

Agenda of DEC 10 1991
Item Number V

FILE



The City
Of Los Angeles

City Employees'
Retirement System

Actuarial Valuation
As Of June 30, 1991

PREPARED BY

Wyatt



December 4, 1991

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

Members of the Board:

We are pleased to present our actuarial valuation report as of June 30, 1991, for the City Employees' Retirement System. This report contains the results of the valuation of the retirement and health subsidy benefits provided by the System.

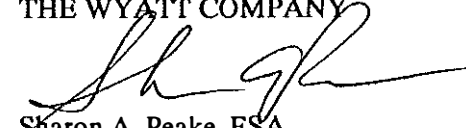
This report is divided into three parts:

- 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,

THE WYATT COMPANY



Sharon A. Peake, FSA
Consulting Actuary



Steven G. Vernon, FSA
Consulting Actuary

CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

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

Valuation Summary

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CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Actuarial Valuation As Of June 30, 1991

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, 1991 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 the funded status and disclosure information as of June 30, 1991, required under Government Accounting Standards Board (GASB) Statement Number 5.

The valuation results were based on the demographic assumptions as outlined in Exhibits VI through IX and the following economic assumptions:

- 8.0% annual interest,
- 6.0% annual salary increases,
- 3.0% annual increases in the Consumer Price Index.

There were no changes made in actuarial assumptions or methods since the last valuation.

We believe the assumptions and methods used are appropriate for use in the evaluation of the liabilities of the Retirement System at June 30, 1991.

This Valuation Summary contains an overview of our valuation results. More detail 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**

Actuarial Valuation As Of June 30, 1991

Summary Of Significant Valuation Results			
	June 30, 1991	June 30, 1990	Percent Change
I. Total Membership			
A. Active Members	23,572	23,871	-1.3%
B. Pensioners	10,862	10,604	+2.4%
II. Salaries at June 30			
A. Total Annual Payroll	\$ 833,128,768	\$ 815,767,554	+2.1%
B. Average Monthly Salary	2,945	2,848	+3.4%
III. Benefits to Current Pensioners and Beneficiaries			
A. Total Annual Benefits	154,100,546	143,279,448	+7.6%
B. Average Monthly Benefit Amount	1,182	1,126	+5.0%
IV. Total System Assets (Actuarial Value)			
	2,943,327,000	2,716,989,000	+8.3%
V. Unfunded Actuarial Accrued Liability			
A. Retirement Benefits	552,296,126	565,404,621	-2.3%
B. Health Subsidy Benefits	322,747,656	245,146,652	+31.7%
VI. Budget Items			
A. Retirement Benefits			
1. Normal Cost as a Percent of Pay	5.74%	5.45%	+5.3%
2. Amortization of Unfunded Actuarial Accrued Liability			
i) Percent of Pay, plus	6.41%	6.15%	+4.2%
ii) Fixed Dollar Amount	\$2,724,502	\$ 2,724,502	+0.0%
B. Health Subsidy Contribution, as a Percent of Pay			
	3.57%	2.64%	+35.2%
C. Total Contribution (A + B)			
i) Percent of Pay, plus	15.72%	14.24%	+10.4%
ii) Fixed Dollar Amount	\$2,724,502	\$ 2,724,502	+0.0%
VII. Funded Ratio			
A. Retirement Benefits	83.3%	81.8%	+1.8%
B. Health Subsidy Benefits	34.1%	39.3%	-13.2%
C. Total	77.0%	76.9%	+0.1%

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, 2004. 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. Smaller pieces are amortized as a level dollar amount over various periods.

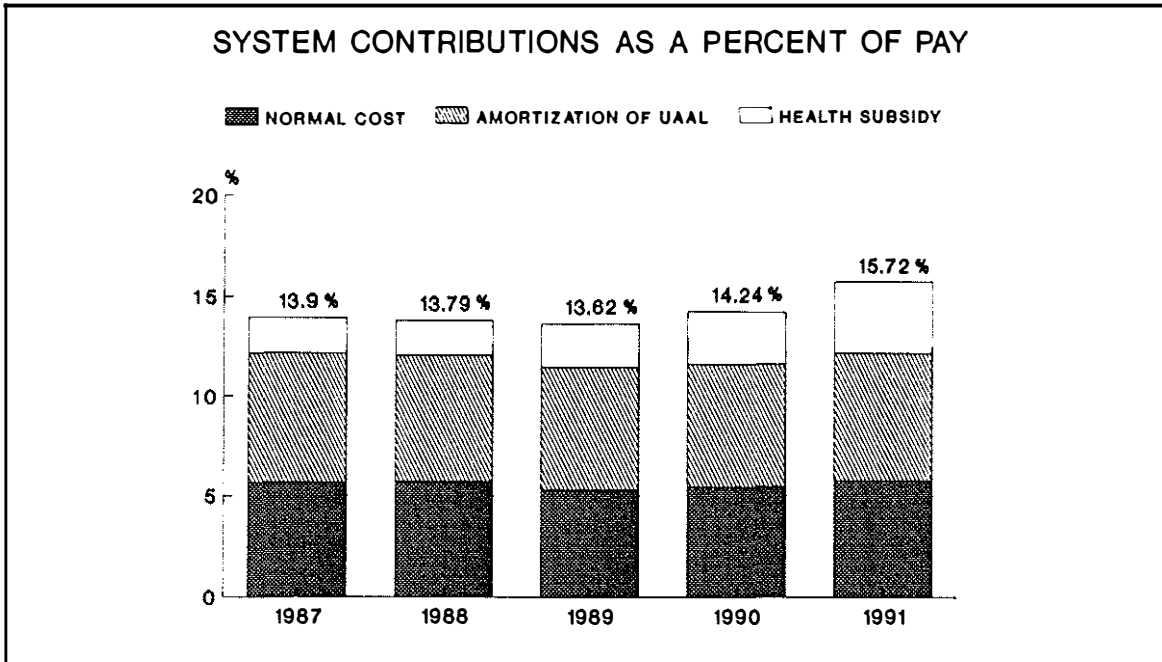
Below, we present a summary of budget requirements for the City Employees' Retirement System. In total, the recommended contribution increased by 10.4% from last year.

