ACTUARIAL STATEMENT

DECEMBER 31, 1981

The Retirement Board of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago, Chicago, Illinois

Gentlemen:

This is to certify that the annual statement as of December 31, 1981 of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago is, to the best of our knowledge and belief, a true and correct statement of the affairs and conditions of said Fund for the calendar year 1981. This statement has been prepared from the books of the Fund as substantiated by our letters of recommendation to the Retirement Board.

The accounting procedure is outlined in Article 11 of the Illinois Pension Code.

The method of valuation, or method of financing the system, and the actuarial assumptions and methods used in the valuation are shown in a separate Exhibit. The attempt is made to give effect to realistic valuation factors affecting costs.

SUMMARY

The following represents a summary of this report:

		This Year	Last Year
INCOME: Investment Employer Employee Total		\$ 9,631,793 \$ 12,392,694 <u>\$ 10,522,389</u> \$ 32,546,876	<pre>\$ 12,626,861 \$ 11,791,330 \$ 9,729,912 \$ 34,148,103</pre>
OUTGO: Refunds, Ben	nefits, Expenses	\$ 16,596,246	\$ 16,796,949
EXCESS OF INCOME OVER	R OUTGO	\$ 15,950,630	\$ 17,351,154
ACTIVE PARTICIPANTS		5,765	5,847
Sr D ⁴ Cr	mployee pouse isabilities nildren ther - reversionary	1,166 2,469 162 137 1	2,379 1,162 177 139 1
ACTUARIAL:			,
Assets: (Total at	t book value)	\$254,234,605	\$238,242,772
Funded Ratio		69.09%	68.98%
Accrued Liability	/	\$367,980,498	\$345,364,820
Termination Liabi	ility	\$195,669,796	\$183,588,283
Excess Upon Termi	ination	\$ 58,564,809	\$ 54,654,489
Unfunded Liabilit	су.	\$113,745,893	\$107,122,048
Annual Actuarial	Requirement (ER & EE)	\$ 23,885,754	\$ 25,019,195
Expected Net Annu	ual Actuarial Deficiency	\$ 1,275,121	\$ 3,333,603
Required Employer	[•] Multiple	1.59	1.96
INVESTMENT:			
Yield (On Investe	ed Assets including gains/los	ses) 4.29%	6.03%
MISCELLANEOUS:			
Salary Roll		\$118,054,512	\$108,854,496
Average Salary		\$ 20,478	\$ 18,617
Invested assets b	book value including cash	\$238,790,649	\$222,801,849
Invested assets m	narket value (AG Becker)	\$193,270,000	\$203,459,000
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LABORERS' A & B FUND OF CHICAGO Assets, Unfunded Liability, Accrued Liability



TIME



LABORERS' A & B FUND OF CHICAGO Income and Payouts

TIME

The graph of Assets, Unfunded Liability and Accrued Liability illustrates the Fund's position with respect to asset growth and accrued liability growth. Please note that the difference between the assets and the accrued liability is what is called unfunded liability.

The next graph illustrates the Income of the Fund - investment income plus employer contributions plus employee contributions - and the current payouts of the fund benefits, refunds and expenses. The excess of income over payouts goes to build reserves for future benefit payments.

ACTUARIAL ASSUMPTIONS:

Actuarial assumptions required by ERISA must take into consideration anticipated future experience as well as past experience. As a guide to our thinking, we have attempted to learn what interest and salary scale assumptions are being used to anticipate the future in other public and private pension fund valuations.

A comprehensive study made in 1976 indicated that 53% of the funds surveyed used an interest assumption of 6% or greater and that 33% used a salary scale of 5% or greater. Based on this study it is our opinion that for the Laborers' Fund, having evaluated past experience of investment earnings and having given effect both to locked in interest rates and to generally expected future interest earnings, a 6% future interest assumption is a reasonable rate for valuation purposes, and a 5% per year salary scale assumption is reasonable considering the generally accepted views on future salary increases for our national economy. These two assumptions could be characterized as being middle of the road.

The liabilities and costs in this report were based in part on a 6% per year interest assumption and a 5% per year salary scale assumption. These and all other assumptions are the same as those used for the last report.

In our opinion, these actuarial assumptions in the aggregate are reasonable, taking into account fund experience and future expectations and, represent the best estimate of anticipated experience.

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ALTERNATIVE VALUATIONS:

We are making alternative valuations giving effect to different rates of salary increases and investment earnings to serve as a guide to the Retirement Board and ourselves in estimating the effects on costs of possible variations in future experience from the assumptions used. These will be submitted at a later time.

THREE METHODS OF FINANCING THE UNFUNDED LIABILITY:

1.) The method of valuation used for this report, is the same as for the last report. It is known as a <u>Normal Cost-plus-Interest Basis</u> and is intended to continue the current provisions of the Article governing the fund in full force and effect on a permanent basis - explained in detail under Actuarial Assumptions and Methods. The method is also referred to as a middle-of-the-road method of funding since the unfunded liability is recognized but not amortized.

The normal cost plus interest only method of funding is that recommended by the Illinois Public Employees Pension Laws Commission. It was also the minimum required for private pension plans for IRS qualification before ERISA.



2.) ERISA now requires that initial unfunded liability be amortized over a forty year period.

The normal cost plus interest method and the <u>Normal Cost Plus 40 Year</u> <u>Amortization method</u> both express the past service costs as a level annual dollar amount. Consequently, as the total payroll increases in the future, the level annual amount becomes a decreasing percent of the total payroll. Under both methods, level dollar amounts represent a greater percent of payroll initially and a decreasing percent of payrolls as future payrolls increase.



3.) An alternative method for funding that is receiving increased attention for public employee pension plans is a method which sets the funding standard cost objective as a Level Annual Percent Of Payroll rather than as a level annual amount. This method will result in increasingly greater dollar amounts each year as payrolls increase.



This constant percent of payroll method is not an acceptable funding method under ERISA. It may be more acceptable in view of the presumably permanent nature of public retirement systems, and the desire to place a relatively constant tax burden (as percentage of salary) on future generations of taxpayers.

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For the Retirement Boards guidance, we have estimated the financial effects of different funding methods. The results are given in the following table:

	Required 1982 Tax Levy	Ultimate Required Multiple	Unfunded Liability Will	Portion Required For Amortization Of Unfunded Liability*
1) Normal Cost + Interest Only	\$14,428,251	1.59	Remain constant at \$113,745,893	\$6,824,754
2) ERISA: Normal Cost + 40 Year Amortization	\$15,193,848	1.67	Decrease to \$0	\$7,559,727
3) Normal Cost + 40 Yr. Level % of Payroll Increasing 3½% a Year (Inflation Only)	\$11,862,445	1.30	Increase to \$140,307,029 in 18 years and decrease thereafter	\$4,361,580 increasing to \$17,268,627 in 40 Years
4) Present Law (Includes Park)	\$13,100,000	1.37		

* Assuming all valuation assumptions are realized and no future benefit liberalization.

The preceding comparative table indicates the need to take into consideration in the funding policy future annual costs expressed both as a level annual dollar amount and as a level annual percent of payroll.

The level annual percent of payroll method results in substantially increasing costs and contributions in future years, especially at the end of a funding period.

In determining funding policy it is essential to provide a margin of safety for unfavorable operating experience such as salaries over anticipated salaries, decreasing age of retirement, increasing longevity, declining fund membership.

REQUIRED ACTUARIAL CONTRIBUTION:

Based on the Normal Cost-Plus-Interest-Method of funding we find that the tax levy for 1982 should be \$14,428,251 which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1981 of \$118,054,512 and an active membership of 5,765 persons. The detail is as follows:

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Detail of Annual City Contribution:

		Amount	Percent of Salary	Dollar <u>Per Active</u>
1.	Normal Cost - For Current Service	\$17,061,001	14.45%	\$2,959
2.	6% Interest on Unfunded Liability	\$ 6,824,754	5.78%	\$1,184
3.	Total Actuarial Requirement (1)+(2)	\$23,885,754	20.23%	\$4,143
4.	Employee Contributions	\$10,034,634	8.50%	\$1,741
5.	Employer Requirement (3)-(4)	\$13,851,121	11.73%	\$2,403
6.	Expected Net Employer Contribution from 1982 Tax Levy of \$13,100,000 after a 4% loss	\$12,576,000	10.65%	\$2,181
7.	Expected Net Annual Deficiency	\$ 1,275,121	1.08%	\$ 221
8.	Tax Levy Required (assume 4% loss)	\$14,428,251		
9.	Increase in Tax Levy Required	\$ 1,328,251		
10.	Required Ultimate Multiple	1.59		
11.	Present Authorized Ultimate Multiple	1.37		
12.	Increase in Ultimate Multiple Needed	.22		

The Illinois Public Employees' Pension Laws Commission Impact Statement - appended to this report - illustrates both the present financial position and the direction of the financial condition.

