ACTUARIAL STATEMENT

DECEMBER 31, 1978

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

телерноме 782-1335 Раде -2-

#### October 16, 1979

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, 1978 of the Laborer's 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 1978. 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 II 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.

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# <u>SUMMARY</u>

The following represents a summary of this report:

		This Year	Last Year
ASSETS: (TOTAL AT BOOK VALUE)		\$202,643,520	\$186,428,465
INCOME: Investment Employer Employee		\$ 10,112,216 \$ 9,477,125 \$ 9,077,825	\$ 11,993,200 \$ 8,470,000 \$ 8,568,248
OUTGO: Refunds, Benefits, Expo	enses	\$ 12,454,451	\$ 10,819,180
EXCESS OF INCOME OVER OUTGO		\$ 16,212,715	\$ 18,212,268
ACTIVE PARTICIPANTS		6,613	6,752
BENEFICIARIES: Employee Spouse Disabilities Children Other		2,150 1,073 191 170 43	2,056 1,058 168 170 34
ACTUARIAL:			
Funded Ratio		67.29%	67.28%
Accrued Liability		\$301,135,468	\$277,111,671
Termination Liability		\$150,990,960	\$137,326,069
Excess Upon Termination		\$ 51,652,560	\$ 49,102,397
Unfunded Liability		\$ 98,491,948	\$ 90,683,205
Annual Actuarial Requiremen	t (ER & EE)	\$ 20,575,276	\$ 18,468,102
Expected Net Annual Actuari	al Deficiency	\$ 1,723,849	\$ 860,613
Required Employer Multiple		1.69	1.53
INVESTMENT:			
Yield (On Invested Assets in	ncluding gains/losses)	5.62%	7.35%
MISCELLANEOUS:			
Salary Roll		\$103,399,152	\$ 98,029,296
Average Salary		\$ 15,636	\$ 14,519



Income and Payouts

LABORERS' A & B FUND OF CHICAGO





TIME

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

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 these studies, it is our opinion that for the Laborers' Fund the past experience of investment earnings and giving effect to locked in interest rates and to generally expected future interest earnings, that a 6% future interest assumption would be a reasonable rate for valuation purposes and that a 5% per year salary scale is reasonable taking into consideration 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. Additional costs and reserves were set up for future reciprocal benefits. Retirement and withdrawal rates were adjusted slightly. All other assumptions are the same as those used for the last report.

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

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#### ALTERNATIVE VALUATIONS:

We plan on making alternative valuations in the future giving effect to different rates of salary increases and investment earnings 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 required for private pension plans for IRS qualification before ERISA.



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

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



3.) An alternative method for funding that is receiving increased attention for public employee pension plans is a method which sets the funding standard cost objective as a <u>Level Annual Percent Of Payroll</u> 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. For the Retirement Boards guidance, we have estimated the financial effects of different funding methods. The results are given in the following table:

	Required 1979 Tax Levy	Ultimate Required Multiple	Unfunded Liability Will	Portion Required For Amortization Of Unfunded Liability*
1) Normal Cost + Interest Only	\$13,470,113	1.69	Remain constant at \$98,491,948	\$5,909,516
2) ERISA: Normal Cost + 40 Year Amortization	\$14,197,438	1.78	Decrease to \$0	\$6,545,926
3) Normal Cost + 40 Yr. Level % of Payroll Increasing 3½% a Year (Inflation Only)	\$11,032,571	1.38	Increase to \$121,490,772 in 18 years and decrease thereafter	\$3,776,668 increasing to \$14,952,809 in 40 Years
4) Present Law	\$11,500,000	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 <u>Normal Cost-Plus-Interest-Method</u> of funding we find that the City tax levy for 1979 should be \$13,470,113 which amount includes a 12½% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1978 of \$103,399,152 and an active membership of 6,613 persons. The detail is as follows:

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Detail	of	Annual	City	Contribution:
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		Amount	Salary	Per Active
1.	Normal Cost - For Current Service	\$14,665,760	14.18%	\$2,218
2.	6% Interest on Unfunded Liability	\$ 5,909,516	5.72%	<u>\$ 893</u>
3.	Total Actuarial Requirement (1)+(2)	\$20,575,276	19.90%	<u>\$3,111</u>
4.	Employee Contributions	\$ 8,788,927	8.50%	\$1,329
5.	Employer Requirement (3)-(4)	\$11,786,349	11.40%	\$1,782
6.	Expected Net Employer Contribution from 1979 Tax Levy of \$11,500,000 after a 12½% loss	<u>\$10,062,500</u>	9.73%	\$1,522
7.	Expected Net Annual Deficiency	\$ 1,723,849	1.67%	\$ 260
8.	Tax Levy Required (assume 12½% loss)	\$13,470,113		
9.	Increase in Tax Levy Required	\$ 1,942,113		
10.	Required Ultimate Multiple	1.69		
11.	Present Authorized Ultimate Multiple	1.37		
12.	Increase in Ultimate Multiple Needed	.32		

