4, Chapter 11 of the Administrative Code provides that a health insurance subsidy be paid to retired Members of the Los Angeles City Employees' Retirement System. This subsidy is a monthly payment which retirees apply to the cost of health insurance. Retirees can select among a variety of plans sponsored by LACERS. In general, members are eligible for subsidy at retirement after age 55 with 10 years of service, or retirement at age 70 (if it was compulsory).

Eligibility: Members who retire with ten years of service. Subsidy begins at age 55. Medical benefits are available to an eligible spouse or domestic partner after the death of the eligible Member.

Subsidy: <u>Medical</u>

*For retired Members under age 65 or 65 and over with only Medicare Part B:*

A percentage of the Maximum Subsidy, or the actual premium paid to a City approved health carrier, if less. The percentage is 4% for each year of service, up to a maximum of 100% after 25 years.

Maximum Subsidy: As of July 1, 2003, this amount is $872 per month. This is an increase from the previous maximum of $751.

*For retired Members age 65 and over with Medicare Parts A and B:*

A percentage of the premium paid to a City approved health carrier. The percentage is 75% with 10 – 14 years of service, 90% for 15 – 19 years of service and 100% for 20 years of service or more. Medicare Part B premiums are also paid ($58.70 for 2003).

Maximum Subsidy: As of July 1, 2003, this amount is $503.75 per month.

*For eligible surviving spouse or domestic partners:*

The same subsidy provided to the Member, except this benefit is limited to the Kaiser single party premium for Members without Medicare A and B. Surviving spouses do not receive a subsidy for Medicare Part B premiums or for dental. As of July 1, 2003, this amount is $400.04 per month.

<u>Dental</u>

4% per year of service to a maximum of the premium for Blue Cross PPO or Safeguard (HMO).

Los Angeles City Employees' Retirement System

**Summary of Health Subsidy Benefits**

Monthly Premiums for City-Approved Health Carriers as of January 1, 2003, before application of maximum subsidies:

| | | | |
|---|---|---|---|
| **Medical** | | | |
| Less than age 65 | Kaiser HMO | PacifiCare/SH | Blue Cross PPO |
| Married | $800.08 | $751.75 | $1,456.92 |
| Single | 400.04 | 418.58 | 663.19 |
| Age 65 and over | | | |
| Married | 345.96 | 379.58 | 571.94 |
| Single | 172.98 | 191.13 | 294.94 |
| **Dental** | $13.28 (Safeguard) | | $38.38 |

Los Angeles City Employees' Retirement System

**Summary of Reported Asset Information**

Submitted for the June 30, 2003 Valuation

(in thousands)

| Report Market Value of Assets | |
|---|---|
| Cash/Short-term | $410,784 |
| Receivables | 204,239 |
| Stocks | 4,122,931 |
| Bonds | 1,311,953 |
| Real Estate | 346,059 |
| Mortgages | 223,288 |
| Miscellaneous | 336,045 |
| Total Market Value | $6,955,299 |
| Liabilities | 246,257 |
| Net Market Value | $6,709,042 |

| Reserves | |
|---|---|
| Member Deposit Reserve | $1,005,888 |
| Basic Pension Reserve | 4,513,731 |
| Family Death Benefit Reserve | 16,778 |
| Annuity Reserve | 448,745 |
| Health Benefits Reserve | 723,900 |
| Total Reserves | $6,709,042 |

Revenues and Disbursements Among Applicable Reserves

| | |
|---|---|
| **Balance - Beginning of Year** | **$6,713,940** |
| Revenues | |
| Employees' Contributions | 82,866 |
| Employer Contributions | 78,423 |
| Defrayal | 19,108 |
| Family Death Benefit Premium | 202 |
| Earnings | 196,520 |
| Realized & Unrealized Gain & Loss | 73,247 |
| **Total Revenues** | **450,366** |
| Disbursements | |
| Benefit Payments and Refunds | 372,874 |
| Health & Dental Insurance | 47,237 |
| Medicare Reimbursements | 3,548 |
| Admin.& Investment Expense | 31,605 |
| **Total Disbursements** | **455,264** |
| Net Increase/(Decrease) | (4,898) |
| **Balance - End of year** | **$6,709,042** |

Los Angeles City Employees' Retirement System

**Derivation of Actuarial Value of Assets**

| | | Year Ending | | | |
|---|---|---|---|---|---|
| | | June 30, 2003 | June 30, 2002 | June 30, 2001 | June 30, 2000 |
| 1. | Beginning of Year Market Value | $6,713,940,288 | $7,325,308,818 | $7,881,497,296 | $7,279,063,114 |
| 2. | Contributions | 180,598,636 | 155,122,031 | 157,356,785 | 171,189,588 |
| 3. | Benefit Payments | 423,659,098 | 387,864,290 | 355,862,157 | 331,798,058 |
| 4. | Expected Return Based on 8% Assumption | 527,392,805 | 576,715,015 | 622,579,569 | 575,900,710 |
| 5. | Expected End of Year Market Value | 6,998,272,631 | 7,669,281,574 | 8,305,571,493 | 7,694,355,354 |
| 6. | Actual End of Year Market Value | 6,709,041,681 | 6,713,940,288 | 7,325,308,818 | 7,881,497,296 |
| 7. | Gain/(Loss) on Market Value of Assets | (289,230,950) | (955,341,286) | (980,262,675) | 187,141,942 |
| 8. | Return on Market Value | 3.61% | (5.25%) | (4.60%) | 10.60% |
| | Return on Actuarial Value | 2.26% | 4.06% | | |

| | | |
|---|---|---|
| 1. | Market Value at June 30, 2003 | $6,709,041,681 |
| | 2003 (Gain)/Loss x 80% | 231,384,760 |
| | 2002 (Gain)/Loss x 60% | 573,204,772 |
| | 2001 (Gain)/Loss x 40% | 392,105,070 |
| | 2000 (Gain)/Loss x 20% | (37,428,388) |
| 2. | Actuarial Value at June 30, 2003 | 7,868,307,895 |
| 3. | 80% of Market Value at June 30, 2003 | 5,367,233,345 |
| 4. | 120% of Market Value at June 30, 2003 | 8,050,850,017 |
| 5. | Actuarial Value at June 30, 2003 (2), but no less than (3) and no more than (4) | $ 7,868,307,895 |

## Actuarial Value of Assets by Plan

In deriving the actuarial value of assets for retirement benefits for the 2003 valuation, we use the asset-smoothing technique as illustrated on the previous page. The actuarial value of assets for the Family Death Benefit Insurance and Health Subsidy are calculated by adjusting their reserves by the ratio of the total system's actuarial value to market value of assets. To derive the actuarial value of assets for retirement benefits, these values are then subtracted from the total actuarial value.

