



The City  
Of Los Angeles

City Employees'  
Retirement System

**Actuarial Valuation**  
**As Of June 30, 1990**

PREPARED BY

THE *Wyatt* COMPANY

THE *Wyatt* COMPANY

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HEALTH CARE CONSULTING

December 10, 1990

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, 1990, for the City Employees' Retirement System. This report contains the results of the valuation of the pension benefits provided by the System. Health Insurance Premium Subsidy benefits are covered in a separate report. However, these results are referenced in this report, where appropriate.

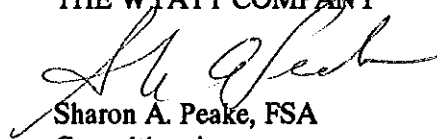
This report is divided into three parts:

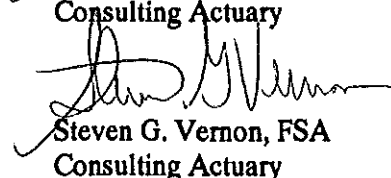
- I. Valuation Summary: This section contains an overview of significant valuation results.
- II. Valuation Detail: This section contains more detailed results of the valuation.
- III. Exhibits: This section contains information on plan demographics, plan provisions, and actuarial assumptions used in 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

Ianta  
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**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM  
Actuarial Valuation As Of June 30, 1990**

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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, 1990**

### **Introduction**

Officers and employees of the City of Los Angeles and their beneficiaries are entitled to pension benefits, 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, 1990 valuation 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, 1990, required under Government Accounting Standards Board (GASB) Statement Number 5.

This report presents the results of the valuation of the pension benefits provided by the System. Also included in this report is a summary of the valuation of the health subsidy benefits. Please refer to our separate report for detail on the valuation of the health subsidy. All figures in this report are for the pension benefits of the System only, unless specifically noted otherwise.

The valuation results were based on the demographic assumptions as outlined in Exhibit V and VI and the following economic assumptions:

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

The annual salary increase rate was increased from 5.75% to 6.00% effective July 1, 1989. This valuation also reflects changes made effective July 1, 1989 to the following assumptions and methods:

- Ordinary Withdrawal
- Ordinary Death
- Death While Eligible for Early Retirement
- Service Retirement Mortality
- Medical Cost Increases
- Asset Valuation Method

These new assumptions were based on our study of plan experience for July 1, 1986 to June 30, 1989.

We believe these assumptions are appropriate for use in the evaluation of the liabilities of the Retirement System at June 30, 1990.

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, 1990**

<b>Summary Of Significant Valuation Results</b>			
	<b>June 30, 1990</b>	<b>June 30, 1989</b>	<b>Percent Change</b>
<b>I. Total Membership</b>			
A. Active Members	23,871	22,784	+4.8%
B. Pensioners	10,604	10,503	+1.0%
<b>II. Salaries at June 30</b>			
A. Total Annual Payroll	\$ 815,767,554	\$752,904,164	+8.3%
B. Average Monthly Salary	2,848	2,753	+3.5%
<b>III. Benefits to Current Pensioners and Beneficiaries</b>			
A. Total Annual Benefits	143,279,448	135,534,667	+5.7%
B. Average Monthly Benefit Amount	1,126	1,075	+4.7%
<b>IV. System Assets</b>	2,643,194,600	2,350,669,609	+12.4%
<b>V. Unfunded Actuarial Accrued Liability for Retirement Benefits</b>	565,404,621	561,877,799	+0.6%
<b>VI. Budget Items</b>			
<b>A. Retirement Benefits</b>			
1. Normal Cost as a Percent of Pay	5.45%	5.29%	+3.0%
2. Amortization of Unfunded Actuarial Accrued Liability			
i) Percent of Pay, plus	6.15%	6.17%	-0.3%
ii) Fixed Dollar Amount	\$ 2,724,502	\$ 2,724,502	+0.0%
<b>B. Health Subsidy Contribution, as a Percent of Pay</b>	2.64%	2.16%	+22.2%
<b>C. Total Contribution (A + B)</b>			
i) Percent of Pay, plus	14.24%	13.62%	+4.6%
ii) Fixed Dollar Amount	\$ 2,724,502	\$ 2,724,502	+0.0%
<b>VII. Funded Ratio (Retirement Benefits Only)</b>	81.8%	80.2%	+2.0%

