ACTUARIAL STATEMENT

DECEMBER 31, 1980

#### DONALDF. CAMPBELL CONSULTING ACTUARIES 221 NORTH LA SALLE STREET SUITE 3117 CHICAGO, ILLINOIS 60601

TELEPHONE 782-1335

October 16, 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, 1980 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 1980. 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.

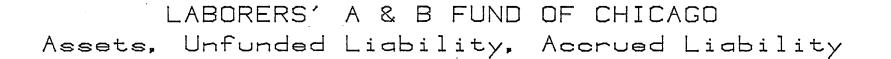
## <u>SUMMARY</u>

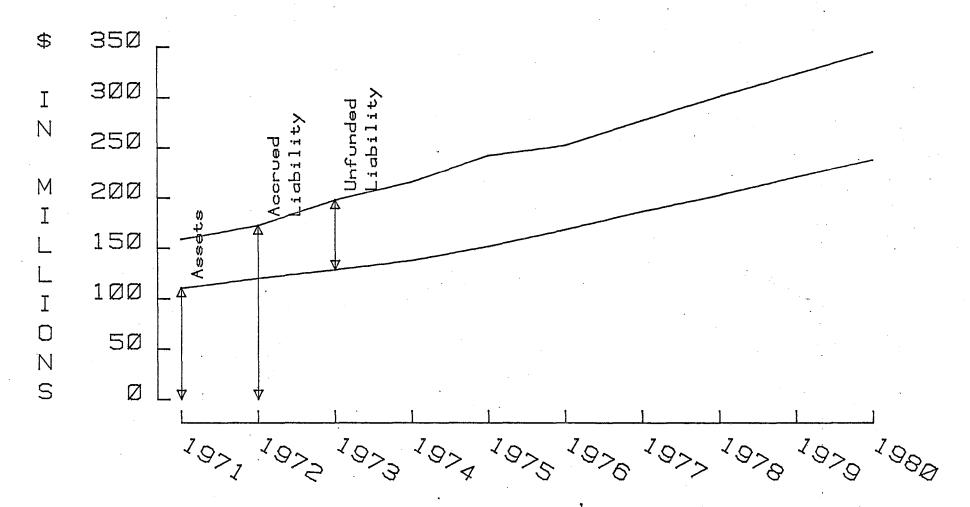
The following represents a summary of this report:

	This Year	Last Year
INCOME: Investment Employer Employee Total	\$ 12,626,861 \$ 11,791,330 \$ 9,729,912 \$ 34,148,103	\$ 13,547,589 \$ 11,108,298 \$ 9,571,764 \$ 34,227,651
OUTGO: Refunds, Benefits, Expenses	\$ 16,796,949	\$ 14,055,673
EXCESS OF INCOME OVER OUTGO	\$ 17,351,154	\$ 20,171,977
ACTIVE PARTICIPANTS	5,847	6,175
BENEFICIARIES: Employee Spouse Disabilities Children Other	2,379 1,162 177 139 1	2,227 1,113 161 153 1
ACTUARIAL:		
Assets: (Total at book value)	\$238,242,772	\$220,810,778
Funded Ratio	68.98%	68.28%
Accrued Liability	\$345,364,820	\$323,368,034
Termination Liability	\$183,588,283	\$169,975,809
Excess Upon Termination	\$ 54,654,489	\$ 50,834,969
Unfunded Liability	\$107,122,048	\$102,557,256
Annual Actuarial Requirement (ER & EE)	\$ 25,019,195	\$ 21,699,408
Expected Net Annual Actuarial Deficiency	\$ 3,333,603	\$ 953,861
Required Employer Multiple	1.96	1.62
INVESTMENT:		
Yield (On Invested Assets including gains/losse	es) 6.03%	7.00%
MISCELLANEOUS:	4.	
Salary Roll	\$108,854,496	\$105,825,264
Average Salary	\$ 18,617	\$ 17,138

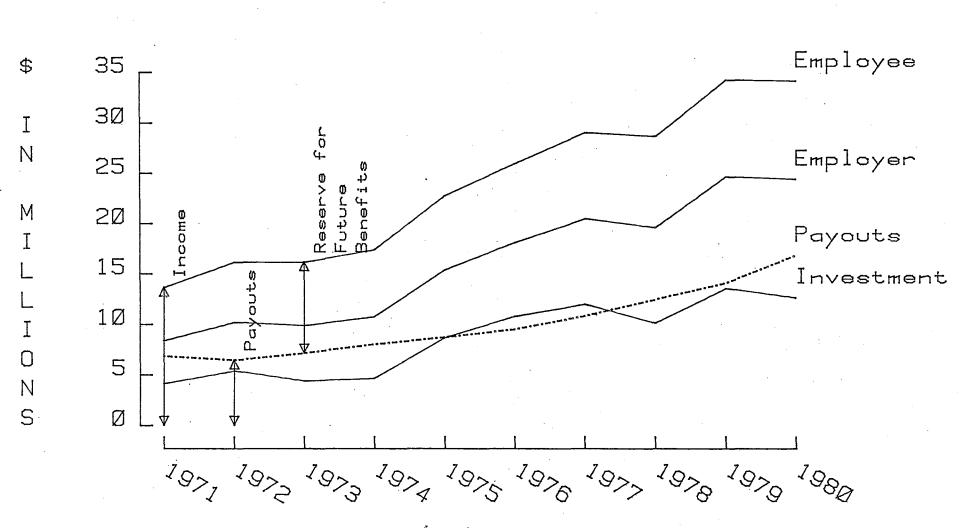
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LABORERS' A & B FUND OF CHICAGO Income and Payouts

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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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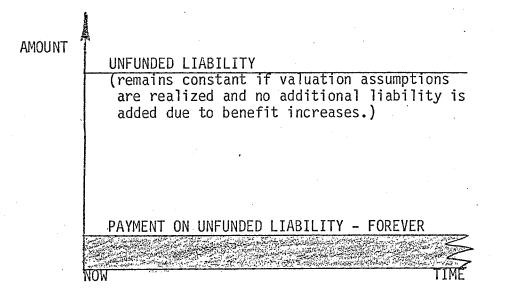
### ALTERNATIVE VALUATIONS:

We can make 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.

#### 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 reguired for private pension plans for IRS qualification before ERISA.

