LABORERS ' AND RETIREMENT BOARD
EMPLOYEES ' ANNULTY AND
BENEFIT FUND
ACTUARIAL STATEMENT
DECEMBER 31, 1972

.•

-

____]

,

Γ---

ን

 $\mathcal{C}_{\mathcal{C}}$

C

•

DONALD F. CAMPBELL CONSULTING ACTUARY 221 NORTH LA SALLE STREET • SUITE 3117 CHICAGO, ILLINOIS 60601

TELEPHONE 782-1335

October 25, 1973

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, 1972, 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 1972.

Exhibit Title

Assets and Liabilities..... 1--2 Α 3--4 В Income and Expenditures..... C Gain and Loss..... 5--6 D Comparative Analysis - Assets and Liabilities..... 7--8 Ε Cash Reconciliation..... 9 F Taxes Receivable..... 10 G Service Table Factors..... 11 H 12 Membership Statistics..... Ι 13 Salary and Age Statistics..... Л Annuitants Classified By Age and Amounts..... 14

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, 1972, amounted to \$52,088,002.01. This is an increase of \$3,695,473.42 over the unfunded liability as of December 31, 1971.

The ratio of assets to total Fund liabilities as of December 31, 1972 was 69.8%. As of December 31, 1971 the ratio was 69.5%.

Page

Page Two.

The net increase in unfunded liability resulted primarily from the following reasons.

- 1. A decrease in the book value of bonds at date of sale of \$740,692.85 increased the unfunded to this extent. 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 had the bonds sold been retained in the Fund. And,
- 2. An increase in salaries over the three percent per year assumed in the new salary scale.

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 5.07% if the decrease in book value on date of sale is used in determining the rate. The corresponding rate in 1971 was 4.14%.

The use of a 4-1/2% interest rate and a 3% salary scale for the valuation as of December 31, 1972 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 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.

Page Three.

5

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,

SGLA

LABORERS' AND RETIREMENT BOARD

EMPLOYEES ' ANNUITY AND

BENEFIT FUND

5

ACTUARIAL BALANCE SHEET AS OF

DECEMBER 31, 1972

Exhibit "A". Page 1.

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND

ACTUARIAL BALANCE SHEET

ASSETS

AS OF DECEMBER 31, 1972

CASH ON DEPOSIT		\$(379,899.30))
ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous from Employees	\$	-	•
Total Accounts Receivable		698,110.04	
INTEREST RECEIVABLE: Accrued Interest on Bonds		1,998,992.54	
INVESTMENTS: Bonds - Par Value Bonds - Premiums and Discounts Common Stocks	\$113,172,380.00 (2,718,365.96) 3,083,919.11)	
Total Investments TAXES RECEIVABLE - (Exhibit F,	-	113,537,933.15	. 791.
Page 10) City: Uncollected Taxes Reserve for Loss and Cost	\$ 9,338,313.90		
of Collection Net Taxes Receivable Park District:	4,002,555.00	5,335,758.90	
Uncollected Taxes Reserve for Loss and Cost	\$ 42,030.11		
of Collection Net Taxes Receivable	20,336.75	21,693.36	
GROSS LEDGER ASSETS			\$121,212,588.69
LESS - ACCOUNTS PAYABLE: Miscellaneous to Employees Military Service Deductions -		\$ 1,138,375.94	
Excess Total		1,557.71	1,139,933.65

NET LEDGER ASSETS DECEMBER 31, 1972

\$120,072,655.04

. .