Recommended City Contributions For Fiscal Year 1992 - 1993			
	Percentage of Salary	plus	Fixed Dollar Amount
Contribution for Retirement, Disability, and Death Benefits	12.15%		\$2,724,502
Contribution for Health Subsidy Benefits	3.57%		—
Total Contribution	15.72%	plus	\$2,724,502

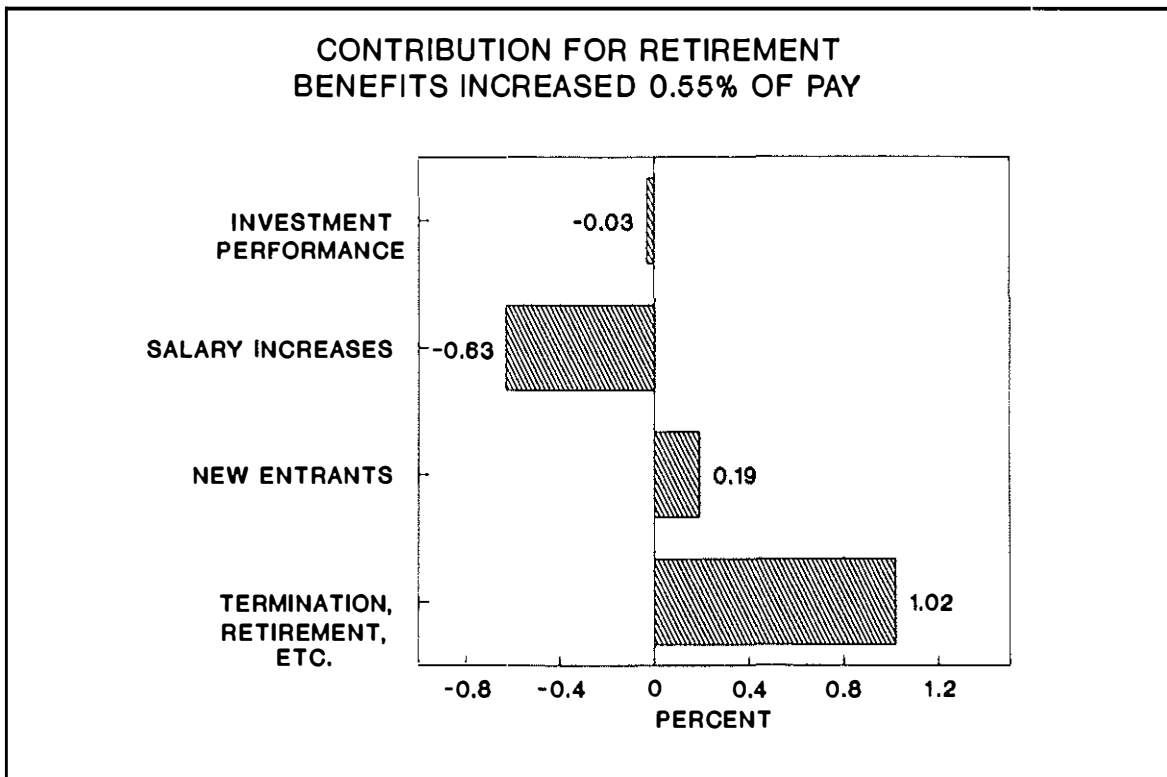
A more detailed explanation of these results can be found in the Valuation Detail section of this report.

We also completed a valuation of the Family Death Benefit Plan as of June 30, 1991. We recommend that the Members and the City each contribute \$2.90 per month to participate in this Plan.

The following graph illustrates the funding levels of the past few years for both the retirement benefits and the health subsidy benefits. These percent-of-pay amounts do not include the small pieces of the UAAL being amortized as a level dollar amount.



The graph below illustrates the effect of gains and losses over the past year on the recommended System contribution for retirement benefits.



CITY OF LOS ANGELES

CITY EMPLOYEES' RETIREMENT SYSTEM

Funded Status At June 30, 1991

In order to assess the funded status of the System, disclosure of a standardized measure of pension liability is required by Government Accounting Standards Board (GASB) Statement No. 5 - *Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers*. This measure of funded status compares the present value of benefits accrued to June 30, 1991 to the value of accumulated plan assets. For retired Members and beneficiaries, the present value of remaining benefit payments is disclosed. For active Members, the present value of the benefits accrued to June 30, 1991 is disclosed. In the latter calculation, we calculate accrued benefits based upon service to June 30, 1991. We also recognize assumed future salary increases. GASB No. 5 covers only pension type benefits provided by public employee retirement systems.

Under GASB Statement No. 12, *Disclosure of Information on Post Employment Benefits Other Than Pensions by State and Local Government Employers*, issued in November 1989, the expenditures and expenses for the period are the only financial information that needs to be disclosed for post-retirement health subsidy benefits. However, the statement encourages more complete disclosures of information, if available. Therefore, we have included a GASB No. 5 figure for the health subsidy benefits of the System in this report, as if GASB No. 5 applied to health subsidy benefits.

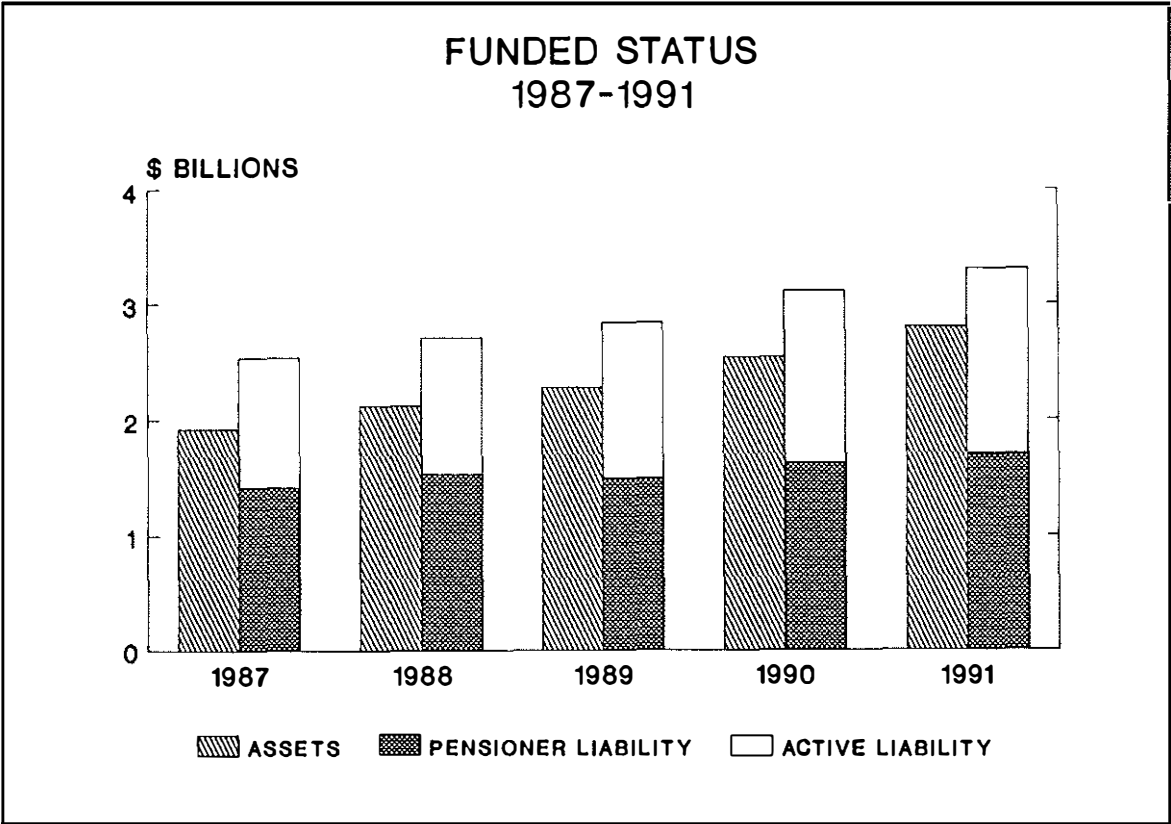
On the next page, we present the funded status of the System under GASB No. 5, along with a comparison of the System's funded status in the prior year. The current System assets available for retirement benefits are 161% of the present value of retirement benefits for current retired Members and their beneficiaries. When the present value of accrued retirement benefits for active Members is added, the System assets available for retirement benefits represent 83.3% of the total present value of accrued retirement benefits on June 30, 1991. This funded ratio increased slightly since the last valuation, primarily due to a return on assets which was slightly greater than the 8% assumed.

