

REPORT ON
ACTUARIAL VALUATION
OF THE
CITY EMPLOYEES' RETIREMENT SYSTEM
OF THE
CITY OF LOS ANGELES
AS OF
JUNE 30, 1975

February 18, 1976

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TOWERS, PERRIN, FORSTER & CROSBY

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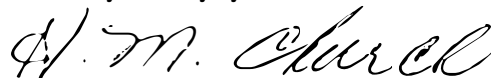
Gentlemen:

We are pleased to transmit herewith our Report on the Actuarial Valuation of your Retirement System made as of June 30, 1975.

If the Board adopts the recommendations contained herein, the System will continue to be maintained on an actuarial sound basis with City contributions determined, in general, on the basis of the Entry Age Normal Cost Funding Method with the resulting Supplemental Present Value amortized over the period ending June 30, 2004. Certain relatively small liabilities are being funded in accordance with City Charter requirements over shorter periods of time and Family Death Benefits are being funded on a term basis.

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

Very truly yours,



Harry M. Church

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, 1975.

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, 1975, 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 persons 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. A summary of the active and retired membership of the System as of June 30, 1975 is shown in the following table.

SUMMARY OF MEMBERSHIP OF SYSTEM
AS OF JUNE 30, 1975

ACTIVE MEMBERS

	<u>Number</u>	<u>Annual Salary</u>	<u>Age</u>	<u>Average Monthly Salary</u>
Males	16,867	\$252,303,252	41.8	\$1,247
Females	<u>6,132</u>	<u>66,562,241</u>	35.5	905
Total June 30, 1975	22,999	\$318,865,493	40.1	1,155
Total June 30, 1974	19,807	\$266,192,290	41.6	1,120
Percentage Increase	16.1%	19.8%	-	3.1%

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	2,633	\$12,834,638.28	54	99	\$406
Females	<u>1,424</u>	<u>4,126,508.04</u>	44	99	241
Total	4,057	\$16,961,146.32	44	99	348

*Including survivors under options.

Disability Retirements

Males	280	\$ 820,553.16	27	88	244
Females	<u>122</u>	<u>253,321.20</u>	33	86	173
Total	402	\$ 1,073,874.36	27	88	223

Survivorships

Male	5	\$ 20,280.72	57	81	338
Female	<u>220</u>	<u>706,633.56</u>	38	94	268
Total	225	\$ 726,914.28	38	94	269

Grand Total June 30, 1975	4,684	\$18,761,934.96	27	99	334
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Grand Total June 30, 1974	4,385	\$16,660,035.84	26	98	317
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Percentage Increase	6.8%	12.6%	-	-	5.4%
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Note: The annual cost of living benefits being paid as of June 30, 1975 amounts to \$3,511,579.32 (an increase of 18% over June 30, 1974)

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>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Males	\$916	\$990	\$1,033	\$1,108	\$1,207	\$1,247
Females	<u>655</u>	<u>687</u>	<u>737</u>	<u>795</u>	<u>872</u>	<u>905</u>
Combined	\$851	\$914	\$ 959	\$1,031	\$1,120	\$1,155
Percentage Increase	-	7.4%	4.9%	7.5%	8.6%	3.1%

We remind the Board that we do not reflect inflationary across-the-board salary increases in the salary scales utilized in the actuarial valuations.

ACCOUNTING BALANCE SHEET

We have been furnished with an Accounting Balance Sheet of the Retirement System as of June 30, 1975, 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, 1975, the results of which are shown on the Actuarial 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, 1974,

except that we were directed by the Board to use an interest assumption of 5-1/4%. It is to be noted that the current valuation reflects the 5-1/2% salary increase that became effective July 1, 1975.

AMENDMENTS

The current valuation reflects the following major amendment to the System that became effective since the last valuation:

- (1) Active members' service retirement benefits and employee contributions increased by approximately 8% - i. e. , the so called "Beta" formula.
- (2) The Board authorized the use of the "Entry Age Normal Cost" funding method.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACCOUNTING BALANCE SHEET

AS OF

JUNE 30, 1975

ASSETS

CASH:

In City Treasury	\$ 621,938.09
Health Ins. Trust Fund	64,149.53
On Hand	<u>100.00</u>
TOTAL CASH	\$ <u>686,187.62</u>

RECEIVABLES:

Accrued Interest	5,164,766.78
Dividends Receivable	227,589.00
Due from Other Funds	<u>2,366,001.09</u>
TOTAL RECEIVABLES	\$ 7,758,356.87

INVESTMENTS:

Temporary Investments (Par)	\$ 26,200,000.00
Bonds (Par)	327,803,477.90
Mortgages (Par)	5,906,582.49
Premium on Investments	1,047,564.64
Discount on Investments	(5,156,909.36)
Stock @ Cost	<u>75,057,727.53</u>
TOTAL INVESTMENTS	<u>\$430,858,443.20</u>
TOTAL ASSETS	<u><u>\$439,302,987.69</u></u>

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACCOUNTING BALANCE SHEET
AS OF
JUNE 30, 1975