ACTUARIAL BALANCE SHEET

LIABILITIES AND FUND BALANCE

AS OF DECEMBER 31, 1972

	FOR SERVICE AFTER JULY 1, 1935: LIABILITIES RESERVES:			•	
	ANNUITY PAYMENT FUND ACCOUNT:				
•	Employee Annuitants	\$11,662,099.86			
	Employee Annuities Fixed	4,915,834.68			
	Widow Annuitants	5,861,977.68			
	Wives' Annuities Fixed	2,798,584.69			
	Total Annuity Payment Fund		\$ 25,238,496.91		
	SALARY DEDUCTION FUND ACCOUNT:	400 000 000 00			
	Employees	\$37,595,901.95			
	Wives of Employees	7,136,404.30			
	Total Salary Deduction Fund CITY CONTRIBUTIONS FUND ACCOUNT:		44,732,306.25		
•	Employees	\$37,850,061.22			į
	. Wives of Employees	11,296,504.26			
	Supplemental Annuities	8,785.36			
	Total City Contributions Fund	0,10).50	49,155,350.84		
	OTHER RESERVES:				
	Annuity Payment Fund Account	\$ 3,779,097.34			
	Child's Annuity Fund Account	0			
	Duty Disability Fund Account	0	•		
	Expense of Administration Account	0			
	Investments & Interest Fund Acct.	0	. ·		
	Ordinary Disability Fund Account	0			
	Total Other Reserves		3,779,097.34		
	TOTAL LIABILITY AND SURPLUS RESERVES			, .	
	FOR SERVICE AFTER JULY 1, 1935			\$122,905,251.34	
	SUPPLEMENTARY PAYMENT RESERVE			75,034.99	
	FOR SERVICE PRIOR TO JULY 1, 1935 ANI	D MINIMUM ANNUIT	les:		
	PRIOR SERVICE FUND ACCOUNT:	422 rol 227 82			
	Estimated Excess Liability (1) Employee Annuitants	\$33,794,231.83 11,768,050.02			
	Employee Annuities Fixed	63,293.04			
	Widow Annuitants	794,933.15			
	Wives' Annuities Fixed	689,808.72			
	Contributions for Employees	14.244.46			
	Contributions for Wives	6,812.62			
	Salary Deductions for 2% Annuity	2,048,996.88			
	Total Prior Service Fund		\$ 49,180,370.72		
	DEDUCT: Obligations of Fund for Price	or			
	Service Fund Liabilities, Includes				
	Age and Service (\$1,069,279.48)		(52,088,002.01)	(2,907,631.29)	
		~~~~~			
	TOTAL NET LIABILITIES AND FUND BALANCE	CES		the are are all	
	DECEMBER 31, 1972			<u>\$120,072,655.04</u>	

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

# LABORERS' AND RETIREMENT BOARD

# EMPLOYEES' ANNUITY AND

BENEFTT FUND

INCOME

YEAR 1972

INCOME And EXPENDITURES Exhibit "B" Page 3.

#### LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND

	INCOME		
	<u>YEAR 1972</u>	,	
SALARY DEDUCTIONS: Employees Wives of Employees 2% Retirement Annuity Total Salary Deductions	\$ 4,588,739.53 897,423.05 352,980.33	\$ 5,839,142.91	·
PAYMENTS BY EMPLOYEES FOR TEMPORARY SERVICE AND REFUND REPAYMENTS		89,242.93	
CITY CONTRIBUTIONS (\$4,647,201.22) PARK CONTRIBUTIONS (\$ 18,875.00) Employee Annuities Wife Annuities Child Annuities Duty Disability Ordinary Disability Expense of Administration Interest on Income Deficiency in Gurrent Requirements Total Contributions	\$ 4,110,900.99 1,225,184.03 90,066.00 186,432.30 762,646.55 208,277.99 93,157.56 (2,010,589.20)	4,666,076.22	
FEDERAL CONTRIBUTIONS		127,058.66	
INCOME ON INVESTMENTS: Bond Interest (Note #1)	•	5,391,546.87	
TOTAL INCOME YEAR 1972		۰	\$16,113,067.59
TOTAL EXPENDITURES YEAR 1972			6,425,128,91
TOTAL EXCESS INCOME OVER EXPENDITURES			\$ 9,687,938.68
LESS: INCREASE IN NET TAXES RECEIVABLE	FOR PRIOR YEARS		( 38,324.13)