Current health subsidy reserves are 62.6% of the present value of health subsidy benefits for current retired Members. When the present value of health subsidy benefits for active Members with ten or more years of service is added, the funded ratio becomes 34.1%.

The combined funded ratio for retirement and health subsidy benefits is 77.0%.

Funded Status			
	June 30, 1991	June 30, 1990	Percent Change
Retirement Benefits			
Present Value of Retirement Benefits Earned			
- Retired Members and Beneficiaries	\$1,729,600,097	\$1,617,040,898	+7.0%
- Active Members	<u>1,582,425,209</u>	<u>1,491,617,808</u>	+6.1%
- Total	\$3,312,025,306	\$3,108,658,706	+6.5%
Actuarial Value of Assets Available for Retirement Benefits	\$2,759,729,180	\$2,543,254,085	+8.5%
Funded Ratio for Retirement Benefits	83.3%	81.8%	+1.8%
Health Subsidy Benefits			
Present Value of Health Subsidy Benefits Earned			
- Retired Members	\$267,123,952	\$221,505,504	+20.6%
- Active Members With Ten or More Years of Service	<u>222,866,614</u>	<u>182,349,483</u>	+22.2%
- Total	\$489,990,566	\$403,854,987	+21.3%
Actuarial Value of Assets Available for Health Subsidy Benefits	\$167,242,910	\$158,708,335	+5.4%
Funded Ratio for Health Subsidy Benefits	34.1%	39.3%	-13.2%
Combined Retirement and Health Subsidy Funded Ratio	77.0%	76.9%	+0.1%

The graph below compares assets to liabilities under GASB No. 5 for retirement benefits only, for the years 1987-1991. (Data for health subsidy is not available before 1989.) Assets exceed liabilities for pensioners, and are about 83.3% of retirement liabilities in 1991.



CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

System Assets

The following asset information was provided to us by the Retirement Office. We have not audited or verified these figures.

	June 30, 1991	June 30, 1990	Percent Change
Total System Assets			
Market Value	\$3,024,302,000	\$2,790,783,000	+8.4%
Book Value	2,862,351,000	2,643,195,000	+8.3%
Actuarial Value	2,943,327,000	2,716,989,000	+8.3%

Rate Of Return July 1, 1990 - June 30, 1991	
The rate of return on total plan assets was as follows:	
Market Value	8.20%
Book Value	8.11%
Actuarial Value	8.16%
These rates of return were based on the following cash flow information:	
Contributions	
City	\$151,293,465
Members	41,790,035
Pensions Paid	
Retirement Allowances	\$152,234,542
Family Death Benefits	638,218
Health Benefits	17,403,673
Refunds of Member Contributions	\$ 8,573,428
Administration Expenses	\$ 8,238,339
Investment Earnings	
Realized	\$213,160,745
Unrealized	14,362,955

The 8.16% rate of return on the actuarial value is greater than the 8.0% rate assumed for the prior year, which resulted in a small actuarial gain. The budgeted contribution for the System would have been slightly higher 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

Summary Of System Funding

As of June 30, 1991, the System had assets equal to 77% of the present value of benefits accrued to that date, as calculated under GASB No. 5. 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 56% of liabilities. This remaining unfunded liability is to be funded by future City and Member contributions to the System.

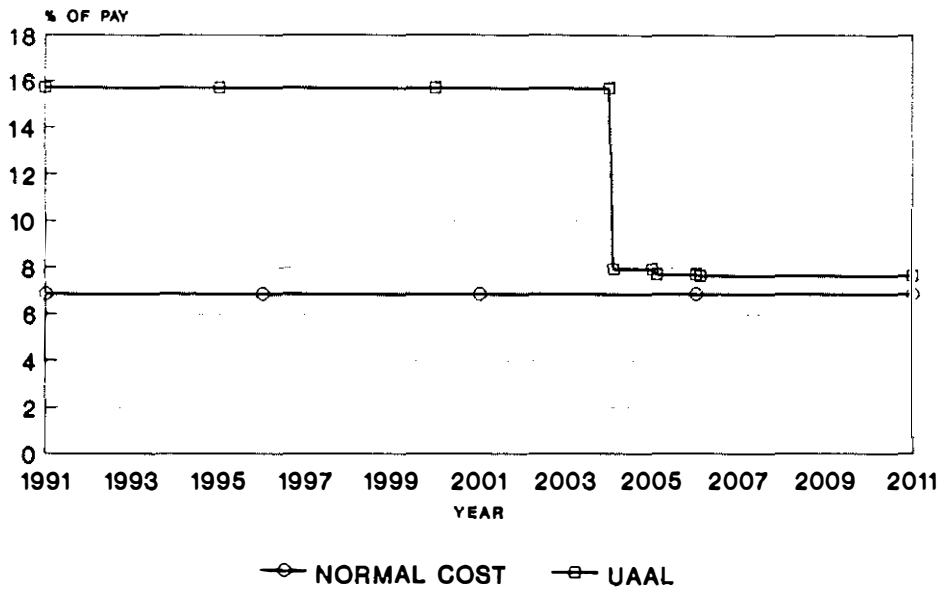
The City contributions are made up of two parts:

- **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 2004. 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. Smaller pieces of the UAAL are amortized as level dollar amounts. These amounts will remain constant, and are not affected by gains and losses.

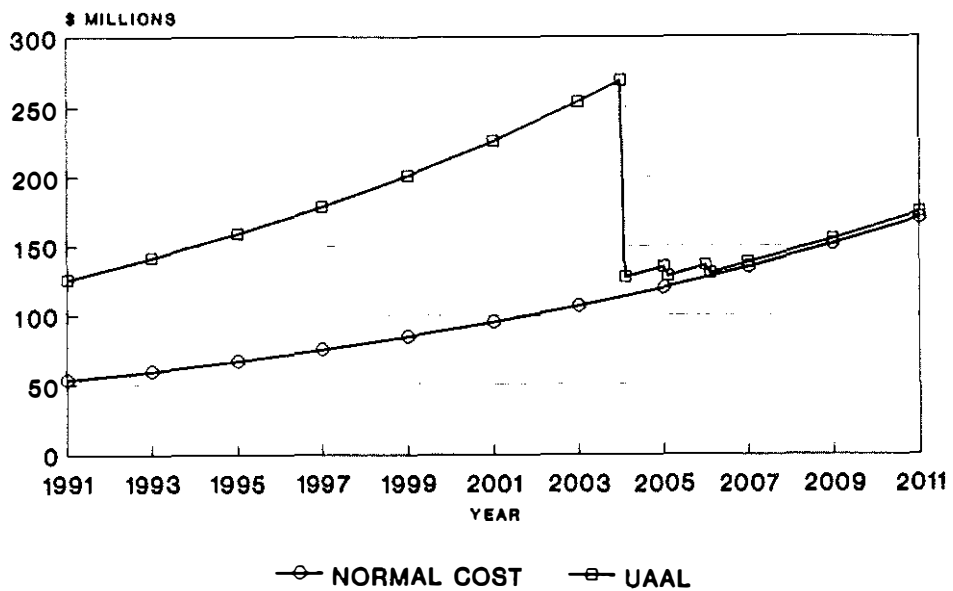
The total contribution will be the sum of the Normal Cost and UAAL contributions.

