

LABORERS' AND RETIREMENT BOARD  
EMPLOYEES' ANNUITY AND BENEFIT  
FUND OF CHICAGO  
ACTUARIAL STATEMENT  
DECEMBER 31, 1988

SUMMARY

The following represents a summary of 1988 Laborers' Actuarial Report:

	<u>1987</u>	<u>1988</u>
INCOME: Investment	\$ 58,220,924	\$ 42,386,313
Employer	\$ 14,745,709	\$ 15,157,663
Employee	\$ 11,774,209	\$ 11,740,621
Total	\$ 84,740,842	\$ 69,284,597
OUTGO: Refunds, Benefits, Expenses	\$ 27,701,584	\$ 31,488,725
EXCESS OF INCOME OVER OUTGO	\$ 57,039,258	\$ 37,795,872
ACTIVE PARTICIPANTS	4,873	4,725
BENEFICIARIES		
Employee	2,498	2,494
Spouse	1,242	1,265
Disabilities	234	262
Children	84	79
ACTUARIAL:		
Assets (Total at book value)	\$546,947,052	\$584,899,234
Funded Ratio	93.77%	96.77%
Accrued Liability	\$583,284,026	\$604,440,661
Termination Liability	\$342,037,898	\$362,818,299
Excess Upon Termination	\$204,909,154	\$222,080,935
Unfunded Liability	\$ 36,336,974	\$ 19,541,427
Annual Actuarial Requirement (ER & EE)	\$ 22,636,952	\$ 21,217,142
Expected Net Annual Actuarial Excess (Deficiency)	\$ 3,660,561	\$ 4,898,895
Required Employer Multiple	1.13	1.03
PV Credited Projected Benefits	\$521,981,791	\$541,629,895
INVESTMENT:		
Invested Assets (Book Value)	\$533,128,841	\$574,105,300
Invested Assets (Market Value)	\$522,381,719	\$580,312,390
MISCELLANEOUS:		
Salary Roll	\$135,453,096	\$132,685,608
Average Salary	\$ 27,797	\$ 28,082

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April 14, 1989

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, 1988, 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 1988. 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.

This statement has been prepared in accordance with generally accepted actuarial principles and practice.

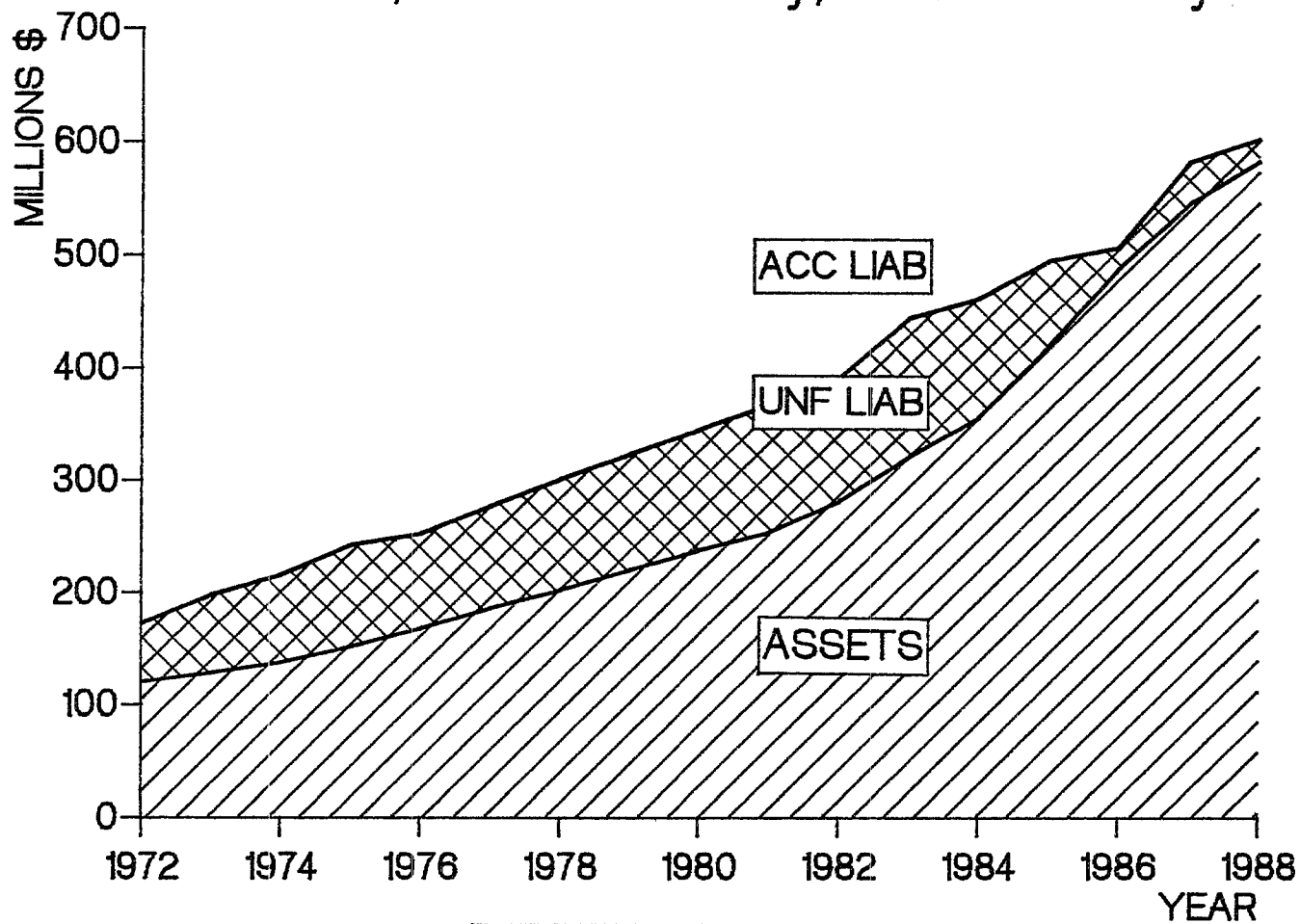
The costs for each of the alternative methods of funding the unfunded accrued liability as required by the Illinois Pension Code Article 22-501.10 are shown in this report. These include:

1. interest only on the unfunded liability;
2. the level annual amount required to amortized the unfunded accrued liability over a period not exceeding 40 years; and
3. the amount required for the current year to amortize the unfunded accrued liability over a period not exceeding 40 years as a level percentage of payroll.

The actuarial present value of credited projected benefits is shown in a separate exhibit.

# 1988

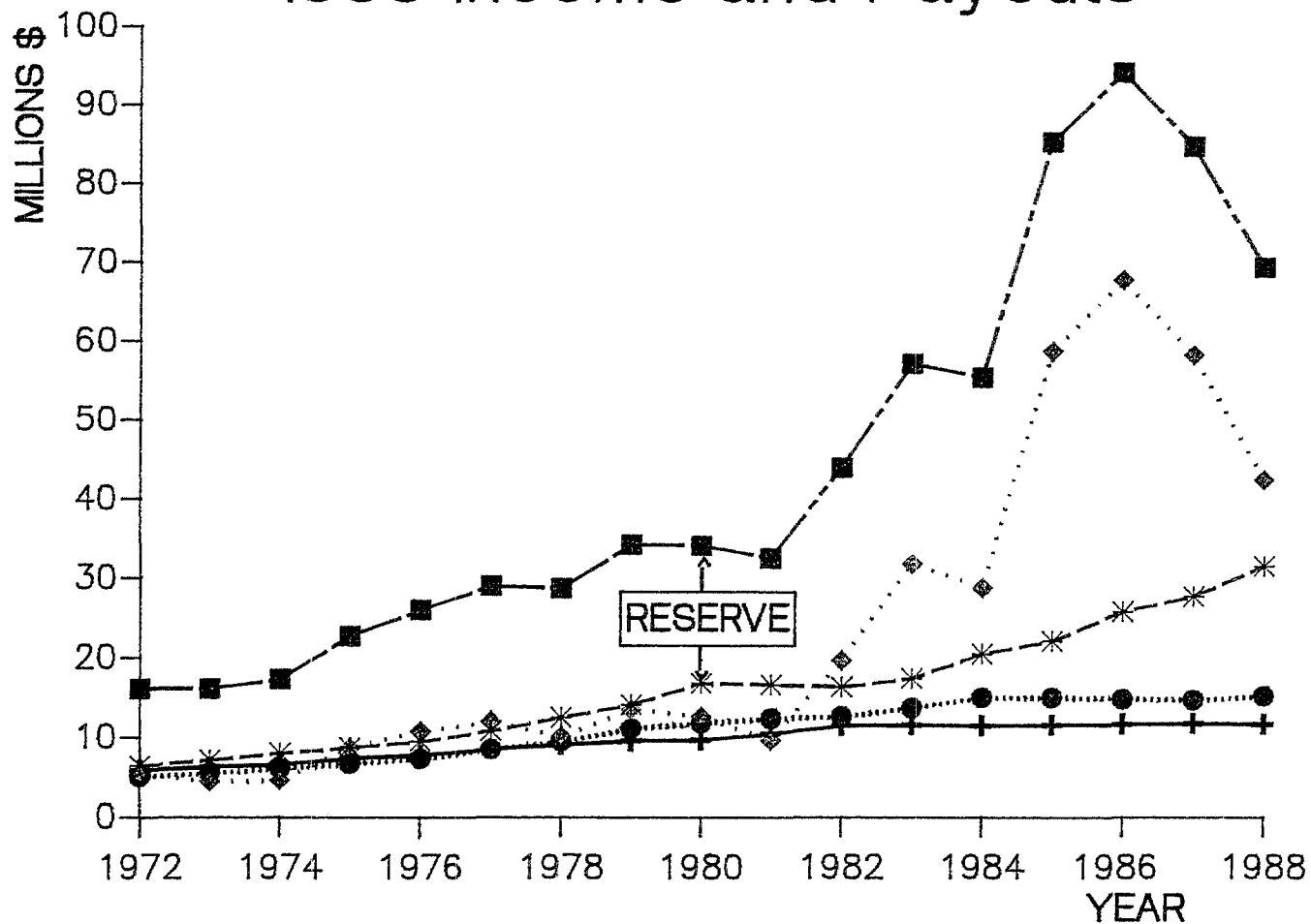
## Assets, Unfunded Liability, Accrued Liability



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# 1988 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 consulted two recent studies in an attempt 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 1985 of 948 private pension plans indicated that the average interest assumption used was 7.6% and the average salary scale assumption was 6%. Only 22% of the plans used an interest rate higher than 7% while 39% used an interest rate lower than 7%. For salary scale, 11% used an assumption higher than 6% while 67% used an assumption lower than 6%. The most common assumptions were 7% interest and 5% salary. We also have made a study of large public employee pension plans and found that the actuarial assumptions used for the rate of interest and rate of salary increase were somewhat higher. These ranged from 7% to 8% for interest and from 5.5% to 7% for salary. The Greenwich Research Associates report on the investment management practices of U.S. tax exempt funds Institutional Investment Management: Grace Under Pressure survey of 169 state and municipal funds indicates that the mean actuarial interest rate assumption for public funds was 7.8% in 1987 and 7.8% in 1988 (which compares with 8.0% for large corporate pension funds). The mean actuarial salary increase assumption was 5.9% in 1987 and 5.9% in 1988. Based on the 1989 Yearbook of Stocks, Bonds, Bills and Inflation published by Ibbotson Associates, Chicago, Illinois, we find the following results based on historical data for the past 63 years for the period 1926 through 1988.

	<u>Total Annual Return</u>	<u>Inflation</u>	<u>Net</u>
Common Stocks	10.0%	3.1%	6.9%
Small Stocks	12.3	3.1	9.2
Long Term Corporate Bonds	5.0	3.1	1.9
Long Term Government Bonds	4.4	3.1	1.3
U.S. Treasury Bills	3.5	3.1	.4
Inflation for the past			
5 years 1984-1988		3.5%	
10 years 1979-1988		5.9	
20 years 1969-1988		6.3	
30 years 1959-1988		4.9	
40 years 1949-1988		4.1	
62 years 1927-1988		3.1	

Based on these studies, it is our opinion that for this Fund, the past experience of investment earnings giving effect to locked-in interest rates and generally expected future interest earnings that a 7.5% future interest assumption would be a reasonable rate for valuation purposes and that 6% per year salary scale is reasonable. These assumptions take into consideration the generally accepted views on future salary increases for our national economy. They could be characterized as being middle of the road.

The RYAN monies or the potential KORSHAK liabilities have not been included in this report.

The liabilities and costs in this report are based in part on a 7.5% per year interest assumption and a 6% per year salary scale assumption. The loading for reciprocal benefits was increased from 1% to 2%. 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.

## ALTERNATIVE VALUATIONS

We are currently making 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 future variations from the assumptions used. These will be submitted at a later time.

## ACTUARIAL OBLIGATIONS OF THE FUND

The value of all future pension payments calculated using the actuarial assumptions contained in this report is the sum of payments to two major groups of beneficiaries.

### 1. Retired Lives

For those currently receiving known benefits--i.e., current retirees, widows, and children--the value is determined based on estimated future longevity with the future benefit payments discounted to the present time at the assumed investment earnings rate.

<u>Group</u>	<u>Number</u>	<u>Present Value of Future Benefits</u>
Employee Annuity	2,494	\$153,320,395
Annuity Increase	2,337	28,096,585
Future Widow Benefit	1,573	14,038,414
Lump Sum Death Benefit	0	0
Health Insurance Supplement	1,231	2,595,350
Widow Annuity	1,265	30,971,542
Widow Compensation	1	<u>2,257</u>
Total Retired Reserve		\$229,024,543

### 2. Active Lives

The value of future payments for active employees who will receive benefits in the future is estimated, since the amount of pension is only known at the actual time of retirement. This estimate is made using various actuarial assumptions as to future salary increases, probable retirement age, and chance of death, withdrawal, or disablement before retirement. For active employees, the goal is to have enough assets on hand at retirement to pay for all future benefits promised. To provide for an orderly accumulation of these required assets, an actuarial funding method is used. Using the entry age normal funding method, assets are allocated as a level amount (expressed as a percentage of salary) over the employee's working lifetime. These allocated costs are called "normal



costs" and are sufficient, if set aside each year, for a newly hired employee to accumulate the amount required to fully fund his or her benefits when and if he or she retires. For an employee who has completed half his or her working lifetime, roughly half of the required retirement assets should have been accumulated. The actuarial reserve (amount of assets needed now) is then the present value of future benefits less the value of future normal costs to be paid.

