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

ACTUARIAL STATEMENT

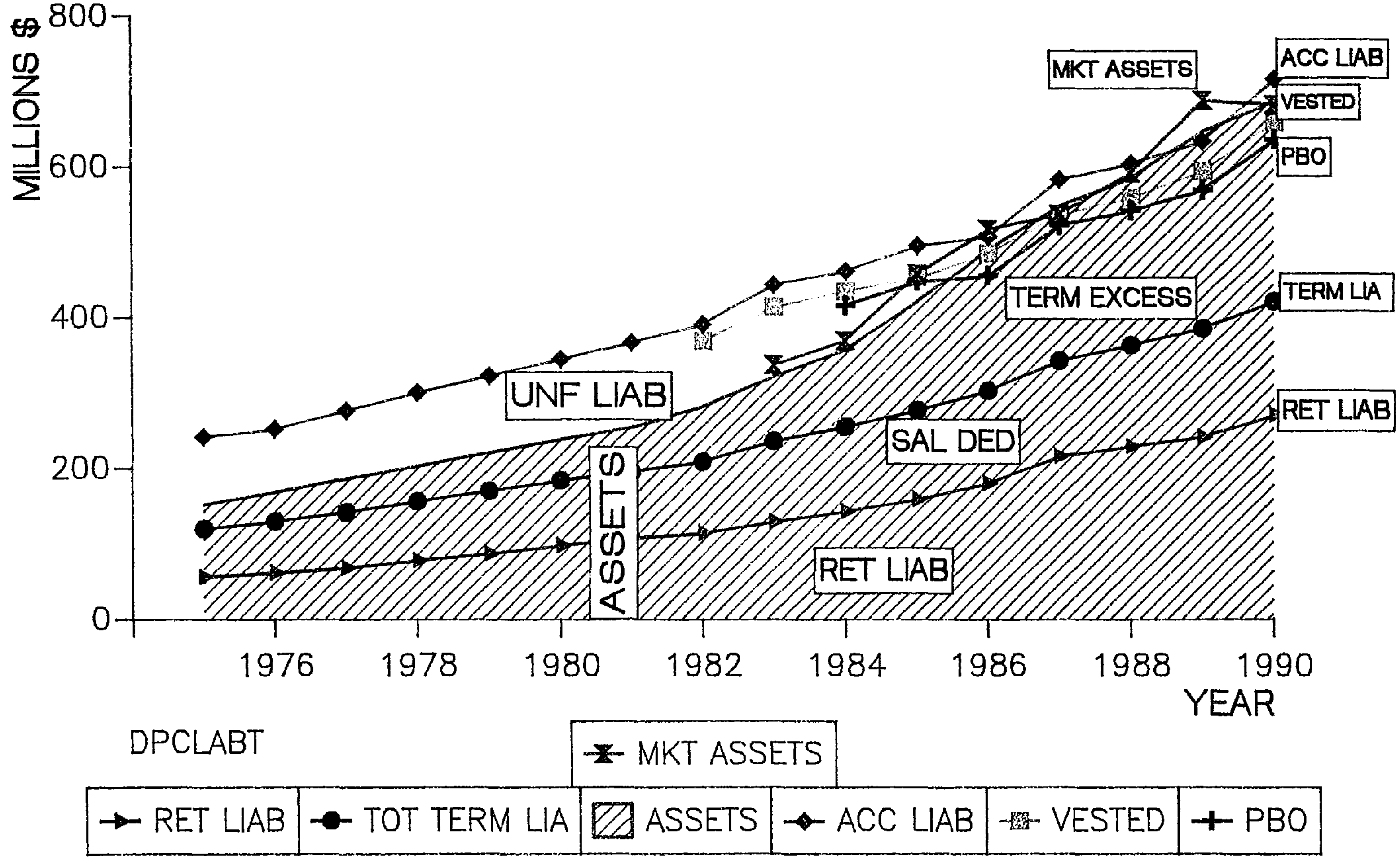
December 31, 1990

Prepared by

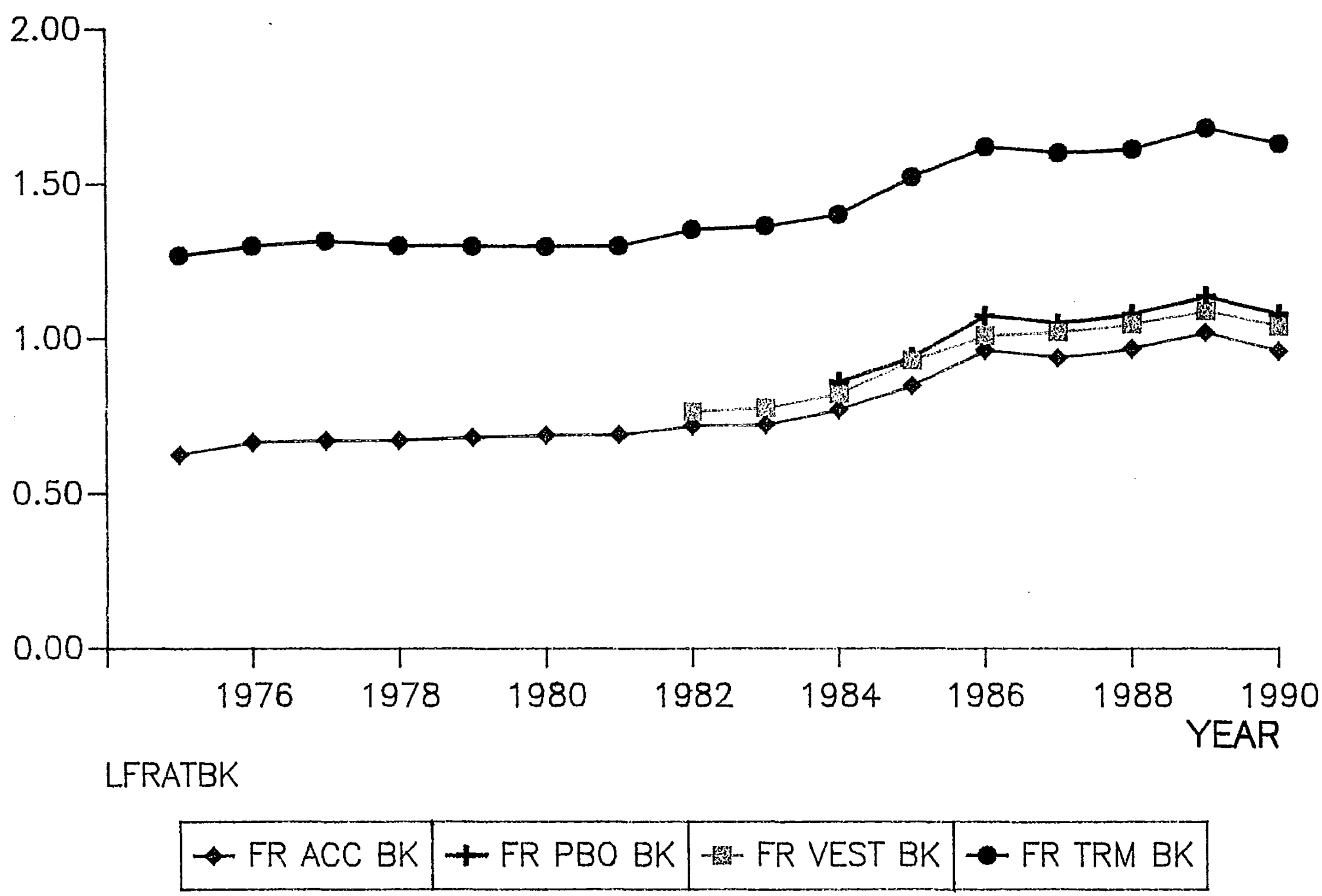
Donald F. Campbell
Consulting Actuaries

SUMMARY	1989	1990
Income		
Investment	$ 66,965,633	$ 49,265,200
Employer	15,257,738	17,029,493
Employee	12,529,606	12,805,485
Total	94,752,977	79,100,178
Outgo		
Refunds, Benefits, Expenses	33,771,961	38,433,568
Excess of Income Over Outgo	60,981,016	40,666,610
Active Participants	4,592	4,498
Inactive Participants	1,524	1,685
Beneficiaries		
Employee	2,476	2,481
Spouse	1,296	1,318
Disabilities	217	215
Children	80	86
Actuarial Funding - Going Concern		
Liability	$633,894,540	$716,604,604
Assets, Book Value	646,313,443	687,103,206
Unfunded Liability (Surplus)	(12,418,903)	29,501,398
Funded Ratio	101.96%	95.88%
Actuarial Requirement (ER and EE)	$ 17,819,965	$ 23,048,446
Deficiency (Excess) in Annual Contribution	(8,914,080)	(5,064,954)
Required Employer Multiple (Normal Cost Plus Interest)	.56	1.01
Termination		
Liability	$384,964,450	$421,800,557
Cost (Excess) on Termination	(261,348,993)	(265,302,649)
Quick Ratio	168%	163%
Vested - Termination		
Liability	$594,007,120	$658,926,727
Unfunded Liability (Surplus)	(52,306,326)	(28,176,479)
Funded Ratio	108.81%	104.28%
GASB - Going Concern		
Liability - APV Credited Projected	$568,750,487	$637,028,116
Unfunded Liability (Surplus)	(77,562,956)	(50,075,090)
Funded Ratio	113.64%	107.86%
Investment		
Invested Assets (Book Value)	$632,434,949	$671,272,062
Invested Assets (Market Value)	673,607,255	682,301,489
Miscellaneous		
Salary Roll	$142,024,296	$145,612,704
Average Salary	30,929	32,373

