



October 20, 1999

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

Members of the Board:

We are pleased to present this actuarial valuation report as of June 30, 1999 for the City Employees' Retirement System.

This report is divided into three parts:

- A. Valuation Summary: This section contains an overview of significant valuation results.
- B. Valuation Detail: This section contains more detailed results of the valuation. Section I contains details of the retirement valuation. Section II contains details of the health subsidy valuation.
- C. Exhibits: This section contains information on plan demographics, plan provisions, and actuarial assumptions used in the valuation.

We appreciate the opportunity to serve the City of Los Angeles and the Board of Administration as actuary for the City Employees' Retirement System.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lawrence Di Fiore'.

Lawrence Di Fiore, FSA  
Consulting Actuary

A handwritten signature in black ink, appearing to read 'Thomas R. Supple'.

Thomas R. Supple, ASA  
Consultant

LD:TRS:MC  
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**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**Actuarial Valuation As Of June 30, 1999  
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# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

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# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Actuarial Valuation As Of June 30, 1999

### Introduction

Officers and employees of the City of Los Angeles and their beneficiaries are entitled to retirement benefits (including disability and survivors' benefits) and health subsidy benefits under Article XXXIV of the Charter of the City of Los Angeles and by related ordinances. This retirement system is known as the City Employees' Retirement System.

This report contains the results of the June 30, 1999 valuation of both the retirement and health subsidy benefits of the Retirement System. It contains our calculations of the annual budget of the System, as provided in Section 506 of the Charter. It also contains disclosure information required by the Government Accounting Standards Board (GASB).

Plan provisions are summarized in Exhibits IV and V.

This valuation reflects the three-year extension of the early retirement window through September 30, 2002. This window provides unreduced pensions to employees over age 50 who retire with at least 30 years of service.

The valuation results were based on the assumptions as outlined in Exhibits VI through IX. Of note are the following economic assumptions:

- 8.0% annual interest
- 4.0% annual total payroll increases
- Annual individual salary increases, which vary by age, averaging 5.5% to 6% per year over a full 30-year career
- 3.0% annual increases in the Consumer Price Index

We have revised our assumption regarding the expected interest to be earned on employee contributions from 8.00% to 6.50%. This was changed to reflect our long-term expectation for five-year Treasury notes, the basis for crediting interest to employee accounts.

All other actuarial assumptions and methods remain unchanged since the last valuation. We believe the assumptions and methods used are appropriate for the valuation of the liabilities of the Retirement System at June 30, 1999.

This Valuation Summary contains an overview of our valuation results. More information on these results can be found in the Valuation Detail and Exhibit sections of this report.

A schedule containing all of the significant results of our valuation can be found on the next page.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

<b>Summary of Significant Valuation Results</b>			
	<b>June 30, 1999</b>	<b>June 30, 1998</b>	<b>Percent Change</b>
<b>I. Total Membership</b>			
A. Active Members	22,504	22,091	1.9%
B. Pensioners	12,843	12,591	2.0%
<b>II. Salaries at June 30</b>			
A. Total Annual Payroll	\$1,068,124,413	\$1,011,857,180	5.6%
B. Average Monthly Salary	\$3,955	\$3,817	3.6%
<b>III. Benefits to Current Pensioners and Beneficiaries</b>			
A. Total Annual Benefits	\$277,022,689	\$259,378,957	6.8%
B. Average Monthly Benefit Amount	\$1,798	\$1,717	4.7%
<b>IV. Total System Assets (Actuarial Value)</b>			
	\$6,653,174,660	\$5,938,215,895	12.0%
<b>V. Unfunded Actuarial Accrued Liability / (Surplus)</b>			
A. Retirement Benefits	(\$226,362,078)	(\$50,005,186)	352.7%
B. Health Subsidy Benefits	(\$110,335,620)	(\$5,196,640)	2023.2%
<b>VI. Budget Items</b>			
	<b>FY 2000 - 2001</b>	<b>FY 1999 - 2000</b>	
<b>A. Retirement Benefits</b>			
1. Normal Cost as a Percent of Pay	7.59%	7.54%	0.7%
2. Amortization of Unfunded Actuarial Accrued Liability	(2.66%)	(1.11%)	139.6%
3. Total Retirement Contribution	4.93%	6.43%	(23.33%)
<b>B. Health Subsidy Contribution, as a Percent of Pay</b>			
	0.67%	1.27%	(47.24%)
<b>C. Total Contribution (A+B)</b>			
	5.60%	7.70%	(27.27%)
<b>VII Funded Ratio</b>			
<b>(Based on Actuarial Value of Assets)</b>			
A. Retirement Benefits	104.0%	100.9%	3.1%
B. Health Subsidy Benefits	118.0%	100.9%	16.9%
C. Total	105.3%	100.9%	4.4%
<b>(Based on Market Value of Assets)</b>			
D. Retirement Benefits	113.8%	112.2%	1.4%
E. Health Subsidy Benefits	129.1%	112.2%	15.1%
F. Total	115.3%	112.2%	2.8%

# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### Budget Requirements

The Charter of the City of Los Angeles requires that budget amounts for the City Employees' Retirement System be determined annually. In determining these amounts, the System currently uses the Projected Unit Credit Cost Method. The required annual contribution is made up of two parts:

- The Normal Cost, or the cost of the portion of the benefit that is earned each year.
- Amortization of Unfunded Actuarial Accrued Liability (UAAL) or Surplus: The UAAL represents liabilities accrued to date, that have not been funded by prior years' Normal Costs. Changes in the UAAL or surplus due to assumption changes are amortized over 30 years and gains and losses are amortized over 15 years, both as a level percent of pay. Plan amendments are amortized over 30 years as a level percent of pay, unless the characteristics of the amendment dictate a shorter amortization period.

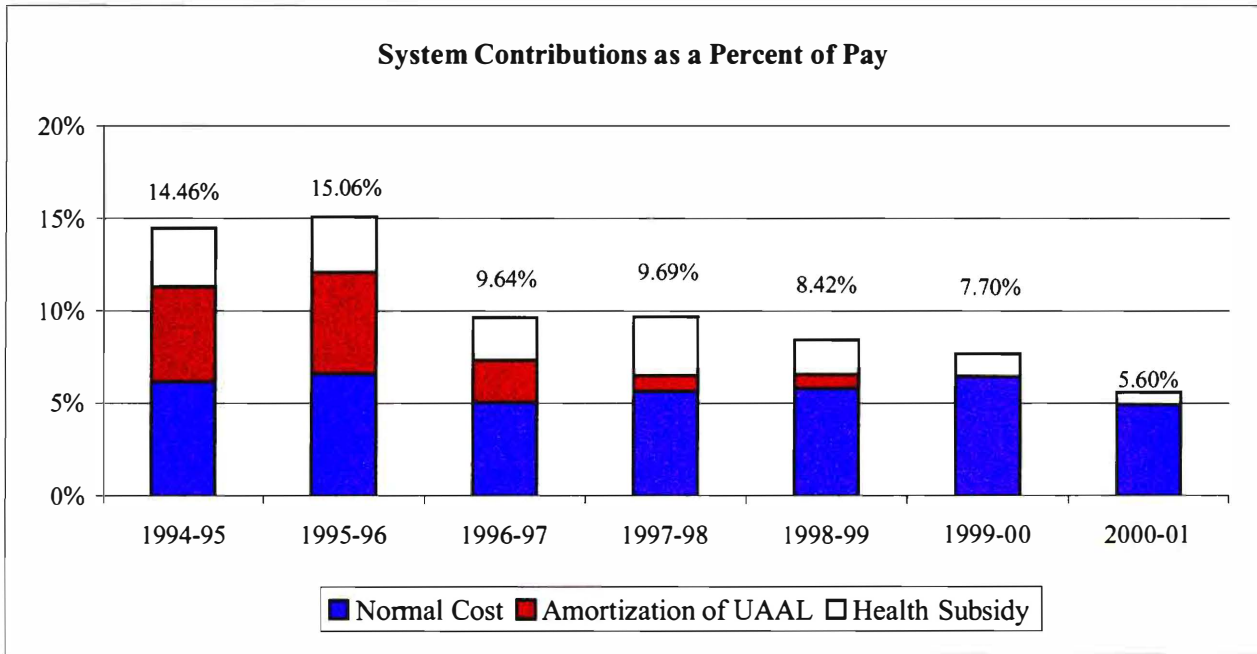
Below, we present a summary of budget requirements for the City Employees' Retirement System. In total, the recommended contribution decreased by 2.10% of payroll from last year.

<b>Recommended City Contributions For Fiscal Year 2000 – 2001</b>	
	<b>Percentage of Salary</b>
Contribution for Retirement, Disability, and Death Benefits	4.93%
Contribution for Health Subsidy Benefits	0.67%
<b>Total Contribution</b>	<b>5.60%</b>

