

THE CITY OF LOS ANGELES

CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION

AS OF JUNE 30, 1989

THE Wyett COMPANY .

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AN INDEPENDENT WORLDWIDE BENEFITS AND COMPENSATION CONSULTING FIRM

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SOUTHERN CALIFORNIA OFFICES LOS ANGELES ORANGE COUNTY SAN DIEGO

EMPLOYEE BENEFITS EMPLOYEE COMMUNICATIONS RISK MANAGEMENT INSURANCE CONSULTING HEALTH CARE CONSULTING

December 4, 1989

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

Members of the Board:

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We are pleased to present our actuarial valuation report as of June 30, 1989, 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:

- Ι. This section contains an overview of significant valuation. Valuation Summary: 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 Ce

Sharon A. Peake, FSA Consulting Actuary

Steven G. Vernon, FSA **Consulting Actuary**

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VALUATION SUMMARY

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ACTUARIAL VALUATION AS OF JUNE 30, 1989

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, 1989 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, 1989, 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,
- 5.75% annual salary increases,
- 3.0% annual increases in the Consumer Price Index.

These are the same assumptions that were used in the prior year's valuation.

We believe these assumptions are appropriate for use in the evaluation of the liabilities of the Retirement System at June 30, 1989. We will soon be completing an investigation of the experience of the System for the past three years. If that investigation indicates a need for change, we will recommend new assumptions for use in the future.

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.

ACTUARIAL VALUATION AS OF JUNE 30, 1989

SUMMARY OF SIGNIFICANT VALUATION RESULTS

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			Percent
	<u>June 30, 1989</u>	<u>June 30, 1988</u>	<u>Change</u>
I. Total Membership			
A. Active Members	22,784	21,579	+5.6%
B. Pensioners	10,503	10,052	+4.5%
II. Salaries at June 30, 1989			
A. Total Annual Payroll	\$ 752,904,164	\$ 697,005,943	+8.0%
B. Average Monthly Salary	2,753	2,692	+2.3%
c , ,		_,	
III. Benefits to Current			
Pensioners and Beneficiaries A. Total Annual Benefits	125 524 667	124 427 120	.0.001
B. Average Monthly Benefit Amount	135,534,667 1,075	124,427,120 1,032	+8.9% +4.2%
B. Average Montiny Benefit Amount	1,075	1,052	+4.2%
IV. System Assets	2,350,669,609	2,119,602,625	+10.9%
V. Unfunded Actuarial Accrued			
Liability for Retirement Benefits	747,778,642	613,917,244	+21.8%
VI. 1990-91 Budget Items			
A. Retirement Benefits			
1. Normal Cost As a Percent			
of Pay	5,41%	5,70%	-5.1%
2. Amortization of	5,4170	5.7070	-3.170
Unfunded Actuarial Accrued			
Liability			
i) Percent of Pay, plus	7.34%	6.36%	+15.4%
ii) Fixed Dollar Amount	\$ 2,724,502	\$ 3,331,129	-18.2%
B. Health Subsidy Contribution,			
As A Percent of Pay	1.10%	1.73%	-36.4%
C. Total Contribution (A + B)			
i) Percent of Pay, plus	13.85%	13.79%	+0.4%
ii) Fixed Dollar Amount	\$ 2,724,502	\$ 3,331,129	-18.2%
VII. Funded Ratio (Retirement Benefits	Only) 74.5%	77.4%	-3.7%

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. 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 somewhat from last year. The portion for retirement benefits increased and the health subsidy amount decreased, resulting in a net increase of about 0.4%.

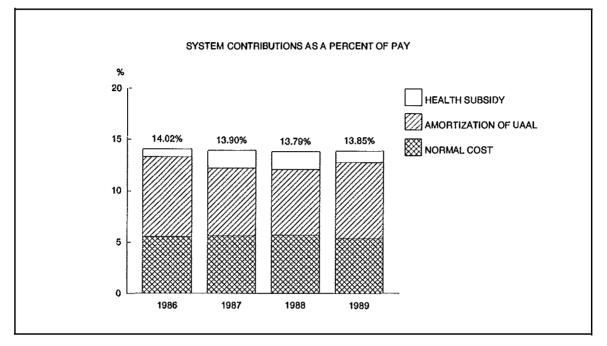
The increase in the portion for retirement benefits and the decrease in the portion for health subsidy benefits is due to the transfer of some retirement benefit assets to the health subsidy reserves to more correctly reflect health subsidy funding prior to 1987.