<u>Benefit</u>	<u>Present Value of Benefits</u>	<u>Reserve</u>
Employee Annuity	\$ 364,929,250	
Annuity Increase	77,616,033	
Future Widow/Widower Benefit	36,754,073	
Lump Sum Death Benefit	0	
Health Insurance Supplement	2,671,547	
Widow/Widower of Employees - Dying in service	20,293,673	
Widow/Widower Compensation - Duty Death	0	
Miscellaneous	<u>90,553,621</u>	
Total Active	\$ 592,818,197	
Total Active and Retired Present Value of Benefits	\$ 821,842,740	
Less Present Value of Future Normal Costs		<u>\$ 217,402,079</u>
Net Active Reserve		375,416,118
Net Active Reserve & Retired		604,440,661
Less Present Assets		<u>584,899,234</u>
Unfunded Liability		\$ 19,541,427

The difference between the sum of the actuarial reserve for active and retired lives (sometimes called the "Accrued Actuarial Liability") and the present assets is called the "Unfunded Liability." The unfunded liability depends upon the benefits, the characteristics of the covered group of employees and retirees, the actuarial assumptions, and the actuarial funding method. The unfunded liability can be thought of as the amount of assets that will be needed in future years to provide for all future benefits payable when added to the future normal costs determined by the actuarial funding method.

### ACTUARIAL BALANCE

For the pension fund to be in actuarial balance, the present value of all benefits payable in the future must equal the sum of present assets plus present value of all future contributions.

Future contributions from the employee and employer must provide for the payment of normal costs for amortization of the unfunded liability on some reasonable basis.

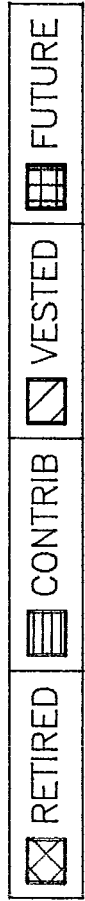
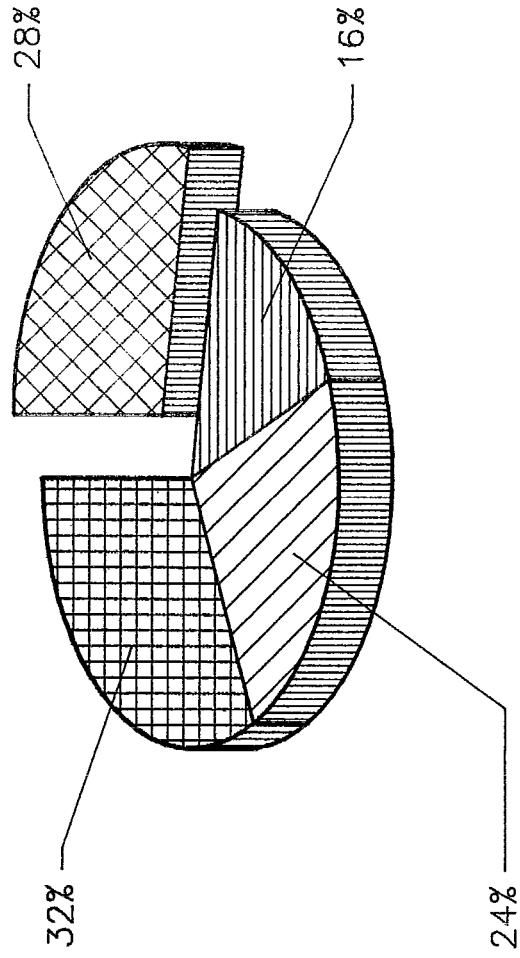
<u>Present Value of</u>		<u>% of Total</u>
Present Assets	\$ 584,899,234	71%
Future Employee contributions	124,557,288	15
Future Employer contributions	163,817,745	20
Deficiency (Excess)	( 51,431,527)	( 6 )
 TOTAL	 \$ 821,842,740	 100%

<u>Present Value of</u>	<u>Actuarial Assets</u>	<u>% of Total</u>	<u>Actuarial Liabilities</u>	<u>% of Total</u>
Benefits				
Retired lives			\$ 229,024,543	28%
Active lives			592,818,197	72%
 Present Assets	 \$ 584,899,234	 71%		
Normal Costs	217,402,079	27%		
Unfunded Liability	<u>19,541,427</u>	<u>2%</u>	<u>                    </u>	<u>                    </u>
 Total	 \$ 821,842,740	 100%	 \$ 821,842,740	 100%

Following are pie charts that illustrate

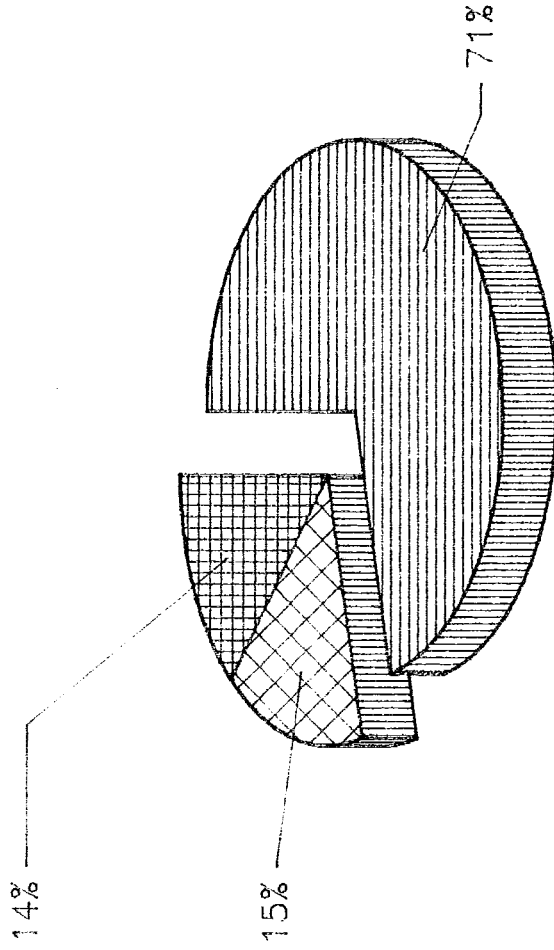
1. Actuarial Present Value of Future Benefits
2. Actuarial Assets
3. Actuarial Cost Method

# 1988 Actuarial Present Value of Benefits



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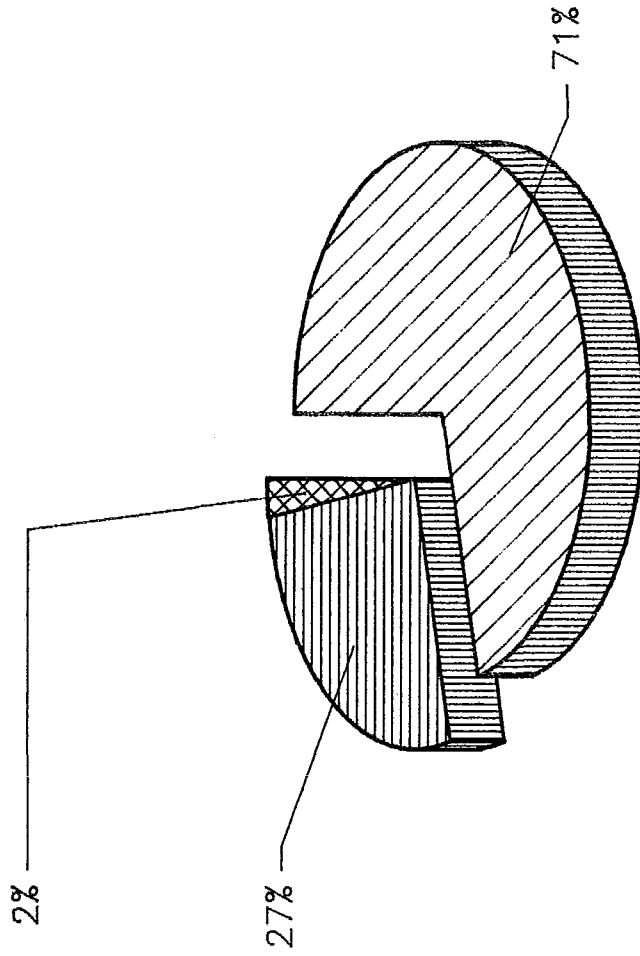
# 1988 Actuarial Assets



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ASSETS	PV EE	PV ER
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# 1988 Actuarial Cost Method



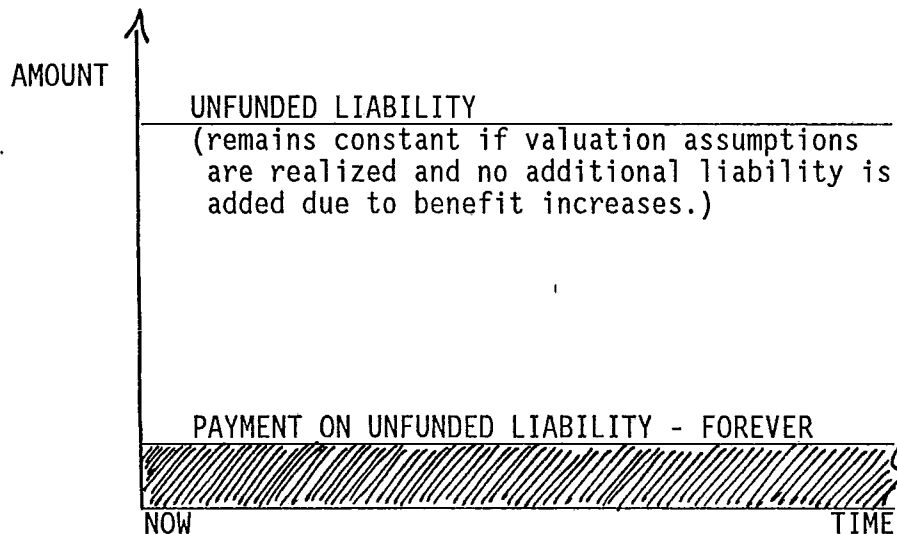
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### THREE METHODS OF FINANCING THE UNFUNDED LIABILITY

1. Normal Cost-Plus-Interest Method. This method of valuation used for this report, is the same as for the last report. It is the method that was used 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.

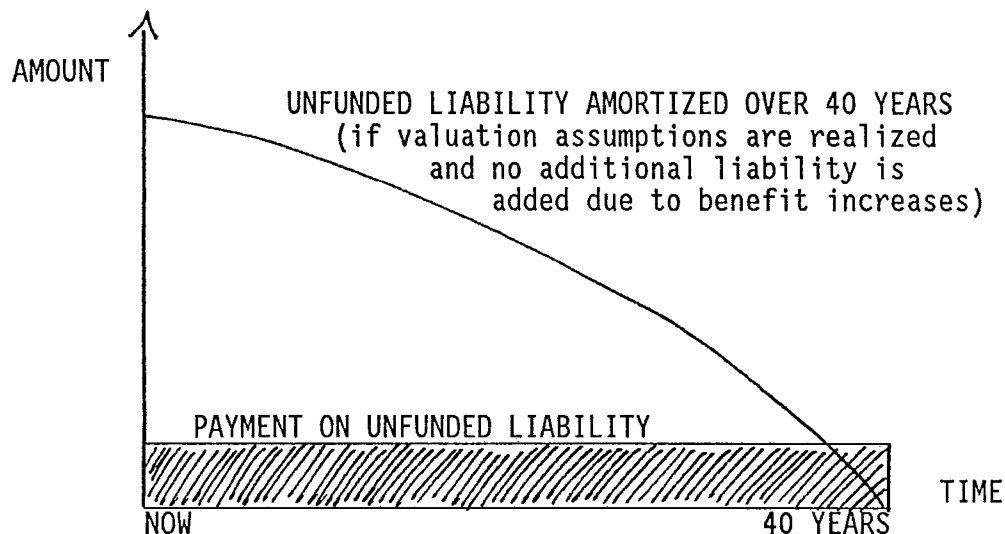
The normal cost-plus-interest-only method of funding is that recommended by the Illinois Public Employees Pension Laws Commission. It was also the minimum required for private pension plans for IRS qualification before ERISA.



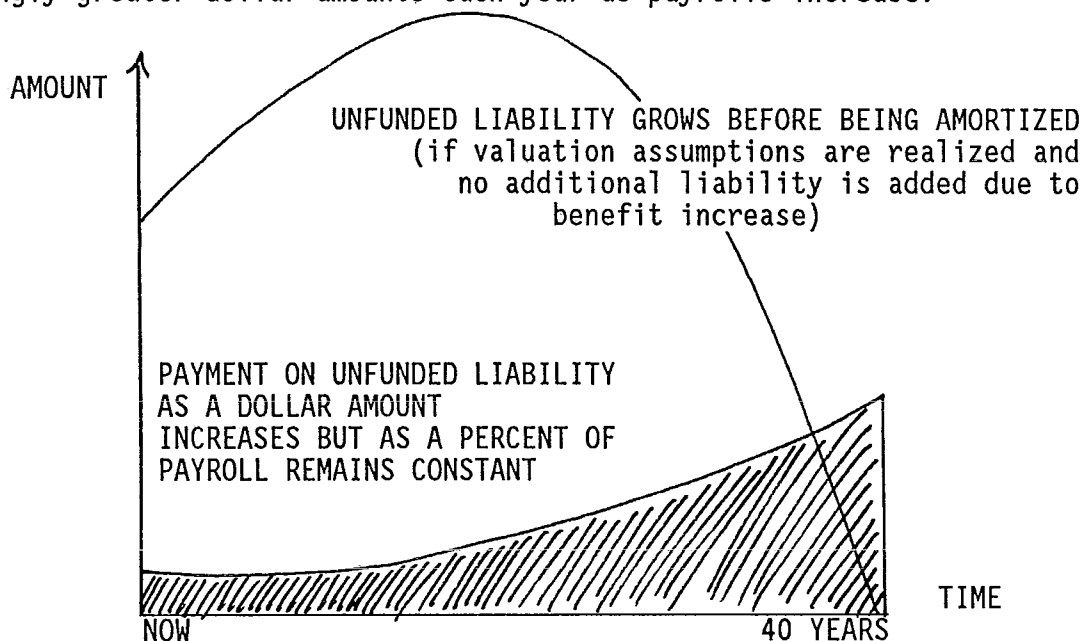
2. Normal Cost-Plus-40-Year-Amortization Method. ERISA minimum funding standards require that initial unfunded liability existing on January 1, 1976, be amortized over a 40 year period. We have calculated the cost of amortizing the existing unfunded liability.

Both of these cost methods, the normal cost-plus-interest method and the normal cost-plus-40-year-amortization method, 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 payroll as future payrolls increase.



