

THE MUNICIPAL EMPLOYEES'  
ANNUITY AND BENEFIT FUND  
OF CHICAGO

ANNUAL ACTUARIAL STATEMENT

AS OF  
DECEMBER 31, 1974

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September 18, 1975

The Retirement Board of the  
Municipal Employees' Annuity  
And Benefit Fund of Chicago  
Chicago, Illinois

Gentlemen:

This is to certify that the annual statement as of December 31, 1974 of  
the Municipal Employees' Annuity and Benefit Fund of Chicago, appended  
hereto, consisting of the following:

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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 1974.

This statement has been prepared from the books of the Fund as substan—  
tiated by my letters of recommendation to the Retirement Board.

The method of valuation or method of financing the system and the actu—  
arial assumptions and methods used in the valuation are shown on pages  
thirteen, fourteen, fifteen and sixteen of this report. The attempt is  
made to give effect to realistic valuation factors affecting costs.

Page Two.

No changes have been made in the actuarial assumptions from those used in the 1973 valuation report.

The accounting procedure is outlined in Article 8 of the Illinois Pension Code.

The method of valuation is that known as a normal cost-plus-interest basis, which method is intended to continue the Article governing the Fund in full force and effect on a permanent basis.

Under this method the estimated amount of City contribution consists of two parts...one part is the current service cost referred to as entry age normal cost, and the other part is an amount equal to the interest at the rate assumed for valuation purposes on the unfunded liability or deficiency. This method is also known as a minimum method of financing or funding.

The current service cost expressed as a rate is the average percentage of the salaries for new employees that is required to be paid into the Fund from the time they enter the service until they leave the service in order to accumulate sufficient funds to pay their benefits with costs computed on the bases of the actuarial assumptions set forth.

At a given valuation date the difference between these total accumulated current costs for all participants of the Fund plus liabilities for annuitants and the total Fund invested assets is the unfunded liability on that valuation date.

In determining the value of the assets on valuation date the stocks have been valued at cost and bonds on an amortized cost basis.

Based on the preceding method of financing, I find that the minimum annual City contributions would be \$43,703,034.29, which amount includes a 12½% reserve for loss of collection. The 12½% reserve is the percent set up on the comptroller's books for the year 1974. For 1973 a 10% loss was used. This minimum annual contribution for the City is computed as follows, based on an annual payroll of \$289,839,576.00 as of December 31, 1974.

1. For Current Service Cost, City's Share, Entry Age Normal 5.73%	
Includes 12½% Loss Estimate.....	\$16,602,360.49
2. For 5% Interest On Unfunded Liability Of \$474,261,793.12	
Includes 12½% Loss Estimate.....	<u>27,100,673.80</u>
Total Minimum Annual Contribution By City To Maintain Fund On A Minimum Valuation Basis Includes 12½% Loss Estimate.....	<u>\$43,703,034.29</u>
Net to Fund after 12½% Loss Estimate.....	<u>\$38,240,155.00</u>

Page Three.

This minimum method of funding or financing is often referred to as a middle-of-the-road method. It 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 expressed by the Civic Federation. This minimum annual contributions of \$43,703,034.29 would require a tax levy multiple of 1.80 based on 1974 salaries and 1974 salary deductions which give effect to the increased salary deductions for spouses' annuities for female employees.

The current ultimate multiple beginning in 1978 authorized in Article 8 is 1.69. As a result, an increase in multiple of .11 is needed for a minimum funding basis. As the members contribute about 8.4% of salary an increase of .11 in the multiple would produce an amount equal to 0.92% of salary. Based on the 1974 salary roll of \$289,839,576.00 a 0.92% increase would be \$2,666,524.10. The Fund would net 12½% less, or \$2,333,208.59.

The total unfunded liability as of December 31, 1974, I estimate, would amount to \$474,261,793.12, as shown on page two of the Annual Statement. As of December 31, 1973 the unfunded liability was \$440,364,217.95.

The increase in unfunded liability of \$33,897,575.17, I estimate, was due to (1) an increase in average salaries of 10% over the 3½% salary scale of about \$34,000,000.00 less operating gains and reserve adjustment for a net loss of \$6,737,099.37...plus (2) the deficiency in current annual contributions of about \$11,057,709.85 less (3) a gain in investment earnings of 6.39% compared to 5% assumed rate which accounted for \$4,654,000.00 plus (4) a loss due to exchange of bonds for greater long term gains and sale of stock—\$7,128,659.15, plus (5) a loss due to an increase in estimated loss on collection of taxes—\$1,006,106.80, plus (6) an increase in unfunded liability due to amendment to provide a spouse's annuity for a female employee of \$12,622,000.00.

The ratio of assets to liabilities was 45.2 as of December 31, 1974 and 45.1 as of December 31, 1973.

Recently enacted Federal legislation for private pension plans will require unfunded liabilities to be amortized over a forty year period. As the Board knows, such Federal law requires a study to be made of Public Employee Plans and a report submitted to Congress before the end of 1976.

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.

Page Four.

For example, for every \$1.00 in salary increase over the 3½% increase assumed in the salary scale the unfunded liability will be increased by about \$2.31 for male employees, and \$1.52 for female employees. This will be in addition to the additional current annual service cost of about 5.73% for every dollar over the 3½% salary scale assumed.

These additional costs will be reduced by the annual amount of investment income earned over the assumed 5% used for valuation purposes.

