LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND ACTUARIAL STATEMENT AS OF DECEMBER 31, 1971

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TELEPHONE 782-1335

October 26, 1972

Page

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 Actuarial Statement of the Laborers' and Retirement Board Employees' Annuity and Benefit Fund as of December 31, 1971, appended hereto, consisting of the exhibits as stated hereinafter, is to the best of my knowledge and belief a true and correct statement of the affairs and conditions of said Fund for the calendar year 1971.

Exhibit Title

A	Assets and Liabilities	
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This statement has been prepared from the books of the Fund as substantiated by our letters of recommendation to the Retirement Board and by the data processing entries and closing journal entries prepared by our office.

The method of valuation used is based on the actuarial assumptions and methods shown on page eleven of this report. The attempt is made to give effect to realistic valuation factors affecting costs. The accounting procedure is outlined in the Article governing the operations of the Fund.

On this basis of valuation the unfunded liability or obligation for service rendered prior to valuation date, December 31, 1971, amounted to \$48,392,528.59. This is an increase of \$25,689,212.20 over the unfunded liability as of December 31, 1971.

The net increase in unfunded liability resulted primarily from:

Page Two.

1) An increase due to the 1971 amendments increasing the annuity formulas. Current costs were increasing about 15%. Unfunded past service costs resulting from the amendments accounted for the greater part of the increase in funded liability, or between approximately seventy to eighty percent of the increase.

2) An increase in the salary scale to 3% from 1-3/4% used in the valuation which increased costs were offset to a degree by an increase in the valuation rate of interest assumption to 4-1/2% from 4%.

3) A decrease in the book value of bonds at date of sale of \$823,812.50. As the proceeds were invested in bonds with greater rates of coupons the Fund's income will materially increase over the income that would have been received has the bonds sold been retained in the Fund.

4) An increase in salaries over the three percent per year assumed in the new salary scale.

The sum of \$839,111.84 was transferred to accounts payable representing accounts that had been inactive for many years.

The service tables indicate rates of retirement such that for male employees about one-half of the employees retire before age sixty-five and for female employees about one-half before age sixty-four.

If the average age for retirement decreases in the future from these ages, the costs will be increased.

The salary scale used in this valuation is based on the assumption that salaries will increase each year in the future due to general salary increases as well as promotional increases for as long as an employee stays in the service at the rate of 3% a year.

Actual general salary increases in the past have been at a rate substantially greater than 3%.

An operating factor which will decrease the unfunded liability will be the extent to which the Fund's assets yield annual earnings greater than the 4-1/2% assumption used in the cost computations, all other cost assumptions remaining the same.

The yield on the Fund's assets for the year was 5.0% if the decrease in book value on date of sale is not used in determining the rate. If such is used the rate would be about 4.14%.

The use of a 4-1/2% interest rate and a 3% salary scale for the valuation as of December 31, 1971 gives a fair valuation for the long range effects of these two highly important cost factors, in my opinion.

A 3% salary scale has been chosen as an increasing number of economists are now of the opinion that future salaries will increase at least 3% a year. Some

Page Three.

believe 5% a year is an appropriate long-range rate. The recently enacted 1972 Social Security Amendments allow for automatic increases in pensions and salary bases as the cost of living increases. Social Security studies, I have been informed, are based on future salary earnings of 5%.

Greater fund investment earnings in the future over a 4-1/2% rate will reduce increased costs resulting from salary increases over 3% compounded per year.

Greater increases in salaries than the 3% rate used, with all other assumptions remaining the same, will result in increases in normal costs at the time such increases are granted with the extent of the increases depending on the extent of the increases over 3%.

On the basis of the actuarial assumptions and methods set forth on page eleven I estimate that the tax levy multiple of 1.37 currently in the law, such to become effective in the year 1978 and thereafter, will be sufficient to keep the unfunded liability from substantially increasing under the cost assumptions set forth in this report.

Future analysis of the Fund's operating experience will indicate changes necessary in the Fund's method of financing which can be made in time to meet all future Fund obligations.