Dollar

Percent of

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

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<u>Detai</u>	il of Normal Cost (given above)	<u>% Sal</u>	ary	\$ Per /	Active	
Ret Ret Pos Spo Chi Ord Dut Ref Wic Exp	cirement Annuity cirement Annuity Increase st-Retirement Spouse Annuity buse Annuity for Death in Service ild's Annuity dinary Disability ty Disability funds dows Compensation bense of Administration	7. 1. 1. 2. 14.	76% 13 47 60 14 08 37 27 01 35 18%	\$1,; \$2,	215 74 94 22 168 58 355 3 54 218	
The t Decem	total unfunded liability as of December 31, 1978 aber 31, 1977, it was \$90,683,205.	is is	\$98,	491,948.	As	of
Detai	il of Change in Unfunded Liability:					
1. I	Increase in Salaries over 5% Assumed		\$9	99,265	Incre	ase
2. I	Investment Yield under 6% Assumed		1,2	50,567	Incre	ase
3. D	Deficiency in Annual Contribution: 1978 Total Actuarial Requirement\$18,468,1 Less Employer Net to Fund 1978 Tax Levy	.02 .25 325	(	86,848)	Decre	ase
4. R	Reciprocal Reserve		2,1	62,034	Incre	ase
5. C	Change in Withdrawal and Retirement		2,5	57,090	Incre	ase
6. M	Aiscellaneous Actuarial Changes - Gain From Retirement, Turnover, and Death		9	26,635	Incre	ase
Net C	Change in Unfunded Liability		<b>\$7,</b> 8	808,743	Incre	ease

FUNDED RATIO:

The ratio of assets to liabilities is 67.29% as of December 31, 1978 - and was 67.28% as of December 31, 1977. 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 8.7% while the liabilites increased 8.6%.

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

The ratio of active employees to annuitants and beneficiaries is 1.94 as of December 31, 1978 and was 2.01 as of December 31, 1977. 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, 1978.

Liability for retired annuitants, widows, spouses of annuitants	\$ 77,603,101
Salary Deductions Contributed by Active Fund Members (incl. ½%)	73,387,859
Total	\$150,990,960
Assets	202,643,520
Excess Assets Upon Termination	\$ 51,652,560

In other words....if the pension fund was terminated as of valuation date, an excess amount of \$51,652,560 would exist after providing lifetime pensions to those now retired and to return all active members' contributions.

Or the assets on hand amounting to \$202,643,520 would be sufficient to provide for the future lifetimes for all retired annuitants, widows and spouses of annuitants, for whom the total liability is \$77,603,101, the difference between the total assets and such reserve liability or \$125,040,419 could be paid to active employees.

As there were 6,613 active employees, the average amount that could be paid to each such member would be \$18,908. The average amount contributed is \$11,097 so that 170% 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 bar chart illustrates the excess upon terminating the plan (the hatched area).





#### 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 \$2.16. 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,

anothell

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

Donald P. Campbell, F.S.A. Enrolled Actuary #1498

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

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# ACTUARIAL BALANCE SHEET

## AS OF

# DECEMBER 31, 1978

<u>ASSETS</u>

AND

# LIABILITIES

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Exhibit "A"

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

# ASSETS

# ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1978

CA	S	Н	:
0, 1	-	•••	•

I

On Deposit

# (\$ 18,613.72)

INVESTMENTS: Bonds - Par Value Bond Premiums & Discounts Common Stocks - Cost Accrued Bond Interest Due from Broker	\$150,116,000.00 ( 3,619,375.02) 40,835,781.70 1,364,558.33 2,885,552.65		
Total Investments		\$191,582,517.66	•
ACCOUNTS RECEIVABLE - TAXES (See Exhibit "D") Tax Extension Less: Estimates for Loss on Collection	\$ 19,581,965.87 8,449,432.22		-
Net Taxes Receivable		\$ 11,132,533.65	
OTHER ACCOUNTS RECEIVABLE: Salary Deductions Accrued Miscellaneous Employee Accounts	\$ 962,626.07 104,756.79		
Total Other Accounts Receivable		\$ 1,067,382.86	
GROSS LEDGER ASSETS		\$203,763,820.45	
LESS: ACCOUNTS PAYABLE: Miscellaneous Employee Accounts Military Service Deductions Excess from Refunds	\$ 1,118,742.14 1,557.71		
Total Accounts Payable		\$ 1,120,299.85	
NET LEDGER ASSETS		\$202,643,520.60	

Exhibit "A"

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

# LIABILITIES AND FUND BALANCES

#### ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1978

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	\$25,157,704.44 7,542,350.16 10,731,774.84 6,105,096.58	\$ 49,536,926.02
SALARY DEDUCTION FUND ACCOUNT: Employees Spouses of Employees Total Salary Deduction Fund	\$56,708,991.16 12,003,739.16	\$ 68,712,730.32
CITY CONTRIBUTION FUND ACCOUNT: Employees Spouses of Employees Supplemental Annuities Total City Contribution Fund	\$54,547,236.59 17,288,310.55 13,185.60	\$ 71,848,732.74
OTHER RESERVES: Supplementary Payment Reserve Annuity Payment Fund Account Total Other Reserves	\$    85,694.43 7,430,538.90	\$ 7,516,233.33
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	\$32,668,716.24 13,015.68 1,503,911.76 2,044,243.24 4,210,891.42 63,080,067.90	\$103,520,846.24
TOTAL LIABILITIES		\$301,135,468.65
Obligations of Fund for Prior Service Liabil	ities (Note 1)	( 98,491,948.05)
TOTAL NET LIABILITIES AND FUND BALANCES		\$202,643,520.60