In order to give the Retirement Board some guidance in estimating the effects on costs of variations in the principal actuarial assumptions I have estimated the financial position of the Fund if the 1974 valuation is based on a 6% a year compound investment earning assumption and a 5% a year compounded salary scale.

The results of this valuation gives a funded ratio as of December 31, 1974 of 48.8 and a required tax levy multiple of 1.77 compared to a funded ratio of 45.2 and a required multiple of 1.80 for the 5% interest and 3½% salary scale assumptions.

As a result, the middle-of-the-road funding method used in this valuation, which in turn is based on actuarial assumptions which can also be classified as being middle-of-the-road, taken together with the two alternative actuarial valuations giving effect to two principal factors of cost, namely:

(1) The investment earning assumption, and (2) the salary earnings assumption gives my best estimate of as realistic as possible a valuation of the Fund's present financial position and future trends under current conditions affecting the Fund.

Future analysis of the Fund's operating experience will indicate the changes necessary in the Fund's method of financing. The middle-of-the-road method of financing will enable the Fund to adapt to future changing conditions in a reasonable and equitable manner.

Respectfully submitted,

  
Actuary.

ACTUARIAL BALANCE SHEETLIABILITIES AND FUND BALANCES #AS OF DECEMBER 31, 1974

## LIABILITY RESERVES AGE AND SERVICE:

## ANNUITY PAYMENT FUND ACCOUNT:

Employee Annuitants	\$ 77,251,283.32
Employees' Annuities Fixed	24,273,377.16
Widow Annuitants	30,304,661.50
Wives' Annuities Fixed	<u>16,765,385.95</u>

\$ 148,594,707.93 (B)

## SALARY DEDUCTION FUND ACCOUNT:

Employees' Deductions	\$147,380,279.83
Wives of Employees	<u>23,465,260.65</u>

170,845,540.48 (C)

## CITY CONTRIBUTION FUND ACCOUNT:

Employees	\$146,635,184.83
Wives of Employees	36,018,994.57
Supplemental Annuities	<u>18,914.29</u>

182,673,093.69 (D)

## SUPPLEMENTARY PAYMENT RESERVE

322,084.81 (C)

## OTHER RESERVES:

Annuity Payment Fund Account	\$ 15,712,355.37
Child's Annuity Fund Account	0
Duty Disability Fund Account	0
Expense of Administration	0
Investment and Interest Fund	<u>0</u>

15,712,355.37 (B)TOTAL AGE AND SERVICE LIABILITIES  
AND OTHER RESERVES

\$518,147,782.28

DEDUCT: UNFUNDED OBLIGATIONS OF FUND  
FOR AGE AND SERVICE CREDITS GRANTED(81,448,710.33) (E)

## NET LIABILITY AGE AND SERVICE

436,699,071.95

## PRIOR SERVICE FUND ACCOUNT:

Estimated Excess Liability	
Minimum Annuity	\$224,347,292.28 (D)
Employee Annuitants	103,687,980.84 (B)
Employees' Annuities Fixed	28,442.52
Widow Annuitants	4,113,922.32
Wives' Annuities Fixed	4,642,112.18
Contributions for Employees	4,061.08 (D)
Contributions for Wives	1,942.19 (D)
Salary Deductions for 2% Annuity	<u>10,978,661.41 (C)</u>

347,804,414.82

DEDUCT: ESTIMATED BALANCES  
UNFUNDED OBLIGATIONS(392,813,082.79) (E)

## NET LIABILITIES FOR PRIOR SERVICE

(45,008,667.97)

## TOTAL NET LIABILITIES AND FUND BALANCE

AS OF DECEMBER 31, 1974

\$391,690,403.98

# Letter of transmittal sets forth method of valuation.

ACTUARIAL BALANCE SHEETASSETSAS OF DECEMBER 31, 1974

## CASH ON DEPOSIT:

First National Bank	\$ 4,912,993.95	
Continental Illinois National Bank	73,049.67	
LaSalle National Bank	5,000.00	
Exchange National Bank	5,000.00	
American National Bank and Trust Co.	5,000.00	
National Security Bank	5,000.00	
		① \$ 5,006,043.62

## INVESTMENTS:

Bonds -- Par Value	\$311,178,504.94	②
Bond Premiums	123,047.65	③
Stocks -- At Cost -- Commons	52,829,955.56	④
Bond Discounts - Amortized	(12,532,902.38)	⑤
Accrued Interest on Bonds	5,542,779.02	⑥
Dividends Accrued	0	⑦
		357,141,384.79

## ACCOUNTS RECEIVABLE:

Sale of Securities		⑧ 431,998.82
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## TAXES IN TRANSIT

⑨ 283,920.76

## ACCOUNTS RECEIVABLE:

Taxes Collectible -- Schedule "A"	\$ 27,386,859.69	⑩
Salary Deductions Accrued	1,700,843.63	⑪
Accounts Receivable --		
Other Annuity and Benefit Funds (Net)	114,844.17	⑫
Total from Individual Ledger Cards -- Schedule "B"	122,907.21	⑬
		29,325,454.70

## GROSS LEDGER ASSETS

392,188,802.69

## LESS: ACCOUNTS PAYABLE:

Salary Deductions	\$ 23,527.64	
Accounts Payable -- Miscellaneous	1,071.58	
Total from Individual Ledger Cards --		
Schedule "C"	421,061.69	
Military Service Deductions --		
Excess from Refunds	32,148.90	
Old Law Deductions Refundable	20,588.90	⑭
		498,398.71