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

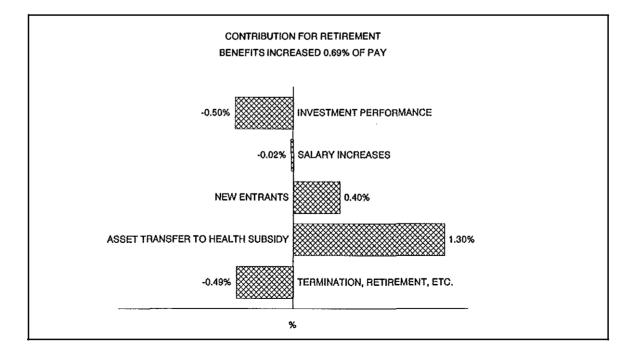
Recon	nmended City Contributions for Fiscal Year 1990 - 1991		
	Percentage of <u>Salary</u>	plus	Fixed Dollar <u>Amount</u>
Contribution for Retirement, Disability, and Death Benefits	12.75%		\$2,724,502
Contribution for Health Subsidy Benefits	1.10%		
Total Contribution	13.85%	plus	\$2,724,502

For the Family Death Benefit Plan, we recommend that the Members and the City each 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.



FUNDED STATUS AT JUNE 30, 1989

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, 1989 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, 1989 is disclosed. In the latter calculation, we calculate accrued benefits based upon service to June 30, 1989. We also recognize assumed future salary increases.

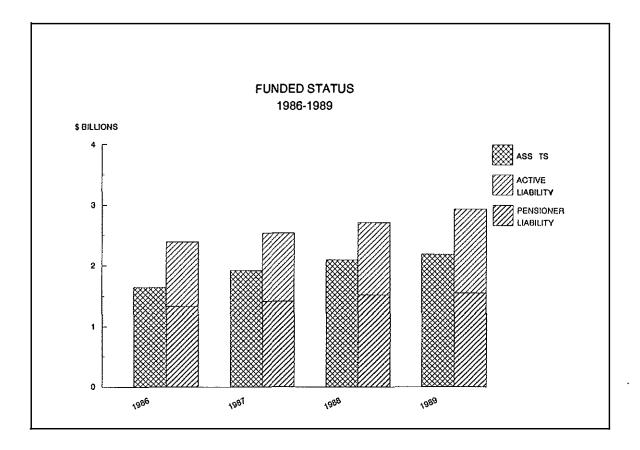
Below we present the funded status of the System under GASB No. 5, along with a comparison of the System's funded status in the prior year. The current System assets are 140% of the present value of retirement benefits for current retired Members and their beneficiaries. When the present value of accrued retirement benefits for active Members is added, the System assets represent 74.5% of the total present value of accrued benefits on June 30, 1989. This funding ratio decreased slightly since the last valuation, due to the transfer of a small amount of assets to the health subsidy reserve. Before the transfer, the funded ratio for pension benefits was 79.1%.

FUNDED STATUS

Dercont

Present Value of Retirement Benefits Earned	<u>June 30, 1989</u>	<u>June 30, 1988</u>	<u>Change</u>
 Retired Members and Beneficiaries Active Members Total 	\$1,558,485,535 <u>1,376,394,387</u> 2,934,879,922	\$1,530,377,118 <u>1,182,399,900</u> 2,712,777,018	+1.8% +16.4% +8.2%
Applicable Assets	\$2,187,101,281	\$2,098,859,774	+4.2%
Funding Ratio for Retirement Benefits	74.5%	77.4%	-3.7%

The graph below compares assets to liabilities under GASB No. 5 for retirement benefits for the years 1986-1989. Assets exceed liabilities for pensioners, and are about 74% of total liabilities in 1989.



SYSTEM ASSETS

The following asset information was provided to us by the Retirement Office. We have not audited or verified these figures. These assets are at book value.

			Percent
	<u>June 30, 1989</u>	<u>June 30, 1988</u>	Change.
TOTAL SYSTEM ASSETS	\$2,350,669,609	\$2,119,602,625	+10.9%

The rate of return on the book value of plan assets was approximately 10.4% based on the following analysis.