The above table indicates the need for additional contributions to maintain the fund on an actuarial basis.

The following bar chart illustrates the annual actuarial cost (composed of current service cost and past service cost) to be paid for by the employee and the employer. Since the annual cost is not being met, there is a deficiency shown in the hatched area. The employer portion is provided by tax levy. The last column represents the amount of tax levy required to meet the cost and therefore eliminate the deficiency.

LABORERS' A & B FUND OF CHICAGO Annual Actuarial Cost 1982 (Normal Cost plus Interest Only)



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Detail of Normal Cost (given above)	<u>% Salary</u>	<u>\$ Per Active</u>
Retirement Annuity Retirement Annuity Increase Post-Retirement Spouse Annuity Spouse Annuity for Death in Service Child's Annuity Ordinary Disability Duty Disability Refunds Widows Compensation Expense of Administration Reciprocal Benefits	$7.74\% \\ 1.12 \\ .35 \\ .47 \\ .10 \\ 1.17 \\ .25 \\ 2.60 \\ 0 \\ .54 \\ .10 \\ 10 \\ 1.17 \\ .25 \\ 1.10 \\ 1.10 \\ 1.17 \\ .25 \\ 1.10 \\ 1.$	\$1,586 229 71 96 21 240 52 533 0 111 20
CHANGE IN THE UNFUNDED LIABILITY:	14.45%	\$2,959
The total unfunded liability as of December 31, December 31, 1980, it was \$107,122,048.	1981 is \$113	,745,893. As of
Detail of Change in Unfunded Liability:		
1. Increase in Salaries over 5% Assumed	\$12,2	05,164 Increase
2. Investment Yield under 6% Assumed	\$ 4,8	52,598 Increase
3. Excess in Annual Contribution: 1981 Total Actuarial Requirement\$25,019 Less Employer Net to Fund 1981 Tax Levy	2,694	4,112 Increase
 Miscellaneous Actuarial Changes - Gain From Retirement and Death 	<u>(12,53</u>	8,029) Decrease
Net Change in Unfunded Liability	\$ 6,62	3,845 Increase
EUNDED DATIO.		

FUNDED RATIO:

The ratio of assets to liabilities is 69.09% as of December 31, 1981 - and was 68.98% as of December 31, 1980. This ratio represents the extent to which present and future benefit promises are secured by present assets. The funded ratio increased slightly because assets increased 6.7% while the liabilities increased 6.5%.

RATIO OF ACTIVE EMPLOYEES TO ANNUITANTS & BENEFICIARIES:

The ratio of active employees to annuitants and beneficiaries is 1.47 as of December 31, 1981 and was 1.52 as of December 31, 1980. This ratio illustrates the relationship between the contributors and the beneficiaries.

TERMINATION LIABILITY:

A measure of Fund funding is to compare the assets to liabilities for present retirees on pension and amount of contributions of active and inactive employees. This amount would be a minimum measure of what it would cost to terminate the Fund as of December 31, 1981.

Liability for retired annuitants, widows, spouses of annuitants	\$107,291,048
Salary Deductions Contributed by Active Fund Members (incl. ½%)	88,378,748
Total Termination Liability	\$195,669,796
Assets at Book Value	254,234,605
Excess Assets Upon Termination	\$ 58,564,809

In other words....if the pension fund was terminated as of valuation date, an excess amount of \$58,564,809 would exist after providing lifetime pensions to those now retired and to return all active members' contributions.

Or the assets on hand amounting to \$254,234,605 would be sufficient to provide for the future lifetimes for all retired annuitants, widows and spouses of annuitants, for whom the total liability is \$107,291,048, the difference between the total assets and such reserve liability or \$146,943,557 could be paid to active employees.

As there were 5,765 active employees, the average amount that could be paid to each such member would be \$25,489. The average amount contributed is \$15,330 so that 166% of what was contributed could be returned to each active employee. This measure does not provide for any retirement benefit which may be accrued and may have a greater value. The actuarial reserve required to fully fund an active life is \$45,219.

The following chart illustrates the excess of assets over the termination liability upon terminating the plan (the hatched area).

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LABORERS' A & B FUND OF CHICAGO Assets and Termination Liability



THE FUTURE

As in the past - a continuous review of the Fund's operating experience is needed. The rates of salary increases, rates of retirement and investment earnings are of critical importance in cost estimates. Costs will need to be adjusted as these factors vary.

For example, for every \$1.00 in salary increase over the 5% increases assumed in the salary scale the unfunded liability will be increased by about \$2.21. This will be in addition to the additional current annual service cost for every dollar in salary over the 5% salary scale assumed.

These additional costs will be reduced to some extent by the annual amount of investment income earned over the assumed 6% used for valuation purposes. The extent of the reduction will depend on the relative amounts of these two items.

The alternative funding methods indicate the imperative need to monitor Fund income if future Fund obligations are to be met.

The disadvantage of funding methods that use the level percent of payroll funding of past service is that the unfunded liability will continually increase if salaries continue at the predicted rates. Subject, however, to projections of contributions and disbursements for potential cost flow problems the level percent of payroll method would appear to provide a long range level funding method on a minimum funding basis whether for interest only or over 40 year period.

Respectfully submitted,

Donald F. Campbell, F.C.A., M.A.A.A. Enrolled Actuary # 1248

DNald P. Campbell, F.S.A., M.C.A., M.A.A.A. Enrolled Actuary #1498

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ACTUARIAL BALANCE SHEET

AS OF

DECEMBER 31, 1981

ASSETS

AND

LIABILITIES

LIABILITIES AND FUND BALANCES

ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1981

ANNUITY PAYMENT FUND ACCOUNT: (Based on 4% Amer. Exp. & 3% Comb.) Employee Annuitants Employee Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed Total Annuity Payment Fund	\$34,872,834.60 3,740,241.12 12,946,288.68 7,307,236.88	\$ 58,866,601.28
SALARY DEDUCTION FUND ACCOUNT: Employees Spouses of Employees Total Salary Deduction Fund	\$66,228,260.42 14,496,350.41	\$ 80,724,610.83
CITY CONTRIBUTION FUND ACCOUNT: Employees Spouses of Employees Supplemental Annuities Total City Contribution Fund	\$62,886,913.61 20,364,539.98 13,196.28	\$ 83,264,649.87
OTHER RESERVES: Supplementary Payment Reserve Annuity Payment Fund Account Total Other Reserves	\$ 141,608.23 8,829,990.19	\$ 8,971,598.42
PRIOR SERVICE FUND ACCOUNT: (Based on 4% Amer. Exp. & 3% Comb.) Employee Annuitants Employee Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed Salary Deductions 2% Annuity Estimated Excess Liability (Note 1) Total Prior Service Account	\$49,712,345.40 4,311,767.04 2,192,944.56 3,694,661.62 5,766,662.75 70,474,656.12	\$136,153,037.49
TOTAL LIABILITIES		\$367,980,497.89
Obligations of Fund for Prior Service Liabili	ties (Note 1)	(113,745,892.74)
TOTAL NET LIABILITIES AND FUND BALANCES		\$254,234,605.15

Note 1 - The letter of transmittal attached hereto sets forth the manner in which this liability was determined.