3. Level-Annual-Percent-of-Payroll Method. An alternative method for funding that is receiving increased attention for public employee pension plans is a method that 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 method under ERISA. It may be more acceptable in the future in view of the presumably permanent nature of public retirement systems with a constant flow of new entrants and the desire to place a relatively constant tax burden (as percentage of salary) on future generations of taxpayers. Please note that if this amount is recomputed each year with the same amortization period, the unfunded liability will never be amortized.

For the Retirement Board's guidance, we have estimated the financial effects of different amortization methods. The costs under these funding methods are contingent upon all actuarial assumptions being met and continued active membership at the same level. These three methods meet the requirements set forth in Illinois Revised Statutes, Chapter 108-1/2, Article 22-501.10. The results are given in the following table:

	<u>Required 1989 Tax Levy</u>	<u>Ultimate Required Multiple</u>	<u>Unfunded Liability Will:</u>	<u>Portion Required for Amortization of Unfunded Liability</u>
1. Normal Cost + Interest Only	\$10,352,984	1.03	Remain constant at \$19,541,427*	\$1,413,557
2. ERISA: Normal Cost + 40-Year Amortization	\$10,439,374	1.04	Decrease to \$0*	\$1,496,492
3. Normal Cost + 40 Year Level % of Payroll Increasing 4% a Year (Inflation Only)	\$ 9,816,783	0.98	Increase to \$28,238,003 in 21 years and decrease thereafter*	\$898,804 in 1989 increases to \$4,149,240 in 40 Years
4. Present Law (Includes Park)	\$15,456,000	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, and declining fund membership.

#### REQUIRED ACTUARIAL CONTRIBUTION

Based on the normal cost-plus-interest-method of funding, we find that the tax levy for 1989 should be \$10,352,984, which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll (as of December 31, 1988) of \$132,685,608 and an active membership of 4,725 persons. The detail is shown in the table that follows.



DETAIL OF ANNUAL CITY CONTRIBUTION

	<u>Amount</u>	<u>Percent of Salary</u>	<u>Dollars Per Active Member</u>
1. Normal Cost - for Current Service	\$19,803,585	14.93%	\$4,191
<u>2. 7.5% Interest on Unfunded Liability</u>	<u>\$ 1,413,557</u>	<u>1.07%</u>	<u>\$ 299</u>
<u>3. Total Actuarial Requirement (1)+(2)</u>	<u>\$21,217,142</u>	<u>15.99%</u>	<u>\$4,490</u>
4. Employee Contributions	\$11,278,277	8.50%	\$2,387
5. Employer Requirement (3-4)	\$ 9,938,865	7.49%	\$2,103
6. Expected Net Employer Contribution from 1989 Tax Levy of \$15,456,000 after a 4% Loss	<u>\$14,837,760</u>	<u>11.18%</u>	<u>\$3,140</u>
7. Expected Net Annual Deficiency (Excess)	\$(4,898,895)	(3.69%)	(\$1,037)
8. Tax Levy Required (Assume 4% Loss)	\$10,352,984		
9. Required Multiple	1.03		
10. Present Authorized Multiple	1.37		
11. Amortization Period (Present Multiple)	4 years		

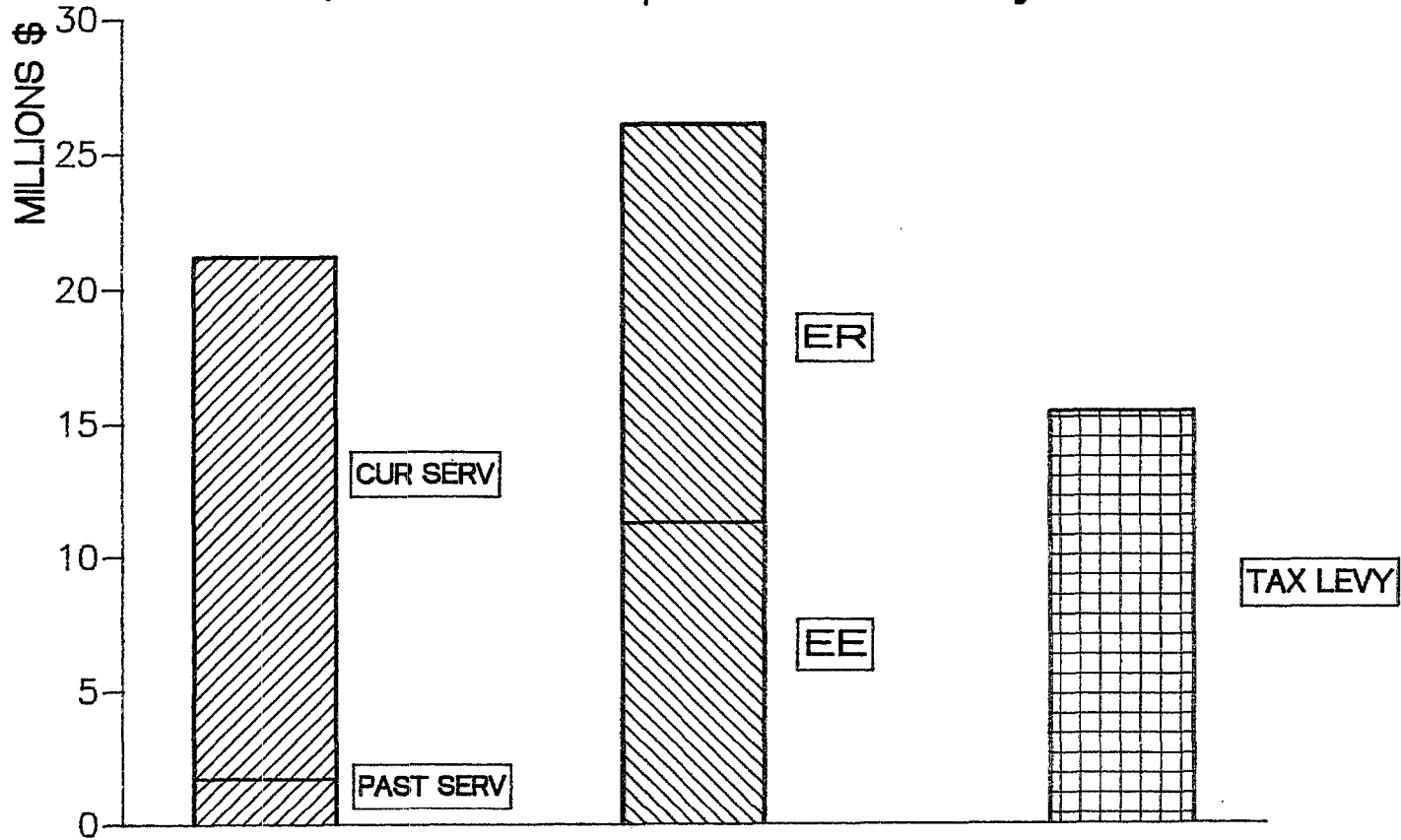
The "Illinois Public Employees Pension Laws Commission Impact Statement," appended to this report, illustrates both the present financial position and the direction of the financial condition.

The above table indicates that the Fund is more than meeting the annual actuarial cost on the normal cost-plus-interest basis.

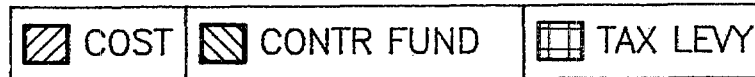
The following bar chart illustrates the annual actuarial cost for the next year (composed of current service cost and past service cost) to be paid for by the employee and the employer. The annual cost is more than being met. The employer portion is provided by tax levy (the third column).

# 1989 Annual Actuarial Cost

(Normal Cost plus Interest Only)



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**DETAIL OF NORMAL COST**

	<u>% Salary</u>	<u>\$ Per Active Member</u>
Retirement Annuity	6.88%	\$1,930
Post-Retirement Annuity Increase	1.46	411
Post-Retirement Spouse Annuity	.70	197
Spouse Annuity for Death in Service	.61	171
Health Insurance	.03	8
Child's Annuity	.10	27
Ordinary Disability	.90	252
Duty Disability	1.03	290
Refunds	1.32	372
Widows'/Widowers' Compensation	0.00	0
Expense of Administration	1.71	479
Reciprocal Benefits	<u>0.19</u>	<u>54</u>
	14.93%	\$4,191

**CHANGE IN THE UNFUNDED LIABILITY**

The total unfunded liability as of December 31, 1988, is \$19,541,427. As of December 31, 1987, it was \$36,336,974.

**DETAIL OF CHANGE IN UNFUNDED LIABILITY**

1. Increase in Salaries under 6.0% Assumed	(\$17,739,334)	Decrease
2. Investment Yield over 7.5% Assumed	( 1,525,244)	Decrease
3. Excess in Annual Contribution:		
1988 Total Actuarial Requirement.....	\$22,636,952	
Less Employer Net to Fund 1988		
Tax Levy .....	15,157,663	
Less Employee Contributions for 1988..	<u>11,740,621</u>	( 4,261,332) Decrease
4. Change in Assumptions (Reciprocal Percentage)	3,593,768	Increase
5. Miscellaneous Actuarial Experience	<u>3,136,595</u>	Increase
Net Change in Unfunded Liability	(\$16,795,547)	Decrease

**FUNDED RATIO**

The ratio of assets to liabilities is 96.77% as of December 31, 1988, and was 93.77% as of December 31, 1987. This ratio represents the extent to which present and future benefit promises are secured by present assets. The funded ratio increased because assets increased 6.9% while liabilities increased 3.6%.

**RATIO OF ACTIVE EMPLOYEES TO ANNUITANTS AND BENEFICIARIES**

The ratio of active employees to annuitants and beneficiaries is 1.15 as of December 31, 1988, and was 1.20 as of December 31, 1987. This ratio illustrates the relationship between the contributors and the beneficiaries.

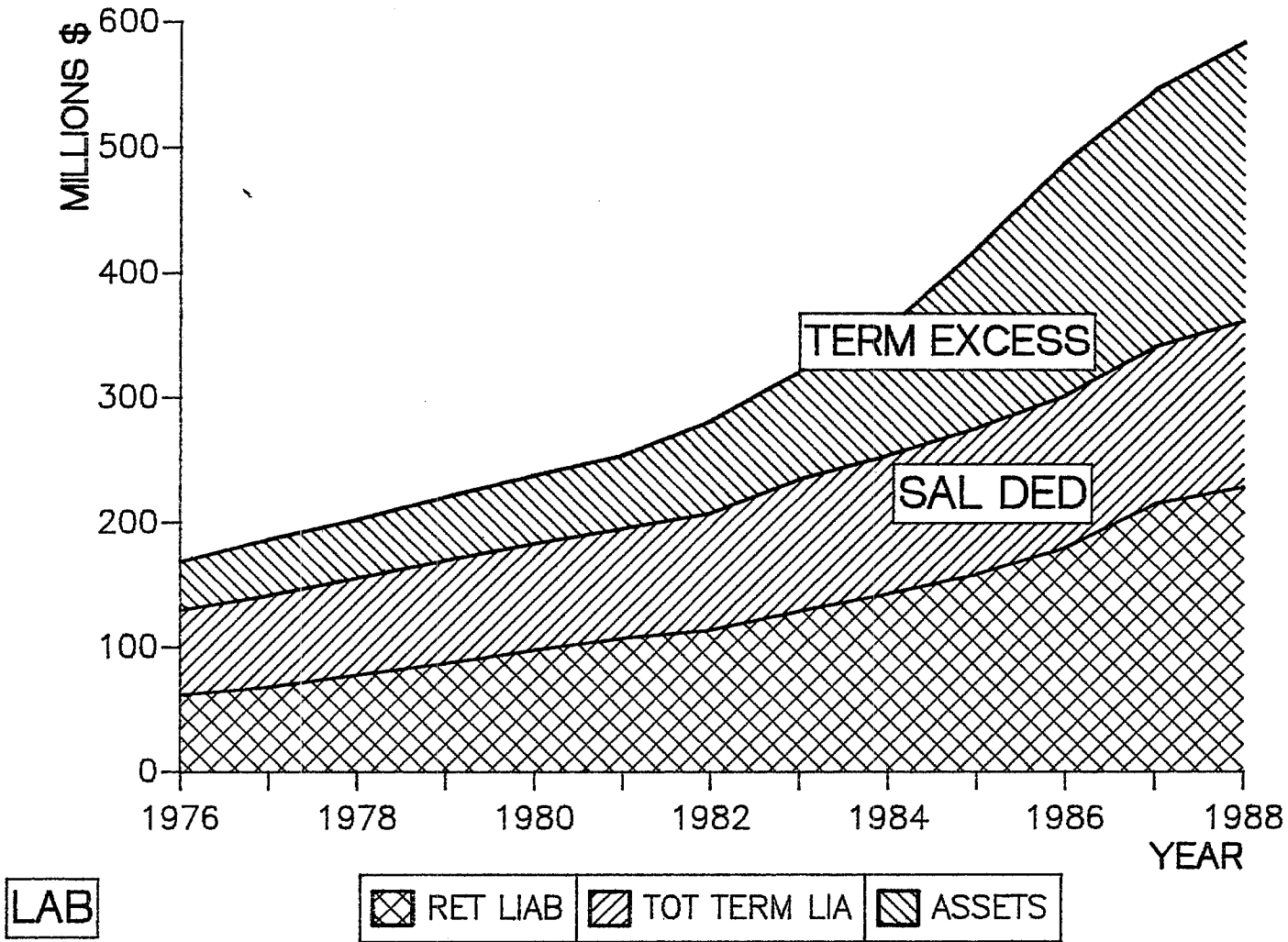
## TERMINATION LIABILITY

A measure of plan funding is to compare the assets to liabilities for present annuitants and the amount of refundable contributions for active and inactive employees. This amount would be a minimum measure of what it would cost to terminate the plan as of the valuation date.

	<u>1987</u>	<u>1988</u>
Liability for Retired Annuitants and Widows/Widowers Spouses of Annuitants.....	\$215,483,599	\$229,024,543
Salary Deductions Contributed by Active Fund Members.....	<u>\$126,554,299</u>	<u>\$133,793,756</u>
Total .....	\$342,037,898	\$362,818,299
Assets at Book Value.....	<u>\$546,947,052</u>	<u>\$584,899,234</u>
Excess Upon Termination.....	\$204,909,154	\$222,080,935
Available Assets for Actives (Retirees Fully Funded).....	\$331,463,453	\$355,874,691
Available Per Active Employee.....	\$ 68,020	\$ 75,317
Refundable per Active Employee.....	\$ 25,970	\$ 28,316
Ratio of Available to Refundable.....	262%	266%

The following chart illustrates the remaining assets after terminating the plan.