Book Value of Assets at 6/30/88	\$2,119,602,625
Contributions:	
- City	134,035,041
- Members	32,558,719
Benefits Paid to Participants	(148,109,770)
Expenses	(5,937,778)
Investment Earnings	218,520,772
Book Value of Assets at 6/30/89	\$2,350,669,609

The 10.4% rate of return is greater than the 8.0% rate assumed for the prior year. This resulted in an actuarial gain, which caused the budgeted 1989 contribution for the System to decrease.

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

SUMMARY OF SYSTEM FUNDING

As of June 30, 1989, the System had assets equal to 74.5% 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 54.1% of liabilities. This remaining unfunded liability is to be funded by future City and Member contributions to the System.

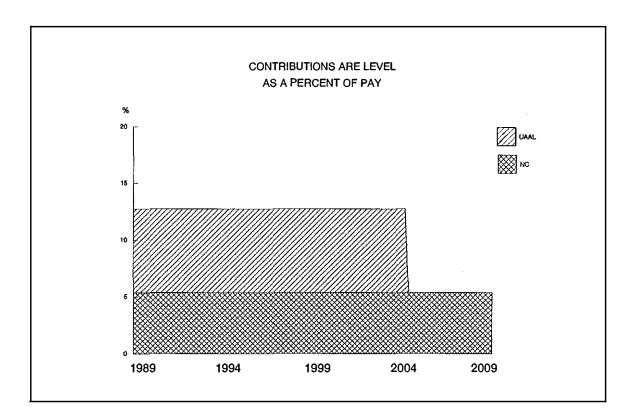
The City contributions are made up of two parts:

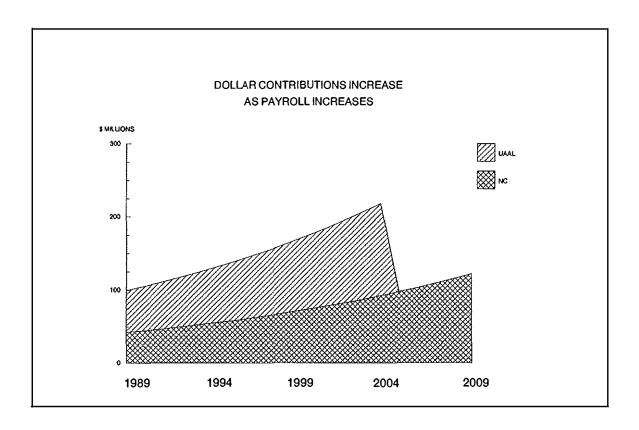
- Normal Cost Contributions: These contributions are determined as the cost of the System benefits accruing each year. If all assumptions are realized and there are no gains or losses, this amount will remain unchanged as a percent of pay unless the average age of the population increases. In this case, 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. The UAAL is funded primarily as a level percent of payroll until the year 2004. If all assumptions are realized and if there are no gains or losses, this percentage will not change. 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 until the UAAL is totally funded.

If there are no future gains or losses, and under the current Charter provisions, the UAAL is expected to be fully funded in the fiscal year 2004. After the UAAL is funded, contributions will consist of the Normal Cost only.

The following graphs are an illustration of expected future contributions 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 5.75% 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.





VALUATION DETAIL

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SYSTEM MEMBERSHIP

Computer tapes containing data on System membership as of June 30, 1989 were supplied to us by the Retirement Office. On the following schedules we present a summary of System membership at June 30, 1989 and June 30, 1988. Salary information as of June 30, 1989 does not include the pay increases that were effective on July 1, 1989. Pension amounts shown do include the cost-of-living adjustments that were effective on July 1, 1989. All July 1, 1989 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 5.6% since the last valuation. The total number of retired Members and their beneficiaries increased 4.5%, while the total average benefit amount increased 4.2%. The following schedule contains a more detailed break-down of these figures.

In the data, there were records for approximately 1,800 terminated participants who had not yet received a refund of contributions. The total amount of contributions to be refunded was approximately \$11 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.