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INCOME

YEAR 1981

INCOME

AND

EXPENDITURES

EXPENDITURES FOR YEAR 1981

TOTAL INCOME FORWARDED

\$32,546,875.50

ANNUITIES AND BENEFITS PAID: Employees' Annuities Spouses' Annuities Compensation Annuities Children's Annuities Ordinary Disability Duty Disability Supplementary Payments	\$9,310,965.89 1,713,057.80 1,479.00 122,200.00 1,385,605.78 297,086.53 58,148.28	,	· · · · · · · · · · · · · · · · · · ·
Total Benefits Paid Reciprocal Act Re- imbursements	\$12,888,543.28 (7,653.43)		
Net Benefits Paid		\$12,880,889.85	
EXPENSE OF ADMINISTRATION: Salaries: Regular Employees Blue Cross & Blue Shield Services: Actuarial Auditing Investment Office Supplies and Equipment Printing and Stationery Postage Rent & Electricity Telephone & Telegraph Miscellaneous Total Expenses	<pre>\$ 126,453.70 3,971.20 229,875.68 19,500.00 185,000.00 3,754.79 10,823.39 9,000.00 36,200.91 1,025.81 15,189.34</pre>	\$ 640,794.82	
REFUNDS	•	3,074,561.37	
		3,074,301.37	
TOTAL EXPENDITURES			\$16,596,246.04
EXCESS INCOME OVER EXPENDITURES	5		\$15,950,629.46
Net Change in Reserve for Loss and Taxes Receivable for Pric			41,204.00
INCREASE IN NET ASSETS FOR YEAR	R		\$15,991,833.46

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COMPARATIVE ANALYSIS

YEAR 1981

ASSETS

AND

LIABILITIES

COMPARATIVE ANALYSIS

LIABILITIES AND FUND BALANCES

	•		-
LIABILITY RESERVES:	1/1/1981	12/31/1981	Increase (Decrease)
ANNUITY PAYMENT FUND:		12/31/1901	(Decrease)
Employee Annuitants	\$ 31,454,212	\$ 34,872,835	\$ 3,418,623
Emp. Annuities Fixed	5,879,820	3,740,241	(2,139,579)
Spouse Annuitants	12,679,361	12,946,289	266,928
Spouses' Annuities Fixed	7,076,083	7,307,237	231,154
Total	\$ 57,089,476	\$ 58,866,602	\$ 1,777,126
SALARY DEDUCTION FUND ACCOUNT:			
Employees	\$ 62,353,239	\$ 66,228,260	\$ 3,875,021
Spouses of Employees	13,506,977	14,496,350	989,373
Spouses of Employees	10,000,077	11,10,000	
Total	\$ 75,860,216	\$ 80,724,610	\$ 4,864,394
CITY CONT. FUND ACCOUNT:	• • • • • • • •	* ** *** ***	• • • • • • • • •
Employees	\$ 59,448,369	\$ 62,886,914	\$ 3,438,545
Spouses of Employees	19,120,589	20,364,540	1,243,951
Supplemental Annuities	12,290	13,196	906
Total	\$ 78,581,248	\$ 83,264,650	\$ 4,683,402
Total	\$ 70,001,210	φ 00,201,000	φ 4,000,102
OTHER RESERVES:			
Supplemental Pymt. Res.	\$ 99,757	\$ 141,608	\$ 41,851
Annuity Fund Account	8,563,422	8,829,990	266,568
	* 0 000 170	* • • • • • • • • •	*
Total	\$ 8,663,179	\$ 8,971,598	\$ 308,419
PRIOR SERVICE FUND ACCOUNT:			
Employee Annuitants	\$ 43,907,346	\$ 49,712,345	\$ 5,804,999
Emp. Annuities Fixed	3,350,605	4,311,767	961,162
Spouse Annuitants	1,978,421	2,192,945	214,524
Spouses' Annuities Fixed	2,976,371	3,694,662	718,291
Sal. Ded. 2% Annuity	5,179,426	5,766,663	587,237
Estimated Excess Liability	67,778,532	70,474,656	2,696,124
Estimated excess clabinity	07,770,002	70,474,030	2,090,124
Total	\$125,170,701	\$136,153,038	\$10,982,337
TOTAL LIABILITIES	\$345,364,820	\$367,980,498	\$22,615,678
UNFUNDED OBLIGATIONS	(107,122,048)	(113,745,893)	(6,623,845)
TOTAL NET LIABILITIES	\$238,242,772	\$254,234,605	\$ 15,991,833

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TAXES RECEIVABLE

DECEMBER 31, 1981

Year	Uncollected Taxes 12-31-81	Estimate for Loss 12-31-80	E	dditional st. Setup 12-31-81		otal Est. for loss 12-31-81		Taxes Dilectible 2-31-81
CITY:						•		
1977 1978 1979 1980 1981 1981	<pre>\$ 1,785,509.12 2,157,206.93 682,008.07 2,306,471.09 11,139,125.00 \$18,070,320.21 \$ 1,411,021.92 \$ 1,784,875.00 \$ 3,195,896.92 \$21,266,217.13</pre>	\$1,755,336.00 2,052,001.00 418,302.00 447,220.00 \$4,672,859.00 Replacement	\$		2,	755,336.00 052,001.00 394,199.03 447,221.00 556,956.00 205,713.03	<u>10,</u> <u>\$12,</u> <u>\$1,</u> <u>\$1,</u> <u>\$1,</u> <u>\$3,</u>	30,173.12 105,205.93 287,809.04 859,250.09 582,169.00 864,607.18 411,021.92 784,875.00 195,896.92 060,504.10
ΡΔΡΚ	DISTRICT:					•	• - ,	,,
1977 1978 1978 1980 1981	\$ 5,479.47 6,086.14 3,147.57 1,208.93 27,000.00	\$ 3,750.00 3,875.00 1,400.00 1,450.00	\$ (241.07) 1,350.00	\$	3,750.00 3,875.00 1,400.00 1,208.93 1,350.00	\$	1,729.47 2,211.14 1,747.57 0 25,650.00
	\$ 42,922.11	\$ 10,475.00	\$	1,108.93	\$	11,583.93	\$	31,338.18
TOTAL	:							

<u>\$21,309,139.24</u> <u>\$4,683,334.00</u> <u>\$533,962.96</u> <u>\$5,217,296.96</u> <u>\$16,091,842.28</u> Note: The loss on the 1981 tax levy was 5%. Due to the 100% collection of the personal property replacement tax, the <u>overall</u> loss is 4%. The statutory requirement of \$12,951,000.00 is the sum of \$12,924,000.00 plus \$27,000.00

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MEMBERSHIP_STATISTICS

YEAR 1981

	Number at Beginning of Year	Increases	Decreases	Number At End of Year
Changes in Active Participants				
Male	5,234	833	821	5,246
Female	613	27	121	519
Total	5,847	860	942	5,765
Changes In Annuitants & Benefici	aries			
Employee Annuitants	2,337	233	150	2,420
Spouse Annuitants	1,154	83	84	1,153
Children's Annuities	139	32	34	137
Ordinary Disability Benefits	152	125	141	136
Duty Disability Benefits	25	435	434	26
Reversionary (Beneficiaries)	1	0	0	1
Reciprocal: Employee Spouse	42 6	7 5	0 0	49 11
Widow Compensation Annuities	2	0	0	2
Total	3,858	920	843	3,935
Ratio of Active Participants to			•.	