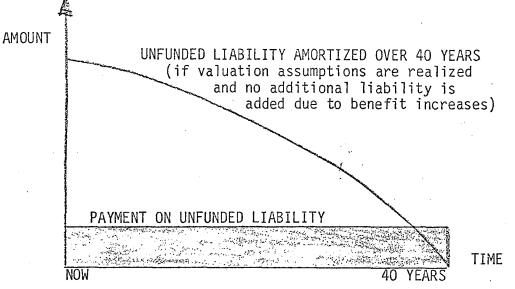


2.) ERISA now requires that initial unfunded liability be amortized over a forty year period.

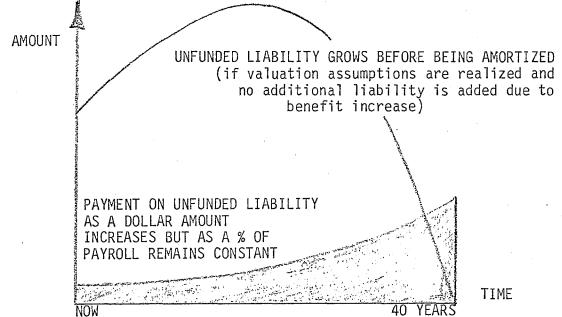
The normal cost plus interest method and the <u>Normal Cost Plus 40 Year</u> <u>Amortization method both express the past service</u> costs as a level annual dollar amount. Consequently, as the total payroll increases in the future, the level annual amount becomes a decreasing percent of the total payroll.

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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 1981 Tax Levy	Ultimate Required Multiple	Unfunded Liability Will	Portion Required For Amortization Of Unfunded Liability*
1) Normal Cost + Interest Only	\$16,423,503	1.96	Remain constant at \$107,122,048	\$6,427,323
2) ERISA: Normal Cost + 40 Year Amortization	\$17,144,517	2.04	Decrease to \$0	\$7,119,496
3) Normal Cost + 40 Yr. Level % of Payroll Increasing 3½% a Year (Inflation Only)	\$14,007,114	1.67	Increase to \$132,136,431 in 18 years and decrease thereafter	\$4,107,589 increasing to \$16,263,011 in 40 Years

4) Present Law \$12,951,000 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 City tax levy for 1981 should be \$16,423,503 which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1980 of \$108,854,496 and an active membership of 5,847 persons. The detail is as follows:

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Detail of	Annual	City	Contribution:
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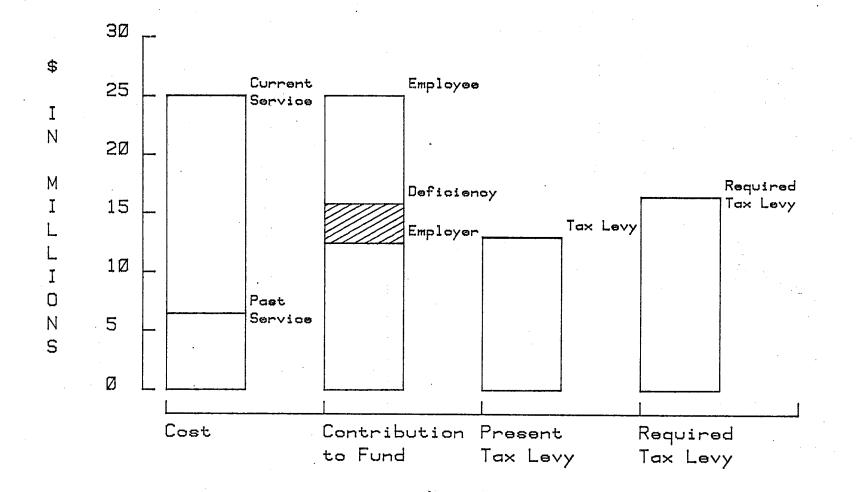
<u></u>		Amount	Percent of Salary	Dollar Per Active
1.	Normal Cost - For Current Service	\$18,591,872	17.08%	\$3,180
2.	6% Interest on Unfunded Liability	\$ 6,427,323	5.90%	\$1,099
3.	Total Actuarial Requirement (1)+(2)	\$25,019,195	22.98%	\$4,279
4.	Employee Contributions	\$ 9,252,632	8.50%	\$1,582
5.	Employer Requirement (3)-(4)	\$15,766,563	14.48%	\$2,697
6.	Expected Net Employer Contribution from 1981 Tax Levy of \$12,951,000			
	after a 4% loss	\$12,432,960	11.42%	\$2,126
7.	Expected Net Annual Deficiency	\$ 3,333,603	3.06%	\$ 570
8.	Tax Levy Required (assume 4% loss)	\$16,423,503		. <b>-</b>
9.	Increase in Tax Levy Required	\$ 3,472,503		
10.	Required Ultimate Multiple	1.96		
11.	Present Authorized Ultimate Multiple	1.37		
12.	Increase in Ultimate Multiple Needed	.59		

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 1981 (Normal Cost plus Interest Only)



Detail of Normal Cost (given above)	<u>% Salary</u>	<u>\$</u> Per	Active
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	7.77% $1.12$ $.38$ $.51$ $.11$ $2.50$ $.34$ $3.85$ $0$ $.40$ $.10$	\$1.	446 209 71 95 20 465 62 718 1 75 18
CHANGE IN THE UNFUNDED LIABILITY:	17.08%	\$3,	180
The total unfunded liability as of December 31, 1980 December 31, 1979, it was \$102,557,256.	is \$107,1	22,048.	As of
Detail of Change in Unfunded Liability:			
1. Increase in Salaries over 5% Assumed	\$8,11	1,444	Increase
2. Investment Yield under 6% Assumed	75	8,925	Increase
3. Excess in Annual Contribution: 1980 Total Actuarial Requirement\$21,699,40 Less Employer Net to Fund 1980 Tax Levy	30	8,166	Increase
<ol> <li>Miscellaneous Actuarial Changes - Gain From Retirement and Death</li> </ol>	(4,48	3,742)	Decrease
Net Change in Unfunded Liability	\$4,56	4,792	Increase
EUNDED DATIO.			

### FUNDED RATIO:

The ratio of assets to liabilities is 68.98% as of December 31, 1980 - and was 68.28% as of December 31, 1979. 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 7.9% while the liabilites increased 6.8%.