| | Market Value | Actuarial Value |
|---|---|---|
| 1. Total Value of Assets at June 30, 2002 | $6,709,041,681 | $7,868,307,895 |
| 2. Less Reserves and Liabilities Established for: | | |
| a. Family Death Benefit Insurance Plan | 16,778,034 | 19,677,138 |
| b. Retiree Health Subsidy | 723,899,616 | 848,983,407 |
| c. Total | 740,677,650 | 868,660,545 |
| 3. Net Assets Available for Retirement Benefits at June 30, 2003 (Item 1 less Item 2) | $5,968,364,031 | $6,999,647,350 |

Here is a summary of assets as of the past valuation dates in thousands:

| | 2002 | 2001 | 2000 |
|---|---|---|---|
| 1. Market Value | $6,713,940 | $7,325,309 | $7,881,497 |
| 2. Gross Actuarial Value | 7,934,762 | 7,853,297 | 7,389,277 |
| 3. Family Death Benefit Insurance | 20,658 | 19,531 | 17,609 |
| 4. Retiree Health Subsidy | 853,916 | 844,984 | 810,303 |
| 5. Net Actuarial Value for Retirement: (2) – (3) – (4) | $7,060,188 | $6,988,782 | $6,561,365 |

Los Angeles City Employees' Retirement System

**Membership Summary**

In the June 30, 2003 Actuarial Valuation

| **Actives** | No. | Annual Compensation | Average Annual Compensation | Average Age | Average Service |
|---|---|---|---|---|---|
| 6/30/03 | 26,358 | $1,405,057,848 | $53,307 | 44.8 | 11.8 |
| 6/30/02 | 25,930 | 1,334,335,478 | 51,459 | 44.4 | 11.8 |
| Percent Change | 1.7% | 5.3% | 3.6% | 0.9% | 0.0% |

| **Pensioners/ Beneficiaries** | No. | Annual Benefit[1] | Average Annual Allowance | Average Attained Age | Average Retirement Age |
|---|---|---|---|---|---|
| 6/30/03 | 13,805 | $359,036,215 | $26,008 | 71.5 | 58.8 |
| 6/30/02 | 13,589 | 336,437,038 | 24,758 | 71.5 | 58.9 |
| Percent Change | 1.6% | 6.7% | 5.0% | 0.0% | (0.2%) |

[1] Does not include the July 1 Cola of 3.0% for both 2002 and 2003.

| **Deferred Vesteds** | No. | Employee Contributions | Annual Accrued Benefits | Average Contribution Balance | Average Annual Accrued Benefits | Average Age | Average Service |
|---|---|---|---|---|---|---|---|
| 6/30/03 | 1,082[2] | $42,610,747 | $14,695,830 | $39,381 | $13,582 | 47.1 | 12.3 |
| 6/30/02 | 957 | 34,807,353 | 12,199,821 | 36,371 | 12,748 | 46.5 | 11.7 |
| Percent Change | 13.1% | 22.4% | 20.5% | 8.3% | 6.5% | 1.3% | 5.1% |

| **Inactives** | No. | Employee Contributions | Average Contribution Balance | Average Age | Average Service |
|---|---|---|---|---|---|
| 6/30/03 | 1,511[2] | $4,510,334 | $2,985 | 39.5 | 1.1 |
| 6/30/02 | 1,370 | 3,875,663 | 2,829 | 39.3 | 1.1 |
| Percent Change | 10.3% | 16.4% | 5.5% | 0.5% | 0.0% |

[2] Approximately 300 active data records were found to be inactive or deferred vested based on their last payroll activity.

Los Angeles City Employees' Retirement System

**Historical Membership Summary**

In the June 30, 2003 Actuarial Valuation

## Actives

| | | | Averages | | | |
|---|---|---|---|---|---|---|
| | No. | Annual Compensation | Compensation | Percentage Increase | Age | Years of Service |
| 6/30/96 | 22,319 | $957,422,907 | $42,897 | -- % | 43.9 | 12.5 |
| 6/30/97 | 22,219 | 990,616,145 | 44,584 | 3.9% | 44.2 | 12.9 |
| 6/30/98 | 22,091 | 1,011,857,180 | 45,804 | 2.7% | 44.5 | 13.2 |
| 6/30/99 | 22,504 | 1,068,124,413 | 47,464 | 3.6% | 44.6 | 13.1 |
| 6/30/00 | 24,234 | 1,182,202,945 | 48,783 | 2.8% | 44.4 | 12.3 |
| 6/30/01 | 25,654 | 1,293,350,061 | 50,415 | 3.3% | 44.3 | 11.8 |
| 6/30/02 | 25,930 | 1,334,335,478 | 51,459 | 2.1% | 44.4 | 11.8 |
| 6/30/03 | 26,358 | 1,405,057,848 | 53,307 | 3.6% | 44.8 | 11.8 |

## Retirants and Beneficiaries

| | | | Averages | | |
|---|---|---|---|---|---|
| | No. | Annual Total Pensions | Pension | Percentage Increase | Attained Age |
| 6/30/96 | 12,242 | $219,872,033 | $17,960 | -- % | 71.6 |
| 6/30/97 | 12,698 | 240,692,161 | 18,955 | 5.5% | 71.5 |
| 6/30/98 | 12,591 | 259,378,957 | 20,600 | 8.7 % | 71.5 |
| 6/30/99 | 12,843 | 277,022,689 | 21,570 | 4.7% | 71.5 |
| 6/30/00 | 13,058 | 290,899,998 | 22,278 | 3.3% | 71.6 |
| 6/30/01 | 13,365 | 316,057,216 | 23,648 | 6.2% | 71.5 |
| 6/30/02 | 13,589 | 336,437,038 | 24,758 | 4.7% | 71.5 |
| 6/30/03 | 13,805 | 359,036,215 | 26,008 | 5.0% | 71.5 |

Los Angeles City Employees' Retirement System

**Retirants and Beneficiaries June 30, 2003**

Tabulated by Type of Allowances Being Paid

| Type of Allowance | No. | Annual Allowance[1] | Average Annual Allowance |
|---|---|---|---|
| **Service Retirement** | | | |
| Unmodified | | | |
| 50% Continuance | 4,278 | $125,795,828 | $29,405 |
| No Continuance | 2,721 | 73,956,530 | 27,180 |
| Optional Forms | | | |
| 100% Continuance | 1,365 | 46,384,879 | 33,982 |
| 75% Continuance | 666 | 27,346,644 | 41,061 |
| 60% Continuance | 620 | 24,714,665 | 39,862 |
| Not Coded | 125 | 1,692,600 | 13,541 |
| Other | 28 | 1,311,386 | 46,835 |
| Beneficiary | 2,515 | 40,762,862 | 16,208 |
| Total Service Retirement | 12,318 | $341,965,394 | $27,761 |
| **Disability Retirement** | | | |
| Unmodified | | | |
| 50% Continuance | 304 | $3,871,779 | $12,736 |
| No Continuance | 305 | 4,075,862 | 13,363 |
| Optional Forms | | | |
| 100% Continuance | 40 | 555,794 | 13,895 |
| 75% Continuance | 15 | 212,538 | 14,169 |
| 60% Continuance | 7 | 134,399 | 19,200 |
| Not Coded | 168 | 2,204,563 | 13,122 |
| Beneficiary | 570 | 5,166,859 | 9,065 |
| Total Disability Retirement | 1,409 | $16,221,794 | $11,513 |
| **Other Beneficiaries** | 78 | $849,027 | $10,885 |
| Total Allowances Being Paid | 13,805 | $359,036,215 | $26,008 |

[1] Benefits do not include COLA increase on July 1, 2003.