C. Ratio of Active Participants to Annuitants & Beneficiaries

1.52

1.47

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SALARY AND AGE STATISTICS

YEAR 1981

Ages and Salaries as of December 31, 1981

Male

Ages	Number	Annual Salaries	Average Annual Salaries
Under 20 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 & Over Without Record Total	$ \begin{array}{r} 40\\ 420\\ 711\\ 538\\ 429\\ 484\\ 474\\ 651\\ 636\\ 534\\ 172\\ 71\\ \underline{86}\\ 5246\\ \end{array} $	<pre>\$ 780,432 8,807,928 15,109,680 11,757,264 9,268,248 10,842,816 10,230,600 14,113,752 13,662,384 11,340,936 3,695,976 1,495,848 1,782,024 \$112,887,888</pre>	\$19,511 20,971 21,251 21,854 21,604 22,403 21,584 21,680 21,482 21,238 21,488 21,068 20,721 \$21,519
		Female	
Under 20 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 & Over W/O Record Total	$ \begin{array}{c} 1\\ 4\\ 6\\ 2\\ 6\\ 14\\ 35\\ 74\\ 133\\ 163\\ 75\\ 5\\ 1\\ 519\\ \hline 519\\ \hline \end{array} $		\$10,824 13,158 17,080 18,840 15,804 12,120 10,729 10,025 9,542 9,716 8,707 11,990 15,360 \$ 9,955
TOTAL MALE AND FEMALE	5765	\$118,054,512	<u>\$20,478</u>

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SALARY AND AGE STATISTICS

YEAR 1981

Ages at Entrance

MALE

FEMALE

	Numbou	Annual	Bi un bi a ca	Annual Salamiaa
	Number	Salaries	Number	Salaries
Under 25	1,696	\$37,292,544	14	\$ 211,296
25 - 29	1,002	21,760,608	38	497, 832
30 - 34	725	15,408,696	62	684,552
35 - 39	554	11,889,216	122	1,199,880
40 - 44	498	10,399,200	153	1,459,728
45 - 49	351	7,410,696	101	836,448
50 - 54	198	4,098,168	18	163,152
55 - 59	113	2,360,664	9	93,216
60 & 0ver	23	486,072	1	5,160
W/O record	86	1,782,024	<u> </u>	15,360
Totals	<u>5,246</u>	\$112,887,888	519	\$5,166,624
		to1 510 ·		
Average Annual Salary		\$21,519 43.6		\$9,955
Average Attained Age Average Service		12.2		57.4 17.6
Average Age at Entranc	e	31.4		39.8
nie uge nge ue une and	-	0111		0000

AGE AND SERVICE DISTRIBUTION

YEAR 1981

Average Salaries by Age And Service Grouping (Showing The Number of Members and The Average Salaries of Male and Female Combined)

Ages	<u>Under 1</u>	1_4	5-9	Yea 10-14	rs of Se 15-19	rvice 20_24	25-29	30-34	35+	Total
00-20	9 18613		<u>.</u>					<u> </u>	<u> </u>	41 19299
20-24	31 20052	338 20791	55 22029							4 24 20898
25-29	18 20445	356 20474	329 21976	14 23235						717 21216
30-34	10 18002	196 20877	213 22415	109 22587	12 23888	•		•		540 21842
35-39	9 22349	120 20174	114 21783	87 22215	90 22147	15 22120				435 21524
40-44	5 18355	104 20403	103 21659	89 22490	131 22410	64 24795	2 21864			498 22113
• • • •	4 18048	90 20421					57 22479			509 20837
			98 20755				150 21588			
55-59	4 20532	41 19921	77 21290	101 20323	197 15468	90 18295	144 20837	114 23012	1 23088	
60-64		36 20246	54 20180	74 19637	188 14237	114 19004	133 20100	91 21385	7 27219	
65-69	1 28680	4 19476	24 21083	31 20991	68 13158	36 15620	49 19188	29 20046	5 21408	247 17607
70+		1 24432	4 16560	6 19684	11 20020	15 19829	19 20831	14 21441	6 22236	76 20471
W/O	2 <u>18708</u>	35 <u>19558</u>	25 21346	16 21824	5 23328	1 <u>14328</u>	2 13452	1 34752		87 20660
No. Sal. Age Servic	95 19965 ce	1430 20497	1181 21700	690 21217	968 17668	498 20126	556 20863	327 22548	20 24004	5765 20478 44.8 12.7

ANNUITANTS CLASSIFIED BY AGE AS OF 12/31/1980

<u>Ages</u> 25 - 29 30 - 34 35 - 39	Male <u>Number</u> 2	Annual Payments \$1,800	Average Annual <u>Payments</u> \$ 900	Female Number	Annual Payments \$	Average Annual Payments \$
40 - 44 45 - 49	2	1,740	870			
50 - 54	2 2	- 3,233	1,616	r		
55 - 59	64	375,562	5,868	9	12,124	1,347
60 - 64	192	1,306,430	6,804	68	191,775	2,820
65 - 69	419	2,643,064	6,308	226	601,085	2,660
70 - 74	356	1,879,197	5,279	261	538,795	2,064
75 - 79	231	1,020,410	4,417	186	348,583	1,874
80 - 84	121	404,751	3,345	110	183,019	1,664
85 - 89	72	274,939	3,819	58	90,823	1,566
90 - 94	16	37,920	2,370	18	25,396	• 1,411
95 - 99	4	4,452	1,113	2	2,703	1,351
100-105				1	2,279	2,279
Totals	1481	\$7,953,49 8	\$5,370	939	<u>\$1,996,582</u>	<u>\$2,126</u>
Average Age			<u>71</u>			<u>71</u>

Retirement Annuities

Spouses Annuities (Not Including Compensation)

Average Male Annual Annual Ages Number Payments Payments	Female Annual Number Payments	Average Annual Payments
20 - 24 \$ \$	\$	\$
25 - 29	2 2,400	1,200
30 - 34 1 1,200 1,200	2 2,400	1,200
35 - 39	6 7,733	1,289
40 - 44	15 18,027	1,202
45 - 49	23 28,817	1,253
50 - 54	52 82,039	1,578
55 - 59	113 198,045	1,753
60 - 64 2 2,400 1,200	183 345,414	1,888
65 - 69 4 5,124 1,281	224 369,681	1,650
70 - 74	198 327,058	1,652
75 - 79	141 185,820	1,318
80 - 84	111 127,324	1,147
85 - 89	51 44,339	869
90 - 94	22 19,523	887
95 - 99	3 1,524	508
Totals 7 <u>\$ 8,724</u> <u>\$1,246</u>	1,146 \$1,760,144	\$1,536
Average Age <u>60</u>		<u>69</u>

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NEW ANNUITIES GRANTED

AS OF DECEMBER 31, 1981

		1ale <u>uitants</u>		Female nuitants	D	dows of eceased mployees	Widows of Deceased nnuitants
Number Retired Average Attained Age		156 64.4		77 65.8		32 52.4	51 69.2
Average Length of Service		23.7		19.5		17.5	N/A
Average Annual Salary (4 out of 10)	\$	14,592	\$	6,480		N/A	N/A
Average Annual Final Salary	\$	19,656	\$	8,448		N/A	N/A
Total Annual Annuity	\$ 1,	,145,469	\$	195,802	\$	73,717	\$ 104,658
Average Annual Annuity	\$	7,343	\$	2,543	\$	2,304	\$ 2,052
Total Liability (6% 1951 G.A.)	\$12,	,713,273	\$2	,101,656	\$	819,612	\$ 781,799
Average Liability	\$	81,495	\$	27,294	\$	25,613	\$ 15,329
Total Cost For Income Tax Purposes	\$2,	,607,399	\$	4 9 9,849		452,919	N/A
Average Cost	\$	16,714	\$	6,492		14,154	N/A

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HISTORY 1964 to 1981

AVERAGE ANNUAL SALARIES ENTIRE FUND

Year End	Total Members In Ser- vice(1)	Percentage Increase Of Preceding Year	Total Salaries	Percentage Increase Of Preceding Year	Average Annual Salaries	Percentage Increase Of Preceding Year
1964	7,868		\$ 44,441,712		\$ 5,648	
1965	7,936	0.9%	45,872,832	3.2%	5,780	2.3%
1966	7,995	0.7	47,598,552	3.8	5,954	3.0
1967	8,102	1.3	52,268,304	9.8	6,451	8.3
1968	7,891	(2.6)	56,165,136	7.5	7,118	10.3
1969	7,777	(1.4)	60,523,296	7.8	7,782	9.3
1970	7,220	(7.2)	62,916,768	4.0	8,714	12.0
1971	6,864	(4.9)	66,142,320	5.1	9,636	10.6
1972	6,971	1.6	69,950,692	5.8	10,035	4.1
1973	6,752	(3.1)	73,108,848	4.5	10,828	7.9
1974	6,638	(1.7)	78,526,728	7.4	11,830	9.3
1975	7,032	5.9	89,276,280	13.7	12,696	7.3
1976	6,811	(3.1)	90,487,008	1.4	13,285	4.6
1977	6,752	(0.9)	98,029,296	8.3	14,519	9.3
1978	6,613	(2.1)	103,399,152	5.5	15,636	7.7
1979	6,175	(6.6)	105,825,264	2.3	17,138	9.6
1980	5,847	(5.3)	108,854,496	2.9	18,617	8.6
1981	5,765	(1.4)	118,054,512	8.5	20,478	10.0

Average Increase for the last 5 years

(3.3)%

5.5%

9.0%

(1) Includes those members who were on disability

(2) Average annual increase in salary 1964 - 1981 about 7.87% compounded.