### RATIO OF ACTIVE EMPLOYEES TO ANNUITANTS & BENEFICIARIES:

The ratio of active employees to annuitants and beneficiaries is 1.52 as of December 31, 1980 and was 1.69 as of December 31, 1979. This ratio illustrates the relationship between the contributors and the beneficiaries.

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### 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, 1980.

In other words....if the pension fund was terminated as of valuation date, an excess amount of \$54,654,489 would exist after providing lifetime pensions to those now retired and to return all active members' contributions.

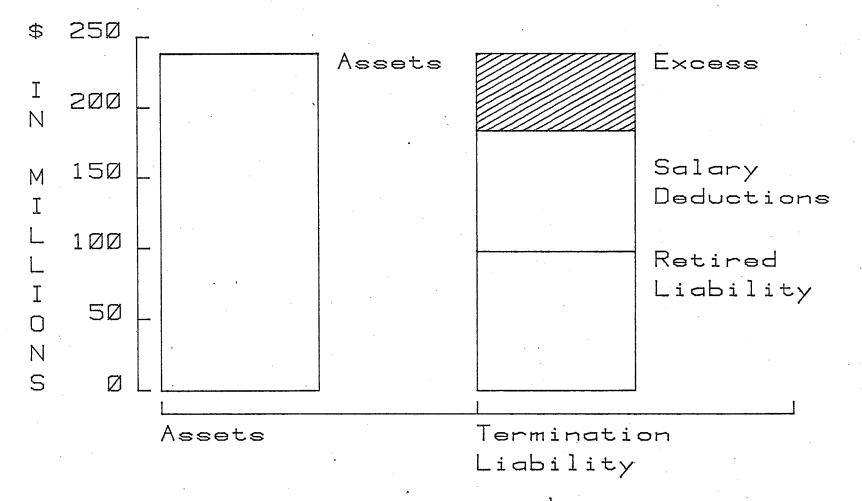
Or the assets on hand amounting to \$238,242,772 would be sufficient to provide for the future lifetimes for all retired annuitants, widows and spouses of annuitants, for whom the total liability is \$97,598,923, the difference between the total assets and such reserve liability or \$140,643,849 could be paid to active employees.

As there were 5,847 active employees, the average amount that could be paid to each such member would be \$24,054. The average amount contributed is \$14,707 so that 164% 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 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 \$2.28. 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,

Cam LIF Donald F. Campbell, F.C.A., M.A.A.A.

Enrolled Actuary # 1248

Donald 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, 1980

ASSETS

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AND

LIABILITIES

# ASSETS

## ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1980

CASH: On Deposit		\$ 791,676.42
INVESTMENTS: Bonds - Par Value Bond Premiums & Discounts Common Stocks - Cost Accrued Bond Interest Due from Broker	\$173,875,735.00 ( 8,199,926.94) 51,257,524.74 3,758,699.87 1,318,139.73	
Total Investments		\$222,010,172.40
ACCOUNTS RECEIVABLE - TAXES (See Exhibit "D") Replacement Tax From State Tax Extension Less: Estimates for Loss on Collection	\$ 4,501,285.00 \$ 17,527,486.59 6,104,481.00	
Net Taxes Receivable		\$ 15,924,290.59
OTHER ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous Employee Accounts	\$ 699,865.17 42,587.91	
Total Other Accounts Receivable		\$ 742,453.08
GROSS LEDGER ASSETS		\$239,468,592.49
LESS: ACCOUNTS PAYABLE: Miscellaneous Employee Accounts Military Service Deductions Excess from Refunds	\$ 1,224,263.09 1,557.71	
Total Accounts Payable		\$ 1,225,820.80
NET LEDGER ASSETS		\$238,242,771.69

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### Exhibit "A"

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

### LIABILITIES AND FUND BALANCES

## ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1980

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	\$31,454,212.20 5,879,820.12 12,679,360.80 7,076,083.25	\$ 57,089,476.37
SALARY DEDUCTION FUND ACCOUNT: Employees Spouses of Employees Total Salary Deduction Fund	\$62,353,239.13 13,506,977.26	\$ 75,860,216.39
CITY CONTRIBUTION FUND ACCOUNT: Employees Spouses of Employees Supplemental Annuities Total City Contribution Fund	\$59,448,368.53 19,120,589.38 12,289.56	\$ 78,581,247.47
OTHER RESERVES: Supplementary Payment Reserve Annuity Payment Fund Account Total Other Reserves	\$ 99,756.51 8,563,421.46	\$ 8,663,177.97
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	\$43,907,346.24 3,350,604.96 1,978,421.04 2,976,371.37 5,179,425.94 67,778,531.92	\$125,170,701.47
TOTAL LIABILITIES		\$345,364,819.67
Obligations of Fund for Prior Service Liabili	ties (Note 1)	( 107,122,047.98)
TOTAL NET LIABILITIES AND FUND BALANCES		\$238,242,771.69
Note 1 - The letter of transmittal attached h which this liability was determined.	ereto sets fort	h the manner in

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INCOME

YEAR 1980

INCOME

AND

EXPENDITURES

Exhibit "B"

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

## INCOME FOR YEAR OF 1980

SALARY DEDUCTIONS: Total Contributions by Employee Employee Spouse Automatic Increase Ordinary Disability - Ded. in Lieu Received From Municipal Fund Temporary Service Payments Total Contributed by City Duty Disability - Ded. in Lieu Total Contributed by City Duty Disability - Ded. in Lieu Total Contributed By City Total Salary Deductions	\$ 7,202,718.68 1,572,068.40 546,371.70 240,960.96 10,636.43 23,813.06 133,342.93	\$ 9,596,569.23 <u>\$ 133,342.93</u> \$ 9,729,912.16
CITY CONTRIBUTIONS: (1980 Taxes of \$ 8,944,408 (City) plus \$29,000 (Park) Less 5% for Loss of Collection \$448,670 Plus Replacement Tax From State of \$3,266,592) Employees Spouses of Employees Ordinary Disability Fund Duty Disability Fund Child's Annuity Fund Expense Fund Interest on Income Prior Service Annuity Fund	\$ 6,595,748.43 2,217,570.64 1,422,028.68 389,518.41 118,864.12 440,591.05 144,454.71 462,553.96	
Total City Contributions	· · ·	\$11,791,330.00
INVESTMENT INCOME: Interest on Bonds Dividends Gain (Loss) on Sale of Bonds* Gain (Loss) on Sale of Stocks Total Investment Income	\$14,505,164.81 2,483,620.17 ( 6,757,953.58) 2,396,029.51	\$12,626,860.91
TOTAL INCOME FORWARDED		\$34,148,103.07