NET EXCESS INCOME OVER EXPENDITURES YE	LAR 1972		<u>\$ 9,649,614.55</u>

Note #1 - This amount includes an amount of \$740,692.85 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.

## EXPENDITURES

## YEAR 1972

BENEFITS PAID: Annuities - Employees Annuities - Widows Compensation Widows' Annuities Child's Annuities Duty Disability Benefits Ordinary Disability Benefits Supplementary Payment Annuities Total Benefits Paid	\$3	,166,939.18 741,590.18 4,284.56 90,066.00 181,724.03 760,772.32 75,820.75	\$5	,021,197.02	
Less: Reimbursement Reciprocal Account				6,280.48	
Net Annuities Paid					\$5,014,916.54
EXPENSE OF ADMINISTRATION: Salaries Survey Audit Investment Counsel Postage Actuarial Department Printing and Stationery Telephone Rent Miscellaneous Office Supplies Office Equipment and Repairs Blue Cross and Blue Shield Total Expense of Administration	\$	63,228.71 4,200.00 3,500.00 11,750.00 4,000.00 89,445.53 4,677.43 886.23 17,367.48 2,940.63 2,053.12 1,346.92 2,881.94		208,277.99	
REFUNDS			_1	,201,934.38	1,410,212.37

\$6,425,128.91

TOTAL EXPENDITURES YEAR 1972

# LABORERS' AND RETIREMENT BOARD

# EMPLOYEES ' ANNUITY AND

BENEFIT FUND

<u>GAIN AND LOSS</u> <u>YEAR 1972</u>

GAINS

AND

LOSSES

GAIN		LOSS	•
YEA	AR 19	972	

OTHER RESERVE BALANCES AS OF DECEMBER 31, 1972 Annuity Payment Fund 0 \$ Expense Fund 0 0 Investment and Interest Fund Ordinary Disability Fund 0 (52,088,002.01) Prior Service Annuity Fund Total

\$(52,088,002.01)

SURPLUS BALANCES AS OF		
JANUARY 1, 1972		
Annuity Payment Fund	\$	0
Expense Fund	·	0
Investment and Interest Fund	•	· 0
Ordinary Disability Fund		0
Prior Service Annuity Fund	(48,3	92,528.59)

Total

Exhibit "C" Page 5.

(48,392,528,59)

NET LOSS YEAR 1972

\$( 3,695,473.42)

## ESTIMATED ANALYSIS OF GAIN AND LOSS

### YEAR 1972

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 When Annuities Are Fixed Refunds After Fixed Salary Deductions - After Fixed	$\begin{array}{c} 1.1.1.\\ \$( 458,270.58)\\ (96,176.92)\\ (397,773.07)\\ 75,446.01\\ 1,105,036.42\\ 286,447.75\\ (97,762.16)\\ 255,730.80 \end{array}$
Total Gain Because of Safeguards	\$ 672,678.25
GAIN IN INVESTMENT AND INTEREST FUND ACCOUNT	1,761,572.21
TRANSFER TO SUPPLEMENTARY PAYMENT RESERVE	0
TAX REQUIREMENT PURPOSES:\$(2,041,633.83)Interest on Deferred Obligations\$(2,010,589.20)City Current Contribution Deficiency Age Service(2,010,589.20)	
Total Tax Requirement Purposes	( 4,052,223.03)
ADD: INCREASE in Present Value Excess Minimum Annuity LESS: INCREASE in Annuity Payment Fund Other Reserve ADD: INCREASE in Taxes Receivable Prior Years	(2,478,705.03) 439,528.31 (38,324.13)
TOTAL NET LOSS YEAR 1972	<u>\$(3,695,473.42</u> )

* Based on American Experience 4% Tables.

# LABORERS' AND RETIREMENT BOARD

EMPLOYEES' ANNUITY AND

BENEFIT FUND

## COMPARATIVE ANALYSIS

YEAR 1972

ASSETS

AND

LIABILITIES

 Exhibit "D" Page 7.

••

LABORERS' AND RETIREMENT BOARD EMPLOYEES ANNUITY AND BENEFIT FUND

## COMPARATIVE ANALYSIS

	ASSETS	· · · ·	Increase or
	Jan. 1, 1972	Dec. 31, 1972	(Decrease)
CASH ON DEPOSIT	\$ 510,755.40	<u>\$(    379,899.30</u> )	<u>\$(    890,654.70</u> )
ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous from Employees Total Accounts Receivable	\$ 496,901.41 91,426.84 \$ 588,328.25	\$ 609,253.37 88,856.67 \$ 698,110.04	
INTEREST RECEIVABLE: Accrued Interest on Bonds Accrued Interest on Tax Anticipation Warrants Due Bond Interest Receivable Total Interest Receivable	\$ 1,181,678.58 0 <u>0</u> <u>\$ 1,181,678.58</u>	\$ 1,998,992.54 0 0 <u>\$ 1,998,992.54</u>	\$ 817,313.96 0 <u>0</u> <u>\$ 817,313.96</u>
INVESIMENTS: BondsPar Value BondsPremiums and Discounts Total Investments	\$106,753,645.31 (2,313,262.46) \$104,440,382.85		\$ 9,502,653.80 ( 405,103.50) <u>\$ 9,097,550.30</u>
TAXES RECEIVABLE: City: Uncollected Taxes Reserve for Loss and Cost of Collection Net Taxes Receivable	\$ 8,552,965.80 3,768,267.00 \$ 4,784,698.80	\$ 9,338,313.90 <u>4,002,555.00</u> <u>\$ 5,335,758.90</u>	\$ 785,348.10 234,288.00 \$ 551,060.10
Park District: Uncollected Taxes Reserve for Loss and Cost of Collection Net Taxes Receivable	\$    44,969.47 24,149.46 \$20,820.01	\$ 42,030.11 20,336.75 <u>\$ 21,693.36</u>	\$( 2,939.36) ( 3,812.71) <u>\$ 873.35</u>
GROSS LEDGER ASSETS	<u>\$111,526,663.89</u>	<u>\$121,212,588.69</u>	<u>\$ 9,685,924.80</u>
LESSACCOUNTS PAYABLE: Miscellaneous to Employees Military Service Deductions - Excess from Refunds Total Accounts Payable	1,557.71	1,138,375.94 <u>1,557.71</u> 1,139,933.65	\$ 36,310.25 0 \$ 36,310.25

\$110,423,040.49 \$120,072,655.04 \$ 9,649,614.55

NET LEDGER ASSETS

-

2011年、1993年、

## COMPARATIVE ANALYSIS

# LIABILITIES AND FUND BALANCES

· LIABILITIES AN	D FUND BALANCES		Increase
			or
	Jan. 1, 1972	Dec. 31, 1972	(Decrease)
FOR SERVICES AFTER JULY 1, 1935:			
LIABILITY RESERVES:			
ANNUITY PAYMENT FUND ACCOUNT:			
Employee Annuities	\$ 10,041,986.38	\$ 11,662,099.86	\$ 1,620,113.48
Employees' Annuities Fixed	4,697,919.96	4,915,834.68	217,914.72
Widow Annuitants	5,081,546.07	5,861,977.68	780,431.61
Wives' Annuities Fixed	2,442,341.15	2,798,584.69	356,243.54
Total Annuity Payment Fund	\$ 22,263,793.56	\$ 25,238,496.91	\$ 2,974,703.35
SALARY DEDUCTION FUND ACCOUNT:			
Employees	\$ 34,729,652.83	\$ 37,595,901.95	\$ 2,866,249.12
Wives of Employees	6,495,255.41	7,136,404.30	641,148.89
Total Salary Deduction Fund	\$ 41,224,908.24	\$ 44,732,306.25	<u>\$ 3,507,398.01</u>
CITY CONTRIBUTION FUND ACCOUNT:	<u> </u>	· <u>Falini, apalata, a seconda da da Constituta da</u>	, <u>, , , , , , , , , , , , , , , , , , </u>
Employees	\$ 35,362,972.92	\$ 37,850,061.22	\$ 2,487,088.30
Wives of Employees	10,509,169.48	11,296,504.26	787,334.78
Supplemental Annuities	4,746.25	8,785.36	4,039.11
Total City Contribution Fund	\$ 45,876,888.65	\$ 49,155,350.84	\$ 3,278,462.19
OTHER RESERVES:	<u></u>		
Annuity Payment Fund Account	\$ 3,339,569.03	\$ 3,779,097.34	\$ 439,528.31
Child's Annuity Fund Account	0	0	0
Duty Disability Fund Account	0	0	0
Investment and Interest Account	0	0	0
Expense of Administration Account	0	0	0
Ordinary Disability Fund Account	0	0	0
Total Other Reserves	<u>\$3,339,569.03</u>	<u>\$ 3,779,097.34</u>	<u>\$ 439,528.31</u>
TOTAL LIABILITY AND OTHER RESERVES			
FOR SERVICE AFTER JULY 1, 1935	\$112,705,159.48	\$122,905,251.34	\$10,200,091.86