Los Angeles City Employees' Retirement Systems

Active Members

**By Attained Ages and Years of Service**

| Age | Years of Service to Valuation Date | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 + | Total |
| 15-19 NO. | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| TOT PAY | 121,458 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121,458 |
| AVG PAY | 17,351 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17,351 |
| 20-24 NO. | 354 | 137 | 88 | 27 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 617 |
| TOT PAY | 8,613,282 | 4,628,162 | 3,396,324 | 1,057,117 | 271,107 | 167,232 | 0 | 0 | 0 | 0 | 0 | 0 | 18,133,223 |
| AVG PAY | 24,331 | 33,782 | 38,595 | 39,152 | 38,730 | 41,808 | 0 | 0 | 0 | 0 | 0 | 0 | 29,389 |
| 25-29 NO. | 428 | 405 | 398 | 244 | 137 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 1,731 |
| TOT PAY | 13,082,325 | 16,351,661 | 16,770,939 | 11,430,801 | 6,664,192 | 5,770,294 | 0 | 0 | 0 | 0 | 0 | 0 | 70,070,213 |
| AVG PAY | 30,566 | 40,374 | 42,138 | 46,848 | 48,644 | 48,490 | 0 | 0 | 0 | 0 | 0 | 0 | 40,480 |
| 30-34 NO. | 333 | 388 | 366 | 373 | 283 | 575 | 184 | 13 | 0 | 0 | 0 | 0 | 2,515 |
| TOT PAY | 12,105,748 | 17,240,653 | 15,656,450 | 18,367,418 | 14,750,707 | 30,818,977 | 10,297,075 | 676,582 | 0 | 0 | 0 | 0 | 119,913,610 |
| AVG PAY | 36,354 | 44,435 | 42,777 | 49,242 | 52,123 | 53,598 | 55,962 | 52,045 | 0 | 0 | 0 | 0 | 47,679 |
| 35-39 NO. | 316 | 272 | 318 | 327 | 237 | 652 | 980 | 453 | 7 | 0 | 0 | 0 | 3,562 |
| TOT PAY | 11,125,853 | 12,546,840 | 13,959,819 | 16,155,148 | 11,876,078 | 35,909,808 | 58,453,897 | 24,932,127 | 382,949 | 0 | 0 | 0 | 185,342,519 |
| AVG PAY | 35,208 | 46,128 | 43,899 | 49,404 | 50,110 | 55,076 | 59,647 | 55,038 | 54,707 | 0 | 0 | 0 | 52,033 |
| 40-44 NO. | 285 | 230 | 299 | 271 | 211 | 521 | 1,028 | 1,200 | 399 | 9 | 0 | 0 | 4,453 |
| TOT PAY | 9,897,729 | 10,049,450 | 13,603,631 | 14,090,807 | 10,405,624 | 28,073,221 | 62,020,039 | 75,215,325 | 22,589,838 | 538,075 | 0 | 0 | 246,483,737 |
| AVG PAY | 34,729 | 43,693 | 45,497 | 51,996 | 49,316 | 53,883 | 60,331 | 62,679 | 56,616 | 59,786 | 0 | 0 | 55,352 |
| 45-49 NO. | 260 | 199 | 209 | 210 | 146 | 416 | 836 | 1,041 | 647 | 318 | 20 | 0 | 4,302 |
| TOT PAY | 8,430,615 | 8,770,401 | 9,401,722 | 10,675,198 | 7,387,142 | 22,826,496 | 49,750,623 | 65,986,372 | 40,157,257 | 18,368,671 | 1,078,106 | 0 | 242,832,603 |
| AVG PAY | 32,425 | 44,072 | 44,984 | 50,834 | 50,597 | 54,871 | 59,510 | 63,387 | 62,067 | 57,763 | 53,905 | 0 | 56,446 |
| 50-54 NO. | 246 | 143 | 202 | 162 | 136 | 322 | 569 | 772 | 524 | 636 | 260 | 7 | 3,979 |
| TOT PAY | 7,978,560 | 6,295,768 | 9,622,870 | 7,619,697 | 7,574,594 | 16,717,547 | 33,752,207 | 47,230,313 | 32,877,475 | 42,394,847 | 16,617,860 | 461,031 | 229,142,769 |
| AVG PAY | 32,433 | 44,026 | 47,638 | 47,035 | 55,696 | 51,918 | 59,318 | 61,179 | 62,743 | 66,659 | 63,915 | 65,862 | 57,588 |
| 55-59 NO. | 173 | 86 | 107 | 95 | 92 | 206 | 358 | 521 | 331 | 407 | 427 | 126 | 2,929 |
| TOT PAY | 5,862,623 | 3,287,671 | 4,797,589 | 4,524,829 | 4,543,217 | 10,086,346 | 20,611,911 | 31,243,629 | 20,542,005 | 28,486,705 | 31,286,288 | 8,789,671 | 174,062,484 |
| AVG PAY | 33,888 | 38,229 | 44,837 | 47,630 | 49,383 | 48,963 | 57,575 | 59,969 | 62,060 | 69,992 | 73,270 | 69,759 | 59,427 |
| 60-64 NO. | 85 | 50 | 49 | 47 | 45 | 116 | 184 | 278 | 153 | 144 | 142 | 121 | 1,414 |
| TOT PAY | 2,337,334 | 1,711,424 | 1,874,856 | 2,210,737 | 2,239,457 | 5,188,350 | 9,839,678 | 16,073,206 | 9,276,712 | 8,588,257 | 10,014,987 | 9,069,082 | 78,424,080 |
| AVG PAY | 27,498 | 34,228 | 38,262 | 47,037 | 49,766 | 44,727 | 53,477 | 57,817 | 60,632 | 59,641 | 70,528 | 74,951 | 55,463 |
| 65-99 NO. | 84 | 23 | 25 | 19 | 19 | 89 | 96 | 159 | 96 | 88 | 68 | 83 | 849 |
| TOT PAY | 1,706,439 | 432,808 | 750,840 | 613,192 | 597,851 | 2,346,872 | 4,852,620 | 9,239,341 | 5,735,508 | 4,669,537 | 4,075,039 | 5,511,104 | 40,531,152 |
| AVG PAY | 20,315 | 18,818 | 30,034 | 32,273 | 31,466 | 26,369 | 50,548 | 58,109 | 59,745 | 53,063 | 59,927 | 66,399 | 47,740 |
| TOT NO. | 2,571 | 1,933 | 2,061 | 1,775 | 1,313 | 3,020 | 4,235 | 4,437 | 2,157 | 1,602 | 917 | 337 | 26,358 |
| TOT AMT | 81,261,968 | 81,314,839 | 89,835,040 | 86,744,942 | 66,309,967 | 157,905,144 | 249,578,050 | 270,596,895 | 131,561,744 | 103,046,093 | 63,072,279 | 23,830,888 | 1,405,057,848 |
| AVG AMT | 31,607 | 42,067 | 43,588 | 48,870 | 50,503 | 52,286 | 58,932 | 60,986 | 60,993 | 64,323 | 68,781 | 70,715 | 53,307 |