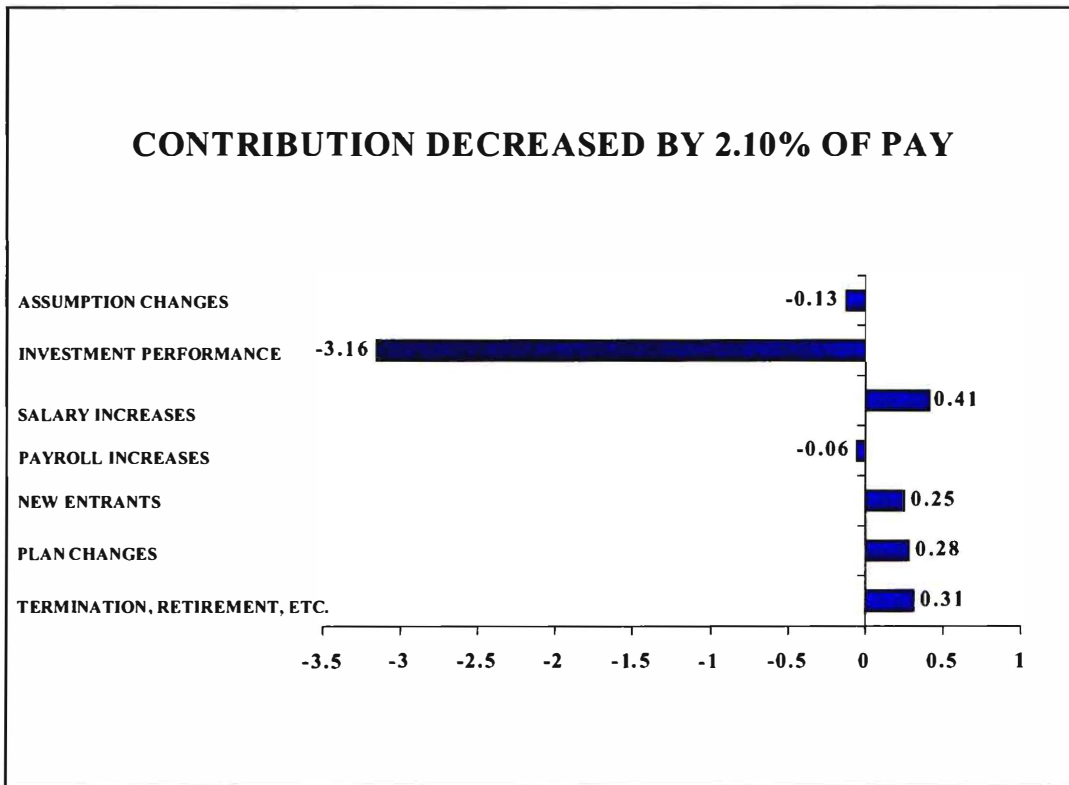
A more detailed explanation of these results can be found in the Valuation Detail section of this report.



The following graph illustrates the contribution levels of the past few years for both the retirement benefits and the health subsidy benefits.



The graph below illustrates the effect of changes in plan provisions, changes in valuation method and assumptions, and gains and losses over the past year on the recommended System contribution.



# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### System Assets

The following asset information regarding cash flow and market values were provided to us by the Retirement Office. We have not audited or verified these figures.

	June 30, 1999	June 30, 1998	Percent Change
Total System Assets			
Market Value	\$7,279,063,114	\$6,600,702,384	10.3%
Actuarial Value	6,653,174,660	5,938,215,895	12.0%

<b>Rate of Return</b>	
<b>July 1, 1998 - June 30, 1999</b>	
The rate of return on total plan assets was as follows:	
Market Value	12.34%
Actuarial Value	14.36%
The rate of return was based on the following cash flow information:	
Contributions	
City	\$109,362,265
Members	62,564,896
Pensions Paid	
Retirement Allowances	266,744,804
Family Death Benefits	1,553,231
Health Benefits	22,326,435
Refunds of Member Contributions	9,627,685
Administration Expenses	6,233,431
Investment Earnings	\$812,919,155

The 14.36% rate of return on the actuarial value is greater than the 8.0% rate assumed for the prior year, which resulted in an actuarial gain. The budgeted contribution for the System would have been greater if not for this gain.

More detail on System assets can be found in the Exhibits section of this report.

# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### Derivation of Actuarial Value of Assets

	Year Ending			
	June 30, 1999	June 30, 1998	June 30, 1997	June 30, 1996
1. Beginning of Year Market Value	\$6,600,702,384	\$6,069,797,808	\$5,192,038,000	\$4,458,509,000
2. Contributions	171,927,161	175,522,533	166,537,208	196,548,903
3. Benefit Payments	300,252,155	278,253,761	257,427,552	241,947,677
4. Expected Return Based on 8% Assumption	522,923,191	481,474,576	411,727,426	354,864,769
5. Expected End of Year Market Value (1)+(2)-(3)+(4)	6,995,300,581	6,448,541,156	5,512,875,083	4,767,974,995
6. Actual End of Year Market Value	7,279,063,114	6,600,702,384	6,069,797,808	5,192,038,000
7. Gain/(Loss)	283,762,533	152,161,228	556,922,725	424,063,005

1. Market Value at June 30, 1999	\$7,279,063,114
1999 (Gain)/Loss x 80%	(227,010,027)
1998 (Gain)/Loss x 60%	(91,296,736)
1997 (Gain)/Loss x 40%	(222,769,090)
1996 (Gain)/Loss x 20%	(84,812,601)
2. Actuarial Value at June 30, 1999	6,653,174,660
3. 80% of Market Value at June 30, 1999	5,823,250,491
4. 120% of Market Value at June 30, 1999	8,734,875,737
5. Actuarial Value at June 30, 1999 (2), but no less than (3) and no more than (4)	<b>\$6,653,174,660</b>

The actuarial value of assets is a market-related value, where gains and losses are recognized over a five-year period. Gains and losses represent the difference between actual and expected market values. Expected market values are based on the actuarial return assumption of 8%.

# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### Summary of System Funding

As of June 30, 1999, the System had assets at actuarial value equal to 105.9% of the present value of retirement and health subsidy benefits accrued to that date. When compared to the present value of all benefits expected to be paid by the System (including benefits expected to be earned in the future), assets equal 81.7% of liabilities. This remaining unfunded liability is to be funded by future City and Member contributions to the System.

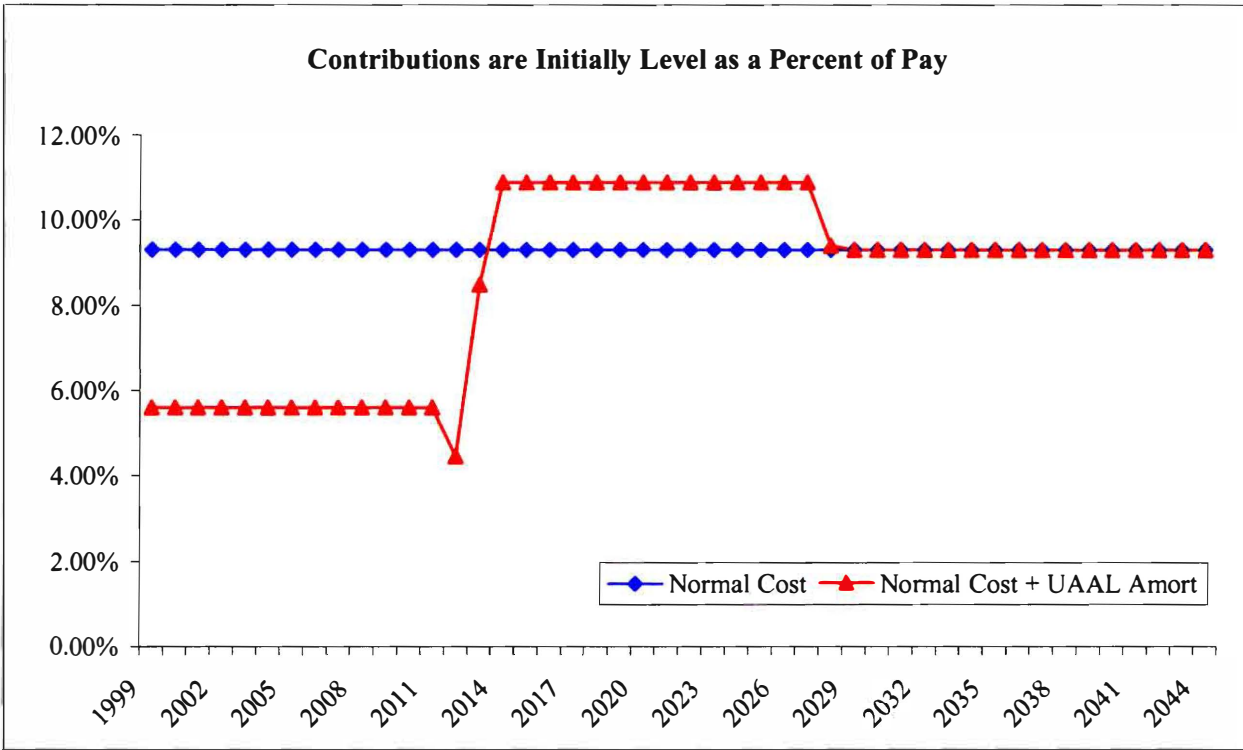
The City contributions are made up of two parts:

- **Normal Cost Contributions:** These contributions are determined as the cost of the System benefits accruing each year. If all assumptions are realized and there are no gains or losses, this amount will remain unchanged as a percent of pay unless the average age of the population increases. In this case, contributions as a percent of pay will increase. The contributions will also increase as a dollar amount as total covered payroll increases.
- **Amortization of Unfunded Actuarial Accrued Liability (UAAL) or Surplus:** The UAAL represents liabilities accrued to date, that have not been funded by prior years' Normal Costs. If the accumulated Normal Costs exceed the liabilities accrued to date, the net result would be a Surplus. Changes in the UAAL (or Surplus) due to assumption changes are amortized over 30 years and gains and losses are amortized over 15 years, both as a level percent of pay. Plan amendments are amortized over 30 years as a level percent of pay, unless the characteristics of the amendment dictate a shorter amortization period. If in the future all assumptions are realized and if there are no future gains or losses, the current contribution percentage will not change until the pieces that make up the UAAL (or Surplus) are fully amortized. However, it will increase as a dollar amount as the total covered payroll increases.

The total contribution will be the sum of the Normal Cost and UAAL contributions.