TOTAL LEDGER ASSETS AS OF DECEMBER 31, 1974

\$391,690,403.98

MUNICIPAL EMPLOYEES'  
ANNUITY AND BENEFIT FUND  
OF CHICAGO

ACTUARIAL  
BALANCE SHEET

AS OF

DECEMBER 31, 1974

ASSETS

AND

LIABILITIES



## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

ACTUARIAL BALANCE SHEETASSETSAS OF DECEMBER 31, 1974

## CASH ON DEPOSIT:

First National Bank	\$ 4,912,993.95	
Continental Illinois National Bank	73,049.67	
LaSalle National Bank	5,000.00	
Exchange National Bank	5,000.00	
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	<hr/>	\$ 5,006,043.62

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## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

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Investment and Interest Fund	<u>0</u>	
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TOTAL AGE AND SERVICE LIABILITIES  
AND OTHER RESERVES

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DEDUCT: UNFUNDED OBLIGATIONS OF FUND  
FOR AGE AND SERVICE CREDITS GRANTED(81,448,710.33)

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		347,804,414.82

DEDUCT: ESTIMATED BALANCES  
UNFUNDED OBLIGATIONS(392,813,082.79)

## NET LIABILITIES FOR PRIOR SERVICE

(45,008,667.97)TOTAL NET LIABILITIES AND FUND BALANCE  
AS OF DECEMBER 31, 1974\$391,690,403.98

# Letter of transmittal sets forth method of valuation.

MUNICIPAL EMPLOYEES'  
ANNUITY AND BENEFIT FUND  
OF CHICAGO

INCOME  
YEAR 1974

INCOME  
AND  
EXPENDITURES

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

INCOME

YEAR 1974

SALARY DEDUCTIONS:

Employees	\$18,404,171.00	
Wives of Employees	2,943,725.52	
For the 2 $\frac{1}{2}$ % Increase Retirement Annuity	<u>1,415,089.55</u>	
		\$22,762,986.07

SUPPLEMENTARY RESERVE CONTRIBUTIONS 2,444.47

PAYMENT BY EMPLOYEES FOR TEMPORARY SERVICE 655,513.71

CITY CONTRIBUTIONS: (Net after 12-1/2 Loss)

(Includes \$44,625.00 from  
Park District)

Employees	\$16,827,788.82	
Wives	4,152,045.89	
Ordinary Disability	1,896,668.31	
Expense	541,909.59	
Children's Benefits	212,005.56	
Duty Disability	397,614.92	
Current Deficiency in Tax Levy	<u>1,216,591.91</u>	
		25,244,625.00

FEDERAL GOVERNMENT CONTRIBUTIONS 1,937,820.15

CERTIFICATES OF DEPOSIT 486,274.86

BOND INTEREST (Note 1) (Includes \$6,731,332.23 Loss) 12,841,110.53

DIVIDENDS (Note 1) (Includes \$397,326.92 Loss) 976,910.64

RECEIVED FROM OTHER ANNUITY AND BENEFIT  
FUNDS RECIPROCAL ACT 95,504.47

GROSS INCOME FOR YEAR 1974 \$65,003,189.90

LESS: DISBURSEMENTS FOR 1974 34,235,873.92

INCREASE IN NET ASSETS FOR YEAR 1974 \$30,767,315.98

LESS: DECREASE IN ESTIMATE FOR TAXES  
RECEIVABLE PRIOR YEARS (1,006,106.80)

NET INCREASE IN NET ASSETS FOR YEAR 1974 \$29,761,209.18

Note 1. During the year book loss on sales of bonds was \$6,731,332.23 and loss on sales of stocks was \$397,326.92. The proceeds were invested in bonds with greater rates of coupons which will result in material gains to the Fund in the future.

## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

EXPENDITURESYEAR 1974

## BENEFITS:

Employee Annuities	\$23,105,521.22	
Widow Annuities	4,626,384.86	
Compensation Annuities	4,256.84	
Ordinary Disability Benefits	1,566,830.02	
Duty Disability Benefits	325,233.33	
Children's Annuities	208,913.64	
Supplementary Payment Annuities	<u>272,525.95</u>	
Total		\$30,109,665.86

## EXPENSES:

Salaries	\$ 198,812.39	
Actuarial Department Including I.B.M. Services	164,899.34	
Medical Fees	15,368.40	
Consultant	2,400.00	
Audit	7,500.00	
Forgery and Fraud Bonds	1,516.00	
Rent and Electricity	36,820.84	
Repairs and Maintenance on Office Machines	716.42	
Office Supplies and Equipment	2,246.31	
Printing and Stationery	10,455.40	
Postage	14,177.45	
Furniture and Fixtures	0	
Telephone and Telegraph	406.28	
Investment Counsel Service	73,333.33	
Miscellaneous	4,476.88	
Rent copy machine	<u>877.26</u>	
Total Expenses		534,006.30

## REFUNDS

3,592,201.76

TOTAL CASH DISBURSEMENTS FOR YEAR 1974

\$34,235,873.92

## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

HISTORY 1962 TO 1974AVERAGE ANNUAL SALARIES ENTIRE FUND

AND

INVESTMENT YIELDS EXCLUDING GAINS AND LOSSES(BONDS AT AMORTIZED VALUES. STOCKS AT COST)