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 a 6.0% 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 this, these contribution levels will change.

CONTRIBUTIONS ARE LEVEL AS A PERCENT OF PAY



DOLLAR CONTRIBUTIONS INCREASE AS PAYROLL INCREASES



CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Valuation Detail

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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, 1991 were supplied to us by the Retirement Office. On the following schedules we present a summary of System membership at June 30, 1991 and June 30, 1990. Salary information as of June 30, 1991 does not include the pay increases that were effective on July 1, 1991. Pension amounts shown on the following schedule do not include the cost-of-living adjustments that were effective on July 1, 1991. All July 1, 1991 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 1.3% since the last valuation. The total number of retired Members and their beneficiaries increased 2.4%, while the total average retirement benefit amount increased 5.0%. The following schedule contains a more detailed breakdown of these figures.

In the data, there were records for approximately 1,600 terminated participants who had not yet received a refund of contributions. The total amount of contributions to be refunded was approximately \$13 million. We included the amount of these future refunds in our pensioner liability.

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

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

System Membership			
	June 30, 1991	June 30, 1990	Percent Change
I. Active Members			
a. Number	23,572	23,871	-1.3%
b. Average Age	41.6	41.1	+1.2%
c. Average Years of Service	10.1	9.6	+5.2%
d. Salary			
i. Total Annual Salary	\$ 833,128,768	\$815,767,554	+2.1%
ii. Average Monthly Salary	\$2,945	\$2,848	+3.4%
II. Pensioners and Beneficiaries			
a. Number	10,862	10,604	+2.4%
b. Average Age	70.3	70.0	+0.4%
c. Allowance			
i. Total Annual Allowance	\$154,100,546	\$143,279,448	+7.6%
ii. Average Monthly Amount	\$1,182	\$1,126	+5.0%

CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Applicable Assets At June 30, 1991

Assets available to pay pension benefits are determined by deducting certain reserves from the total actuarial value of assets amount. Applicable assets at June 30, 1991, are calculated below.

	Book Value	Market Value	Actuarial Value
1. Total Value of Assets at June 30, 1991	\$2,862,351,000	\$3,024,302,000	\$2,943,327,000
2. Less Reserves and Liabilities Established for:			
a. Family Death Benefit Insurance	15,904,475	16,804,346	16,354,910
b. Retiree Medical Subsidy	<u>162,641,797</u>	<u>171,844,023</u>	<u>167,242,910</u>
c. Total	178,546,272	188,648,369	183,597,820
3. Net Assets Available for Retirement Benefits at June 30, 1991 (Item 1 less Item 2)	\$2,683,804,728	\$2,835,653,631	\$2,759,729,180

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:

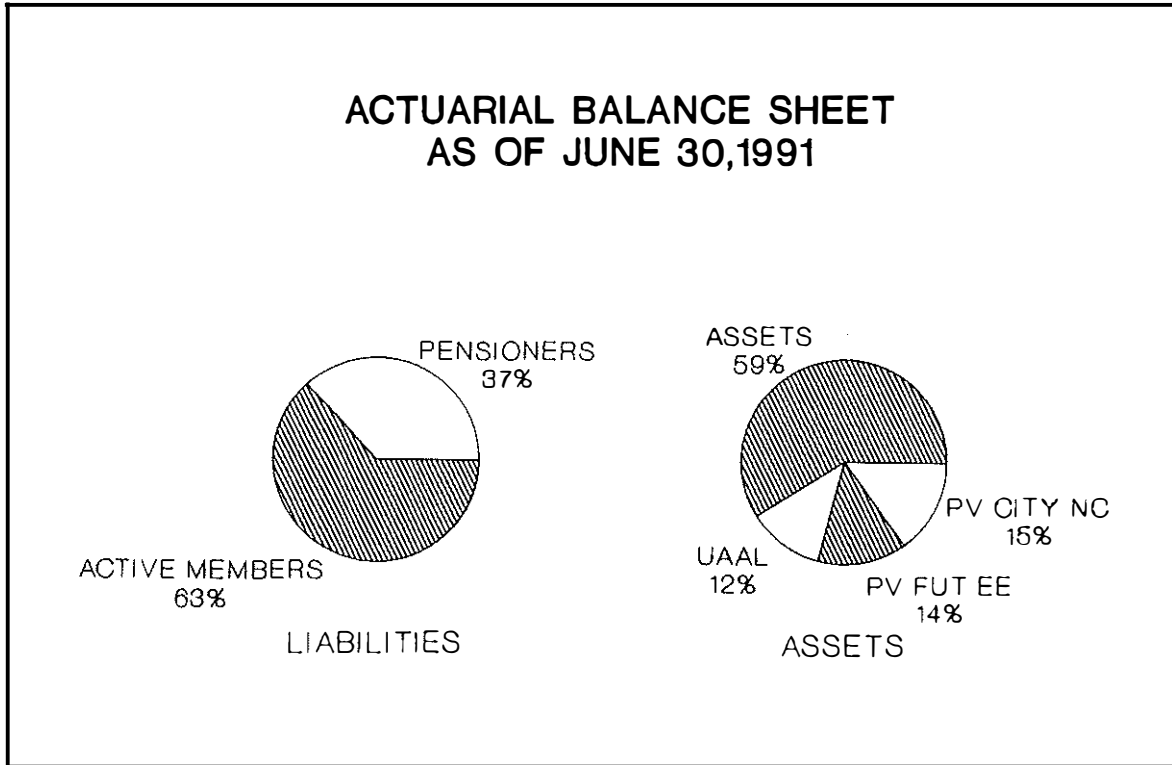
- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

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 1991 fiscal year, the normal cost percentage is 5.74% of pay. The present value of these future City Normal Cost contributions represents one piece of the present 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 37% of the System's liabilities are for retired Members and their beneficiaries and 63% are for active Members. About 59% of the System's assets consist of currently available assets with 41% 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, 1991

Assets		
1. Applicable Assets		\$2,759,729,180
2. Present Value of Future Member Contributions		643,725,340
3. Present Value of Future Contributions by the City for:		
a. Basic Pensions		
i. Normal Costs	532,177,814	
ii. Amortization of Certain Liabilities	197,424,707	729,602,521
b. Cost-of-Living Pensions		
i. Normal Cost	182,566,105	
ii. Amortization of Certain Liabilities	354,871,419	537,437,524
4. Total Assets		\$4,670,494,565
Liabilities		
5. Present Value of Benefits Already Granted (Pensioners and Beneficiaries)		
a. Basic	1,063,122,256	
b. Cost-of-Living	666,477,841	1,729,600,097
6. Present Value of Benefits to be Granted (Actives)		
a. Basic	2,360,613,252	
b. Cost-of-Living	580,281,216	2,940,894,468
7. Total Liabilities		\$4,670,494,565

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 contribution for retirement benefits increased from 11.60% of pay to 12.15% of pay.