(Continued)

LIA BILITIES, RESERVES AND FUND BALANCE

CURRENT LIABILITIES:

Accrued Benefits Payable	\$ 77,938.76
Accounts Payable	142,583.33
Due on Securities	1,199,089.18
Due Insurance Carriers	<u>64,149.53</u>

TOTAL CURRENT LIABILITIES \$ 1,483,760.80

RESERVES:

Actuarial:

Accumulated Contributions of Members	\$162,787,627.58
Annuities	49,242,062.19
Prior Service	2,013,291.32
Subsequent Service	195,799,069.77
Cost of Living (Sec. 510.1)	27,126,802.15
Family Death Benefit Ins.	<u>2,237,632.60</u>

TOTAL ACTUARIAL RESERVES \$439,206,485.61

Others:

Undistributed Earnings	79,676.26
Reserve for Gain or Loss on Investments:	
Bonds	(2,274,840.95)
Stocks	(881,665.21)
Reserve for Encumbrances	<u>61,260.94</u>

TOTAL RESERVES \$436,190,916.65

FUND BALANCE \$ 1,628,310.24

TOTAL LIA BILITIES, RESERVES AND FUND BALANCE \$439,302,987.69

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET

ACTUARIAL VALUATION OF ASSETS AND LIABILITIES
AS OF JUNE 30, 1975

ASSETS

Total Assets from Accounting Balance Sheet			\$ 439,302,988
Present Value of Future Contributions of Members			181,342,408
Present Value of Future Contributions by the City on Account of:			
(a) Basic Pensions:			
i) Normal Cost		\$ 99,241,406	
ii) Amortization of Certain Liabilities:			
- Prior Service Pensions	\$ 8,734,792		
- Increase due to 1965 Amendments	6,191,515		
- Supplemental Present Value	<u>270,247,976</u>	285,174,283	
(b) Cost of Living Pensions:			
i) Normal Cost		28,232,469	
ii) Amortization of Certain Liabilities:			
- Increase due to 1967 Amendments	\$ 23,118,154		
- Supplemental Present Value	<u>109,902,598</u>	<u>133,020,752</u>	<u>545,668,910</u>
Total Assets			<u>\$1,166,314,306</u>

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET

ACTUARIAL VALUATION OF ASSETS AND LIABILITIES
AS OF JUNE 30, 1975

(Continued)

LIABILITIES

5.	Current Liabilities		\$	1,483,761
6.	Present Value of Benefits Already Granted:			
	(a) Basic	\$193,365,998		
	(b) Cost of Living	<u>75,838,886</u>		269,204,884
7.	Present Value of Benefits to be Granted:			
	(a) Basic	\$756,468,485		
	(b) Cost of Living	<u>138,306,802</u>		894,775,287
8.	Investment Reserve, Undistributed Earnings and Fund Balance			(1,387,259)
9.	Family Death Benefit Insurance Reserve			<u>2,237,633</u>
10.	Total Liabilities			<u><u>\$1,166,314,306</u></u>

RECOMMENDATIONS

Based on the entry age normal cost funding method, and upon the assumption that all members will contribute on the basis of full rates, we recommend that the City contributions for the fiscal year 1976-1977 be made up as follows:

		Recommended City Contributions For 1976-1977	
		Percentage of Salary	Fixed Dollar Amount
a)	For Basic Pensions:		
	i) Normal Cost	3.48%	\$ -
	ii) Prior Service-Minimum Pensions (Charter-Period ending June 30, 1997)	-	678,794
	iii) Increase due to 1965 Amendments (Charter-Period ending June 30, 1990)	-	606,627
	iv) Supplemental Present Value (Period ending June 30, 2004)	5.76%	-
	v) Total Basic Pensions	9.24%	\$1,285,421
b)	For Cost of Living Pensions:		
	i) Normal Cost	.99%	\$ -
	ii) Increase due to 1967 Amendment (Charter-Period ending June 30, 1997)		1,796,547
	iii) Supplemental Present Value (Period Ending June 30, 2004)	2.34%	-
	iv) Total Cost of Living Pensions	3.33%	\$1,796,547
c)	Total Basic and Cost of Living Pensions	12.57%	\$3,081,968
d)	For Family Death Benefits:		

\$5.14 per month for each participating member to the Family Death Benefit Insurance Plan.

The new ordinance that became effective in October of 1975 permits the City to "subsidize" a portion of employee contributions. Since the portion that will be subsidized by the City will not be refunded to the member upon his

termination of employment prior to retirement, the City does not have to pay into the System the total amount of employee contributions that it subsidizes.

Based upon the actuarial valuation carried out as of June 30, 1975, we recommend that the City contribute, to the System, 73.31% of the employee contributions it subsidizes - i. e., for each \$10,000 the City subsidizes, the City should contribute \$7,331 to the System.