Respectfully submitted,

LABORERS' AND RETIREMENT BOARD

EMPLOYEES' ANNUITY AND

BENEFIT FUND

ACTUARIAL

BALANCE SHEET

AS OF

DECEMBER 31, 1971

2

Exhibit "A" Page 1.

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND

ACTUARIAL BALANCE SHEET

ASSETS

AS OF DECEMBER 31, 1971

CASH ON :	DEPOSIT
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\$ 510,755.40

ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous from Employees	\$ 496,901.41 91,426.84	
Total Accounts Receivable	588,328.25	• .
INTEREST RECEIVABLE: Accrued Interest on Bonds	1,181,678.58	
INVESTMENTS: Bonds - Par Value Bonds - Premiums and Discounts Common Stocks	\$106,139,360.00 (2,313,262.46) 614,285.31	
Total Investments	104,440,382.85	
TAXES RECEIVABLE - (Exhibit F, Page 10) City:		1999 - 1997
Uncollected Taxes Reserve for Loss and Cost of Collection Net Taxes Receivable Park District:	\$ 8,552,965.80 <u>3,768,267.00</u> 4,784,698.80	
Uncollected Taxes Reserve for Loss and Cost of Collection Net Taxes Receivable	\$ 44,969.47 24,149.46 20,820.01	
GROSS LEDGER ASSETS	· · · · · · · · · · · · · · · · · · ·	\$111,526,663.89
LESS - ACCOUNTS PAYABLE: Miscellaneous to Employees Military Service Deductions -	\$ 1,102,065.69	
Excess Total	<u> 1,557.71</u>	1,103,623.40

NET LEDGER ASSETS DECEMBER 31, 1971

\$110,423,040.49

ACTUARIAL BALANCE SHEET

LIABILITIES AND FUND BALANCE

AS OF DECEMBER 31, 1971

FOR SERVICE AFTER JULY 1, 1935: LIABILITIES RESERVES: ANNUITY PAYMENT FUND ACCOUNT: Employee Annuitants \$10,041,986.38 Employee Annuities Fixed 4,697,919.96 Widow Annuitants 5,081,546.07 Wives' Annuities Fixed 2,442,341.15 \$22,263,793.56 Total Annuity Payment Fund SALARY DEDUCTION FUND ACCOUNT: \$34,729,652.83 Employees Wives of Employees 6,495,255.41 Total Salary Deduction Fund 41,224,908.24 CITY CONTRIBUTIONS FUND ACCOUNT: Employees \$35,362,972.92 Wives of Employees 10,509,169.48 Supplemental Annuities 4,746.25 Total City Contributions Fund 45,876,888,65 **OTHER RESERVES:** \$ **3,339,569.0**3 Annuity Payment Fund Account Child's Annuity Fund Account Duty Disability Fund Account 0 Expense of Administration Account 0 Investments & Interest Fund Acct. 0 Ordinary Disability Fund Account 0 Total Other Reserves 3,339,569.03 TOTAL LIABILITY AND SURPLUS RESERVES \$112,705,159.48 FOR SERVICE AFTER JULY 1, 1935 150,855.74 SUPPLEMENTARY PAYMENT RESERVE FOR SERVICE PRIOR TO JULY 1, 1935 AND MINIMUM ANNUITIES: PRIOR SERVICE FUND ACCOUNT: \$33,280,215.43 Estimated Excess Liability (1) Employee Annuitants 9,523,068.99 73,806.84 Employee Annuities Fixed Widow Annuitants 720,464.14 Wives' Annuities Fixed 554,976.11 22,010.85 Contributions for Employees Contributions for Wives 9,984.29 Salary Deductions for 2% Annuity 775.027.21 Total Prior Service Fund \$45,959,553.86 DEDUCT: Obligations of Fund for Prior Service Fund Liabilities, Includes Age and Service (\$955,821.75) (48.392.528.59) (2, 432, 974.73)TOTAL NET LIABILITIES AND FUND BALANCES \$110,423,040.49 DECEMBER 31, 1971

(1) For minimum annuity provisions and for other reserves.