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

## EXPENDITURES FOR YEAR 1980

### TOTAL INCOME FORWARDED

## \$34,148,103.07

ANNUITIES AND BENEFITS PAID: Employees' Annuities Spouses' Annuities Compensation Annuities Children's Annuities Ordinary Disability Duty Disability Supplementary Payments	\$8,591,787.16 1,614,326.44 3,469.32 118,864.12 1,408,837.25 365,268.98 66,365.28	-	
Total Benefits Paid Reciprocal Act Re- imbursements	\$12,168,918.55 ( 7,626.35)		
Net Benefits Paid	• •	\$12,161,292.20	0
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	$\begin{array}{c} 109,785.83\\ 4,137.60\\ 214,065.52\\ 16,100.00\\ 36,000.00\\ 4,752.64\\ 7,475.99\\ 10,000.00\\ 30,377.13\\ 1,089.74\\ 6,806.60\\ \end{array}$		
Total Expenses		\$ 440,591.05	
REFUNDŞ		4,195,055.49	
TOTAL EXPENDITURES			\$16,796,948.74
EXCESS INCOME OVER EXPENDITURES	5		\$17,351,164.33
Net Change in Reserve for Loss and Taxes Receivable for Pric		• •	80,828.88
INCREASE IN NET ASSETS FOR YEAF	{		\$17,431,993.21

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## COMPARATIVE ANALYSIS

## YEAR 1980

## ASSETS

AND

## LIABILITIES

## Exhibit "C"

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

## COMPARATIVE ANALYSIS

# ASSETS

CACIL	1/1/1980	12/31/1980	Increase (Decrease)
CASH: On Deposit	(\$ 1,146,731)	\$ 791,676	\$ 1,938,407
INVESTMENTS: Bonds (Par Value) Bond Premiums & Discounts Common Stocks - Cost Due From Broker Accrued Bond Interest Accrued Dividends	\$161,312,574 ( 5,599,771) 50,031,027 416,517 3,150,356 0	\$172,875,735 (7,199,927) 51,257,525 1,318,140 3,758,700 0	\$11,563,161 ( 1,600,156) 1,226,498 901,623 608,344 0
Total Investments	\$209,310,703	\$222,010,173	\$12,699,470
ACCOUNTS RECEIVABLE - TAXES Replacement Tax From State Tax Extension Less: Estimates for L/C	\$ 3,133,949 15,938,439 6,679,058	\$ 4,501,285 17,527,487 6,104,481	\$ 1,367,336 1,589,048 ( 574,577)
Net Taxes Receivable	\$ 12,393,330	\$ 15,924,291	\$ 3,530,961
TAXES IN TRANSIT	\$ 0	\$0	\$0
OTHER ACCOUNTS RECEIVABLE: Salary Deductions Accrued Misc. Employee Accounts	\$ 1,344,305 79,208	\$    699,865 42,588	(\$ 644,440) ( 36,620)
Total Other Accts. Rec.	\$ 1,423,513	\$ 742,453	<u>(\$ 681,060)</u>
GROSS LEDGER ASSETS	\$221,980,815	\$239,468,593	\$17,487,778
LESS: ACCOUNTS PAYABLE: Misc. Employee Accts. Military Service Deds.	\$ 1,168,478 1,558	\$ 1,224,263 1,558	\$    55,785 0
Total Accts. Payable	\$ 1,170,036	\$ 1,225,821	\$ 55,785
NET LEDGER ASSETS	\$220,810,779	\$238,242,772	\$17,431,993
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## COMPARATIVE ANALYSIS

## LIABILITIES AND FUND BALANCES

LIABILITY RESERVES:	1/1/1980	12/31/1980	Increase (Decrease)
ANNUITY PAYMENT FUND: Employee Annuitants Emp. Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed	\$ 27,982,762 8,527,380 11,620,647 6,881,069	\$ 31,454,212 5,879,820 12,679,361 7,076,083	\$ 3,471,450 ( 2,647,560) 1,058,714 195,014
Total	\$ 55,011,858	\$ 57,089,476	\$ 2,077,618
SALARY DEDUCTION FUND ACCOUNT: Employees Spouses of Employees	\$ 59,899,556 12,849,553	\$ 62,353,239 13,506,977	\$ 2,453,683 657,424
Total	\$ 72,749,109	\$ 75,860,216	\$ 3,111,107 -
CITY CONT. FUND ACCOUNT: Employees Spouses of Employees Supplemental Annuities	\$ 57,332,846 18,326,808 12,737	\$ 59,448,369 19,120,589 12,290	\$ 2,115,523 793,781 ( 447)
Total	\$ 75,672,391	\$ 78,581,248	\$ 2,908,857
OTHER RESERVES: Supplemental Pymt. Res. Annuity Fund Account	\$    66,122 8,251,779	\$	\$ 33,635 311,643
Total	\$ 8,317,901	\$ 8,663,179	\$ 345,278
PRIOR SERVICE FUND ACCOUNT: Employee Annuitants Emp. Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed Sal. Ded. 2% Annuity Estimated Excess Liability	\$ 37,973,839 12,569 1,700,659 2,157,678 4,735,214 65,036,816	\$ 43,907,346 3,350,605 1,978,421 2,976,371 5,179,426 67,778,532	\$ 5,933,507 3,338,036 277,762 818,693 444,212 2,741,716
Total	\$111,616,775	\$125,170,701	\$13,553,926
TOTAL LIABILITIES	\$323,368,034 (102,557,256)	\$345,364,820 ( 107,122,048)	\$21,996,786 ( 4,564,792)
TOTAL NET LIABILITIES	\$220,810,778	\$238,242,772	\$ 17,431,994

