

REPORT ON
ACTUARIAL VALUATION
OF THE
CITY EMPLOYEES' RETIREMENT SYSTEM
OF THE
CITY OF LOS ANGELES
AS OF
JUNE 30, 1973

January 28, 1974

COATES AND CRAWFORD

CONSULTING ACTUARIES

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January 28, 1974

Board of Administration
City Employees' Retirement System
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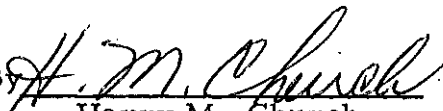
Gentlemen:

We are pleased to transmit herewith our Report on the Actuarial Valuation of your Retirement System made as of June 30, 1973.

We will be most happy to meet with you at your convenience to discuss the items contained in this Report.

Very truly yours,

COATES AND CRAWFORD
Consulting Actuaries

By 
Harry M. Church

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REPORT ON
ACTUARIAL VALUATION
OF THE
CITY EMPLOYEES' RETIREMENT SYSTEM
OF THE
CITY OF LOS ANGELES

In accordance with our agreement we have completed the actuarial valuation of the City Employees' Retirement System as of June 30, 1973.

In order to complete this valuation, the office of the Retirement System furnished us with a magnetic tape which contains all of the pertinent information for each member of the System as of June 30, 1973, including such information as current compensation, years of service credited, rates of contribution, and accumulated contributions. In addition to the above information on active members, we were also furnished a tape for each person currently receiving an allowance from the Retirement System, together with such data as was necessary to determine the value of the allowance already entered upon.

During the year ending June 30, 1973, a net reduction of 163 active members of the System occurred. There was also a net increase of 215 persons receiving retirement and survivorship allowances.

A summary of the active and retired membership of the System as of June 30, 1973 is shown in the following table.

SUMMARY OF MEMBERSHIP OF SYSTEM
AS OF JUNE 30, 1973

ACTIVE MEMBERS

	<u>Number</u>	<u>Annual Salary</u>	<u>Age</u>	<u>Average Monthly Salary</u>
Males	14,943	\$198,726,849	43.1	\$1,108
Females	<u>4,884</u>	<u>46,571,921</u>	36.7	795
Total June 30, 1973	19,827	\$245,298,770	41.5	1,031
Total June 30, 1972	19,990	\$230,122,576	41.1	959
Percentage Increase	-.8%	6.6%	-	7.5%

BENEFICIARIES

	<u>Number</u>	<u>Annual Basic Retirement Allowances</u>	<u>Youngest Age</u>	<u>Oldest Age</u>	<u>Average Monthly Basic Allowance</u>
Service Retirement*					
Males	2,294	\$ 8,230,145.04	52	97	\$299
Females	<u>1,217</u>	<u>2,838,446.64</u>	42	97	194
Total	3,511	\$11,068,591.68	42	97	263

*Including survivors under options.

Disability Retirements

Males	242	\$ 581,630.88	25	89	200
Females	<u>100</u>	<u>163,465.56</u>	31	95	136
Total	342	\$ 745,096.44	25	95	182

Survivorships

Male	4	\$ 14,342.52	55	79	299
Female	<u>193</u>	<u>472,980.24</u>	37	92	204
Total	197	\$ 487,322.76	37	92	206

Grand Total June 30, 1973	<u>4,050</u>	<u>\$12,301,010.88</u>	25	97	253
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Grand Total June 30, 1972	3,835	\$11,133,707.28	30	97	242
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Percentage Increase	5.6%	10.5%	-	-	4.5%
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COMPENSATION EXPERIENCE

Since benefits under the System are based upon compensation of members, it is of interest to compare the average monthly compensation from year to year. These averages for the years indicated are as follows:

	<u>AVERAGE MONTHLY COMPENSATION</u>					
	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Males	\$795	\$838	\$916	\$990	\$1,033	\$1,108
Females	<u>578</u>	<u>604</u>	<u>655</u>	<u>687</u>	<u>737</u>	<u>795</u>
Combined	\$743	\$781	\$851	\$914	\$ 959	\$1,031
Percentage Increase	-	5.1%	9.0%	7.4%	4.9%	7.5%

ACCOUNTING BALANCE SHEET

We have been furnished with an Accounting Balance Sheet of the Retirement System as of June 30, 1973, which shows the distribution of the reserves now held by the System. This statement of assets was used in the completion of the actuarial valuation and no physical audit was required nor has been made by us.