The recommended retirement contributions increased for the following reasons:

- The active group aged about one-half of a year on average since the last valuation. Under the Projected Unit Credit Funding Method, costs remain a level percent of pay only if the group remains constant. An aging population, such as CERS had this past year, increases plan costs when determined as a percent of payroll.
- The UAAL is primarily amortized as a level percent of payroll. CERS payroll is assumed to increase 6% per year. In 1990-1991, total payroll increased only about 2.1%. Therefore, the UAAL is being spread over a smaller payroll base than expected, causing an increase in the percent of pay required to fund the UAAL.

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**

Recommended City Contributions For Fiscal Year 1992 - 1993			
	Percentage of Salary	plus	Fixed Dollar Amount
For Basic Retirement Benefits			
Normal Cost	4.31%		
Prior Service-Minimum Pensions (amortized as a level dollar amount until June 30, 1997)			\$927,955
Unfunded Actuarial Accrued Liability	2.65%		
Total Contributions for Basic Retirement Benefits	6.96%	plus	\$927,955
For Cost-of-Living Retirement Benefits			
Normal Cost	1.43%		
Increase due to 1967 Amendment (Amortized as a level dollar amount until June 30, 1997)			\$1,796,547
Unfunded Actuarial Accrued Liability	3.76%		
Total Contributions for Cost-of-Living Retirement Benefits	5.19%	plus	\$1,796,547
Total Basic and Cost-of-Living Contributions for Retirement Benefits	12.15%	plus	\$2,724,502

**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 6/30/91	Amortization Amount	Percentage of Salary
Basic Pensions				
1. Prior Service Pensions	6	\$4,289,824	\$927,955	—
2. Change in Asset Valuation Method at 6/30/89	28	(100,946,538)	(4,674,160)	(.54)%
3. Change in Assumptions at 6/30/89	28	(51,007,869)	(2,361,834)	(.27)%
4. Ad Hoc COLA Increase at 12/01/89	14	21,374,677	1,751,554	.20%
5. Actuarial Loss at 6/30/90	14	15,026,356	1,231,339	.14%
6. Actuarial Loss at 6/30/91	15	14,015,116	1,081,520	.13%
7. Remaining UAAL	13	294,673,141	25,772,751	2.99%
Total		\$197,424,707	\$23,729,125	2.65%
Cost-of-Living Pensions				
1. Increase Due to 1967 Amendments	6	\$8,305,221	\$1,796,547	—
2. Change in Assumptions at 6/30/89	28	(47,370,134)	(2,193,394)	(.25)%
3. Actuarial Gain at 6/30/90	14	(12,076,309)	(989,597)	(.12)%
4. Actuarial Gain at 6/30/91	15	(6,671,097)	(514,794)	(.06)%
5. Remaining UAAL	13	412,683,738	36,094,213	4.19%
Total		\$354,871,419	\$34,192,975	3.76%

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

Funded Status Of The System

The following table presents a breakdown of the funded status of the System into basic and cost-of-living retirement pensions. This information is calculated using the guidelines of GASB No. 5 (see page 5). These figures do not include assets or liabilities of the health subsidy.

	June 30, 1991	June 30, 1990
1. Present Value of Benefits Earned to Valuation Date		
a. Basic Benefits	\$2,331,796,529	\$2,191,267,704
b. Cost-of-Living Benefits	<u>980,228,777</u>	<u>917,391,002</u>
c. Total	<u>\$3,312,025,306</u>	<u>\$3,108,658,706</u>
2. Actuarial Value of Assets Available for Retirement Benefits		
a. Basic Benefits	\$2,134,371,822	\$1,992,857,453
b. Cost-of-Living Benefits	<u>625,357,358</u>	<u>550,396,632</u>
c. Total	<u>\$2,759,729,180</u>	<u>\$2,543,254,085</u>
3. Funding Ratio		
a. Basic Benefits	91.5%	90.9%
b. Cost-of-Living Benefits	63.8%	60.0%
c. Total	83.3%	81.8%

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 75% of the amount that would have been contributed by Members without the bargaining agreements. This 75% amount 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 73% of the defrayed amount be contributed. This percent is increasing because the group affected by the defrayal is aging. The probability that these Members will terminate and get a refund of contributions is decreasing.

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

For participation in the Family Death Benefit Plan, we recommend that a contribution of \$2.90 per month be made by participating Members and the City.

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.

Currently, the City and Members share the cost of the plan. Each contributes \$3.20 per month. This contribution rate is reviewed every two years to determine if the level of contributions is appropriate. We have reviewed the contribution level, and we recommend that Members and the City each begin to contribute \$2.90 per month until the next scheduled review, June 30, 1993.

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. Members are eligible for a subsidy at retirement after age 55 with 10 years of service, or compulsory retirement at age 70. 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, 1991 is \$167,242,910. This amount was calculated by the City as part of the asset information provided to us. 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, 1991 valuation of the retiree health insurance premium subsidy. In determining the budget amounts for the fiscal year beginning July 1, 1992, 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 medical trend assumptions were used. A summary of the economic assumptions follows:

- 8.0% annual interest
- graded medical cost increase rates of 13.0% in 1991-1992, decreasing gradually to 7.0% in 2002 and beyond

We believe these assumptions are appropriate for use in the valuation of the health subsidy liabilities of the City Employees' Retirement System at June 30, 1991. 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 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:

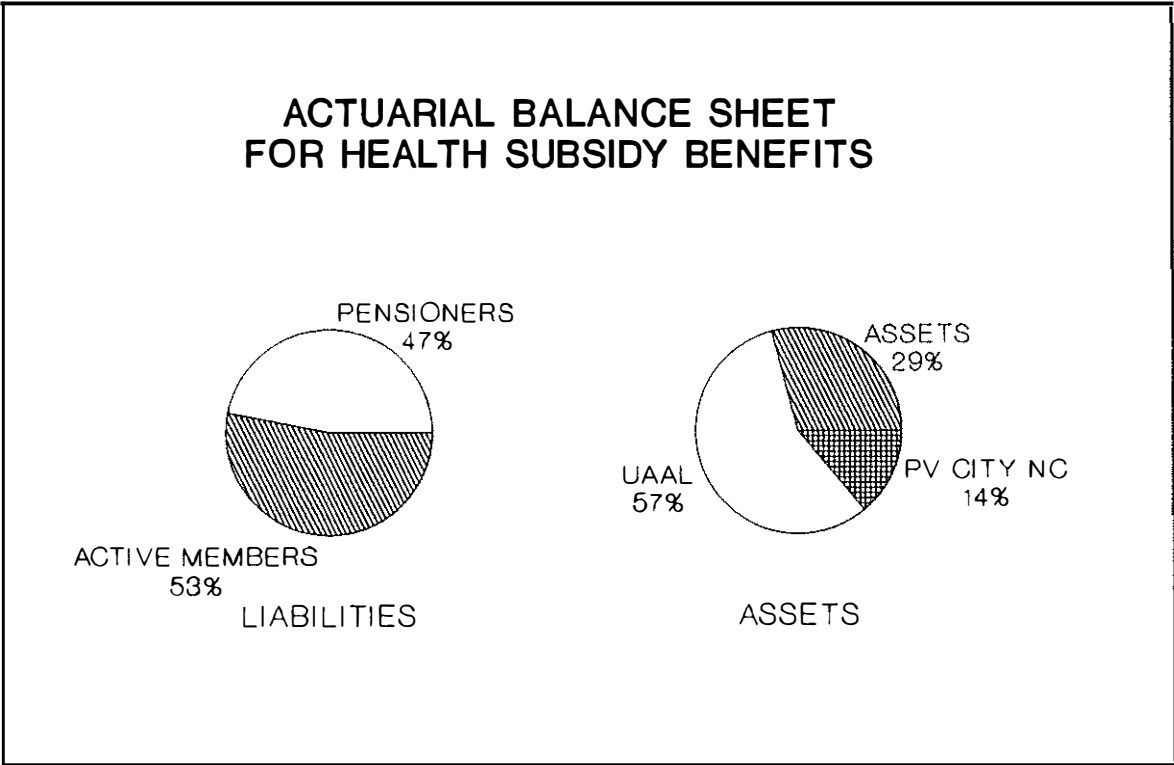
- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

