

FILE



---

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

---

*Actuarial Valuation*

*As Of June 30, 1997*

*Revised*



December 2, 1997

Watson Wyatt & Company

Suite 700  
15303 Ventura Boulevard  
Sherman Oaks, CA 91403-3197  
Telephone 818 906 2631  
Fax 818 906 2097

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, 1997 of the City Employees' Retirement System.

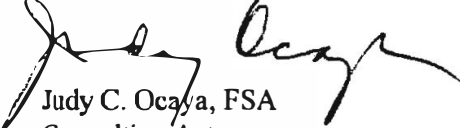
This report is divided into three parts:

- 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,

  
Sharon A. Peake, FSA  
Consulting Actuary

  
Judy C. Ocaña, FSA  
Consulting Actuary

SAP:JCO:MC  
p leil\_martcers197 val

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

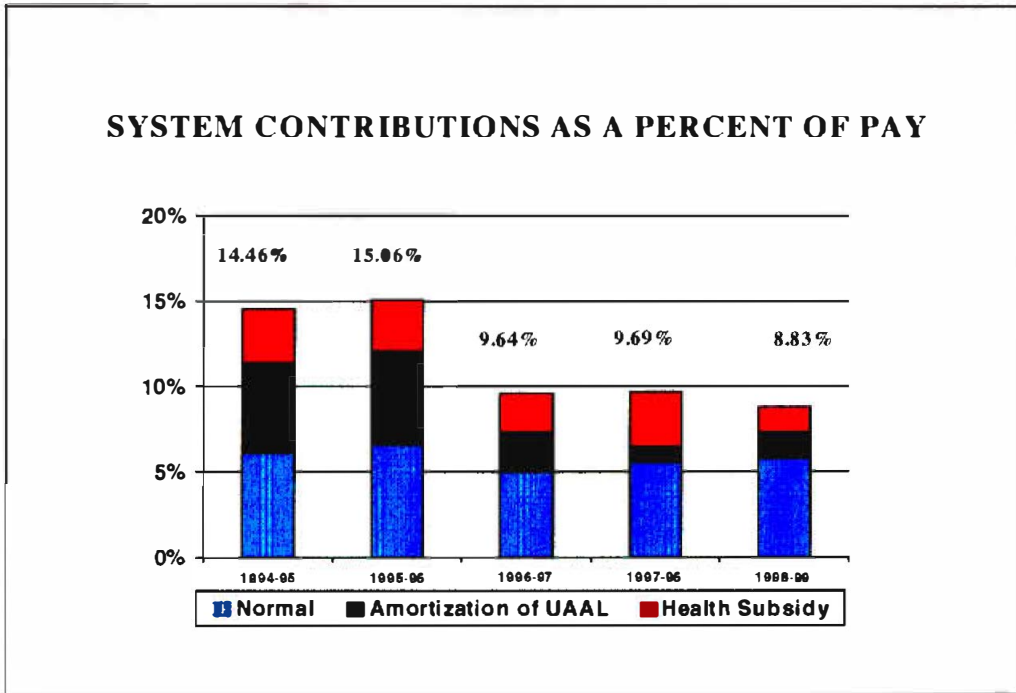
**Actuarial Valuation As Of June 30, 1997  
Table of Contents**

	<u>Page No.</u>
<b>A. Valuation Summary</b>	
Introduction .....	1
Summary of Significant Valuation Results .....	2
Budget Requirements .....	3
System Assets .....	6
Derivation of Actuarial Value of Assets .....	8
Summary of System Funding .....	9
<b>B. Valuation Detail</b>	
System Membership .....	12
Applicable Assets at June 30, 1997 .....	13
<b>I. Valuation of Retirement Benefits</b>	
Actuarial Balance Sheet .....	14
Budget and Recommended Contributions .....	17
Detail of Amortization of Unfunded Actuarial Accrued Liability .....	19
Funded Status of Retirement Benefits .....	20
Member Contributions .....	24
Family Death Benefit Insurance Plan .....	25
<b>II. Valuation of Health Subsidy Benefits</b>	
Introduction .....	26
Actuarial Balance Sheet .....	27
Budget and Recommended Contributions .....	30
Detail of Amortization of Unfunded Actuarial Accrued Liability .....	31
Funded Status of Health Subsidy Benefits .....	32
Assumptions and Methods .....	33

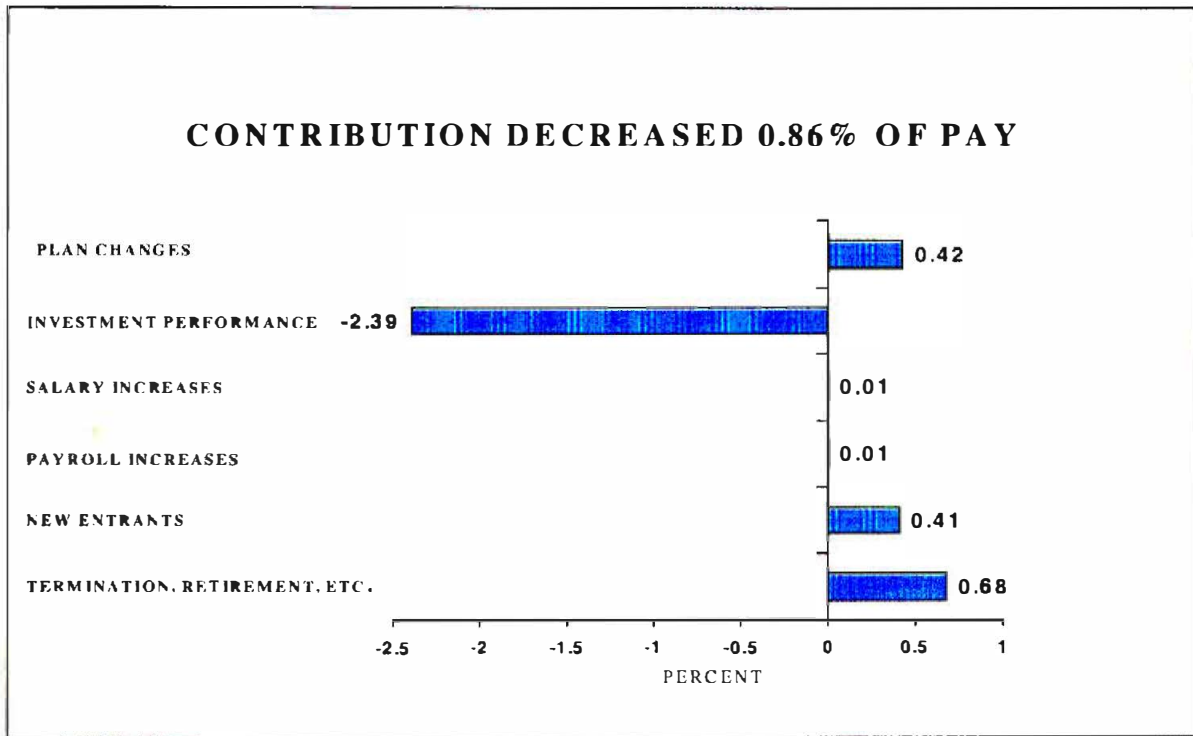
## C. Exhibits

Exhibit I .....	System Assets (Book Value)
Exhibit II .....	Statement of Reserve and Fund Balance Accounts
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, 1997 for Active Members
Exhibit XII .....	Age/Benefit Distribution of Pensioners as of June 30, 1997
Exhibit XIII .....	Age/Average Monthly Health Subsidy Distribution as of June 30, 1997

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, book value and market values was provided to us by the Retirement Office. We have not audited or verified these figures.