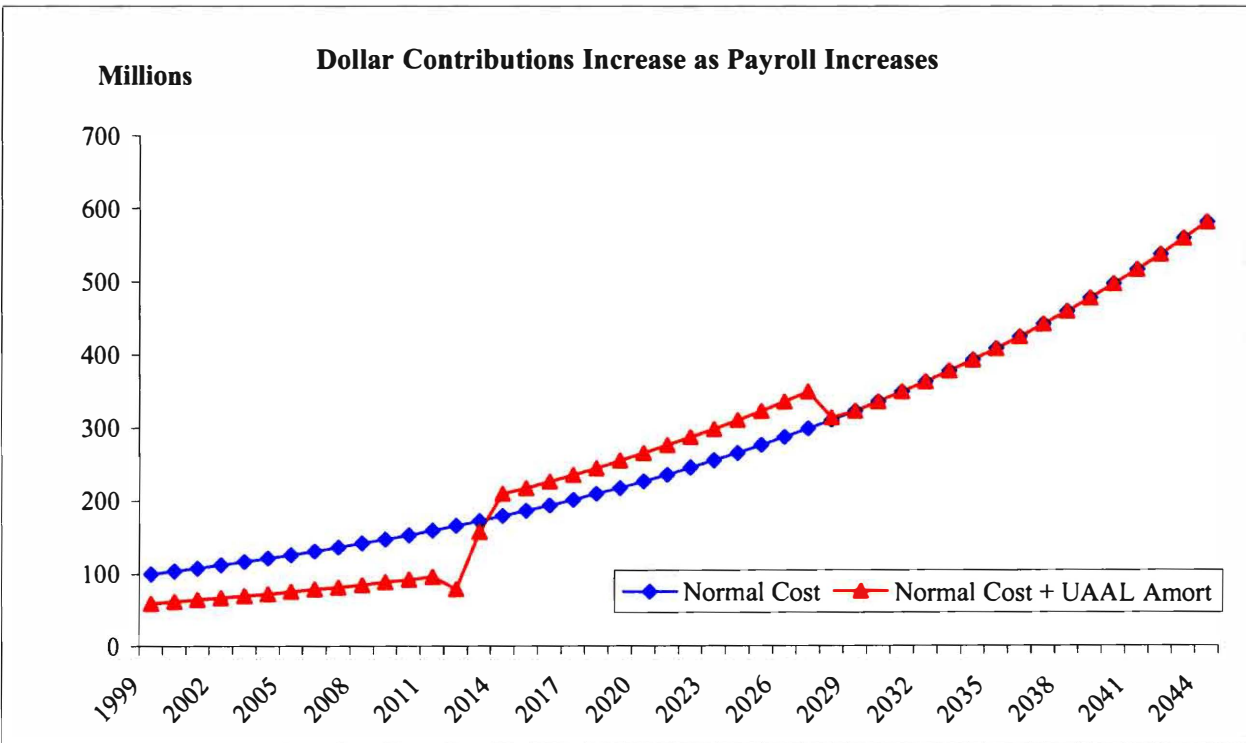
The following graphs are an illustration of expected future contribution levels. These contribution levels are based on the current Charter provisions and assume no future gains or losses. They are also based on our assumption of 4.0% annual increase in total System payroll, and a population with the same average age and service characteristics as the current population. If actual experience differs from these assumptions, the contribution levels will change.

**Contributions are Initially Level as a Percent of Pay**



**Dollar Contributions Increase as Payroll Increases**

Millions



# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

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# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### System Membership

Computer tapes containing data on System membership as of June 30, 1999 were supplied to us by the Retirement Office. On the following schedule we present a summary of System membership at June 30, 1999 and June 30, 1998. Pension amounts shown are those in effect on June 30, 1999, and do not include the cost-of-living adjustments that were effective on July 1, 1999. However, all July 1 increases were reflected in our valuation calculations.

It was necessary to make assumptions for less than 0.01% of the data records where the information given to us was unreasonable or incomplete. These assumptions did not materially affect the results of our valuation.

The number of total active Members increased by 1.9% since the last valuation. The total number of retired Members and their beneficiaries increased by 2.0%, and the average retirement benefit amount increased by 4.7%.

More detail on System membership, including breakdowns by age and service categories, can be found in Exhibits XI, XII, and XIII of this report.

<b>System Membership</b>			
	<b>June 30, 1999</b>	<b>June 30, 1998</b>	<b>Percent Change</b>
<b>I. Active Members</b>			
a. Number	22,504	22,091	1.9%
b. Average Age	44.6	44.5	0.2%
c. Average Years of Service	13.1	13.2	-0.8%
d. Salary			
i) Total Annual Salary	\$1,068,124,413	\$1,011,857,180	5.6%
ii) Average Monthly Salary	\$3,955	\$3,817	3.6%
<b>II. Pensioners and Beneficiaries</b>			
a. Number	12,843	12,591	2.0%
b. Average Age	71.5	71.5	0.0%
c. Allowance			
i) Total Annual Allowance	\$277,022,689	\$259,378,957	6.8%
ii) Average Monthly Amount	\$1,798	\$1,717	4.7%

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Applicable Assets At June 30, 1999

Assets available to pay pension benefits are determined by deducting certain reserves from the total actuarial value of assets amount.

	Market Value	Actuarial Value
1. Total Value of Assets at June 30, 1999	\$7,279,063,114	\$6,653,174,660
2. Less Reserves and Liabilities Established for:		
a. Family Death Benefit Insurance	\$19,472,020	\$17,797,723
b. Retiree Health Subsidy	792,578,451	724,428,788
c. Total	812,050,471	742,226,511
3. Net Assets Available for Retirement Benefits at June 30, 1999 (Item 1 less Item 2)	\$6,467,012,643	\$5,910,948,149

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## VALUATION OF RETIREMENT BENEFITS

### Actuarial Balance Sheet

The purpose of the Actuarial Balance Sheet is to compare System assets with System liabilities in order to define the portion of the liabilities which need to be funded by the City in the future. The Balance Sheet information in the next two pages represents assets and liabilities for retirement benefits only.

System liabilities equal the present value of all future benefits expected to be paid to current and future retirees and beneficiaries of the System. For the purpose of the Actuarial Balance Sheet, system assets are equal to the sum of:

- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

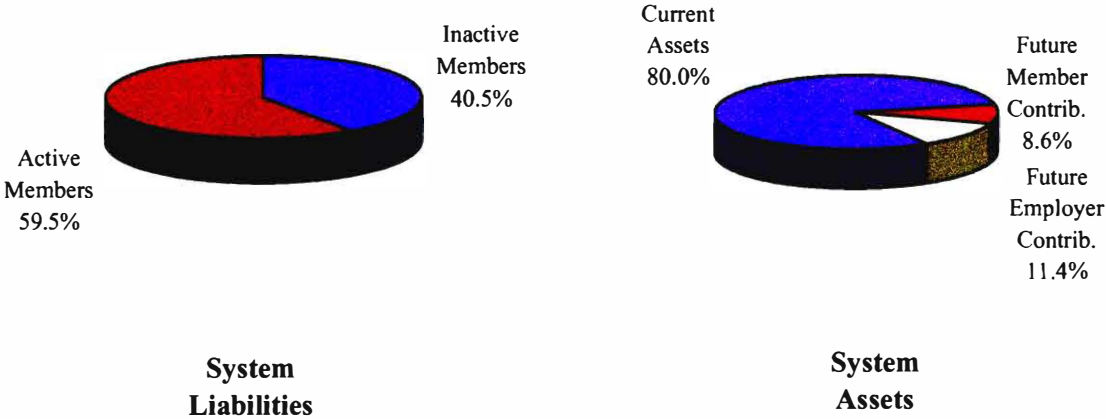
The last item, the present value of future City contributions, is made up of two parts:

1. **The Present Value of Future City Normal Costs:** Using the Projected Unit Credit Cost Method, the City budgets a certain percentage of payroll to fund benefits for System Members. The Normal Cost is the cost of benefits earned in each year. Normal Cost is funded from a Member's date of employment to the average expected retirement date. An adjustment is made for the deductions which will be made from the salaries of System Members. For the 2000 – 2001 fiscal year, the Normal Cost percentage is 7.59% of pay. The present value of these future City Normal Cost contributions represents one piece of the value of future City contributions.
2. **The Unfunded Actuarial Accrued Liability:** The portion of the present value of future City contributions which will not be funded by the future Normal Cost contributions is the Unfunded Actuarial Accrued Liability (UAAL). The UAAL arises from prior contributions that were different than the current Normal Cost percentage. This usually results from benefit or assumption changes and the net effect of prior gains and losses. If the City 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 Normal Cost would be sufficient to fund all benefits and there would be no UAAL. If the accumulated Normal Costs exceed the liabilities accrued to date, then there would be a Surplus. This liability or surplus is funded based on the provisions of the City Charter.

The Actuarial Balance Sheet can be found on the following pages.

The following chart illustrates the breakdown of Balance Sheet assets and liabilities of the retirement benefits of the System. It shows that about 40% of the System's liabilities are for terminated and retired Members and their beneficiaries, and 60% for active Members. About 80% of System assets consist of currently available assets, and 20% consist of future contributions from the City and the Members.

**Actuarial Balance Sheet for Retirement Benefits  
As Of June 30, 1999**



**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**VALUATION OF RETIREMENT BENEFITS**

**Actuarial Balance Sheet As Of June 30, 1999**

<b>Assets</b>		
1.	Applicable Assets	\$5,910,948,149
2.	Present Value of Future Member Contributions	635,087,442
3.	Present Value of Future Contributions by the City For:	
	a. Normal Cost	\$1,068,856,256
	b. Amortization of Certain Liabilities / (Surplus)	(226,362,078)
	c. Total	842,494,178
4.	Total Assets	\$7,388,529,769
<b>Liabilities</b>		
5.	Present Value of Benefits Already Granted (Inactive Members)	\$2,989,217,956
6.	Present Value of Benefits to be Granted (Active Members)	4,399,311,813
7.	Total Liabilities	\$7,388,529,769

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## VALUATION OF RETIREMENT BENEFITS

### **Budget And Recommended Contributions**

Section 506 of the City Charter requires that an annual budget be prepared which sets forth the estimated cost of maintaining the retirement fund on a reserve basis.

The Charter defines the annual budget amount to be the sum of the Normal Cost plus an amount to amortize the Unfunded Actuarial Accrued Liability (UAAL). The Normal Cost and Actuarial Accrued Liability are currently calculated using the Projected Unit Credit Cost Method.

The Normal Cost is the cost of the System benefits earned each year. The Normal Cost consists of two parts: the first part, which is funded by Member contributions, is a specified percentage of the Member's pay; the second part, which is funded by the City, is the balance after deducting the Member paid portion from the total Normal Cost percentage.

The amortization of the UAAL (or Surplus) is the payment stream required to fund the difference between System liabilities and the sum of the System assets, future Member contributions, and future City Normal Cost contributions. (See section on the Actuarial Balance Sheet.) The method of amortization is defined in the Charter.

The recommended retirement contribution decreased primarily due to asset gains.