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HISTORY OF TOTAL ANNUITIES 1968 - 1981

Employee Annuitants (Male & Female)

Year	Number Of	Total	Average
End	Annuitants	Annuities	<u>Annuities</u>
1968	1,572	\$2,389,710	\$1,520
1969	1,593	2,495,396	1,566
1970	1,651	2,779,061	1,683
1971	1,675	2,927,594	1,748
1972	1,724	3,373,308	1,957
1973	1,777	3,781,854	2,128
1974	1,831	4,331,609	2,366
1975	1,907	4,887,747	2,563
1976	2,009	5,633,971	2,804
1977	2,087	6,287,310	3,013
1978	2,188	7,162,866	3,274
1979	2,227	7,976,776	3,582
1980	2,379	8,958,700	3,766
1981	2,420	9,950,080	4,112

Spouse Annuitants (Not Including Compensation)

19791,1111,523,3701,37119801,1541,689,0761,464'19811,1531,768,8681,534
19811,1531,768,8681,5340017A/6B-32-P-LAB

HISTORY OF INVESTMENT YIELDS

Nonrecurring Gains and Losses are Excluded from Income

Year End	Investment Yield on Total Assets	Investment Yield on Invested Assets
1971 1972 1973	4.75% 5.47 5.76	4.99% 5.70 6.03
1974 1975 1976	6.58 7.25 7.23	6.98 7.73
1977 1978	7.01 6.61	7.65 7.35 6.97
1979 1980 1981	7.38 7.69 8.46	7.82 8.20 9.11
Average of Last 5 Years	7.43%	7.89%

Nonrecurring Gains and Losses are Included in Income

Year End	Investment Yield on Total Assets	Investment Yield on Invested Assets
1971	3.95%	4.14%
1972	4.79	5.00
1973	3.60	3.77
1974	3.55	3.76
1975	6.17	6,58
1976	6.98	7.39
1977	7.00	7.35
1978	5.34	5.62
1979	6.61	7.00
1980	5.66	6.03
1981	3.99	4.29
Average of Last 5 Years	5.72%	6.06%

Notes:

Yield = Investment Income $\frac{1}{2}$ (Assets at beginning + end) - $\frac{1}{2}$ Investment Income

Bonds valued at amortized value, stocks at cost. Market values are not considered.

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Year End	Employee Contributions(1)	Employer Contributions(2)	Investment Income (3)	<u>Total Income</u>
71	\$ 5,254,928	\$ 4,241,819	\$ 4,145,156	\$13,641,903
72	5,928,386	4,793,135	5,391,547	16,113,068
·73	6,269,104	5,463,149	4,394,426	16,126,679
74	6,597,012	6,103,125	4,646,080	17,346,217
75	7,375,222	6,699,000	8,665,212	22,739,434
76	7,887,179	7,287,000	10,785,585	25,959,764
77	8,568,248	8,470,000	11,993,200	29,031,448
78	9,077,825	9,477,125	10,112,216	28,667,166
79	9,571,764	11,108,298	13,547,589	34,227,651
80	9,729,912	11,791,330	12,626,861	34,148,103
81	10,522,389	12,392,694	9,631,793	32,546,876

HISTORY OF FINANCIAL INFORMATION*

Year		Income Less	Pay Outs	Income	Pay Outs
End	Pay Outs(4)	Pay Outs(5)	To Assets	To Assets	To Income
71	\$ 6,829,674	\$ 6,812,229	6.2%	12.4%	50.1%
72	6,425,129	9,687,939	5.4	13.4	39.9
73	7,125,454	9,001,225	5.5	12.5	44.2
74	7,999,287	9,346,930	5.8	12.6	46.1
75	8,690,763	14,048,671	5.7	15.0	38.2
76	9,482,736	16,477,028	5.6	15.4	36.5
77	10,819,180	18,212,268	5.8	15.6	37.3
78	12,454,451	16,212,715	6.1	14.1	43.4
79	14,055,673	20,171,977	6.4	15.5	41.1
80	16,796,949	17,351,154	7.1	14.3	49.2
81	16,596,246	15,950,630	6.5	12.8	51.0

*Statistical material suggested by the Laborers' Finance Officers Association in the disclosure guidelines for security offerings by the State and Local Government.

Includes Deductions In Lieu for Disability. (1)

- (2)
- Net Tax Levy and Miscellaneous Income. Includes Realized Net Loss on Sale and Exchange of Bonds. (3)
- (4) Includes Pensions, Benefits, Refunds and Administrative Expenses.
- (5) Does Not Include Prior Year Adjustments.

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HISTORY OF FINANCIAL INFORMATION ANNUAL ACTUARIAL REQUIREMENTS

Actuarial Recommended Contribution (Employer and Employee) Normal Cost Plus Various Amortization Methods.

•	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u> .	B	<u>C</u>
Year	NC Plus Interest	NC Plus ERISA 40 Year Amortization	NC Plus Increasing % of Salary at 3½%	Percent	ressed age of ning of	Salary
77 78 79 80 81 82	\$17,063,326 18,468,103 20,575,276 21,699,408 25,019,195 23,885,754	21,211,686 22,362,086 25,711,368	\$15,240,172 16,504,353 18,442,428 19,478,525 22,699,461 21,422,580	18.86% 18.84 19.90 20.50 22.98 20.23	19.46% 19.44 20.51 21.13 23.62 20.86	16.84% 16.84 17.84 18.41 20.85 18.15

Actual Employer and Employee Contribution

	D	E	<u>D</u>	E
Year	Employer	Employee	Expresse Percentage Beginning	of Salary
77 78 79 80 81 82 ES	\$ 8,470,000 9,477,125 11,108,298 11,791,330 12,392,694 12,576,000	<pre>\$ 8,568,248 9,077,825 9,571,764 9,729,912 10,522,389 10,034,634</pre>	9.36% 9.67 10.74 11.14 11.38 10.65	9.47% 9.26 9.26 9.19 9.67 8.50

Deficiency (Excess) In Annual Contribution

	<u>+</u>	<u>G</u>	H	· F	<u>G</u>	<u>H</u>
Year	NC NC Plus Interest Amo	Plus ERISA 40 Year ortization	NC Plus Increasing % of Salary at 3½%	Expre Percenta Beginn		Salary
77 78 79 80 81 82 EST 0017A/6B	\$ 25,078 (86,847) (104,786) 178,166 2,104,112 1,275,121	569,080 499,106 531,624 840,844 2,796,285 2,010,094	<pre>(\$1,798,076) (2,050,597) (2,237,634) (2,042,717) (215,622) (1,188,053) -35-</pre>		.63% .51 .51 .79 2.57 1.70 AB	(1.99%) (2.09) (2.16) (1.93) (.20) (1.01)

HISTORY OF FINANCIAL INFORMATION

ACCRUED AND UNFUNDED LIABILITIES

Year End	Accrued Liability	Assets At Book Value	Funded <u>Ratio</u>	Unfunded Accrued Liability	Payroll	Unfunded Accrued % Payroll
71	\$158,815,569	\$110,423,040	69.5%	\$ 48,392,529	\$ 66,142,320) 73%
72	172,160,657	120,072,655	69,7	52,088,002	69,950,692	2 74
73	197,782,050	128,624,035	65.0	69,158,015	73,108,848	3 95
74	215,636,093	137,709,821	63.9	77,926,272	78,526,728	99
75	242,216,859	151,749,085	62.7	90,467,774	89,276,280) 101
76*	252,410,689	168,219,982	66.6	84,190,707	90,487,008	93
77	277,111,671	186,428,465	67.3	90,683,205	98,029,296	5 93
78	301,135,468	202,643,520	67.3	98,491,948	103,399,152	95
79	323, 368, 034	220,810,778	68.3	102,557,256	105,825,264	97
80	345,364,820	238,242,772	69.0	107,122,048	108,854,496	98
81	367,980,498	254,234,605	69.1	113,745,893	118,054,512	96