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

INCOME

YEAR 1978

INCOME

AND

EXPENDITURES

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Exhibit "B"

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

# INCOME FOR YEAR OF 1978

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 Employee	$ \begin{array}{c} \$ & 6,678,159.56 \\ 1,459,839.24 \\ & 506,314.69 \\ 188,077.20 \\ & 67,119.24 \\ & 35,350.10 \\ \end{array} $	\$ 8,934,860.03
Total Contributed by City Duty Disability - Ded. in Lieu Total Contributed By City	142,965.51	\$ 142,965.51
Total Salary Deductions		\$ 9,077,825.54
CITY CONTRIBUTIONS: (1978 Taxes of \$10,800,000 (City) plus \$31,000 (Park) Less 12½% for Loss of Collection \$1,353,875) Employees Spouses of Employees Ordinary Disability Fund Duty Disability Fund Child's Annuity Payment Fund Expense Fund Interest on Income Prior Service Annuity Fund	$ \begin{array}{c}  & 6,157,343.17 \\  & 2,051,314.90 \\  & 1,117,995.67 \\  & 371,034.63 \\  & 135,739.09 \\  & 350,648.40 \\  & 139,196.46 \\  & ( 846,147.32) \end{array} $	
Total City Contributions		\$ 9,477,125.00
INVESTMENT INCOME: Interest on Bonds Dividends Gain (Loss) on Sale of Bonds* Gain (Loss) on Sale of Stocks Total Investment Income	\$11,059,629.08 1,394,134.50 ( 2,234,876.27) ( 106,670.94)	\$10,112,216.37
TOTAL INCOME FORWARDED		\$28,667,166.91

\*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. Page -22-

Exhibit "B"

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

#### EXPENDITURES FOR YEAR 1978

#### TOTAL INCOME FORWARDED

\$28,667,166.91

ANNUITIES AND BENEFITS PAID: Employees' Annuities Spouses Annuities Compensation Annuities Children's Annuities Ordinary Disability Duty Disability Supplementary Payments Total Benefits Paid Reciprocal Act Re-	\$6,745,093.31 1,337,885.62 3,469.32 135,739.09 1,105,369.99 369,582.25 74,509.92 \$9,771,649.50	
imbursements	( 7,610.04)	
Net Benefits Paid		\$9,764,039.46
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	<pre>\$ 99,062.24 4,015.50 159,556.76 12,800.00 23,500.00 5,745.63 10,557.74 8,000.00 22,645.96 1,021.04 3,743.53</pre>	
Total Expenses		\$ 350,648.40
REFUNDS		2,339,763.88
TOTAL EXPENDITURES		

EXCESS INCOME OVER EXPENDITURES

Net Change in Reserve for Loss on Collection and Taxes Receivable for Prior Years

INCREASE IN NET ASSETS FOR YEAR

\$12,454,451.74 \$16,212,715.17 2,339.60

# \$16,215,054.77

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

# COMPARATIVE ANALYSIS

<u>YEAR 1978</u>

ASSETS

AND

LIABILITIES

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Exhibit "C"

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

# COMPARATIVE ANALYSIS

# ASSETS

CACU	1/1/1978	12/31/1978	Increase (Decrease)
On Deposit	(\$ 1,297,874)	(\$ 18,614)	\$ 1,279,260
INVESTMENTS: Bonds (Par Value) Bond Premiums & Discounts Common Stocks - Cost Due From Broker Accrued Bond Interest Accrued Dividends	\$138,420,000 ( 1,156,773) 36,284,888 2,146,021 2,608,398 0	\$150,116,000 ( 3,619,375) 40,835,782 1,364,558 2,885,553 0	\$11,696,000 ( 2,462,602) 4,550,894 ( 781,463) 277,155 0
Total Investments	\$178,302,534	\$191,582,518	\$13,279,984
ACCOUNTS RECEIVABLE - TAXES Tax Extension Less: Estimates for L/C Net Taxes Receivable	\$ 17,070,194 7,537,833 \$ 9,532,361	\$ 19,581,966 8,449,432 \$ 11,132,534	\$ 2,511,772 911,599 \$ 1,600,173
TAXES IN TRANSIT	\$0	0	0
OTHER ACCOUNTS RECEIVABLE: Salary Deductions Accrued Misc. Employee Accounts	\$   911,648 88,303	\$    962,626 104,757	\$    50,978 16,454
Total Other Accts. Rec.	\$ 999,951	\$ 1,067,383	\$ 67,432
GROSS LEDGER ASSETS	\$187,536,972	\$203,763,821	\$16,226,849
LESS: ACCOUNTS PAYABLE: Misc. Employee Accts. Military Service Deds.	\$ 1,106,949 1,558	\$ 1,118,742 1,558	\$ 11,793 0
Total Accts. Payable	\$ 1,108,507	\$ 1,120,300	\$ 11,793
NET LEDGER ASSETS	\$186,428,465	\$202,643,521	\$16,215,056