LABORERS' AND RETIREMENT BOARD

EMPLOYEES' ANNUITY AND

BENEFIT FUND

INCOME

YEAR 1971

INCOME

And

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EXPENDITURES

Exhibit "B" Page 3.

INCOME	

<u>YEAR 1971</u>

SALARY DEDUCTIONS: Employees Wives of Employees 2% Retirement Annuity Total Salary Deductions	\$ 4,034,364.70 852,167.20 336,186.01	\$ 5 ,2 22,717.91	
PAYMENTS BY EMPLOYEES FOR TEMPORARY SERVICE AND REFUND REPAYMENTS		32,210.57	:
CITY CONTRIBUTIONS (\$4,223,843.73) PARK CONTRIBUTIONS (\$ 17,875.00) Employee Annuities Wife Annuities Child Annuities Duty Disability Ordinary Disability Expense of Administration Interest on Income Deficiency in Current Requirements Total Contributions	\$ 3,859,318.91 1,146,282.60 110,802.12 227,141.66 738,170.50 204,215.01 86,814.35 (2,130,926.42)	4,241,818.73	
INCOME ON INVESTMENTS: Bond Interest (Note #1)		4,145,156.22	
TOTAL INCOME YEAR 1971			\$13,641,903.43
TOTAL EXPENDITURES YEAR 1971			6,829,673.51
TOTAL EXCESS INCOME OVER EXPENDITURES			\$ 6,812,229.92
ADD: INCREASE IN NET TAXES RECEIVABI	E FOR PRIOR YEARS		59,798.32
•			

NET EXCESS INCOME OVER EXPENDITURES YEAR 1971

Note #1 - This amount includes an amount of \$823,812.50 deducted from bond interest which represents the difference between the book value and proceeds from sales of bonds. The proceeds were invested in bonds with greater rates of coupons which will result in material gains to the Fund in the future.

\$ 6,872,028.24

EXPENDITURES

<u>YEAR 1971</u>

BENEFITS PAID: Annuities - Employees Annuities - Widows Compensation Widows' Annuities Child's Annuities Duty Disability Benefits Ordinary Disability Benefits Supplementary Payment Annuities Total Benefits Paid Less: Reimbursement Reciprocal Account	\$2,820,833.56 699,474.66 1,995.56 110,802.12 225,852.41 737,242.64 77,057.28	\$4,673,258.23 5,802.43	
Net Annuities Paid			\$4,667,455.80
EXPENSE OF ADMINISTRATION: Salaries Legal Services Audit Investment Counsel Medical Services Actuarial Department Printing Telephone Rent Premiums on Surety Bonds Office Supplies and Miscellaneous Office Equipment and Repairs Blue Cross and Blue Shield Total Expense of Administration	<pre>\$ 65,348.83 4,200.00 3,500.00 8,050.00 84,954.08 5,269.33 956.10 16,086.82 214.00 3,989.16 5,183.51 2,908.18</pre>	\$ 204,215.01	
INACTIVE ACCOUNTS TRANSFERRED TO PAYABLES	\$ 839,111.84	· ·	
REFUNDS	1,118,890.86	1,958,002.70	2,162,217.71
			46 820 672 51

TOTAL EXPENDITURES YEAR 1971

\$6,829,673.51

LABORERS' AND RETIREMENT BOARD

EMPLOYEES' ANNUITY AND

BENEFIT FUND

GAIN AND LOSS

<u>YEAR 1971</u>

GAINS

LOSSES

AND

J

GAIN AND LOSS

YEAR 1971

Nov So

\$(25,689,212.20)

OTHER RESERVE BALANCES AS OF DECEMBER 31, 1971 Annuity Payment Fund Expense Fund Investment and Interest Fund Ordinary Disability Fund Prior Service Annuity Fund Total	\$ _(48,392	0 0 0 528.59)	\$(48,392,528.59)
SURPLUS BALANCES AS OF JANUARY 1, 1971 Annuity Payment Fund Expense Fund Investment and Interest Fund Ordinary Disability Fund Prior Service Annuity Fund	\$ (22 , 703	0 0 0 ,316.39)	
Total			(22,703,316.39)

NET LOSS YEAR 1971

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Exhibit "C" Page 5.