Los Angeles City Employees' Retirement System

**Distribution of Pensioners by Plan Year of Retirement and by Attained Age as of June 30, 2003**

Retirement Benefits

| Year Retired | Under 50 | 50-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-89 | 90+ | Total |
|---|---|---|---|---|---|---|---|---|---|
| Pre-1984 | 2 | 82 | 85 | 125 | 166 | 618 | 1,828 | 527 | 3,433 |
| 1984 | 4 | 12 | 6 | 16 | 24 | 183 | 186 | 6 | 437 |
| 1985 | 0 | 13 | 10 | 14 | 65 | 129 | 178 | 5 | 414 |
| 1986 | 0 | 14 | 7 | 18 | 74 | 108 | 112 | 2 | 335 |
| 1987 | 2 | 16 | 11 | 19 | 121 | 138 | 112 | 2 | 421 |
| 1988 | 4 | 15 | 10 | 15 | 134 | 112 | 110 | 1 | 401 |
| 1989 | 0 | 21 | 17 | 19 | 152 | 132 | 73 | 2 | 416 |
| 1990 | 9 | 18 | 20 | 76 | 146 | 113 | 56 | 1 | 439 |
| 1991 | 8 | 17 | 11 | 82 | 112 | 96 | 39 | 3 | 368 |
| 1992 | 9 | 22 | 17 | 107 | 123 | 78 | 36 | 0 | 392 |
| 1993 | 10 | 9 | 9 | 136 | 133 | 73 | 49 | 3 | 422 |
| 1994 | 9 | 22 | 15 | 161 | 119 | 79 | 36 | 1 | 442 |
| 1995 | 24 | 32 | 64 | 137 | 104 | 54 | 15 | 1 | 431 |
| 1996 | 18 | 37 | 97 | 141 | 112 | 52 | 24 | 0 | 481 |
| 1997 | 16 | 43 | 219 | 153 | 91 | 48 | 15 | 0 | 585 |
| 1998 | 18 | 97 | 211 | 182 | 112 | 42 | 18 | 0 | 680 |
| 1999 | 22 | 117 | 206 | 115 | 67 | 44 | 9 | 1 | 581 |
| 2000 | 23 | 203 | 210 | 151 | 91 | 45 | 52 | 5 | 780 |
| 2001 | 19 | 238 | 199 | 138 | 74 | 50 | 70 | 9 | 797 |
| 2002 | 19 | 280 | 165 | 121 | 80 | 46 | 56 | 15 | 782 |
| 2003 | 25 | 322 | 155 | 109 | 63 | 29 | 59 | 6 | 768 |
| TOTALS | 241 | 1,630 | 1,744 | 2,035 | 2,163 | 2,269 | 3,133 | 590 | 13,805 |

Age at Retirement: 58.8
Attained Age: 71.5
Annual Pension: $26,008 prior to 7-1-03 Cola

# ACTUARIAL COST METHODS, ACTUARIAL ASSUMPTIONS

# AND

# DEFINITIONS OF TECHNICAL TERMS

## Actuarial Cost Methods - June 30, 2003

Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using a projected unit credit actuarial cost method. Future, anticipated compensation increases are incorporated into this method.

Financing of Unfunded Actuarial Accrued Liability. Each year's actuarial gain (loss) is funded (or credited, if negative) in fifteen installments. Any liability changes due to benefit or assumption changes are funded over 30 years.

Active member payroll in aggregate is assumed to increase 4% a year for the purpose of determining the level percent contributions, although individual annual pay increase rates will increase by greater percentages per year for the purpose of projecting individual pays.

Deferred Member Actuarial Accrued Liability. Data provided includes date of hire, date of birth, date of termination, benefit service, and average compensation. Accrued benefits were calculated based on the data provided.

## Actuarial Assumptions Used for the June 30, 2003 Valuation

The contribution requirements and benefit values of the Fund are calculated by applying actuarial assumptions to the benefit provisions and member information furnished, using the actuarial cost methods described on the previous page. The actuarial assumptions were adopted by the Board on September 10, 2002. The Board subsequently elected to phase in assumption changes, reflecting 3.81% of the increase in computed rate, over three years.

The principal areas of financial risk which require assumptions about future experiences are:

(i) long-term rates of investment return to be generated by the assets of the Fund.

(ii) patterns of pay increases to members.

(iii) rates of mortality among members, retirants, and beneficiaries.

(iv) rates of withdrawal of active members (without entitlement to a retirement benefit).

(v) rates of disability among members.

(vi) the age patterns of actual retirements.

In making a valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives -- a period of time which can be as long as a century.

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Actual experience of the system will not coincide exactly with assumed experience, regardless of the choice of the assumptions, the skill of the actuary and the precision of the many calculations made. Each valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate. From time to time it becomes appropriate to modify one or more of the assumptions, to reflect experience trends (but not random year-to-year fluctuations).

(Continued on Next Page)

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

The Projected Unit Credit Actuarial Cost Method was used in conjunction with the following actuarial assumptions.

One year term cost funding method was used for the Family Death Benefit Insurance Plan. There is an adjustment for the funded status of the plan at each valuation date.

The investment return rate used for the actuarial valuation calculations was 8% a year, net of administrative expenses, compounded annually. This assumption, used to equate the value of payments due at different points in time, is adopted by the Retirement Board. The rate is comprised of two elements:

| | |
|---|---|
| Inflation | 4% |
| Real Rate of Return | 4% |
| Total | 8% |

The inflation rate used for the actuarial valuation calculations was 4% per year, compounded annually. It represents the difference between the investment return rate and the assumed real rate of return.