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

# COMPARATIVE ANALYSIS

# LIABILITIES AND FUND BALANCES

LIABILITY RESERVES:	1/1/1978	12/31/1978	Increase (Decrease)
ANNUITY PAYMENT FUND: Employee Annuitants Emp. Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed	\$ 23,748,239 6,859,175 9,831,570 5,186,319	\$ 25,157,704 7,542,350 10,731,775 6,105,097	\$ 1,409,465 683,175 900,205 918,778
Total	\$ 45,625,303	\$ 49,536,926	\$ 3,911,623
SALARY DEDUCTION FUND ACCOUNT: Employees Spouses of Employees	\$ 53,751,406 11,190,887	\$ 56,708,991 12,003,739	\$ 2,957,585 812,852
Total	\$ 64,942,293	\$ 68,712,730	\$ 3,770,437
CITY CONT. FUND ACCOUNT: Employees Spouses of Employees Supplemental Annuities	\$ 52,017,479 16,310,023 12,961	\$ 54,547,237 17,288,310 13,186	\$ 2,529,758 978,287 225
Total	\$ 68,340,463	\$ 71,848,733	\$ 3,508,270
OTHER RESERVES: Supplemental Pymt. Res. Annuity Fund Account	\$ 110,204 6,843,796	\$     85,694 7,430,539	(\$ 24,510) 586,743
Total	\$ 6,954,000	\$ 7,516,233	\$ 562,233
PRIOR SERVICE FUND ACCOUNT: Employee Annuitants Emp. Annuities Fixed Spouse Annuitants Spouses' Annuities Fixed Sal. Ded. 2% Annuity Estimated Excess Liability	\$ 27,542,841 14,361 1,275,482 1,631,119 3,843,261 56,942,547	\$ 32,668,716 13,016 1,503,912 2,044,243 4,210,891 63,080,068	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Total	\$ 91,249,611	\$103,520,846	\$12,271,235
TOTAL LIABILITIES	\$277,111,670	\$301,135,468	\$24,023,798
UNFUNDED OBLIGATIONS	(\$ 90,683,205)	( 98,491,948)	( 7,808,743)
TOTAL NET LIABILITIES	\$186,428,465	\$202,643,520	\$16,215,055

# TAXES RECEIVABLE

# DECEMBER 31, 1978

Year	Uncollected Taxes 12-31-78	Estimate for Loss 12-31-77	Additional Est. Setup 12-31-78	Total Est. for loss 12-31-78	Taxes Collectible 12-31-78
CITY					
1969 1970 1971 1972 1973 1974 1975 1976 1977 1978	505,014.07 512,943.00 595,296.49 690,710.67 878,576.85 992,661.29 1,057,969.59 1,483,745.43 1,994,417.35 10,800,000.00 \$19,516,334.74	501,343.00 506,795.00 587,494.00 656,574.00 753,068.00 868,686.00 953,625.00 1,037,505.00 1,206,250.00 \$7,071,340.00	<u>1,350,000.00</u> \$1,350,000.00	501,343.00 506,795.00 587,494.00 656,574.00 753,068.00 868,686.00 953,625.00 1,037,505.00 1,206,250.00 1,350,000.00 \$8,421,340.00	3,671.07 6,148.00 7,802.49 34,136.67 125,508.85 123,975.29 104,344.59 446,240.43 793,167.35 9,450,000.00 \$11,094,994.74
PARK	DISTRICT:				
1969 1970 1971 1972 1973 1974 1975 1976 1977 1978	2,896.38 $2,243.87$ $2,636.88$ $3,979.80$ $3,044.87$ $5,404.69$ $3,441.88$ $4,958.19$ $6,206.57$ $31,000.00$ $$ 65,631.13$	2,200.00 2,000.00 2,025.00 2,125.00 2,200.00 3,125.00 3,250.00 3,500.00 3,750.00	42.22 <u>3,875.00</u> \$3,917.22	2,200.00 2,000.00 2,067.22 2,125.00 2,200.00 3,125.00 3,250.00 3,500.00 3,750.00 3,875.00 \$ 28,092.22	696.38 243.87 569.66 1,672.80 844.87 2,279.69 191.88 1,458.19 2,456.57 27,125.00 \$ 37,538.91

TOTAL:

\$19,581,965.87 \$7,095,515.00 \$1,353,917.22 \$8,449,432.22 \$11,132,533.65

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

# MEMBERSHIP STATISTICS

# YEAR 1978

		Number at Beginning of Year	Increases	Decreases	Number At End of Year
Α.	Changes in Active Participants				
	Male	5,835	965	938	5,862
	Female	976	9	95	890
	Total	<u>6,811</u>	974	1,033	<u>6,752</u>
Β.	Changes In Annuitants & Benefici	aries			
	Employee Annuitants	2,056	260	166	2,150
	Spouse Annuitants	1,058	78	63	1,073
	Children's Annuities	170	30	30	170
	Ordinary Disability Benefits	127	161	137	151
	Duty Disability Benefits	41	744	745	40
	Reversionary (Beneficiaries)	1			1
	Reciprocal: Employee Spouse	31	8 2	1	38 2
	Widow Compensation Annuities	2			2
	Total	<u>3,391</u>	<u>1,182</u>	1,087	<u>3,486</u>