ESTIMATED ANALYSIS OF GAIN AND LOSS

YEAR 1971

GAIN BECAUSE OF ANNUITY AND BENEFIT PURPOSES:	P.S.A.F. and A.P.F.
Mortality Employee Annuitants* Mortality Employees' Annuities Fixed Mortality Widow Annuitants Mortality Wives' Annuities Fixed Excess Contributions on Refunds - Age and Service Excess Contributions on Transfers to Accounts Payable Excess Contributions When Annuities Are Fixed Refunds After Fixed Salary Deductions - After Fixed	$ \begin{array}{c} \$(926,960.11) \\ (45,686.67) \\ 14,737.94 \\ (143,736.22) \\ 1,105,162.40 \\ 958,851.64 \\ 356,945.32 \\ (67,068.50) \\ 213,652.15 \end{array} $
Total Gain Because of Safeguards	\$ 1,465,897.95
GAIN IN INVESTMENT AND INTEREST FUND ACCOUNT AFTER BOOKKEEPING ADJ. (\$823,812.50)	771,095.04
TRANSFER TO SUPPLEMENTARY PAYMENT RESERVE	(130,000.00)
TAX REQUIREMENT PURPOSES: Interest on Deferred Obligations \$(1,014,155.79) City Current Contribution Deficiency Age Service (2,130,926.42)	
Total Tax Requirement Purposes	(3,145,082.21)
 ADD: INCREASE in Present Value Excess Minimum Annuity*** ADD: INCREASE in Annuity Payment Fund Other Reserve** ADD: INCREASE in Taxes Receivable Prior Years 	(24,376,583,15) (334,338,15) 59,798,32
TOTAL NET LOSS YEAR 1971	<u>\$(.25, 689, 212, 20</u>)

* Based on American Experience 4% Tables.

** The changed method of valuation described in the accompanying letter results in setting up in the Annuity Payment Fund the Other Reserve Account.

*** Increase due primarily to 1971 amendments changing annuity formulas. Increase in salaries resulted in a small part of the increase. Decrease in book value of bonds at date of sale (\$823,812.50).

LABORERS' AND RETIREMENT BOARD

EMPLOYEES' ANNUITY AND

BENEFIT FUND

COMPARATIVE ANALYSIS

<u>YEAR 1971</u>

ASSETS

AND

LIABILITIES

Exhibit "D"

Page 7.