In our opinion, if the recommended contributions included in this report are adopted, the System will be maintained in compliance with the Charter of the City of Los Angeles and in accordance with the methods and assumptions underlying the calculations.

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM  
VALUATION OF RETIREMENT BENEFITS**

<b>Recommended City Contributions For Fiscal Year 2000 - 2001</b>	
	<b>Percentage of Salary</b>
For Retirement Benefits	
Normal Cost	7.59%
Unfunded Actuarial Accrued Liability / (Surplus)	(2.66%)
<b>Total Contributions for Retirement Benefits</b>	<b>4.93%</b>

**CITY OF LOS ANGELES**  
**CITY EMPLOYEES' RETIREMENT SYSTEM**  
**VALUATION OF RETIREMENT BENEFITS**  
**Detail of Amortization of Unfunded Actuarial Accrued Liability**

Item	Remaining Years	Balance to be Amortized 06/30/1999	Amortization Amount	Percentage of Salary
1. Combined Bases at 6/30/97	13	69,681,538	6,911,717	0.65%
2. (Gain)/Loss at 6/30/98	14	(351,022,185)	(32,894,281)	(3.08%)
3. Change in Assumptions at 6/30/98	29	228,180,384	13,191,635	1.24%
4. (Gain)/Loss at 6/30/99	15	(185,388,031)	(16,495,131)	(1.54%)
5. Plan Change at 6/30/99	30	21,650,511	1,228,769	0.12%
6. Change in Assumptions at 6/30/99	30	(9,464,294)	(537,144)	(0.05%)
<b>Total</b>		<b>(226,362,078)</b>	<b>(28,594,435)</b>	<b>(2.66%)</b>

The Plan Change indicated above reflects the three-year extension of the early retirement window through September 30, 2002. This window provides unreduced pensions to Members who retire on or after age 50 with at least 30 years of service.



# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## VALUATION OF RETIREMENT BENEFITS

### Funded Status and GASB Disclosure

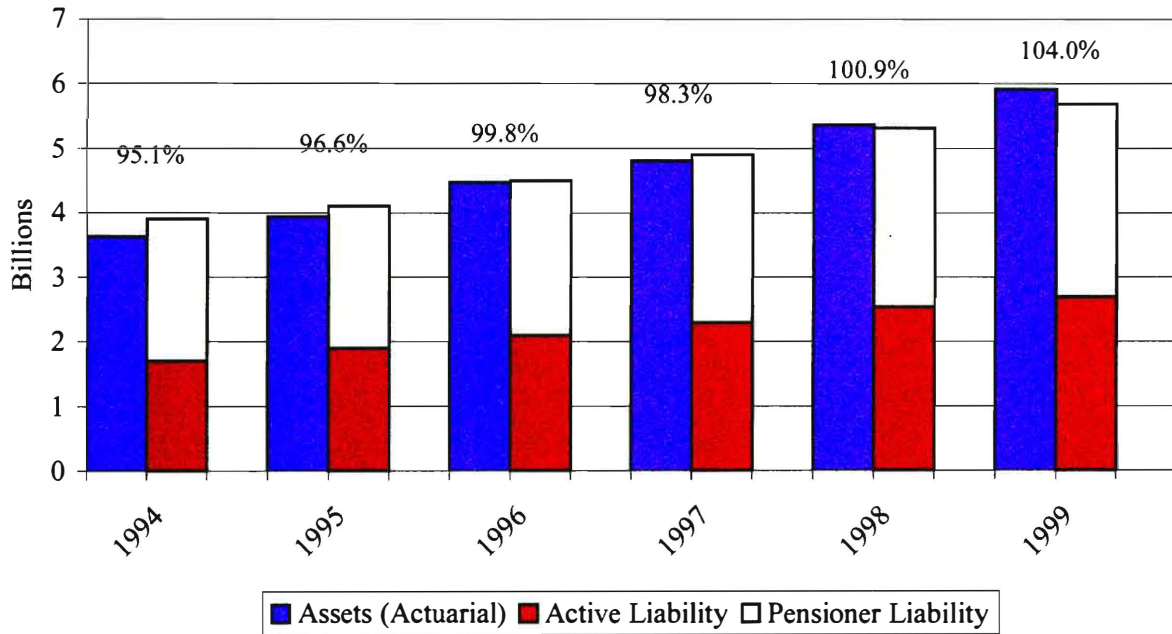
In November 1994, the Governmental Accounting Standards Board (GASB) adopted Statement No. 25, changing the way in which governmental retirement systems must report financial information. This replaced the requirements of GASB No. 5. The statement became effective for plan years beginning after June 15, 1997. This statement applies only to retirement benefits paid by the System.

This report includes two tables showing information required to be reported under GASB No. 25. The first table shows a six-year history of funding progress (a comparison of Actuarial Assets with the Actuarial Accrued Liability, and a comparison of UAAL with covered payroll). This table shows significant funding progress over the last six years.

The second table shows the Annual Required Contribution (ARC) as computed under GASB No. 25, and it shows what percent of this amount was actually received. The current method used for determining CERS contributions satisfies the GASB requirements. As long as actual contributions are made in accordance with the actuarially recommended rates, the "Percentage Contributed" shown on this table will always be 100%. Otherwise, additional financial disclosures will be necessary.

The graph on the next page compares assets to liabilities for retirement benefits for the last six years. Actuarial assets exceed liabilities for pensioners, and are 104.0% of total retirement liabilities at June 30, 1999. Based on the market value of assets, the funded ratio for retirement benefits is 115.3%.

## Funded Status of Retirement Benefits



**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**VALUATION OF RETIREMENT BENEFITS**

**GASB No. 25 Disclosure  
Schedule of Funding Progress  
Retirement Benefits**

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Annual Covered Payroll	UAAL as % of Payroll
(1)	(2)	(3)	(4) = (3)-(2)	(5) = (2)/(3)	(6)	(7) = (4)/(6)
June 30, 1994	3,629,723,739	3,817,841,255	188,117,516	95.1%	884,950,676	21.3%
June 30, 1995	3,940,057,106	4,080,765,873	140,708,767	96.6%	911,292,385	15.4%
June 30, 1996	4,468,433,499	4,476,024,351	7,590,852	99.8%	957,422,907	0.8%
June 30, 1997	4,802,508,841	4,886,336,641	83,827,800	98.3%	990,616,145	8.5%
June 30, 1998	5,362,923,264	5,312,918,078	(50,005,186)	100.9%	1,011,857,180	(4.9%)
June 30, 1999	5,910,948,149	5,684,586,071	(226,362,078)	104.0%	1,068,124,413	(21.2%)

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**VALUATION OF RETIREMENT BENEFITS**

**GASB No. 25 Disclosure  
Schedule of Employer Contributions  
Retirement Benefits**

<b>Fiscal Year Ending</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>
<b>(1)</b>	<b>(2)</b>	<b>(3)</b>
1993	138,258,965	100%
1994	143,548,618	100%
1995	115,129,588	100%
1996	120,660,148	100%
1997	88,799,922	100%
1998	64,459,744	100%
1999	69,248,626	100%

# **CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM**

## **VALUATION OF RETIREMENT BENEFITS**

### **Member Contributions**

Members contribute to the Retirement System based on schedules contained in the City Administrative Code. For Members commencing participation before February 1, 1983, different contribution rate schedules apply to different groups because of various collective bargaining agreements. For purposes of this valuation, we have assumed that the contribution rates for these Members correspond to those effective on July 1, 1981. These contribution rates can be found in Exhibit X.

If certain Members from this group contribute at a lower rate through a collective bargaining agreement, the City should contribute 94% of the amount that would have been contributed by Members without the bargaining agreements. This percentage reflects the fact that certain participants will terminate when only eligible for a return of their contributions. The City does not need to contribute the amounts that are expected to be refunded after the Members' termination.

In the prior valuation report, it was recommended that 88% of the defrayed amount be contributed. This percentage generally increases with the aging of the group affected by the defrayal, and as the probability that these Members will terminate and get a refund of contributions decreases.

For Members commencing participation after February 1, 1983, the contribution rate is 6%.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## VALUATION OF RETIREMENT BENEFITS

### **Family Death Benefit Insurance Plan**

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.

These benefits were updated in 1997 to reflect recent increases in Social Security levels.

Currently, the City and Members share the cost of the Plan. Each contributes \$2.90 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 \$3.20 per month from Members and the City would be sufficient to fund benefits under this plan. This rate will be next reviewed on June 30, 2001.

# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### VALUATION OF HEALTH SUBSIDY BENEFITS

#### Introduction

Division 4, Chapter 11 of the Administrative Code provides that a health insurance subsidy be paid to retired Members of the 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 the City. 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). Exhibit V summarizes the provisions of the Health Insurance Premium Subsidy.

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, 1999 is \$724,428,788.

This section of the report contains the results of the June 30, 1999 valuation of the retiree health insurance premium subsidy. In determining the budget amounts for the fiscal year 2000 – 2001, 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 rates of 8.00% in 1999-2000 decreasing gradually to 6.0% in 2007 and beyond for benefits paid before age 65, and benefits paid to Members without Medicare
- medical cost rates of 10.00% for five years and then decreasing gradually to 6.00% in 2013 and beyond for benefits paid after age 65 from System HMO plans and for Medicare Part B premiums
- graded medical cost rates of 8.50%, decreasing gradually to 6.00% in 2009 and beyond for benefits paid after age 65 for Members who join the medical indemnity plan
- graded dental rates of 8.00% in 1999-2000 decreasing to 6.0% in 2007 and beyond.

We believe these are appropriate for use in the valuation of health subsidy liabilities of the City Employees' Retirement System at June 30, 1999. These assumptions are described in more detail in Exhibit VII.

**CITY OF LOS ANGELES**  
**CITY EMPLOYEES' RETIREMENT SYSTEM**  
**VALUATION OF HEALTH SUBSIDY BENEFITS**

**Actuarial Balance Sheet**

The purpose of the Actuarial Balance Sheet is to compare System assets with System liabilities in order to define the portion of the liabilities, which need to be funded by the City in the future. The Balance Sheet information in the next two pages represents assets and liabilities for health subsidy benefits only.