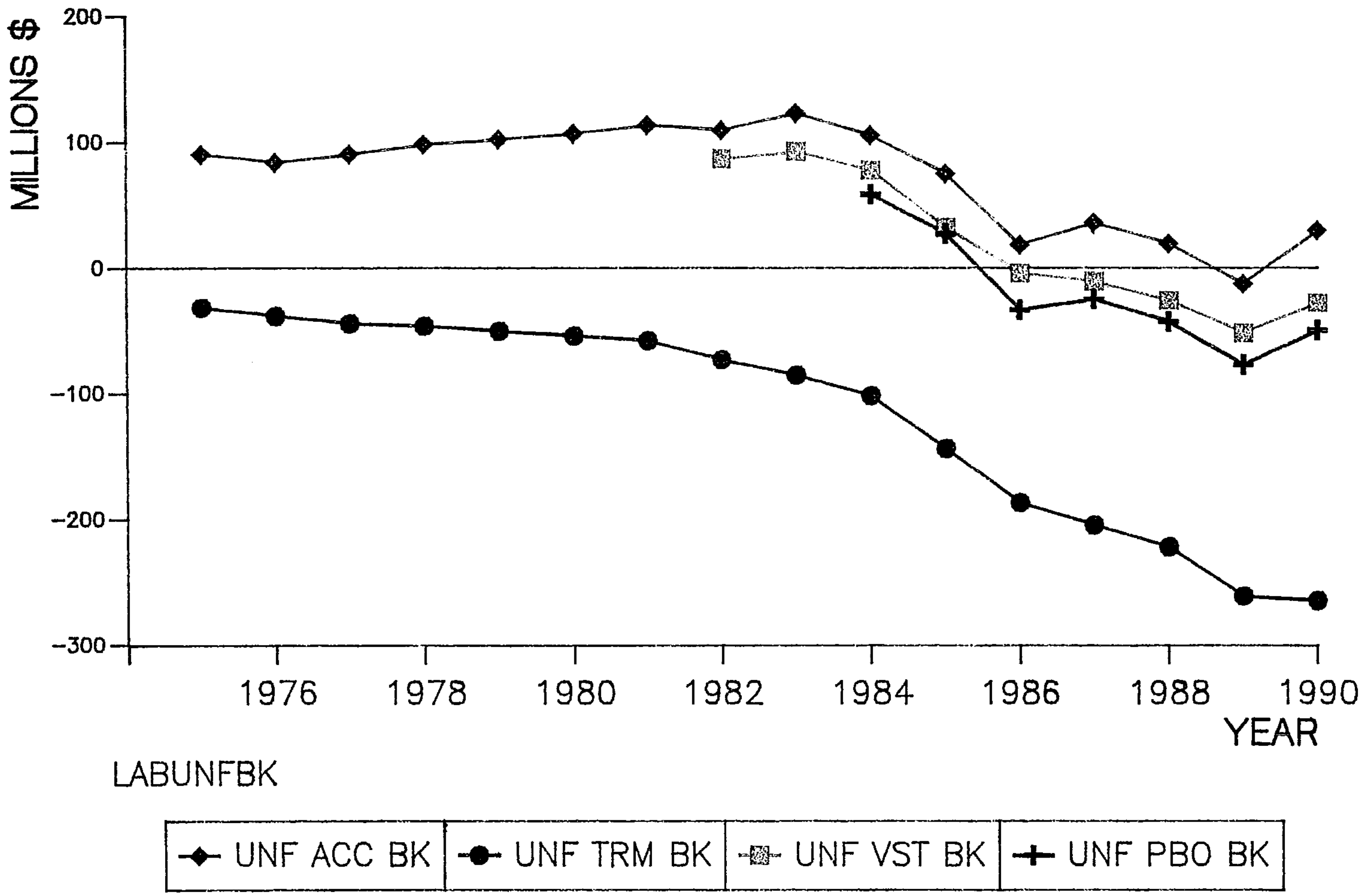
LABORERS' A&B FUND
ASSETS AND LIABILITIES