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## TAXES RECEIVABLE

DECEMBER 31, 1980

Year	Uncollected Taxes 12-31-80	Estimate for Loss 12-31-79	Additional Est. Setup 12-31-80	Total Est. for loss 12-31-80	Taxes Collectible 12-31-80
CITY	•				
1976 1977 1978 1979 1980	1,813,767.93 2,322,820.02 2,965,858.03	\$1,417,647.00 1,755,336.00 2,052,001.00 418,302.00 \$5,643,286.00	\$ <u>447,220.00</u> \$ 447,220.00	\$1,417,647.00 1,755,336.00 2,052,001.00 418,302.00 447,220.00 \$6,090,506.00	\$ 14,094.42 58,431.93 270,819.02 2,547,556.03 8,497,188.00 \$11,388,089.40
	<pre>\$ 1,234,693.00 \$ 3,266,592.00 \$ 4,501,285.00 \$21,979,880.40</pre>	Replacement	tax due from St	ate	<pre>\$ 1,234,693.00 \$ 3,266,592.00 \$ 4,501,285.00 \$15,889,374.40</pre>
PARK	DISTRICT:				
1976 1977 1978 1979 1980	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	\$ 3,500.00 3,750.00 3,875.00 1,400.00 \$ 12,525.00	\$ <u>1,450.00</u> <u>\$ 1,450.00</u>	\$ 3,500.00 3,750.00 3,875.00 1,400.00 1,450.00 \$ 13,975.00	1,701.53 2,340.20 1,968.11 27,550.00
TOTAL	.:	· .			
	\$22,028,771.59	\$5,655,811.00	\$ 448,670.00	\$6,104,481.00	\$15,924,290.59

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## MEMBERSHIP STATISTICS

# YEAR 1980

		Number at Beginning of Year	Increases	Decreases	Number At End of Year
Α.	Changes in Active Participants				
	Male	5,470	1,221	1,457	5,234
	Female	705	87	179	613
	Total	6,175	1,308	1,636	5,847
Β.	Changes In Annuitants & Beneficia	ries			
	Employee Annuitants	2,183	268	114	2,337
	Spouse Annuitants	1,106	94	46	1,154
	Children's Annuities	153	15	29	139
	Ordinary Disability Benefits	139	296	283	152
	Duty Disability Benefits	22	670	667	25
	Reversionary (Beneficiaries)	1	0	0	1
	Reciprocal: Employee Spouse	44 5	7 1	9 0	42 6
	Widow Compensation Annuities	2	0	0	2
	Total	3,655	1,351	1,148	3,858

C. Ratio of Active Participants to Annuitants & Beneficiaries

1.69

1.52

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## SALARY AND AGE STATISTICS

### YEAR 1980

## Ages and Salaries as of December 31, 1980

## <u>Male</u>

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	35 452 637 486 425 495 492 697 659 526 175 77 78 5234	\$ 611,400 8,626,224 12,283,752 9,609,264 8,504,112 10,035,600 9,855,480 13,878,816 12,788,736 10,226,904 3,477,120 1,496,496 1,486,032 \$102,879,936	\$17,469 19,085 19,284 19,772 20,010 20,274 20,031 19,912 19,406 19,443 19,869 19,435 19,052 \$19,656
		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 under Total	$ \begin{array}{c} 1\\ 3\\ 2\\ 1\\ 5\\ 17\\ 41\\ 90\\ 169\\ 200\\ 79\\ 4\\ 1\\ 613\\ \hline \end{array} $	$\begin{array}{c} \$ & \$, \$08 \\ 30, 408 \\ 27, 624 \\ 13, 680 \\ 56, 016 \\ 184, 440 \\ 444, 792 \\ 933, 672 \\ 1, 606, 704 \\ 1, 939, 296 \\ 671, 016 \\ 43, 824 \\ 14, 280 \\ \$ & 5, 974, 560 \end{array}$	\$ 8,808 10,136 13,812 13,680 11,203 10,849 10,849 10,374 9,507 9,696 8,494 10,956 14,280 \$ 9,746
TOTAL MALE AND FEMALE	5847	\$108,854,496	\$18,617

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## SALARY AND AGE STATISTICS

## YEAR 1980

## Ages at Entrance

### MALE

## FEMALE

	Number	Annual Salaries	Number	Annual Salaries	
Under 25 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 & Over W/O record	1,633 992 722 594 520 353 203 110 29 78	\$32,646,936 19,677,312 14,162,752 11,593,098 10,041,720 6,839,002 3,787,370 2,115,740 530,000 1,486,006	$ \begin{array}{r} 12\\ 36\\ 64\\ 133\\ 185\\ 139\\ 32\\ 10\\ 1\\ 1\\ 1\\ 1\\ 1 \end{array} $	$     \begin{array}{r}       172,056 \\       449,712 \\       692,545 \\       1,301,940 \\       1,811,890 \\       1,183,585 \\       240,704 \\       102,980 \\       14,300 \\       4,848 \\     \end{array} $	
Totals	5,234	<u>\$102,879,936</u>	<u>613</u>	<u>\$5,974,560</u>	
Average Annual Salar Average Attained Age Average Service Average Age at Entra		\$19,656 43.3 12.2 31.8		\$9,746 57.6 17.3 40.5	•

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Exhibit "G"

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

## AGE AND SERVICE DISTRIBUTION

# YEAR 1980

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>	<u>1-4</u>	5-9	ү <u>10-1</u> 4	ears of So 4 <u>15-19</u>	ervice <u>20-24</u>	25-29	<u>30-34</u>	<u>35+</u>	<u>Total</u>
00-20	32 17288	4 16752							·	36 17228
20-24	91 17824	303 19162	61 20138							455 19026
25-29	81 18348	283 18801	256 19945	19 20986						639 19267 -
		152 19307	177 19849				•		. ·	487 19760
35-39	31 17367	101 18819	105 20140					<b>,</b>		430 19907
	23 18500	91 19199	89 19832		. 144 3 19408		2 22536			512 19961
45-49	23 18476		89 19880			83 18521	55 21936	2 23028		533 19325
50-54	14 17169	67 18938		101 17860	161 16391		167 20292	<b>57</b> 22558	1 23256	787 18821
55-59		37 17364	76 19428	122 16806		134 17056	131 19570	104 20702	4 27000	828 17386
				91 17523	196 12778	146 17517	117 18846	79 19198	5 24480	726 16758
65-69			16 20169				43 19223	30 18150		254 16331
70+			4 15210	11 19529		18 18284	16 18500	16 20040	6 21324	81 19016
W/O	10 <u>18749</u>	24 17432	28 <u>19709</u>	9 20501	5 <u>19627</u>	1 11328	2 24312			79 18991
No. Sal. Age Servic	370 17989 e	1175 18940	1054 19694	768 18938		627 18343	533 19850	288 20371	21 22283	5847 18617 45.6 12.5
0017A/	6A				-28	-		P-1	LAB	