System liabilities equal the present value of all future health subsidy benefits expected to be paid to current and future retirees and beneficiaries of the System.

For the purpose of the Actuarial Balance Sheet for health subsidy benefits, System assets are equal to the sum of (a) the assets currently available to pay benefits; and (b) the present value of future contributions expected to be made by the City.

No Member contributions are required for health subsidy benefits.

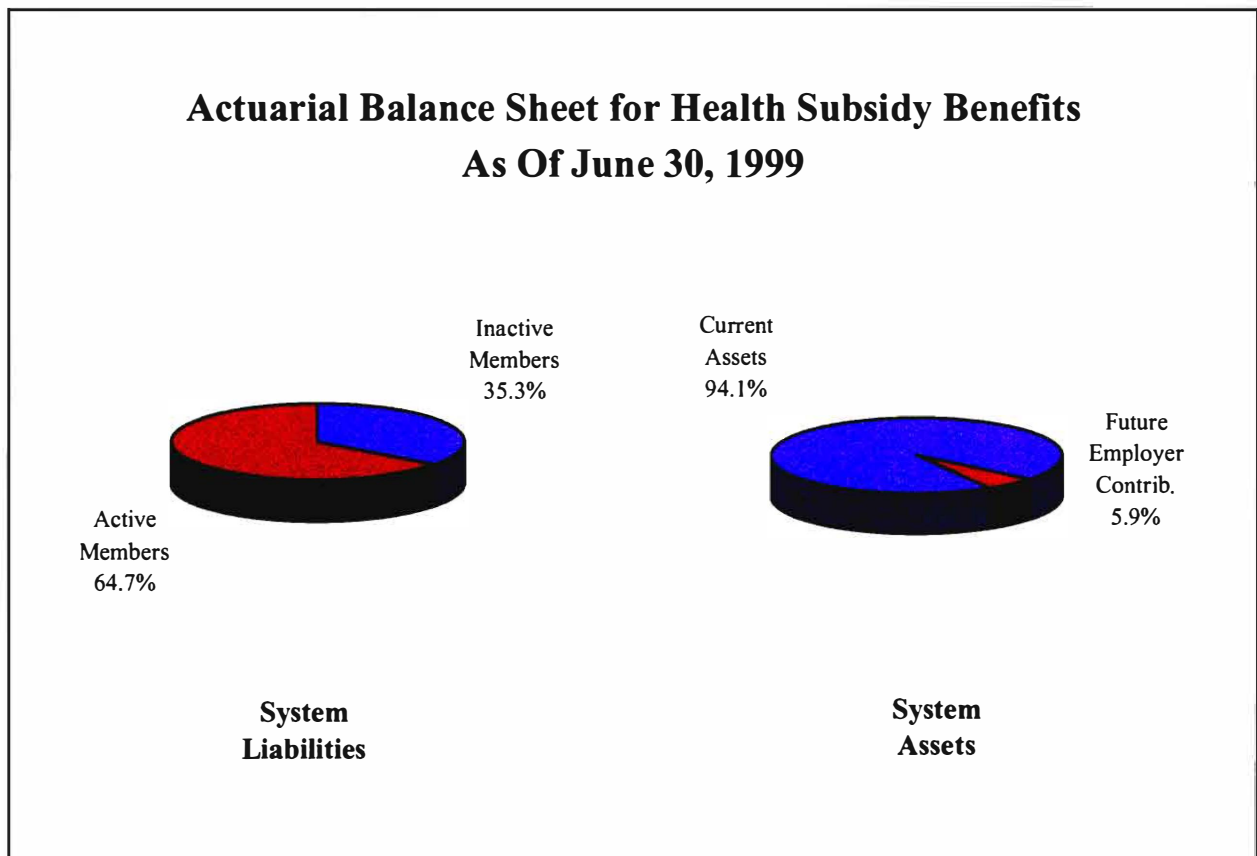
The last item, the present value of future City contributions, is made up of two parts:

1. **The Present Value of Future City Normal Costs:** Using the Projected Unit Credit Cost Method, the City budgets a certain percentage of payroll to fund benefits for System Members. The Normal Cost is the cost of benefits earned in each year. Normal Cost is funded from a Member's date of employment to the average expected retirement date. For the 2000 – 2001 fiscal year, the Normal Cost percentage for health subsidy benefits is 1.72% of pay. The present value of these future City Normal Cost contributions represents one piece of the value of future City contributions.
2. **The Unfunded Actuarial Accrued Liability:** The portion of the present value of future City contributions which will not be funded by the future Normal Cost contributions is the Unfunded Actuarial Accrued Liability (UAAL). The UAAL arises from prior contributions that were different than the current Normal Cost percentage. This usually results from benefit or assumption changes and the net effect of prior gains and losses. If the City 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 Normal Cost would be sufficient to fund all health subsidy benefits and there would be no UAAL. If the accumulated Normal Costs exceed the liabilities accrued to date, then there would be a Surplus. This liability or surplus is funded based on the provisions of the City Charter.

The Actuarial Balance Sheet can be found on the following pages.



The following chart illustrates the breakdown of Balance Sheet assets and liabilities for health subsidy benefits. It shows that about 35% of the System's liabilities are for retired Members and their beneficiaries, and 65% for active Members. About 95% of System assets consist of currently available assets, and 5% consist of future contributions from the City.



**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM  
VALUATION OF HEALTH SUBSIDY BENEFITS**

**Actuarial Balance Sheet As Of June 30, 1999**

<b>Assets</b>	
1. Applicable Assets	\$724,428,788
2. Present Value of Future Member Contributions	0
3. Present Value of Future Contributions by the City For:	
a. Normal Cost	\$155,559,947
b. Amortization of Certain Liabilities / (Surplus)	(110,335,620)
c. Total	\$45,224,327
4 Total Assets	\$769,653,115
<b>Liabilities</b>	
5. Present Value of Benefits Already Granted (Inactive Members)	\$271,856,647
6. Present Value of Benefits to be Granted (Active Members With Ten or More Years of Service)	497,796,468
7. Total Liabilities	\$769,653,115

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM  
VALUATION OF HEALTH SUBSIDY BENEFITS**

**Budget and Recommended Contributions**

Under Division 4, Chapter 11 of the Administration Code, certain retired employees are eligible for a health insurance premium subsidy. This subsidy is to be funded entirely by the City Employees' Retirement System.

Based on the actuarial value for this reserve, we have calculated the required funding amount for the fiscal year beginning in 2000.

The contribution for health subsidy benefits decreased from 1.27% of payroll for 2000 – 2001 to 0.67% of payroll for 2000 – 2001. This was primarily due to asset gains.

<b>Recommended City Contributions For Fiscal Year 2000 – 2001</b>	
	<b>Percentage of Salary</b>
<b>For Health Subsidy Benefits</b>	
Normal Cost	1.72%
Unfunded Actuarial Accrued Liability/(Surplus)	(1.05%)
<b>Total Contributions for Health Subsidy Benefits</b>	<b>0.67%</b>

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**VALUATION OF HEALTH SUBSIDY BENEFITS**

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

Item	Remaining Years	Balance to be Amortized 06/30/1999	Amortization Amount	Percentage of Salary
1. Combined Bases at 6/30/97	13	\$52,260,808	\$5,183,753	0.49%
2. (Gain)/Loss at 6/30/98	14	(107,932,221)	(10,114,326)	(0.95%)
3. Change in Assumptions at 6/30/98	29	45,562,483	2,634,072	0.25%
4. (Gain)/Loss at 6/30/99	15	(103,379,627)	(9,198,331)	(0.86%)
5. Plan Change at 6/30/99	30	3,152,938	178,944	0.02%
<b>Total</b>		(\$110,335,620)	(\$11,315,888)	(1.05%)

The Plan Change indicated above reflects the three-year extension of the early retirement window through September 30, 2002. This window provides unreduced pensions to Members who retire on or after age 50 with at least 30 years of service. The incidence of early retirement increases the liability for the health subsidy benefits.

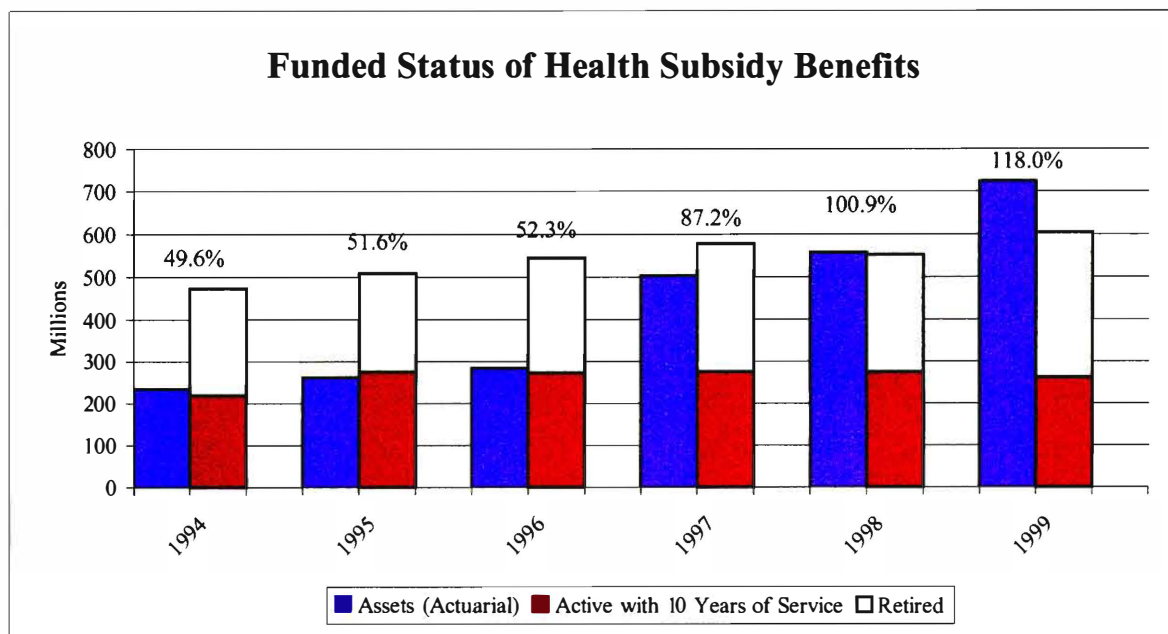
# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## VALUATION OF HEALTH SUBSIDY BENEFITS

### Funded Status of Health Subsidy Benefits

This information is prepared using GASB guidelines. These figures do not include assets or liabilities of the retirement benefits of the System.