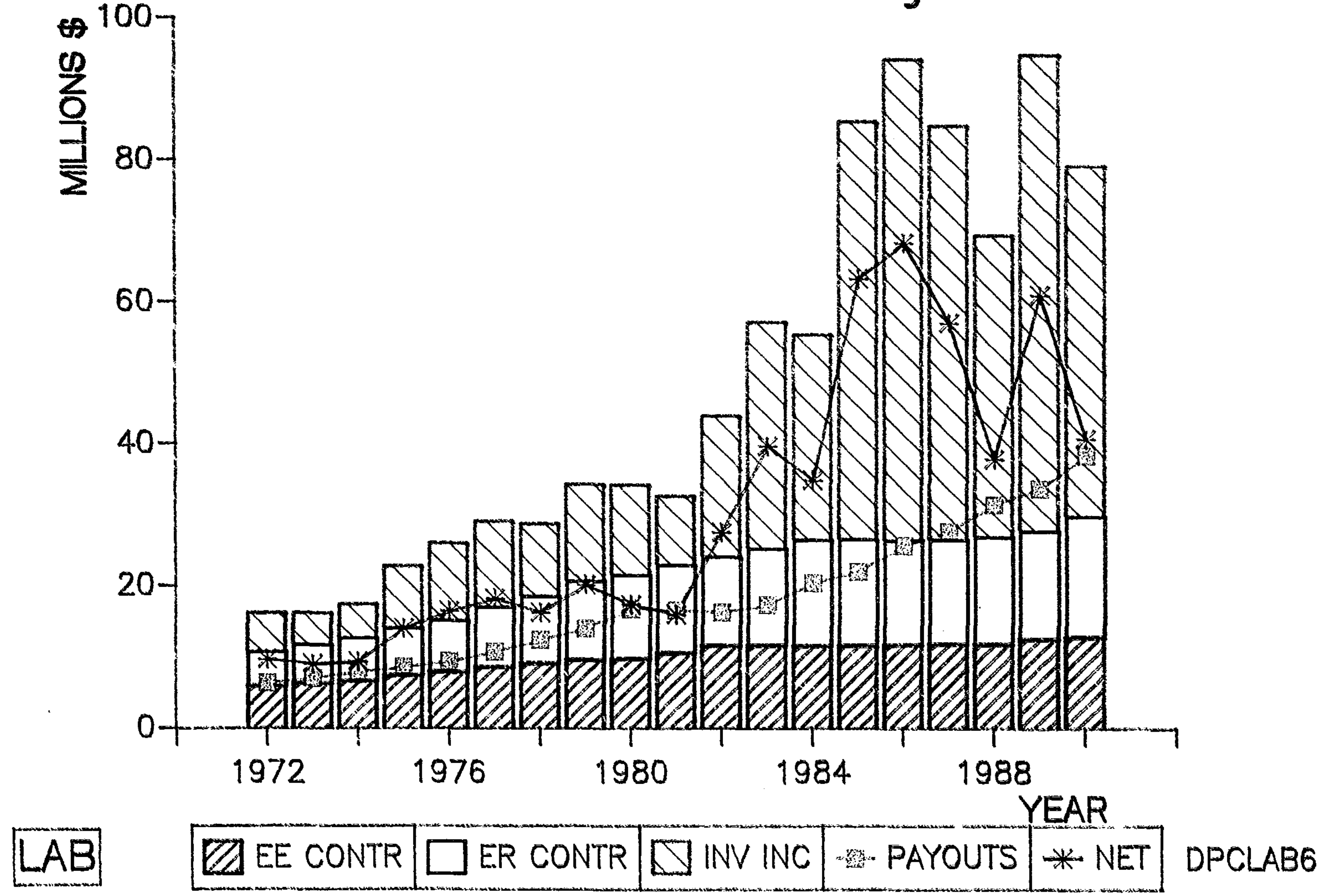
LABORERS' A&B FUND FUNDING RATIOS

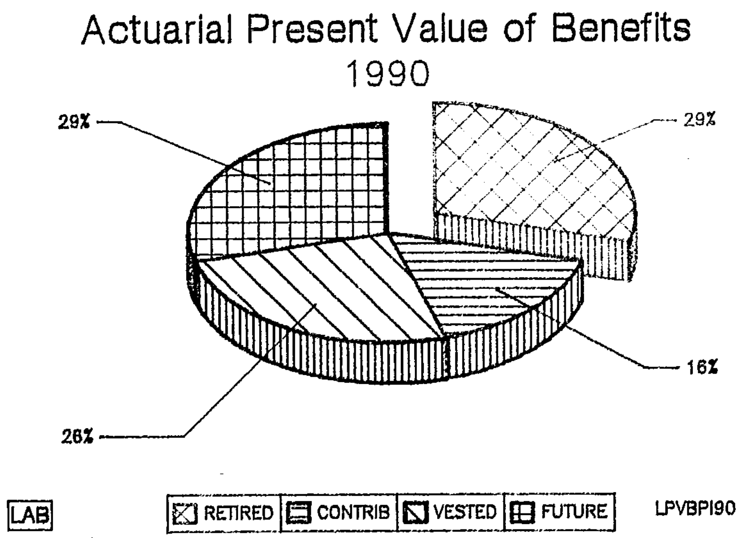


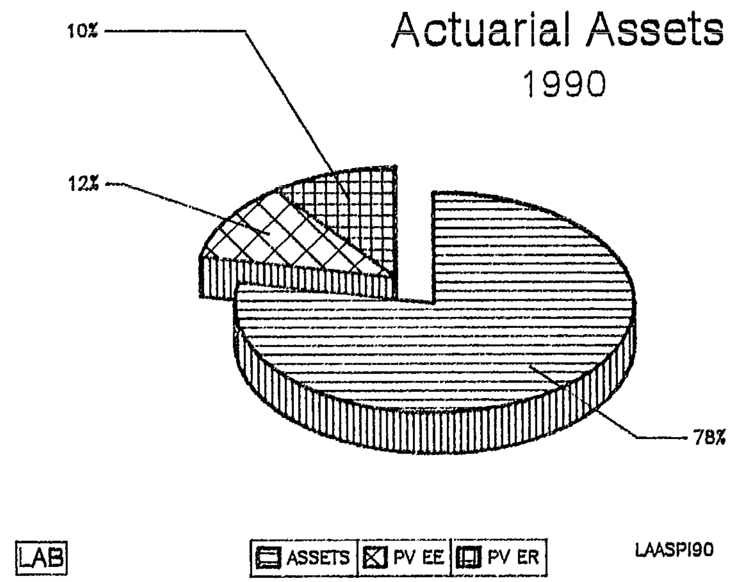
LABORERS' A&B FUND UNFUNDED

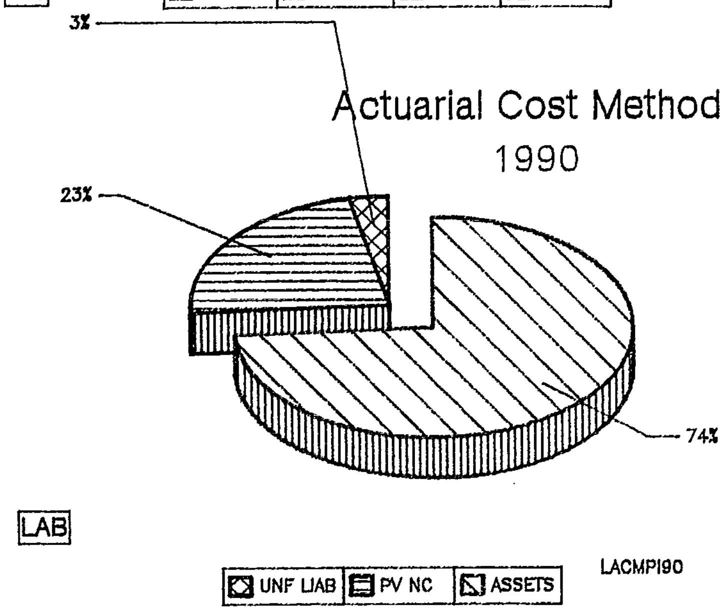


1990 Income and Payouts




Actuarial Present Value of Benefits
1990
29%
29%
16%
26%
LAB
RETIRED
CONTRIB
VESTED
FUTURE
LPVBPI90