# 1988 Termination Liability



**VESTED LIABILITY**

We have computed the value of vested benefits for active employees. That is, an employee who is eligible to retire, either with an immediate or deferred retirement annuity, is assumed to retire and is valued at the estimated amount of annuity for the employee's life. The value of estimated post retirement annuity increase and estimated spouse annuity is added. No death or disability benefits for those dying or becoming disabled in the future are included. Active employees not currently eligible for a retirement benefit are valued at the amount of their refundable accumulated salary deductions with statutory interest. Retired lives are entirely vested. The total vested liability computed using the actuarial assumptions of interest and mortality in this report is greater than the termination liability used in previous reports because the value of a retirement annuity for an eligible employee is greater than the amount of his or her accumulated salary deductions.

	<u>1987</u>	<u>1988</u>
Liability for Retired Annuitants and Widows/Widowers and Spouses of Annuitants.....	\$215,483,599	\$229,024,543
Value of Active Employees Eligible To Retire.....	\$244,134,459	\$247,984,956
Accumulated Salary Deductions of Active Employees Eligible for Refund and not Annuity.....	\$ 76,574,038	\$ 81,751,616
Active Vested Liability.....	<u>\$320,708,497</u>	<u>\$329,736,572</u>
Total Vested Liability.....	\$536,192,096	\$558,761,115
Assets at Book Value.....	<u>\$546,947,052</u>	<u>\$584,899,234</u>
Unfunded Vested Liability.....	(\$ 10,754,956)	(\$ 26,138,119)
Vested Funded Ratio.....	102.01%	104.68%

The average amount of assets required per active employee to provide for vested benefits as of the valuation date is \$69,785. This should be compared to the average amount of assets required per active employee to fully fund the present amount required to provide for future projected retirement annuity assuming future service and salary increments--using the entry age normal funding method described in the actuarial assumptions and methods. This amount per active employee is \$79,453.

**GASB DISCLOSURE**

The Governmental Accounting Standards Board (GASB) Statement No. 5 - Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers requires disclosure of the actuarial present value of credited projected benefits for reports issued for fiscal years beginning after December 15, 1988.

The Actuarial Present Value (APV) of credited projected benefits must take into account the long-term nature of the pension obligations on a going-concern basis (rather than a termination basis). Benefits are projected to anticipated retirement, assuming future salary increases and future years of service credit. The liability or value of credited benefits is determined based on the ratio of years of service to date to the total years of service at projected retirement. This measure differs from the actuarial cost method used for funding the pension plan. The credited projected benefit method is not recommended for funding if level costs are desired.

The stated purpose of the GASB disclosure is to provide persons familiar with financial matters with information useful to (a) assess the funding status on a going-concern basis, (b) ascertain the progress made in accumulating assets to pay benefits when due, and (c) assess the extent to which employers are making contributions to the system at actuarially determined rates. The use of a single actuarial method--the credited projected benefit method, which may differ from that used for funding--is to facilitate comparison and understanding. However, the financial health of the pension plan should be measured against the actuarial method used for funding the plan. No split between vested and nonvested current employees is possible, due to the different vesting schedules of the defined benefit and defined contribution portions of the benefits.

See complete GASB disclosure exhibit in the rear of this report.

	<u>1987</u>	<u>1988</u>
Pension Benefit Obligation (PBO)		
APV of Credited Projected Benefits		
Accumulated contributions (with interest)	\$126,554,299	\$133,793,756
Payable to retirees and beneficiaries	\$215,483,599	\$229,024,543
Payable to vested and nonvested current employees	<u>\$179,943,893</u>	<u>\$178,811,596</u>
Total APV	\$521,981,791	\$541,629,895
Net assets available for benefits (book value)	<u>\$546,947,052</u>	<u>\$584,899,234</u>
Excess assets over APV of credited projected benefits	(\$ 24,965,261)	(\$ 43,269,339)
Percentage funded	104.78%	107.99%
Surplus APV as % of Payroll	( 18.43%)	(18.82%)

## THE FUTURE

A continuous review of the Fund's operating experience is needed, just as it has been needed in the past. 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 increase in salary over the 6% increases assumed in the salary scale the unfunded liability will be increased by about \$2.83. This will be in addition to the additional current annual service cost for every dollar in salary over the 6% salary scale assumed.

These additional costs will be reduced to some extent by the annual amount of investment income earned over the assumed 7.5% used for valuation purposes. The extent of the reduction will depend on the relative amounts of these two items.

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 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 a 40 year period.

## OTHER MATTERS

### RYAN LAWSUIT

An annuitant has sued the city for failing to make contributions to the four City pension funds on a timely basis. A judgment was entered in the amount of approximately \$19 million for the four City pension funds representing interest on the city contribution. This fund share has not been included in this report.

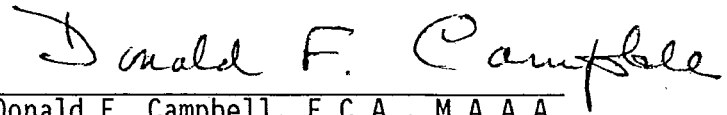
### KORSHAK LAWSUIT

The City sought to recover from the four City pension funds approximately \$83 million in past annuitant health care costs paid by the City for the period 1980-1987 in excess of the "premiums" paid by annuitants and the "supplement" paid by the pension fund. The City contended that these past health care costs were a responsibility of the pension funds and all future health care costs are a responsibility of the pension funds, the annuitants, or both. The city was not successful in its attempt to recover the past health care costs. Liabilities for future health care costs in excess of the current Fund subsidy, which could be substantial, have not been included in this report. Present financing is not adequate to fund these liabilities on a long-term basis.

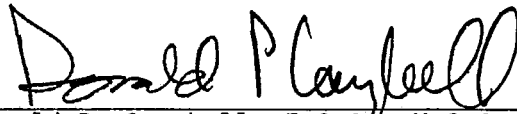


The RYAN monies or the potential KORSHAK liabilities have not been included in this report.

Respectfully submitted,



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

DFC:ih

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

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

ACTUARIAL BALANCE SHEET

AS OF

DECEMBER 31, 1988

ASSETS

AND

LIABILITIES

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

## LIABILITIES AND FUND BALANCES

ACTUARIAL BALANCE SHEET AS OF DECEMBER 31, 1988

## ANNUITY PAYMENT FUND ACCOUNT

(Based on 3% Comb. and 4% Amer. Exp. Tables)

Employee Annuitants	\$ 63,445,004.76	
Employee Annuities Fixed	11,875,563.24	
Spouse Annuitants	22,762,622.88	
Spouses' Annuities Fixed	<u>20,040,324.07</u>	
Total Annuity Payment Fund		\$118,123,514.95

## SALARY DEDUCTION FUND ACCOUNT

Employees	\$ 95,223,597.15	
Spouses of Employees	<u>21,697,424.41</u>	
Total Salary Deduction Fund		\$116,921,021.56

## CITY CONTRIBUTION FUND ACCOUNT

Employees	\$ 88,690,408.19	
Spouses of Employees	29,348,891.32	
Supplemental Annuities	<u>3,979.38</u>	
Total City Contribution Fund		\$118,043,278.89

## OTHER RESERVES

Supplementary Payment Reserve	\$ 72,045.39	
Annuity Payment Fund Account	<u>5,994,667.32</u>	
Total Other Reserves		\$ 6,066,712.71

## PRIOR SERVICE FUND ACCOUNT

(Based on 3% Comb. and 4% Amer. Exp. Tables)

Employee Annuitants	\$138,745,381.32	
Employee Annuities Fixed	0.00	
Spouse Annuitants	10,911,761.06	
Spouses' Annuities Fixed	5,263,479.94	
Salary Deductions Retirement Annuity	9,916,473.41	
Estimated Excess Liability (Note 1)	<u>80,449,037.16</u>	
Total Prior Service Account		<u>\$245,286,132.89</u>

TOTAL LIABILITIES \$604,440,661.00

Obligations of Fund for Prior Service Liabilities (Note 1) (\$ 19,541,427.38)TOTAL NET LIABILITIES AND FUND BALANCES \$584,899,233.62

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

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

INCOME

YEAR 1988

INCOME

AND

EXPENDITURES

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

## EXPENDITURES FOR YEAR 1988

TOTAL INCOME FORWARDED	\$67,892,259.50
------------------------	-----------------

## BENEFITS

Employees' Annuities	\$20,682,766.48
Spouses' Annuities	3,743,668.47
Compensation Annuities	0.00
Children	127,950.00
Ordinary Disability	1,191,429.06
Duty Disability	1,370,320.63
Supplemental Annuities	46,909.92
Annuitant Health Insurance	<u>309,744.00</u>

Total Benefits	\$27,472,788.56
----------------	-----------------

Reciprocal Act

Reimbursements

( 5,099.58 )

Net Benefits Paid

\$27,467,688.98

## EXPENSE OF ADMINISTRATION

## Salaries

Regular Employees	\$ 280,964.20
Health Care	37,084.94

## Services

Legal	17,925.08
Medical Expense	20,256.00
Actuarial Consulting	10,607.55
Auditing	16,400.00
Annuity Certification	48,249.57
Employee Acc'ts & Data Proc.	94,995.76
Checks Production	53,078.60
Office Supplies and Equipment	16,900.25
Depreciation Expense	7,415.88
Printing and Stationery	12,810.45
Postage	22,905.63
Rent & Electricity	97,403.58
Election Expense	796.00
Telephone	2,842.29
Conference & Association Expense	5,177.09
Insurance Premiums	1,495.70
Miscellaneous	<u>6,133.91</u>

Total Expenses

\$ 753,442.48

## REFUNDS

1,756,290.06

## LITIGATION EXPENSE

118,965.77

## TOTAL EXPENDITURES

\$30,096,387.29

## EXCESS INCOME OVER EXPENDITURES

\$37,795,872.21

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

156,309.33

## INCREASE IN NET ASSETS FOR YEAR

\$37,952,181.54

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

COMPARATIVE ANALYSIS

YEAR 1988

ASSETS

AND

LIABILITIES

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

## COMPARATIVE ANALYSIS

## LIABILITIES AND FUND BALANCES

LIABILITY RESERVES	<u>01/01/88</u>	<u>12/31/88</u>	<u>Increase (Decrease)</u>
<b>ANNUITY PAYMENT FUND</b>			
Employee Annuitants	\$ 60,164,950	\$ 63,445,005	\$ 3,280,055
Emp. Annuitants Fixed	11,423,012	11,875,563	452,551
Spouse Annuitants	21,819,059	22,762,623	943,564
Spouses' Annuities Fixed	<u>18,366,385</u>	<u>20,040,324</u>	<u>1,673,939</u>
Total	\$111,773,406	\$118,123,515	\$ 6,350,109
<b>SALARY DEDUCTION FUND ACCOUNT</b>			
Employees	\$ 90,287,149	\$ 95,223,597	\$ 4,936,448
Spouses of Employees	<u>20,508,543</u>	<u>21,697,424</u>	<u>1,188,881</u>
Total	\$110,795,692	\$116,921,021	\$ 6,125,329
<b>CITY CONT. FUND ACCOUNT</b>			
Employees	\$ 84,244,296	\$ 88,690,408	\$ 4,446,112
Spouses of Employees	27,838,767	29,348,892	1,510,125
Supplemental Annuities	<u>4,027</u>	<u>3,979</u>	<u>( 48)</u>
Total	\$112,087,090	\$118,043,279	\$ 5,956,189
<b>OTHER RESERVES</b>			
Supplemental Pymt. Res.	\$ 68,955	\$ 72,046	\$ 3,091
Annuity Fund Account	<u>4,399,030</u>	<u>5,994,667</u>	<u>1,595,637</u>
Total	\$ 4,467,985	\$ 6,066,713	\$ 1,598,728
<b>PRIOR SERVICE FUND ACCOUNT</b>			
Employee Annuitants	\$128,614,005	\$138,745,381	\$10,131,376
Emp. Annuitants Fixed	0	0	0
Spouse Annuitants	10,775,530	10,911,761	136,231
Spouses' Annuities Fixed	4,982,599	5,263,480	280,881
Sal. Ded. 3% Annuity	9,288,573	9,916,474	627,901
Estimated Excess Liability	<u>90,499,147</u>	<u>80,449,037</u>	<u>( 10,050,110)</u>
Total	<u>\$244,159,854</u>	<u>\$245,286,133</u>	<u>\$ 1,126,279</u>
TOTAL LIABILITIES	\$583,284,027	\$604,440,661	\$21,156,634
UNFUNDED OBLIGATIONS	<u>(\$ 36,336,975)</u>	<u>(\$ 19,541,427)</u>	<u>\$16,795,548</u>
TOTAL NET LIABILITIES	<u>\$546,947,052</u>	<u>\$584,899,234</u>	<u>\$37,952,182</u>



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

## TAXES RECEIVABLE

DECEMBER 31, 1988

Year	Uncollected Taxes 12-31-88	Estimate for Loss 12-31-87	Additional Est. Setup 12-31-88	Total Est. for loss 12-31-88	Taxes Collectible 12-31-88
CITY					
1984	\$ 347,535.46	(\$ 343,224.00)	(\$ 3,312.84)	(\$ 346,536.84)	\$ 998.62
1985	229,861.24	( 203,723.00)	( 22,787.00)	( 226,510.00)	3,351.24
1986	559,140.20	( 347,325.00)	( 186,045.00)	( 533,370.00)	25,770.20
1987	602,690.78	( 620,400.00)	279,180.00	( 341,220.00)	261,470.78
1988	<u>12,284,000.00</u>		( 614,200.00)	( 614,200.00)	<u>11,669,800.00</u>
	\$14,023,227.68	(\$1,514,672.00)	(\$547,164.84)	(\$2,061,836.84)	\$11,961,390.84
PARK					
1984	\$ 905.17	(\$ 916.41)	\$ 11.24	(\$ 905.17)	\$ 0
1985	518.10	( 766.04)	247.94	( 518.10)	0
1986	0.00	0.00	0.00	0.00	0
1987	0.00	( 1,050.00)	1,050.00	( 0)	0
1988	<u>20,000.00</u>		( 1,000.00)	( 1,000.00)	<u>19,000.00</u>
	\$ 21,423.27	(\$ 2,732.45)	\$ 309.18	(\$ 2,423.27)	\$ 19,000.00
TOTAL CITY AND PARK					
	<u>\$14,044,650.95</u>	<u>(\$1,517,404.45)</u>	<u>(\$546,855.66)</u>	<u>(\$2,064,260.11)</u>	<u>\$11,980,390.84</u>
			Replacement Tax From State	1987	\$ 0.00
				1988	<u>3,096,000.00</u>
					\$15,076,390.84

Note: The loss on the 1988 tax levy was 5%. Due to the 100% collection of the personal property replacement tax, the overall loss is 4%. The statutory requirement of \$15,400,000 is the sum of \$12,284,000 plus \$20,000 plus \$3,096,000.