	June 30, 1997	June 30, 1996	Percent Change
Total System Assets			
Market Value	\$6,069,797,808	\$5,192,038,000	+16.9%
Book Value	5,153,309,230	4,432,513,431	+16.3%
Actuarial Value	5,326,700,106	4,774,115,864	+11.6%

<b>Rate of Return</b>	
<b>July 1, 1996 - June 30, 1997</b>	
The rate of return on total plan assets was as follows:	
Market Value	19.32%
Book Value	19.09%
Actuarial Value	14.12%
These rates of return were based on the following cash flow information:	
Contributions	
City	\$113,262,396
Members	53,274,812
Pensions Paid	
Retirement Allowances	226,902,682
Family Death Benefits	1,066,838
Health Benefits	20,010,324
Refunds of Member Contributions	9,447,708
Administration Expenses	19,206,089
Investment Earnings	
Realized	830,892,232
Unrealized	156,964,009

The 14.12% 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, 1997	June 30, 1996	June 30, 1995	June 30, 1994
1. Beginning of Year Market Value	\$5,192,038,000	\$4,458,509,000	\$3,996,980,000	\$3,846,821,000
2. Contributions	166,537,208	196,548,903	188,132,339	215,921,473
3. Benefit Payments	257,427,552	241,947,677	229,596,515	219,198,961
4. Expected Return Based on 8% Assumption	411,727,427	354,864,769	318,099,833	307,614,580
5. Expected End of Year Market Value (1)+(2)-(3)+(4)	5,512,875,083	4,767,974,995	4,273,615,657	4,151,158,092
6. Actual End of Year Market Value	6,069,797,808	5,192,038,000	4,458,509,000	3,996,980,000
7. Gain/(Loss)	556,922,725	424,063,005	184,893,343	(154,178,092)

1. Market Value at June 30, 1997	\$6,069,797,808
1997 (Gain)/Loss x 80%	(445,538,180)
1996 (Gain)/Loss x 60%	(254,437,803)
1995 (Gain)/Loss x 40%	(73,957,337)
1994 (Gain)/Loss x 20%	<u>30,835,618</u>
2. Actuarial Value at June 30, 1997	5,326,700,106
3. 80% of Market Value at June 30, 1997	4,855,838,246
4. 120% of Market Value at June 30, 1997	7,283,757,370
5. Actuarial Value at June 30, 1997 (2), but no less than (3) and no more than (4)	<b>\$5,326,700,106</b>

The actuarial value of assets is a market-related value, where gains and losses are recognized over a 5-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, 1997, the System had assets at actuarial value equal to 97.1% 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 75.7% of liabilities. This remaining unfunded liability is to be funded by future City and Member contributions to the System.

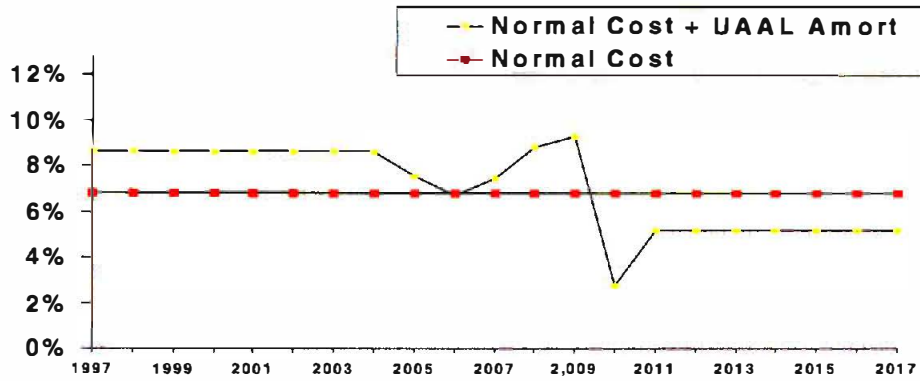
The City contributions are made up of two parts:

- 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.
- Funding of Unfunded Actuarial Accrued Liability (UAAL): The UAAL represents liabilities accrued to date, that have not been funded by prior years' normal costs. Most of the UAAL is funded as a level percent of payroll until the year 2010. Increases in the UAAL 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 are fully amortized. However, it will increase as a dollar amount as the total covered payroll increases.

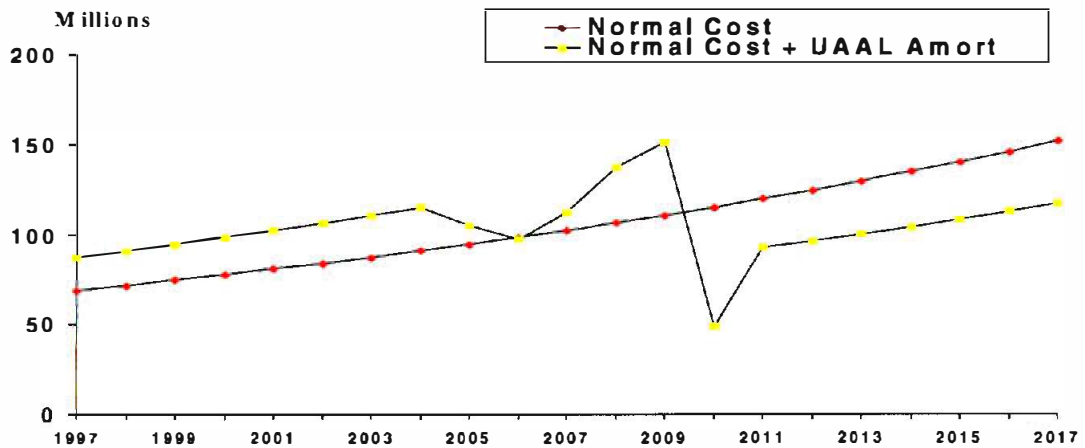
The total contribution will be the sum of the Normal Cost and UAAL contributions.