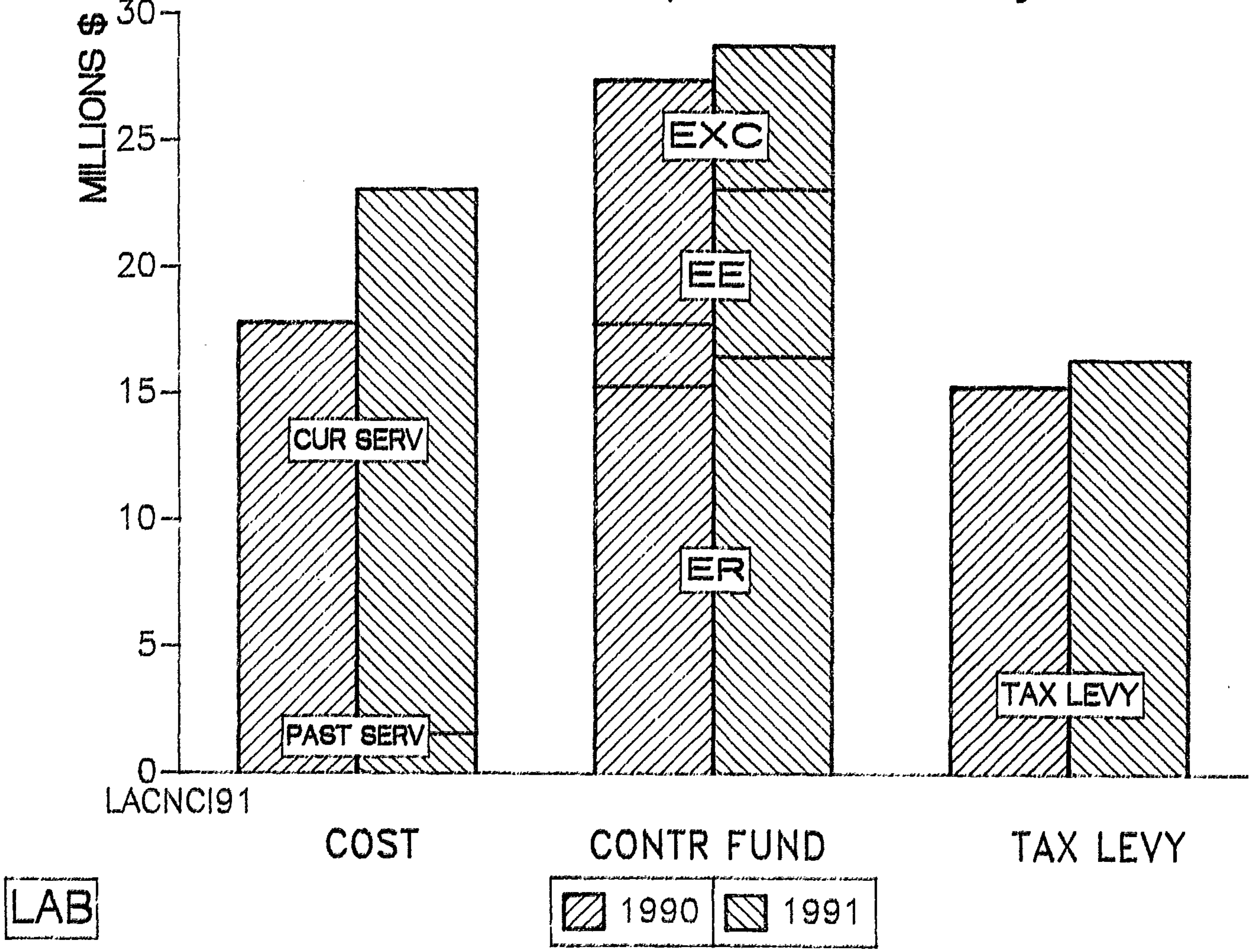

Actuarial Assets
1990
10%
12%
78%
LAB
ASSETS
PV EE
PV ER
LAASPI90

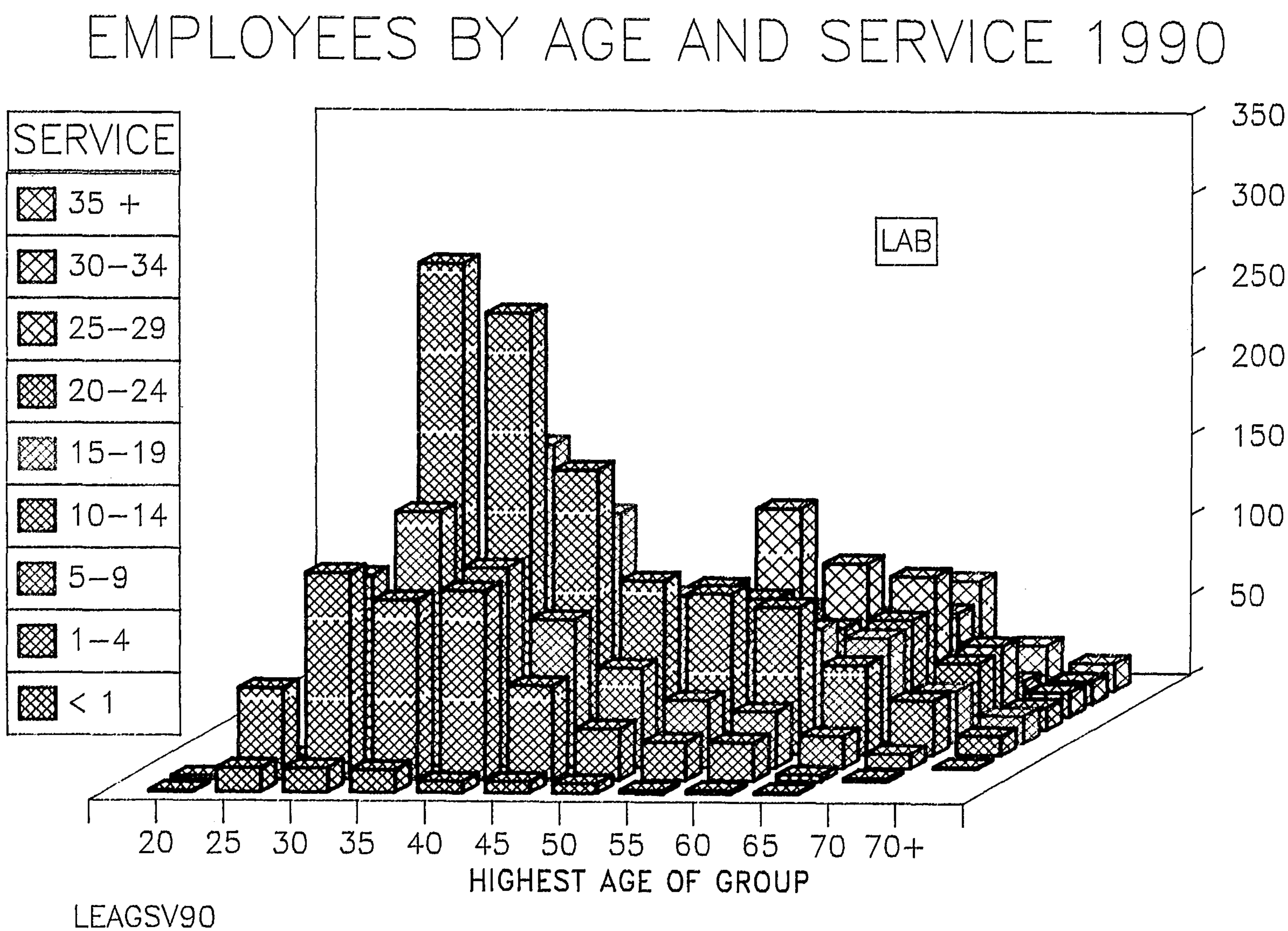

Actuarial Cost Method
1990
3%
23%
74%
LAB
UNF LIAB
PV NC
ASSETS
LACMPI90

LPIES90

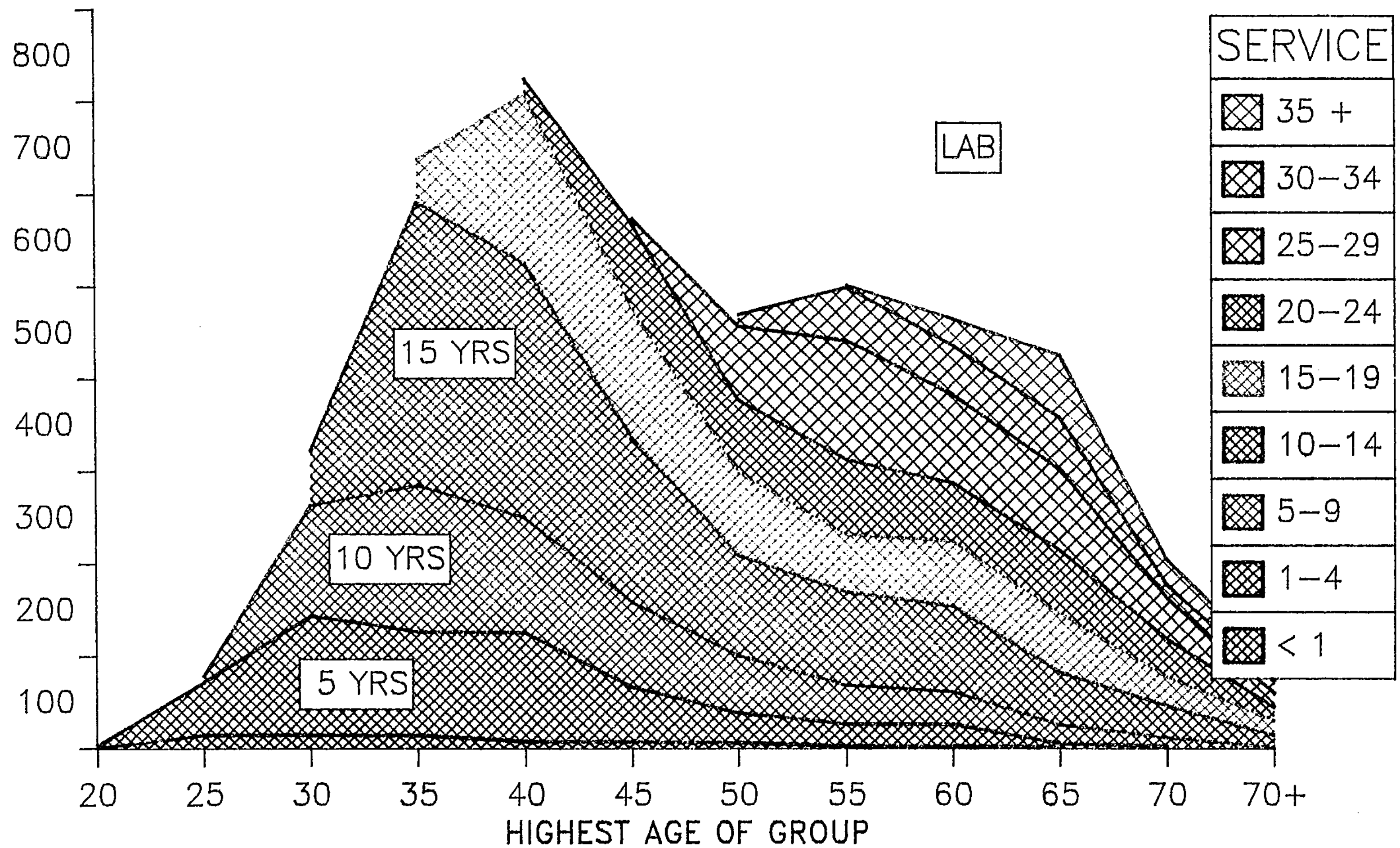
Annual Actuarial Cost

(Normal Cost plus Interest Only)




EMPLOYEES BY AGE AND SERVICE 1990
SERVICE
35 +
30–34
25–29
20–24
15–19
10–14
5–9
1–4
< 1
LAB
350
300
250
200
150
100
50
20 25 30 35 40 45 50 55 60 65 70 70+
HIGHEST AGE OF GROUP
LEAGSV90

EMPLOYEES BY AGE AND SERVICE 1990



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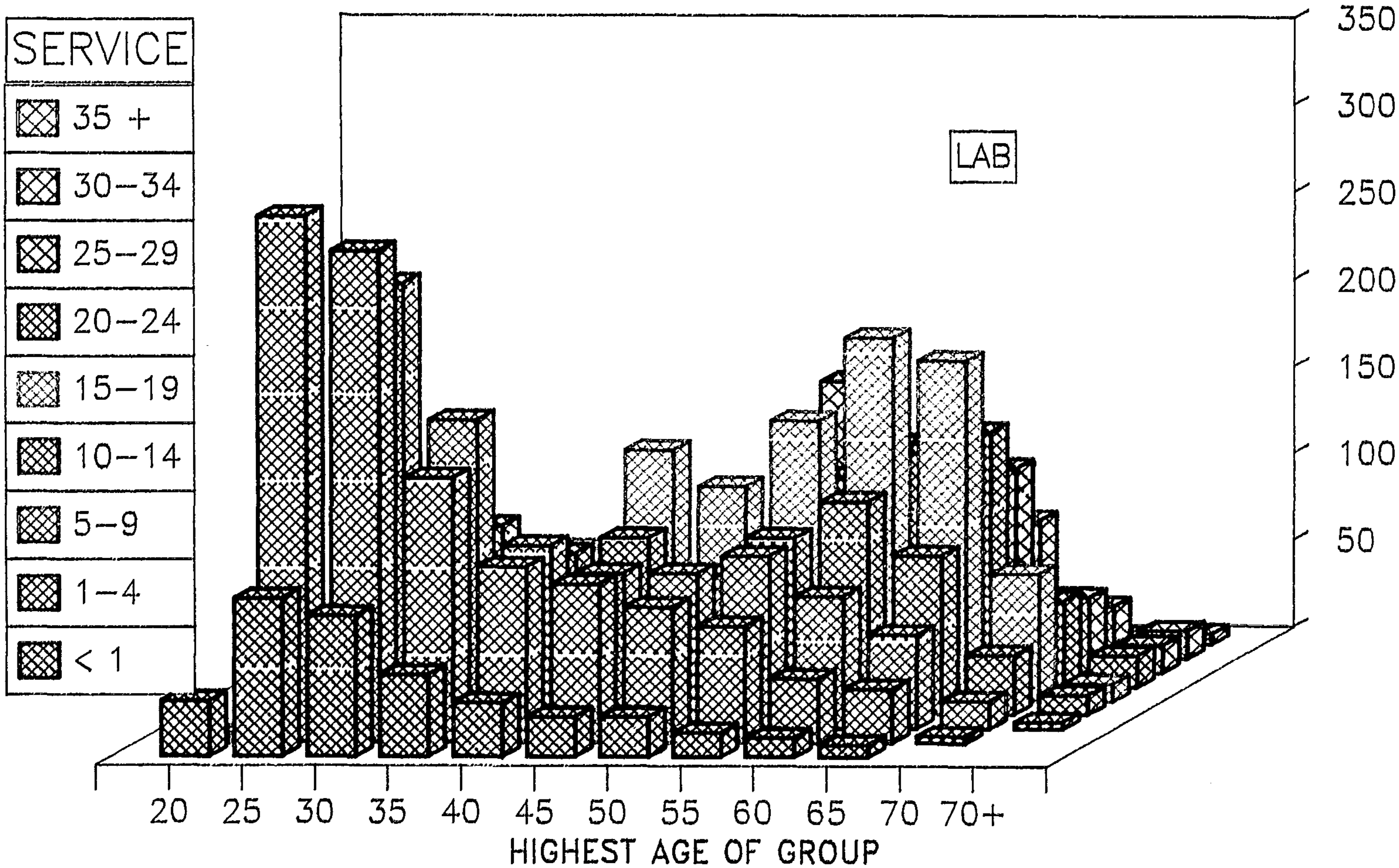
EMPLOYEES BY AGE AND SERVICE 1980