SOLVENCY (TERMINATION) TEST

	Retired Liability	Active Membe Salary Deductions	er Total Term. Liab.	Assets At Book Value	Termination Cost (Excess)	Quick Ratio Assets to Term. Liab.
75	\$56,403,573	\$63,162,106	\$119,565,679	\$151,749,085	\$(32,183,406)) 127%
76*	61,271,047	68,189,205	129,460,252	168,219,982	(38,759,730)	130
77	67,977,467	73,608,310	141,585,777	186,428,466	(44,842,689)	132
78	77,603,101	78,072,062	155,675,163	202,643,520	(46,968,357)) 130
79	86,918,802	83,057,007	169,975,809	220,810,778	(50,834,969)	130
80	97,598,923	85,989,360	183, 588, 283	238,242,772	(54,654,489)) 130
81	107,291,048	88,378,748	195,669,796	254,234,605	(58,564,809)) 130

 Change in valuation assumptions
 Quick ratio is defined as assets divided by the termination liability

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Method: The actuarial funding method used is the ENTRY AGE NORMAL METHOD.

This cost method assigns to each year of employment a constant percentage of an employees salary, called the CURRENT SERVICE COST (sometimes referred to as NORMAL COST), sufficient to accumulate the necessary funds to provide for the full prospective costs of the employee's projected retirement pension. The amount of pension must be estimated using various assumptions as to future compensation levels, employee turnover, mortality and pension fund earnings, since the actual pension can only be known at the time of retirement. These are called actuarial assumptions.

It should be emphasized that the actuarial assumptions do not directly affect the cost of the pension plan. Benefits are fixed by statute and will become payable as various members and their dependents satisfy the contingencies covered. The actual cost of the plan can only be determined after all benefits have been paid, and is equal to the total benefits paid, plus total administrative expenses minus total investment income.

The ACCRUED LIABILITY of the fund at any point in time is the accumulated value of all CURRENT SERVICE COSTS which should have been paid at that time for active employees plus the full prospective cost of pensions for all retired employees. The extent that the actual plan ASSETS are less than the ACCRUED LIABILITY is called the UNFUNDED LIABILITY.

An amount of money is required each year to keep the UNFUNDED LIABILITY from increasing if all assumptions are realized. This amount is called INTEREST ONLY on the UNFUNDED LIABILITY.

- The total actuarial contribution required to the fund is equal to the CURRENT SERVICE COSTS plus INTEREST ONLY on the UNFUNDED LIABILITY. This is the funding policy. This minimum method of funding, often referred to as middle-of-the-road method, is the method the fund has tried to follow in the past. It has evolved over the years and seeks to give effect to all interested groups including opinions often expressed by the Civic Federation. No funds are provided for amortization of the UNFUNDED LIABILITY.

Reserves for employee retirement annuities, spouses retirement annuities and death benefit annuities are valued on the entry age normal method. Grouped ages of entry, 22, 27, 32, 37, 42, 47, 52, 57, 62 and over, are used.

The costs for the following items are valued on an annual cost basis. No reserves are set up as these items tend to stabilize on a cash basis.
SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

- 1) Duty Disability Benefits
- 2) Ordinary Disability Benefits
- 3) Children's Annuities
- 4) Refunds including refunds for no wife
- 5) Expense of administration

Reserves are set up for duty, and ordinary disability recipients as if they were in active service.

Actuarial Assumptions:

Mortality:

Active Members, Present and Future Retired Members and Spouses: 1951 GROUP ANNUITY MORTALITY TABLE, male and female. Past experience indicates this table's adequacy. For active lives in 1980, the experience was 157% of expected. The active life experience for 1981 was 147% of expected. The retired life employee 1980 experience was 106% of expected and the spouse experience was 121% of expected. The retired life employee 1981 experience was 125% of expected and the spouse experience was 206% of expected.

Interest: 6% a year, compounded annually. An exhibit details the investment yields the Fund actually realized over the past few years.

Interest earnings over the assumed rate can be used to reduce losses which may result from variations in other cost factors - such as increased costs - resulting from salary increases greater than the assumed rate.

It must be realized that the interest assumption is a long range assumption it must cover a period as long as perhaps 50 years - which would be the period of time, say, that the youngest employee in the fund will work, then retire on pension for the rest of his life. There is no guarantee that the current high interest rates will continue over this period.

<u>Salary Increase</u>: 5% a year, compounded annually. An exhibit details the annual increase in the average salary over the past years which averages greater than 5%.

It should be remembered that pensions are based directly upon salary. If it is believed that the recent pattern will continue in the long range future, the salary scale assumption will need to be increased.

Increased costs would necessarily result with the extent of the increase in cost depending on the extent of the increase in salary over the assumed long range.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Rate of Retirement: The rates of retirement used in this valuation are shown in Exhibit "O" for each age of entrance group into the service and are based on 1973, 1974 and 1975 experience of the Fund adjusted to 1978.

These rates reflect the changing pattern of retirement. For 1979 the actual retirements were heavier than expected, the 1980 experience was 146% of expected. The 1981 experience was 138% of expected.

Rate of Termination: These rates are shown in Exhibit "O" and are based on the experience of the Fund for the years 1973, 1974 and 1975 adjusted to 1978. The rate of withdrawal for 1979 was heavier than expected. The 1980 experience was 263% of expected. The 1981 experience was 211% of expected.

Proportion Married: The scale is shown in Exhibit "O".

Active Membership: It is assumed that the future active membership of the Fund will approximate its present membership, which was made up of 5,765 members.

<u>Age of Spouse</u>: Of a male employee - the spouse is assumed four years younger; of a female employee - the spouse is assumed four years older.

<u>Asset Value</u>: Bonds are amortized value; stocks are at cost, real estate separate accounts at adjusted cost.

Reciprocal Benefits: Active life normal costs and reserves are loaded 1%.

Loss on Tax Levy: 4% overall is assumed for all future years.

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Exhibit "O"

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SERVICE TABLE FUNCTIONS

Rate of Retirement

	- 7	
Ma	γI	ρ
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Attained	Age	at Entr							
Age	22	27	32	37	42	47	52	57	62
55	.065	.010	.007	.008	.002	,			
56	.135	.065	.008	.010	.003				
57	.187	.115	.010	.015	.005	.007			
58	.205	.146	.016	.020	.011	.009			
59	.219	.157	.035	.028	.021	.011			
60	.229	.160	.150	.046	.033	.015	.021	.017	
61	.236	.172	.193	.074	.055	.022	.037	.028	
62	.240	.210	.211	.115	.097	.044	.084	.042	
63	.245	.321	.225	.140	.116	.106	.134	.064	.125
64	.255	.336	.249	.216	.136	.174	.162	.081	.145
65	.324	.345	•334	.319	.152	.200	.178	.113	.167
66	.354	.350	.348	.348	.166	.217	.193	.130	.201
67	.363	.354	.356	.358	.180	.231	.205	.139	. 227
68	.370	.359	.362	.364	.194	.246	.220	.146	.275
69	.374	.363	.367	.367	.208	.259	.232	.152	.290
70	.377	.365	.370	.371	.225	.270	.243	.157	.300
71	.379	.368	.373	.374	.240	.275	.250	.162	.309
72	.381	.371	.375	.377	.255	.280	.260	.167	.315
73	.383	.373	.377	.379	.265	.285	.271	.172	.321
74	.500	.500	.500	.500	.500	.500	.500	.500	.500
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Female 55	.028	.025	.021	.019	.013				
	.028	.025	.021	.019	.015				
56 57	.038	.055	.023	.023	.021	.006			
58	.044	.052	.024	.020	.021	.000			
58	.068	.073	.027	.037	.034	.005			
60	.080	.085	.044	.045	.043	.023	.018	.019	
61	.000	.093	.098	.053	.056	.032	.027	.030	
62	.110	.098	.172	.060	.077	.047	.045	.043	
63	.120	.106	.193	.071	.095	.062	.070	.066	.070
64	.136	.123	.204	.083	.114	.100	.135	.100	.090
65	.154	.180	.213	.101	.136	.160	.163	.145	.153
66	.168	.221	.218	.141	.163	.173	.176	.172	.163
67	.176	.236	.228	.190	.183	.193	.182	.186	.168
68	.184	.246	.238	.228	.200	.204	.184	.194	.171
69	.189	.254	.259	.237	.214	.214	.188	.201	.174
70	.192	.258	.292	.248	.230	.221	.195	.207	.175
70	.194	.261	.307	.256	.243	.227	.211	.212	.177
72	.195	.264	.316	.261	.254	.233	.224	.216	.179
73	.196	.265	.322	.266	.271	.237	.240	.220	.181
74	.500	.500	.500	.500	.500	.500	.500	.500	.500
75	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