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

## MEMBERSHIP STATISTICS

YEAR 1988

	<u>Number at Beginning of Year</u>	<u>Increases</u>	<u>Decreases</u>	<u>Number at End of Year</u>
A. Changes in Active Participants				
Male	4,521	230	355	4,396
Female	<u>352</u>	<u>56</u>	<u>79</u>	<u>329</u>
Total	<u>4,873</u>	<u>286</u>	<u>434</u>	<u>4,725</u>
B. Changes in Annuitants & Beneficiaries				
Employee Annuitants	2,416	144	155	2,405
Spouse Annuitants	1,209	81*	58	1,232
Children's Annuities	84	16	21	79
Ordinary Disability Benefits	82	90	82	90
Duty Disability Benefits	152	648	628	172
Reciprocal: Employee	82	10	3	89
Spouse	31	3	1	33
Widow/Widower Compensation Annuities	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>
Total	<u>4,058</u>	<u>992</u>	<u>949</u>	<u>4,101</u>
C. Ratio of Active Participants to Annuitants & Beneficiaries				
	<u>1.20</u>			<u>1.15</u>

\* One widow changed from Compensation to Supplemental Annuity.

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

## SALARY AND AGE STATISTICS

YEAR 1988

Ages and Salaries as of December 31, 1988

Male

<u>Age</u>	<u>Number</u>	<u>Annual Salaries</u>	<u>Average Annual Salaries</u>
Without DOB	44	\$ 1,170,456	\$26,601
Under 20	2	64,368	32,184
20 - 24	67	1,796,904	26,819
25 - 29	395	10,859,520	27,492
30 - 34	688	19,924,104	28,959
35 - 39	653	19,007,016	29,107
40 - 44	459	13,353,696	29,093
45 - 49	480	14,440,128	30,083
50 - 54	482	13,824,864	28,682
55 - 59	473	13,612,272	28,778
60 - 64	407	11,683,224	28,705
65 - 69	182	4,948,440	27,189
70 & over	64	1,990,272	31,098
Active	<u>4396</u>	<u>\$126,675,264</u>	<u>\$28,816</u>

Female

Without DOB	3	\$ 78,192	\$26,064
Under 20	1	20,112	20,112
20 - 24	9	213,504	23,722
25 - 29	27	662,856	24,550
30 - 34	23	559,608	24,330
35 - 39	14	333,384	23,813
40 - 44	12	281,496	23,458
45 - 49	17	402,096	23,652
50 - 54	28	580,344	20,726
55 - 59	51	786,576	15,423
60 - 64	84	1,303,152	15,513
65 - 69	55	744,336	13,533
70 & over	5	44,688	8,937
Active	<u>329</u>	<u>\$ 6,010,344</u>	<u>\$18,269</u>
TOTAL MALE AND FEMALE	<u>4725</u>	<u>\$132,685,608</u>	<u>\$28,082</u>

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

## SALARY AND AGE STATISTICS

YEAR 1988

## AGES AT ENTRANCE

<u>Age</u>	<u>Male</u>		<u>Female</u>	
	<u>Number</u>	<u>Annual Salaries</u>	<u>Number</u>	<u>Annual Salaries</u>
Under 25	1,548	\$ 46,333,536	32	\$ 763,872
25 - 29	932	26,821,008	44	941,016
30 - 34	639	17,932,248	60	1,135,368
35 - 39	394	11,053,416	91	1,487,400
40 - 44	379	10,677,984	64	1,041,504
45 - 49	244	6,727,320	24	387,984
50 - 54	123	3,307,176	9	141,120
55 - 59	75	2,112,864	2	33,888
60 & over	18	539,256	0	0
W/O record	44	1,170,456	3	78,192
Totals	<u>4,396</u>	<u>\$126,675,264</u>	<u>329</u>	<u>\$6,010,344</u>
Average Annual Salary		\$28,816		\$18,268
Average Attained Age		44.6		52.6
Average Service		14.3		16.9
Average Age at Entrance		30.3		35.7

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

## AGE AND SERVICE DISTRIBUTION

YEAR 1988

Average Salaries by Age and Service Grouping (Showing the Number of Members and the Average Salaries of Males and Females Combined)

Age	Years of Service									Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
00-20	3 28160									3 28160
20-24	15 28634	50 25327	11 28595							76 26453
25-29	18 24644	125 25434	229 28058	50 29484						422 27304
30-34	7 26290	115 26160	262 28652	302 29846	25 30843					711 28810
35-39	8 22929	77 24980	183 28378	266 29745	114 30889	19 31929				667 28996
40-44	1 20112	46 25736	115 28201	136 29757	96 28218	73 31377	4 35424			471 28949
45-49	2 25968	38 27845	82 27742	104 28945	72 30002	113 30432	81 32733	5 39346		497 29864
50-54	2 16572	28 24471	72 26650	104 28903	65 28530	106 28047	101 29345	31 30596	1 22392	510 28246
55-59	1 15528	20 24084	51 28160	84 27974	66 27412	106 25761	76 26294	83 29784	37 29878	524 27479
60-64		6 25892	37 25991	60 28540	72 27104	109 22869	73 24255	63 27637	71 31001	491 26449
65-69		2 25188	17 29222	30 25342	32 25601	66 21844	39 19833	18 25195	33 27196	237 24020
70+			2 31824	11 30135	14 30854	15 28795	8 27429	10 28555	9 30107	69 29492
W/O		14 24777	13 28134	15 25445	3 30144	1 31824	1 32112			47 26567
No.	57	521	1074	1162	559	608	383	210	151	4725
Sal.	25364	25602	28120	29259	28834	27036	27548	29035	29784	28082
Age										45.2
Service										14.5

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO  
 ANNUITANTS CLASSIFIED BY AGE AS OF DECEMBER 31, 1988

## Retirement Annuities

Ages	Male Number	Annual Payments	Average Annual Payments	Female Number	Annual Payments	Average Annual Payments
20 - 24		\$	\$		\$	\$
25 - 29						
30 - 34						
35 - 39	4	12,000.00	3,000.00			
40 - 44	1	3,000.00	3,000.00			
45 - 49						
50 - 54	3	9,897.96	3,299.32			
55 - 59	44	668,594.88	15,195.34	5	48,896.04	9,779.21
60 - 64	258	3,735,876.24	14,480.14	26	129,855.60	4,994.45
65 - 69	435	5,498,949.24	12,641.26	138	799,993.44	5,797.05
70 - 74	422	3,917,793.36	9,283.87	222	1,011,024.72	4,554.17
75 - 79	301	2,491,932.96	8,278.85	181	739,747.80	4,087.00
80 - 84	134	930,259.56	6,942.24	138	488,790.48	3,541.96
85 - 89	57	270,048.12	4,737.69	61	212,098.20	3,477.02
90 - 94	21	115,791.72	5,513.89	28	97,837.32	3,494.19
95 - 99	7	32,997.00	4,713.86	7	21,639.84	3,091.41
100-105				1	3,038.04	3,038.04
Totals	<u>1687</u>	<u>\$17,687,141.04</u>	<u>\$ 10,484.38</u>	<u>807</u>	<u>\$3,552,921.48</u>	<u>\$ 4,402.63</u>

Average Age 71  
 Spouses Annuities (Not Including Compensation) 76

Ages	Male Number	Annual Payments	Average Annual Payments	Female Number	Annual Payments	Average Annual Payments
20 - 24		\$	\$		\$	\$
25 - 29				1	2,400.00	2,400.00
30 - 34				3	7,200.00	2,400.00
35 - 39				2	5,904.00	2,952.00
40 - 44				18	47,906.52	2,661.47
45 - 49				25	70,037.76	2,801.51
50 - 54				39	133,132.20	3,413.65
55 - 59	1	2,400.00	2,400.00	74	239,701.68	3,239.21
60 - 64	1	2,400.00	2,400.00	164	548,395.92	3,343.88
65 - 69	1	2,400.00	2,400.00	223	742,342.32	3,328.89
70 - 74	6	14,400.00	2,400.00	262	798,993.36	3,046.37
75 - 79	5	12,000.00	2,400.00	213	589,134.24	2,765.89
80 - 84				129	354,298.68	2,746.50
85 - 89				72	180,270.60	2,503.76
90 - 94				21	54,269.52	2,584.26
95 - 99				5	13,078.56	2,615.71
100-105						
Totals	<u>14</u>	<u>\$33,600.00</u>	<u>\$ 2,400.00</u>	<u>1251</u>	<u>\$3,787,065.36</u>	<u>\$3,027.23</u>

Average Age 72 70

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

## NEW ANNUITIES GRANTED

DURING 1988

	<u>Male Annuitants</u>	<u>Female Annuitants</u>	<u>Widows/ Widowers of Deceased Employees</u>	<u>Widows/ Widowers of Deceased Annuitants</u>
Number Retired	121	33	13	70
Average Attained Age	64.3	67.4	54.2	70.5
Average Length of Service	28.2	24.8	22.0	N/A
Average Annual Salary (4 out of 10)	\$ 24,084	\$ 12,468	N/A	N/A
Average Annual Final Salary	\$ 28,044	\$ 13,140	\$ 26,784	N/A
Total Annual Annuity	\$ 1,795,227	\$ 214,146	\$ 63,355	\$ 260,212
Average Annual Annuity	\$ 14,837	\$ 6,489	\$ 4,873	\$ 3,717
Total Liability (7.5% UP-1984)	\$20,194,122	\$2,353,832	\$ 679,574	\$2,106,114
Average Liability	\$ 166,894	\$ 71,328	\$ 52,275	\$ 30,087
Total Cost for Income Tax Purposes	\$ 2,185,842	\$ 247,020	\$ 185,392	N/A
Average Cost	\$ 18,065	\$ 7,485	\$ 14,261	N/A
Expected Future lifetime (yrs.)	15.35	16.71	26.89	14.69
Payback Period (yrs.)	1.22	1.15	2.93	N/A
Replacement ratio	52.9%	49.4%	N/A	N/A
Liability divided by Salary	5.95	5.42	N/A	N/A

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

## HISTORY 1965 to 1988

## HISTORY OF AVERAGE ANNUAL SALARIES ENTIRE FUND

Year End	Members in Serv. (1)	Percent Increase	Average Salary	Percent Increase	Salary	Percent Increase	Actuarial Salary Assumption	CPI Chicago
65	7,936	0.9%	\$ 45,872,832	3.2%	\$ 5,780	2.3%	1.00%	1.4%
66	7,995	0.7	47,598,552	3.8	5,954	3.0	1.00	2.9
67	8,102	1.3	52,268,304	9.8	6,451	8.3	1.75	2.7
68	7,891	(2.6)	56,165,136	7.5	7,118	10.3	1.75	4.3
69	7,777	(1.4)	60,523,296	7.8	7,782	9.3	1.75	5.4
70	7,220	(7.2)	62,916,768	4.0	8,714	12.0	1.75	5.6
71	6,864	(4.9)	66,142,320	5.1	9,636	10.6	3.50	3.9
72	6,971	1.6	69,950,692	5.8	10,035	4.1	3.50	2.9
73	6,752	(3.1)	73,108,848	4.5	10,828	7.9	3.50	6.2
74	6,638	(1.7)	78,526,728	7.4	11,830	9.3	5.00	10.7
75	7,032	5.9	89,276,280	13.7	12,696	7.3	5.00	7.9
76	6,811	(3.1)	90,487,008	1.4	13,285	4.6	5.00	4.8
77	6,752	(0.9)	98,029,296	8.3	14,519	9.3	5.00	6.4
78	6,613	(2.1)	103,399,152	5.5	15,636	7.7	5.00	8.6
79	6,175	(6.6)	105,825,264	2.3	17,138	9.6	5.00	12.5
80	5,847	(5.3)	108,854,496	2.9	18,617	8.6	5.00	14.4
81	5,765	(1.4)	118,054,512	8.5	20,478	10.0	5.00	9.6
82	5,970	3.6	134,293,920	13.8	22,495	9.8	6.00	6.8
83	5,424	(9.1)	131,355,840	(2.2)	24,218	7.7	6.00	4.0
84	5,341	(1.5)	131,327,856	( 0)	24,589	1.5	6.00	3.8
85	5,138	(3.8)	125,594,688(3)	(4.4)	24,444	(.6)	7.00	3.8
86	4,844	(5.7)	128,601,816	2.4	26,549	8.6	6.00	2.0
87	4,873	.6	135,453,096	5.3	27,797	4.7	6.00	4.1
88	4,725	(3.0)	132,685,608	(2.0)	28,082	1.0 (2)	6.00	3.9

Average Increase (Decrease)  
for the Last 5

Years (2.7)% .3% 3.0% 3.5%

Avg. Last

10 Years (3.2)% 2.7% 6.1% 6.5%

- (1) Includes those members who were on disability.
- (2) Average annual increase in salary 1965-1988, about 7.1% compounded. The average increase in the Chicago CPI for the same period is about 5.9%.
- (3) Total salaries include the 7% Board of Education "pick up" for the first time due to a change in the law.