ACTUARIAL BALANCE SHEET

We have completed a valuation of the actuarial assets and liabilities of the Retirement System as of June 30, 1973, the results of which are shown on the Balance Sheet which follows the Accounting Balance Sheet. This valuation employed the actuarial assumptions adopted and factors developed at the time of the actuarial investigation and valuation made as of June 30, 1969, except that we were directed by the Board to use an interest assumption of 5%.

AMENDMENTS

The current valuation reflects the following major amendments to the System that became effective during the past fiscal year:

- (1) Active members service retirement benefits and employee contributions increased by 20%.
- (2) "Final Compensation" changed from highest three-year average to highest one-year average salary.
- (3) Cost of Living maximum annual change increased from 2% to 3%.
- (4) Retired members granted additional Cost of Living adjustment equal to the excess in their "bank" over what such bank would be had 3% maximum been in effect since the Cost of Living Program was first adopted.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACCOUNTING BALANCE SHEET
AS OF
JUNE 30, 1973

ASSETS

CASH:		
In City Treasury	\$	243,963.13
On Hand		50.00
		<hr/>
TOTAL CASH		\$ 244,013.13
RECEIVABLES:		
Accrued Interest	\$	4,040,764.14
Dividends Receivable		193,210.00
Due From Other Funds		767,607.81
		<hr/>
TOTAL RECEIVABLES		\$ 5,001,581.95
INVESTMENTS:		
Temporary Investments - (Par)	\$	3,600,000.00
Bonds (Par)		284,461,127.69
Mortgages		1,000,000.00
Premium on Investments		735,717.11
Discount on Investments	(4,296,125.13)
Stocks at Cost		70,691,808.65
		<hr/>
TOTAL INVESTMENTS		<u>\$356,192,528.32</u>
TOTAL ASSETS		<u>\$361,438,123.40</u>

LIABILITIES, RESERVES AND FUND BALANCE

CURRENT LIABILITIES:		
Accrued Benefits Payable	\$	101,286.21
Accounts Payable		29,089.30
Due on Securities		31,058.85
		<hr/>
TOTAL CURRENT LIABILITIES		\$ 161,434.36
RESERVES:		
Actuarial:		
Accumulated Contributions of Members	\$137,400,417.52	
Annuities	36,789,161.57	
Prior Service	3,554,965.63	
Subsequent Service	162,099,390.35	
Cost of Living (Sec. 510.1)	16,366,250.88	
Family Death Benefit Insurance	1,554,288.45	
	<hr/>	
TOTAL ACTUARIAL RESERVES	\$357,764,474.40	
Others:		
Undistributed Earnings	\$	22,513.98
Investment Fluctuation:		
Bonds	\$	427,558.57
Stock		2,214,456.65
	<hr/>	<hr/>
TOTAL RESERVES		\$360,429,003.60
FUND BALANCE		847,685.44
TOTAL LIABILITIES, RESERVES AND FUND BALANCE		<u>\$361,438,123.40</u>