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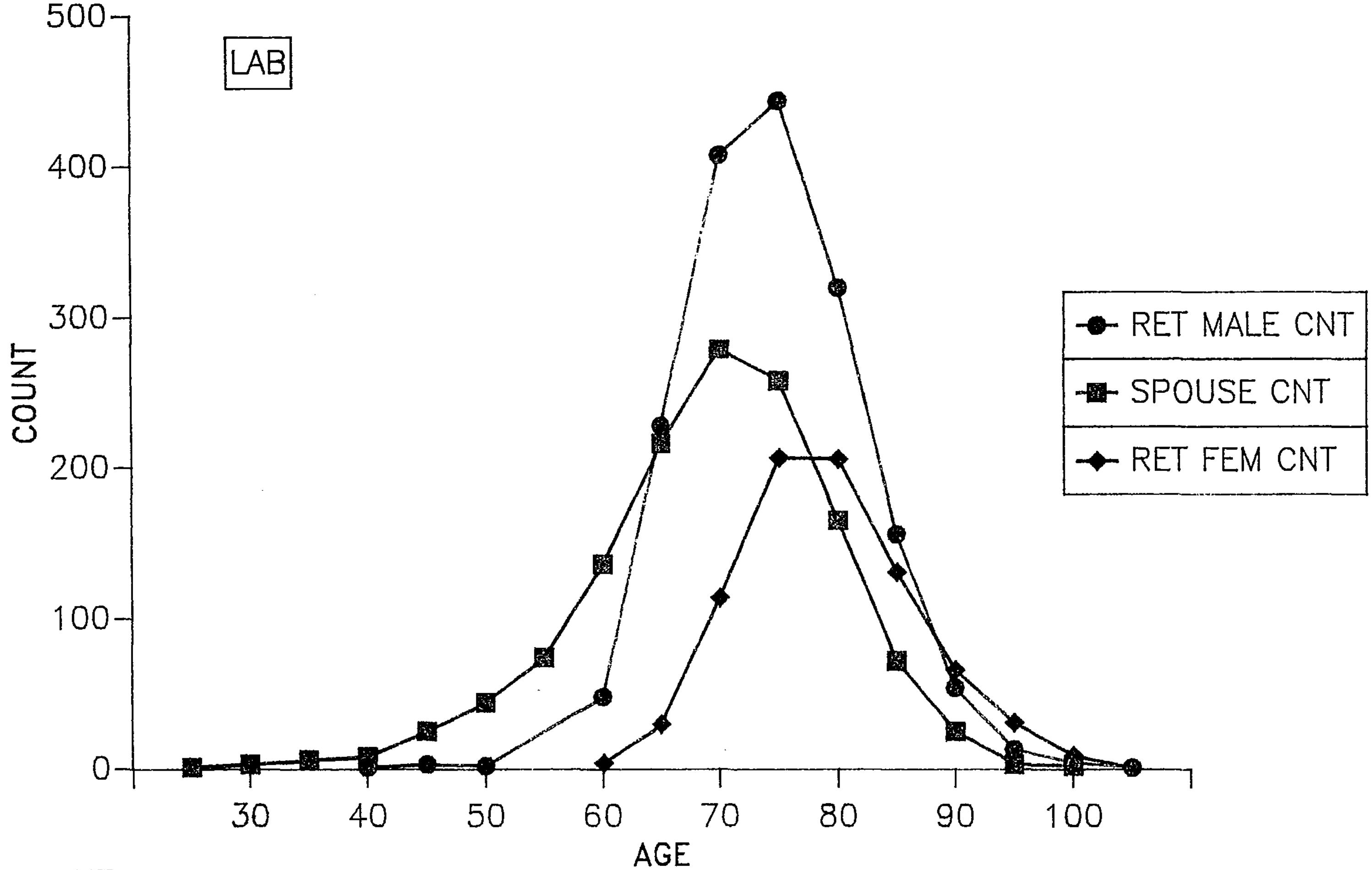
ANNUITANTS BY AGE 1990



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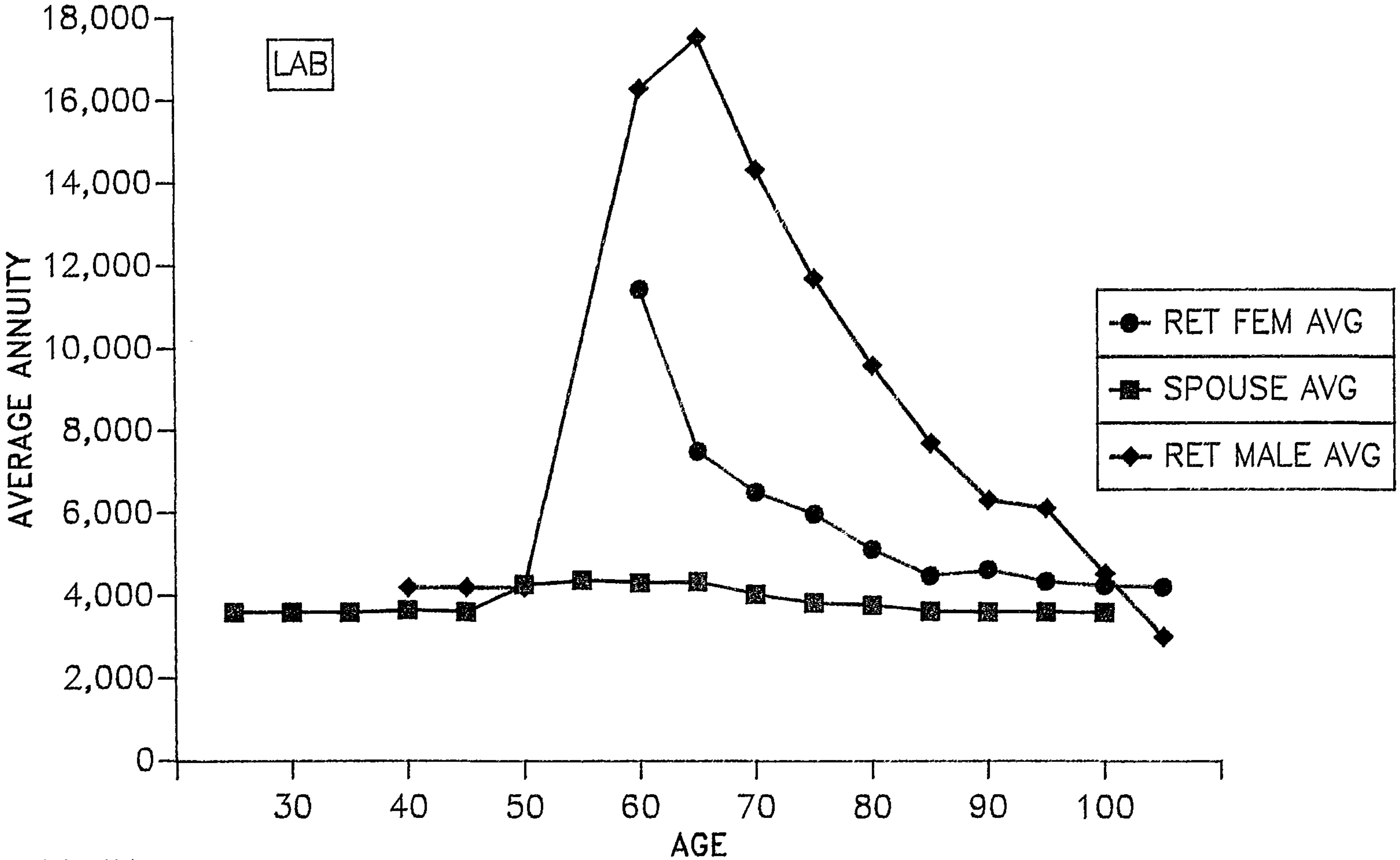
ANNUITANTS BY AGE 1990