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. For the 1991 fiscal year, the normal cost percentage for health subsidy benefits is 1.12% of pay. The present value of these future City Normal Cost contributions represents one piece of the present 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 for the health subsidy benefits 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 47% of the System's liabilities are for retired Members and their beneficiaries and 53% are for active Members with ten or more years of service. About 29% of the System's assets consist of currently available assets with 71% 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, 1991

Assets		
1. Applicable Assets		\$167,242,910
2. Present Value of Future Member Contributions		0
3. Present Value of Future Contributions by the City		
a. Normal Costs	80,033,220	
b. Amortization of Unfunded Actuarial Liability	322,747,656	402,780,876
4. Total Assets		\$570,023,786
Liabilities		
5. Present Value of Benefits Already Granted (Pensioners and Beneficiaries)		\$267,123,952
6. Present Value of Benefits to be Granted (Actives With Ten or More Years of Service)		302,899,834
7. Total Liabilities		\$570,023,786

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

Recommended City Contribution For Fiscal Year 1992-1993

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.

The City is currently building reserves for, or advance funding, the Retiree Health Insurance Subsidy for current retirees and for active Members with sufficient service to receive a health subsidy (10 years). The actuarial value of the reserve available at June 30, 1991 is \$167,242,910. This reserve amount was calculated by the City as part of the asset information provided to us. 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.

Based on this reserve, we have calculated the required funding amount for the fiscal year beginning July 1, 1992. The dollar amounts shown on the next page are based on total payroll at July 1, 1991, for illustrative purposes.

The contribution for health subsidy benefits increased from 2.64% of payroll for 1991-1992 to 3.57% of payroll for 1992-1993 for the following reasons:

- Medical premiums increased on average about 28% from 1990 to 1991. Our assumptions were that medical premiums would increase about 14% over that period. Therefore, there was a large actuarial loss caused by this difference, which increased the required level of contributions
- Contributions to the health subsidy reserve were less than the recommended amount for 1990-1991, which added to the Unfunded Actuarial Accrued Liability (UAAL). This caused an increase in future contribution levels.
- The active group aged about one-half of a year on average since the last valuation. Under the Projected Unit Credit Funding Method, costs remain a level percent of pay only if the group remains constant. An aging population increases plan costs when determined as a percent of payroll.
- The UAAL is primarily amortized as a level percent of payroll. CERS payroll is assumed to increase 6% per year. In 1990-1991, total payroll increased only about 2.1%. Therefore, the UAAL is being spread over a smaller payroll base than expected, causing an increase in the percent of pay required to fund the UAAL.

**Recommended City Contribution For
Health Subsidy Benefits For Fiscal Year 1992-1993**

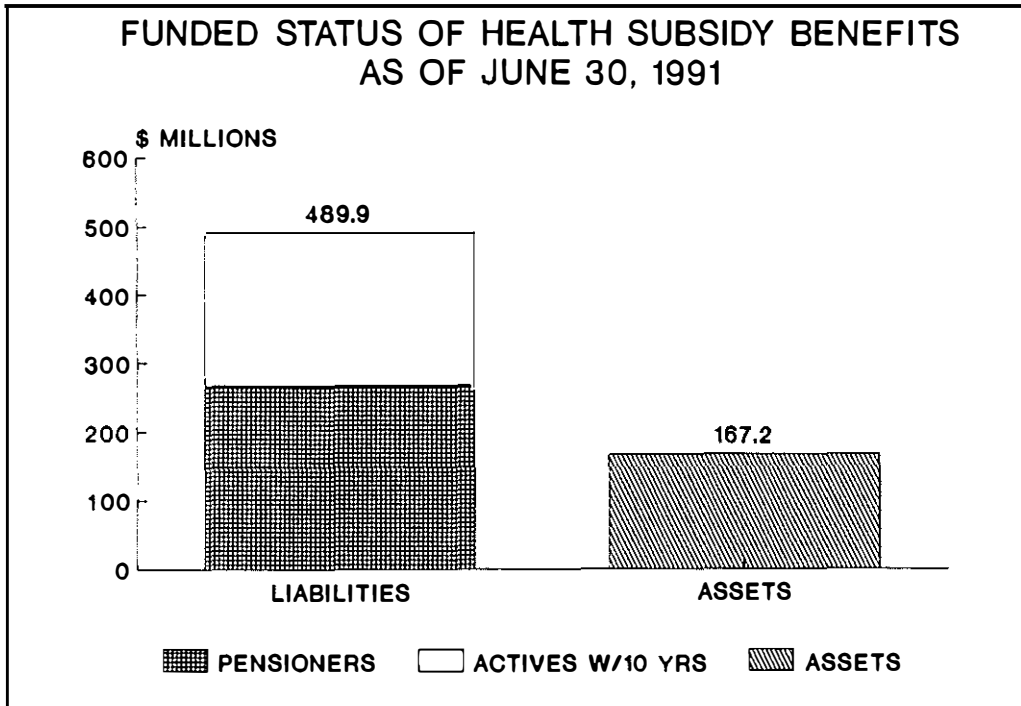
	Dollar Amount	Percent of Pay
1. Normal Cost at June 30, 1991	\$ 9,621,075	1.12%
2. Actuarial Accrued Liability at June 30, 1991	489,990,566	—
3. Actuarial Value of Assets Available for Health Subsidy Benefits at June 30, 1991	167,242,910	—
4. Unfunded Actuarial Accrued Liability (UAAL) (2) - (3)	322,747,656	—
5. Amortization of UAAL		
- Initial Base as a Level Percent of Pay through June 30, 2004	5,195,972	.60%
- 6/30/89 Change in Assumptions	957,693	.11%
- 6/30/89 Change in Funding	5,975,542	.69%
- Actuarial Loss from 1989 to 1990	4,370,878	.51%
- Actuarial Loss from 1990 to 1991	<u>4,650,544</u>	<u>.54%</u>
Total	21,150,629	2.45%
6. Recommended Contribution: (1)+(5)	\$30,771,704	3.57%

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

Funded Status Of Health Subsidy Benefits At June 30, 1991

This information is calculated using the guidelines of GASB No. 5 (see page 5). 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, 1991	
- Retired Members	\$267,123,952
- Active Members with Ten Years of Service	222,866,614
- Total	489,990,566
Actuarial Value of Assets Available for Health Subsidy Benefits	\$167,242,910
Funded Ratio	34.1%



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

Assumptions And Methods

It is our understanding that the City is phasing in the process of advance funding for the Health Insurance Premium Subsidy. A brief summary of this phase-in 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 grade down from 15% in 1990 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).