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET

ACTUARIAL VALUATION OF ASSETS AND LIABILITIES
AS OF JUNE 30, 1973

ASSETS

1. Total Assets from Accounting Balance Sheet				\$361,438,123
2. Present Value of Future Contributions of Members				129,730,458
3. Present Value of Future Contributions by the City on Account of:				
(a) Basic Pensions:				
i) Future Service Liabilities		\$140,245,723		
ii) Amortization of Certain Past Service Liabilities:				
Prior Service Pensions	\$7,981,772			
Increase due to 1965 Amendments	6,839,153			
Increase due to 1973 Amendments	37,723,826		52,544,751	
(b) Cost of Living Pensions:				
i) Future Service Liabilities		37,797,756		
ii) Amortization of Certain Past Service Liabilities:				
Increase due to 1967 Amendments	\$24,789,909			
Increase due to 1973 Amendments	34,734,745		59,524,654	290,112,884
4. Total Assets				<u>\$781,281,465</u>

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET
(Continued)

LIABILITIES

5. Accounts Payable		\$ 161,434
6. Present Value of Benefits Already Granted:		
(a) Basic	\$115,143,975	
(b) Cost of Living	<u>40,965,820</u>	156,109,795
7. Present Value of Benefits to be Granted:		
(a) Basic	\$529,538,777	
(b) Cost of Living	<u>90,404,956</u>	619,943,733
8. Investment Reserve, Undistributed Earnings and Fund Balance		3,512,215
9. Family Death Benefit Insurance Reserve		<u>1,554,288</u>
10. Total Liabilities		<u>\$781,281,465</u>

COMMENTS ON ACTUARIAL BALANCE SHEET

The Actuarial Balance Sheet has been prepared in a more condensed format than previously used and we have utilized some new terminology that we hope will aid in its review and discussion.

"Cost of Living Pensions" are the post retirement increases provided by Section 510.1 of Article XXXIV of the City Charter, and related Ordinances.

"Basic Pensions" are all benefits other than "Cost of Living Pensions" and Family Death Benefits provided by Article XXXIV of the City Charter, and related Ordinances.

"Amortization of Certain Past Service Liabilities" refers to those liabilities of the System being amortized over fixed periods of time pursuant either to Charter, Ordinance, or Board authorization.

"Future Service Liabilities" refers to all liabilities of the System other than "Amortization of Certain Past Service Liabilities" and liabilities for Family Death Benefits.

RECOMMENDATIONS

Based upon the valuation described herein, we recommend the following contributions which, in our opinion, are in accordance with the provisions of the Charter and are adequate to maintain the System on a sound actuarial basis:

1. That members contribute at the rates set forth on the attached schedules commencing July 1, 1974. These rates are approximately 11% higher, on the average, than those presently in effect.

2. That City contributions for the fiscal year 1974-1975 be made up as follows:

		Recommended City Contributions For 1974-1975	
		Percentage of Salary	Fixed Dollar Amount
a)	For Basic Pensions:		
i)	Future Service	6.41%	\$ -
ii)	Prior Service-Minimum Pensions (Period ending June 30, 1997)	-	578,446
iii)	Increase due to 1965 Amendments (Period ending June 30, 1990)	-	606,627
iv)	Increase due to 1973 Amendments (Period ending June 30, 2003)	-	<u>2,453,989</u>
v)	Total Basic Pensions	6.41%	\$3,639,062
b)	For Cost of Living Pensions:		
i)	Future Service	1.73%	\$ -
ii)	Increase due to 1967 Amendment (Period ending June 30, 1997)	-	1,796,547
iii)	Increase due to 1973 Amendment (Period ending June 30, 2003)	-	<u>2,259,545</u>
iv)	Total Cost of Living Pensions	1.73%	\$4,056,092
c)	Total Basic and Cost of Living Pensions	8.14%	\$7,695,154

3. In addition to the foregoing contributions developed by the current valuation, we recommend that the City contribute:

- a) \$3.98 per month for each participating member to the Family Death Benefit Insurance Plan (the attached schedule shows the schedule of benefits effective for the fiscal year 1974-75).

b) The following amounts for the new Health Insurance

Program For Retired Employees:

- | | |
|--|-----------------|
| i) Presently active members | .399% of Salary |
| ii) Presently retired members
(Period ending June 30, 2003) | \$174,000 |

This program became effective January 1, 1974 and the foregoing recommendation is based on preliminary cost calculations summarized in our letter of May 22, 1973.