C. Ratio of Active Participants to Annuitants & Beneficiaries

2.01

1.94

## SALARY AND AGE STATISTICS

# YEAR 1978

# Ages and Salaries as of December 31, 1978

# Male

Ages	Number	Annual Salaries	Average Annual <u>Salaries</u>
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	54 579 675 480 509 498 586 764 768 516 212 71 105 5817	<pre>\$ 884,328 9,198,456 10,991,232 7,882,992 8,781,360 8,562,048 10,083,528 13,263,240 13,096,344 8,587,080 3,581,808 1,186,560 1,611,600 \$ 97,710,576</pre>	\$16,376 15,887 15,283 16,423 17,252 17,193 17,207 17,360 17,053 16,642 16,895 16,712 15,349 \$16,797
		Female	
Under 20 20 - 24	5	\$ 44,496	\$ 8,899
25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 & Over Total	1 5 29 59 130 229 244 84 10 796	3,024 40,608 228,984 438,312 955,416 1,625,520 1,637,304 621,336 93,576 \$5,688,576	3,024 8,122 7,896 7,429 7,349 7,098 6,710 7,397 9,358 \$ 7,146
TOTAL MALE AND FEMALE	6613	\$103,399,152	\$15,636

## SALARY AND AGE STATISTICS

# <u>YEAR 1978</u>

## 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	1,747 1,041 795 659 616 415 259 144 36 105	\$29,662,824 17,642,784 13,394,856 11,191,224 10,237,128 6,890,328 4,194,792 2,325,048 559,992 1,611,600	13 39 77 163 224 197 61 20 2	<pre>\$ 161,880 352,488 645,336 1,311,208 1,589,808 1,241,904 342,912 128,712 14,328</pre>
Totals	<u>5,817</u>	<u>\$97,710,576</u>	<u>796</u>	\$5,688,576
Average Annual Salary Average Attained Age Average Service Average Age at Entran	ce	\$16,797 43.7 11.4 32.3		\$7,146 57.4 16.0 41.4

Exhibit "G"

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

#### AGE AND SERVICE DISTRIBUTION

#### YEAR 1978

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

Ages				Year	rs of Se	rvice				
5	<u>Under 1</u>	1-4	<u>5-9</u>	10-14	15-19	20-24	25-29	30-34	35+	<u>Total</u>
00-20	12 16824	42 16249								54 16376
	10021	202.5								
20-24	40 15718	500 15703	44 17420							584 15833
05 00		420	105	00					-	cəŕ
25-29	28 15312	439 15893	185 17182	23 17691	·					675 16282
20 24	10	01 E	154	02	c					101
30-34	15657	15719	154 16859	93 17299	16664					16398
35-30	Л	157	112	1/17	88	6			•	51 <i>1</i>
22-23	15036	15842	17162	17779	18389	20116				17161
40-44	11	133	107	127	116	32	1			527
10 11	14935	16351	16844	16018	17378	18329	14544			16683
45-49	2	124	107	136	97	112	65	2		645
	13908	16008	16381	14854	15732	17926	17958	16824		16310
50-54	7	95	112	186	136	146	182	29	1	894
	17661	15843	16403	13726	13686	16562	18475	18583	19128	15907
55-59	16488	15403	16111	12061	12802	15981	17276	17234	27462	14766
60-64	1	<i>A</i> 1	70	153	190	127	118	51	q	760
00 04	15864	15162	15408	10747	10915	15194	16120	15369	19387	13453
65-69		5	23	61	59	61	62	18	7	296
		11544	15808	12567	12290	14332	16220	15920	17674	14200
70+	•		3	11	19	15	15	11	7	81
			15768	13460	15872	16514	14502	18386	16533	15804
W/0	4	55	30	<sup>、</sup> 5	6	2	3			105
	13614	<u>14059</u>	17089	16421	<u>17944</u>	<u>15492</u>	<u>16832</u>			15349
No.	126	1881	1035	1175	914	654	636	164	28	6613
Sal.	15691	15764	16691	14202	14061	16301	17300	16821	19389	15637 45 २
Servi	ce							·		12.0

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Exhibit "H"

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

# ANNUITANTS CLASSIFIED BY AGE AS OF 12/31/1978

		Re	tirement Annu	ities		
Ages	Male Number	Annual Payments	Average Annual Payments	Female Number	Annual Payments	Average Annual Payments
25 - 29 30 - 34 35 - 39	1	\$ 600	\$ 600		\$	\$
40 - 44 45 - 49	1	541	541			
50 - 54	8	9,921	1,240			
55 - 59	43	188,013	4,372	11	22,934	2,085
60 - 64	163	920,595	5,648	72	140,900	1,957
65 - 69	370	1.911.739	5,167	229	411,347	1,796
70 - 74	291	1,244,765	4,278	256	407,346	1.591
75 - 79	229	758,874	3,314	153	249,485	1,631
80 - 84	126	434,995	3,452	102	153,174	1,502
85 - 89	64	188,273	2,942	40	57,314	1,433
90 - 94	20	49,226	2,461	6	9,199	1,533
95 - 99				3	3,625	1,208
Totals	<u>1316</u>	\$5,707,542	\$4,337	872	\$1,455,324	\$1,669
Average Age			72			73