In valuing the liabilities of the health subsidy, we projected future cash flows by applying the 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 V. To determine the present value of future health insurance subsidy benefits, we discounted future cash flows to June 30, 1991 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

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Exhibit II:	Statement of Reserve and Fund Balance Accounts
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Exhibit IV:	Summary of Retirement Benefits
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Exhibit VIII:	Average Monthly Claim Rates for Health Subsidy Benefits
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**CITY OF LOS ANGELES
CITY EMPLOYEES' RETIREMENT SYSTEM**

System Assets (Book Value)		
	June 30, 1991	June 30, 1990
ASSETS		
Cash	\$ 3,264,808	\$ 2,410,967
Receivables		
Accrued Interest and Dividend Income	36,345,650	40,015,343
Other Receivables	3,463,790	5,621,367
Proceeds from Investment	14,639,232	3,538,193
Total Receivables	<u>54,448,672</u>	<u>49,174,903</u>
Investments		
Temporary, at Cost	472,895,204	414,686,953
Bonds, at Amortized Cost	1,434,034,643	1,345,964,959
Common Stocks, at Cost	818,639,366	779,307,209
Real Estate	<u>104,030,884</u>	<u>56,065,211</u>
Total Investments	<u>2,829,600,097</u>	<u>2,596,024,332</u>
Total Assets	<u>\$2,887,313,577</u>	<u>\$2,647,610,202</u>
LIABILITIES		
Accounts Payable and Accrued Expenses	\$ (24,962,931)	\$ (4,415,602)
Net Assets Available for Plan Benefits	<u>\$2,862,350,646</u>	<u>\$2,643,194,600</u>

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

Statement Of Changes In Net Assets Available For Plan Benefits		
	Year Ended June 30, 1991	Year Ended June 30, 1990
REVENUES		
City Contributions	\$151,293,465	\$ 146,391,924
Members' Contributions	41,790,035	37,084,736
Income from Investments		
Interest Earned	158,809,588	142,880,304
Dividends	28,991,231	33,935,925
Real Estate	<u>5,767,670</u>	<u>3,230,082</u>
	193,568,489	180,046,311
Total Revenues	\$386,651,989	\$363,522,971
EXPENDITURES		
Pensions		
Retirement Allowances	\$152,234,542	\$ 140,962,137
Family Death Benefit Insurance	638,218	644,115
Health Benefits	<u>17,403,673</u>	<u>14,433,729</u>
	\$170,276,433	\$ 156,039,981
Refund of Members' Contributions	8,573,428	7,224,661
Administrative Expenses	8,238,339	7,110,113
Total Expenditures	\$187,088,200	\$ 170,374,755
Excess of Revenues over Expenditures before Gain on Disposition of Investments	\$199,563,789	\$ 193,148,216
Gain on Disposition of Investments	\$ 19,592,256	\$ 99,376,775
Excess of Revenues over Expenditures	\$219,156,045	\$ 292,524,991
Net Assets Available for Plan Benefits, Beginning of the Year	\$2,643,194,600	\$2,350,669,609
Net Assets Available for Plan Benefits, End of the Year	\$2,862,350,645	\$2,643,194,600

**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 :**
 - Beta Formula:** 2.16% of Final Compensation for each year of service.

 - Prior Formula:** 2% of Final Compensation for each year of service that Beta Formula does not apply.

 - C) **Reduction for Early Retirement:**
 - Beta Formula:** Unreduced for retirement after age 60, or after age 55 with at least 30 years of service. Reduction factors apply for earlier retirement.

 - Prior Formula:** Unreduced for retirement after age 58-3/4. Reduction factors apply for earlier retirement.

 - D) **Form of Payment:** Benefit payable for life with 50% continuance to eligible spouse if employee had that coverage at time of retirement. Larger continuances are available with actuarial reduction.

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 if employee had this coverage at time of retirement.

5. Deferred Service Retirement:

- A) Eligibility: Five years of service prior to termination of City service. Member must leave contributions on deposit and apply in writing within three years of termination.
- 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, or dependent parents, 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) = 60% of the benefit the Member would have received if he or she had been granted a disability benefit on the day before death, payable for the lifetime of the Member's spouse.

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

C) Eligible for Service Retirement:

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

7. Post-retirement Death Benefits:

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

(i) = 50% continuance to surviving eligible spouse, 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.

(iii) = \$500 death benefit allowance for burial expenses.

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 75% 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.

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, 1991, this amount is \$447 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.

Dental

4% per year of service to a maximum of \$26.15 for Connecticut General and \$9.00 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: Salaries for individuals and the total System payroll are assumed to increase 6.0% per year.
- Cost-of-Living: 3.0% per year.
- Mortality: A. For Pensioners on service retirement and Beneficiaries:

1971 Group Annuity Mortality Table

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 at Retirement: 75% of male employees and 55% of female employees are assumed married 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.

Asset Valuation Method: An asset value equal to the average of book and market values was used in determining annual funding requirements.

**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. The prefunding of these cash flows is determined using the Projected Unit Credit Funding Method.

Discount on Projected Cash Flows: 8% per year.

Medical Trend Rates:

Year	Increase
1991-1992	13.0%
1992-1993	12.0%
1993-1994	11.5%
1994-1995	11.0%
1995-1996	10.5%
1996-1997	10.0%
1997-1998	9.5%
1998-1999	9.0%
1999-2000	8.5%
2000-2001	8.0%
2001-2002	7.5%
2002+	7.0%

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 Dependents:	90% of male and 65% of female retirees who receive a subsidy are assumed to be married 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.
Funding Method:	Projected Unit Credit Cost Method.
Asset Valuation Method:	An asset value equal to the average of book and market values was used in determining annual funding requirements.