Present Value of Health Subsidy Benefits Accrued To June 30, 1999	
- Retired Members	\$271,856,647
- Active Members with Ten Years of Service	342,236,521
- Total	\$614,093,168
Value of Assets Available for Health Subsidy Benefits	
- Market	\$792,578,451
- Actuarial	\$724,428,788
Funded Ratio	
- Market	129.1%
- Actuarial	118.0%



# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### VALUATION OF HEALTH SUBSIDY BENEFITS

#### Summary of Funding Process

The City is in the process of advance funding for the Health Insurance Premium Subsidy. A brief summary of this funding process is as follows.

The City began funding for these benefits when the health subsidy plan was first initiated, by commencing funding when a Member retired. However, this funding was limited below the actual cost, since the contributions were determined by recognizing only 3% annual increases in the subsidy due to medical trend.

Beginning in 1987, the assumption for annual increases in the health insurance subsidy benefits was increased to 8% per year. Also, the City began advance funding for active Members who are eligible to retire.

Following the June 30, 1989 Study of Plan Experience, in order to fully reflect the cost of benefits due to expected inflation, the 8% medical trend rate assumption was changed to a series of medical trend rates that graded down from 15% in 1991 to 7% in 2002 and thereafter. The City also began advance funding for active members with sufficient service to receive a health subsidy (10 years).

Effective with the June 30, 1992 Study of Plan Experience, the medical and dental trend rates were updated. Separate rates were used for pre- and post-age 65 benefits to reflect the differences in cost increases after Medicare eligibility. Effective with the June 30, 1993 valuation, the ultimate trend rate was reduced from 7% to 6% to better reflect our expectations of future medical inflation and utilization.

Effective with the June 30, 1995 Study of Plan Experience, the medical and dental trend rates were again updated due to favorable expectations of experience under the Plan. Further reduction in the rates were assumed effective June 30, 1997.

Effective with the June 30, 1998 Study of Plan Experience, the trend rates were updated to reflect how Medicare Reform will affect the System's future health subsidy costs. For details on these trend rates, refer to Exhibit VII.

In valuing the liabilities of the health subsidy, we projected future cash flows by applying medical trend rates to current subsidy amounts. The current average monthly claim rates we used as the starting point for our projections depend on the experience of the plan and plan provisions. These rates are summarized in Exhibit VIII. To determine the present value of future health insurance subsidy benefits, we discounted future cash flows to June 30, 1999 using a valuation rate of 8%.

For the purpose of determining contributions, we have used the Projected Unit Credit Funding Method. Our assumptions and methods are described further in Exhibit VII.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Exhibits Table of Contents

Exhibit I.....	System Assets (Market Value)
Exhibit II.....	Statement of Reserve and Fund Balances
Exhibit III .....	Statement of Changes in Net Assets Available for Plan Benefits
Exhibit IV .....	Summary of Retirement Benefits
Exhibit V .....	Summary of Health Subsidy Benefits
Exhibit VI .....	Summary of Actuarial Assumptions and Methods Used for Valuation of Retirement Benefits
Exhibit VII.....	Summary of Actuarial Assumptions and Methods Used for Valuation of Health Subsidy Benefits
Exhibit VIII .....	Average Monthly Claim Rates for Health Subsidy Benefits
Exhibit IX .....	Rates of Separation from Active Service
Exhibit X .....	Member Contributions
Exhibit XI .....	Age/Service/Salary Distribution as of June 30, 1999 for Active Members
Exhibit XII.....	Age/Benefit Distribution of Pensioners as of June 30, 1999
Exhibit XIII .....	Age/Average Monthly Health Subsidy Distribution as of June 30, 1999
Exhibit XIV .....	Retention Rates



**CITY OF LOS ANGELES**  
**CITY EMPLOYEES' RETIREMENT SYSTEM**

<b>System Assets (Market Value)</b>		
	<b>June 30, 1999</b>	<b>June 30, 1998</b>
<b>Assets</b>		
Cash	706,520,094	671,722,565
Receivable		
Accrued Interest and Dividend Income	34,315,986	34,076,915
Other Receivable	5,788,469	6,368,569
Proceeds from Investment	<u>150,335,753</u>	<u>29,618,980</u>
Total Receivable	190,440,208	70,064,464
Investments		
Temporary, at Market	0	0
Bonds, at Market	1,620,439,910	1,671,752,993
Common Stocks, at Market	4,538,313,818	3,909,469,970
Real Estate & Mortgages	633,578,498	355,617,445
Alternative Investment, at Market	<u>105,141,067</u>	<u>64,471,919</u>
Total Investments	6,897,473,293	6,001,312,327
Total Assets	7,794,433,595	6,743,099,356
<b>Liabilities</b>		
Accounts Payable and Accrued Expenses	(23,539,315)	(6,226,654)
Purchases of Investments	<u>(491,831,166)</u>	<u>(136,170,319)</u>
Total Liabilities	(515,370,481)	(142,396,973)
<b>Net Assets Available for Plan Benefits</b>	<b>7,279,063,114</b>	<b>6,600,702,383</b>

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

<b>Statement of Reserve and Fund Balances</b>		
	<b>June 30, 1999</b>	<b>June 30, 1998</b>
<b>Actuarial</b>		
Member Contributions	\$776,617,190	\$733,679,752
Annuities	416,227,855	397,598,555
Pensions	5,274,167,598	4,829,949,948
Family Death Benefit Insurance	19,472,020	19,976,400
Health Benefits	792,578,451	619,495,729
<b>Total Actuarial</b>	<b>\$7,279,063,114</b>	<b>\$6,600,700,384</b>
<b>Other</b>		
Undistributed Earnings	0	0
Fund Balance	0	0
<b>Total Other</b>	<b>0</b>	<b>0</b>
<b>Total Reserve and Fund Balance</b>	<b>\$7,279,063,114</b>	<b>\$6,600,700,384</b>

## CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

<b>Statement of Changes in Net Assets Available for Plan Benefits</b>		
	<b>Year Ended June 30, 1999</b>	<b>Year Ended June 30, 1998</b>
<b>Revenues</b>		
City Contributions	\$109,362,265	\$117,208,578
Members' Contributions	62,564,896	58,313,955
Income from Investments	812,919,155	639,396,001
<b>Total Revenues</b>	<b>\$984,846,316</b>	<b>\$814,918,534</b>
<b>Expenditures</b>		
Pensions		
Retirement Allowances	\$266,744,804	\$247,875,866
Family Death Benefit Insurance	1,553,231	1,499,177
Health Benefits	<u>22,326,435</u>	<u>21,388,457</u>
<b>Total</b>	<b>290,624,470</b>	<b>270,763,500</b>
Refund of Members' Contributions	9,627,685	7,490,261
Administrative Expenses	6,233,431	5,760,198
<b>Total Expenditures</b>	<b>\$306,485,586</b>	<b>\$284,013,959</b>
<b>Net Revenues</b>	<b>\$678,360,730</b>	<b>\$530,904,575</b>
<b>Net Assets Available for Plan Benefits, Beginning of the Year</b>	<b>\$6,600,702,384</b>	<b>\$6,069,797,808</b>
<b>Net Assets Available for Plan Benefits, End of the Year</b>	<b>\$7,279,063,114</b>	<b>\$6,600,702,384</b>

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Summary of Retirement Benefits

1. Eligibility: Members are eligible on their first day of City employment.
2. Final Compensation: Highest 12-month average salary.
3. Service Retirement:
  - A) Eligibility: Age 55 with 10 years of service, or any age with 30 years of service, or age 70.
  - B) Benefit: 2.16% of Final Compensation for each year of service.
  - C) Reduction for Early Retirement: Unreduced for retirement after age 60, or after age 55 with at least 30 years of service. Reduction factors apply for earlier retirement.
  - D) Form of Payment: Benefit payable for life with 50% continuance to eligible spouse or domestic partner if employee had that coverage at time of retirement. Larger continuances are available with actuarial reduction.
  - E) Special Early Retirement Benefit: Unreduced pensions are available for employees age 50 with 30 years of service who retire prior to September 30, 2002.

4. Disability Retirement:

- A) Eligibility: Five years of continuous service and physically or mentally incapacitated so unable to perform duties of position.
- B) Benefit: 1/70 of Final Compensation per year of continuous service. If service is less than 23-1/3 years, then service is projected to retirement, with a maximum service of 23-1/3 years.
- C) Form of Payment: Benefit payable for life with 50% continuance to eligible spouse or domestic partner if employee had this coverage at time of retirement. Larger continuances are available with actuarial reduction.

5. Deferred Service Retirement:

- A) Eligibility: Five years of service prior to termination of City service. Member must leave contributions on deposit.
- B) Benefit: Same as Service Retirement payable anytime after age 55, provided at least 10 years have elapsed from date of original membership (or anytime after age 70).
- C) Form of Payment: Same as Service Retirement.

6. Pre-retirement Death Benefits:

- A) Not Eligible for Disability or Service Retirement:

Member receives (i), (ii), and (iii) where:

(i) = Accumulated contributions with interest.

(ii) = Limited monthly pension equal to half the average monthly salary for the year before death. Benefit is payable to surviving spouse, minor children, dependent parents or domestic partner, and is payable for a period of 2 months times the number of completed years of service, to a maximum of 12 months.

(iii) = Family Death Benefit Insurance Plan benefit, if a qualified Member.

B) Eligible for Disability Retirement or Duty-Related Death:

Member receives (i) and (ii) where:

(i) = 100% of the benefit the Member would have received if he or she had been granted an Option 1 (Joint and 100%) actuarially reduced disability benefit on the day before death.

(ii) = Family Death Benefit Insurance Plan benefit, if a qualified Member.

Surviving spouse or domestic partner may elect A in lieu of B.