Year	<u>Average Annual Salary</u>		Male and Female	<u>% Increase of Preceding Year</u>	<u>Investment Yields %</u>
	<u>Male</u>	<u>Female</u>			
1962	\$ 7,513.35	\$ 4,315.43	\$ 6,457.74		
1963	7,625.00	4,386.79	6,518.33	1.009%	3.75%
1964	7,695.24	4,430.10	6,580.68	1.010	3.87
1965	7,836.07	4,503.27	6,651.09	1.011	4.10
1966	8,303.72	5,066.82	7,093.28	1.067	4.23
1967	8,878.36	5,119.75	7,466.49	1.053	4.25
1968	9,301.30	5,451.58	7,837.67	1.050	4.37
1969	10,297.22	6,156.06	8,701.55	1.110	4.68
1970	11,192.00	6,116.78	8,823.00	1.014	4.95
1971	12,101.00	6,617.00	9,467.00	1.072	5.08
1972	12,588.76	7,038.27	9,884.00	1.044	5.67
1973	13,459.58	7,223.19	10,327.45	1.045	5.69
1974	14,723.44	8,161.24	11,391.27	1.100	6.39

Average Increase for Total Annual Salary

Compounded 1962 to 1974 - Twelve Years 5.0%.

MUNICIPAL EMPLOYEES'  
ANNUITY AND BENEFIT FUND  
OF CHICAGO

COMPARATIVE ANALYSIS

YEAR 1974

ASSETS

AND

LIABILITIES

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

COMPARATIVE ANALYSIS

	<u>ASSETS</u>		Increase (Decrease)
	January 1, 1974	December 31, 1974	<u>          </u>
CASH:			
Cash on Deposit	\$ 168,491.62	\$ 5,006,043.62	\$ 4,837,552.00
Petty Cash	0	0	0
	<u>\$ 168,491.62</u>	<u>\$ 5,006,043.62</u>	<u>\$ 4,837,552.00</u>
INVESTMENTS:			
Bonds -- Par Value	\$289,393,206.94	\$ 311,178,504.94	\$ 21,785,298.00
Bond Premiums	490,712.85	123,047.65	( 367,665.20)
Stocks at Cost - Common	49,520,208.68	52,829,955.56	3,309,746.88
Bond Discounts	( 8,913,469.41)	( 12,532,902.38)	( 3,619,432.97)
Accrued Interest on Bonds	4,910,232.56	5,542,779.02	632,546.46
Dividends Accrued	0	0	0
	<u>\$335,400,891.62</u>	<u>\$ 357,141,384.79</u>	<u>\$ 21,740,493.17</u>
TAXES IN TRANSIT	\$ 0	\$ 283,920.76	\$ 283,920.76
ACCOUNTS RECEIVABLE:			
Sale of Securities	\$ 982,064.92	\$ 431,998.82	\$( 550,066.10)
ACCOUNTS RECEIVABLE:			
Taxes Collectible	\$ 23,641,206.78	\$ 27,386,859.69	\$ 3,745,652.91
Accrued Salary Deductions	2,015,394.73	1,700,843.63	( 314,551.10)
Accounts Receivable -- Other Funds	96,317.76	114,844.17	18,526.41
Employee Accounts	113,566.64	122,907.21	9,340.57
	<u>\$ 25,866,485.91</u>	<u>\$ 29,325,454.70</u>	<u>\$ 3,458,968.79</u>
GROSS LEDGER ASSETS	<u>\$362,417,934.07</u>	<u>\$ 392,188,802.69</u>	<u>\$ 29,770,868.62</u>
LESS: ACCOUNTS PAYABLE:			
Salary Deductions	\$ 23,527.64	\$ 23,527.64	\$ 0
Accounts Payable -- Other Funds	1,801.81	1,071.58	( 730.23)
Employee Accounts	410,672.02	421,061.69	10,389.67
Military Service	32,148.90	32,148.90	0
Old Law Deductions Refundable	20,588.90	20,588.90	0
	<u>\$ 488,739.27</u>	<u>\$ 498,398.71</u>	<u>\$ 9,659.44</u>
NET LEDGER ASSETS	<u>\$361,929,194.80</u>	<u>\$ 391,690,403.98</u>	<u>\$ 29,761,209.18</u>



## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

COMPARATIVE ANALYSISLIABILITIES AND FUND BALANCES

	<u>January 1, 1974</u>	<u>December 31, 1974</u>	<u>Increase (Decrease)</u>
<b>AGE AND SERVICE:</b>			
<b>ANNUITY PAYMENT FUND ACCOUNT:</b>			
Employee Annuitants	\$ 68,125,746.20	\$ 77,251,283.32	\$ 9,125,537.12
Employees' Annuities Fixed	22,168,047.36	24,273,377.16	2,105,329.80
Widow Annuitants	27,704,584.50	30,304,661.50	2,600,077.00
Wives' Annuities Fixed	14,590,612.26	16,765,385.95	2,174,773.69
	<u>\$ 132,588,990.32</u>	<u>\$ 148,594,707.93</u>	<u>\$ 16,005,717.61</u>
<b>SALARY DEDUCTION FUND ACCOUNT:</b>			
Employees' Deductions	\$ 135,395,826.92	\$ 147,380,279.83	\$ 11,984,452.91
Wives of Employees	21,212,028.00	23,465,260.65	2,253,232.65
	<u>\$ 156,607,854.92</u>	<u>\$ 170,845,540.48</u>	<u>\$ 14,237,685.56</u>
<b>CITY CONTRIBUTION FUND ACCOUNT:</b>			
Employees	\$ 136,201,190.62	\$ 146,635,184.83	\$ 10,433,994.21
Wives of Employees	33,217,349.61	36,018,994.57	2,801,644.96
Supplemental Annuities	17,225.28	18,914.29	1,689.01
	<u>\$ 169,435,765.51</u>	<u>\$ 182,673,093.69</u>	<u>\$ 13,237,328.18</u>
<b>SUPPLEMENTARY PAYMENT RESERVE</b>	<u>\$ 292,166.29</u>	<u>\$ 322,084.81</u>	<u>\$ 29,918.52</u>
<b>OTHER RESERVES:</b>			
Annuity Payment Fund Account	\$ 19,888,348.55	\$ 15,712,355.37	\$ ( 4,175,993.18)
<b>TOTAL LIABILITIES AND SURPLUS RESERVES</b>	<u>\$ 478,813,125.59</u>	<u>\$ 518,147,782.28</u>	<u>\$ 39,334,656.69</u>
<b>DEDUCT: UNFUNDED OBLIGATIONS OF FUND FOR AGE AND SERVICE CREDITS GRANTED</b>	<u>( 80,472,989.70)</u>	<u>( 81,448,710.33)</u>	<u>( 975,720.63)</u>
<b>NET LIABILITIES</b>	<u>\$ 398,340,135.89</u>	<u>\$ 436,699,071.95</u>	<u>\$ 38,358,936.06</u>
<b>PRIOR SERVICE FUND ACCOUNT:</b>			
Excess Minimum Annuity Provisions (Estimated)	\$ 218,405,108.13	\$ 224,347,292.28	\$ 5,942,184.15
Employee Annuitants	88,134,628.56	103,687,980.84	15,553,352.28
Employees' Annuities Fixed	30,293.04	28,442.52	( 1,850.52)
Widow Annuitants	3,381,796.08	4,113,922.32	732,126.24
Wives' Annuities Fixed	3,664,338.37	4,642,112.18	977,773.81
Old Fund Pensioners	0	0	0
Employee Deductions	0	0	0
Contributions for Employees	3,904.88	4,061.08	156.20
Contributions for Wives	1,867.49	1,942.19	74.70
Salary Deductions for 2% Annuity	9,858,350.61	10,978,661.41	1,120,310.80
	<u>\$ 323,480,287.16</u>	<u>\$ 347,804,414.82</u>	<u>\$ 24,324,127.66</u>
<b>DEDUCT: ESTIMATED BALANCE OF UNFUNDED OBLIGATIONS</b>	<u>(359,891,228.25)</u>	<u>(392,813,082.79)</u>	<u>(32,921,854.54)</u>
<b>NET LIABILITIES FOR PREVIOUS SERVICE</b>	<u>\$ ( 36,410,941.09)</u>	<u>\$ ( 45,008,667.97)</u>	<u>\$ ( 8,597,726.88)</u>
<b>TOTAL NET LIABILITIES AND FUND BALANCES</b>	<u>\$ 361,929,194.80</u>	<u>\$ 391,690,403.98</u>	<u>\$ 29,761,209.18</u>

MUNICIPAL EMPLOYEES'  
ANNUITY AND BENEFIT FUND  
OF CHICAGO

CASH RECONCILIATION

YEAR 1974

RECEIPTS  
AND

DISBURSEMENTS

## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

RECEIPTS - YEAR 1974 (ACTUAL CASH)

CASH BALANCE, JANUARY 1, 1974 \$ 168,491.62

## RECEIPTS:

Deductions from Employees' Salaries	\$22,880,697.37	
Interest on Investments	\$19,201,300.77	
Dividends on Stock	<u>1,374,237.56</u>	20,575,538.33
Bond Maturities and Sales	\$47,754,702.00	
Less: Losses on Bond Sales (Net)*	<u>6,640,870.77</u>	41,113,831.23
Stock Sales	\$ 9,695,663.55	
Less: Losses on Stock Sales (Net)	<u>397,326.92</u>	9,298,336.63
Taxes Collected (Levies for Fund Purposes)		20,208,944.53
Federal Government Contributions		1,937,820.15
Treasurer's Receipts		657,830.47
Contributions from Annuitants		2,444.47
Annuity Payments under Reciprocal Act	<u>95,504.47</u>	<u>116,770,947.65</u>

TOTAL CASH RECEIPTS PLUS CASH BALANCE, JANUARY 1, 1974 \$116,939,439.27

\* Losses were advisedly taken in order to replace low interest yields with higher yielding bonds, with the eventual result a financial gain, sufficient to more than offset a present temporary loss.

## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

DISBURSEMENTS - YEAR 1974 (ACTUAL CASH)

## DISBURSEMENTS:

## INVESTMENTS:

Bonds and Notes Purchased (Premium and Discount, Net)	\$64,280,603.02	
Accrued Interest on Investments Purchased	580,060.03	
Stock Purchased	<u>13,005,410.43</u>	\$77,866,073.48

## BENEFITS PAID:

Annuities to Employees, Widows and Children	\$28,217,602.51	
Duty Disability Benefits	325,233.33	
Ordinary Disability Benefits	<u>1,566,830.02</u>	30,109,665.86

## REFUNDS:

To Employees, Their Heirs or Estates	\$ 3,348,532.39	
Board of Education and City Comptrollers and Other A & B Funds	<u>75,117.62</u>	3,423,650.01

## EXPENSE OF ADMINISTRATION:

Salaries, Actuarial, Legal Expense and Consultant Audit	\$ 366,111.73 7,500.00	
Forgery Bonds, Surety & Insurance Premiums	1,516.00	
Investment Counsel Service	73,333.33	
Medical Fees	15,368.40	
Office Supplies and Equipment	2,246.31	
Postage	14,177.45	
Printing & Stationery	10,455.40	
Repairs and Maintenance of Office Machines	716.42	
Rent and Electricity	36,820.84	
Rental Copy Machine	877.26	
Telephone and Telegraph	406.28	
Miscellaneous	<u>4,476.88</u>	
		<u>534,006.30</u>

\$111,933,395.65

CASH BALANCE, DECEMBER 31, 1974

\$ 5,006,043.62

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

TAXES COLLECTIBLE -- CITY OF CHICAGO

DECEMBER 31, 1974

Year	Uncollected Taxes 12-31-74	Estimate for Loss 12-31-73	Additional Estimate Set Up 12-31-74	Total Estimate for Loss 12-31-74	Accounts Receivable Taxes Collectible
1965	\$ 956,449.77	\$ 931,683.00	\$ 0	\$ 931,683.00	\$ 24,766.77
1966	951,367.08	925,091.00	9,738.00	934,829.00	16,538.08
1967	1,318,958.48	1,264,117.00	41,865.00	1,305,982.00	12,976.48
1968	1,369,176.17	1,322,622.00	30,060.00	1,352,682.00	16,494.17
1969	1,568,130.60	1,479,713.00	0	1,479,713.00	88,417.60
1970	1,825,850.84	1,738,569.00	22,677.00	1,761,246.00	64,604.84
1971	2,421,803.88	2,108,651.00	125,090.00	2,233,741.00	188,062.88
1972	2,929,170.80	2,411,991.00	140,699.00	2,552,690.00	376,480.80
1973	4,412,659.98	2,455,500.00	613,639.00	3,069,139.00	1,343,520.98
1974	<u>28,800,000.00</u>	<u>0</u>	<u>3,600,000.00</u>	<u>3,600,000.00</u>	<u>25,200,000.00</u>
Totals	<u>\$46,553,567.60</u>	<u>\$14,637,937.00</u>	<u>\$4,583,768.00</u>	<u>\$19,221,705.00</u>	<u>\$27,331,862.60</u>
1965	\$ 3,651.63	\$ 3,600.00	\$ 0	\$ 3,600.00	\$ 51.63
1966	3,813.39	3,600.00	0	3,600.00	213.39
1967	4,839.98	3,600.00	0	3,600.00	1,239.98
1968	4,534.60	3,600.00	0	3,600.00	934.60
1969	3,671.13	3,400.00	0	3,400.00	271.13
1970	4,598.08	3,900.00	0	3,900.00	698.08
1971	5,773.47	4,200.00	0	4,200.00	1,573.47
1972	6,229.15	4,200.00	0	4,200.00	2,029.15
1973	7,860.66	4,500.00	0	4,500.00	3,360.66
1974	<u>51,000.00</u>	<u>0</u>	<u>6,375.00</u>	<u>6,375.00</u>	<u>44,625.00</u>
Totals	<u>\$ 95,972.09</u>	<u>\$ 34,600.00</u>	<u>\$ 6,375.00</u>	<u>\$ 40,975.00</u>	<u>\$ 54,997.09</u>
Grand Total	<u>\$46,649,539.69</u>	<u>\$14,672,537.00</u>	<u>\$4,590,143.00</u>	<u>\$19,262,680.00</u>	<u>\$27,386,859.69</u>

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

ACCOUNTS RECEIVABLE #12

TOTAL FROM INDIVIDUAL LEDGER CARDS - 1974

	<u>December 31, 1974</u>
Regular Cards	\$ 73,508.14
Widow Annuitants	720.45
Employee Annuitants	256.28
T. A.	74.66
Due -- Permanent File	16,346.53
Balance from Refunds	1,476.82
Refund Check	215.66
Treasurer's Receipts Accrued	25,637.67
Interest Coupons in Default (#8)	<u>4,671.00</u>
Total to Page 1 -- Balance Sheet	<u>\$122,907.21</u>

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

ACCOUNTS PAYABLE #14

TOTAL FROM INDIVIDUAL LEDGER CARDS - 1974

	<u>December 31, 1974</u>
Regular Cards	\$275,662.28
Widow Annuitants	2,025.04
Employee Annuitants	12,018.00
T. A.	2,220.21
Due Payable -- Permanent File	105,081.47
Balance from Refunds	9,377.72
Suspense	0
Outstanding Paper Checks Cancelled - (Includes Permanent File Municipal Courts) (16-A)	5,001.52
Special Asset Account (8-A) B/C or B/S	<u>9,675.45</u>
Total to Page 1 -- Balance Sheet	<u>\$421,061.69</u>

MUNICIPAL 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 with interest at the valuation rate on the unfunded liability. No funds are provided for amortization of this liability.