Inflation actually experienced, as measured by the Consumer Price Index for urban wage earners, has been as follows:

Consumer Price Index
Urban Wage Earners and Clerical Workers Before 1978
All Urban Consumers After 1977
10 Year Moving Averages

| | |
|---|---|
| June 30, 1963 | 1.4 % |
| June 30, 1973 | 3.7% |
| June 30, 1983 | 8.4% |
| June 30, 1993 | 3.8% |
| June 30, 2003 | 2.4% |
| **50-Year Average** | **3.9%** |

## Comparison of Selected Actuarial Assumptions to Actual Experience

The salary increase assumptions project annual increases in total member payroll of 4.0%, the inflation portion of the individual pay increase assumptions. In effect, this assumes no change in the number of active members. Changes actually experienced in areas related to these assumptions have been as follows:

| | 7/01/02-6/30/03 | 7/01/01-6/30/02 | 7/01/00-6/30/01 | 7/01/99-6/30/00 | 7/01/98-6/30/99 | 3-Year Average | 5-Year Average |
|---|---|---|---|---|---|---|---|
| Inflation[1] | 3.0% | 2.8% | 3.7% | 2.7% | 1.9% | 3.2% | 2.8% |
| Assumed | | | | | | 4.0% | 4.0% |
| Average Pay Increase | 3.6% | 2.1% | 3.3% | 2.8% | 3.6% | 3.0% | 3.1% |
| Assumed | | | | | | 4.0% | 4.0% |
| Merit & Longevity Pay Increase | 0.6% | (0.7%) | (0.4%) | 0.1% | 1.7% | (0.2%) | 0.3% |
| Assumed | 1.0% | 1.0% | Varied depending on age | | | | |
| Total Payroll | 5.3% | 3.2% | 9.4% | 10.7% | 5.6% | 5.9% | 6.8% |
| Assumed | | | | | | 4.0% | 4.0% |
| Investment Return Rate[2] | 2.3% | 4.1% | 9.1% | 13.6% | 14.4% | 5.2% | 8.6% |
| Assumed | | | | | | 8.0% | 8.0% |
| Real Rate of Investment Return | (0.7%) | 1.3% | 5.4% | 10.9% | 12.5% | 2.0% | 5.8% |
| Assumed | | | | | | 4.0% | 4.0% |

[1] Based on Consumer Price Index for Los Angeles-Riverside-Orange County, All Items, 1982-84=100.

[2] Based on actuarial value of assets NOT market value or book value.

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

Compensation increase rates used to project current pays to those, upon which a benefit will be based, are represented by the following table.

| Annual Rate of Compensation Increase | |
|---|---|
| Inflation | 4% |
| plus | |
| Merit & Longevity | 1% |

Members with less than 5 years of service receive an additional merit increase based on the following table:

| Service | All Members |
|---|---|
| 0 | 4.0% |
| 1 | 3.5 |
| 2 | 3.0 |
| 3 | 2.0 |
| 4 | 1.5 |

Cost-of-Living Increase: 3.0% per year

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

Rates of separation from active membership are shown below (rates do not include separation on account of retirement or death). This assumption measures the probabilities of members remaining in employment.

| | % of Active Members Separating Within Next Year | | | |
|---|---|---|---|---|
| Sample | Withdrawal | Death | | Disability |
| Ages | All Members | Men | Women | All Members |
| 20 | 6.25% | .03% | .02% | .00% |
| 25 | 5.75 | .04 | .03 | .01 |
| 30 | 5.25 | .06 | .05 | .02 |
| 35 | 3.75 | .08 | .07 | .07 |
| 40 | 2.75 | .12 | .10 | .12 |
| 45 | 2.25 | .17 | .14 | .17 |
| 50 | 1.70 | .23 | .18 | .20 |
| 55 | 1.45 | .32 | .26 | .20 |
| 60 | 1.20 | .44 | .42 | .00 |

All deaths are assumed to be non-duty related.

NOTE: Withdrawal rates for actives with less than 5 years of service are as follows and supercede the above probabilities:

| Service | Rate |
|---|---|
| 0 | 8.25% |
| 1 | 7.25 |
| 2 | 6.75 |
| 3 | 6.50 |
| 4 | 6.25 |

The post-retirement mortality table used was the 1994 Male Group Annuity Mortality Table, setback three years for females. This assumption is used to measure the probabilities of members dying after retirement and the probabilities of each benefit payment being made after retirement. The 1981 Disability Mortality Table (General) is used for male disabilitants, the table was setback five years for female disabilitants. Related values are shown below.

| | Future Life Expectancy (Years) | | % Dying Within Next Year | |
|---|---|---|---|---|
| | Non-disabled Retirees | | Non-disabled Retirees | |
| Sample Ages | Men | Women | Men | Women |
| 45 | 34.7 | 37.5 | .17% | .13% |
| 50 | 30.0 | 32.8 | .28 | .20 |
| 55 | 25.4 | 28.2 | .48 | .35 |
| 60 | 21.2 | 23.7 | .86 | .60 |
| 65 | 17.3 | 19.6 | 1.56 | 1.09 |
| 70 | 13.8 | 15.8 | 2.55 | 1.94 |
| 75 | 10.7 | 12.5 | 4.00 | 3.06 |

| | Future Life Expectancy (Years) | | % Dying Within Next Year | |
|---|---|---|---|---|
| Sample Ages | Disabled Retirees | | Disabled Retirees | |
| | Men | Women | Men | Women |
| 45 | 23.6 | 26.2 | 2.08% | 1.76% |
| 50 | 21.1 | 23.6 | 2.44 | 2.08 |
| 55 | 18.7 | 21.1 | 2.84 | 2.44 |
| 60 | 16.4 | 18.7 | 3.30 | 2.84 |
| 65 | 14.1 | 16.4 | 3.79 | 3.30 |
| 70 | 11.7 | 14.1 | 4.37 | 3.79 |
| 75 | 9.2 | 11.7 | 5.53 | 4.37 |

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

The rates of retirement used to measure the probability of eligible members retiring during the next year.

| Retirement Ages | All Members |
|---|---|
| 50 | 1.0% |
| 51 | 1.0 |
| 52 | 1.0 |
| 53 | 1.0 |
| 54 | 2.0 |
| 55 | 9.0 |
| 56 | 10.0 |
| 57 | 10.0 |
| 58 | 12.0 |
| 59 | 12.0 |
| 60 | 20.0 |
| 61 | 15.0 |
| 62 | 25.0 |
| 63 | 10.0 |
| 64 | 15.0 |
| 65 | 26.0 |
| 66 | 23.0 |
| 67 | 23.0 |
| 68 | 23.0 |
| 69 | 23.0 |
| 70 | 100.0 |

Once a member is eligible for retirement, we assumed that the probability of withdrawal is "turned-off"; thus the liability is valued as a potentially immediate benefit rather than a deferred benefit at age 60.