SYSTEM MEMBERSHIP

		June 30, 1989	<u>June 30, 1988</u>	Percent Change
I.	Active Members			
	 a) Number b) Average Age c) Average Years of Service d) Salary 	22,784 41.1 9.7	21,579 41.2 9.7	+5.6% -0.2% +0.0%
	i. Total Annual Salaryii. Average Monthly Salary	\$752,904,164 \$2,753	\$697,005,943 \$2,692	+8.0% +2.3%
II. J	Pensioners and Beneficiaries			
	a) Number b) Average Age c) Allowance	10,503 69.7	10,052 69.7	+4.5% +0.0%
	i. Total Annual Allowance ii. Average Monthly Amount	\$135,534,667 \$1,075	\$124,427,120 \$1,032	+8.9% +4.2%

ALLOCATION OF ASSETS AT JUNE 30, 1989 TO HEALTH SUBSIDY RESERVE

Before 1987, health subsidy benefits were funded along with the retirement allowances paid to retirees. Beginning with the 1987 valuation, the health subsidy costs for retirees and those actives eligible to retire have been determined separately from the retirement benefit costs. A reserve has been established reflecting the amounts funded since 1987. However, no assets had been allocated to the reserve to reflect the funding that took place for retirees before 1987.

It is impossible to exactly calculate the current value of the amounts previously funded, since separate accounts were not kept. We have estimated the amount of assets that we believe represents the health subsidy liability for current retirees that was funded before 1987. This method allocates a portion of the unfunded liability as of June 30, 1989, to health subsidy benefits. By estimating how much of the liability is unfunded, we can estimate the portion that was funded in the past. Based on this method, we recommend that \$135,607,997 be added to the health subsidy reserve at June 30, 1989. Therefore, the assets available for pension benefits will be decreased by this amount.

The details of our calculations follow:

1.	Unfunded liability at 6/30/89 for	
	retirement benefits (see Balance Sheet)	\$ 612,170,645
2.	Liability for health subsidy for current	
	retirees at 6/30/89	166,765,440
3.	Total unfunded liability (1) + (2)	778,936,085
4.	Total liability for retirement benefits	
	(see Balance Sheet)	4,041,799,978
5.	Total liability including health subsidy	
	for current retirees $(2) + (4)$	4,208,565,418
6.	Portion of total liability due to health subsidy	
	for current retirees $(2) \div (5)$	4.0%
7.	Portion of unfunded liability due to health subsidy	
	(6) x (3)	31,157,443
8.	Funded liability of health subsidy for current	
	retirees (2) - (7)	135,607,997
9.	Estimated reserve for health subsidy due to	
	pre-1987 funding only	\$ 135,607,997

APPLICABLE ASSETS AT JUNE 30, 1989

Assets available to pay pension benefits are determined by deducting certain reserves from the total assets amount. Applicable assets at June 30, 1989, are calculated below.

1.	Total Assets at June 30, 1989	\$2,350,669,609
2.	 Less Reserves and Liabilities Established for: a) Family Death Benefit Insurance b) 20% of Undistributed Earnings c) Retiree Medical Subsidy d) Total 	14,026,928 2,834,101 <u>146,707,299</u> 163,568,328
3.	Net Applicable Assets at June 30, 1989 (Item 1 less Item 2)	\$2,187,101,281

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:

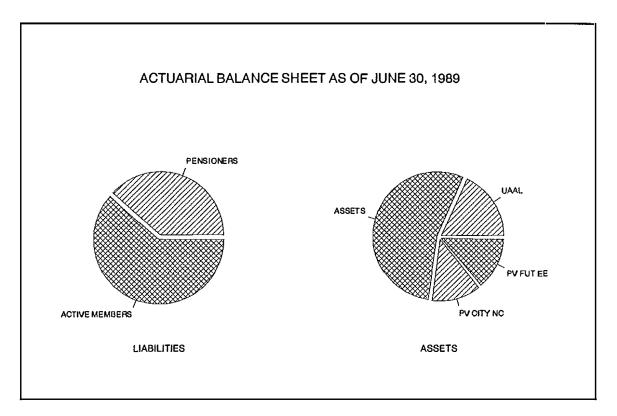
- the assets currently available to pay benefits,
- the present value of future contributions expected to be made by current System Members, and
- the present value of future contributions expected to be made by the City.

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 1989 fiscal year, the normal cost percentage is 5.41%. 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 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 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 UAAL has increased from the prior valuation due to the transfer of approximately \$136 million in assets to the health subsidy reserve.

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 39% of Systems liabilities are for retired Members and their beneficiaries and 61% are for active Members. About 54% of System assets consist of currently available assets with 46% consisting of future contributions from the City and the Members.