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**



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

**Valuation Summary  
Table of Contents**

	<u>Page No.</u>
Introduction .....	1
Summary of Significant Valuation Results .....	2
Budget Requirements .....	3
System Assets .....	6
Derivation of Actuarial Value of Assets .....	8
Summary of System Funding.....	9

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Actuarial Valuation As Of June 30, 1997

### 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, 1997 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. In the past year, the plan "buyback" provisions were amended to allow Members to buy benefits for service at other governmental employers or for military service. These new provisions are reflected in this valuation.

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

All actuarial assumptions and methods remain unchanged since the last valuation. There was a change in the method of allocating excess investment earnings between retirement and health subsidy assets which caused an increase in the retirement benefit contribution and a decrease in the health subsidy contribution. The total contribution for all benefits combined was unaffected by this change.

We believe the assumptions and methods used are appropriate for the valuation of the liabilities of the Retirement System at June 30, 1997.

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>				
		June 30, 1997	June 30, 1996	Percent Change
I.	Total Membership			
	A. Active Members	22,219	22,319	-0.4%
	B. Pensioners	12,698	12,242	+3.7%
II.	Salaries at June 30			
	A. Total Annual Payroll	\$990,616,145	\$957,422,907	+3.5%
	B. Average Monthly Salary	\$3,715	\$3,576	+3.9%
III.	Benefits to Current Pensioners and Beneficiaries			
	A. Total Annual Benefits	\$240,692,161	\$219,872,033	+9.5%
	B. Average Monthly Benefit Amount	\$1,580	\$1,497	+5.5%
IV.	Total System Assets (Actuarial Value)	\$5,326,700,106	\$4,774,115,864	+11.6%
V.	Unfunded Actuarial Accrued Liability			
	A. Retirement Benefits	\$83,827,800	\$7,590,852	+1004.3%
	B. Health Subsidy Benefits	\$73,889,152	\$259,142,412	-71.5%
VI.	Budget Items	FY 1998-1999	FY 1997-1998	
	A. Retirement Benefits			
	1. Normal Cost as a Percent of Pay	5.81%	5.64%	+3.0%
	2. Amortization of Unfunded Actuarial Accrued Liability	1.53%	0.87%	+75.9%
	3. Total Retirement Contribution	7.34%	6.51%	+12.7%
	B. Health Subsidy Contribution, as a Percent of Pay	1.49%	3.18%	-53.1%
	C. Total Contribution (A+B)	8.83%	9.69%	-8.9%
VII.	Funded Ratio			
	(Based on Actuarial Value of Assets)			
	A. Retirement Benefits	98.3%	99.8%	-1.5%
	B. Health Subsidy Benefits	87.2%	52.3%	+66.7%
	C. Total	97.1%	94.7%	+2.5%
	(Based on Market Value of Assets)			
	D. Retirement Benefits	112.0%	108.6%	+3.1%
	E. Health Subsidy Benefits	99.4%	56.9%	+74.7%
	F. Total	110.7%	103.0%	+7.5%

# 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.
- The payment to amortize the Unfunded Actuarial Accrued Liability (UAAL). Most of the UAAL is amortized as a level percent of pay over the period ending June 30, 2010. Increases in the UAAL due to assumption and method 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 0.86% of payroll from last year.

<b>Recommended City Contributions For Fiscal Year 1998 - 1999</b>	
	<b>Percentage of Salary</b>
Contribution for Retirement, Disability, and Death Benefits	7.34%
Contribution for Health Subsidy Benefits	1.49%
<b>Total Contribution</b>	<b>8.83%</b>

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

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## Valuation Detail Table of Contents

	<u>Page No.</u>
System Membership .....	12
Applicable Assets at June 30, 1997 .....	13
<b><i>I. Valuation of Retirement Benefits</i></b>	
Actuarial Balance Sheet .....	14
Budget and Recommended Contributions .....	17
Detail of Amortization of Unfunded Actuarial Accrued Liability .....	19
Funded Status of Retirement Benefits .....	20
Member Contributions .....	24
Family Death Benefit Insurance Plan .....	25
<b><i>II. Valuation of Health Subsidy Benefits</i></b>	
Introduction .....	26
Actuarial Balance Sheet .....	27
Budget and Recommended Contributions .....	30
Detail of Amortization of Unfunded Actuarial Accrued Liability .....	31
Funded Status of Health Subsidy Benefits .....	32
Assumptions and Methods .....	33



# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## System Membership

Computer tapes containing data on System membership as of June 30, 1997 were supplied to us by the Retirement Office. On the following schedule we present a summary of System membership at June 30, 1997 and June 30, 1996. Pension amounts shown do not include the cost-of-living adjustments that were effective on July 1, 1997. All July 1 increases were reflected in our valuation calculations.

It was necessary to make assumptions for less than 0.1% 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 decreased by 0.4% since the last valuation. The total number of retired Members and their beneficiaries increased by 3.7%, while the average retirement benefit amount increased by 5.5%.

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>			
	June 30, 1997	June 30, 1996	Percent Change
<b>I. Active Members</b>			
a. Number	22,219	22,319	-0.4%
b. Average Age	44.2	43.9	+0.7%
c. Average Years of Service	12.9	12.5	+3.2%
d. Salary			
i) Total Annual Salary	\$990,616,145	\$957,422,907	+3.5%
ii) Average Monthly Salary	\$3,715	\$3,575	+3.9%
<b>II. Pensioners and Beneficiaries</b>			
a. Number	12,698	12,242	+3.7%
b. Average Age	71.5	71.6	-0.1%
c. Allowance			
i) Total Annual Allowance	\$240,692,161	\$219,872,033	+9.5%
ii) Average Monthly Amount	\$1,580	\$1,497	+5.5%

# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### Applicable Assets At June 30, 1997

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

	Book Value	Market Value	Actuarial Value
1. Total Value of Assets at June 30, 1997	\$5,153,309,230	\$6,069,797,808	\$5,326,700,106
2. Less Reserves and Liabilities Established for:			
a. Family Death Benefit Insurance	20,204,602	23,797,884	20,884,417
b. Retiree Health Subsidy	<u>486,923,569</u>	<u>573,520,330</u>	<u>503,306,848</u>
c. Total	507,128,171	597,318,214	524,191,265
3. Net Assets Available for Retirement Benefits at June 30, 1997 (Item 1 less Item 2)	\$4,646,181,059	\$5,472,479,594	\$4,802,508,841