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

Average Monthly Claim Rates For Health Subsidy Benefits	
	Premium Per Month Per Year of Service (Maximum 25 Years)
Medical	
Less Than Age 65 or Age 65 and Over Without Medicare Parts A & B	
Married Male	\$13.35
Single Male	10.21
Married Female	12.56
Single Female	10.15
Age 65 and Over with Medicare Parts A & B	
Married Male	8.97
Single Male	6.16
Married Female	7.54
Single Female	6.02
Dental	\$0.84

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

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	0.1296	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	0.0006	0.0001	0.0006	0.0005	0.0000
31	0.0946	0.0879	0.0000	0.0000	0.0008	0.0001	0.0006	0.0006	0.0000
32	0.0877	0.0827	0.0000	0.0000	0.0009	0.0001	0.0007	0.0006	0.0000
33	0.0813	0.0779	0.0000	0.0000	0.0010	0.0001	0.0007	0.0006	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	0.0016	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	0.0006	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	0.0016	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	0.0016	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	0.0067	0.0023	0.0032	0.0028	0.0022	0.0000
54	0.0220	0.0330	0.0235	0.0134	0.0023	0.0036	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	0.0036	0.0031	0.0026
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	0.1650	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.*

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

EXHIBIT XI

AGE/SERVICE/SALARY DISTRIBUTION BY ATTAINED AGE FOR ACTIVE MEMBERS AS OF JUNE 30, 1991

ATTAINED AGE	SERVICE												TOTAL	
	0 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	OVER 34		
UNDER 25	292	283	230	94	50	33	0	0	0	0	0	0	0	982
AVERAGE SALARY	22,290	23,942	25,711	25,590	27,036	26,888	0	0	0	0	0	0	0	24,279
25 - 29	346	580	672	328	317	638	64	0	0	0	0	0	0	2945
AVERAGE SALARY	26,057	28,557	30,112	30,037	31,982	31,338	30,709	0	0	0	0	0	0	29,801
30 - 34	263	474	505	321	407	1193	479	8	0	0	0	0	0	3650
AVERAGE SALARY	27,799	29,711	31,376	33,278	35,834	35,945	32,746	30,462	0	0	0	0	0	33,238
35 - 39	204	343	379	260	284	990	744	441	40	0	0	0	0	3685
AVERAGE SALARY	29,377	30,342	31,479	35,114	34,746	37,257	37,244	35,050	36,319	0	0	0	0	34,961
40 - 44	146	241	266	187	207	715	676	849	446	11	0	0	0	3744
AVERAGE SALARY	29,232	29,837	32,229	35,614	35,857	36,716	39,132	40,112	41,610	39,785	0	0	0	37,358
45 - 49	94	151	158	101	147	412	412	489	754	232	15	0	0	2965
AVERAGE SALARY	32,626	27,684	32,312	33,060	36,397	36,626	41,158	42,328	45,019	45,770	41,515	0	0	40,126
50 - 54	74	117	98	65	89	309	273	316	521	395	154	9	9	2420
AVERAGE SALARY	26,635	25,408	32,518	35,003	33,946	36,335	37,780	38,522	40,667	46,344	45,431	36,608	36,608	38,827
55 - 59	37	62	59	42	42	157	180	208	322	275	206	47	47	1637
AVERAGE SALARY	21,409	20,956	30,631	36,396	36,592	37,712	37,620	38,526	36,741	43,013	47,932	50,005	50,005	38,823
60 - 64	30	49	27	28	29	117	124	135	169	105	88	48	48	949
AVERAGE SALARY	16,044	16,295	27,133	34,499	32,231	36,164	36,953	34,701	37,809	43,332	46,891	44,465	44,465	36,471
OVER 64	22	53	8	10	12	60	80	96	101	68	40	45	45	595
AVERAGE SALARY	9,771	10,187	26,765	28,488	33,916	31,730	37,313	36,110	37,900	39,892	40,345	49,838	49,838	34,308
TOTAL	1508	2353	2402	1436	1584	4624	3032	2542	2353	1086	503	149	149	23572
AVERAGE SALARY	26,275	27,544	30,617	32,815	34,479	35,743	37,409	38,864	41,305	44,616	46,189	47,361	47,361	35,344

AVERAGE AGE: 41.6
 AVERAGE SERVICE: 10.1

CITY OF LOS ANGELES EMPLOYEE'S RETIREMENT SYSTEM

EXHIBIT XII

DISTRIBUTION OF PENSIONERS BY PLAN YEAR OF RETIREMENT AND BY ATTAINED AGE AS OF JUNE 30, 1991

TOTAL FOR ALL PENSIONERS

ATTAINED AGE	PRE 1977	Retirements in Plan Year Beginning in														TOTAL	AVERAGE AMOUNT
		1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990		
0 - 39	3	0	0	3	6	3	5	3	3	5	7	4	5	13	14	74	7,881
40 - 44	7	0	7	9	9	6	7	6	8	7	10	7	9	7	9	108	8,497
45 - 49	22	5	11	6	12	7	8	8	6	9	7	9	11	6	5	132	9,144
50 - 54	31	9	16	24	9	9	7	13	11	11	13	10	23	19	8	213	8,880
55 - 59	47	9	11	14	19	20	11	15	13	15	65	97	139	163	161	799	18,251
60 - 64	90	27	34	30	44	87	126	147	169	139	171	160	148	171	127	1670	18,035
65 - 69	225	94	176	140	140	151	275	237	178	141	165	144	145	92	76	2379	16,975
70 - 74	596	181	209	189	185	174	145	134	134	74	85	63	37	37	17	2260	14,060
75 - 79	829	124	132	100	76	78	52	33	31	23	13	6	6	2	5	1510	11,822
80 - 84	854	35	32	22	21	15	10	6	1	5	1	2	4	5	1	1014	9,240
85 - 89	495	2	2	0	0	0	0	1	0	0	0	0	0	0	0	500	8,015
90 - 94	199	1	1	0	0	0	0	0	0	0	1	0	0	1	0	203	6,941
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3398	487	631	537	521	550	646	603	554	429	538	502	527	516	423	10862	
AVERAGE BENEFIT AMOUNT	9,036	12,583	13,217	13,276	12,892	14,582	17,880	17,333	17,503	17,091	18,119	18,917	18,823	19,623	20,652		

AVERAGE BENEFIT AMOUNT: \$14,187
 TOTAL ANNUAL BENEFITS: \$154,100,546

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

EXHIBIT XIII

DISTRIBUTION OF PENSIONERS BY PLAN YEAR OF RETIREMENT AND BY ATTAINED AGE AS OF JUNE 30, 1991

TOTAL FOR ALL PENSIONERS

ATTAINED AGE	PRE 1977	Retirements in Plan Year Beginning in														TOTAL	MONTHLY AVERAGE HEALTH SUBSIDY	
		1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990			
0 - 39	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	0	0	0	0	0	0	0	0	0	0	0
45 - 49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 - 54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55 - 59	11	2	4	1	7	6	2	4	3	3	42	75	113	141	120	534	312	
60 - 64	15	4	7	10	16	44	87	107	144	113	145	138	126	151	109	1216	308	
65 - 69	62	53	109	92	100	109	221	199	152	117	145	125	126	73	53	1736	211	
70 - 74	289	125	156	125	135	134	120	108	103	62	74	56	24	25	12	1548	179	
75 - 79	445	96	95	80	59	63	39	25	23	16	10	5	5	1	2	964	174	
80 - 84	433	28	23	12	11	11	7	1	0	2	1	2	4	3	0	538	171	
85 - 89	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231	163	
90 - 94	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	154	
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	1572	308	394	320	328	367	476	444	425	313	417	401	398	394	296	6853		
MONTHLY AVERAGE HEALTH SUBSIDY	180	188	190	192	190	196	226	222	237	236	248	247	268	277	282			

AVERAGE MONTHLY HEALTH SUBSIDY: \$218
 TOTAL MONTHLY HEALTH SUBSIDY: \$1,497,749