For current deferred vested members, we assume that benefits will commence at the later of age 60 or current attained age. We assume that none of the deferred vested members are reciprocal.

Employee contributions are assumed to accumulate at a rate of 6.50%. Employee contribution interest is based on the 5-Year U.S. Treasury Note.

Members are assumed to have two children with 3-year age difference. The youngest is assumed to turn 18 when the participant is 45. (This is used for the valuation of the Family Death Benefit Insurance Plan)

**Actuarial Assumptions Used for the June 30, 2003 Valuation**

(Continued)

Survivor Benefits. Marital status and spouses' census data were imputed with respect to active and deferred members.

Marital Status – 76% of men and 50% of women were assumed married or having a domestic partner at retirement.

Spouse Census – Women were assumed to be 4 years younger than men.

Retention Rates

Probability of Working to Age 55

| Age | |
|---|---|
| Under 25 | 26.0% |
| 25-29 | 35.5 |
| 30-34 | 46.9 |
| 35-39 | 58.1 |
| 40-44 | 68.8 |
| 45-49 | 78.8 |
| 50-54 | 90.4 |

Probability of Working 10 Years

| Age | |
|---|---|
| 45-49 | 61.9% |
| 50-54 | 30.5 |
| 55-59 | 13.3 |
| 60-64 | 8.6 |

## Valuation of Health Subsidy Benefits

The System is building a reserve through the advance funding of the health insurance subsidy for current retirees and for active members with sufficient service to receive a health subsidy (ten years). The actuarial value of the reserve available at June 30, 2003 is $848,983,407 (the market value is $723,899,616).

In determining the health subsidy benefits budget amounts for the fiscal year 2004-2005, we have used the same funding method and methods of amortization used in the funding of the retirement benefits. We have also used the same economic and demographic assumptions as those used in the retirement valuation. In addition, special health cost trend assumptions were used. A summary of the economic assumptions follows:

- 8.0% annual interest
- graded medical cost trend of 7.75% in 2003-2004 decreasing gradually to 4.0% in 2014 and beyond for benefits paid to members under age 65, and benefits paid to members without Medicare, who are enrolled in the PPO.
- graded medical cost trend of 10.75% in 2003-2004 decreasing gradually to 4.0% in 2014 and beyond for benefits paid to members under age 65, and benefits paid to members without Medicare, who are enrolled in an HMO.
- medical cost trend rates of 15.0% (25.0% for Kaiser) in 2003-2004 decreasing gradually to 4.0% in 2016 and beyond for benefits paid after age 65 from System HMO plans
- graded medical cost trend rates of 10.75%, decreasing gradually to 4.0% in 2016 and beyond for benefits paid after age 65 for Members who join the PPO.
- graded dental trend rates of 7.25% in 2003-2004 decreasing to 4.0% in 2014 and beyond
- Medicare Part B premium trend rates of 6.0%, decreasing gradually to 4.0% in 2016.

Updated health cost trend assumptions were adopted as of June 30, 2003. The ultimate health inflation rate was changed from 6.0% to 4.0%.

Los Angeles City Employees' Retirement System

**Summary of Actuarial Assumptions and Methods**

**Used for Valuation of Health Subsidy Benefits**

| | |
|---|---|
| Methods: | Future cash flows were projected by applying medical trend rate factors to current annual claim rates. |
| Discount on Projected Cash Flows: | 8% per year. |
| Funding Method: | Projected Unit Credit Funding Method (only those members with 10 or more years of service are valued). |

Medical Trend Rates:

| | Medical Trend | | | | Dental Trend | Medicare Part B |
|---|---|---|---|---|---|---|
| | Pre-65 | | Post-65 | | | |
| | PPO | HMO | PPO | HMO[1] | | |
| 2003-2004 | 7.75% | 10.75% | 10.75% | 15.00% | 7.25% | 6.00% |
| 2004-2005 | 7.50% | 10.50% | 10.50% | 14.00% | 7.00% | 6.00% |
| 2005-2006 | 7.25% | 8.75% | 9.25% | 11.50% | 6.75% | 6.00% |
| 2006-2007 | 7.00% | 7.00% | 8.00% | 9.00% | 6.50% | 6.00% |
| 2007-2008 | 6.50% | 6.50% | 7.50% | 8.50% | 6.25% | 6.00% |
| 2008-2009 | 6.00% | 6.00% | 7.00% | 8.00% | 6.00% | 6.00% |
| 2009-2010 | 5.50% | 5.50% | 6.50% | 7.50% | 5.50% | 5.75% |
| 2010-2011 | 5.00% | 5.00% | 6.00% | 7.00% | 5.00% | 5.50% |
| 2011-2012 | 4.75% | 4.75% | 5.50% | 6.50% | 4.75% | 5.25% |
| 2012-2013 | 4.50% | 4.50% | 5.00% | 6.00% | 4.50% | 5.00% |
| 2013-2014 | 4.25% | 4.25% | 4.75% | 5.50% | 4.25% | 4.75% |
| 2014-2015 | 4.00% | 4.00% | 4.50% | 5.00% | 4.00% | 4.50% |
| 2015-2016 | 4.00% | 4.00% | 4.25% | 4.50% | 4.00% | 4.25% |
| 2016+ | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |

[1] An increase of 25% is assumed for Kaiser for 2003-2004 in anticipation of a large increase in rates for that plan.