SCHEDULE 1(a)

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

RECOMMENDED MEMBER NORMAL PLUS NORMAL PORTION OF
COST OF LIVING RATES OF CONTRIBUTION
BASED ON 5% INTEREST RATE ASSUMPTION - 1/50th PLAN

<u>Age</u>	<u>'Normal' Contribution Rate</u>	<u>Age</u>	<u>'Normal' Contribution Rate</u>
16	4.21%	40	6.56%
17	4.24	41	6.72
18	4.28	42	6.88
19	4.32	43	7.05
		44	7.22
20	4.38	45	7.39
21	4.45	46	7.57
22	4.52	47	7.75
23	4.59	48	7.94
24	4.66	49	8.12
25	4.74	50	8.31
26	4.82	51	8.51
27	4.91	52	8.71
28	5.00	53	8.90
29	5.11	54	9.10
30	5.21	55	9.29
31	5.32	56	9.49
32	5.44	57	9.68
33	5.55	58	9.88
34	5.68	59	10.07
35	5.81		
36	5.95		
37	6.08		
38	6.23		
39	6.39		

Effective July 1, 1974

SCHEDULE 1(b)

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

RECOMMENDED MEMBER SURVIVOR PLUS SURVIVOR PORTION OF
COST OF LIVING RATES OF CONTRIBUTION
BASED ON 5% INTEREST RATE ASSUMPTION - 1/50th PLAN

<u>Age</u>	<u>"Survivor" Contribution Rate</u>	<u>Age</u>	<u>"Survivor" Contribution Rate</u>
16	.08%	45	.68%
17	.09	46	.70
18	.10	47	.72
19	.12	48	.75
		49	.76
20	.13		
21	.16	50	.77
22	.20	51	.78
23	.23	52	.79
24	.26	53	.80
		54	.82
25	.30		
26	.32	55	.83
27	.34	56	.84
28	.37	57	.85
29	.39	58	.86
		59 and Over	.87
30	.41		
31	.44		
32	.46		
33	.48		
34	.51		
35	.52		
36	.53		
37	.54		
38	.55		
39	.56		
40	.58		
41	.59		
42	.61		
43	.63		
44	.66		

Effective July 1, 1974

SCHEDULE 1(c)

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

RECOMMENDED MEMBER NORMAL PLUS SURVIVOR PLUS
COST OF LIVING RATES OF CONTRIBUTION
BASED ON 5% INTEREST RATE ASSUMPTION - 1/50th PLAN

Applicable Only to Employees Whose Normal and Survivor
Contribution Rates Are Assigned By The Same Age

<u>Age</u>	<u>Total Contribution Rate</u>	<u>Age</u>	<u>Total Contribution Rate</u>
		40	7.14%
16	4.29%	41	7.31
17	4.33	42	7.49
18	4.38	43	7.68
19	4.44	44	7.88
20	4.51	45	8.07
21	4.61	46	8.27
22	4.72	47	8.47
23	4.82	48	8.69
24	4.92	49	8.88
25	5.04	50	9.08
26	5.14	51	9.29
27	5.25	52	9.50
28	5.37	53	9.70
29	5.50	54	9.92
30	5.62	55	10.12
31	5.76	56	10.33
32	5.90	57	10.53
33	6.03	58	10.74
34	6.19	59	10.94
35	6.33		
36	6.48		
37	6.62		
38	6.78		
39	6.95		

Effective July 1, 1974

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

FAMILY DEATH BENEFITS PAYABLE 1974-75

<u>Years</u>	(1) <u>Number</u>	(2) <u>Taxable Wages</u>	<u>(1) x (2)</u>
1964-65	2	\$ 4,800	\$ 9,600
1966-67	2	6,600	13,200
1968-71	4	7,800	31,200
1972	1	9,000	9,000
1973	<u>1</u>	10,800	<u>10,800</u>
	10		\$73,800