COMMENTS

City contributions for 1975 -76 amount to 11.47% of salary plus \$3,057,196. City contributions for 1976-77 recommended herein amount to 12.57% of salary plus \$3,081,968. The increase is due to the adoption of the "Beta" formula previously referred to. We estimated, based on the June 30, 1974 valuation, that adoption of the Beta Formula would increase the percentage rate by 1.44% of salary compared to the 1.10% of salary increase actually developed by the current valuation. The 16% increase in the active membership of the System acted to reduce the percentage rate.

VESTED LIABILITY

We calculate the vested liability, as of June 30, 1975, to be \$679,416,249. Assets on hand from the Accounting Balance Sheet amount to \$439,302,988. Thus, as of June 30, 1975, there was an excess of vested liability over assets on hand amounting to \$240,113,261. It is to be noted that the assets on hand amount to 65% of the vested liability.

We have calculated the vested liability of active members on the basis of an "on going concern" - i. e., on the basis of the same actuarial assumptions

as utilized for the June 30, 1975 actuarial valuation. Further, the vested liability of active members reflects service retirement benefits earned to June 30, 1975 together with related continuance benefits and cost of living benefits.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

FAMILY DEATH BENEFITS PAYABLE 1976-77

<u>Years</u>	(1) <u>Number</u>	(2) <u>Taxable Wages</u>	<u>(1) x (2)</u>
1966-67	2	\$ 6,600	\$13,200
1968-71	4	7,800	31,200
1972	1	9,000	9,000
1973	1	10,800	10,800
1974	1	13,200	13,200
1975	<u>1</u>	14,100	<u>14,100</u>
	10		\$91,500

Average Monthly Wage (AME) = $\frac{91500}{120} = \$763$ (Nearest dollar)

Primary Insurance Amount (PIA) Effective January 1, 1976 = \$428.70

Mother (75%) \$321.53

Child (75%) 321.53

Each of 2 Parents (75%) 321.53

Sole Parent (82-1/2%) 353.68

Maximum Family 750.20

Widow or Dependent Widow at Age:

60 (71.5%) 306.52

61 (77.2%) 330.96

62 (82.9%) 355.39

63 (88.6%) 379.83

64 (94.3%) 404.26

65 (100%) 428.70

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	255	\$ 82,814	257	\$ 73,420	512	\$ 156,234
21	251	85,896	197	58,883	448	144,779
22	248	88,030	232	72,777	480	160,807
23	331	119,869	316	103,289	647	223,158
24	383	143,781	321	109,191	704	252,972
25	376	151,139	292	105,939	668	257,078
26	433	177,832	306	114,884	739	292,716
27	476	209,313	305	117,706	781	327,019
28	463	217,496	264	106,570	727	324,066
29	497	249,891	244	103,687	741	353,578
30	422	215,937	200	79,819	622	295,756
31	436	229,476	198	83,201	634	312,677
32	437	238,011	152	63,864	589	301,875
33	435	235,504	160	68,306	595	303,810
34	338	184,360	123	52,108	461	236,468
35	383	208,988	131	56,684	514	265,672
36	318	178,513	106	43,944	424	222,457
37	372	208,618	100	40,404	472	249,022
38	381	212,616	121	51,559	502	264,175
39	335	182,959	97	39,900	432	222,859
40	357	201,828	77	33,372	434	235,200
41	369	205,984	80	33,353	449	239,337
42	365	208,814	74	32,812	439	241,626
43	373	210,471	70	32,520	443	242,991
44	363	208,193	86	36,440	449	244,633
45	387	218,345	101	43,339	488	261,684
46	380	228,190	90	39,698	470	267,888
47	370	215,470	99	44,794	469	260,264
48	409	249,989	90	36,954	499	286,943
49	399	238,106	104	44,966	503	283,072

Note: The salaries shown above do not reflect the 5-1/2% salary increase that became effective July 1, 1975.

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	492	\$ 308,829	81	\$ 34,882	573	\$ 343,711
51	417	259,549	105	45,724	522	305,273
52	443	271,106	100	44,042	543	315,148
53	470	297,868	84	37,275	554	335,143
54	466	291,210	96	41,467	562	332,677
55	420	259,145	78	34,189	498	293,334
56	400	237,016	80	34,982	480	271,998
57	373	226,718	71	31,287	444	258,005
58	332	211,282	55	24,471	387	235,753
59	324	196,453	61	28,688	385	225,141
60	251	163,061	77	32,984	328	196,045
61	249	145,781	54	25,270	303	171,051
62	229	136,282	34	15,619	263	151,901
63	169	98,104	37	16,678	206	114,782
64	123	73,325	41	17,838	164	91,163
65	120	68,956	24	9,870	144	78,826
66	87	47,404	17	7,301	104	54,705
67	67	41,399	14	5,814	81	47,213
68	42	24,577	17	8,150	59	32,727
69	37	23,066	8	3,489	45	26,555
70 and over	14	10,513	5	2,219	19	12,732
	16,867	\$9,198,077	6,132	\$2,426,622	22,999	\$11,624,699

Note: The salaries shown above do not reflect the 5-1/2% salary increase that became effective July 1, 1975.