P-LAB

Exhibit "O"

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SERVICE TABLE FUNCTIONS

Rates of Termination

Male									
Attained Age	Age 	at Entr _ <u>27</u> _	ance <u>32</u>	37	42		_52_	57	62
22 27 32 37 42 47 52 57 62 67 72	.223 .116 .050 .021 .012 .005	.262 .100 .046 .025 .012 .005	.219 .098 .022 .010 .005	.221 .088 .034 .017	.176 .080 .028	.142 .076	.120 .046	.112	.148
Female 22 27 32 37 42 47 52 57 62 67 72	.140 .108 .052 .022 .008	.174 .085 .038 .022 .013 .005	.108 .062 .033 .017 .009	.074 .051 .028 .015	.054 .033 .020	.063 .033	.054 .036	.056	.027

Attained Age	Male Death Rate 1951 GA Per 1,000	Female Death Rate 1951 GA Per 1,000	Proportion Married %
22	.6	.4	. 81
27	•8	.5	81
32	1.1	.7	- 81
37	1.5	1.0	80
42	2.4	1.5	83
47	4.5	2.3	83
52	7.9	3.5	84
57	12.2	5.6	82
62	18.3	9.8	80
67	30.1	16.5	78
70	39.3	23.1	74
75	62.4	44.3	74

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P-LAB

ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

	EMPLOYEES	PENSION LAW	S COMMISSION IMPACT ST	ATEMENT
Name of Retirement System: Laborers	· ·			
Total Annual Payroll: \$118,054,512		· · ·	Bill N	0
Total Number of Active Employees: 5,7 PRESENT FINANCIAL CONDITION AS OF VA			n n	
Valuation Date 12-31-81		IT PLAN	PROPOSED LEGISLATION	PLAN IF PROPOSED LEGISLATION ENACTED
(1) Accrued Pension Liability	\$367,980,498			
(2) Present Assets	\$254,234,605			
(3) Unfunded Liability = (1)-(2)	\$113,745,893			
(4) Funded Ratio = (2) ÷ (1)	69.09%			
DIRECTION OF FINANCIAL CONDITION: FO	R YEAR BEGINNING	ON VALUATION DATE		
(5) Minimum Recommended Annual	PRESENT PLAN	PER % OF ACTIVE SALARY	PROPOSED LEGISLATION PER % OF ACTIVE SALARY	PLAN IF PROPOSED PER % OF LEGISLATION ENACTED ACTIVE SALARY
Contribution	\$23,885,754	\$4143 20.23		
1982 Tax Levy \$13,100,000 Less 4% (6) Estimated Annual Employer Contribution	\$12,576,000	\$2181 10.65		
(7) Estimated Annual Employee Contribution	\$10,034,634	\$1741 8.50		
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 1,275,121	\$ 221 1.08		
(9) Source of Funding Revenues: (10) Remarks				IS THE ANNUAL COST FOR PROPOSED LEGISLATION

(For explanation of each line item see back of this statement

EXPLANATION

The Impact-Statement gives in lines 1 through 8 financial information for the Retirement System under three headings:

I. Financial condition under the current provisions of the Fund.

II. Cost of proposed legislation.

. .

III. Financial condition if proposed legislation is enacted into law.

Lines 1 through 4 give information on the System's financial position as of the stated valuation date.

Lines 5 through 9 give information for the System's annual operation for the year beginning on the valuation date.

- 1) ACCRUED PENSION LIABILITY Represents the total amount of money necessary to pay all present pensioners and beneficiaries for the remainder of their lifetime - plus an amount for active members such that when added to future contributions will provide an amount sufficient to pay all pensions and benefits for their lifetime when they retire.
- PRESENT ASSETS Assets of the Fund bonds valued at amortized value stocks at cost other assets at cost or market.
- 3) UNFUNDED LIABILITY = (1) (2) Represents the excess of accrued pension liabilities over assets.
- 4) FUNDED RATIO = (2) + (1) Represents the ratio of assets to accrued pension liabilities. It is sometimes called "security ratio". The higher the ratio the greater the extent the pension promises are backed by assets.
- 5) MINIMUM RECOMMENDED ANNUAL CONTRIBUTION The Commission recommends that at least a minimum annual contribution be made to a System.

This minimum method provides for the sum of two amounts:

(1) An amount each year expressed as a constant percentage of an employee's salary, called Current Service Cost sufficient to accumulate the necessary funds to provide for the full future costs of the employee's projected retirement pension. Plus,

(2) An amount to keep the Unfunded Liability from increasing if all assumptions are realized. This amount is called interest Only on the Unfunded Liability.

The total of items one and two above gives the Commission recommended annual contribution - which is line 5 - shown on the impact Statement.

The Accrued Pension Liability - referred to in line 1 - at any point in time is the accumulated value of all Current Service Costs which should have been paid to that time for active employees - plus the full prospective costs of pensions for all retired employees and beneficiaries.

The extent that the actual Present Assets - referred to in line 2 - are less than the Accrued Pension Liability - in line 1 - is called the Unfunded Liability - and is shown in line 3.

This minimum recommended annual contribution is greater than the benefit payout for the year. It recognizes the increasing liability for active members who could retire in the future and takes into consideration annual future investment income, employee and employer annual contributions.

Minimum Recommended Annual Contribution for proposed legislation (Column II - Line 5) is Current Service Cost plus amortization of the increase in Unfunded Liability (Column II - Line 3) over 30 years.

- 6) ESTIMATED ANNUAL EMPLOYER CONTRIBUTION The amount contributed by the governmental employer.
- 7) ESTIMATED ANNUAL EMPLOYEE CONTRIBUTION The amount of payroll deductions and other special payments to be made by employees.
- 8) DEFICIENCY IN ANNUAL CONTRIBUTION = (5) (6) (7) Represents the additional amount required by the Fund per year to meet the minimum recommended annual contribution. The long range financial soundness of the pension plan depends upon eliminating this deficiency. Any delay in eliminating this deficiency will increase the Minimum Recommended Annual Contribution in future years.
- 9) SOURCE OF FUNDING REVENUES Refers to the manner in which the cost of a proposed amendment will be financed.