LABORERS' AND RETIREMENT BOARD EMPLOYEES ANNUITY AND BENEFIT FUND

COMPARATIVE ANALYSIS

ASSETS

·	Jan. 1, 1971	Dec. 31, 1971	Increase or (Decrease)
CASH ON DEPOSIT	<u>\$ 160,429.43</u>	<u>\$ </u>	<u>\$350,325.97</u>
ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous from Employees	\$ 523,054.64 93,626.11	\$ 496,901.41 91,426.84	\$(26,153.23) _(2,199.27)
Total Accounts Receivable	<u>\$ 616,680.75</u>	<u>\$ 588,328.25</u>	<u>\$(</u>)
INTEREST RECEIVABLE: Accrued Interest on Bonds Accrued Interest on Tax Anticipation Warrants Due Bond Interest Receivable	\$ 1,025,359.12 0 0	\$ 1,181,678.58 0 0	\$ 156,319.46 0 0
Total Interest Receivable	<u>\$ 1,025,359.12</u>	<u>\$ 1,181,678.58</u>	<u>\$ 156,319.46</u>
INVESTMENTS: BondsPar Value BondsPremiums and Discounts Total Investments	\$ 99,354,593.44 (1,705,431.19) <u>\$ 97,649,162.25</u>	\$106,753,645.31 (2,313,262.46) \$104,440,382.85	\$ 7,399,051.87 (607,831.27) <u>\$ 6,791,220.60</u>
TAXES RECEIVABLE: City: Uncollected Taxes Reserve for Loss and Cost of Collection	\$ 8,097,685.67 3,632,156.00	\$ 8,552,965.80 3,768,267.00	\$ 455,280.13
Net Taxes Receivable	\$ 4,465,529.67	\$ 4,784,698.80	<u>\$ 319,169.13</u>
Park District: Uncollected Taxes Reserve for Loss and Cost of Collection	\$ 42,348.46 22,301.15	\$ 45,365.47 24,545.46	\$ 3,017.01 2,244.31
Net Taxes Receivable	\$ 20,047.31	\$ 20,820.01	\$ 772.70
GROSS LEDGER ASSETS	<u>\$103,937,208.53</u>	<u>\$111,526,663.89</u>	<u>\$ 7,589,455.36</u>
LESSACCOUNTS PAYABLE: Miscellaneous to Employees Military Service Deductions		\$ 1,102,065.69	
Excess from Refunds Total Accounts Payable	<u>1,557.71</u> <u>\$386,196.28</u>	1,557.71 \$ 1,103,623.40	0 <u>\$717,427.12</u>
	•		•

NET LEDGER ASSETS

\$103,551,012.25 \$110,423,040.49 \$ 6,872,028.24

Exhibit "D" Page 8.

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND

COMPARATIVE ANALYSIS

LIABILITIES AND FUND BALANCES

	N.		
	Jan. 1, 1971	Dec. 31, 1971	Increase or (Decrease)
FOR SERVICES AFTER JULY 1, 1935: LIABILITY RESERVES: ANNUITY PAYMENT FUND ACCOUNT:			
Employee Annuities Employees' Annuities Fixed Widow Annuitants	\$ 9,275,818.07 3,876,038.16 4,754,221.36	\$ 10,041,986.38 4,697,919.96 5,081,546.07	\$ 766,168.31 821,881.80 327,324.71
Wives' Annuities Fixed	2,128,794.97	2,442,341.15	313,546.18
Total Annuity Payment Fund	<u>\$ 20,034,872.56</u>	<u>\$ 22,263,793.56</u>	<u>\$ 2,228,921.00</u>
SALARY DEDUCTION FUND ACCOUNT: Employees Wives of Employees	\$ 32,870,485.02 5,977,103.19	\$ 34,729,652.83 6,495,255.41	\$ 1,859,167.81 518,152.22
Total Salary Deduction Fund	\$ 38,847,588.21	\$ 41,224,908.24	\$ 2,377,320.03
CITY CONTRIBUTION FUND ACCOUNT: Employees Wives of Employees Supplemental Annuities	\$ 33,578,075.84 9,943,490.65 6,517.43	\$ 35,362,972.92 10,509,169.48 4,746.25	\$ 1,784,897.08 565,678.83 (1,771.18)
Total City Contribution Fund	<u>\$ 43,528,083.92</u>	<u>\$ 45,876,888.65</u>	\$ 2,348,804.73
OTHER RESERVES: Annuity Payment Fund Account Child's Annuity Fund Account Duty Disability Fund Account	\$ 3 ,005,230. 88 0	\$ 3,339,569.0 3	\$ 334,338.15 0
Investment and Interest Account Expense of Administration Account Ordinary Disability Fund Account	0 0 0	0 0 0	0 0 0
Total Other Reserves	\$ 3,005,230.88	<u>\$ 3,339,569.03</u>	<u>\$ 334,338.15</u>
TOTAL LIABILITY AND OTHER RESERVES FOR SERVICE AFTER JULY 1, 1935	<u>\$105,415,775.57</u>	<u>\$112,705,159.48</u>	<u>\$ 7,289,383.91</u>
SUPPLEMENTARY RESERVE	<u>\$ 97,913.02</u> ;	<u>\$ 150,855.74</u>	<u>\$ 52,942.72</u>
PRIOR SERVICE FUND ACCOUNT: Estimated Excess Minimum Annuity	¢ 0 107 000 00		A 07 450 006 11
Provision (1) Employee Annuitants Employees' Annuities Fixed Widow Annuitants Wives' Annuities Fixed	\$ 9,427,289.32 8,484,509.39 59,998.08 725,560.16	\$ 33,280,215.43 9,523,068.99 73,806.84 720,464.14	\$ 23,852,926.11 1,038,559.60 13,808.76 (5,096.02)_ 67,893.27
Contributions for Employees Contributions for Wives Salary Deductions for 2% Annuity	487,082.84 39,452.27 18,346.81 1,498,401.18	554,976.11 22,010.85 9,984.29 1,775,027.21	(17,441.42) (8,362.52) 276,626.03
Total Prior Service Fund DEDUCT: (PER CONTRA): Obligations of City for Prior	<u>\$ 20,740,640.05</u>	<u>\$ 45,959,553.86</u>	<u>\$ 25,218,913.81</u>
Service Credits NET LIABILITIES FOR SERVICE	<u>\$(22,703,316.39</u>)	\$(48,392,528.59)	<u>\$(25,689,212.20</u>)
PRIOR TO JULY 1, 1935 TOTAL LIABILITIES AND FUND BALANCES	<u>\$(1,962,676.34</u>) <u>\$103,551,012.25</u>	$\frac{(2,432,974.73)}{110,423,040.49}$	
(1) For minimum annuity provisions	and for other rese	rves.	