# Spouses Annuities (Not Including Compensation)

Ages	Male <u>Number</u>	Annual Payments	Average Annual Payments	Female Annual Number Payments	Average Annual Payments
20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54	1	\$ 1,200	\$ 1,200	1 \$ 1,200 1 1,200 2 1,500 12 12,019 16 16,781 37 42,994 68 100,923	\$1,200 1,200 750 1,002 1,049 1,162 1,484
55 - 59	1	1,200	1,200	111 168,087	1,514
60 - 64	1	1,200	1,200	166 255,519	1,539
65 - 69	1	1,200	1,200	196 294,720	1,504
/0 - /4	1	1 000	1 000	168 201,358	1,199
/5 - /9	T	1,200	1,200	140 156,898	1,121
80 - 84					902
85 - 89				40   52,505   10   10   502	700
90 - 94				18 10,505	203
95 - 99			······	2 1,374	687
Totals	5	<u>\$ 6,000</u>	<u>\$1,200</u>	<u>1,070</u> <u>\$1,375,263</u>	<u>\$1,285</u>

<u>58</u>

Average Age

<u>67</u>

# NEW ANNUITIES GRANTED

AS OF DECEMBER 31, 1978

	<u>Anr</u>	Male Female Annuitants <u>Annuitants</u>		Female nuitants	Deceased Employees		Deceased <u>Annuitants</u>	
Number Retired		182		86		39		. 41
Average Attained Age		65.3		66.4		53.9		70.0
Average Length of Service		22.0		18.8		19.9		N/A
Average Annual Salary (4 out of 10)	\$	16,200	\$	6,480		N/A		N/A
Average Annual Final Salary	\$	12,420	\$	3,852		N/A		N/A
Total Annual Annuity	\$ 1	,048,343	\$	192,367	\$	90,285	\$	82,660
Average Annual Annuity	\$	5,760	\$	2,236	\$	2,315	\$	2,016
Total Liability (6% 1951 G.A.)	\$11	,523,456	\$1	,768,986	\$1	,027,361	\$	646,720
Average Liability	\$	63,315	\$	20,569	\$	26,342	\$	15,773
Total Cost For Income Tax Purposes	\$ 2	2,246,708	\$	401,941		518,024		N/A
Average Cost	\$	13,334	\$	4,674		13,283		N/A
Expected Future Lifetime		14.40		16.89		27.29		14.21

#### HISTORY 1964 to 1978

# 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	7,868		\$ 44,441,712		\$ 5,648	
1965	7,936	0.9%	45,872,832	3.2%	5,780	2.3%
1966	7,995	0.7	47,598,552	3.8	5,954	3.0
1967	8,102	1.3	52,268,304	9.8	6,451	8.3
1968	7,891	(2.6)	56,165,136	7.5	7,118	10.3
1969	7,777	(1.4)	60,523,296	7.8	7,782	9.3
1970	7,220	(7.2)	62,916,768	4.0	8,714	12.0
1971	6,864	(4.9)	66,142,320	5.1	9,636	10.6
1972	6,971	1.6	69,950,692	5.8	10,035	4.1
1973	6,752	(3.1)	73,108,848	4.5	10,828	7.9
1974	6,638	(1.7)	78,526,728	7.4	11,830	9.3
1975	7.032	5.9	89,276,280	13.7	12,696	7.3
1976	6,811	(3.1)	90,487,008	1.4	13,285	4.6
1977	6,752	(0.9)	98,029,296	8.3	14,519	9.3
1978	6,613	(2.1)	103, 399, 152	5.5	15,636	7.7

Average Increase				
for the last 5				
years	<u>(0.4)%</u>	•	7.3%	7.6%

Includes those members who were on disability (1)

(2) Average annual increase in salary 1964 - 1978 about 7.54% compounded.

# HISTORY OF TOTAL ANNUITIES 1968 - 1978

## Employee Annuitants (Male & Female)

	Number Of	Total	Average
	Annuitants	Annuities	<u>Annuities</u>
1968	1,572	\$2,389,710	\$1,520
1970	1,651	2,779,061	1,683
1971 1972	1,075	2,927,594 3,373,308	1,748
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

## HISTORY OF INVESTMENT YIELDS

Year	Investment Yield on Total Assets	Investment Yield on Invested Assets		
December 31, 1971	4.75%	4.99%		
December 31, 1972	5.47	5.70		
December 31, 1973	5.76	6.03		
December 31, 1974	6.58	6.98		
December 31, 1975	7.25	7.73		
December 31, 1976	7.23	7.65		
December 31, 1977	7.01	7.35		
December 31, 1978	6.61	6.97		
Average of Last 5 Years	6.94%	7.34%		