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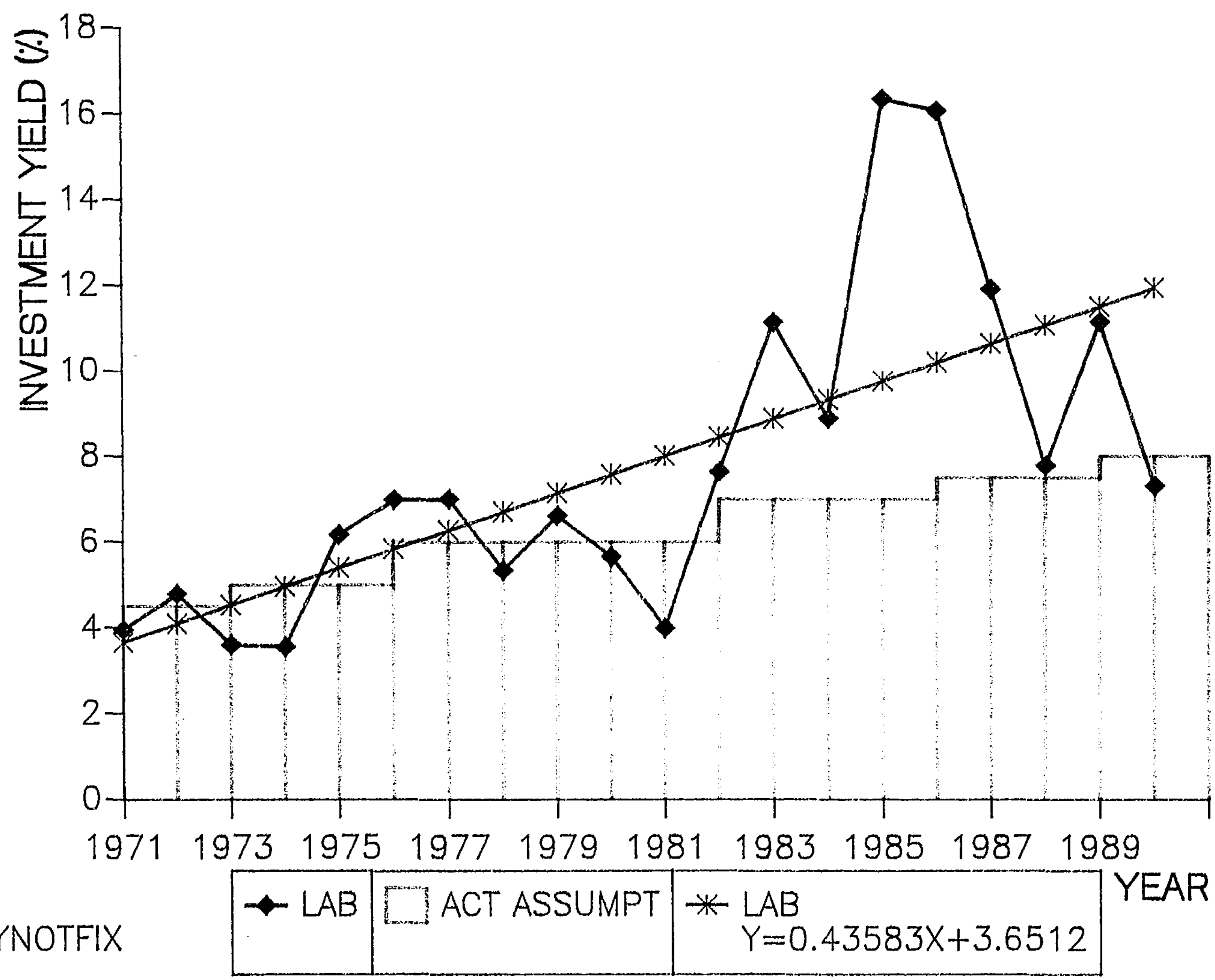
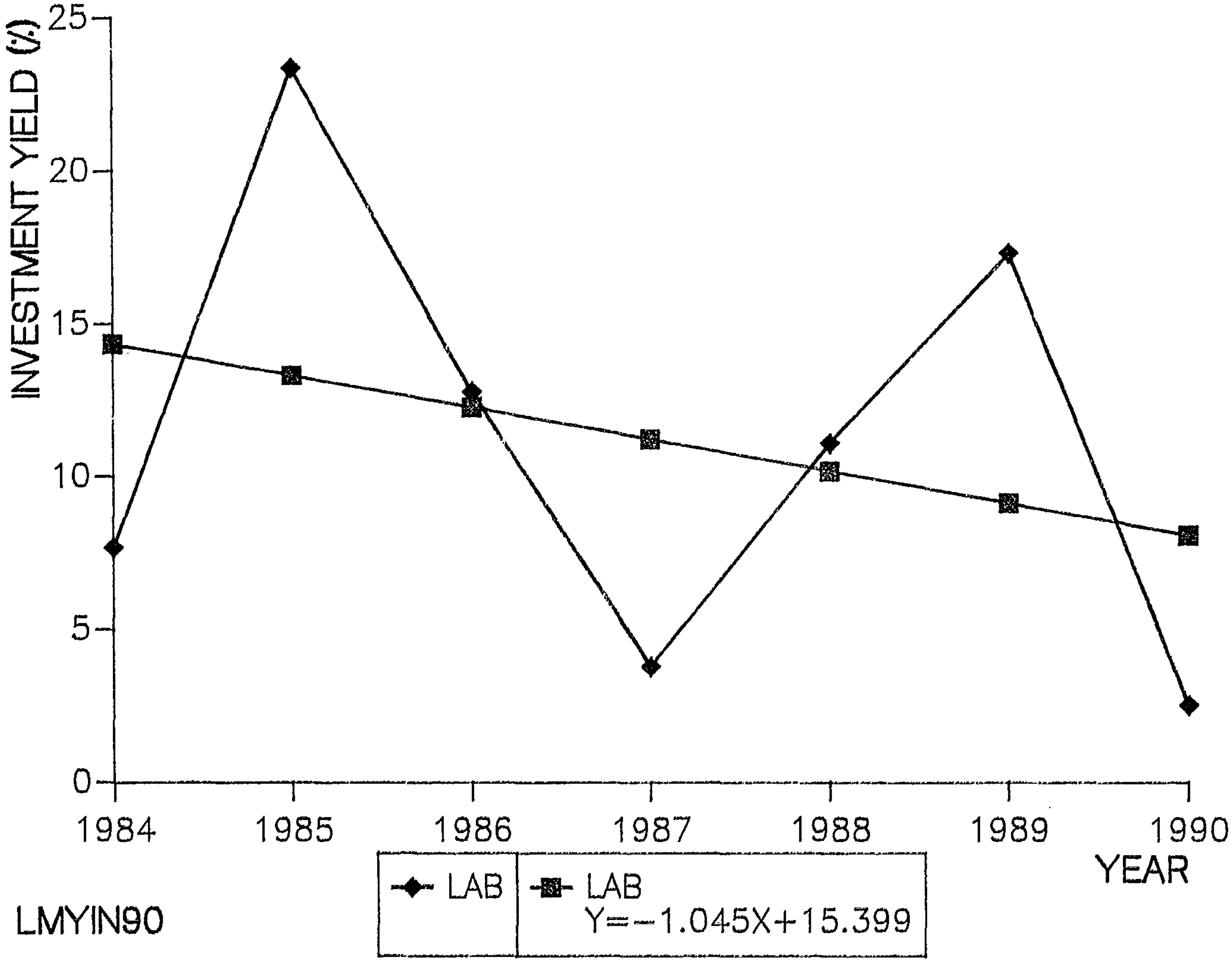
YIELD ON TOTAL ASSETS BOOK