ACTUARIAL BALANCE SHEET AS OF JUNE 30, 1989

ASSETS

1.	Applicable Assets		\$2,187,101,281
2.	Present Value of Future Member Contributions		568,812,351
3.	Present Value of Future Contributions by the City for:		
	 a. Basic Pensions Normal Costs Amortization of Certain Liabilities Prior Service Pensions Increase due to 1965 amendments Remaining Unfunded Actuarial 	5,332,622 561,692	392,863,910
	Accrued Liability - Total	<u>331,239,843</u>	337,134,157
	 b. Cost-of-Living Pensions Normal Cost Amortization of Certain Liabilities Increase due to 1967 amendments Remaining Unfunded Actuarial Liability Total 	10,324,107 <u>400,320,378</u>	145,243,794 410,644,485
4.	TOTAL ASSETS		<u>410,044,485</u> \$4,041,799,978

LIABILITIES

5.	Present Value of Benefits Already Granted (Pensioners		
	and Beneficiaries)		
	a. Basic	\$ 938,858,100	
	b. Cost-of-Living	<u>619,627,435</u>	
			1,558,485,535
6.	Present Value of Benefits to be Granted (Actives) a. Basic b. Cost-of-Living	1,986,387,072 <u>496,927,371</u>	
	0. Cost-of-Living	<u>_490,927,571</u>	2,483,314,443
7.	TOTAL LIABILITIES		\$4,041,799,978

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ACTUARIAL VALUATION AS OF JUNE 30, 1989

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 12.06% of pay to 12.75% of pay. The increase was due primarily to the shifting of approximately \$136 million in assets to the health subsidy reserve. This shift caused the health subsidy contribution to decrease similarly. The total contribution increased from 13.79% of pay to 13.85%. Before the shift in assets, pension benefit contributions decreased slightly due to gains from favorable investment performance, salary increases, and 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.

RECOMMENDED CITY CONTRIBUTIONS FOR FISCAL YEAR 1990 - 1991

For Basic Pensions	Percentage of <u>Salary</u>	<u>plus</u>	Fixed Dollar <u>Amount</u>
 i. Normal Cost ii. Prior Service-Minimum Pensions (amortized as a level dollar amount 	4.06%		
until June 30, 1997) iii. Unfunded Actuarial Accrued Liability (amortized as a level percent of pay until			\$ 927,955
June 30, 2004) iv. Total Basic Pensions	<u> </u>		927,955
For Cost-of-Living Pensions			
 i. Normal Cost ii. Increase due to 1967 Amendment (Amortized as a level dollar amount until June 30, 1997) iii. Unfunded Actuarial Accrued Liability 	1.35%		1,796,547
(amortized as a level percent of pay until June 30, 2004) iv. Total Cost-of-Living Contributions	<u> </u>		1,796,547
Total Basic and Cost-of-Living Contributions for Retirement Benefits	s 12.75%		2,724,502
Contribution for Prefunding Health Care Subsidy	1.10%		
Total Contribution	13.85%	plus	\$2,724,502

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.

		<u>June 30, 1989</u>	<u>June 30, 1988</u>
1.	Present Value of Benefits Earned to		
	Valuation Date		
	a) Basic Benefits	\$2,037,761,825	\$1,882,777,754
	b) Cost-of-Living Benefits	<u> </u>	<u>829,999,264</u>
	c) Total	2,934,879,922	2,712,777,018
\mathbf{r}	Applicable Assets		
Ζ.	Applicable Assets	1 700 607 668	1 (((002 00(
	a) Basic Benefits	1,700,627,668	1,666,893,986
	b) Cost-of-Living Benefits	486,473,613	<u>431,965,788</u>
	c) Total	\$2,187,101,281	\$2,098,859,774
3	Funding Ratio		
5.	a) Basic Benefits	83.5%	88.5%
	,		
	b) Cost-of-Living Benefits	54.2%	52.0%
	c) Total	74.5%	77.4%

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 72% of the amount assumed by the City. This 72% 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 68% 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 \$3.20 per month be made by participating Members and the City.

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 \$3.50 per month. This contribution rate is reviewed every two years to determine if the level of contributions is appropriate. Based on our valuation of current plan costs and the increasing surplus in the plan, we recommend that Members and the City each contribute \$3.20 per month in the future.

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 eligible to retire.