# 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:

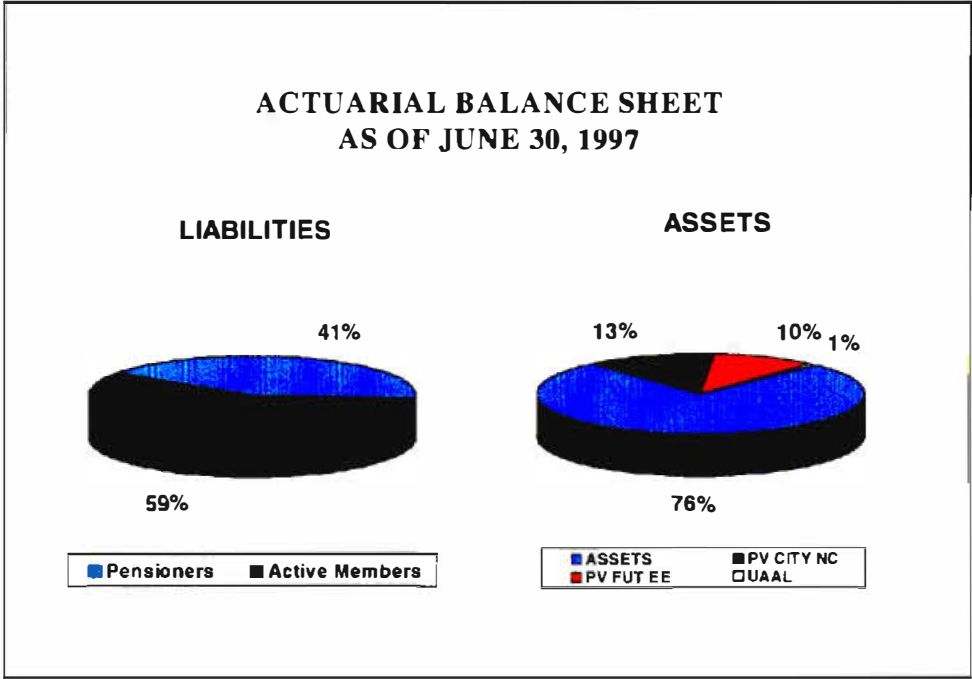
- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

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 1998-1999 fiscal year, the normal cost percentage is 5.81% 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 less 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. This liability 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 41% of the System's liabilities are for retired Members and their beneficiaries and 59% are for active Members. About 76% of the System's assets consist of currently available assets with 24% consisting of future contributions from the City and the Members.



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

**VALUATION OF RETIREMENT BENEFITS**

**Actuarial Balance Sheet As Of June 30, 1997**

<b>ASSETS</b>		
1. Applicable Assets		\$4,802,508,841
2. Present Value of Future Member Contributions		\$605,035,236
3. Present Value of Future Contributions by the City For:		
a. Normal Cost	\$841,671,087	
b. Amortization of Certain Liabilities	83,827,800	
c. Total		\$925,498,887
4. Total Assets		\$6,333,042,964
<b>LIABILITIES</b>		
5. Present Value of Benefits Already Granted (Inactive Members)		\$2,598,432,150
6. Present Value of Benefits to be Granted (Active Members)		3,734,610,814
7. Total Liabilities		\$6,333,042,964

# 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 is the payment stream required to fund the excess of System liabilities over 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 increased primarily due to a change in the asset earnings allocation. In 1996-1997, the System decided to shift some of the excess investment earnings from the retirement assets to those reserved for the health subsidy. While there was still an asset gain of \$75 million on retirement assets, the gain would have been larger if not for this shift.

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 1998 - 1999</b>	
	<b>Percentage of Salary</b>
For Retirement Benefits	
Normal Cost	5.81%
Unfunded Actuarial Accrued Liability	1.53%
<b>Total Contributions for Retirement Benefits</b>	<b>7.34%</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 06/30/97	Amortization Amount	Percentage of Salary
1. Change in Asset Valuation Method at 06/30/89	22	(126,377,928)	(8,617,084)	(.87%)
2. Change in Assumptions at 06/30/89	22	(123,162,306)	(8,397,826)	(.85%)
3. Ad Hoc COLA Increase at 12/01/89	8	19,883,794	2,934,564	.30%
4. Actuarial (Gain)/Loss at 06/30/90	8	2,744,281	405,017	.04%
5. Actuarial (Gain)/Loss at 06/30/91	9	7,134,512	952,827	.10%
6. Actuarial (Gain)/Loss at 06/30/92	10	(35,304,803)	(4,319,490)	(.44%)
7. Change in Assumptions at 06/30/93	26	(204,025,389)	(12,552,252)	(1.27%)
8. Actuarial (Gain)/Loss at 06/30/93	11	(106,778,158)	(12,087,704)	(1.22%)
9. Actuarial (Gain)/Loss at 06/30/94	12	(11,599,644)	(1,224,959)	(0.12%)
10. Actuarial (Gain)/Loss at 06/30/95	13	(22,309,964)	(2,212,927)	(0.22%)
11. Actuarial (Gain)/Loss at 06/30/96	14	(237,548,953)	(22,260,707)	(2.25%)
12. Plan Amendment at 06/30/96	29	39,600,065	2,289,371	0.23%
13. Change in Assumption at 06/30/96	29	64,633,415	3,736,607	0.38%
14. Change in Asset Valuation Method at 06/30/96	29	38,771,784	2,241,486	0.23%
15. Plan Amendment at 6/30/97	30	65,407,475	3,712,184	0.37%
16. Actuarial (Gain)/Loss at 6/30/97	15	21,841,630	1,943,386	0.20%
17. Remaining UAAL	13	690,917,989	68,532,205	6.92%
<b>Total</b>		<b>\$83,827,800</b>	<b>\$15,074,698</b>	<b>1.53%</b>



# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### **Funded Status and GASB Disclosure**

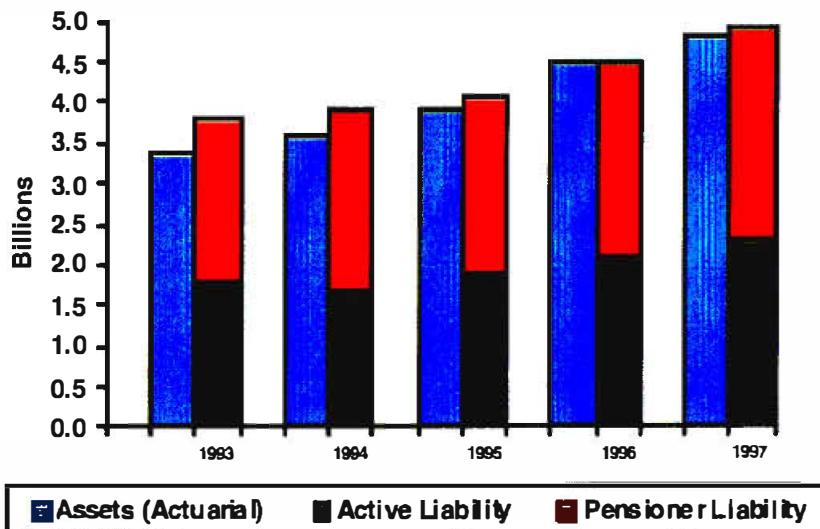
In November 1994, the Governmental Accounting Standards Board (GASB) adopted Statement No. 25, changing the way in which governmental retirement systems must report financial information. This replaces the requirements of GASB No. 5. While released in 1994, the statement allowed plans to delay the effective date until reporting for plan years beginning after June 15, 1996. This statement applies only to retirement benefits paid by the System.