C) Eligible for Service Retirement

Surviving spouse or domestic partner receives a lifetime benefit equal to

100% of the benefit the Member would have been entitled to if he or she had been granted an Option 1 (Joint and 100%) actuarially reduced Service Retirement benefit on the day before death.

Benefits under the Family Death Benefit Insurance Plan are not available.

Surviving spouse or domestic partner may elect A or B in lieu of C.

7. Post-retirement Death Benefits:

Beneficiary receives (i), (ii), and (iii), where:

(i) = 50% continuance to surviving eligible spouse or domestic partner, if covered under the plan.

(ii) = Return of unused contributions and interest (provided normal cash refund annuity was selected) and any accrued but unpaid retirement allowance at death of last beneficiary eligible for monthly allowance.

(iii) = \$2,500 death benefit allowance for burial expenses at death of retired member.

8. Post-retirement  
Cost-of-Living Benefits:

Each July 1, the benefits are increased by the percentage increase in CPI (to a maximum of 3%). Increases in CPI above 3% are "banked" to apply in years when CPI increase is less than 3%.

If benefit has been paid less than 12 months, the 3% increase is proportionately decreased.

9. Employee Contributions:

Pre-February 1983 participants:

Members are assumed to contribute per the schedule effective July 1, 1981. To the extent that Members contribute less than the full rates, the City should contribute 94% of the amounts otherwise paid by the Member.

Post-January 1983 participants:

Members contribute 6% of pay.

10. Family Death Benefit Insurance Plan:

A) Eligibility:

Employee may elect coverage after 18 months of City retirement service.

B) Benefits:

Benefits similar to those provided by Social Security Survivors' Insurance are payable if Member dies in active service after 18 months of Family Death Benefit Plan membership.

C) Cost:

It is recommended that the Member and City each contribute \$3.20 per month.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Summary of Health Subsidy Benefits

**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:** *Medical*

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:** The maximum is the rate currently paid for active City employees. As of July 1, 1999, this amount is \$508 per month.

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.



For eligible surviving spouse or domestic partners:

The same subsidy provided to the Member, except this benefit is reduced to half of the Member's subsidy through September 30, 1999.

***Dental***

4% per year of service to a maximum of \$25.33 for Connecticut General and \$11.38 for Safeguard.

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**Summary of Actuarial Assumptions  
and Methods Used for Valuation  
of Retirement Benefits**

Interest Rate: 8.0% per year.

Salary Increases: Total System payroll is assumed to increase 4.0% per year.

Annual salary increases for individuals vary by age.

<b>Age</b>	<b>Annual Salary Increase</b>
Under 34	7%
35 - 44	6%
45 - 54	5%
55 and over	4%

Cost-of-Living: 3.0% per year.

Interest Earned on  
Employee Contributions 6.5% per year.

Mortality:

A. For Pensioners on Service Retirement and Beneficiaries

1971 Group Annuity Mortality Table, with a one-year setback for males and a five-year setback for females

Sample Rates

<b>Deaths per 1,000</b>		
<b>Age</b>	<b>Males</b>	<b>Females</b>
45	2.6	1.6
50	4.7	2.9
55	7.8	5.3
60	11.9	8.5
65	19.2	13.1
70	32.4	21.3
75	51.2	36.1

B. For Pensioners on Disability Retirement:

1981 Disability Mortality Table

Sample Rates

<b>Age</b>	<b>Deaths per 1,000</b>
45	20.8
50	24.4
55	28.4
60	33.0
65	37.9
70	43.7
75	55.3

Rehire for Former Employees:

All former employees are assumed not to be rehired.

Dependents:

Where no other information is available, Members are assumed to have two children with a three-year difference in age. The eldest is assumed to reach age 21 when the participant reaches age 45.

Proportion of Members with Spouses  
or Domestic Partners at Retirement:

76% of male employees and 56% of female employees are assumed to be married or to have a qualified domestic partner at retirement. Wives are assumed four years younger than husbands.

Funding Method:

For retirement benefits: The Projected Unit Credit Cost Method.

For the Family Death Benefit Insurance Plan: One year term cost funding method, with an adjustment for the funded status of the plan at each valuation date.

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.

Special Early Retirement Rate:

Employees eligible for an enhanced retirement benefit during the 1998-2002 window period are assumed to retire at the rate of 25% per year.

# CITY OF 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.

Medical Trend Rates:

	Medical Trend			Dental Trend
	Pre-65	Post 65		
		HMO & Medicare Part B	Other	
1999-2000	8.00%	10.00%	8.50%	8.00%
2000-2001	7.75%	10.00%	8.25%	7.75%
2001-2002	7.50%	10.00%	8.00%	7.50%
2002-2003	7.25%	10.00%	7.75%	7.25%
2003-2004	7.00%	10.00%	7.50%	7.00%
2004-2005	6.75%	9.50%	7.25%	6.75%
2005-2006	6.50%	9.00%	7.00%	6.50%
2006-2007	6.25%	8.50%	6.75%	6.25%
2007-2008	6.00%	8.00%	6.50%	6.00%
2008-2009	6.00%	7.50%	6.25%	6.00%
2009-2010	6.00%	7.00%	6.00%	6.00%
2010-2011	6.00%	6.75%	6.00%	6.00%
2011-2012	6.00%	6.50%	6.00%	6.00%
2012-2013	6.00%	6.25%	6.00%	6.00%
2013+	6.00%	6.00%	6.00%	6.00%

Mortality:	1971 Group Annuity Mortality Table, with a one-year age setback for males and a five-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.
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.
Funding Method:	Projected Unit Credit Funding Method.
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.

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**Average Monthly Claim Rates for  
Health Subsidy Benefits**

Health subsidy benefits are based on a percentage of the maximum subsidy (currently \$508 per month), limited to the composite carrier rates shown on the table below.

The monthly dental subsidy amount assumed for current active members is \$0.90 multiplied by years of service (maximum of 25).

<b>Composite Carrier Rates For Health Subsidy Benefits</b>		
<b>Monthly Rate</b>		
<b>Medical</b>		
<b>Less Than Age 65</b>	<b>HMO</b>	<b>Non-HMO</b>
Married	\$508.00	\$508.00
Single	318.64	508.00
<b>Age 65 and Over</b>		
Married	62.37	428.40
Single	31.41	214.20
<b>Dental</b>	0.90 per year of service (maximum 25 years)	

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Rates Of Separation From Active Service

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

- |    |   |  |
|----|---|--|
| 1. | Ordinary Withdrawal:                            | Member terminates and elects a refund of Member contributions.                                       |
| 2. | Service Retirement:                             | Member retires after meeting age and service requirements for reasons other than disability.         |
| 3. | Ordinary Disability:                            | Member receives disability retirement; disability is not service related.                            |
| 4. | Service Disability:                             | None assumed.  |
| 5. | Ordinary Death:                                 | Member dies before eligibility for retirement; death is not service related.                         |
| 6. | Service Death:                                  | None assumed.  |
| 7. | Death While Eligible<br>for Service Retirement: | Member dies before retirement but after meeting age and service requirements for service retirement. |

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 0.0020 for a Member's service retirement at age 50 means we assume that, on average, 2 out of 1,000 Members who are age 50 will retire at that age.



**Los Angeles City Employees' Retirement System  
Rates of Separation from Active Service**

Age	Ordinary Withdrawal <sup>1</sup>		Service Retirement		Ordinary Disability		Ordinary Death		Death
	Males	Females	Males	Females	Males	Females	Males	Females	Elig for Svc Ret
20	0.3117	0.1500	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
21	0.2500	0.1400	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
22	0.1889	0.1191	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
23	0.1985	0.1200	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
24	0.1491	0.1494	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
25	0.1462	0.1160	0.0000	0.0000	0.0002	0.0000	0.0004	0.0003	0.0000
26	0.1312	0.1084	0.0000	0.0000	0.0002	0.0000	0.0004	0.0003	0.0000
27	0.1126	0.0965	0.0000	0.0000	0.0003	0.0000	0.0005	0.0004	0.0000
28	0.1070	0.0823	0.0000	0.0000	0.0004	0.0000	0.0005	0.0004	0.0000
29	0.1008	0.0782	0.0000	0.0000	0.0005	0.0000	0.0006	0.0005	0.0000
30	0.0801	0.0741	0.0000	0.0000	0.0006	0.0001	0.0006	0.0005	0.0000
31	0.0747	0.0790	0.0000	0.0000	0.0008	0.0001	0.0006	0.0006	0.0000
32	0.0674	0.0658	0.0000	0.0000	0.0009	0.0001	0.0007	0.0006	0.0000
33	0.0640	0.0617	0.0000	0.0000	0.0010	0.0001	0.0007	0.0006	0.0000
34	0.0605	0.0598	0.0000	0.0000	0.0011	0.0001	0.0008	0.0007	0.0000
35	0.0584	0.0550	0.0000	0.0000	0.0013	0.0002	0.0008	0.0007	0.0000
36	0.0559	0.0579	0.0000	0.0000	0.0014	0.0002	0.0009	0.0008	0.0000
37	0.0480	0.0500	0.0000	0.0000	0.0015	0.0002	0.0010	0.0008	0.0000
38	0.0456	0.0498	0.0000	0.0000	0.0016	0.0003	0.0010	0.0009	0.0000
39	0.0433	0.0450	0.0000	0.0000	0.0017	0.0003	0.0011	0.0010	0.0000
40	0.0426	0.0438	0.0000	0.0000	0.0018	0.0004	0.0012	0.0010	0.0000
41	0.0409	0.0456	0.0000	0.0000	0.0018	0.0005	0.0014	0.0011	0.0000
42	0.0412	0.0413	0.0000	0.0000	0.0019	0.0006	0.0014	0.0012	0.0000
43	0.0346	0.0436	0.0000	0.0000	0.0019	0.0008	0.0015	0.0012	0.0000
44	0.0370	0.0375	0.0000	0.0000	0.0020	0.0010	0.0016	0.0013	0.0000
45	0.0340	0.0350	0.0000	0.0000	0.0020	0.0012	0.0017	0.0014	0.0000
46	0.0285	0.0358	0.0000	0.0000	0.0021	0.0014	0.0018	0.0014	0.0000
47	0.0286	0.0320	0.0000	0.0000	0.0021	0.0014	0.0019	0.0015	0.0000
48	0.0260	0.0315	0.0000	0.0000	0.0022	0.0016	0.0021	0.0016	0.0000
49	0.0241	0.0326	0.0000	0.0000	0.0022	0.0018	0.0022	0.0017	0.0000
50	0.0438	0.0602	0.0100	0.0010	0.0023	0.0020	0.0023	0.0018	0.0000
51	0.0536	0.0575	0.0100	0.0050	0.0023	0.0024	0.0025	0.0019	0.0000
52	0.0480	0.0542	0.0100	0.0100	0.0023	0.0028	0.0027	0.0021	0.0000
53	0.0440	0.0522	0.0100	0.0200	0.0023	0.0032	0.0028	0.0022	0.0000
54	0.0410	0.0502	0.0100	0.0300	0.0023	0.0036	0.0030	0.0024	0.0000
55	0.0400	0.0482	0.1000	0.0800	0.0024	0.0040	0.0032	0.0026	0.0021
56	0.0350	0.0450	0.1100	0.0800	0.0024	0.0040	0.0034	0.0029	0.0024
57	0.0300	0.0425	0.1200	0.0700	0.0024	0.0040	0.0036	0.0031	0.0026
58	0.0275	0.0400	0.1300	0.1100	0.0024	0.0040	0.0039	0.0034	0.0029
59	0.0250	0.0375	0.1400	0.1000	0.0024	0.0040	0.0041	0.0038	0.0032
60	0.0225	0.0350	0.2000	0.2000	0.0024	0.0000	0.0044	0.0042	0.0035
61	0.0200	0.0325	0.1800	0.1000	0.0024	0.0000	0.0050	0.0046	0.0039
62	0.0175	0.0300	0.1600	0.1500	0.0025	0.0000	0.0055	0.0052	0.0043
63	0.0150	0.0275	0.1800	0.1600	0.0025	0.0000	0.0061	0.0058	0.0048
64	0.0125	0.0250	0.2000	0.1700	0.0025	0.0000	0.0067	0.0065	0.0053
65	0.0000	0.0000	0.3000	0.2000	0.0000	0.0000	0.0074	0.0073	0.0059
66	0.0000	0.0000	0.2500	0.2000	0.0000	0.0000	0.0082	0.0084	0.0065
67	0.0000	0.0000	0.2500	0.2000	0.0000	0.0000	0.0090	0.0097	0.0072
68	0.0000	0.0000	0.2500	0.2000	0.0000	0.0000	0.0098	0.0111	0.0078
69	0.0000	0.0000	0.2500	0.2000	0.0000	0.0000	0.0106	0.0127	0.0086
70	0.0000	0.0000	1.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000