## Exhibit "H"

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

ANNUITANTS CLASSIFIED BY AGE AS OF 12/31/1980

		Re	tirement Annu	ities		
<u>Ages</u> 25 - 29 30 - 34	Male <u>Number</u> 1	Annual Payments \$600	Average Annual <u>Payments</u> \$ 600	Female Number	Annual Payments \$	Average Annual <u>Payments</u> \$
35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 - 74 75 - 79 80 - 84 85 - 89 90 - 94 95 - 99 Totals	$\begin{array}{c} 2\\ 6\\ 50\\ 184\\ 414\\ 336\\ 221\\ 114\\ 70\\ 19\\ 1\\ 1418\\ \end{array}$	1,741 10,230 253,978 1,242,910 2,339,444 1,748,171 826,528 383,934 257,920 50,250 342 \$7,116,048	870 1,705 5,080 6,755 5,651 5,203 3,740 3,368 3,685 2,645 342 \$5,018	8 68 236 254 166 118 55 12 2 919	13,855 189,654 576,682 472,955 296,565 192,821 80,129 16,715 3,277 \$1,842,653	1,732 2,789 2,444 1,862 1,787 1,634 1,457 797 1,639 \$2,005
Average Age			<u>71</u>			<u>73</u>

## Spouses Annuities (Not Including Compensation)

Ages	Male <u>Number</u>	Annual Payments	Average Annual Payments	Female Annual Number Payments	Average Annual Payments
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	1 1 4 1 1 	\$ 1,200 4,800 1,200 1,200 1,200 \$ 9,600	\$ 1,200 1,200 1,200 1,200 1,200	$ \begin{tabular}{ccccc} & & & & \\ & & & 2 & 2,400 \\ & & & 6 & 6,102 \\ & & & 21 & 23,083 \\ & & & & 24 & 31,344 \\ & & & 61 & 93,992 \\ & & & & 122 & 214,740 \\ & & & & 122 & 214,740 \\ & & & & 187 & 323,181 \\ & & & & 201 & 330,138 \\ & & & & & 199 & 302,080 \\ & & & & & 137 & 175,630 \\ & & & & & 120 & 125,126 \\ & & & & & 46 & 35,740 \\ & & & & & 17 & 14,396 \\ & & & & & & & 1,524 \\ \hline & & & & & & & & \\ \hline & & & & & & & &$	\$ 1,200 1,017 1,099 1,306 1,541 1,760 1,728 1,642 1,518 1,282 1,043 777 847 508 \$1,466
Average Age 0017A/6A			<u>60</u> -29-	P-LAB	<u>68</u>

## NEW ANNUITIES GRANTED

AS OF DECEMBER 31, 1980

	Male Annuitants	Female Annuitants	Widows of Deceased Employees	Widows of Deceased Annuitants
Number Retired Average Attained Age	187 65.2	81 65.9	34 56.6	60 68.9
Average Length of Service	21.8	20.4	17.6	N/A -
Average Annual Salary (4 out of 10)	\$ <b>13,</b> 620	\$ 5,952	N/A	N/A
Average Annual Final Salary	\$    17,544	\$ 7,836	N/A	N/A
Total Annual Annuity	\$ 1,180,008	\$ 227,175	\$ 79,828	\$ 136,476
Average Annual Annuity	\$ <b>6,</b> 310	\$ 2,805	\$ 2,348	\$ 2,275
Total Liability (6% 1951 G.A.)	\$12,799,832	\$2,391,545	\$ 901,183	\$1,078,841
Average Liability	\$ <b>68,</b> 448	\$ 29,525	\$ 26,505	\$ 17,980
Total Cost For Income Tax Purposes	\$ 2,744,044	\$ 497,746	443,317	N/A
Average Cost	\$ 14,674	\$ 6,145	13,039	N/A

### HISTORY 1964 to 1980

### AVERAGE ANNUAL SALARIES ENTIRE FUND

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

Average Increase for the last 5 years

(3.6)%

4.1%

8.0%

(1) Includes those members who were on disability

(2) Average annual increase in salary 1964 - 1980 about 7.96% compounded.

00174/64

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P-LAB

HISTORY OF TOTAL ANNUITIES 1968 - 1980

## Employee Annuitants (Male & Female)

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

## Spouse Annuitants (Not Including Compensation)

1968	875	\$ 580,690	\$ 664
1969	909	640,079	704
1970	928	673,352	726
1971	921	711,618	773
1972	932	775,469	832
1973	967	860,410	890
1974	997	959,632	963
1975	1,022	1,053,816	1,031
1976	1,041	1,142,064	1,097
1977	1,059	1,267,194	1,197
1978	1,075	1,381,263	1,285
1979	1,111	1,523,370	1,371
1980	1,154	1,689,076	1,464

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## HISTORY OF INVESTMENT YIELDS

## Nonrecurring Gains and Losses are Excluded from Income

Year	Investment Yield on Total Assets	Investment Yield on Invested Assets
December 31, 1971 December 31, 1972 December 31, 1973 December 31, 1973 December 31, 1974 December 31, 1975 December 31, 1976 December 31, 1977 December 31, 1978 December 31, 1979 December 31, 1980	4.75% 5.47 5.76 6.58 7.25 7.23 7.01 6.61 7.38 7.69	4.99% 5.70 6.03 6.98 7.73 7.65 7.35 6.97 7.82 8.20

Average of Last 5 Years

7.18%

### 7.60%

### Nonrecurring Gains and Losses are Included in Income

Year	Investment Yield on Total Assets	Investment Yield on Invested Assets
December 31, 1971	3.95%	4.14%
December 31, 1972	4.79	5.00
December 31, 1973	3.60	3.77
December 31, 1974	3.55	3.76
December 31, 1975	6.17	6.58
December 31, 1976	6.98	7.39
December 31, 1977	7.00	7.35
December 31, 1978	5.34	5.62
December 31, 1979	6.61	7.00
December 31, 1980	5.66	6.03
Average of Last 5 Years	6.32%	6.68%