# 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 4.6% from last year.

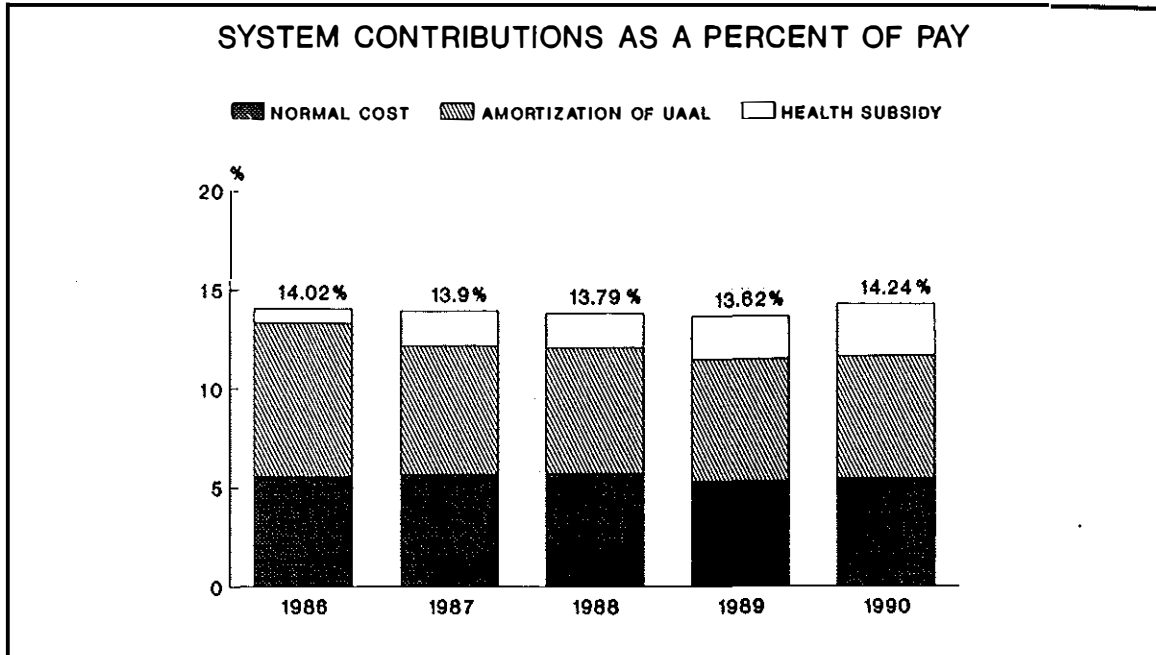
<b>Recommended City Contributions For Fiscal Year 1991 - 1992</b>			
	<b>Percentage of Salary</b>	<b>plus</b>	<b>Fixed Dollar Amount</b>
Contribution for Retirement, Disability, and Death Benefits	11.60%		\$2,724,502
Contribution for Health Subsidy Benefits	2.64%		—
<b>Total Contribution</b>	<b>14.24%</b>	<b>plus</b>	<b>\$2,724,502</b>

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

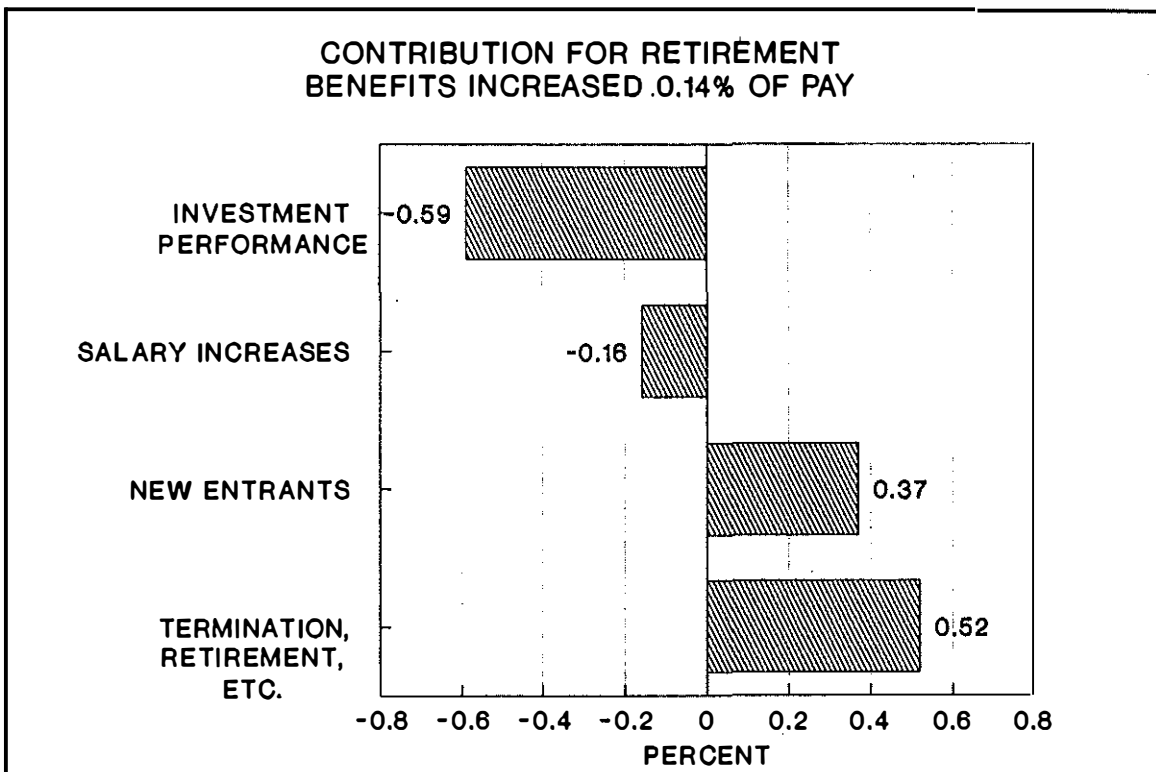
As determined in the June 30, 1989 valuation, for the Family Death Benefit Plan we recommend that the Members and the City each continue to contribute \$3.20 per month.



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 unfunded 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