	OMB No. 1545-0208
Form 5500-G Annual Return/Report of Employee Benefit (For Government and Certain Church Plans	Plan
Department of the TreasuryThis form is required to be filed under section 6058Internal Revenue Servicethe Internal Revenue Code, referred to as the Code	
	nding December 31, 1981
Please type this form or complete in ink and file the original. For Paperwork Re	
This return/report is: (i) the return/report filed for the plan's first plan year; (ii) a final return/report filed for the plan.	· · · · · · · · · · · · · · · · · · ·
 If you have been granted an extension of time to file this form, you must attach a copy If any item does not apply, enter "N/A." 	of the approved extension to this form.
1 (a) Name of plan sponsor (employer if for a single employer plan) City of Chicago	1 (b) Employer identification number 36 6005820
Address (number and street) 121 North LaSalle Street	1 (c) Business code number 9904
City or town, State and ZIP code Chicago, Illinois 60601	1 (d) Telephone number of sponsor (312) 744-4000
2 (a) Name of plan administrator (if other than plan sponsor) Board of Trustees, LaVerne Wilson - Executive Secretary	2 (b) Administrator's employer identification no. 36 6001591
Address (number and street) 221 North LaSalle Street	2 (c) Telephone number of administrator (312) 236-2065
City or town, State and ZIP code Chicago, Illinois 60601	
 3 Name, address and identification number of plan sponsor and/or plan administrator as filed for this plan if not the same as in 1 or 2 above: (a) Sponsor ▶ The Same 	
(b) Administrator ▶ The Same	······
 4 Type of plan entity (check only one box): (a) X Single employer plan (b) Multiple employer plan 	
5 (a) (i) Name of plan > Laborers' And Retirement Board	5 (b) Effective date of plan
Employees' Annuity & Benefit	July 1, 1935
Fund of Chicago (ii) Check if changed since last return/report	5 (c) Enter three digit plan number ▶ 0 0 3
 6 Type of plan: (a) □ Defined benefit (b) □ Defined contribution (c) ☑ Other (specify) ➤ Defined Benefit with Defined Contribution 	on Minimum
 7 (a) Active participants as of the end of the plan year: (i) Fully vested . in. ER Contribution (20 + ys or age 60+). (ii) Partially vested . 10 to 20 ys and under age 60 (iii) Nonvested	eficiaries)
(ii) End of plan year	<u> </u>
 (a) Was this plan terminated during this plan year or any earlier plan year? (b) If "Yes," were all trust assets distributed to participants or beneficiaries or transfer 	· · · · · · · · · · · · ×
Under penalties of perjury and other penalties set forth in the instructions, I declare that I have ex ing ``edules and statements, and to the best of my knowledge and belief it is true, correct, and complete	amined this return/report, including accompany.
Date ▶ Signature of employer/plan sponsor ▶	
Date ► Signature of plan administrator ►	

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Form !	5500-G (1981)		(Page 2
9 (a	a) In this plan year, was this plan merged or consolidated into anoth to another plan?			<u> ×</u>
	If "Yes," identify other plan(s):	(c) Employer identification	on number(s)	(d) Plan number(s)
(b	b) Name of plan(s) ⊳			
10 In	Indicate funding arrangement:	·····		<u> </u>
	a) [X] Trust			
(b			Ę	
(c)	c) 🗌 Combination			
(d	I) 📋 Other (specify) 🔈			
11 I ni	formation about employees of the employer at end of the plan year:			
(a)) Total number of employees			5,850
(b)	b) Number of employees excluded under the plan because of:			
	(i) Minimum age or years of service		T D D D	
	(ii) Employees on whose behalf retirement benefits were the sul	ject of collective bargainin	ng	······
	(iii) Nonresident aliens who receive no earned income from Uni	ted States sources		
	(iv) Total excluded: Add (i), (ii) and (iii)	, , , , , , , , , , , , ,		0
(c)) Total number of employees not excluded: Subtract (b)(iv) from (5,850
(d)				
(e)				5,850
(f)	, see the second s		• • • •	5,850
<u>(g)</u>) Employees participating: Subtract (f) from (e)			5,000

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Exhibit "R"

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

PLAN SUMMARY

PARTICIPANT:

Person employed by the City in a position classified by the Civil Service Commission of the employer as labor service of the employer; any person employed by the Board; any person employed by the Retirement Board of any other Annuity and Benefit Fund which is in operation for the employer.

SERVICE:

For all purposes except formula minimum annuity and ordinary disability credit, service in four months in any calendar year constitutes one year of service credit. No more than one year of service is allowed during any calendar year.

RETIREMENT ANNUITY:

Accumulation Annuity: Age 55, 10 years service (entire sum accumulated from deductions plus 1/10 City contributions for each year after 10). Full City contributions are added for age 60 and over regardless of service. This annuity is known as the money purchase plan and does not increase after age 70 nor does it apply after age 65 if participant has 20 years service.

Formula Minimum Annuity: Age 55, 20 years service; 1.67% for the first 10 years, 1.90% for the second 10 years, 2.1% for the third 10 years, 2.3% for all service over 30 years times the final average salary (highest 4 consecutive years within the last 10 years). Under age 60 the annuity is reduced by a percentage equal to 1/2 of 1% for each month and fraction thereof that the employee is under age 60. Maximum annuity is 75% of highest average monthly salary.

Age 65, 15 years service; 1% of final average salary for each year of service plus the sum of \$25.00 per year for each year of service.

Service during 6 or more months in any year constitutes a year of service credit and service of less than 6 months and at least 1 month in any year constitutes a half a year of service credit for formula minimum annuity.

Automatic Increase In Annuity: Retirement at age 60--2% of annuity starting January of the year following the year in which the first anniversary of retirement occurs. If retirement is before age 60, increases begin with January of the year immediately following the year in which he attains the age of 60 years. Increases apply only to life annuities.

PLAN SUMMARY

SPOUSE'S ANNUITY:

Payable until remarriage or termination of temporary annuity.

Death In Service (Non-Duty): Money Purchase based on total salary deductions and City contributions for both employee and spouse, limited to amount payable at employee's age 65 if deceased employee has less than 20 years service and is under age 60. Maximum \$400.00 per month.

Formula Minimum Annuity if deceased employee is age 60 or over and has at least 20 years service. Widow's annuity is 1/2 of annuity that would have been payable to employee discounted 1/2 of 1% for each month spouse is under age 60. Maximum \$400.00 per month.

Death After Retirement: Fixed at date of retirement. Annuity is determined to be based on money purchase plan or formula minimum annuity depending on rules in effect at the date participant retires.

CHILDREN'S ANNUITY:

Payable upon the death of City employee, either active or retired.

Child must be unmarried, under age 18, born before participant is age 65 and before his separation from City service or legally adopted at least one year before child's annuity becomes payable and prior to the attainment of age 55 by the adopting parent. Annuity is \$80.00 per month while a surviving parent is alive and \$120.00 per month if neither parent is alive. Except for duty death deceased employee must have had 4 years of service and at least 2 years from latest re-entrance if he had previously resigned from service.

FAMILY MAXIMUM:

Non-duty death: 60% of final monthly salary: Duty death: 70% of final monthly salary.

DISABILITIES:

Duty Disability Benefits: Any employee under age 65, who becomes disabled as the result of injury incurred in the performance of any act of duty, shall

PLAN SUMMARY

have a right to receive duty disability benefit in the amount of 75% of salary at date of injury plus \$10.00 a month for each unmarried child (the issue of the employee) less than age 18. Child's duty disability benefit is limited to 15% of the employee's salary as of date of injury.

If the disability has resulted from any mental disorder, physical defect or disease which existed at the time such injury was sustained, the duty disability benefit shall be 50% of salary at date of injury. Disablement because of heart attacks, strokes, or any disablement due to heart disease shall not be considered to be the result of an accident suffered in the performance of duty.

Duty disability is payable to age 65 and the City contributes salary deductions for annuity purposes.

Ordinary Disability Benefit: Disability other than in performance of an act of duty...50% of salary less the sum ordinarily deducted from salary for annuity purposes, as of last day worked payable until age 65 and limited to a maximum of 1/4 service or 5 years, whichever is less. The City contributes the deductions for pension purposes. Service for this ordinary disability is actual service -- one day of service is given for each day paid, exclusive of any overtime payments and any previous ordinary disability periods.

REFUNDS:

<u>To Employee</u>: Upon separation from service -- deductions plus interest if employee is under age 55. If over age 55 employee is eligible for refund if he has less than 10 years of service or would be eligible for temporary rather than life annuity. Employee forfeits all rights.

Spouse's annuity deductions -- payable to employee if not married when he retires or at age 65.

<u>To Spouse</u>: In lieu of annuity if annuity would be temporary rather than life and spouse so chooses.

<u>Remaining Amounts</u>: Excess over total annuity payments may be paid to designated beneficiary or children, estate or heirs.

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PLAN SUMMARY

DEDUCTIONS AND CONTRIBUTIONS:

	Deductions	Contributions *
Employee	6-1/2%	6%
Spouse	1-1/2% **	2% **
Annuity Increase	1/2%	
Total:	8-1/2%	8%

****** Only to employee age 65.

FINANCING: *

The City shall levy a tax annually equal to the total amount of contributions in the 2 years prior multiplied by 1.370 for 1978 and each year thereafter.