Age at entrance valuation groups were 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, and 60 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 are assumed married).
- 5) Expense of Administration.

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

ACTUARIAL ASSUMPTIONS:

MORTALITY: For mortality for members in the active service the 1951 Group Annuity Table was used for female lives, and the Combined Annuity Mortality Table for male lives. These rates of mortality approximate those experienced by the members of the Fund for the years 1971 and 1972. For retirement annuitants and wives the 1951 Group Annuity Mortality Table was used. The experience for 1971-1972 indicates this Table's adequacy.

INTEREST: 5% a year, compounded annually. On page five of this report, a statement indicates the investment yields the Fund actually realized on investments valued over the past twelve years. The average for the last five years was 5.56%. Interest earnings over the assumed 5% 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 3-1/2% rate assumed.

SALARY SCALE: 3-1/2% a year, compounded annually. Page five of this report shows that the annual increase in total average salary for the past twelve years has been about 5%. If it is believed that a 5% pattern, or greater, will continue in the long range future, the salary scale assumption will need to be increased. The discussion on the relationship of the Salary Scale and interest rates is given in the letter to transmittal for this report.



MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Some Social Security contributions studies are now based on a projection of 6% compounded annually for future wage and salary increases. Such a pattern will have a powerful influence on salary scales.

RATES OF RETIREMENT: The rates of retirement used in this 1973 valuation are shown on page fifteen for each age of entrance group into the service and are based on the combined 1971 and 1972 experience of the Fund...modified to give effect to the greater rates of retirement in 1972 resulting from the impact of the first full calendar year during which the new annuity formula was in effect.

TERMINATION RATES: These rates are shown on page fifteen. They are slightly greater than those used in the 1972 valuation and are based on the experience for the year 1971 and 1972.

THE SALARY SCALE AND PROPORTION OF MALES MARRIED ARE SHOWN ON PAGE FIFTEEN.

ACTIVE MEMBERSHIP: It is assumed that the future active membership of the Fund will approximate its present membership, which as of December 31, 1974 was made up of 12,524 males and 12,920 females.

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SERVICE TABLE FUNCTIONS

Rate of Retirement  
%

Male

Attained Age	Age at Entrance							
	22	27	32	37	42	47	52	57
60	10.2	6.6	5.1	3.9	1.9			
61	13.2	8.4	6.3	4.8	2.8	0.7	0.5	0.4
62	15.6	10.2	8.1	6.0	3.9	1.8	1.5	0.3
63	17.4	12.0	10.5	7.8	5.1	3.0	2.5	1.2
64	18.5	13.8	12.4	11.1	6.3	5.0	3.5	1.8
65	32.0	26.0	23.2	21.5	14.5	7.5	5.0	2.5
70	36.5	33.0	30.8	29.2	26.5	22.5	16.0	9.0
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Female

55	4.8	3.5	3.0	2.0	1.0			
56	5.8	4.5	4.0	2.8	1.5	0.5		
57	6.8	5.5	4.5	3.5	2.3	1.0		
58	8.0	6.3	5.5	4.2	3.0	1.8	0.2	
59	9.5	7.3	6.5	5.0	3.6	2.5	1.0	
60	11.0	8.0	7.0	5.5	4.5	3.0	2.0	
61	12.5	9.5	8.5	6.5	5.5	4.0	3.0	0.8
62	15.0	10.8	10.0	7.5	6.5	5.0	3.7	2.0
63	18.5	12.5	11.5	9.0	7.5	6.0	4.5	3.0
64	25.0	14.5	13.0	10.5	9.5	7.5	5.7	4.0
65	30.8	23.5	15.0	12.5	11.0	9.0	7.0	5.0
70	35.0	32.0	28.5	24.0	20.5	17.5	14.5	12.5
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Attained Age	Salary Scale 3-1/2% Per Yr.	Male	Male Death	Female Death	Proportion
		Combined Rate	Rate 1951 GA Per 1,000	Rate 1951 GA Per 1,000	of Males Married %
22	1.035	2.1	.6	.4	81
27	1.229	2.2	.8	.5	81
32	1.459	2.6	1.1	.7	81
37	1.733	3.6	1.5	1.0	80
42	2.059	5.5	2.4	1.5	83
47	2.445	8.1	4.5	2.3	83
52	2.905	12.1	7.9	3.5	84
57	3.450	18.1	12.2	5.6	82
62	4.097	27.0	18.3	9.8	80
67	4.866	40.1	30.1	16.5	78
70	5.396	50.8	39.3	23.1	74
75	6.408	69.5	62.4	44.3	74

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SERVICE TABLE FUNCTIONS

Rate of Withdrawal from Service  
%

Male

<u>Attained</u> <u>Age</u>	<u>Age at Entrance</u>							
	<u>22</u>	<u>27</u>	<u>32</u>	<u>37</u>	<u>42</u>	<u>47</u>	<u>52</u>	<u>57</u>
22	16.5	-	-	-	-	-	-	-
27	9.8	12.0	-	-	-	-	-	-
32	4.5	7.2	9.5	-	-	-	-	-
37	2.0	3.8	5.0	8.8	-	-	-	-
42	0.5	1.8	2.8	4.5	8.5	-	-	-
47	0	0.5	1.5	2.5	4.0	7.5	-	-
52	0	0	0.3	1.0	1.5	4.2	8.5	-
57	0	0	0	0	0	2.0	3.2	5.0