We have estimated the reserve available at June 30, 1989, from prior funding, as follows:

1.	Reserve at 6/30/88	\$ 5,128,728
2.	Contributions toward Health Subsidy	16,815,128
3.	Benefit Payments	(11,369,458)
4.	Interest Adjustment	524.904
5.	Reserve at 6/30/89 due to funding after July 1, 1987	11,099,302
б.	Estimated Reserve at 6/30/89 due to funding before June 30, 1987	
	(see page 12)	<u>135,607,997</u>
7.	Total Reserve at 6/30/89	\$146,707,299

Based on this estimated reserve, we have calculated the required funding amount for the fiscal year beginning July 1, 1990. The dollar amounts shown below are based on total payroll at July 1, 1989, for illustrative purposes.

			Percent
		<u>Amount</u>	<u>of Pay</u>
1.	Normal Cost	\$ 1,643,277	0.21%
2.	Actuarial Accrued Liability	235,597,503	
3.	Estimated Reserve	146,707,299	
4.	Unfunded Actuarial Accrued		
	Liability (UAAL) (2) - (3)	88,890,204	
5.	UAAL amortized as a level percent of pay		
	through June 30, 2004	6,984,166	0.89%
б.	Recommended Contribution:		
	(1) + (5)	\$ 8,627,443	1.10%

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

EXHIBITS

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Exhibit I:	System Assets
Exhibit II:	Statement of Reserve and Fund Balance Accounts
Exhibit III: Statement of Changes in Net Assets Available for	
	Plan Benefits
Exhibit IV:	Summary of Plan Benefits
Exhibit V:	Summary of Actuarial Assumptions
Exhibit VI:	Rates of Separation from Active Service
Exhibit VII:	Member Contributions
Exhibit VIII:	Age/Service/Salary Distribution as of June 30, 1989 for Active Members
Exhibit IX:	Age/Benefit Distribution of Pensioners as of June 30, 1989

EXHIBIT I

CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

SYSTEM ASSETS

<u>ASSETS</u>	<u>June 30, 1989</u>	<u>June 30, 1988</u>
CASH	\$ 3,638,392	\$ 3,242,752
RECEIVABLES Accrued interest and dividend i Other Receivables Proceeds from investment Total Receivables	ncome 36,101,507 2,405,345 <u>15,490,009</u> 53,996,861	33,876,022 2,908,012 <u>7,771,420</u> 44,555,454
INVESTMENTS:		
Temporary, at cost	316,065,199	161,054,570
Bonds, at amortized cost	1,169,345,787	1,145,191,949
Common stocks, at cost	800,850,875	774,774,197
Real estate	23,214,798	0
Total Investments	2,309,476,659	2,081,020,716
TOTAL ASSETS	<u>2,367,111,912</u>	2,128,818,922
LIABILITY		
ACCOUNTS PAYABLE AND ACCRUED EXPENSES	(16,442,303)	<u>(9,216,297)</u>
NET ASSETS AVAILABLE FOR PLAN BENEFITS	<u>\$2,350,669,609</u>	<u>\$2,119,602,625</u>

EXHIBIT II

CITY OF LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

STATEMENT OF RESERVE AND FUND BALANCE ACCOUNTS

	<u>June 30, 1989</u>	June 30, 1988
ACTUARIAL		
Member Contributions	\$ 375,574,222	\$ 346,413,747
Annuities	271,157,239	252,052,699
Subsequent Service	1,235,462,733	1,105,878,466
Cost of Living	440,277,984	390,009,085
Family Death Benefit Insurance	<u> 14,026,928 </u>	<u> 13,205,497</u>
Total Actuarial	2,336,499,106	2,107,559,494
<u>OTHER</u>		
Undistributed earnings	14,170,503	12,043,131
Fund Balance	0	0
Total Other	14,170,503	12,043,131
TOTAL RESERVE AND FUND BALANCE	<u>\$2,350,669,609</u>	<u>\$2,119,602,625</u>

STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR PLAN BENEFITS

	Year Ended June 30, 1989	Year Ended June 30, 1988
REVENUES:	<u></u>	<u> </u>
City Contributions	\$ 134,035,041	\$ 126,201,429
Members' Contributions	32,558,719	28,085,438
Income From Investments		
Interest Earned	133,803,539	117,456,858
Dividends	28,643,416	27,673,458
Real Estate	381,817	0
Stock and Bond Option premiums	0	0
	<u>162,828,772</u>	<u>145,130,316</u>
	329,422,532	299,417,183
EXPENDITURES:		
Pensions		
Retirement Allowances	140,851,356	129,744,043
Family Death Benefit Insurance	651,455	720,399
Refund of Members' Contributions	6,606,959	6,585,120
Administrative Expenses	5,937,778	<u>6,181,068</u>
	154,047,548	143,230,630
EXCESS OF REVENUES OVER		
EXPENDITURES BEFORE		
GAIN ON DISPOSITION OF INVESTMENTS	175,374,984	156,186,553
OAIR ON DISCOSITION OF INVESTIGATION	175,574,704	150,100,555
GAIN ON DISPOSITION OF INVESTMEN'T	_55,692,000	27,600,312
EXCESS OF REVENUES OVER		
EXPENDITURES	231,066,984	183,786,865
		, ,
NET ASSETS AVAILABLE FOR PLAN		
BENEFITS BEGINNING OF THE YEAR	2.119.602.625	<u>1,935,815,760</u>
	·	
NET ASSETS AVAILABLE FOR PLAN		
BENEFITS, END OF THE YEAR	\$2,350,669,609	\$2,119,602,625

EXHIBIT IV

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 retire- ment. 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. Same as Service Retirement payable anytime after age B) Benefit: 55, provided at least 10 years have elapsed from date of original membership (or anytime after age 70). Same as Service Retirement. C) Form of Payment: 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-Relate Death: 	ed 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%.

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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 72% 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 (only if not eligible for Service Retirement).
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. Benefits are based on average earn- ings equal to the average of the Social Security wage bases for the ten years prior to the year of death.
C) Cost:	It is recommended that the Member and City each con- tribute \$3.20 per month.

11. Retiree Health Insurance Subsidy:

A) Eligibility:	Retirement after age 55 with 10 years of service, or retirement at age 70.
B) Benefits:	<u>Medical</u>
	Before age 65 or after age 65 with only Medicare Part B:
	A percentage of the Maximum Subsidy, up to a maxi- mum 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 \$301 per month as of July 1, 1989.

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.

<u>Dental</u>

4% per year of service to a maximum of \$19.88 for Connecticut General and \$9.18 for Safeguard.

EXHIBIT V

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 5.75% 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								

	Deams r	<u>per 1,000</u>
Age	<u>Males</u>	<u>Females</u>
45	2.3	1.3
50	4.2	2.0
55	7.1	3.8
60	10.9	6.5
65	17.4	10.0
70	29.2	15.9
75	47.5	26.3

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 be rehired.
Dependents:	Where no other information is available, Members are assumed to have two children with a three year dif- ference 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.

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

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EXHIBIT VI

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 con- tributions.
2.	Service Retirement	:	Member retires after meeting age and service require- ments 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.

EXHIBIT VI PAGE 2 OF 2

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

RATES OF SEPARATION FROM ACTIVE SERVICE

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22 0.2340 0.1680 0.0000	21	0.2520	0,1740	0.0000	0.0000	0.0000	0 0000	0 0003	0 0002		
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	70	0.000	0.000	1.0000	1.0000	0.0000	0.0000	0.0000	0.000	0.0000	

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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
				44	10.64	0.95	11.59
20	8.20	0.44	8.64				
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
				49	11.24	1.01	12.25
25	8.58	0.63	9.21				
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
				54	11.75	1.08	12.83
30	9.06	0.75	9.81				
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
				59-over	12.19	1.14	13.33
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				

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

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LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