This report includes two new 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 compensation). 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 only for the last five years. Actuarial assets exceed liabilities for pensioners, and are 98.3% of total retirement liabilities at June 30, 1997. Based on the market value of assets, the funded ratio for retirement benefits is 112.0%.

### FUNDED STATUS OF RETIREMENT BENEFITS 1993-1997



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

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

Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
June 30, 1992	\$3,085,517,616	\$3,597,424,573	\$511,906,957	85.8%	\$915,343,121	55.9%
June 30, 1993	3,406,232,239	3,634,196,193	227,963,954	93.7%	898,116,886	25.4%
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%

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

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

Fiscal Year Ending	Annual Required Contribution	Percentage Contributed
(1)	(2)	(3)
1992	\$138,626,866	100%
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%

**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 85% 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 84% 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 1996 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. After reviewing the assets and liabilities of the plan as of June 30, 1997, we recommend that this contribution rate be continued for the next two years.

# 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, 1997 is \$503,306,848. The City provides the book value of the health subsidy reserve, which we use along with estimates of the market value, to determine the actuarial value used in funding calculations.

This section of the report contains the results of the June 30, 1997 valuation of the retiree health insurance premium subsidy. In determining the budget amounts for the fiscal year 1998-1999, 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 8.5% in 1997-1998, decreasing gradually to 6.0% in 2008 and beyond for benefits paid before age 65, and rates of 8.25% in 1997-1998 decreasing to 6.0% in 2006 and beyond for benefits paid after age 65.
- graded dental rates of 8.5% in 1997-1998 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, 1997. 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:

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

No Member contributions are required for health subsidy benefits.

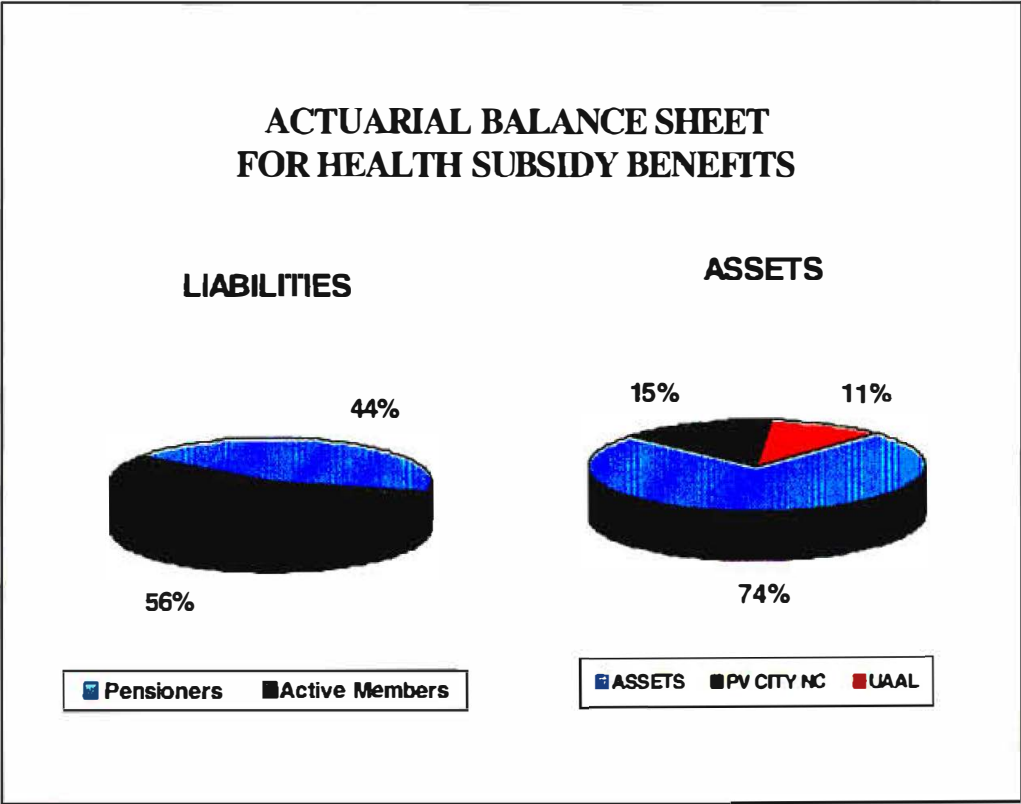
The last item, the present value of future City contributions, is made up of two parts:

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 1998-1999 fiscal year, the normal cost percentage for health subsidy benefits is 1.19% 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 less 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. This liability 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 health subsidy benefits of the System. It shows that about 44% of the System's liabilities are for retired Members and their beneficiaries and 56% are for active Members with ten or more years of service. About 74% of the System's assets consist of currently available assets with 26% consisting 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, 1997**

<b>ASSETS</b>		
1. Applicable Assets		\$503,306,848
2. Present Value of Future Member Contributions		0
3. Present Value of Future Contributions by the City:		
a. Normal Costs	\$ 101,594,690	
b. Amortization of Certain Liabilities	73,889,152	
c. Total		\$175,483,842
4. Total Assets		\$678,790,690
<b>LIABILITIES</b>		
5. Present Value of Benefits Already Granted (Inactive Members)		\$301,312,000
6. Present Value of Benefits to be Granted (Active Members With Ten or More Years of Service)		377,478,690
7. Total Liabilities		\$678,790.690

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

**Recommended City Contribution  
For Fiscal Year 1998-1999**

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 1998.

The contribution for health subsidy benefits decreased from 3.18% of payroll for 1997-1998 to 1.49% of payroll for 1998-1999. This was primarily due to significant asset gains which were allocated to the reserves for these health subsidy benefits. These gains were shifted from the assets available for retirement benefits.