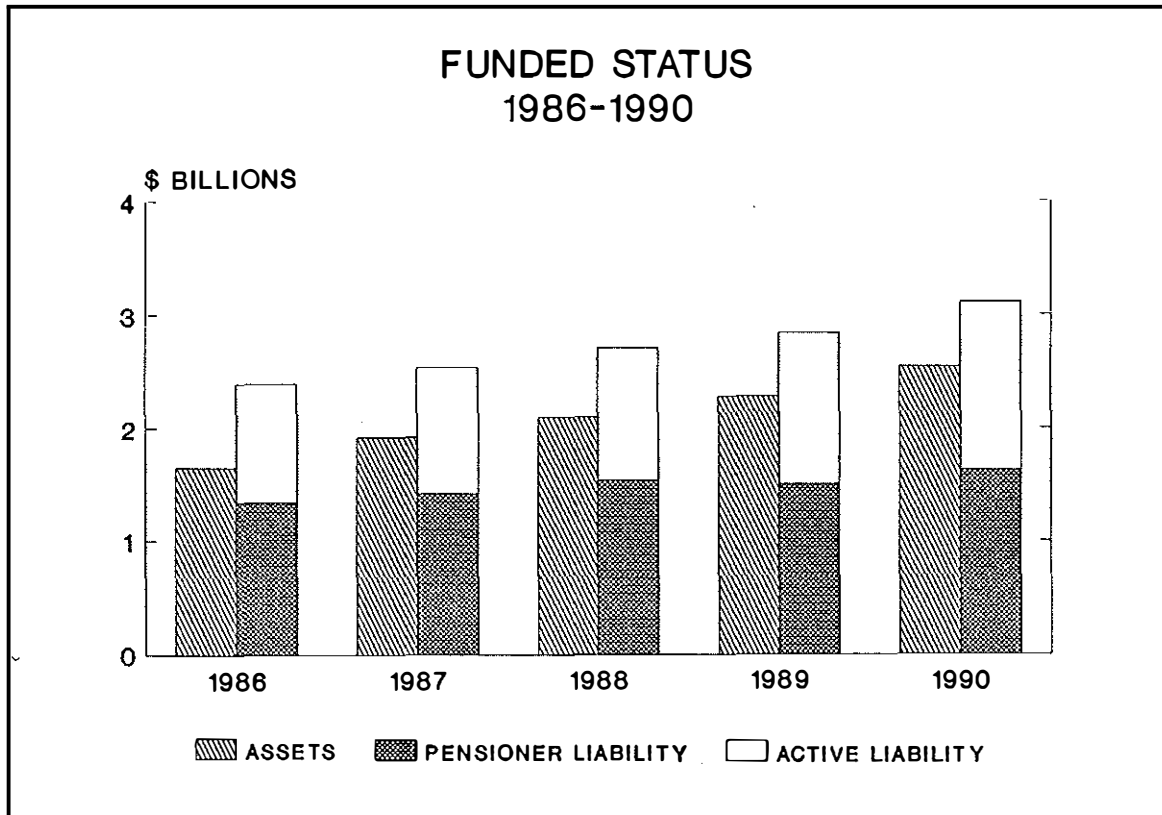
## **Funded Status At June 30, 1990**

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, 1990 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, 1990 is disclosed. In the latter calculation, we calculate accrued benefits based upon service to June 30, 1990. We also recognize assumed future salary increases.

Below 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 are 157% 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 represent 81.8% of the total present value of accrued benefits on June 30, 1990. This funding ratio increased slightly since the last valuation, primarily due to a return on assets which was greater than the 8% assumed.

<b>Funded Status</b>			
	<b>June 30, 1990</b>	<b>June 30, 1989</b>	<b>Percent Change</b>
<b>Present Value of Retirement Benefits Earned</b>			
- Retired Members and Beneficiaries	\$1,617,040,898	\$1,501,330,013	+7.7%
- Active Members	1,491,617,808	1,341,797,458	+11.2%
- Total	\$3,108,658,706	\$2,843,127,471	+9.3%
<b>Applicable Assets (Actuarial Value)</b>	<b>\$2,543,254,085</b>	<b>\$2,281,249,672</b>	<b>+11.5%</b>
<b>Funding Ratio for Retirement Benefits</b>	<b>81.8%</b>	<b>80.2%</b>	<b>+2.0%</b>

The graph below compares assets to liabilities under GASB No. 5 for retirement benefits for the years 1986-1990. Assets exceed liabilities for pensioners, and are about 82% of total liabilities in 1990.



# 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, 1990	June 30, 1989	Percent Change
<b>Total System Assets</b>			
Market Value	\$2,790,783,000	\$2,538,966,000	+9.9%
Book Value	2,643,195,000	2,350,670,000	+12.4%
Actuarial Value	2,716,989,000	2,444,818,000	+11.1%

The rate of return on total plan assets was as follows:	
Market Value	9.45%
Book Value	11.95%
Actuarial Value	10.65%
These rates of return were based on the following cash flow information:	
<b>Contributions</b>	
City	\$146,391,924
Members	37,084,736
<b>Pensions Paid</b>	
Retirement Allowances	\$140,962,137
Family Death Benefits	644,115
Health Benefits	14,433,729
<b>Refunds of Member Contributions</b>	\$ 7,224,661
<b>Administration Expenses</b>	\$ 7,110,113
<b>Investment Earnings</b>	
Realized	\$279,423,086
Unrealized	(40,708,000)

The 10.65% 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 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

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## Summary Of System Funding

As of June 30, 1990, the System had assets equal to 81.8% 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 57.4% of liabilities. This remaining unfunded liability is to be funded by future City and Member contributions to the System.