Average Monthly Wage (AME) = $\frac{73800}{120}$ = \$615 (Nearest dollar)

Primary Insurance Amount (PIA) from 10/72 Amendment = \$315.90

Mother (75%)	\$236.93
Child (75%)	236.93
Each of 2 Parents (75%)	236.93
Sole Parent (82-1/2%)	260.62
Maximum Family	555.50
Widow or Dependent Widow at Age:	
60 (71.5%)	225.87
61 (77.2%)	243.87
62 (82.9%)	261.88
63 (88.6%)	279.89
64 (94.3%)	297.89
65 (100%)	315.90

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Number of Active Members and Total Bi-Weekly Salary
By Sex and Nearest Age

Age	Male		Female		Total	
	Number	Salary	Number	Salary	Number	Salary
20 and Under	72	\$ 23,117	182	\$ 49,228	254	\$ 72,345
21	122	39,561	182	52,358	304	91,919
22	176	59,081	220	64,758	396	123,839
23	228	79,547	220	68,642	448	148,189
24	246	89,472	249	80,951	495	170,423
25	345	132,792	249	82,671	594	215,463
26	384	155,876	223	77,453	607	233,329
27	395	178,459	218	80,747	613	259,206
28	358	163,538	168	60,376	526	223,914
29	372	175,889	164	61,653	536	237,542
30	363	177,584	127	47,052	490	224,636
31	379	188,245	129	49,637	508	237,882
32	293	144,640	104	41,543	397	186,183
33	332	162,548	108	43,017	440	205,565
34	273	136,550	87	33,523	360	170,073
35	344	174,521	74	27,742	418	202,263
36	336	168,614	96	37,316	432	205,930
37	302	149,817	80	30,472	382	180,289
38	330	168,180	68	26,223	398	194,403
39	347	175,272	66	25,265	413	200,537
40	347	179,593	53	22,205	400	201,798
41	348	176,205	65	26,923	413	203,128
42	343	180,858	77	29,425	420	210,283
43	367	188,194	84	33,796	451	221,990
44	363	199,326	83	33,830	446	233,156
45	337	177,843	102	41,475	439	219,318
46	389	217,700	81	30,872	470	248,572
47	392	211,646	83	33,081	475	244,727
48	467	266,139	70	27,905	537	294,044
49	414	232,917	98	37,292	512	270,209

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Number of Active Members and Total Bi-Weekly Salary
By Sex and Nearest Age

Age	Male		Female		Total	
	Number	Salary	Number	Salary	Number	Salary
50	430	\$ 241,438	94	\$ 37,663	524	\$ 279,101
51	456	262,543	77	31,010	533	293,553
52	458	258,161	91	35,498	549	293,659
53	413	232,872	76	30,263	489	263,135
54	393	213,489	80	31,579	473	245,068
55	377	208,621	76	30,458	453	239,079
56	350	199,164	70	29,206	420	228,370
57	345	189,102	64	27,837	409	216,939
58	283	166,576	90	34,878	373	201,454
59	293	156,846	56	23,882	349	180,728
60	269	145,764	47	19,662	316	165,426
61	227	120,759	45	18,462	272	139,221
62	167	90,444	49	19,742	216	110,186
63	181	96,309	38	14,385	219	110,694
64	146	74,809	23	8,750	169	83,559
65	125	68,006	24	9,512	149	77,518
66	86	44,476	24	10,762	110	55,238
67	69	40,303	20	8,270	89	48,573
68	49	25,843	13	5,388	62	31,231
69	41	22,350	9	3,542	50	25,892
70 and over	21	11,741	8	3,048	29	14,789
	14,943	\$7,643,340	4,884	\$1,791,228	19,827	\$9,434,568