(1) For minimum annuity provisions and for other reserves.

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CASH RECONCILIATION

RECEIPTS AND DISBURSEMENTS

YEAR 1971

Balance as of January 1, 1971

RECEIPTS:

Salary Deductions:	
Errors in Deductions	\$ 12,175.38
Salary Deductions	5,181,211.11
Interest on Bonds	4,480,299.53
Dividends on Stocks	22,820.00
Installments on Taxes - City	3,964,295.62
Installments on Taxes - Park	17,379.60
Treasurer's Receipts	41,821.73
Cancelled Checks	21,367.99
Bonds Matured and Redeemed	36,811,000.00
Bonds Sold	3,676,187.50
Stock Rights Sold	308.13
Miscellaneous Receipts	10,000.00

Total Receipts

DISBURSEMENTS:

Annuities - Employees Annuities - Widows Annuities - Children O. D. Benefits D. D. Benefits Refunds Operating Expenses Securities Purchased - Par Value Premiums - Bonds Purchases Accrued Interest Purchased Reimbursement Forged Checks Miscellaneous

Total Disbursements

Excess Disbursements Over Receipts

Balance December 31, 1971

\$54,238,866.59

\$ 2,	906,752.84	
	705,439.83	
	110,802.12	
	625,977.78	
	188,381.70	
l,	343,633.10	
-	204,215.01	
48,	710,360.00	
(995,077.18)	
	77,716,18	
	249.24	
	10,090.00	

53,888,540.62

350,325.97

\$510,755.40

\$160,429.43

TAXES RECEIVABLE

DECEMBER 31, 1971

TAXES RECEIVABLE - CITY:

Year	Uncollected 12-31-71	Estimate For Loss and Cost 12-31-70	Additional Estimate Set Up 12-31-71	Total Estimate For Loss and Cost 12-31-71	Net Accounts Receivable Taxes 12-31-71
1962 1963 1964 1965 1966 1967 1968 1969 1970 1971	\$ 326,459.04 316,219.79 325,321.45 382,802.90 365,098.36 501,976.36 450,265.76 539,317.97 645,556.44 4,699,947.73	\$ 316,704.00 307,389.00 316,707.00 372,599.00 353,964.00 372,592.00 392,598.00 405,289.00 515,765.00 0	\$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$ 316,704.00 307,389.00 316,707.00 372,599.00 353,964.00 372,592.00 392,598.00 405,289.00 454,321.00 476,104.00	<pre>\$ 9,755.04 8,830.79 8,614.45 10,203.90 11,134.36 129,384.36 57,667.76 134,028.97 191,235.44 4,223,843.73</pre>
Total	<u>\$8,552,965.80</u>	<u>\$3,353,607.00</u>	<u>\$414,660.00</u>	<u>\$3,768,267.00</u>	<u>\$4,784,698.80</u>

TAXES RECEIVABLE - PARK DISTRICT:

1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 Total	<pre>\$ 2,724.22 1,495.06 2,004.00 2,108.44 2,067.12 2,104.95 2,340.77 2,718.21 893.70 3,330.19 3,182.81 20,000.00</pre>	<pre>\$ 2,400.26 1,495.99 2,005.70 2,110.24 2,069.40 2,108.82 2,346.18 2,510.16 1,054.40 2,200.00 2,000.00 0</pre>	$ \begin{array}{c} \$ & 0 \\ (.93) \\ (1.70) \\ (1.80) \\ (2.28) \\ (3.87) \\ (5.41) \\ 0 \\ (5.41) \\ 0 \\ (160.70) \\ 0 \\ 0 \\ 2,025.00 \\ \\ \$ 1,848.31 \\ \end{array} $	<pre>\$ 2,400.26 1,495.06 2,004.00 2,108.44 2,067.12 2,104.95 2,340.77 2,510.16 893.70 2,200.00 2,000.00 2,025.00</pre>	\$ 323.96 0 0 0 0 208.05 0 1,130.19 1,182.81 17,975.00 \$ 20,820.01
GRAND TOTALS	<u>\$8,597,935.27</u>	<u>\$3,375,908.15</u>	<u>\$416,508.31</u>	<u>\$3,792,416.46</u>	<u>\$4,805,518.81</u>

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

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Method: The unfunded liability or obligations of the Fund for Prior Service Liabilities, or liabilities which have been accrued prior to the valuation date, have been computed on the entry-age-normal method of valuation.

For year age at entrance valuation, groups were used 20-24, 25-29, 30-34, 35-39, 40-44, 45-50, 50 and over.

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:

- 1) Duty Disability Benefits.
- 2) Ordinary Disability Benefits.
- 3) Children's Annuities.
- 4) Refunds..including refunds for no wife (a percentage of members assumed married).
- 5) Expense of administration.

Actuarial Assumptions:

Mortality: For mortality for members in the active service and for retirement members and widow annuitants, the Combined Annuity Mortality Table was used. 4-1/2% a year, compounded annually.

Interest:

Salary Scale: 3% a year, compounded annually.

Rates of Retirement: The same rates of retirement were used for all ages at entry. Termination Rates: An average of the rates for 1968, 1969, and 1970 for the Municipal Fund were used. The Laborers Fund rates were slightly greater.

Selected rates in percent for the service table are as follows:

Age at entrance twenty-seven.

			Active	Service			Salary
Age	Retirem	ent Rates	<u>Morte</u>	<u>lity</u>	Withd	<u>irawal</u>	Scale
	Male	Female	Male	Female	Male	Female	Same
27	C-1997 - 1997 - 1997 - 20		,22	.06	11.0	11.6	1.00
30			.24	.07	8.7	9.5	1.13
40		6	.46	.13	3.0	4.2	1.51
45			.69	.20	1.0	2.3	1.75
50			1.03	• 30	0	1.2	2.03
55	1.0	2.5	1.55	•46	0		2.36
56	1.8	2.8	1.67	.51	0		2.43
57	2.5	3.2	1.81	• 56	0		2.50
58	3.5	4.6	1.96	.63	0		2.58
59	4.3	7.0	2.13	.70	0		2.65
60	5.0	12.5	2.30	.78	0		2.73
61	6.0	11.0	2.49	.88			2.81
62	6.5	10.7	2.70	•98			2.90
63	8.5	11.5	2.92	1.10	•		2.99
64	11.0	12.5	3.16	1.23			3.07
65	24.0	13.5	3.43	1,36			3.17
66	18.0	15.0	3.71	1.50			3.26
67	14.5	16.6	4.01	1.65			3.36
68	14.0	18.0	4.34	1.82			3.46
69 `	14.0	19.8	4.70	2.04			3.56
70	15.5	21.8	5.08	2.31			3.67
71	17.0	23.5	5.50	2.65			3.78
72	19.0	26.0	5.94	3.04			3.90
73	23.5	29.2	6.43	3.48			4.01
74	30.0	50.0	6.95	3•94			4.13
75	100.0	100.0					4.26