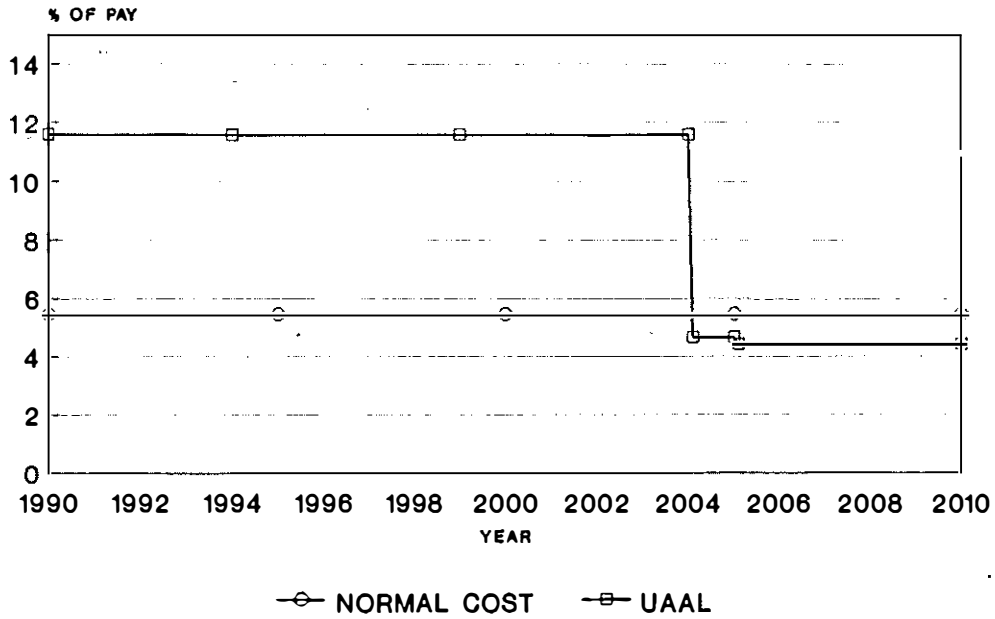
The City contributions are made up of two parts:

- **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.

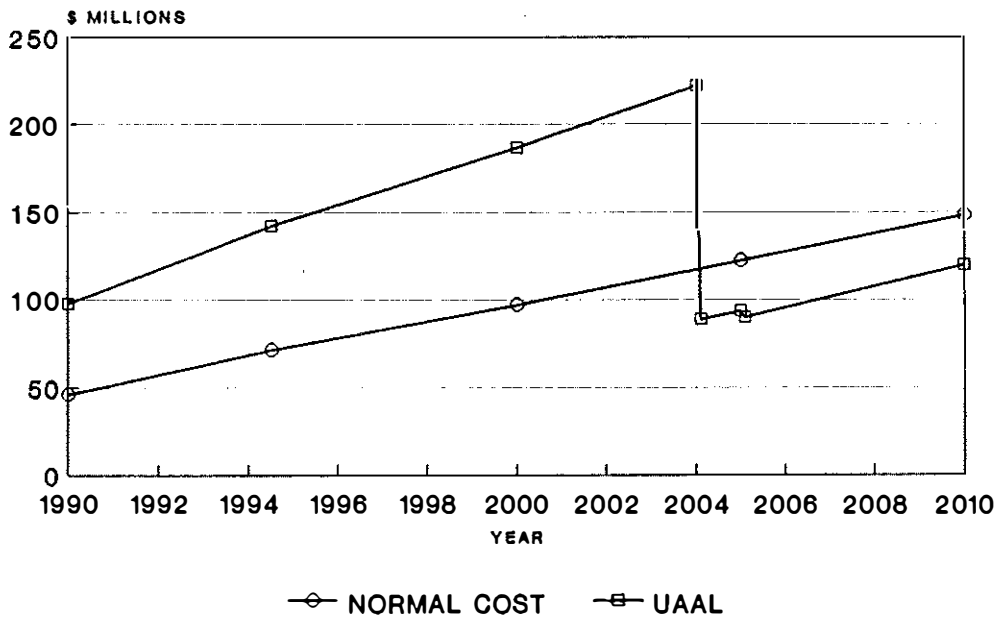
The total contribution will be the sum of the Normal Cost and UAAL contributions.

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

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## **System Membership**

Computer tapes containing data on System membership as of June 30, 1990 were supplied to us by the Retirement Office. On the following schedules we present a summary of System membership at June 30, 1990 and June 30, 1989. Salary information as of June 30, 1990 does not include the pay increases that were effective on July 1, 1990. Pension amounts shown do include the 1.6% Ad Hoc COLA effective December 1, 1989, but do not include the cost-of-living adjustments that were effective on July 1, 1990. All July 1, 1990 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 increased 4.8% since the last valuation. The total number of retired Members and their beneficiaries increased 1.0%, while the total average benefit amount increased 4.7%. The following schedule contains a more detailed breakdown of these figures.

In the data, there were records for approximately 1,900 terminated participants who had not yet received a refund of contributions. The total amount of contributions to be refunded was approximately \$12 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 VIII and IX of this report.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

<b>System Membership</b>			
	June 30, 1990	June 30, 1989	Percent Change
<b>I. Active Members</b>			
a. Number	23,871	22,784	+4.8%
b. Average Age	41.1	41.1	+0.0%
c. Average Years of Service	9.6	9.7	-1.0%
d. Salary			
i. Total Annual Salary	\$815,767,554	\$752,904,164	+8.3%
ii. Average Monthly Salary	\$2,848	\$2,753	+3.5%
<b>II. Pensioners and Beneficiaries</b>			
a. Number	10,604	10,503	+1.0%
b. Average Age	70.0	69.7	+0.4%
c. Allowance			
i. Total Annual Allowance	\$143,279,448	\$135,534,667	+5.7%
ii. Average Monthly Amount	\$1,126	\$1,075	+4.7%

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## **Applicable Assets At June 30, 1990**

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, 1990, are calculated below.

1. Total Actuarial Value of Assets at June 30, 1990	<b>\$2,716,989,000</b>
2. Less Reserves and Liabilities Established for:	
a. Family Death Benefit Insurance	15,026,580
b. 20% of Undistributed Earnings	0
c. Retiree Medical Subsidy	<u>158,708,335</u>
d. Total	<u>173,734,915</u>
3. Net Applicable Actuarial Value of Assets at June 30, 1990 (Item 1 less Item 2)	<b>\$2,543,254,085</b>

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

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## **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 represents assets and liabilities for pension 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.