## Nonrecurring Gains and Loses are Excluded from Income

Nonrecurring Gains and Losses are Included in Income

	Investment Yield	Investment Yield on
Year	on Total Assets	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
Average of Last 5 Years	5.81%	6.14%

#### Notes:

Yield = Investment Income Mean Assets - ½ Investment Income

Bonds valued at amortized value, stocks at cost. Market values are not considered. Page -36-

#### Exhibit "M"

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

#### HISTORY OF FINANCIAL INFORMATION\*

Year End	Employee Contributions(1)	Employer Contributions(2)	Investment Income (3)	Total Income
12-31-71	\$5,254,928	\$4,241,819	\$ 4,145,156	\$13,641,903
12-31-72	5,928,386	4,793,135	5,391,547	16,113,068
12-31-73	6,269,104	5,463,149	4,394,426	16,126,679
12-31-74	6,597,012	6,103,125	4,646,080	17,346,217
12-31-75	7,375,222	6,699,000	8,665,212	22,739,434
12-31-76	7,887,179	7,287,000	10,785,585	25,959,764
12-31-77	8,568,248	8,470,000	11,993,200	29,031,448
12-31-78	9,077,825	9,477,125	10,112,216	28,667,166
Year End	Pay Outs(4)	Income Less Pay Outs(5)	Total Assets Stocks At Cost Bonds Amortized	Unfunded Liability
12-31-7112-31-7212-31-7312-31-7412-31-7512-31-7612-31-7712-31-78	\$ 6,829,674	<pre>\$ 6,812,229</pre>	\$110,423,040	\$48,392,529
	6,425,129	9,687,939	120,072,655	52,088,002
	7,125,454	9,001,225	128,624,035	69,158,015
	7,999,287	9,346,930	137,709,821	77,926,272
	8,690,763	14,048,671	151,749,085	90,467,774
	9,482,736	16,477,028	168,219,982	84,190,707
	10,819,180	18,212,268	186,428,465	90,683,205
	12,454,451	16,212,715	202,643,521	98,491,948
<u>Year End</u>	Funded	Pay Outs	Income	Pay Outs
	Ratio	To Assets	To Assets	To Income
$12-31-71 \\ 12-31-72 \\ 12-31-73 \\ 12-31-74 \\ 12-31-75 \\ 12-31-76 \\ 12-31-77 \\ 12-31-78 $	69.5%	6.2%	12.4%	50.1%
	69.7	5.4	13.4	39.9
	65.0	5.5	12.5	44.2
	63.9	5.8	12.6	46.1
	62.7	5.7	15.0	38.2
	66.6	5.6	15.4	36.5
	67.3	5.8	15.6	37.3
	67.3	6.1	14.1	43.4

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

Includes Deductions In Lieu for Disability. (1)

(2)

(3)

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

(5)

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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 become payable as various members and their dependents satisfy the contingencies covered. The actual cost of the plan can only be determined after all benefits have been paid, and is equal to the total benefits paid, plus total administrative expenses minus total investment income.

The ACCRUED LIABILITY of the fund at any point in time is the accumulated value of all CURRENT SERVICE COSTS which should have been paid to 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.

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

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

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

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

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

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

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#### 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.

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.

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, 1978 was made up of 5,817 males and 796 females.

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

Asset Value: Bonds are amortized value; stocks are at cost.