<sup>1</sup> For Members with four or more years of service. For Members with less than four years of service, add .0500 to these rates.

**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM**

**Contribution Rates Assumed For Members  
Participating Before February 1, 1983**

Age	Normal	Survivor	Total
16	8.00%	0.22%	8.22%
17	8.04	0.28	8.32
18	8.08	0.33	8.41
19	8.14	0.39	8.53
20	8.20	0.44	8.64
21	8.27	0.48	8.75
22	8.34	0.53	8.87
23	8.42	0.56	8.98
24	8.50	0.60	9.10
25	8.58	0.63	9.21
26	8.66	0.66	9.32
27	8.75	0.68	9.43
28	8.86	0.70	9.56
29	8.96	0.72	9.68
30	9.06	0.75	9.81
31	9.17	0.77	9.94
32	9.28	0.79	10.07
33	9.40	0.81	10.21
34	9.50	0.82	10.32
35	9.61	0.83	10.44
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

Age	Normal	Survivor	Total
40	10.19%	0.91%	11.10%
41	10.29	0.92	11.21
42	10.41	0.93	11.34
43	10.52	0.94	11.46
44	10.64	0.95	11.59
45	10.76	0.97	11.73
46	10.89	0.98	11.87
47	11.01	0.99	12.00
48	11.12	1.00	12.12
49	11.24	1.01	12.25
50	11.34	1.03	12.37
51	11.44	1.05	12.49
52	11.55	1.06	12.61
53	11.65	1.07	12.72
54	11.75	1.08	12.83
55	11.85	1.09	12.94
56	11.94	1.10	13.04
57	12.03	1.12	13.15
58	12.13	1.13	13.24
59 - Over	12.19	1.14	13.33

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



Exhibit XII

**Los Angeles City Employees' Retirement System  
Distribution of Pensioners by Plan Year of Retirement and by Attained Age as of June 30, 1999  
Total for All Pensioners  
Retirement Benefits**

Attained Age	Retirements in Plan Year Beginning in															Pre 1984	Total	Average Monthly Benefit Amount
	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984			
Under 40	12	5	6	9	9	5	7	4	3	4	0	3	0	0	0	4	71	800
40 - 44	5	3	10	10	15	4	2	6	3	6	1	2	1	0	0	1	69	914
45 - 49	12	9	6	17	15	12	3	9	9	5	10	8	10	5	9	34	173	955
50 - 54	84	70	38	18	14	12	7	11	12	10	13	8	9	7	6	58	377	1,928
55 - 59	187	197	250	88	49	16	10	15	10	17	19	11	12	7	8	91	987	2,260
60 - 64	108	170	170	149	161	167	133	120	87	53	24	22	18	20	15	148	1,565	2,222
65 - 69	61	122	101	128	121	118	154	124	129	171	157	133	125	78	50	197	1,969	2,112
70 - 74	48	53	59	65	59	89	89	93	113	128	163	142	156	131	158	850	2,396	1,906
75 - 79	11	14	17	22	16	34	50	41	40	64	94	108	126	89	154	1,442	2,322	1,723
80 - 84	3	7	3	9	8	8	11	8	2	12	15	35	30	43	78	1,341	1,613	1,424
85 - 89	1	0	1	0	0	1	5	1	5	3	4	2	3	6	9	778	819	1,128
90 - 94	0	0	0	1	1	1	0	0	0	2	1	0	2	1	1	344	354	904
Over 94	3	3	3	2	2	4	1	3	0	0	0	0	0	0	0	107	128	751
<b>Total</b>	<b>535</b>	<b>653</b>	<b>664</b>	<b>518</b>	<b>470</b>	<b>471</b>	<b>472</b>	<b>435</b>	<b>413</b>	<b>475</b>	<b>501</b>	<b>474</b>	<b>492</b>	<b>387</b>	<b>488</b>	<b>5,395</b>	<b>12,843</b>	<b>1,798</b>
<b>Average Monthly Benefit Amount</b>	<b>2,470</b>	<b>2,548</b>	<b>2,500</b>	<b>2,205</b>	<b>1,897</b>	<b>2,019</b>	<b>76</b>	<b>2,166</b>	<b>2,118</b>	<b>1,992</b>	<b>2,011</b>	<b>1,960</b>	<b>1,939</b>	<b>1,824</b>	<b>1,878</b>	<b>1,326</b>	<b>1,798</b>	

Average Monthly Benefit Amount: \$1,798  
Total Annual Benefits: \$277,022,689

Exhibit XIII

**Los Angeles City Employees' Retirement System  
Distribution of Pensioners by Plan Year of Retirement and by Attained Age as of June 30, 1999  
Total for All Pensioners\*  
Health Subsidy Benefits**

Attained Age	Retirements in Plan Year Beginning in															Pre 1984	Total	Average Monthly Health Subsidy	
	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984				
Under 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
40 - 44	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	180
45 - 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 - 54	74	68	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175	379
55 - 59	135	164	210	67	50	6	2	1	2	2	5	2	3	1	2	11	663	357	
60 - 64	86	158	139	125	103	140	125	103	78	57	4	5	2	5	3	28	1,161	349	
65 - 69	46	98	80	99	89	100	110	105	102	111	127	115	94	59	41	37	1,413	164	
70 - 74	28	35	40	41	35	70	69	63	78	85	116	99	116	94	99	442	1,510	115	
75 - 79	3	12	9	14	8	22	37	27	29	41	61	78	88	66	109	782	1,386	104	
80 - 84	2	2	3	5	4	3	7	5	0	6	5	20	21	25	47	704	859	105	
85 - 89	0	0	0	0	0	0	3	1	2	1	2	2	1	3	4	350	369	100	
90 - 94	0	0	0	1	0	1	0	0	0	1	1	0	1	0	0	124	129	138	
Over 94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	41	124	
<b>Total</b>	<b>535</b>	<b>653</b>	<b>664</b>	<b>518</b>	<b>470</b>	<b>471</b>	<b>472</b>	<b>435</b>	<b>413</b>	<b>475</b>	<b>501</b>	<b>474</b>	<b>326</b>	<b>253</b>	<b>305</b>	<b>2,519</b>	<b>7,707</b>	<b>183</b>	
<b>Average Monthly Health Subsidy</b>	<b>219</b>	<b>252</b>	<b>235</b>	<b>177</b>	<b>150</b>	<b>162</b>	<b>145</b>	<b>142</b>	<b>131</b>	<b>121</b>	<b>97</b>	<b>93</b>	<b>125</b>	<b>112</b>	<b>114</b>	<b>116</b>	<b>183</b>		

Average Monthly Health Subsidy: \$183  
Total Monthly Health Subsidy: \$1,407,544

\*Pensioners does not include beneficiaries

## CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

<b>Retention Rates</b>			
Probability of Working to Age 55			
Age	Male	Female	60% male/40% female
under 25	10.91%	13.66%	12.0%
25-29	25.12%	24.88%	25.0%
30-34	39.43%	36.26%	38.2%
35-39	51.82%	47.07%	49.9%
40-44	62.53%	57.18%	60.4%
45-49	72.31%	66.91%	70.1%
50-54	85.86%	81.05%	83.9%
Probability of Working 10 Years			
Age	Male	Female	60% male/40% female
45-49	53.43%	51.15%	52.5%
50-54	23.62%	26.85%	24.9%
55-59	9.68%	14.32%	11.5%
60-64	5.80%	10.08%	7.5%