System assets are equal to the sum of:

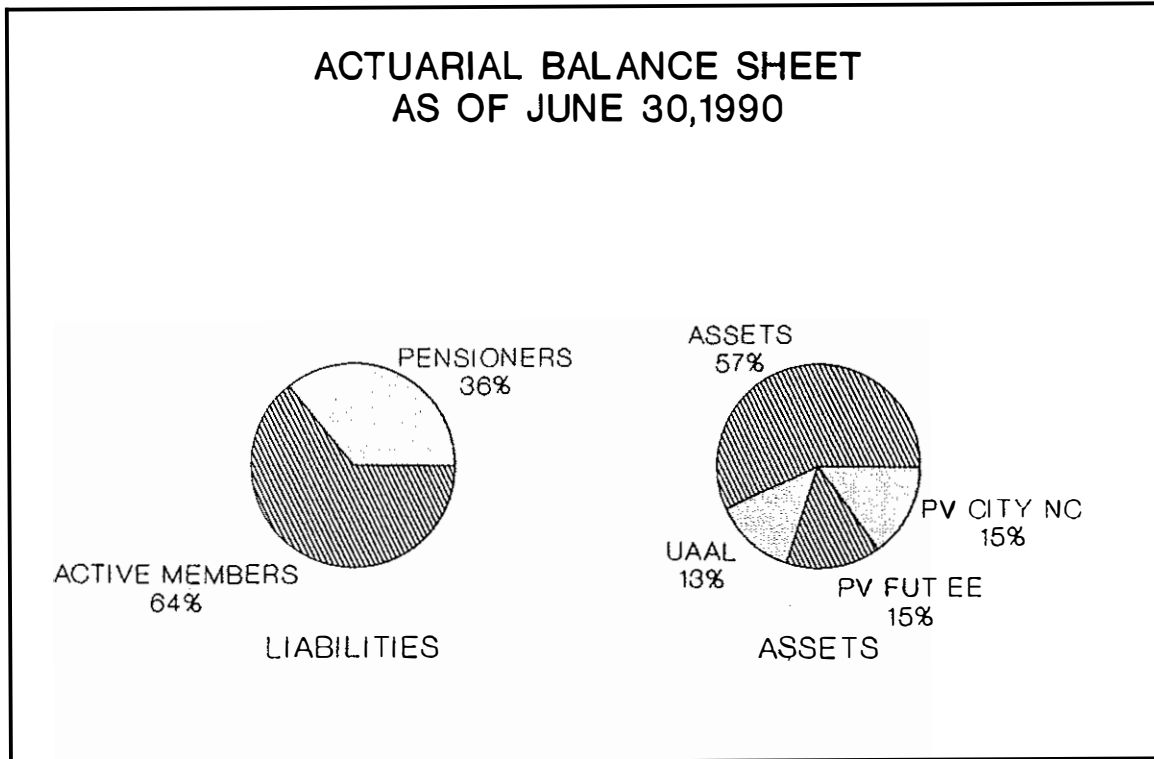
- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

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 1990 fiscal year, the normal cost percentage is 5.45%. 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 System. It shows that about 36% of the System's liabilities are for retired Members and their beneficiaries and 64% are for active Members. About 57% of the System's assets consist of currently available assets with 43% consisting of future contributions from the City and the Members.



**CITY OF LOS ANGELES  
CITY EMPLOYEES' RETIREMENT SYSTEM  
Actuarial Balance Sheet As Of June 30, 1990**

<b>Assets</b>		
1. Applicable Assets		\$2,543,254,085
2. Present Value of Future Member Contributions		643,200,486
3. Present Value of Future Contributions by the City for:		
a. Basic Pensions		
i. Normal Costs	506,512,474	
ii. Amortization of Certain Liabilities	198,410,251	704,922,725
b. Cost-of-Living Pensions		
i. Normal Cost	175,006,538	
ii. Amortization of Certain Liabilities	366,994,370	542,000,908
4. Total Assets		\$4,433,378,204
<b>Liabilities</b>		
5. Present Value of Benefits Already Granted (Pensioners and Beneficiaries)		
a. Basic	996,135,721	
b. Cost-of-Living	620,905,177	1,617,040,898
6. Present Value of Benefits to be Granted (Actives)		
a. Basic	2,260,949,227	
b. Cost-of-Living	555,388,079	2,816,337,306
7. Total Liabilities		\$4,433,378,204

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

## **Actuarial Valuation As Of June 30, 1990**

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### **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 11.46% of pay to 11.60% of pay. The total contribution increased from 13.62% of pay to 14.24% due primarily to an increase in the health subsidy contribution from 2.16% to 2.64%. Pension benefit contributions increased slightly. Gains from favorable investment performance and salary increases were offset by terminations and retirements that were less than assumed.

In our opinion, if these recommendations 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

<b>Recommended City Contributions For Fiscal Year 1991 - 1992</b>		
	<b>Percentage of Salary</b>	<b>plus Fixed Dollar Amount</b>
<b>For Basic Pensions</b>		
Normal Cost	4.08%	
Prior Service-Minimum Pensions (amortized as a level dollar amount until June 30, 1997)		\$927,955
Unfunded Actuarial Accrued Liability	2.49%	
<b>Total Contributions for Basic Pensions</b>	<b>6.57%</b>	<b>plus \$927,955</b>
<b>For Cost-of-Living Pensions</b>		
Normal Cost	1.37%	
Increase due to 1967 Amendment (Amortized as a level dollar amount until June 30, 1997)		\$1,796,547
Unfunded Actuarial Accrued Liability	3.66%	
<b>Total Contributions for Cost-of-Living Pensions</b>	<b>5.03%</b>	<b>plus \$1,796,547</b>
<b>Total Basic and Cost-of-Living Contributions for Retirement Benefits</b>	<b>11.60%</b>	<b>plus \$2,724,502</b>
Contribution for Prefunding Health Care Subsidy	2.64%	
<b>Total Contribution</b>	<b>14.24%</b>	<b>plus \$2,724,502</b>