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

## HISTORY OF TOTAL ANNUITIES

## Employee Annuitants (Male and Female)

<u>Year End</u>	<u>Number of Annuitants</u>	<u>Total Annuities</u>	<u>Average 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
1979	2,227	7,976,776	3,582
1980	2,379	8,958,700	3,766
1981	2,420	9,950,080	4,112
1982	2,419	10,725,716	4,434
1983	2,419	11,550,456	4,775
1984	2,469	13,123,860	5,315
1985	2,419	14,194,488	5,868
1986	2,487	16,737,498	6,730
1987	2,498	19,820,563	7,934
1988	2,494	21,240,063	8,516

Spouse Annuitants  
(Not Including Compensation)

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
1981	1,153	1,768,868	1,534
1982	1,174	1,927,743	1,642
1983	1,211	2,128,737	1,758
1984	1,228	2,304,994	1,877
1985	1,210	2,462,519	2,035
1986	1,226	2,610,422	2,129
1987	1,240	3,654,798	2,947
1988	1,265	3,820,665	3,020

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO  
HISTORY OF INVESTMENT YIELDSNonrecurring Gains and Losses Are Excluded from Income

Year	Investment Yield	Investment Yield
	on Total Assets	on Invested Assets
1971	4.75%	4.99%
1972	5.47	5.70
1973	5.76	6.03
1974	6.58	6.98
1975	7.25	7.73
1976	7.23	7.65
1977	7.01	7.35
1978	6.61	6.97
1979	7.38	7.82
1980	7.69	8.20
1981	8.46	9.11
1982	9.88	10.47
1983	9.37 (9.30)*	9.79 ( 9.72)*
1984	9.67 (9.58)*	10.12 (10.03)*
1985	8.89 (8.72)*	9.27 ( 9.10)*
1986	7.44 (7.14)*	7.72 ( 7.41)*
1987	6.50 (6.20)*	6.71 ( 6.40)*
1988	6.81 (6.55)*	7.00 ( 6.73)*
Avg. of Last 5 Years	7.86%(7.64)*	8.16%( 7.93)*

Nonrecurring Gains and Losses are Included in Income

Year	Actuarial Assumption	Avg.	30	3 Mo.	Investment Yield	Investment Yield
		Ins. Co.	Year Treasury	Treasury Bills	on Total Assets	on Invested Assets
1971	4.50%	5.44%	N/A	4.348%	3.95%	4.14%
1972	4.50	5.56	N/A	4.071	4.79	5.00
1973	5.00	5.88	N/A	7.041	3.60	3.77
1974	5.00	6.25	N/A	7.886	3.55	3.76
1975	5.00	6.36	N/A	5.838	6.17	6.58
1976	6.00	6.55	N/A	4.989	6.98	7.39
1977	6.00	6.89	N/A	5.265	7.00	7.35
1978	6.00	7.31	8.49%	7.221	5.34	5.62
1979	6.00	7.73	9.29	10.041	6.61	7.00
1980	6.00	8.02	11.30	11.506	5.66	6.03
1981	6.00	8.57	13.44	14.029	3.99	4.29
1982	6.75	8.91	12.76	10.686	7.64	8.09
1983	6.75	8.96	11.18	8.520	11.14 (11.07)*	11.64 (11.57)*
1984	6.75	9.45	12.39	9.570	8.88 ( 8.79)*	9.30 ( 9.21)*
1985	7.00	9.63	10.79	7.470	16.34 (16.17)*	17.07 (16.89)*
1986	7.50	9.35	7.80	5.970	16.06 (15.74)*	16.69 (16.34)*
1987	7.50	9.09	8.59	5.820	11.90 (11.59)*	12.29 (11.96)*
1988	7.50	N/A	8.96	6.690	7.78 ( 7.52)*	7.99 ( 7.72)*
Avg of Last 5 Yrs		9.30%	9.71%	7.104%	12.19%(11.96)*	12.67%(12.42)*

\*Investment income is net of investment expense.

Notes: Yield = 
$$\frac{\text{Investment Income}}{1/2(\text{Assets at beginning} + \text{Assets at end} - \text{Investment Income})}$$
Bonds valued at amortized value, stocks at cost.  
Market values are not considered.

Exhibit "M"

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO  
RECENT LEGISLATIVE CHANGES

1984 SESSION

Direct deposit.

1985 SESSION

HB 398 1.80, 2.00, 2.20, 2.40% Benefit accrual rate for those born before January 1, 1936, and retiring after August 16, 1985.

Reduction in age discount factor (employee and widow) from 0.5% to 0.25% for employees born before January 1, 1936, and retiring or dying in service after August 16, 1985.

Health insurance supplement up to \$25 per month if the employee is age 65 or older with at least 15 years of service (for each employee annuitant in receipt of annuity and for each employee who retires on annuity in the future).

Disability provisions extended to age 70 in certain cases.

Unisex money purchase factors for widows/widowers.

Membership provisions extended to age 70.

Board of Education employee contribution "pick up" included in the definition of salary for contribution and benefit purposes.

1986 SESSION

HB 2630 Cap removed on spouse maximum annuity.

Automatic post-retirement increase to begin on first anniversary of retirement following attainment at age 60.

1987 SESSION

HB 2715 1.80, 2.00, 2.20, 2.40% Benefit accrual rate for those born on or after January 1, 1936, and retiring on or after January 1, 1988.

Reduction in age discount factor (employee and widow) from .5% to .25% for employees born on or after January 1, 1936, and retiring or dying in service on or after January 1, 1988. No discount for employee age less than 60 if employee has at least 35 years of service.

Minimum employee annuity of \$250 and minimum spouse annuity of \$200 under certain conditions.

Change amount of children's benefits to \$120 or \$150 effective 1-1-88.

Provide for certain "Good Government" initiatives.

Remove chronic alcoholism restriction for ordinary disability.

1988 SESSION

No changes.

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

## HISTORY OF RECOMMENDED EMPLOYER MULTIPLES

<u>Year of Report</u>	<u>Statutory Multiple</u>	<u>Normal Cost Plus Interest</u>	<u>Normal Cost Plus 40 Year Amortization</u>	<u>Normal Cost Plus 40 Year % of Salary Amortization</u>
1974	1.235	1.48	---	---
1975	1.280	1.33	---	---
1976A	1.325	1.54	1.62	1.24
1977	1.370	1.53	1.62	1.24
1978A	1.370	1.69	1.78	1.38
1979	1.370	1.62	1.71	1.34
1980	1.370	1.96	2.04	1.67
1981	1.370	1.59	1.67	1.30
1982A	1.370	1.34	1.40	1.03
1983B	1.370	1.54	1.60	1.21
1984	1.370	1.58	1.63	1.30
1985AB	1.370	1.60	1.64	1.33
1986AB	1.370	.99	1.00	.94
1987AB	1.370	1.13	1.15	1.03
1988A	1.370	1.03	1.04	.98

A = Change in actuarial assumptions

B = Change in benefits

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO  
 HISTORY OF FINANCIAL INFORMATION  
 HISTORY OF CHANGE IN UNFUNDED LIABILITY

	<u>Salary Scale</u>	<u>Investment</u>	<u>Contribution</u>	<u>Amendments</u>
1976	\$ 2,054,198	(\$ 3,060,916)	\$ 1,344,697	\$ 0
1977	6,438,469	( 1,713,276)	25,079	0
1978	999,265	1,250,567	( 86,848)	0
1979	9,603,360	( 1,250,488)	( 104,786)	0
1980	8,111,444	758,925	178,166	0
1981	12,205,164	4,852,598	2,104,112	0
1982	13,090,805	( 4,232,954)	( 249,949)	0
1983	4,185,219	( 12,540,094)	( 805,111)	28,057,130
1984	( 13,893,652)	( 6,915,903)	( 708,947)	0
1985	( 20,313,749)	( 33,560,632)	( 404,023)	17,491,073
1986	5,125,287	( 38,156,363)	( 1,490,690)	15,144,096
1987	( 4,287,957)	( 21,518,841)	( 6,348,853)	29,787,872
1988	( 17,739,334)	( 1,525,244)	( 4,261,332)	0
Totals	<u>\$ 5,578,519</u>	<u>(\$117,612,621)</u>	<u>(\$10,808,485)</u>	<u>\$90,480,171</u>

	<u>Assumptions</u>	<u>Miscellaneous</u>	<u>Total</u>
1976	(\$ 5,885,819)	(\$ 729,227)	(\$ 6,227,067)
1977	0	1,742,226	6,492,498
1978	4,719,124	926,635	7,808,743
1979	0	( 4,182,778)	4,065,308
1980	0	( 4,483,742)	4,564,793
1981	0	( 12,538,029)	6,623,845
1982	( 10,209,470)	( 2,498,897)	( 4,100,465)
1983	0	( 5,235,581)	13,661,563
1984	0	3,858,364	( 17,660,138)
1985	806,348	5,624,931	( 30,356,052)
1986	( 50,944,726)	13,613,438	( 56,708,958)
1987	12,677,781	7,445,130	17,755,132
1988	3,593,768	3,136,595	( 16,795,547)
TOTALS	<u>(\$45,242,994)</u>	<u>\$ 6,679,065</u>	<u>(\$70,926,345)</u>

Over the last 13 years, the unfunded liability has decreased by \$70.9 million. The biggest component of increase has been benefit changes which account for \$90.5 million; followed by miscellaneous changes due to actuarial experience (retirement, disability, death and withdrawal) of \$6.7 million; followed by salary increase over the assumed amount of \$5.5 million. The components which reduced the unfunded liability over the same period were investment earnings in excess of the assumed amount of \$117.6 million changes in actuarial assumptions of \$45.2 million and more than adequate contributions (on the interest only basis) of \$10.8 million.

Investment earnings in excess of the assumed amount have been the general trend. Salary increases generally have exceeded the assumed increases, but not always, and have been offset by the investment gains. Experience for retirements and withdrawals tends to fluctuate, but tracks fairly well the assumed rates. Mortality experience has been somewhat heavier than expected, so the assumed mortality tables can be considered as having a margin for future mortality improvement.

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

HISTORY OF FINANCIAL INFORMATION  
ACCRUED AND UNFUNDED LIABILITIES

<u>Year- End</u>	<u>Accrued Liability</u>	<u>Assets at Book Value</u>	<u>Funded Ratio</u>	<u>Unfunded Accrued Liability</u>	<u>Payroll</u>	<u>Unfunded Accrued % Payroll</u>
71A	\$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	95
74	215,636,093	137,709,821	63.9	77,926,272	78,526,728	99
75	242,216,859	151,749,085	62.7	90,467,774	89,276,280	101
76A	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
78A	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
81	367,980,498	254,234,605	69.1	113,745,893	118,054,512	96
82A	391,353,993	281,708,565	72.0	109,645,428	134,293,920	82
83B	444,711,069	321,404,078	72.3	123,306,991	131,355,840	94
84	462,455,964	356,809,111	77.2	105,646,853	131,327,856	80
85AB	495,844,974	420,554,173	84.8	75,290,801	125,594,688	60
86AB	507,984,848	489,403,006	96.3	18,581,842	128,601,816	14
87AB	583,284,026	546,947,052	93.8	36,336,974	135,453,096	27
88A	604,440,661	584,899,234	96.8	19,541,427	132,685,608	15

## SOLVENCY (TERMINATION) TEST

<u>Year- End</u>	<u>Retired Liability</u>	<u>Active Member Salary Deductions</u>	<u>Total Term. Liab.</u>	<u>Assets at Book Value</u>	<u>Termination Cost (excess)</u>	<u>Quick Ratio Assets to Term. Liab.</u>
75	\$56,403,573	\$63,162,106	\$119,565,679	\$151,749,085	\$( 32,183,406)	127%
76A	61,271,047	68,189,205	129,460,252	168,219,982	( 38,759,730)	130
77	67,977,467	73,608,310	141,585,777	186,428,466	( 44,842,689)	132
78A	77,603,101	78,072,062	155,675,163	202,643,520	( 46,968,357)	130
79	86,918,802	83,057,007	169,975,809	220,810,778	( 50,834,969)	130
80	97,598,923	85,989,360	183,588,283	238,242,772	( 54,654,489)	130
81	107,291,048	88,378,748	195,669,796	254,234,605	( 58,564,809)	130
82A	113,743,284	94,516,563	208,259,847	281,708,565	( 73,448,718)	135
83B	128,901,825	106,730,627	235,632,452	321,404,078	( 85,771,626)	136
84	142,713,639	111,888,474	254,602,113	356,809,111	(102,206,998)	140
85AB	158,514,452	117,882,073	276,396,525	420,554,173	(144,157,648)	152
86AB	179,881,434	122,432,246	302,314,080	489,403,006	(187,088,926)	162
87AB	215,483,599	126,554,299	342,037,898	546,947,052	(204,909,154)	160
88A	229,024,543	133,793,756	362,818,299	584,899,234	(222,080,935)	161

A Change in valuation assumptions

B Change in benefits

Quick ratio is defined as assets divided by  
the termination liability

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

PLAN DESCRIPTION

Any employee of the City of Chicago or the Board of Education of the City employed under the provisions of the municipal personnel ordinance as labor service or any person employed by a retirement board of any annuity and benefit fund in the city is covered by the Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago (Laborers' Plan) which is a defined benefit single employer pension plan with a defined contribution minimum. Although this is a single employer plan, the defined benefits as well as the employer and employee contribution levels are mandated in Illinois State Statutes (Chapter 108 1/2-Pensions-Article 11) and may be amended only by the Illinois legislature. The City of Chicago accounts for the plan as a pension trust fund. The City of Chicago payroll for employees covered by the Laborers' Plan for the year ended December 31, 1988 was \$132,685,608. At December 31, 1988 the Laborers' Plan membership consisted of:

December 31, 1988

Retirees and beneficiaries currently receiving benefits (includes disabilities)	4,101
Terminated employees entitled to benefits or a refund of contributions but not yet receiving them	1,546
Current employees	4,725

The Laborers' Fund provides retirement benefits as well as death and disability benefits. Employees age 55 or more with at least 10 years of service are entitled to receive a money purchase annuity with partial city contributions if under age 60 with less than 20 years of service. Employees age 55 or more with at least 20 years of service are entitled to receive a minimum formula annuity of 1.8% per year for the first 10 years of service, 2.0% per year for the next 10 years, 2.2% per year for the next 10 years, and 2.4% per year for each year of service over 30 times the final average salary (highest average annual salary for any 4 consecutive years within the last 10 years of service immediately preceding the date of retirement). If the employee retires prior to age 60, the annuity shall be reduced by 1/4 of 1% for each month the employee is under age 60. The original annuity shall not exceed 75% of the highest average annual salary. The monthly annuity is increased by 3% of the original annuity at the first payment date following the later of age 60 or the first anniversary of retirement, and by 3% annually thereafter.

Covered employees are required to contribute 8.5% (7% if age 65 or over) of their salary to the Laborers' Plan. If an employee leaves covered employment without qualifying for an annuity, accumulated contributions are refunded with interest (3% or 4% depending on when employee became a participant). The City of Chicago is required by state statutes to contribute the remaining amounts necessary to finance the requirements of the fund. It is required to levy a tax at a rate not more than an amount equal to the total amount of contributions by the employees to the fund made in the calendar year two years prior to the year for which the annual applicable tax is levied, multiplied by 1.37 annually.

Exhibit "P"

LABORERS' AND RETIREMENT BOARD EMPLOYEES' ANNUITY AND BENEFIT FUND OF CHICAGO  
**GASB DISCLOSURE**  
PLAN ASSETS

Bonds are stated at amortized value; stocks are at cost; real estate separate accounts are at adjusted cost.

FUNDING STATUS AND PROGRESS

The amount shown below as the "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases and step-rate benefits, estimated to be payable in the future as a result of employee service to date. The measure is intended to help users assess the funding status of the system on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among employers. The measure is the Actuarial Present Value (APV) of credited projected benefits and is independent of the funding method used to determine contributions to the system. No split between vested and nonvested current employees is possible, due to the different vesting schedules of the defined benefit and defined contribution portions of the benefits.