Los Angeles City Employees' Retirement System

**Summary of Actuarial Assumptions and Methods**

**Used for Valuation of Health Subsidy Benefits**

| | |
|---|---|
| Mortality: | UP 94 with a 3 year age setback for females. |
| Probability of Termination of Employment: | Same rates as used in valuation of retirement benefits. See retirement report for details. |
| City Medical Plan Coverage: | 80% of all retirees are assumed to receive a subsidy for a City approved health carrier. |
| Carrier Election | Participating actives are assumed to follow the same pattern as the current retirees in electing health carriers. For the 2003 valuation, actual retiree election percents for pre-65 are 13% PPO, 66% Kaiser, and 21% Pacificare/SH. Election percents for post-65 are 31% PPO, 57% Kaiser, and 12% Pacificare/SH. |
| Spouses and Domestic Partners: | 91% of male and 66% of female retirees who receive a subsidy are assumed to be married or have a qualified domestic partner and elect dependent coverage. |
| Medicare Coverage: | 85% of retirees are assumed to elect Medicare Parts A & B. |
| Dental Coverage: | 65% of retirees are assumed to elect dental coverage. |
| Spousal Coverage: | With regard to Members who are currently alive, 75% of eligible spouse or domestic partners are assumed to elect continued health coverage after the Member's death. With regard to deceased Members, 70% of the current eligible survivors are assumed to elect health coverage. |
| Asset Valuation Method: | The actuarial value of assets is determined by phasing in, over five years, the difference between the actual and expected realized and unrealized appreciation. The expected appreciation is based on the assumed 8.00% rate of return. The actuarial value of assets can be no less than 80% and no greater than 120% of the market value of assets. |

Los Angeles City Employees' Retirement System

## Summary of Actuarial Assumptions and Methods

## Used for Valuation of Health Subsidy Benefits

The following methodology is used to develop blended subsidy amounts to be used in the valuation of current actives and current deferred vesteds health subsidies. The participation percent for carrier elections is assumed to be the same as the current retiree participation rates. Based on the 7/2003 date, 31.2% of participating post-65 retirees are in the PPO, 56.8% are in Kaiser, and 12.0% are in PacifiCare/SH. Based on the 7/2003 date, 13.1% of participating pre-65 retirees are in the PPO, 66.4% are in Kaiser, and 20.5% are in PacifiCare/SH. These participation percents are used to determine a blend of the different carrier amounts. Utilization assumption factors are then applied to the blended rates. Our valuation software then prorates on service to determine the portion subsidized. This methodology is done separately for pre-65 and post-65, and for single, married, and surviving spouse coverage as shown below. Finally, since subsidies are revised every January 1, we apply a half year of the medical trend assumed from January 1, 2003 to June 30, 2003 to bring rates forward to the July 1 valuation year.

**PRE 65**

| Plan | Participation Percent | Single Maximum Subsidy | Married Maximum Subsidy | Surviving Spouse Maximum Subsidy | Utilization |
|---|---|---|---|---|---|
| PPO | 0.131 | $663.19 | $872.00[1] | $400.04 | 0.80 |
| Kaiser | 0.664 | 400.04 | 800.08 | 400.04 | 0.80 |
| PacifiCare/SH | 0.205 | 418.58 | 751.75 | 400.04 | 0.80 |
| Dental | 1.000 | 38.38 | 38.38 | 0.00 | 0.65 |

| | Blended Monthly Premiums | | | | | | |
|---|---|---|---|---|---|---|---|
| Coverage type | PPO | Kaiser | PacifiCare | Dental | Medicare | Sum | Half Year of Trend |
| Single Pre 65 | $69.50 | $212.50 | $68.65 | $24.95 | $0.00 | $375.60 | $390 |
| Married Pre 65 | 91.39 | 425.00 | 123.29 | 24.95 | 0.00 | 664.62 | 690 |
| Surv Spo Pre 65 | 41.92 | 212.50 | 65.61 | 0.00 | 0.00 | 320.03 | 332 |

[1] Capped by overall maximum subsidy of $872.

Los Angeles City Employees' Retirement System

**Summary of Actuarial Assumptions and Methods**

**Used for Valuation of Health Subsidy Benefits**

| POST 65 Plan | Participation Percent | Single Maximum Subsidy | Married Maximum Subsidy | Surviving Spouse Maximum Subsidy | Utilization |
|---|---|---|---|---|---|
| PPO | 0.312 | $294.94 | $503.75[1] | $294.94 | 0.80 |
| Kaiser | 0.568 | 172.80 | 345.58 | 172.80 | 0.80 |
| PacifiCare/SH | 0.120 | 191.13 | 379.58 | 191.13 | 0.80 |
| Dental | 1.000 | 38.38 | 38.38 | 0.00 | 0.65 |
| Medicare Part B | 1.000 | 58.70 | 58.70 | 0.00 | 0.85 |

**Blended Monthly Premiums**

| Coverage type | PPO | Kaiser | PacifiCare | Dental | Medicare | Sum | Half Year of Trend |
|---|---|---|---|---|---|---|---|
| Single Post65 | $73.62 | $78.52 | $18.35 | $24.95 | $49.90 | $245.33 | $257 |
| Married Post65 | 125.74 | 157.03 | 36.44 | 24.95 | 49.90 | 394.05 | 412 |
| Surv Spo Post65 | 73.62 | 78.52 | 18.35 | 0.00 | 0.00 | 170.49 | 178 |

[1] Capped by post 65 maximum subsidy of $503.75.

For the valuation of current retirees, subsidies valued are based on actual average subsidies paid for pre-65 and post-65 coverage, shown below. Averages are calculated on a per retiree basis and include medical, dental, and Medicare Part B premium subsidies. We apply a half year of the medical trend assumed from January 1, 2003 to June 30, 2003 to bring rates forward to the July 1 valuation year.

**Monthly Average Retiree Subsidies**

| | Pre-65 | Post-65 |
|---|---|---|
| Single | $ 553.71 | $ 414.19 |
| Married | 319.44 | 298.45 |
| Surviving Spouse | 108.16 | 108.38 |

## Definitions of Technical Terms

Actuarial Accrued Liability. The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial liability".

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

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

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

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

Actuarial Gain (Loss). The difference between actual experience and actuarial assumption anticipated experience during the period between two actuarial valuation dates.

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

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

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

(Concluded on Next Page)

Unfunded Actuarial Accrued Liability. The difference between actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial liability" or "unfunded accrued liability".

Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar). Unfunded actuarial accrued liability must be controlled.

# DISCLOSURES REQUIRED BY

# STATEMENTS NO. 25 AND 27 OF

# THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

Los Angeles City Employees' Retirement System

**GASB No. 25 Disclosure**

**Schedule of Funding Progress**

**Retirement Benefits**

($ in Thousands)

| Valuation Date | Valuation Assets | Actuarial Accrued Liability | Unfunded AAL | Funded Ratio | Member Payroll | UAAL Ratio to Payroll |
|---|---|---|---|---|---|---|
| 6/30/96 | $4,468,433 | $4,476,024 | $7,591 | 99.8% | $957,423 | 0.8% |
| 6/30/97 | 4,802,509 | 4,886,337 | 83,828 | 98.3 | 990,616 | 8.5 |
| 6/30/98 | 5,362,923 | 5,312,918 | (50,005) | 100.9 | 1,011,857 | (4.9) |
| 6/30/99 | 5,910,948 | 5,684,586 | (226,362) | 104.0 | 1,068,124 | (21.2) |
| 6/30/00 | 6,561,365 | 6,012,931 | (548,434) | 109.1 | 1,182,203 | (46.4) |
| 6/30/01 | 6,988,782 | 6,468,066 | (520,716) | 108.1 | 1,293,350 | (40.3) |
| 6/30/02 | 7,060,188 | 7,252,118 | 191,930 | 97.4 | 1,334,335 | 14.4 |
| 6/30/03 | 6,999,647 | 7,659,846 | 660,199 | 91.4 | 1,405,058 | 47.0 |