LYNOTFIX

MARKET YIELD
Invested Assets Net of Investment Expense



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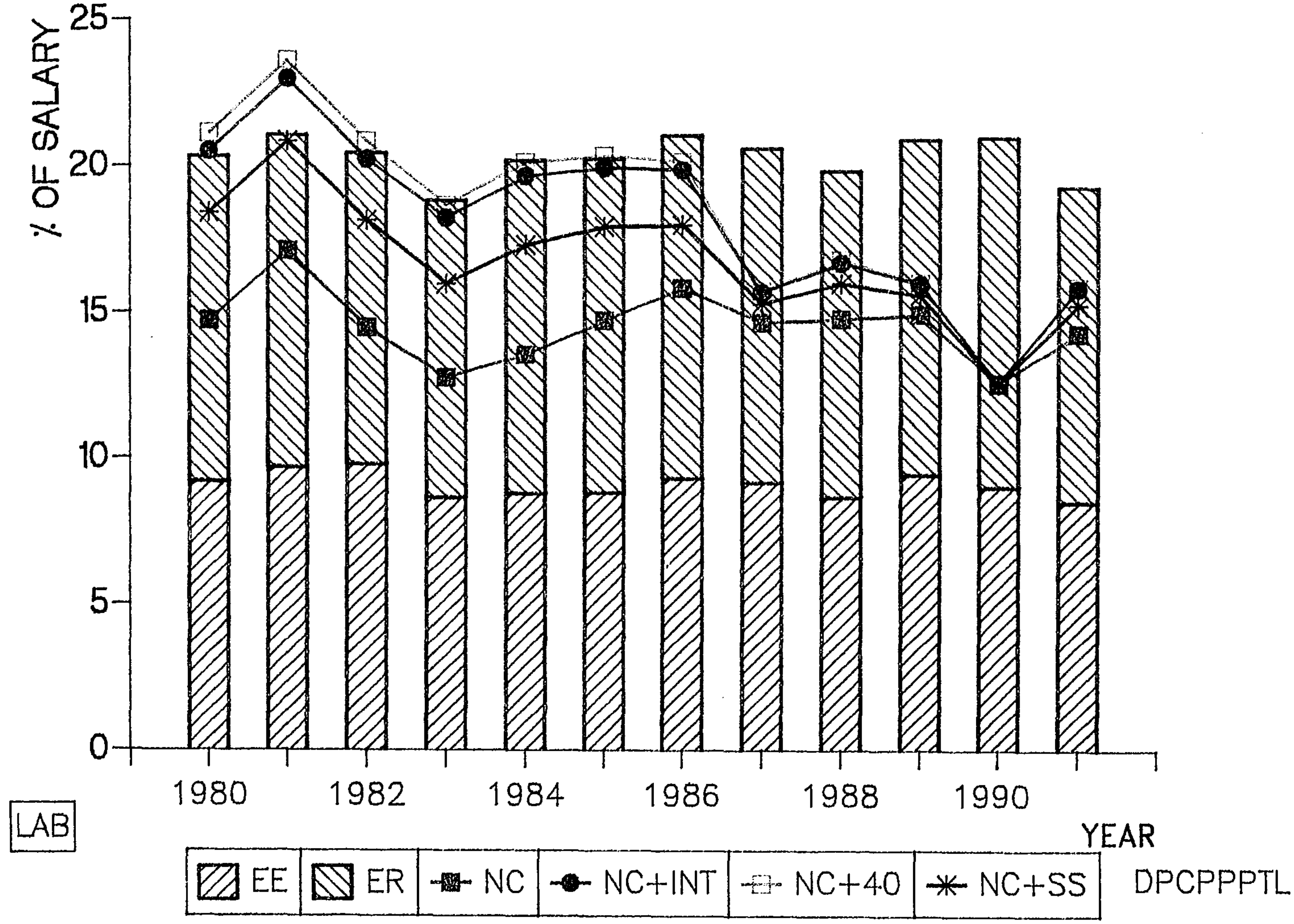
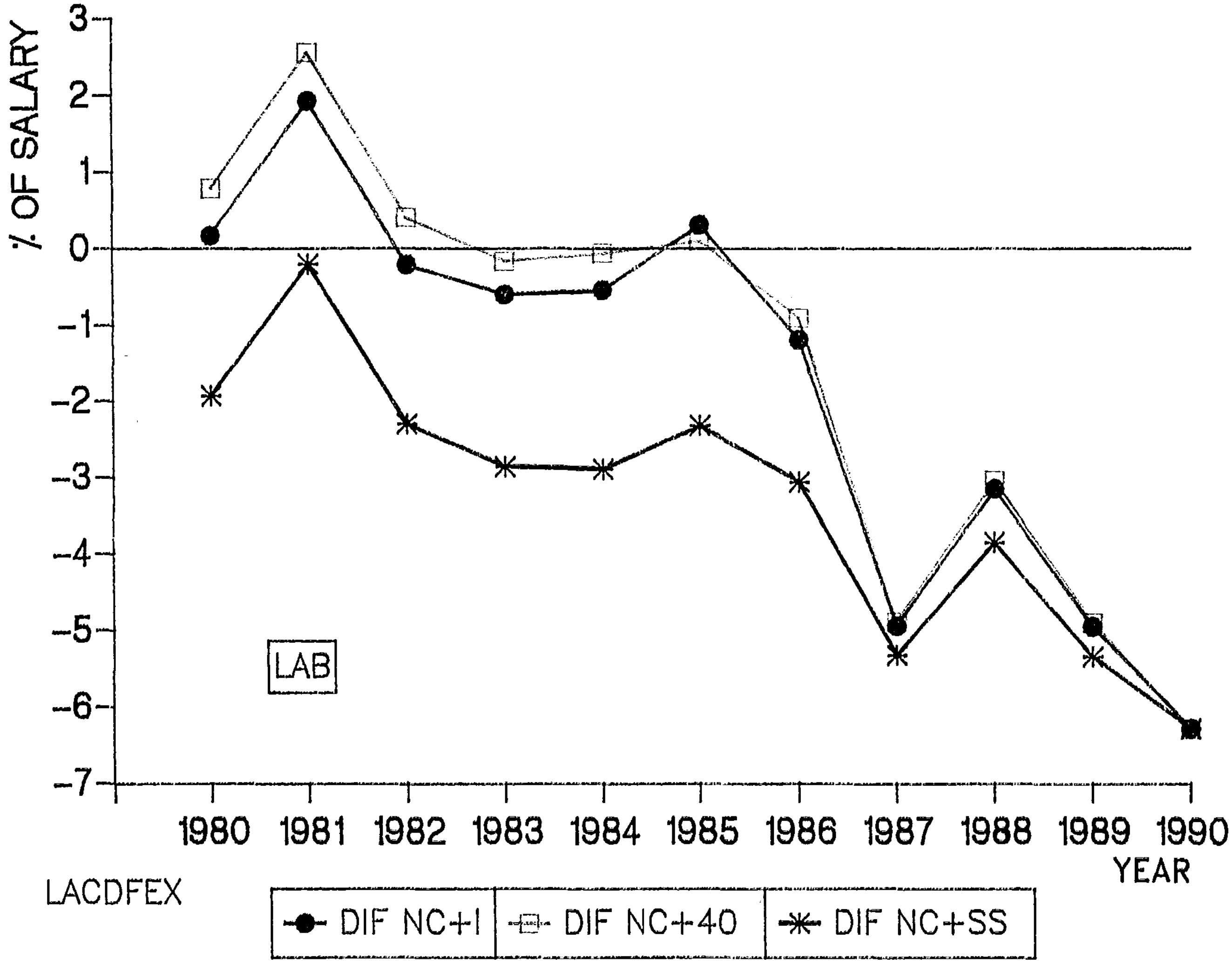
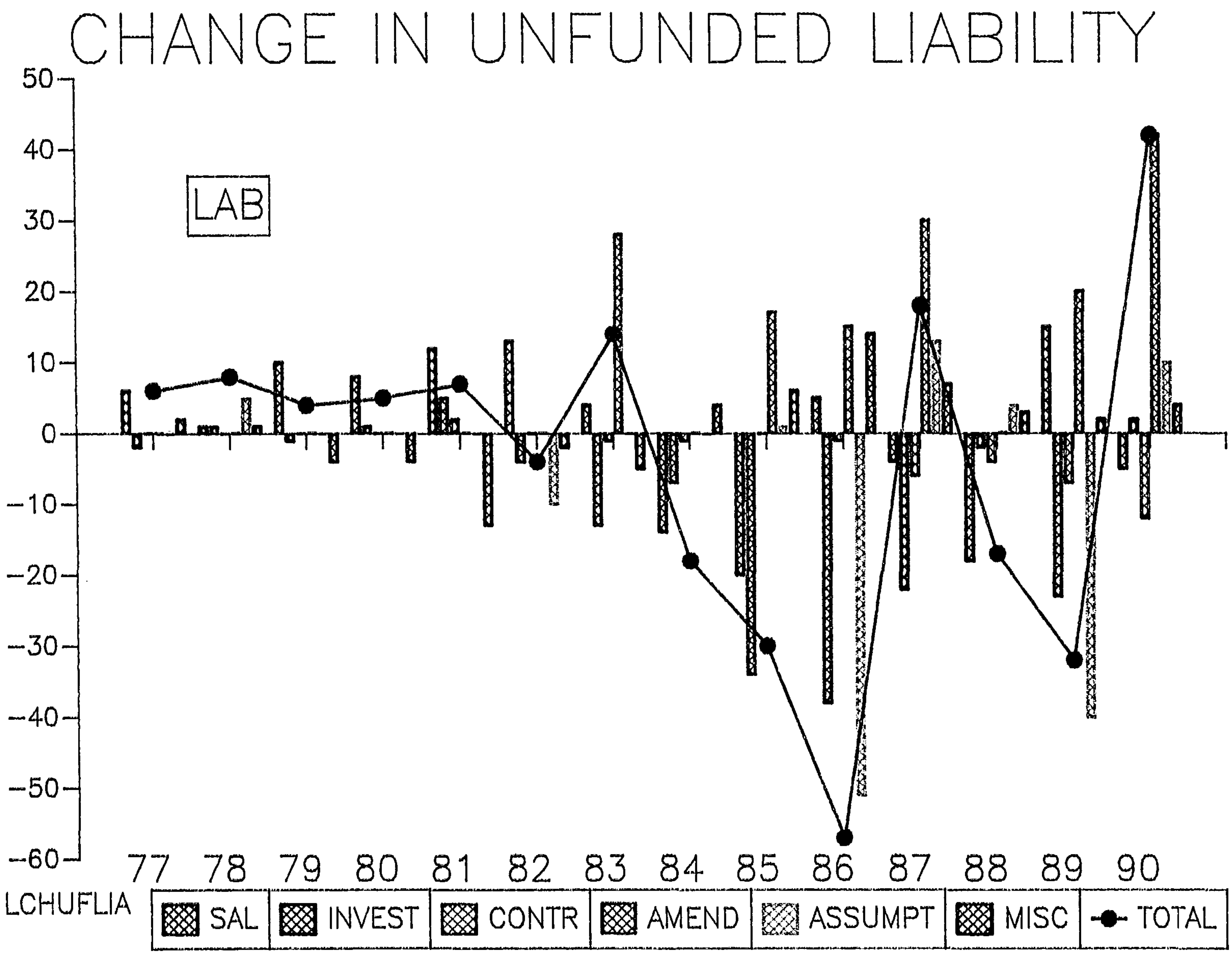
ACTUARIAL COST



ACTUARIAL DEFY (EXCESS)





CHANGE IN UNFUNDED LIABILITY
LAB
50
40
30
20
10
0
−10
−20
−30
−40
−50
−60
77
78
79
80
81
82
83
84
85
86
87
88
89
90
LCHUFLIA
SAL
INVEST
CONTR
AMEND
ASSUMPT
MISC
TOTAL

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April 16, 1991

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, 1990, 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 1990. This statement has been prepared from the unaudited 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 amortize 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.

The graph of assets and liabilities illustrates the Fund's position with respect to asset growth and accrued liability growth for the various ways of measuring the liabilities. Please note that the difference between the assets and the liability is what is called unfunded liability.

The next graph of funded ratios displays the ratio of assets to liabilities for the various different measures of liability.

The following 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 or net 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.

Greenwich Reports' 1991 survey, *Going Global, Good Going*, shows that the mean actuarial interest rate assumption for public funds (based on 310 public funds) went from 7.8% in 1988 to 7.9% in 1989 to 8.0% in 1990. The corresponding salary increase assumption for public funds remained at 5.8%. Corporate funds' actuarial assumptions tended to be higher in the interest assumption (8.8% in 1989 and 8.7% in 1990) and lower in the salary assumptions (5.4% for both years). For the 1990 survey, the average monthly benefit paid to all public retirees was $678, or $1,022 to new public retirees. These benefits are somewhat higher than those paid to retirees of corporate funds ($509 and $850); however, corporate retirees also receive Social Security payments. Based on the *1991 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 65 years for the period 1926 through 1990.

	Total Annual Return	**Inflation**	**Net**
Common Stocks	10.1%	3.1%	7.0%
Small Stocks	11.6	3.1	8.5
Long-Term Corporate Bonds	5.2	3.1	2.1
Long-Term Government Bonds	4.5	3.1	1.4
Intermediate Term Gov't Bonds	5.0	3.1	1.9
U.S. Treasury Bills	3.7	3.1	0.6

Inflation for the past	5 years	1986-1990	4.1%
	10 years	1981-1990	4.5
	20 years	1971-1990	6.3
	30 years	1961-1990	5.1
	40 years	1951-1990	4.3
	65 years	1926-1990	3.1

Based on a portfolio made up of 60% in long-term corporate bonds and 40% in common stocks, the annual return for the 65-year period would be approximately 7.2% with a net return after inflation of 4.1%.