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

**Detail Of Amortization Of Unfunded  
Actuarial Accrued Liability**

Item	Remaining Years	Balance to be Amortized 6/30/90	Amortization Amount	Percentage of Salary
<b>Basic Pensions</b>				
1. Prior Service Pensions	7	\$4,831,277	\$927,955	—
2. Change in Asset Valuation Method at 6/30/89	29	(97,541,292)	(4,398,057)	(.518)%
3. Change in Assumptions at 6/30/89	29	(49,287,212)	(2,222,320)	(.262)%
4. Ad Hoc COLA Increase at 12/01/89	15	21,314,312	1,644,780	.194%
5. Actuarial Loss at 6/30/90	15	14,983,919	1,156,277	.136%
6. Remaining UAAL	14	304,109,247	24,920,318	2.937%
<b>Total</b>		<b>\$198,410,251</b>	<b>\$22,028,953</b>	<b>2.49%</b>
<b>Cost-of-Living Pensions</b>				
1. Increase Due to 1967 Amendments	7	\$9,353,489	\$1,796,547	—
2. Change in Assumptions at 6/30/90	29	(45,772,190)	(2,063,831)	(.243)%
3. Actuarial Gain at 6/30/90	15	(12,042,204)	(929,271)	(.110)%
4. Remaining UAAL	14	415,455,275	34,044,600	4.013%
<b>Total</b>		<b>\$366,994,370</b>	<b>\$32,848,045</b>	<b>3.66%</b>

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## 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 6). These figures do not include assets or liabilities of the health subsidy.

	June 30, 1990	June 30, 1989
<b>1. Present Value of Benefits Earned to Valuation Date</b>		
a. Basic Benefits	\$2,191,267,704	\$1,990,189,230
b. Cost-of-Living Benefits	<u>917,391,002</u>	<u>852,938,241</u>
c. Total	3,108,658,706	2,843,127,471
<b>2. Applicable Assets</b>		
a. Basic Benefits	1,992,857,453	1,794,776,059
b. Cost-of-Living Benefits	<u>550,396,632</u>	<u>486,473,613</u>
c. Total	\$2,543,254,085	\$2,281,249,672
<b>3. Funding Ratio</b>		
a. Basic Benefits	90.9%	90.2%
b. Cost-of-Living Benefits	60.0%	57.0%
c. Total	81.8%	80.2%

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

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## **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 VII.

If certain Members from this group contribute at a lower rate through a collective bargaining agreement, the City should contribute 73% of the amount assumed by the City. This 73% 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 72% 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%.

As determined in the June 30, 1989 valuation, for participation in the Family Death Benefit Plan, we recommend that a contribution of \$3.20 per month be made by participating Members and the City.

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

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## **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 recommend that Members and the City each continue to contribute \$3.20 per month until the next scheduled review, June 30, 1991.

# CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

## **Retiree Health Insurance Subsidy**

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 reserve available at June 30, 1990 is \$158,708,335. This reserve amount was calculated by the City as part of the asset information provided to us.

Based on this reserve, we have calculated the required funding amount for the fiscal year beginning July 1, 1991. The dollar amounts shown below are based on total payroll at July 1, 1990, for illustrative purposes.

	Amount	Percent of Pay
1. Normal Cost	\$ 7,887,487	.93%
2. Actuarial Accrued Liability	403,854,987	—
3. Health Subsidy Reserve	158,708,335	—
4. Unfunded Actuarial Accrued Liability (UAAL) (2) - (3)	245,146,652	—
5. Amortization of UAAL		
- Initial Base as a Level Percent of Pay through June 30, 2004	3,873,896	.46%
- 6/30/89 Change in Assumptions	901,122	.11%
- 6/30/89 Change in Funding	5,622,567	.66%
- Actuarial Loss from 1989 to 1990	<u>4,104,432</u>	<u>.48%</u>
Total	14,502,017	1.71%
6. Recommended Contribution: (1)+(5)	\$22,389,504	2.64%

Please refer to our separate report for more detail on the Retiree Health Insurance Subsidy valuation.

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

## **Exhibits**

### **Table Of Contents**

<b>Exhibit I:</b>	<b>System Assets</b>
<b>Exhibit II:</b>	<b>Statement of Reserve and Fund Balance Accounts</b>
<b>Exhibit III:</b>	<b>Statement of Changes in Net Assets Available for Plan Benefits</b>
<b>Exhibit IV:</b>	<b>Summary of Plan Benefits</b>
<b>Exhibit V:</b>	<b>Summary of Actuarial Assumptions</b>
<b>Exhibit VI:</b>	<b>Rates of Separation from Active Service</b>
<b>Exhibit VII:</b>	<b>Member Contributions</b>
<b>Exhibit VIII:</b>	<b>Age/Service/Salary Distribution as of June 30, 1990 for Active Members</b>
<b>Exhibit IX:</b>	<b>Age/Benefit Distribution of Pensioners as of June 30, 1990</b>