<b>Recommended City Contributions For Fiscal Year 1998 - 1999</b>	
	<b>Percentage of Salary</b>
For Health Subsidy Benefits	
Normal Cost	1.19%
Unfunded Actuarial Accrued Liability	0.30%
<b>Total Contributions for Health Subsidy Benefits</b>	<b>1.49%</b>

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

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

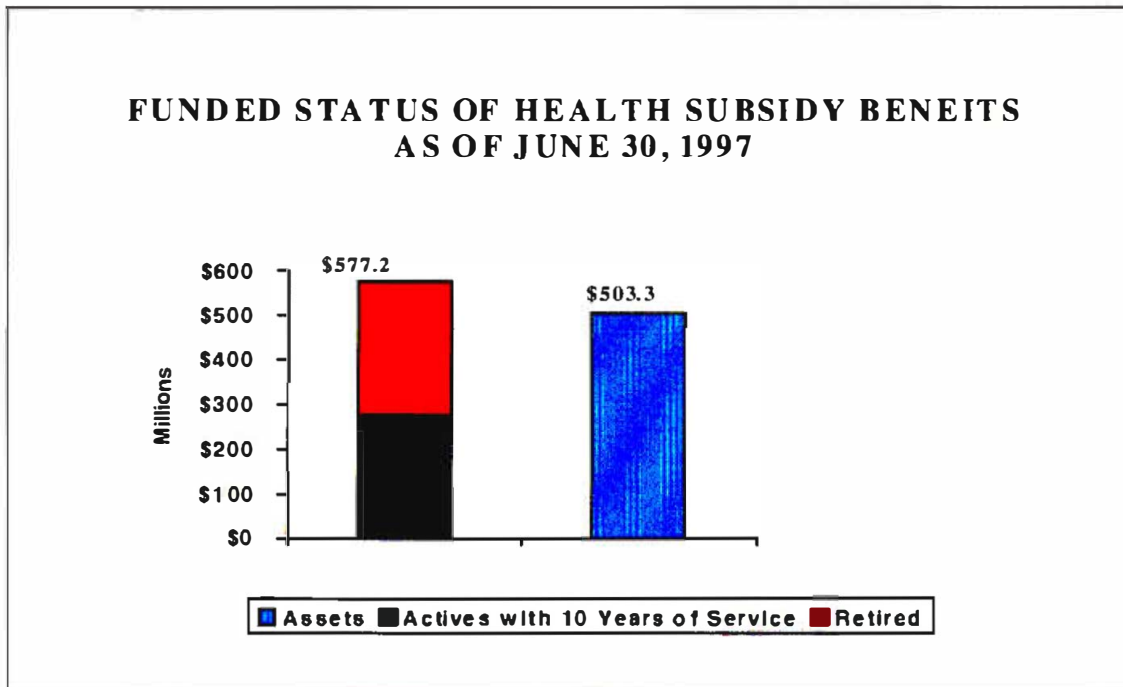
Item	Remaining Years	Balance to be Amortized 06/30/97	Amortization Amount	Percentage of Salary
1. Initial Base as a Level Percent of Pay through 06/30/2010	13	\$31,924,097	\$3,166,553	.32%
2. Actuarial (Gain)/Loss at 06/30/90	8	47,911,793	7,071,097	.71%
3. Change in Assumptions at 06/30/89	22	25,002,989	1,704,830	.17%
4. Change in Funding Method 06/30/89	22	156,006,591	10,637,315	1.07%
5. Actuarial (Gain)/Loss at 06/30/91	9	56,683,580	7,570,192	.76%
6. Change in Assumptions at 06/30/92	25	14,320,398	901,831	.09%
7. Actuarial (Gain)/Loss at 06/30/92	10	(26,177,574)	(3,202,787)	(.32%)
8. Change in Assumptions 06/30/93	26	(22,625,471)	(1,391,987)	(.14%)
9. Actuarial (Gain)/Loss at 06/30/93	11	(10,445,997)	(1,182,528)	(.12%)
10. Actuarial (Gain)/Loss at 06/30/94	12	(37,726,372)	(3,984,026)	(.40%)
11. Actuarial (Gain)/Loss at 06/30/95	13	(43,927,958)	(4,357,217)	(.44%)
12. Change in Assumptions at 06/30/95	28	(16,268,618)	(959,085)	(.10%)
13. Actuarial (Gain)/Loss at 06/30/96	14	(21,144,870)	(1,981,485)	(.20%)
14. Plan Amendment at 06/30/ 96	29	170,657,196	9,866,086	1.00%
15. Change in Assumptions at 06/30/96	29	(59,570,027)	(3,443,881)	(.35%)
16. Change in Asset Valuation Method at 06/30/96	29	2,383,243	137,781	.01%
17. Plan Amendment at 06/30/97	30	7,860,892	446,143	.05%
18. Actuarial (Gain)/Loss at 06/30/97	15	(200,974,740)	(17,881,978)	(1.81%)
<b>Total</b>		<b>\$73,889,152</b>	<b>\$3,166,854</b>	<b>.30%</b>

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

## Funded Status of Health Subsidy Benefits At June 30, 1997

This information is calculated 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, 1997	
- Retired Members	\$301,312,000
- Active Members with Ten Years of Service	<u>275,884,000</u>
- Total	<u>\$577,196,000</u>
Value of Assets Available for Health Subsidy Benefits	
Market	\$573,520,330
Actuarial	\$503,306,848
Funded Ratio	
Market	99.4%
Actuarial	87.2%



# CITY OF LOS ANGELES

## CITY EMPLOYEES' RETIREMENT SYSTEM

### VALUATION OF HEALTH SUBSIDY BENEFITS

#### Assumptions And Methods

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 has been 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, 1996. While the ultimate trend rate was kept, the trend rates for the immediate future have been reduced. For details on these new 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, 1997 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 (Book Value)
Exhibit II:	Statement of Reserve and Fund Balance Accounts
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, 1997 for Active Members
Exhibit XII:	Age/Benefit Distribution of Pensioners as of June 30, 1997
Exhibit XIII:	Age/Average Monthly Health Subsidy Distribution as of June 30, 1997

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

<b>System Assets (Book Value)</b>		
	<b>June 30, 1997</b>	<b>June 30, 1996</b>
<b>ASSETS</b>		
Cash	\$5,105,246	\$296,657
Receivable		
Accrued Interest and Dividend Income	35,696,000	35,337,729
Other Receivable	4,649,971	7,154,074
Proceeds from Investment	<u>101,336,827</u>	<u>34,558,157</u>
Total Receivable	141,682,798	77,049,960
Investments		
Temporary, at Cost	383,405,501	383,546,927
Bonds, at Amortized Cost	1,700,966,501	1,511,015,933
Common Stocks, at Cost	2,822,350,202	2,379,901,527
Real Estate	115,379,017	128,465,008
Alternative Investment, at Cost	30,330,616	9,650,000
Security Lending Collateral, at Cost	<u>1,239,000,000</u>	<u>0</u>
Total Investments	6,291,431,837	4,412,579,396
Total Assets	6,438,219,881	4,489,926,013
<b>LIABILITIES</b>		
Accounts Payable and Accrued Expenses	(1,284,910,651)	(57,412,582)
<b>NET ASSETS AVAILABLE FOR PLAN BENEFITS</b>	<b>\$5,153,309,230</b>	<b>\$4,432,513,431</b>