The pension benefit obligation was computed as part of an actuarial valuation performed as of December 31, 1988. Significant actuarial assumptions used in the valuation for 1988 include (a) a rate of return on the investment of present and future assets of 7.5 percent per year compounded annually, (b) projected salary increases of 4 percent per year compounded annually, attributable to inflation, (c) additional projected salary increase of 2 percent per year, attributable to seniority/merit, and (d) post retirement benefit increases of 3 percent per year for employee annuitants age 60 and over. The loading for the reciprocal benefits was changed from 1% to 2%.

At December 31, 1988, the excess of assets over the pension benefit obligation was \$43,269,339. At December 31, 1987, this excess was \$24,965,261.

Pension Benefit Obligation (PBO)	<u>1987</u>	<u>1988</u>
APV of Credited Projected Benefits		
Payable to Retirees and Beneficiaries	\$215,483,599	\$229,024,543
Current Employees -		
Accumulated Employee Contributions	\$126,554,299	\$133,793,756
Payable to Vested and Non-Vested Current Employees	<u>\$179,943,893</u>	<u>\$178,811,596</u>
Total APV	\$521,981,791	\$541,629,895
Net Assets Available for Benefits, at Cost (market value is \$591,106,324)	<u>\$546,947,052</u>	<u>\$584,899,234</u>
Assets Over APV	(\$ 24,965,261)	(\$ 43,269,339)
Percentage Funded	104.78%	107.99%
Assets Over APV as % of Payroll	( 18.43%)	( 32.61%)



Exhibit "P"

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

Current year changes in the actuarial assumptions and benefit provisions are reflected in the December 31, 1988 pension benefit obligation shown above. The change in actuarial assumptions increased the pension benefit obligation by \$2,843,558.

CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The Plan's funding policy provides for an employer contribution which, when added to the amounts contributed by the employees, will be sufficient for the requirements of the Fund. This amount cannot be more than an amount equal to the total amount of contributions by the employees to the Fund made in the calendar year two years prior to the year of the employer contribution, multiplied by 1.37.

The total required Annual Actuarial Contribution to the Fund (financed by the employee and the city) is equal to the Current Service Cost plus Interest Only on the Unfunded Liability determined using the Entry Age Normal method. The unfunded liability is recognized but not amortized. The employer contribution required for Interest Only on the Unfunded Liability results in a decreasing annual employer cost expressed as a percentage of payroll as future payrolls increase. Since the tax levy is expressed as a multiple of the total salary deductions made two years prior, the City is effectively contributing a level annual percentage of payroll.

For the year 1988 (based on a 1988 multiple of 1.37), the City contributed (after tax levy losses of 4%) \$15,157,663 or 11.19% of payroll. For 1988, the employee contributions were \$11,740,621 or 8.67% of payroll. As the Current Cost requirement for the Entry Age Normal Method plus the requirement for Interest Only on the Unfunded Liability was 16.71% of payroll, an excess of 3.15% of payroll or \$4,261,332 was contributed. Such contribution is applied to amortize the Unfunded Liability.

The Annual Actuarial Contribution to the Fund for 1989 (based on Normal Cost Plus Interest Only Basis) increased by \$388,016 because of the change in actuarial assumptions (reciprocal loading rates).

On an alternative amortization basis for 1988, the Current Service Cost plus an amount to amortize the present Unfunded Liability over a sliding 40 year period with increasing payments at 4% representing a constant percentage of payroll, assuming a total of future payroll increase at 4% a year, an excess of 3.85% of payroll or \$5,218,507 was contributed.

It is estimated for 1989 that contributions will again more than meet the standard. If the excess of contributions continues as in 1989, the Unfunded Liability will be amortized over about 4 years. Consideration should be given to the steady decline in membership.

Exhibit "P"

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

ANNUAL ACTUARIAL REQUIREMENTS

ACTUARIAL RECOMMENDED CONTRIBUTION (EMPLOYER AND EMPLOYEE)  
NORMAL COST PLUS VARIOUS AMORTIZATION METHODS

Year	A	B	C	Expressed as		
	NC Plus Interest	NC Plus ERISA 40-Year Amortization	NC Plus Increasing % of Salary	Percentage of Salary Beginning of Year		
80	\$21,699,408	\$22,362,086	\$19,478,525	20.50%	21.13%	18.41%
81	25,019,195	25,711,368	22,699,461	22.98	23.62	20.85
82	23,885,754	24,620,727	21,422,580	20.23	20.86	18.15
83A	24,484,651	25,070,322	21,442,931	18.23	18.67	15.97
84B	25,818,914	26,456,281	22,731,331	19.66	20.14	17.31
85	26,200,791	26,746,874	23,555,414	19.95	20.37	17.94
86AB	24,965,655	25,330,252	22,617,955	19.88	20.17	18.01
87AB	20,171,065	20,249,927	19,681,589	15.68	15.75	15.30
88AB	22,636,952	22,791,167	21,679,777	16.71	16.83	16.01
89	21,217,142	21,300,076	20,702,389	15.99	16.05	15.60

ACTUAL EMPLOYER AND EMPLOYEE CONTRIBUTION

Year	D	E	Expressed as a	
	Employer	Employee	Percentage of Salary Beginning of Year	
80	\$11,791,330	\$ 9,729,912	11.14%	9.19%
81	12,392,694	10,522,389	11.38	9.67
82	12,589,417	11,546,286	10.66	9.78
83A	13,681,225	11,608,537	10.19	8.64
84B	14,996,619	11,531,243	11.42	8.78
85	15,035,039	11,569,775	11.45	8.81
86AB	14,765,250	11,691,095	11.76	9.31
87AB	14,745,709	11,774,209	11.47	9.16
88AB	15,157,663	11,740,621	11.19	8.67
89A EST	14,837,760	11,278,277	11.18	8.50

DEFICIENCY (EXCESS) IN ANNUAL CONTRIBUTION

Year	F	G	H	Expressed as a		
	NC Plus Interest	NC Plus ERISA 40-Year Amortization	NC Plus Increasing % of Salary	Percentage of Salary Beginning of Year		
80	\$ 178,166	\$ 840,844	( \$ 2,042,717)	.17%	.79%	(1.93)%
81	2,104,112	2,796,285	( 215,622)	1.93	2.57	(.20)
82	( 249,949)	485,024	( 2,713,123)	(.21)	.41	(2.30)
83A	( 805,111)	( 219,440)	( 3,846,831)	(.60)	(.16)	(2.86)
84B	( 708,948)	( 71,581)	( 3,796,531)	(.54)	(.05)	(2.89)
85	( 404,023)	142,060	( 3,049,400)	.31	.11	(2.32)
86AB	( 1,490,690)	( 1,126,093)	( 3,838,390)	(1.19)	(.90)	(3.06)
87AB	( 6,348,853)	( 6,269,991)	( 6,838,329)	(4.94)	(4.88)	(5.32)
88AB	( 4,261,332)	( 4,107,117)	( 5,218,507)	(3.15)	(3.03)	(3.85)
89A EST	( 4,898,895)	( 4,815,961)	( 5,413,648)	(3.69)	(3.63)	(4.08)

A Change in actuarial assumptions

B Change in benefits

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

## GASB DISCLOSURE

TREND INFORMATION

Trend information gives an indication of the progress made in accumulating sufficient assets to pay benefits when due. For 1984 and 1985, the assets were insufficient to cover the Pension Benefit Obligation. For 1986 and 1987, the assets exceeded the amount needed for the Pension Benefit Obligation.

<u>Year</u>	<u>Assets Available for Benefits as a % of Pension Benefit Obligation</u>	<u>Unfunded Pension Benefit Obligation as a % of Covered Payroll</u>	<u>Employer Contributions as a % of Covered Payroll</u>
1984	85.89%	44.65%	11.42%
1985	93.91	21.71	11.45
1986	107.42	(26.28)	11.76
1987	104.78	(18.43)	11.47
1988	107.99	(32.61)	11.19

<u>Year</u>	<u>Employer Contributions</u>		
	<u>Required Normal Cost Plus Interest Only Basis</u>	<u>Required Statutory Basis*</u>	<u>Actual**</u>
1984	\$14,653,668	\$14,972,550	\$14,996,619
1985	15,037,923	14,979,650	15,035,039
1986	14,290,107	14,765,250	14,765,250
1987	9,239,911	14,659,550	14,745,709
1988	11,123,439	14,784,800	15,157,663

\*Tax Levy After 4% Overall Loss

\*\*Net Tax Levy and Miscellaneous Income

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

## GASB DISCLOSURE

INCOME AND PAYOUTS

<u>Year End</u>	<u>Employee Contributions(1)</u>	<u>Employer Contributions(2)</u>	<u>Investment Income (3)</u>	<u>Total Income</u>
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
81	10,522,389	12,392,694	9,631,793	32,546,876
82	11,546,286	12,589,417	19,729,269	43,864,972
83	11,608,537	13,681,225	31,809,924	57,099,686
84	11,531,243	14,996,619	28,832,621	55,360,483
85	11,569,775	15,035,039	58,720,209	85,325,023
86	11,691,095	14,765,250	67,653,382	94,109,727
87	11,774,209	14,745,709	58,220,924	84,740,842
88	11,740,621	15,157,663	42,386,313	69,284,597

<u>Year End</u>	<u>Benefits</u>	<u>Administrative Expenses</u>	<u>Refunds</u>	<u>Total</u>	<u>Income Less Pay Outs(4)</u>
72	\$ 5,014,917	\$ 208,278	\$1,201,934	\$ 6,425,129	\$ 9,687,939
73	5,587,346	215,796	1,322,312	7,125,454	9,001,225
74	6,329,476	231,455	1,438,356	7,999,287	9,346,930
75	7,028,933	261,733	1,400,097	8,690,763	14,048,671
76	7,710,946	288,228	1,483,562	9,482,736	16,477,028
77	8,704,971	316,160	1,798,049	10,819,180	18,212,268
78	9,764,039	350,648	2,339,764	12,454,451	16,212,715
79	10,795,166	438,914	2,821,593	14,055,673	20,171,977
80	12,161,292	440,591	4,195,056	16,796,939	17,351,164
81	12,880,890	640,795	3,074,561	16,596,246	15,950,630
82	13,851,434	626,772	1,860,636	16,338,842	27,526,130
83	14,828,962	641,349	1,936,538	17,406,849	39,692,837
84	16,582,310	766,485	3,124,454	20,473,249	34,887,234
85	18,516,249	1,266,552	2,273,021	22,055,822	63,269,201
86	20,881,472	2,006,912	2,886,317	25,774,701	68,335,026
87	23,465,597	2,223,312	2,012,475	27,701,584	57,039,258
88	27,467,689	2,264,746	1,756,290	31,488,725	37,795,872

Statistical material required by Government Accounting Standards Board.

- (1) Includes deductions in lieu for disability
- (2) Net tax levy and miscellaneous income
- (3) Includes realized net loss on sale and exchange of bonds
- (4) Does not include prior year adjustments

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

## GASB DISCLOSURE

ANALYSIS OF FUNDING PROGRESS\*

<u>Year</u>	<u>Net Assets Available For Benefit (Book)</u>	<u>Pension Benefit Obligation</u>	<u>Percentage Funded</u>	<u>Unfunded Pension Benefit Obligation</u>	<u>Annual Covered Payroll</u>	<u>Unfunded As % of Covered Payroll</u>
1984	\$356,809,111	\$415,442,598	85.89%	\$58,633,487	\$131,327,856	44%
1985AB	420,554,173	447,815,793	93.91	27,261,620	125,594,688	21
1986AB	489,403,006	455,604,084	107.42	( 33,798,922)	128,601,816	(26)
1987AB	546,947,052	521,981,791	104.78	( 24,965,261)	135,453,096	(18)
1988A	584,899,234	541,629,895	107.99	( 43,269,339)	132,685,608	(33)

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the retirement system.

\*The disclosure made in this exhibit does not include other appropriate measures of funding progress which must also be examined to obtain the complete picture.

A Change in Actuarial Assumptions  
B Change in Benefits

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

## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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 employee's 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 be known only 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 that should have been paid up 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 required 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 the 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 satisfy the ideologies of all interested groups, including opinions often expressed by the Civic Federation. No funds are provided for amortization of the unfunded liability.

Reserves for employees' 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, and 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.

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

## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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: UP-1984 MORTALITY TABLE, male and female.

**Interest:** 7.5% a year, compounded annually. An exhibit details the investment yields the Fund actually realized over the past few years. This assumption contains a 4% inflation assumption and a 3.5% real rate of return assumption.

Interest earnings over the assumed rate can be used to reduce losses that 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 before retiring on pension for the rest of his or her life. There is no guarantee that the current high interest rates will continue over this period.

**Salary Increase:** 6% a year, compounded annually. An exhibit details the annual increase in the average salary over the past years, which averages greater than 6%. This assumption contains a 4% inflation assumption and a 2% merit and longevity assumption.

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

Increased costs will necessarily result, with the extent of the increase in cost depending on the extent of the increase in salary over the assumed time period.

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

## SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Rate of Retirement: The rates of retirement used in this valuation are shown in an exhibit grouped by age of entrance into the service and are based on 1985, 1986, and 1987 experience of this Fund for males and on experience of the Municipal Fund for females. These rates reflect the changing pattern of retirement.

Rate of Termination: These rates are shown in an exhibit and are based on the experience of the Fund.

Proportion Married: This is shown in an exhibit.

Active Membership: It is assumed that the future active membership of the Fund will remain at the present level and that the average age at entrance into the service will be about the same in the future as it has been in the past. The actuarial costs are based on the present group. If future entrants to the Fund are older than the present group, then costs will tend to increase. Conversely, if new entrants are younger, then costs will tend to decrease.

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

Asset Value: Bonds are amortized value; stocks are at cost, real estate separate accounts at adjusted cost.

Reciprocal Benefits: Active life normal costs and reserves are loaded 2%.

Loss on Tax Levy: 4% overall is assumed for all future years.

Required Tax Multiple: Is computed using the actuarial requirement less expected employee contributions (increased to adjust for the loss on the tax levy) divided by the expected employee contributions computed two years prior using the actuarial salary scale. If the actual contributions had been used, the result would be somewhat different. The method used approximates a steady condition of uniformly increasing salaries.