Notes:

Yield = Investment Income ½ (Assets at beginning + end) - ½ Investment Income

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

Year End	Employee Contributions(1)	Employer Contributions(2)	Investment Income (3)	Total Income
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

### HISTORY OF FINANCIAL INFORMATION\*

Year End	Pay Outs(4)	Income Less Pay Outs(5)	Pay Outs To Assets	Income To Assets	Pay Outs 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

\*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)
- Includes Pensions, Benefits, Refunds and Administrative Expenses. (4)
- Does Not Include Prior Year Adjustments. (5)

### HISTORY OF FINANCIAL INFORMATION

### ANNUAL ACTUARIAL REQUIREMENTS

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

		A	B	<u>C</u>	<u>A</u>	B	<u>C</u>
Yea	<u>r</u>	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	EST	18,468,103 20,575,276	\$17,607,328 19,054,056 21,211,686 22,362,086 25,711,368	\$15,240,172 16,504,353 18,442,428 19,478,525 22,699,461	18.86% 18.84 19.90 20.50 22.98	19.46% 19.44 20.51 21.13 23.62	16.84% 16.84 17.84 18.41 20.85

Actual Employer and Employee Contribution

	<u>D</u>	<u>E</u>		<u>D</u>		E
Year	Employer	Employee		Perce	pressed a ntage of inning o	Salary
77 78 79 80 81 EST	\$ 8,470,000 9,477,125 11,108,298 11,791,330 12,432,960	\$ 8,568,24 9,077,82 9,571,76 9,729,91 9,252,63	5 4 2	9.367 9.67 10.74 11.14 11.42		9.47% 9.26 9.26 9.19 8.50
Deficiency	/ (Excess) In <u>F</u>	Annual Contr <u>G</u>	ibution <u>H</u>	F	G	H
Year	NC Plus	Plus ERISA 40 Year portization	NC Plus Increasing % of Salary at 3½%	Percer	pressed antage of inning of	Salary
77 78 79 80 81 EST	\$25,078 (86,847) (104,786) 178,166 3,333,603	\$ 569,080 499,106 531,624 840,844 4,025,776	<pre>( \$1,798,076) ( 2,050,597) ( 2,237,634) ( 2,042,717) 1,013,869</pre>	.03% (.09 (.10 .17 3.06	) .51 ) .51 .79	(1.99%) (2.09) (2.16) (1.93) .93
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# HISTORY OF FINANCIAL INFORMATION

# ACCRUED AND UNFUNDED LIABILITIES

Year End	Accrued Liability	Assets At Book Value	Funded Ratio	Unfunded Accrued Liability		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	74
73	197,782,050	128,624,035	65.0	69,158,015	73,108,848	
74	215,636,093	137,709,821	63.9	77,926,272	78,526,728	9 <del>9</del>
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	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

### 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 76* 77 78	\$56,403,573 61,271,047 67,977,467 77,603,101	\$63,162,106 68,189,205 73,608,310 78,072,062	\$119,565,679 129,460,252 141,585,777 155,675,163	\$151,749,085 168,219,982 186,428,466 202,643,520	\$(32,183,406) (38,759,730) (44,842,689) (46,968,357)	) 130 ) 132
79 80	86,918,802 97,598,923	83,057,007 85,989,360	169,975,809 183,588,283	220,810,778 238,242,772	(50,834,969) (54,654,489)	130

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

\*

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#### Exhibit "N"

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

### 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 becomepayable 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 retired life employee 1980 experience was 106% of expected and the spouse experience was 121% 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.

Salary Increase: 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.

### Exhibit "N"

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

### 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.

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.

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 as of December 31, 1980 was made up of 5,234 males and 613 females.

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

Asset Value: Bonds are amortized value; stocks are at 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

Male						ł			,
Attained Age	Age 22	at Entr 27	ance 32	37	42	47	52	57	62
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75	.065 .135 .187 .205 .219 .229 .236 .240 .245 .255 .324 .354 .354 .363 .370 .374 .377 .379 .381 .383 .500 1.000	.010 .065 .115 .146 .157 .160 .172 .210 .321 .336 .345 .350 .354 .359 .363 .365 .368 .371 .373 .500 1.000	.007 .008 .010 .016 .035 .150 .193 .211 .225 .249 .334 .348 .356 .362 .367 .370 .373 .375 .377 .500 1.000	.008 .010 .015 .020 .028 .046 .074 .115 .140 .216 .319 .348 .358 .364 .367 .371 .374 .377 .379 .500 1.000	.002 .003 .005 .011 .021 .033 .055 .097 .116 .136 .152 .166 .180 .194 .208 .225 .240 .255 .265 .500 1.000	.007 .009 .011 .015 .022 .044 .106 .174 .200 .217 .231 .246 .259 .270 .275 .280 .285 .500 1.000	.021 .037 .084 .134 .162 .178 .193 .205 .220 .232 .243 .250 .260 .271 .500 1.000	.017 .028 .042 .064 .081 .113 .130 .139 .146 .152 .157 .162 .167 .172 .500 1.000	.125 .145 .167 .201 .227 .275 .290 .300 .309 .315 .321 .500 1.000
Female 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75	.028 .036 .044 .057 .068 .080 .097 .110 .120 .136 .154 .168 .176 .184 .189 .192 .194 .195 .196 .500 1.000	.025 .035 .052 .067 .073 .085 .093 .098 .106 .123 .180 .221 .236 .246 .254 .254 .254 .264 .265 .500 1.000	.021 .023 .024 .027 .031 .044 .098 .172 .193 .204 .213 .218 .228 .238 .259 .292 .307 .316 .322 .500 1.000	.019 .023 .026 .031 .037 .045 .053 .060 .071 .083 .101 .141 .190 .228 .237 .248 .256 .261 .266 .500 1.000	.013 .016 .021 .026 .034 .043 .056 .077 .095 .114 .136 .163 .183 .200 .214 .230 .243 .254 .271 .500 1.000	.006 .009 .014 .023 .032 .047 .062 .100 .160 .173 .193 .204 .214 .221 .227 .233 .237 .500 1.000	.018 .027 .045 .070 .135 .163 .176 .182 .184 .188 .195 .211 .224 .240 .500 1.000	.019 .030 .043 .066 .100 .145 .172 .186 .194 .201 .207 .212 .216 .220 .500 1.000	.070 .090 .153 .163 .168 .171 .174 .175 .177 .179 .181 .500 1.000

P-LAB

# SERVICE TABLE FUNCTIONS

# Rates of Termination

Male						۶			
Attained Age	Age 22	at Entr 	ance <u>32</u>	37	42	_47	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	Male Death Rate 1951 GA	Female Death Rate 1951 GA	Proportion Married
Age	Per 1,000	Per 1,000	%
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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# ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

.