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

<b>Statement Of Reserve And Fund Balance Accounts</b>		
	June 30, 1997	June 30, 1996
<b>ACTUARIAL</b>		
Member Contributions	\$683,048,131	\$637,736,799
Annuities	374,598,141	364,545,077
Pensions	3,588,534,786	3,146,422,364
Family Death Benefit Insurance	20,204,603	19,625,778
Health Benefits	486,923,569	264,183,412
<b>Total Actuarial</b>	<b>\$5,153,309,230</b>	<b>\$4,432,513,431</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>\$5,153,309,230</b>	<b>\$4,432,513,431</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, 1997</b>	<b>Year Ended June 30, 1996</b>
<b>REVENUES</b>		
City Contributions	\$113,262,396	\$149,036,489
Members' Contributions	53,274,812	47,512,414
Income from Investments - Realized	830,892,232	186,208,990
<b>Total Revenues</b>	<b>\$997,429,440</b>	<b>\$382,757,893</b>
<b>EXPENDITURES</b>		
Pensions		
Retirement Allowances	\$226,902,682	\$211,396,773
Family Death Benefit Insurance	1,066,838	509,680
Health Benefits	<u>20,010,324</u>	<u>21,184,649</u>
<b>Total</b>	<b>247,979,844</b>	<b>233,091,102</b>
Refund of Members' Contributions	9,447,708	8,856,575
Administrative Expenses	19,206,089	12,490,598
<b>Total Expenditures</b>	<b>\$276,633,641</b>	<b>\$254,438,275</b>
<b>NET REVENUES</b>	<b>\$720,795,799</b>	<b>\$128,319,618</b>
<b>NET ASSETS AVAILABLE FOR PLAN BENEFITS, BEGINNING OF THE YEAR</b>	<b>\$4,432,513,431</b>	<b>\$3,949,185,329</b>
<b>NET ASSETS AVAILABLE FOR PLAN BENEFITS, END OF THE YEAR</b>	<b>\$5,153,309,230</b>	<b>\$4,432,513,431</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, 1999.

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 85% 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 \$2.90 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, 1997, this amount is \$472 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 \$28.24 for Connecticut General and \$10.44 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.

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

Deaths per 1,000		
Age	Males	Females
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

Age	Deaths per 1,000
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 1997-1999 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 Inflation		Dental Inflation
	Pre-65	Post-65	Pre and Post-65
1997-1998	8.50%	8.25%	8.50%
1998-1999	8.25%	8.00%	8.25%
1999-2000	8.00%	7.75%	8.00%
2000-2001	7.75%	7.50%	7.75%
2001-2002	7.50%	7.25%	7.50%
2002-2003	7.25%	7.00%	7.25%
2003-2004	7.00%	6.75%	7.00%
2004-2005	6.75%	6.50%	6.75%
2005-2006	6.50%	6.25%	6.50%
2006-2007	6.50%	6.00%	6.25%
2007-2008	6.25%	6.00%	6.00%
2008 +	6.00%	6.00%	6.00%

Medicare Premium Inflation Rate:

Year	Increase
1997-1998	\$43.80
1998-1999	6.50
1999-2000	6.25
2000+	6.00

\*Estimated average of 1997 and 1998 Medicare Part B premiums.

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:

The prefunding of projected cash flows is determined using the 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

Medical subsidy benefits are based on a percentage of the maximum subsidy (currently \$472 per month), limited to the composite carrier rates shown on the table below.

The monthly dental subsidy amount assumed for current active members is \$.95 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>	
Married	\$386.00
Single	292.00
<b>Age 65 and Over</b>	
Married	268.00
Single	103.00
<b>Dental</b>	0.95 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

EXHIBIT 1A  
PAGE 2 OF 2

RATES OF SEPARATION FROM ACTIVE SERVICE

AGE	ORDINARY WITHDRAWAL		SERVICE RETIREMENT		ORDINARY DISABILITY		ORDINARY DEATH		DEATH ELIG FOR SVC RET
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES	
20	0.2900	0.1500	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
21	0.2549	0.1440	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
22	0.2240	0.1382	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
23	0.1969	0.1327	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
24	0.1731	0.1274	0.0000	0.0000	0.0000	0.0000	0.0003	0.0002	0.0000
25	0.1521	0.1223	0.0000	0.0000	0.0002	0.0000	0.0004	0.0003	0.0000
26	0.1404	0.1159	0.0000	0.0000	0.0002	0.0000	0.0004	0.0003	0.0000
27	0.1298	0.1098	0.0000	0.0000	0.0003	0.0000	0.0005	0.0004	0.0000
28	0.1197	0.1040	0.0000	0.0000	0.0004	0.0000	0.0005	0.0004	0.0000
29	0.1105	0.0986	0.0000	0.0000	0.0005	0.0000	0.0006	0.0005	0.0000
30	0.1020	0.0934	0.0000	0.0000	0.0008	0.0001	0.0006	0.0005	0.0000
31	0.0948	0.0879	0.0000	0.0000	0.0008	0.0001	0.0006	0.0008	0.0000
32	0.0877	0.0827	0.0000	0.0000	0.0009	0.0001	0.0007	0.0008	0.0000
33	0.0813	0.0779	0.0000	0.0000	0.0010	0.0001	0.0007	0.0008	0.0000
34	0.0754	0.0733	0.0000	0.0000	0.0011	0.0001	0.0008	0.0007	0.0000
35	0.0699	0.0690	0.0000	0.0000	0.0013	0.0002	0.0008	0.0007	0.0000
36	0.0654	0.0671	0.0000	0.0000	0.0014	0.0002	0.0009	0.0008	0.0000
37	0.0611	0.0652	0.0000	0.0000	0.0015	0.0002	0.0010	0.0008	0.0000
38	0.0572	0.0634	0.0000	0.0000	0.0018	0.0003	0.0010	0.0009	0.0000
39	0.0535	0.0617	0.0000	0.0000	0.0017	0.0003	0.0011	0.0010	0.0000
40	0.0500	0.0600	0.0000	0.0000	0.0018	0.0004	0.0012	0.0010	0.0000
41	0.0480	0.0580	0.0000	0.0000	0.0018	0.0005	0.0014	0.0011	0.0000
42	0.0450	0.0560	0.0000	0.0000	0.0019	0.0008	0.0014	0.0012	0.0000
43	0.0430	0.0540	0.0000	0.0000	0.0019	0.0008	0.0015	0.0012	0.0000
44	0.0400	0.0520	0.0000	0.0000	0.0020	0.0010	0.0018	0.0013	0.0000
45	0.0380	0.0500	0.0000	0.0000	0.0020	0.0012	0.0017	0.0014	0.0000
46	0.0360	0.0480	0.0000	0.0000	0.0021	0.0014	0.0018	0.0014	0.0000
47	0.0340	0.0460	0.0000	0.0000	0.0021	0.0014	0.0019	0.0015	0.0000
48	0.0320	0.0440	0.0000	0.0000	0.0022	0.0016	0.0021	0.0018	0.0000
49	0.0300	0.0420	0.0000	0.0000	0.0022	0.0018	0.0022	0.0017	0.0000
50	0.0280	0.0400	0.0020	0.0010	0.0023	0.0020	0.0023	0.0018	0.0000
51	0.0270	0.0380	0.0030	0.0022	0.0023	0.0024	0.0025	0.0019	0.0000
52	0.0250	0.0360	0.0040	0.0040	0.0023	0.0028	0.0027	0.0021	0.0000
53	0.0240	0.0340	0.0055	0.0087	0.0023	0.0032	0.0028	0.0022	0.0000
54	0.0220	0.0330	0.0235	0.0134	0.0023	0.0038	0.0030	0.0024	0.0000
55	0.0210	0.0320	0.0945	0.0635	0.0024	0.0040	0.0032	0.0026	0.0021
56	0.0205	0.0320	0.0675	0.0286	0.0024	0.0040	0.0034	0.0029	0.0024
57	0.0205	0.0320	0.0785	0.0313	0.0024	0.0040	0.0038	0.0031	0.0028
58	0.0205	0.0320	0.0900	0.0358	0.0024	0.0040	0.0039	0.0034	0.0029
59	0.0205	0.0320	0.1000	0.0581	0.0024	0.0040	0.0041	0.0038	0.0032
60	0.0210	0.0325	0.1935	0.1654	0.0024	0.0000	0.0044	0.0042	0.0035
61	0.0210	0.0325	0.1400	0.0984	0.0024	0.0000	0.0050	0.0046	0.0039
62	0.0225	0.0330	0.1500	0.1118	0.0025	0.0000	0.0055	0.0052	0.0043
63	0.0230	0.0335	0.1680	0.1207	0.0025	0.0000	0.0061	0.0058	0.0048
64	0.0240	0.0340	0.2125	0.1341	0.0025	0.0000	0.0067	0.0065	0.0053
65	0.0000	0.0000	0.3500	0.2240	0.0000	0.0000	0.0074	0.0073	0.0059
66	0.0000	0.0000	0.2240	0.1520	0.0000	0.0000	0.0082	0.0084	0.0065
67	0.0000	0.0000	0.2240	0.1850	0.0000	0.0000	0.0090	0.0097	0.0072
68	0.0000	0.0000	0.2240	0.1920	0.0000	0.0000	0.0098	0.0111	0.0078
69	0.0000	0.0000	0.2500	0.2500	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