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

## SERVICE TABLE FUNCTIONS

## Rates of Retirement

Male

Attained Age	Age at Entrance								
	22	27	32	37	42	47	52	57	62
55	.10	.03	.01						
56	.06	.04	.01						
57	.30	.04	.02	.07	.01				
58	.30	.05	.02	.02	.01				
59	.35	.05	.03	.04	.01				
60	.50	.20	.09	.10	.04	.02	.02	.02	
61	.50	.22	.09	.12	.04	.02	.02	.05	
62	.50	.25	.15	.33	.07	.03	.03	.10	
63	.75	.30	.24	.40	.09	.05	.03	.10	.02
64	.75	.35	.28	.45	.11	.06	.05	.15	.05
65	1.00	.50	.40	.65	.42	.08	.30	.20	.10
66		.75	.45	.65	.46	.13	.15	.20	.15
67		1.00	.50	.70	.50	.22	.20	.50	.20
68			.75	.75	.75	.50	.50	.50	.50
69			.75	.75	.75	.75	.75	.75	.75
70			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Female

55	.10	.05	.04						
56	.10	.07	.04						
57	.35	.09	.05	.01	.01	.01			
58	.10	.09	.06	.02	.01	.01			
59	.25	.11	.08	.03	.01	.01			
60	.40	.28	.12	.10	.02	.02	.02	.02	
61	.50	.30	.15	.13	.04	.02	.03	.03	
62	.50	.33	.30	.14	.08	.03	.03	.03	
63	.75	.50	.33	.15	.09	.03	.04	.03	.02
64	.75	.50	.22	.15	.10	.03	.05	.04	.04
65	1.00	.75	.24	.42	.25	.13	.05	.06	.15
66		.75	.27	.20	.27	.15	.06	.08	.18
67		1.00	.30	.30	.33	.25	.07	.12	.22
68			.50	.50	.50	.50	.50	.50	.50
69			.75	.75	.75	.75	.75	.75	.75
70			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Expected average age of retirement

present membership	62.11
new hires	62.46

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

SERVICE TABLE FUNCTIONS

Rates of Termination

Male

Attained Age	Age at Entrance								
	22	27	32	37	42	47	52	57	62
22	.223								
27	.116	.262							
32	.050	.100	.219						
37	.021	.046	.098	.221					
42	.012	.025	.022	.088	.176				
47	.005	.012	.010	.034	.080	.142			
52		.005	.005	.017	.028	.076	.120		
57							.046	.112	
62									.148
67									

Female

22	.140								
27	.108	.174							
32	.052	.085	.108						
37	.022	.038	.062	.074					
42	.008	.022	.033	.051	.054				
47		.013	.017	.028	.033	.063			
52		.005	.009	.015	.020	.033	.054		
57							.036	.056	
62									.027
67									

Attained Age	Male Death Rate UP-1984 Per 1,000	Female Death Rate UP-1984 Per 1,000	Proportion Married %
22	1.167	1.385	81
27	1.058	1.167	81
32	1.208	1.058	81
37	1.792	1.208	80
42	2.818	1.792	83
47	4.635	2.818	83
52	7.543	4.635	84
57	11.863	7.543	82
62	18.685	11.863	80
67	29.634	18.685	78
70	37.667	24.847	74

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

## ACTUARIAL EXPERIENCE

The actuarial assumptions for retirement, withdrawal and pre-retirement mortality determine when and if a benefit is expected to be paid. The post-retirement mortality determines how long the benefit is expected to be paid. Once the actives enter service, there is a probability that they will not be in the work force at the end of each year because of withdrawal, retirement or death, at which time they may be eligible for a benefit to be paid. The withdrawal and retirement rates for the Laborers' Fund have been based on past experience of this fund and the Municipal Fund with adjustments for expected changes in the future. The pre-retirement and post-retirement mortality are based on a published table, the UP84 and not on the experience of this Fund. The actual experience of the Fund is compared to the expected experience of the Fund each year and changes in the rates or tables are made when the future expectations differ from the expectations using the current rates.

Actuarial ExperienceActual to Expected

Year	Mortality			Retirement	Withdrawal
	Active	Retired	Widow		
1979	1.35	1.54	1.54	1.25	1.37
1980	1.57	1.06	1.21	1.46	2.63
1981	1.47	1.25	2.06	1.38	2.11
1982	1.00	1.41	1.72	NEW RATES .95	1.08
1983	NEW MORTALITY RATES .98	1.49	1.66	.99	1.02
1984	.69	1.45	1.63	1.27	1.23
1985	1.52	1.65	2.70	.98	1.32
1986	.88	1.52	1.70	1.44	1.43
1987	1.90	1.45	1.87	1.11	.63
1988	1.34	1.26	1.37	NEW RATES .75	.68

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

## ACTUARIAL EXPERIENCE

## ATTAINED AGE AT RETIREMENT 1988

Age	Males Entry Ages									Total	
	22	27	32	37	42	47	52	57	62		
55	1		1		1					3	
56	1			1						2	
57	2									2	
58	5	2								7	
59	8	1					1			10	
60	7	2		1		1				11	
61	6	3	1	2				1		13	
62	1	5	4			3				13	
63				1	2					3	
64	1		1							2	
65	1	3	5	1	2	1				13	
66		2		1	1	1	2			7	
67		1	2	3	2	2	1	1		12	
68			2	1		1			1	5	
69			1		1		1			3	
70				1	1	3				5	
TOTAL	33	19	17	12	10	12	5	2	1	0	111

10 male employees retired before age 55 or after age 70 in 1988.

Age	Females Entry Ages									Total
	22	27	32	37	42	47	52	57	62	
55										0
56										0
57										0
58		2								2
59										0
60			1							1
61										0
62			1							1
63					1					1
64				1	1					2
65	1		1		6				1	9
66				1						1
67			2		2					4
68				1	1					2
69					2					2
70				1	1	1				3
TOTAL	1	2	5	4	14	1	0	0	1	28

5 female employees retired before age 55 or after age 70 in 1988.

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

## IMPACT STATEMENT

Fund	Laborers'
Annual Payroll	\$132,685,608
Active Members	4,725
Valuation Date	December 31, 1988

	<u>Present Plan</u>
(1) Accrued Pension Liability	\$604,440,661
(2) Present Assets	\$584,899,234
(3) Unfunded Liability = (1) - (2)	\$19,541,427
(4) Funded Ratio = (2)/(1)	96.77%

## DIRECTION OF FINANCIAL CONDITION

		<u>Per Active</u>	<u>Percent of Salary</u>
(5) Minimum Recommended Annual Contribution	\$21,217,142	\$4,490	15.99%
(6) Estimated Annual Employer Contribution	\$14,837,760	\$3,140	11.18%
(7) Estimated Annual Employee Contribution	\$11,278,277	\$2,387	8.50%
(8) Deficiency in Annual Contributions = (5) - (6) - (7)	(\$4,898,895)	(\$1,037)	(3.69%)

Prepared by Fund Actuary.

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

**PARTICIPANTS**

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.

For minimum annuity, one half-year credit is given for one completed month of service and a full year credit is given for one complete month of service plus service in at least 5 other months. For O.D. credit, the exact number of days, months and years are used.

**RETIREMENT ANNUITY**

Money Purchase Formula: Maximum is 60% of final salary. Applies in cases where an employee is age 55 or more and has over 10 years of service. If employee is age 55 to 60 with service less than 20 years, the annuity is based on all employee deductions plus 1/10 of the city contributions for each year over 10. In case of withdrawal before age 55 and application after age 55, the annuity is based on employee deductions plus 1/10 of the city contributions for each year over 10, with interest to date of application or age 55, whichever is later. The age factor for age 55 is used.

The annuity is based on all employee deductions and city contributions in cases where the employee is: (a) age 55 to 60 with 20 or more years of service; (b) age 60 to 70; (c) resigning at the time of disability expiration. Money purchase can be calculated only to age 70.

Minimum Annuity Formula: Maximum is 75% of final average salary.

a. An employee age 55 or older withdrawing on or after January 1, 1989, with at least 20 years of service, is qualified for an annuity equal to 1.8% for each of the first 10 years of service plus 2.% for each of the next 10 years plus 2.2% for each of the next 10 years and 2.4% for each year of service over 30 years of the final average salary during the four highest consecutive years within the last 10 years of service prior to retirement. This annuity is discounted 0.25% for each month the employee is younger than 60 to age 55 unless he has at least 35 years of service.

b. An employee who is at least age 65 with 15 or more years of service is qualified for an annuity equal to 1% for each year of service multiplied by the final average salary added to the sum of \$25 for each year of service.

c. The employee will receive a minimum annuity of \$250 per month if employee retires at age 60 or more with at least 10 years of service on or after January 1, 1989.

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

## PLAN SUMMARY

**Reversionary Annuity:** An employee may elect to reduce his or her annuity by an amount less than or equal to \$200 to provide a reversionary annuity for a spouse, parent, child, brother, or sister, to begin upon the employee's death. The election must be made before retirement and have been in effect 2 years prior to death. The death of the employee before retirement voids the election. The reversionary annuity cannot exceed 80% of the employee's reduced annuity. If the employee resigns after June 30, 1983, the 3% automatic annual increase in annuity will be computed on the original, not the reduced, annuity; if the beneficiary dies before the employee annuitant, the full annuity is restored for annuities elected after June 30, 1983. The amount of the monthly reversionary annuity is determined by multiplying the amount of the monthly reduction in the employee's annuity by a factor based on the age of the employee and the difference in the age of the employee and the age of the reversionary annuitant at the starting date of the employee's annuity.

**Reciprocal Annuity:** Under reciprocal retirement an employee can receive annuity based on continued service credits in two or more governmental units in Illinois to whose pension fund he or she has contributed for at least one year.

**Automatic Increase in Annuity:** An employee who is age 60 or more is entitled to receive 2% of the original annuity, such increase to begin in January of the year immediately following the year of the first anniversary of retirement. Beginning with January of the year 1984 such increases are at the rate of 3% of the original annuity. An employee who retires prior to age 60 will receive such increase beginning in January of the year following the year he attained age 60. Effective for retirements on or after January 1, 1988, the first increase shall begin upon the first annuity payment date following the first anniversary of retirement, or age 60 if later.

**SPOUSE'S ANNUITY (Payable until remarriage)**

**Money Purchase Formula:** When an employee is 65, or retires prior to age 65, the spouse's annuity is fixed, based on employee deductions and city contributions made for spouses' annuity purposes and a joint life age factor. (If the employee is a female, these are deductions accumulated since October 1974.) In the case of the spouse of an employee over 65, the money purchase annuity is the amount fixed at employee age 65; all deductions after that time are refunded if the employee dies in service.

If the employee dies in service under 65, the spouse's annuity is based on all sums accumulated to their credit. This annuity cannot exceed the amount at which the spouse's annuity would have been fixed if the employee had continued to work to age 65.

For 3% annuities fixed on or after August 1, 1983, the "Combined Annuity Mortality Table" shall continue to be used; however, widows'/widowers' single life annuities and reversionary annuities shall be computed using the best factor (the factor producing the highest annuity), not depending upon sex.

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

## PLAN SUMMARY

## SPOUSE'S ANNUITY

Spouses' Minimum Annuity Formula: If the employee is at least age 60 and has 20 or more years of service, the spouse's annuity is equal to 1/2 the amount of annuity the employee was entitled to at the time of death, if death occurred before retirement, or was entitled to receive on the date of retirement, if the employee died after retirement. This annuity is subject to a maximum of \$400 (\$500 if retirement or death before retirement occurs on or after January 1, 1984. Effective January 23, 1987, there is no maximum dollar amount) and must be then discounted .25% for each month that the spouse is under age 60 at the time the annuity is fixed.

In the case of the spouse of a female employee, the female employee must have made contributions for her spouse for at least 20 years to qualify for the minimum annuity formula. Current female employees may elect to pay spouse contributions for their service before October, 1974.

The spouse will receive a minimum annuity of \$200 per month if employee retires with at least 10 years of service or dies in service with at least 5 years on or after January 1, 1989.

## CHILDREN'S ANNUITY

Child's annuity is payable upon the death of the employee, either active or retired, if the child is unmarried, under age 18, born before participant is age 65 and before his separation from 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 employee parent. Annuity is \$120 per month while spouse of deceased employee is alive and \$150 per month if no spouse is alive. Except for duty death deceased employee must have had 4 years of service or 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 who becomes disabled as the result of injury incurred in the performance of any act of duty, shall have a right to receive duty disability benefit in the amount of 75% of salary at date of injury plus \$10 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. Duty disability benefits begin one day after the later of the last day worked and the last day paid.



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

## PLAN SUMMARY

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 benefit is payable to age 65 if disability begins before age 60. For an employee who begins disability on or after age 60, disability will continue for 5 years or to age 70 whichever occurs first. The City contributes salary deductions for annuity purposes. Such amounts contributed by the city after December 31, 1983, while the employee is receiving duty disability benefits are not refundable to the employee and will be used for annuity purposes only.

**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 of employee's total service or 5 years, whichever occurs first if disability begins before age 60. For an employee who begins disability on or after age 60, disability will continue for a period not greater than 1/4 of employee's total service, but no more than 5 years or age 70, whichever occurs first.

**GROUP HEALTH HOSPITAL AND SURGICAL INSURANCE PREMIUMS**

The pension fund may provide up to \$25 per month (paid to the underwriting organization) health insurance supplement for employee annuitants if the employee is age 65 or older with least 15 years of service. This supplement is available to any employee annuitant who is receiving annuity or for any employee who retires on annuity in the future.

**REFUNDS**

**To Employee:** Upon separation from service employee is entitled to all salary 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. Effective September 17, 1983, employee may choose a refund in lieu of annuity if annuity would be less than \$200 per month.

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

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

## PLAN SUMMARY

To Spouse: In lieu of annuity if annuity would be temporary rather than life and spouse so chooses. Effective September 17, 1983, spouse may choose a refund in lieu of annuity if annuity would be less than \$200 per month.

Remaining Amounts: Amounts contributed by employee excluding 0.5% deductions for annuity increase, which have yet not been paid out as annuity, are refundable to his estate with interest to his retirement or death if he died in service.

## DEDUCTIONS AND CONTRIBUTIONS

	Deductions	Contributions *
Employee	6-1/2%	6%
Spouse	1-1/2% **	2% **
Annuity Increase	1/2%	-
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.

## TAX SHELTER OF EMPLOYEE SALARY DEDUCTIONS

Beginning January 1, 1982, the City employee salary deductions were designated for income tax purposes to be made by the employer. The W2 salary is therefore reduced by the amount of contribution. For pension purposes the salary remains unchanged. Income tax will be paid when a refund or annuity is granted. For the purposes of benefits, refunds, or financing, these contributions are treated as employee contributions. Beginning September 1, 1981, Board of Education employee contributions were paid by the employer. The 1985 amendments contained a provision whereby the amount of pick-up, if any, is included in the pensionable salary for contributions and benefits. Such provision was retroactive to September 1, 1981.