AGE/SERVICE/SALARY DISTRIBUTION BY ATTAINED AGE FOR ACTIVE MEMBERS AS OF JUNE 30, 1989

ATTAINED	SERVICE												
	<u>0 - 1</u>	<u>1 - 2</u>	<u>2 - 3</u>	<u>3 - 4</u>	<u>4 - 5</u>	5 - 9	<u>10 - 14</u>	<u> 15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u> 30 - 34</u>	<u>OVER 34</u>	TOTAL
UNDER 25	668	282	204	92	72	19	0	0	0	0	0	0	1,337
Average Salary	21,901	22,468	22,549	23,893	25,496	28,395	0	0	0	0	0	0	22,542
25 - 29	806	440	506	366	344	555	12	0	0	0	0	0	3,029
Average Salary	24,597	26,774	29,165	30,247	29,853	29,545	32,109	0	0	0	0	0	27,892
30 - 34	580	347	408	361	340	1,002	298	29	0	0	0	0	3,365
Average Salary	25,650	28,861	31,006	33,259	33,450	33,035	30,348	30,646	0	0	0	0	30,893
35 - 39	439	299	294	311	247	834	684	457	27	0	0	0	3,592
Average Salary	25,889	30,584	30,995	33,518	35,029	34,075	35,715	34,216	32,658	0	0	0	32,869
40 - 44	303	212	224	163	167	585	598	818	346	14	0	0	3,430
AVERAGE SALARY	26,624	32,949	32,036	32,046	34,404	35,307	38,813	40,204	39,518	42,366	0	0	36,214
45 - 49	179	107	131	120	101	360	333	501	603	183	8	0	2,626
Average Salary	25,345	30,114	29,988	32,605	34,609	34,990	37,743	40,017	42,445	41,571	39,324	0	37,252
50 - 54	134	66	92	78	73	252	219	357	467	341	191	10	2,280
Average Salary	24,230	32,060	32,832	34,793	34,280	34,048	36,138	36,994	38,155	43,257	40,546	45,254	36,871
55 - 59	74	47	42	32	34	163	191	239	291	285	207	22	1,627
Average Salary	17,816	32,082	29,236	35,165	33,378	33,643	34,963	35,371	35,757	41,061	44,643	43,469	36,407
60 - 64	60	21	37	20	33	110	133	173	151	110	87	39	974
AVERAGE SALARY	13.672	31.710	26.361	36.660	36.241	34,078	34,325	34,493	36,277	39,359	42,859	44,487	34,849
OVER 64	55	7	11	10	7	55	83	83	95	46	37	35	524
AVERAGE SALARY	7,779	19,706	24,292	26,338	22,826	31,270	33,659	35,497	35,216	39,353	37,669	49,416	32,433
TOTAL	3,298	1,828	1,949	1,553	1,418	3,935	2,551	2,657	1,980	979	530	106	22,784
AVERAGE SALARY	23,989	28,398	29,613	31,984	32,697	33,352	35,902	37,650	38,988	41,668	42,306	45,976	33,046

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AVERAGE AGE: 41.1 AVERAGE SERVICE: 9.7

DISTRIBUTION OF PENSIONERS BY PLAN YEAR OF RETIREMENT AND BY ATTAINED AGE AS OF JUNE 30, 1989

TOTAL FOR ALL PENSIONERS

ATTAINED	PRE					Reti	rements	s in Pla	an Year	Beginn	ing in						AVERAGE
	<u>1975</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	1982	<u>198:</u>	<u>3 1984</u>	<u>1986</u>	<u>1986</u>	1987	1986	TOTAL	AMOUNT
0 - 39	2	0	0	2	6	16	10	5	8	6	11	9	15	9	15	114	6,550
40 - 44	3	3	5	2	8	7	13	11	12	5	6	10	7	10	9	111	8,512
45 - 49	10	9	4	9	15	15	10	5	8	8	11	9	8	11	11	143	7,696
50 - 54	25	7	16	9	13	22	12	18	8	15	14	13	17	12	13	214	8,095
55 - 59	30	12	11	17	13	10	24	26	16	19	70	90	138	158	169	803	16,257
60 - 64	79	21	22	36	64	77	109	116	218	225	173	132	175	156	158	1,761	16,645
65 - 69	167	68	102	139	216	169	170	211	264	217	183	119	147	127	99	2,398	15,279
70 - 74	402	152	186	183	211	175	148	137	102	94	93	48	41	36	14	2,022	12,656
75 - 79	688	134	140	103	93	61	40	47	34	22	14	12	5	4	5	1,402	10,021
80 - 84	729	56	43	18	18	9	8	5	3	3	0	3	1	1	1	898	8,522
85 ~ 89	453	2	1	1	3	0	0	0	0	1	0	0	1	0	0	462	7,600
90 - 94	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175	6,834
OVER 95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2,763	464	530	519	660	561	544	581	673	615	575	445	555	524	494	10,503	
AVERAGE BENEFIT AMOUNT	7,514 1	1,271	12,729	12,085	12,690	12,704	12,322	13,717	17,009	16,731	16,546	16,168	17,164	18,020	18,082		

AVERAGE BENEFIT AMOUNT: \$12,904 TOTAL ANNUAL BENEFITS: \$135,534,667 EXHIBIT IX

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