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



Exhibit XII

Los Angeles City Employees' Retirement System  
 Distribution of Pensioners by Plan Year of Retirement and by Attained Age as of June 30, 1997  
 Total for All Pensioners  
 Retirement Benefits

Attained Age	Retirements in Plan Year Beginning in																Pre-1982	Total	Average Monthly Benefit Amount
	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982				
Under 40	22	18	10	7	6	7	4	5	0	4	0	0	0	3	0	1	86	717	
40 - 44	15	10	13	6	4	7	8	7	6	4	4	3	2	1	0	6	82	822	
45 - 49	20	24	11	11	3	9	8	7	12	9	12	3	10	10	7	32	197	873	
50 - 54	93	25	14	13	5	10	9	8	9	9	7	11	3	5	8	56	288	1,478	
55 - 59	270	138	131	90	31	20	11	19	22	11	13	7	14	9	7	97	890	1,918	
60 - 64	134	159	137	143	171	157	129	135	104	42	17	20	19	21	14	118	1,524	2,040	
65 - 69	89	106	90	114	130	121	142	143	132	175	165	113	121	90	70	221	2,023	1,845	
70 - 74	38	46	40	63	81	87	78	111	170	144	173	141	163	182	278	734	2,530	1,732	
75 - 79	10	22	17	21	39	24	30	43	49	81	95	81	146	155	176	1,340	2,331	1,488	
80 - 84	5	5	2	4	7	6	3	3	10	12	21	24	38	34	68	1,199	1,442	1,242	
85 - 89	1	3	1	2	3	0	5	3	4	3	1	2	6	8	8	784	834	923	
90 - 94	0	0	0	0	0	0	0	0	0	0	2	1	0	1	1	321	326	802	
Over 94	3	7	2	7	2	4	0	0	0	0	1	0	0	0	0	119	145	728	
Total	700	563	468	484	482	452	427	484	518	497	511	406	522	519	637	5,028	12,898	1,580	
Average Monthly Benefit Amount	2,270	2,026	1,830	1,938	2,087	2,057	2,026	1,905	1,876	1,807	1,791	1,678	1,718	1,625	1,776	1,089	1,580		

Average Monthly Benefit Amount \$1,580  
 Total Annual Benefits \$240,692,161

Exhibit XIII

Los Angeles City Employees' Retirement System  
 Distribution of Pensioners by Plan Year of Retirement and by Attained Age as of June 30, 1997  
 Total for All Pensioners\*  
 Health Subsidy Benefits

Attained Age	Retirements in Plan Year Beginning in															Pre 1982	Total	Average Monthly Health Subsidy	
	1996	1985	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982				
Under 40	0	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	1	0	0	0	0	0	0	0	0	0	0	0	1	82
45 - 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 - 54	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	340
55 - 59	184	127	101	73	51	4	2	3	8	3	3	2	3	3	2	12	581	326	
60 - 64	87	119	104	130	131	146	114	103	79	45	3	7	3	5	4	24	1 104	325	
65 - 69	57	78	84	90	100	90	115	112	105	120	129	92	89	67	60	42	1 415	154	
70 - 74	22	24	21	51	56	70	54	76	121	114	134	114	129	131	197	343	1 657	122	
75 - 79	5	18	9	12	33	14	20	23	26	59	75	52	95	94	116	738	1 389	120	
80 - 84	4	1	2	1	4	5	2	2	6	7	11	13	25	21	40	641	785	118	
85 - 89	0	1	0	1	1	0	1	2	3	2	2	1	1	2	3	348	368	135	
90 - 94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	112	174	
Over 94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	45	105	
Total	428	368	306	358	376	330	308	321	348	350	357	281	345	323	422	2 305	7 526		
Average Monthly Health Subsidy	293	273	259	235	205	220	206	217	181	160	136	124	131	131	130	133	176		

Average Monthly Health Subsidy \$176  
 Total Monthly Health Subsidy \$1,323,313

\*Pensioners does not include beneficiaries