Name of Retirement System: <u>Laborers'</u> 5847 Total Annual Payroll: <u>5847</u>	· · · · · · · · · · · · · · · · · · ·					Bill No				
Total Number of Active Employees:\$108, PRESENT FINANCIAL CONDITION AS OF V Valuation Date12-31-80	854,496	~		11				111		
Valuation Date12-31-80	PRESENT	PLAN		PROPOSED LEGIS	LATION		PLAN IF PROPOSE	D LEGISL	ATION EN	ACTED
(1) Accrued Pension Liability	\$345,364,820									•
(2) Present Assets	\$238,242,772	•						· "		
(3) Unfunded Liability = (1)-(2)	\$107,122,048									
(4) Funded Ratio = (2) ÷ (1)	68: 98%	·		· · · · · · · · · · · · · · · · · · ·						
DIRECTION OF FINANCIAL CONDITION: FO	R YEAR BEGINNING ON	VALUATIO	ON DATE							- <u></u>
	PRESENT PLAN	PER ACTIVE	% OF SALARY	PROPOSED LEGISLATION	PER ACTIVE S	% OF SALARY	PLAN IF PROPOSED	red	PER ACTIVE	% OF SALAR
(5) Minimum Recommended Annual Contribution	\$25,019,195	\$4279	22.98							
1981 Levy \$12,951,000 Less 4% (6) Estimated Annual Employer Contribution	\$12,432,960	\$2126	11.42	•						
(7) Estimated Annual Employee Contribution	\$ 9,252,632	\$1582	8.50							
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 3,333,603	\$ 570	3,06							
(9) Source of Funding Revenues:		· · · · · · · · · · · · · · · · · · ·					IS THE ANN PROPOSED I			

(10) Remarks

Form 5500-G	Annual Return/Report of Employee Benefi (For Government and Certain Church Plan		Exhibit "Q" 1980 Amended			
Department of the Treasury Internal Revenue Service						
⇒ calendar plan year 1980	or fiscal plan year beginning January 1, , 1980, and	ending Dec	ember 31 , 19 80			
	Please type this form or complete in ink and file th	ne original.				
<ul> <li>Plan number—Enter yo</li> <li>If any item does not ap</li> </ul>	ur 3 digit plan number in item 5(c); see instruction 5(c) for exp	lanation of "plan	number."			
and the second se	sor (employer if for a single employer plan)	1 (b) Employe 36 600	identification number			
Address (number a 121 North La		<b>1 (c)</b> Business 9904				
City or town, State Chicago, 111			e number of sponsor ) 744-4000			
Board of Tru Address (number an	nistrator (if other than plan sponsor) <u>stees, LaVerne Wilson - Executive Secreta</u> nd street) Salle Street	2 (c) Telephone	tor's employer identification no. 191 number of administrator ) 236-2065			
City or town, State a Chicago, Ill	and ZIP code	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
<ul> <li>4 Type of plan entity (chec</li> <li>(a) X Single employer</li> </ul>	plan -					
(b) Multiple-employe 5 (a) (i) Name of plan		5 (b) Effective	date of plan			
<u></u>	Employees' Annuity & Benefit Fund of Chicago anged since last return/report	July 1 5 (c) Enter the plan num	, 1935 ee digit   0   0   3			
6 Type of plan: (a) Defined benefit (b) Defined contribu						
<ul> <li>(ii) Partially vested</li> <li>(iii) Nonvested</li> <li>(iv) Total</li> <li>(b) Total participants (se</li> <li>(i) Beginning of pl</li> </ul>	s of the end of the plan year: in ER Contribution (20 + ys or age 60 10 to 20 ys and under age 60 e specific instruction 7(b)): lan year (Includes actives, retirees and be ar	eneficiaries	$\begin{array}{c} 2,076 \\ 1,350 \\ 2,421 \\ 5,847 \\ 10,049 \\ 9,699 \\ \end{array}$			
• •	oted during this plan year or any earlier plan year?					
•	ist assets distributed to participants or beneficiaries or transfe and other penalties set forth in the instructions, I declare that I have ex d to the best of my knowledge and belied it is true, correct, and complet					
Date 🗲	Signature of employer/plan sponsor ≻					
Date 🗲	Signature of plan administrator 🗲					

(m 5500-G (1980)			Page 2
9 (a) In this plan year, was this plan to another plan?		her plan or were assets or liabilities transfe	ried Yes No
If "Yes," identify other plan(s)		(c) Employer identification number(s)	(d) Plan number(s)
(b) Name of plan(s) ≻			
•			**********
·	· · · · · · · · · · · · · · · · · · ·		
	· · · · · · · · · · · · · · · · · · ·		
10 Indicate funding arrangement: (a) 🙀 Trust	•		· • •
(b) Fully insured			
(c) ☐ Combination (d) ☐ Other (specify) ≻		•	•
11 Information about employees of the	employer at end of the plan year:		
(a) Total number of employees			5,847
(b) Number of employees excluded	under the plan because of:		
(i) Minimum age or years of	service	•••••••••••••••••••••••••••••••••••••••	
	If retirement benefits were the sul		
(iii) Nonresident aliens who rec	ceive no earned income from Unit	ted States sources	0
	) and (iii)	1	
(c) Total number of employees not			5,847
(d) Employees ineligible (specify re			<u> </u>
(e) Employees eligible to participate	: Subtract (d) from (c)		5,847
<ul> <li>(f) Employees eligible but not partic</li> <li>(g) Employees participating: Subtra</li> </ul>			5,847

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### 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.

### Exhibit "R"

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

### 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 deduc-tions 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:

To Employee: 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 Spouse Annuity Increase	6-1/2% 1-1/2% ** 1/2%	6% 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.