Los Angeles City Employees' Retirement System

**GASB No. 25 Disclosure**

**Schedule of Employer Contributions**

**Retirement Benefits**

| Year Ended June 30 | Actuarially Required Contributions (ARC)[1] | Contributions Made[1] |
|---|---|---|
| 1998 | $64,459,744 | 100% |
| 1999 | 69,248,626 | 100% |
| 2000 | 72,146,277 | 100% |
| 2001 | 59,153,313 | 100% |
| 2002 | 32,296,002 | 100% |
| 2003 | 51,604,669 | 100% |

[1] Exclusive of Health Subsidy contributions and Family Death Benefit contributions. Defrayals not included in this figure.

# COMPREHENSIVE

# ANNUAL FINANCIAL

# REPORT EXHIBITS

Los Angeles City Employees' Retirement System

**Solvency Test for Retirement Benefits**

For Years Ended June 30

(In Thousands)

| Valuation Date | Aggregate Accrued Liabilities For (1) Member Contributions | (2) Retirants, Beneficiaries, & Deferred Vesteds | (3) Active Member | Reported Assets* | Portion of Accrued Liabilities Covered by Reported Assets (1) | (2) | (3) |
|---|---|---|---|---|---|---|---|
| 6-30-96 | $637,737 | $2,357,798 | $1,480,489 | $4,468,433 | 100.0% | 100.0% | 99.5% |
| 6-30-97 | 683,048 | 2,598,432 | 1,604,857 | 4,802,509 | 100.0 | 100.0 | 94.8 |
| 6-30-98 | 733,680 | 2,772,712 | 1,806,526 | 5,362,923 | 100.0 | 100.0 | 100.0 |
| 6-30-99 | 776,617 | 2,989,218 | 1,918,751 | 5,910,948 | 100.0 | 100.0 | 100.0 |
| 6-30-00 | 827,729 | 3,149,392 | 2,035,810 | 6,561,365 | 100.0 | 100.0 | 100.0 |
| 6-30-01 | 889,658 | 3,444,240 | 2,134,168 | 6,988,782 | 100.0 | 100.0 | 100.0 |
| 6-30-02 | 950,002 | 3,756,935 | 2,545,181 | 7,060,188 | 100.0 | 100.0 | 92.5 |
| 6-30-03 | 1,005,888 | 4,021,213 | 2,632,745 | 6,999,647 | 100.0 | 100.0 | 74.9 |

* Actuarial Value of Assets excluding the FDBIP and Health Subsidy assets.

Los Angeles City Employees' Retirement System

**Retirants and Beneficiaries Added To and Removed From the Rolls***

For Years Ended June 30

| Year Ended | No. of New Retirants/ Beneficiaries | Annual Allowances Added | No. of Retirants/ Beneficiaries Removed | Annual Allowances Removed | No. of Retirants/ Beneficiaries at 6/30 | Annual Allowances at 6/30 | % Increase in Annual Allowances | Average Annual Allowances |
|---|---|---|---|---|---|---|---|---|
| 6/30/01 | 773 | 22,866,958 | 466 | 6,436,730 | 13,365 | 316,057,216 | 8.6% | 23,648 |
| 6/30/02 | 844 | 23,740,829 | 620 | 11,316,344 | 13,589 | 336,437,038 | 6.4% | 24,758 |
| 6/30/03 | 827 | 24,729,535 | 611 | 12,008,132 | 13,805 | 359,036,215 | 6.7% | 26,008 |

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

# APPENDIX A:

# MEMBER CONTRIBUTION RATES

**Contribution Rates Assumed for Members**

Participating Before February 1, 1983

| Age | Normal | Survivor | Total | Age | Normal | Survivor | Total |
|---|---|---|---|---|---|---|---|
| 16 | 8.00% | 0.22% | 8.22% | 40 | 10.19% | 0.91% | 11.10% |
| 17 | 8.04 | 0.28 | 8.32 | 41 | 10.29 | 0.92 | 11.21 |
| 18 | 8.08 | 0.33 | 8.41 | 42 | 10.41 | 0.93 | 11.34 |
| 19 | 8.14 | 0.39 | 8.53 | 43 | 10.52 | 0.94 | 11.46 |
| 20 | 8.20 | 0.44 | 8.64 | 44 | 10.64 | 0.95 | 11.59 |
| 21 | 8.27 | 0.48 | 8.75 | 45 | 10.76 | 0.97 | 11.73 |
| 22 | 8.34 | 0.53 | 8.87 | 46 | 10.89 | 0.98 | 11.87 |
| 23 | 8.42 | 0.56 | 8.98 | 47 | 11.01 | 0.99 | 12.00 |
| 24 | 8.50 | 0.60 | 9.10 | 48 | 11.12 | 1.00 | 12.12 |
| 25 | 8.58 | 0.63 | 9.21 | 49 | 11.24 | 1.01 | 12.25 |
| 26 | 8.66 | 0.66 | 9.32 | 50 | 11.34 | 1.03 | 12.37 |
| 27 | 8.75 | 0.68 | 9.43 | 51 | 11.44 | 1.05 | 12.49 |
| 28 | 8.86 | 0.70 | 9.56 | 52 | 11.55 | 1.06 | 12.61 |
| 29 | 8.96 | 0.72 | 9.68 | 53 | 11.65 | 1.07 | 12.72 |
| 30 | 9.06 | 0.75 | 9.81 | 54 | 11.75 | 1.08 | 12.83 |
| 31 | 9.17 | 0.77 | 9.94 | 55 | 11.85 | 1.09 | 12.94 |
| 32 | 9.28 | 0.79 | 10.07 | 56 | 11.94 | 1.10 | 13.04 |
| 33 | 9.40 | 0.81 | 10.21 | 57 | 12.03 | 1.12 | 13.15 |
| 34 | 9.50 | 0.82 | 10.32 | 58 | 12.13 | 1.13 | 13.24 |
| 35 | 9.61 | 0.83 | 10.44 | 59 - Over | 12.19 | 1.14 | 13.33 |
| 36 | 9.73 | 0.85 | 10.58 | | | | |
| 37 | 9.84 | 0.86 | 10.70 | | | | |
| 38 | 9.96 | 0.87 | 10.83 | | | | |
| 39 | 10.07 | 0.90 | 10.97 | | | | |

Total is applicable only to employees whose Normal and Survivor Rates are assigned by the same age.