SUPPLEMENTARY RESERVE	\$ 150,855.74	\$ 75,034.99	\$( 75,820.75)
PRIOR SERVICE FUND ACCOUNT:			<del>delena el de encolo</del>
Estimated Excess Minimum			
Annuity Provision	\$ 33,280,215,43	<b>\$ 33,</b> 794,231.83	\$ 514,016.40 [°]
Employee Annuitants	9,523,068.99		2,244,981.03
Employees' Annuities Fixed	73,806.84	63,293.04	( 10,513.80)
Widow Annuitants	720,464.14	794,933.15	74,469.01
Wives' Annuities Fixed	554,976.11	689,808.72	134,832.61
Contributions for Employees	22,010.85	14,244.46	( 7,766.39) _
Contributions for Wives	9,984.29	6,812.62	( 3,171.67)
Salary Deductions for 2% Annuity	1,775,027.21	2,048,996.88	273,969.67
Total Prior Service Fund	<u>\$ 45,959,553.86</u>	\$ 49,180,370.72	\$ 3,220,816.86
DEDUCT: (PER CONTRA):			
Obligations of City for Prior			
Service Credits	<u>\$(48,392,528.59</u> )	<u>\$(52,088,002.01</u> )	<u>\$(3,695,473.42)</u>
NET LIABILITIES FOR SERVICE			
PRIOR TO JULY 1, 1935	• <u>\$(2,432,974.73</u> )	<u>\$( 2,907,631.29</u> )	<u>\$(    474,656.56</u> )
TOTAL LIABILITIES AND FUND BALANCES		\$120,072,655.04	•
and and and the total televitorio	<u>4440,760,040,49</u>	<u>y===0,072,077,04</u>	$\Psi$ 7,047,014,77

#### CASH RECONCILIATION

#### RECEIPTS AND DISBURSEMENTS

#### YEAR 1972

Balance as of January 1, 1972

\$ 510,755.40

**RECEIPTS:** 

Salary Deductions:	
Errors in Deductions	\$ 211,981.36
Salary Deductions	5,704,625.19
Interest on Bonds	5,222,679.09
Dividends on Stocks	22,643.50
Installments on Taxes - City	4,058,101.83
Installments on Taxes - Park	17,716.81
Treasurer's Receipts	97,795.82
Cancelled Checks	31,367.77
Bonds Matured and Redeemed (Par Value)	35,618,000.00
Bonds Sold	50,189,002.06
Emergency Employee Account	127,05866
Forged Checks	91.19

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 Stocks Purchased

Total Disbursements

102,191,717.98

\$101,301,063.28

\$ 3,258,266.25

750,877.30

636.025.68

152,067.10

738,202.05)

169,190.29

2,469,633.80

91.19

1,520,404.43 208,277.99

93,675,020.00

90,066.00

Excess Disbursements Over Receipts

Balance December 31, 1972

(890,654.70)

\$(379,899.30)

# TAXES RECEIVABLE

# DECEMBER 31, 1972

# TAXES RECEIVABLE - CITY:

	The lected	Estimate For Loss and Cost 12/31/71	Additional Estimate Set Up 12/31/72	Total Estimate For Loss and Cost 12/31/72	Net Taxes Receivable 12/31/72
1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	\$ 316,138.32 325,148.15 382,682.10 364,629.49 501,976.36 449,674.84 527,592.07 569,566.45 731,029.90 5,169,876.22	\$ 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	\$ 28,317.00 <u>522,675.00</u>	\$ 307,389.00 316,707.00 372,599.00 353,964.00 400,909.00 392,598.00 405,289.00 454,321.00 476,104.00 522,675.00	\$ 8,749.32 8,441.15 10,083.10 10,665.49 101,067.36 57,076.84 122,303.07 115,245.45 254,925.90 4,647,201.22
Total	<u>\$9,338,313.90</u>	\$3,451,563.00	\$550 <b>,</b> 992 <b>.</b> 00	\$4,002,555.00	<u>\$5,335,758.90</u>

TAXES RECEIVABLE - PARK DISTRICT:

1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	\$ 2,107.54 2,065.48 2,103.54 2,336.14 2,716.46 863.89 3,117.11 2,502.74 3,217.21 21,000.00	\$ 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	\$( .90) ( 1.64) ( 1.41) ( 4.63) ( 29.81) 	\$ 2,107.54 2,065.48 2,103.54 2,336.14 2,510.16 863.89 2,200.00 2,000.00 2,025.00 2,125.00	\$ 0 0 0 206.30 0 917.11 502.74 1,192.21 18,875.00
Total	<u>\$ 42,030.11</u>	\$ 18,250.14	<u>\$ 2,086.61</u>	<u>\$ 20,336.75</u>	<u>\$ 21,693.36</u>
GRAND TOTALS	\$9,380, <u>344.01</u>	\$3,469,813.14	\$5 <u>53,078.61</u>	\$4,022,891.75	\$5, <u>357,</u> 452.26

#### 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.
- Ordinary Disability Benefits. 2)
- 3) Children's Annuities.
- Ξų. 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:

3% a year, compounded annually. Salary Scale:

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	Retirement Rates		Mortality /		Withd	Scale			
	Male	Female		Male	Female	,	Male	Female	Same
27				.22	.06		11.0	11.6	1.00
30				.24	.07		8.7	9.5	1.13
40				.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	<b>,</b> .	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 1972

#### A. CHANGES IN ACTIVE PARTICIPANTS:

	<u>Male</u>	Female	Total
Number at Beginning of Fiscal Year Increases Decreases	5,372 908 <u>727</u>	1,492 36 110	6,864 944 <u>837</u>
Number at End of Fiscal Year	5,553	1,418	6,971

#### B. CHANGES IN ANNUITANTS AND BENEFICIARIES:

· · · ·	Number at Beginning of Year	Increases	Decreases	Number At End of Year
Employee Annuities Widow Annuities Children Annuities Ordinary Disability Benefits Duty Disability Benefits Widow Compensation Annuities Supplemental Annuities	1,675 921 234 144 21 ' 3 0	204 81 24 194 307 0 0	155 70 57 225 320 0 0	1,724 932 201 113 8 3 0
	2,998	810	827	2, <u>981</u>

#### SALARY AND AGE STATISTICS

# YEAR 1972

### 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			31 336 361 490 449 583 744 846 741 539 212 78	<pre>\$ 337,296.00 3,614,928.00 3,981,792.00 5,540,664.00 5,020,296.00 6,650,976.00 8,534,160.00 9,633,316.00 8,439,072.00 6,110,280.00 2,414,784.00 855,576.00</pre>
Without Record	- ,	· 1	143	1,475,832.00
	•	•	5,553	\$62,608,972.00

Average Annual Salary

\$11,274.80

F	ΈV	M	١Į	Æ	

Under 20	. 0	\$0
20 to 24	l	6,528.00
25 to 29	. 2	9,048.00
30 to 34	13	70,824.00
35 to 39	38	213,312.00
40 to 44	100	561,288.00
45 to 49	185	937,416.00
50 to $5^{4}$	308	1,605,192.00
55 to 59	374	1,967,904.00
60 to 64	268	1,285,224.00
65 to 69	92	475.800.00
70 and Over	30	173,688.00
Without Record	7	35,496.00
· _ ·	1,418	\$ 7,341,720.00

Average Annual Salary

\$5,177.51

### ANNUITANTS CLASSIFIED BY AGE AND AMOUNTS

# YEAR 1972

PENSIONER

Age	Male	Amo	ount	Female	Amount	Widows	Amount
Under 50	7	\$4,	877.28	0	\$0	80	\$ 64,048.80
50 to 54	2	l,	542.36	1	300.00	75	67,588.56
55 to 59	24	55,	250.16	18	14,930.28	108	100,870.20
60 to 64	82	238,	753.08	66	58,486.80	136	129,954.96
65 to 69	234	673,	437.72	194	214,139.76	128	106,509.24
70 to 74	272	722,	202.72	186	212,668.92	149	140,063.16
75 and Over	<u>393</u>	918,	948.12	<u>245</u>	257,771.04	256	166,434.00
• •	<u>1,014</u> '	<u>\$2,615</u> ,	011.44	<u>710</u>	<u>\$758,296.80</u>	<u>932</u>	<u>\$775,468.92</u>
Average Annual Annuity	Male	<u>\$</u> 2.	578.40	Female	<u>\$ 1,068.02</u>	Widows	\$ 832.04