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

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Male

#### Exhibit "O"

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

# SERVICE TABLE FUNCTIONS

## Rate of Retirement

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Attained	Age	e at E <mark>nt</mark> r	rance						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Age	22	27	32	37	42	47	52	57	62
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	55	.065	.010	.007	.008	.002				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	56	.135	.065	.008	.010	.003				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	57	.187	.115	.010	.015	.005	.007			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	.58	.205	.146	.016	.020	.011	.009			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	59	.219	.157	.035	.028	.021	.011			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	60	.229	.160	.150	.046	.033	.015	.021	.017	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	61	.236	.172	.193	.074	.055	.022	.037	.028	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	62	.240	.210	.211	.115	.097	.044	.084	.042	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	63	.245	.321	.225	.140	.116	.106	.134	.064	.125
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	64	.255	.336	.249	.216	.136	.174	.162	.081	.145
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	65	.324	.345	.334	.319	.152	.200	.178	.113	.167
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	66	.354	.350	.348	.348	.166	.217	.193	.130	.201
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	67	.363	.354	.356	.358	.180	.231	.205	.139	.227
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	68	.370	.359	.362	.364	.194	.246	.220	.146	.273
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	69	.374	.363	.367	.367	.208	.259	.232	.152	.290
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	70	.377	.365	.370	.371	.225	.270	.243	.157	.300
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	71	.379	.368	.373	.374	.240	.275	.250	.162	.309
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	72	.381	.371	•375 <sub>.</sub>	.377	.255	.280	.260	.167	.315
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	73	.383	.373	.377	.379	.265	.285	.271	.172	.321
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	74	.500	.500	.500	.500	.500	.500	.500	.500	.500
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	75	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										•
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Fomalo									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	55	028	025	021	010	013				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	56	.020	.035	.023	.023	.016				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	57	.044	.052	.024	.026	.021	.006			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	58	.057	.067	.027	.031	.026	.009			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	59	.068	.073	.031	.037	.034	.014			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	60	.080	.085	.044	.045	.043	.023	.018	.019	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	61	.097	.093	.098	.053	.056	.032	.027	.030	
63       .120       .106       .193       .071       .095       .062       .070       .066       .070         64       .136       .123       .204       .083       .114       .100       .135       .100       .090         65       .154       .180       .213       .101       .136       .160       .163       .145       .153         66       .168       .221       .218       .141       .163       .173       .176       .172       .163         67       .176       .236       .228       .190       .183       .193       .182       .186       .168	62	.110	.098	.172	.060	.077	.047	.045	.043	
64       .136       .123       .204       .083       .114       .100       .135       .100       .090         65       .154       .180       .213       .101       .136       .160       .163       .145       .153         66       .168       .221       .218       .141       .163       .173       .176       .172       .163         67       .176       .236       .228       .190       .183       .193       .182       .186       .168	63	.120	.106	.193	.071	.095	.062	.070	.066	.070
65       .154       .180       .213       .101       .136       .160       .163       .145       .153         66       .168       .221       .218       .141       .163       .173       .176       .172       .163         67       .176       .236       .228       .190       .183       .193       .182       .186       .168	64	.136	.123	.204	.083	.114	.100	.135	.100	.090
66       .168       .221       .218       .141       .163       .173       .176       .172       .163         67       .176       .236       .228       .190       .183       .193       .182       .186       .168	65	.154	.180	.213	.101	.136	.160	.163	.145	.153
67 .176 .236 .228 .190 .183 .193 .182 .186 .168	66	.168	.221	.218	.141	.163	.173	.176	.172	.163
	67	.176	.236	.228	.190	.183	.193	.182	.186	.168
68 .184 .246 .238 .228 .200 .204 .184 .194 .171	68	.184	.246	.238	.228	.200	.204	.184	.194	.171
69 .189 .254 .259 .237 .214 .214 .188 .201 .174	69	.189	.254	.259	.237	.214	.214	.188	.201	.174
70 .192 .258 .292 .248 .230 .221 .195 .207 .175	70	.192	.258	.292	.248	.230	.221	.195	.207	.175
71 .194 .261 .307 .256 .243 .227 .211 .212 .177	71	.194	.261	.307	.256	.243	.227	.211	.212	.177
72 .195 .264 .316 .261 .254 .233 .224 .216 .179	72	.195	.264	.316	.261	.254	.233	.224	.216	.179
73 .196 .265 .322 .266 .271 .237 .240 .220 .181	73	.196	.265	.322	.266	.271	.237	.240	.220	.181
74 .500 .500 .500 .500 .500 .500 .500 .50	/4	.500	.500	.500	.500	.500	.500	.500	.500	.500

Exhibit "O"

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

# SERVICE TABLE FUNCTIONS

# Rates of Termination

Male

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

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# ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

Name of Retirement System: LABORERS!	·								
Total Annual Payroll:\$103,399,15		Bill NoBill No							
Total Number of Active Employees:6,613 PRESENT FINANCIAL CONDITION AS OF VALUATION DATE				n n			111		
Valuation Date <u>12-31-78</u>	PRESENT	PLAN		PROPOSED LEGI	SLATION		PLAN IF PROPOSED LEG	SLATION E	NACTED
(1) Accrued Pension Liability	\$301,135,468				,				
(2) Present Assets	\$202,643,520			•					
(3) Unfunded Liability = (1)-(2)	\$ 98,491,948	·							
(4) Funded Ratio = (2) ÷ (1)	67.29%								
DIRECTION OF FINANCIAL CONDITION: FO	R YEAR BEGINNING ON	VALUATI	ON DATE					<u></u>	
	PRESENT PLAN	PER	% OF SALARY	PROPOSED LEGISLATION	PER	% OF SALARY	PLAN IF PROPOSED LEGISLATION ENACTED	PER	% OF SALARY
Contribution	\$ 20,575,276	3,111	19.90				<b>4</b>		
Tax Levy \$11,500,000 Less 121% (6) Estimated Annual Employer Contribution	\$ 10,062,500	1,522	9.73						
(7) Estimated Annual Employee Contribution	\$ 8,788,927	1,329	8.50						
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 1,723,849	260	1.67						

(9) Source of Funding Revenues:

(10) Remarks

79

#### IS THE ANNUAL COST FOR PROPOSED LEGISLATION

11 4.736

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

#### PLAN SUMMARY

#### PARTICIPANT:

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

#### SERVICE:

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

#### **RETIREMENT ANNUITY:**

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

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

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

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

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

#### PLAN SUMMARY

#### SPOUSE'S ANNUITY:

Payable until remarriage or termination of temporary annuity.

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

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

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

#### CHILDREN'S ANNUITY:

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

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

#### FAMILY MAXIMUM:

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

#### DISABILITIES:

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

#### PLAN SUMMARY

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

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

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

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

#### **REFUNDS:**

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

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

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

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

#### PLAN SUMMARY

## DEDUCTIONS AND CONTRIBUTIONS:

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

\*\* 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 1.280 for 1976, 1.325 for 1977 and 1.370 for 1978 and each year thereafter.