*Exhibit I*

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

<b>System Assets (Book Value)</b>		
	<b>June 30, 1990</b>	<b>June 30, 1989</b>
<b>ASSETS</b>		
Cash	\$ 2,410,967	\$ 3,638,392
Receivables		
Accrued Interest and Dividend Income	40,015,343	36,101,507
Other Receivables	5,621,367	2,405,345
Proceeds from Investment	<u>3,538,193</u>	<u>15,490,009</u>
Total Receivables	49,174,903	53,996,861
Investments		
Temporary, at Cost	414,686,953	316,065,199
Bonds, at Amortized Cost	1,345,964,959	1,169,345,787
Common Stocks, at Cost	779,307,209	800,850,875
Real Estate	<u>56,065,211</u>	<u>23,214,798</u>
Total Investments	2,596,024,332	2,309,476,659
Total Assets	<u>\$2,647,610,202</u>	<u>\$2,367,111,912</u>
<b>LIABILITIES</b>		
Accounts Payable and Accrued Expenses	\$ (4,415,602)	\$ (16,442,303)
Net Assets Available for Plan Benefits	<u>\$2,643,194,600</u>	<u>\$2,350,669,609</u>

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

<b>Statement Of Reserve And Fund Balance Accounts</b>		
	<b>June 30, 1990</b>	<b>June 30, 1989</b>
<b>ACTUARIAL</b>		
Member Contributions	\$411,447,908	\$ 375,574,222
Annuities	293,569,647	271,157,239
Subsequent Service	1,265,476,487	1,088,755,434
Cost-of-Living	498,965,643	440,277,984
Family Death Benefit Insurance	15,026,580	14,026,928
Health Benefits	158,708,335	146,707,299
<b>Total Actuarial</b>	<b>2,643,194,600</b>	<b>2,336,499,106</b>
<b>OTHER</b>		
Undistributed Earnings	0	14,170,503
Fund Balance	0	0
<b>Total Other</b>	<b>0</b>	<b>14,170,503</b>
<b>TOTAL RESERVE AND FUND BALANCE</b>	<b>\$2,643,194,600</b>	<b>\$2,350,669,609</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, 1990</b>	<b>Year Ended June 30, 1989</b>
<b>REVENUES</b>		
City Contributions	\$ 146,391,924	\$ 134,035,041
Members' Contributions	37,084,736	32,558,719
Income from Investments		
Interest Earned	142,880,304	133,803,539
Dividends	33,935,925	28,643,416
Real Estate	0	381,817
Stock and Bond Option Premiums	<u>3,230,082</u>	<u>0</u>
	180,046,311	162,828,772
<b>Total Revenues</b>	<b>\$363,522,971</b>	<b>\$329,422,532</b>
<b>EXPENDITURES</b>		
Pensions		
Retirement Allowances	\$ 140,962,137	\$ 129,481,898
Family Death Benefit Insurance	644,115	651,455
Health Benefits	<u>14,433,729</u>	<u>11,369,458</u>
	\$ 156,039,981	\$ 141,502,811
Refund of Members' Contributions	7,224,661	6,606,959
Administrative Expenses	7,110,113	5,937,778
<b>Total Expenditures</b>	<b>\$ 170,374,755</b>	<b>\$ 154,047,548</b>
Excess of Revenues over Expenditures before Gain on Disposition of Investments	\$ 193,148,216	\$ 175,374,984
Gain on Disposition of Investments	\$ 99,376,775	\$ 55,692,000
<b>Excess of Revenues over Expenditures</b>	<b>\$ 292,524,991</b>	<b>\$ 231,066,984</b>
Net Assets Available for Plan Benefits, Beginning of the Year	\$2,350,669,609	\$2,119,602,625
<b>Net Assets Available for Plan Benefits, End of the Year</b>	<b>\$2,643,194,600</b>	<b>\$2,350,669,609</b>

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

**Summary Of Plan Benefits**

1. **Eligibility:** Members are eligible at the first of the month following 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 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 73% of the amounts otherwise paid by the Member.

Post-February, 1983 participants:

Members contribute 6% of pay.

10. Family Death Benefit Insurance Plan:

A) Eligibility: Employee may elect coverage after 18 months of City retirement service.

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

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

11. Retiree Health Insurance Subsidy:

A) Eligibility: Retirement after age 55 with 10 years of service, or compulsory retirement at age 70.

B) Benefits: Medical

Before age 65 or after age 65 with only Medicare Part B:

A percentage of the Maximum Subsidy, up to a maximum of the actual premium paid to a City approved health carrier. The percentage is 4% per year of service, up to a maximum of 100%. The Maximum Subsidy is \$382 per month as of July 1, 1990.

After age 65 with Parts A and B of Medicare:

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 \$22.46 for Connecticut General and \$9.00 for Safeguard.

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

**Summary Of Actuarial Assumptions**

- 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

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

**B. For Pensioners on disability retirement:**

**1981 Disability Mortality Table**

**Sample Rates**

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

**Rehire for Former Employees:** All former employees are assumed not to be rehired.

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

**Proportion of Members with Spouses 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 pension and health subsidy benefits: The Projected Unit Credit Cost Method.

For the Family Death Benefit Insurance Plan: One year term cost funding method.

See separate report for additional actuarial assumptions used in valuation of Health Subsidy Benefits.



**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 for Service Retirement : Member dies before retirement but after meeting age and service requirements for service retirement.