Female

22	16.5	-	-	-	-	-	-	-
27	12.0	13.0	-	-	-	-	-	-
32	7.0	8.0	9.0	-	-	-	-	-
37	3.5	4.0	5.5	6.5	-	-	-	-
42	1.2	2.0	3.2	4.5	5.0	-	-	-
47	0.5	1.0	1.8	2.5	3.1	4.0	-	-
52	0	0	0.6	1.0	2.0	2.6	3.5	-
57	0	0	0	0	0.7	1.5	2.1	3.5

## MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

MEMBERSHIP STATISTICSYEAR 1974

## A. CHANGES IN ACTIVE PARTICIPANTS

	<u>Number at Beginning of Year</u>	<u>Increases</u>	<u>Decreases</u>	<u>Number at End of Year</u>
Male	12,585	1,267	1,328	12,524
Female	<u>12,698</u>	<u>1,445</u>	<u>1,223</u>	<u>12,920</u>
Total	<u>25,283</u>	<u>2,712</u>	<u>2,551</u>	<u>25,444</u>

## B. CHANGES IN ANNUITANTS AND BENEFICIARIES

	<u>Number at Beginning of Year</u>	<u>Increases</u>	<u>Decreases</u>	<u>Number at End of Year</u>
Employee Annuities	5,729	723	372	6,080
Widow Annuities	3,682	263	245	3,700
Children Annuities	415	80	73	422
Ordinary Disability Benefits	294	461	446	309
Duty Disability Benefits	34	217	213	38
Widow Compensation Annuities	1	1	0	2
Reversionary	2	5	0	7
Reciprocals	417	113	16	514
Other Special Fund Benefits	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	<u>10,574</u>	<u>1,863</u>	<u>1,365</u>	<u>11,072</u>

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

SALARY AND AGE STATISTICS

YEAR 1974

	<u>Age at Entrance</u>		<u>Attained Age</u> <u>December 31, 1974</u>	
	<u>Number</u>	<u>Salaries</u>	<u>Number</u>	<u>Salaries</u>
<u>MALE</u>				
Under 20	0	\$ 0	12	\$ 115,224
20 to 24	1,220	18,093,912	246	2,523,264
25 to 29	2,207	35,217,912	530	6,477,960
30 to 34	2,368	36,940,752	709	9,663,960
35 to 39	2,119	31,083,768	912	13,113,384
40 to 44	1,704	24,173,832	1,276	18,505,224
45 to 49	1,273	17,555,928	1,911	29,351,208
50 to 54	774	10,048,536	2,322	35,794,488
55 to 59	506	6,274,616	2,130	31,987,248
60 to 64	208	2,581,632	1,470	21,282,624
65 to 69	0	0	609	9,157,248
70 and Over	0	0	252	4,099,056
Without Record	145	2,325,432	145	2,325,432
<b>Total</b>	<b>12,524</b>	<b>\$184,396,320</b>	<b>12,524</b>	<b>\$184,396,320</b>
Average Annual Salary				\$ 14,723.44

<u>FEMALE</u>				
Under 20	0	\$ 0	42	\$ 271,632
20 to 24	1,375	12,126,336	436	3,145,752
25 to 29	1,365	12,318,360	852	6,872,112
30 to 34	1,771	14,849,064	1,033	8,365,584
35 to 39	2,197	17,772,624	1,439	11,380,296
40 to 44	2,248	17,842,632	1,615	12,574,656
45 to 49	1,993	15,453,960	1,893	14,790,432
50 to 54	1,205	9,167,376	2,110	17,041,080
55 to 59	505	3,833,304	1,784	15,140,232
60 to 64	131	1,022,664	1,108	9,943,560
65 to 69	0	0	349	3,409,632
70 and Over	0	0	129	1,451,352
Without Record	130	1,056,936	130	1,056,936
<b>Total</b>	<b>12,920</b>	<b>\$105,443,256</b>	<b>12,920</b>	<b>\$105,443,256</b>
Average Annual Salary				\$ 8,161.24
				<u>25,444</u>
Average Salary Male plus Female				\$ 11,391.27

MUNICIPAL EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO

ANNUITANTS CLASSIFIED BY AGE AND AMOUNTS

YEAR 1974

PENSIONER

	<u>Male</u>		<u>Female</u>		<u>Widows</u>	
Under 50	2	\$ 2,802.00	3	\$ 1,200.00	123	\$ 116,082.00
50 to 54	4	3,934.32	3	2,591.40	173	224,824.56
55 to 59	73	266,615.76	97	184,983.72	277	381,179.04
60 to 64	357	2,126,750.64	298	763,075.80	455	689,590.44
65 to 69	887	4,977,484.44	700	2,096,277.60	612	913,022.64
70 to 74	912	4,638,198.48	676	2,047,668.24	701	936,758.64
75 to 79	663	2,900,509.20	472	1,297,197.00	639	743,271.60
80 and Over	607	2,451,891.00	326	763,154.00	720	750,611.52
Total	<u>3,505</u>	<u>\$17,368,185.84</u>	<u>2,575</u>	<u>\$7,156,147.76</u>	<u>3,700</u>	<u>\$4,755,340.44</u>
Average Annual Annuity		\$ 4,955.26		\$ 2,779.09		\$ 1,285.23
Average Monthly Annuity		\$ 412.94		\$ 231.59		\$ 107.10