LABORERS' AND RETIREMENT BOARD ANNUITY AND BENEFIT FUND OF CHICAGO

MEMBERSHIP STATISTICS

YEAR 1971

A. CHANGES IN ACTIVE PARTICIPANTS:

	Male	Female	Total
Number at Beginning of Fiscal Year Increases Decreases	5,658 808 1,094	1,562 46 <u>116</u>	7,220 854 1,210
Number at End of Fiscal Year	5,372	1,492	6,864

B. CHANGES IN ANNUITANTS AND BENEFICIARIES

	Number at Beginning of Year	Increases	Decreases	Number At End of Year
Employee Annuities	1,651	152	128	1,675
Widow Annuities	928	72	79	921
Children Annuities	229	37	32	234
Ordinary Disability Benefits	143	214	213	144
Duty Disability Benefits	21	354	354	21
Widow Compensation Annuities	3	0	0	3
Supplemental Annuities	0	0	. 0	0
	2,975	829	806	2,998

SALARY AND AGE STATISTICS

YEAR 1971

MALE

	Number	Salaries
Under 20 20 to 24 25 to 29 30 to 34 35 to 39 40 to 44 45 to 49 50 to 54 55 to 59 60 to 64 65 to 69 70 and Over Without Record	27 272 329 435 409 618 742 846 746 536 198 97 117	\$ 271,704.00 2,891,688.00 3,602,736.00 4,812,648.00 4,499,016.00 6,866,616.00 8,176,776.00 9,393,120.00 8,220,600.00 5,854,296.00 2,198,520.00 1,034,616.00 1,151,184.00
· · · ·	5,372	\$58,973,520.00

Under 20	0	\$
20 to 24	· 1	
25 to 29	1	
30 to 34	16	
35 to 39	50	
40 to 44	126	
45 to 49	203	
50 to 54	337	
55 to 59	377	
60 to 64	258	
65 to 69	93	
70 and Over	21.	
Without Record	9	

FEMALE

φ		v
	6,	,240.00
	2	,664.00
	78,	,336.00
	263	400.00
	624	,552.00
	982	704.00
	1,617	,648.00
	1,802	448.00
	1,178	,040.00
	464	,640.00
	106	824.00
	41	,304.00
_		

0

<u>\$ 7,168,800.00</u>

1,492

ANNUITANTS CLASSIFIED BY AGE AND AMOUNTS

<u>YEAR 1971</u>

PENSIONER

Age	Male	Amount	Female	Amount	Widows	Amount
Under 50	5	\$ 2,824.56	0	\$ 0	81	\$ 57,121.80
50 to 54	l	822.00	1	300.00	62	55,965.24
55 to 59	21	38,733.36	16	8,592.48	108	99,280.68
60 to 64	. 81	173,460.24	72	52,732.56	141	117,391.32
65 to 69	212	556,986.36	178	175,447.80	127	105,190.32
70 to 74	249	557,209.68	198	217,467.72	153	126,224.04
75 and Over	-404	903,096.36	237	239,920.68	249	150,444.60
	973	<u>\$2,233,132.56</u>	702	\$694,461.24	921	\$711,618.00