Each rate represents the probability that a Member will separate from service at each age due to the particular cause. For example, a rate of 0.0020 for a Member's service retirement at age 50 means we assume that, on average, 2 out of 1,000 Members who are age 50 will retire at that age.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

RATES OF SEPARATION FROM ACTIVE SERVICE

AGE	ORDINARY WITHDRAWAL		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
16	8.00%	0.22%	8.22%
17	8.04	0.28	8.32
18	8.08	0.33	8.41
19	8.14	0.39	8.53
20	8.20	0.44	8.64
21	8.27	0.48	8.75
22	8.34	0.53	8.87
23	8.42	0.56	8.98
24	8.50	0.60	9.10
25	8.58	0.63	9.21
26	8.66	0.66	9.32
27	8.75	0.68	9.43
28	8.86	0.70	9.56
29	8.96	0.72	9.68
30	9.06	0.75	9.81
31	9.17	0.77	9.94
32	9.28	0.79	10.07
33	9.40	0.81	10.21
34	9.50	0.82	10.32
35	9.61	0.83	10.44
36	9.73	0.85	10.58
37	9.84	0.86	10.70
38	9.96	0.87	10.83
39	10.07	0.90	10.97

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

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

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

EXHIBIT VIII

AGE/SERVICE/SALARY DISTRIBUTION BY ATTAINED AGE FOR ACTIVE MEMBERS AS OF JUNE 30, 1990

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	539	395	167	99	54	26	0	0	0	0	0	0	0	1280
AVERAGE SALARY	20,774	23,664	23,718	24,712	24,894	28,004	0	0	0	0	0	0	0	22,675
25 - 29	734	739	373	384	322	660	35	0	0	0	0	0	0	3247
AVERAGE SALARY	25,443	27,425	27,958	30,566	31,363	30,913	32,411	0	0	0	0	0	0	28,563
30 - 34	563	542	313	394	343	1127	320	33	0	0	0	0	0	3635
AVERAGE SALARY	26,945	28,339	29,838	33,113	34,691	34,940	32,318	32,109	0	0	0	0	0	31,800
35 - 39	409	400	261	272	305	917	626	511	40	0	0	0	0	3741
AVERAGE SALARY	27,268	28,422	32,368	32,782	35,294	36,425	37,603	35,050	36,497	0	0	0	0	33,938
40 - 44	272	279	184	211	170	626	621	826	428	14	0	0	0	3631
AVERAGE SALARY	27,558	30,304	33,550	34,131	34,595	36,032	40,202	40,214	42,100	38,771	0	0	0	37,044
45 - 49	181	168	93	128	115	388	340	499	699	210	12	0	0	2833
AVERAGE SALARY	27,150	30,085	31,208	33,344	35,129	36,342	42,019	40,826	43,597	46,011	44,743	0	0	39,044
50 - 54	131	111	66	82	94	274	220	339	511	357	180	12	12	2377
AVERAGE SALARY	24,847	28,869	33,666	32,789	34,970	35,797	37,340	39,183	39,560	45,161	43,159	45,636	38,123	
55 - 59	64	59	46	47	38	153	173	223	338	251	195	28	28	1615
AVERAGE SALARY	21,860	25,682	34,765	35,061	36,394	36,604	37,014	37,672	36,587	43,111	48,100	45,711	38,264	
60 - 64	52	36	22	26	26	120	124	143	170	113	91	45	45	968
AVERAGE SALARY	20,011	22,841	33,559	30,391	34,903	35,876	36,367	35,608	37,994	39,590	42,775	46,809	36,298	
OVER 64	58	16	10	11	15	48	75	94	88	52	41	36	36	544
AVERAGE SALARY	14,414	17,229	30,157	30,302	27,577	31,656	38,063	36,759	37,072	39,958	39,655	50,397	34,504	
TOTAL	3003	2745	1535	1654	1482	4339	2534	2668	2274	997	519	121	121	23871
AVERAGE SALARY	25,020	27,566	30,041	32,090	33,751	34,985	37,983	38,527	40,570	43,832	44,708	47,506	34,174	

AVERAGE AGE: 41.1  
 AVERAGE SERVICE: 9.6

CITY OF LOS ANGELES EMPLOYEE'S RETIREMENT SYSTEM

EXHIBIT IX

DISTRIBUTION OF PENSIONERS BY PLAN YEAR OF RETIREMENT AND BY ATTAINED AGE AS OF JUNE 30, 1990

TOTAL FOR ALL PENSIONERS

ATTAINED AGE	PRE 1976	Retirements in Plan Year Beginning in														TOTAL	AVERAGE AMOUNT
		1976	1977	1978	1976	1980	1981	1982	1983	1984	1985	1988	1987	1988	1988		
0 - 39	6	0	0	1	5	7	4	7	3	6	8	11	6	8	9	81	8,021
40 - 44	6	3	1	7	7	10	5	6	6	6	6	8	7	6	9	93	8,766
45 - 49	19	4	5	12	10	12	6	8	9	7	9	7	8	14	7	137	8,170
50 - 54	25	12	9	15	22	11	14	7	12	11	11	15	10	21	19	214	8,602
55 - 59	33	13	12	14	14	22	21	17	19	15	66	106	135	158	182	827	17,068
60 - 64	85	23	29	48	36	78	98	178	181	190	126	167	148	168	135	1690	17,250
65 - 69	188	88	125	200	161	149	187	261	230	182	127	156	141	118	79	2392	16,086
70 - 74	511	174	178	200	182	159	162	119	118	112	60	61	44	25	19	2124	13,261
75 - 79	714	145	117	117	90	70	51	43	24	24	16	6	5	6	4	1432	10,898
80 - 84	783	53	26	24	16	11	11	6	4	1	4	1	2	2	2	946	8,800
85 - 89	475	1	1	2	0	0	0	0	1	0	0	0	0	0	0	480	7,811
90 - 94	186	0	0	0	0	0	0	0	0	0	0	1	0	0	1	188	6,686
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3031	516	503	640	543	529	559	652	607	554	433	539	506	526	466	10604	
AVERAGE BENEFIT AMOUNT	8,132	12,912	12,373	12,916	13,020	12,556	14,204	17,443	17,019	17,055	16,695	17,635	18,469	18,375	19,155		

AVERAGE BENEFIT AMOUNT: \$13,512  
 TOTAL ANNUAL BENEFITS: \$143,279,448