Based on these studies, it is our opinion that for this Fund, an 8% future interest assumption would be a reasonable rate for valuation purposes and that a 6% per year salary scale would also be reasonable. These assume an underlying 4% inflation. These assumptions take into consideration generally expected future investment earnings and the generally accepted views on future salary increases for our national economy. They could be characterized as being middle of the road.

The valuation includes the cost of the following amendments passed in 1990:

1. A life annuity equal to 2.2% of average salary for each year of service for employees withdrawing on or after July 1, 1990.
2. No discount for employees under age 60 with 30 or more years of service if withdrawal occurred on or after July 1, 1990.
3. Employee annuitants already receiving an annuity on January 1, 1991 will receive a minimum annuity of $350 for life (reciprocal annuitants must have had 5 years of Laborers' service to qualify).
4. Spouses of employees withdrawing or dying in service on or after July 1, 1990, at age 55 or over with 20 or more years of service will receive half of the employee's annuity discounted .25% per month that the widow is under the age of 55.
5. Widow annuitants already receiving an annuity on January 1, 1991 will receive a minimum annuity of $300 for life (reciprocal employees must have had 5 years of Laborers' service to provide this minimum annuity for their widows).
6. 10% increase in duty disability benefits beginning January 1st of the sixth year on disability.

   A change in benefits for certain employees and their spouses has not been included in this valuation. Employees who retired on or after January 1, 1985 with at least 35 years of service will no longer be discounted for age less than 60 after January 1, 1991 and their spouses/widows annuities will be computed as half of the employee annuity. These liabilities will be updated after this report.

The Fund has received a payment as part of the settlement of the Ryan lawsuit which is included in the Fund's income. No accrued future payments are included in this report.

The liabilities and costs in this report are based in part on an 8% per year interest assumption (net of investment expense) and a 6% per year salary scale assumption. The retirement rates have been changed to reflect anticipated earlier retirements for those employees under age 60 with at least 30 years of service. The expected time of payment of the post-retirement annuity increase for future retirees has been modified. All other assumptions are the same as those used for the last report. We have included market yield figures (net of investment expenses) in Exhibit O.

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 can make alternative valuations giving effect to different rates of salary increases and investment earnings to serve as a guide to the Retirement Board and ourselves in estimating the effects on costs of possible future variations from the assumptions used. These can 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.

Group	Number	Present Value of Future Benefits
Employee Annuity	2,481	$172,877,405
Annuity Increase	2,339	29,577,328
Future Widow Benefit	1,591	18,230,947
Lump Sum Death Benefit	0	0
Health Insurance Supplement	2,197	10,229,106
Widow Annuity	1,317	40,484,952
Widow Compensation	1	1,887
Total Retired Reserve		$271,401,625

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.

Benefit	Present Value of Benefits	Reserve
Employee Annuity	$409,841,949	
Annuity Increase	85,972,717	
Future Widow/Widower Benefit	41,117,078	
Lump Sum Death Benefit	0	
Health Insurance Supplement	10,748,431	
Widow/Widower of Employees, Dying in Service	20,552,124	
Widow/Widower Compensation, Duty Death	0	
Miscellaneous	89,049,198	
Total Active	$657,281,497	
Total Active and Retired Present Value of Benefits	$928,683,122	
Less Present Value of Future Normal Costs		$212,078,518
Net Active Reserve		445,202,979
Net Active Reserve and Retired		716,604,604
Less Present Assets		687,103,206
Unfunded Liability		$ 29,501,398

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." If assets exceed liability, there is a surplus. 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 and for amortization of the unfunded liability on some reasonable basis.

	Present Value	Percent of Total
Present Assets	$687,103,206	74 %
Future Employee Contributions	127,914,645	14
Future Employer Contributions	168,233,341	18
Deficiency (Excess)	(54,568,070)	(6)
Total	$928,683,122	100 %

Present Value of	**Actuarial Assets**	**Percent of Total**	**Actuarial Liabilities**	**Percent of Total**
Benefits				
Retired Lives			$271,401,625	29 %
Active Lives			657,281,497	71
Present Assets	$687,103,206	74 %		
Normal Costs	212,078,518	23		
Unfunded Liability (Surplus)	29,501,398	3		
Total	$928,683,122	100 %	$928,683,122	100 %

The pie charts illustrate:

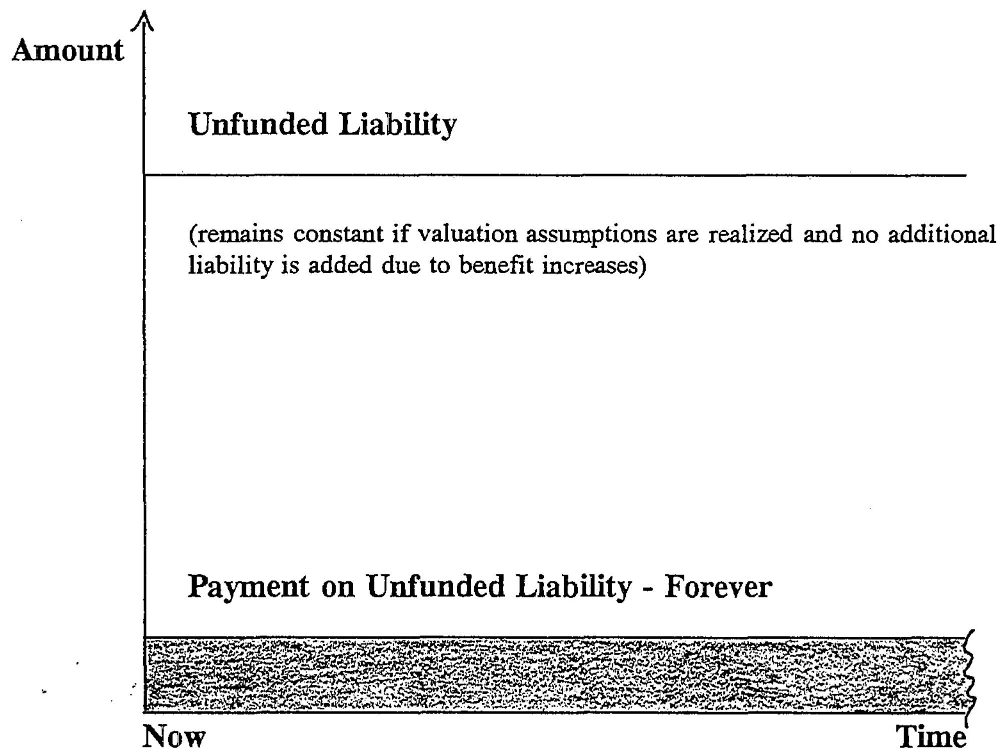
1. Actuarial Present Value of Future Benefits
2. Actuarial Assets
3. Actuarial Cost Method

Three Methods of Financing the Unfunded Liability

1. Normal Cost Plus Interest Method

The 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 in the Section "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.

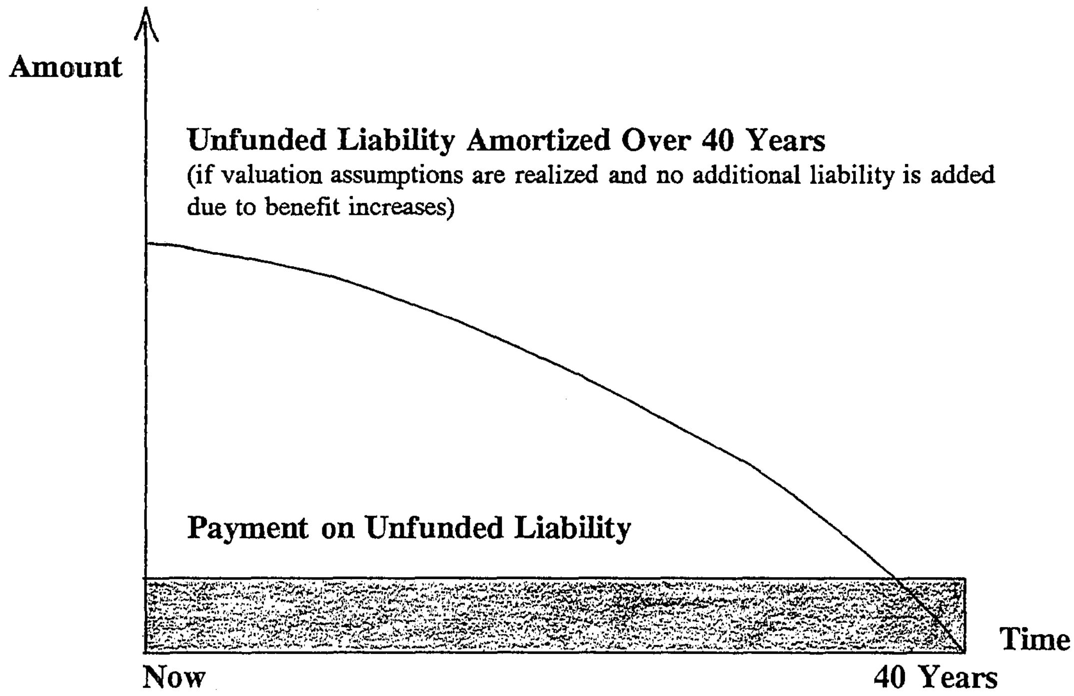
The normal cost plus interest only method of funding is that recommended by the Illinois Public Employees' Pension Laws Commission. It was also the minimum required for private pension plans for IRS qualification before ERISA.



2. Normal Cost Plus 40 Year Amortization Method

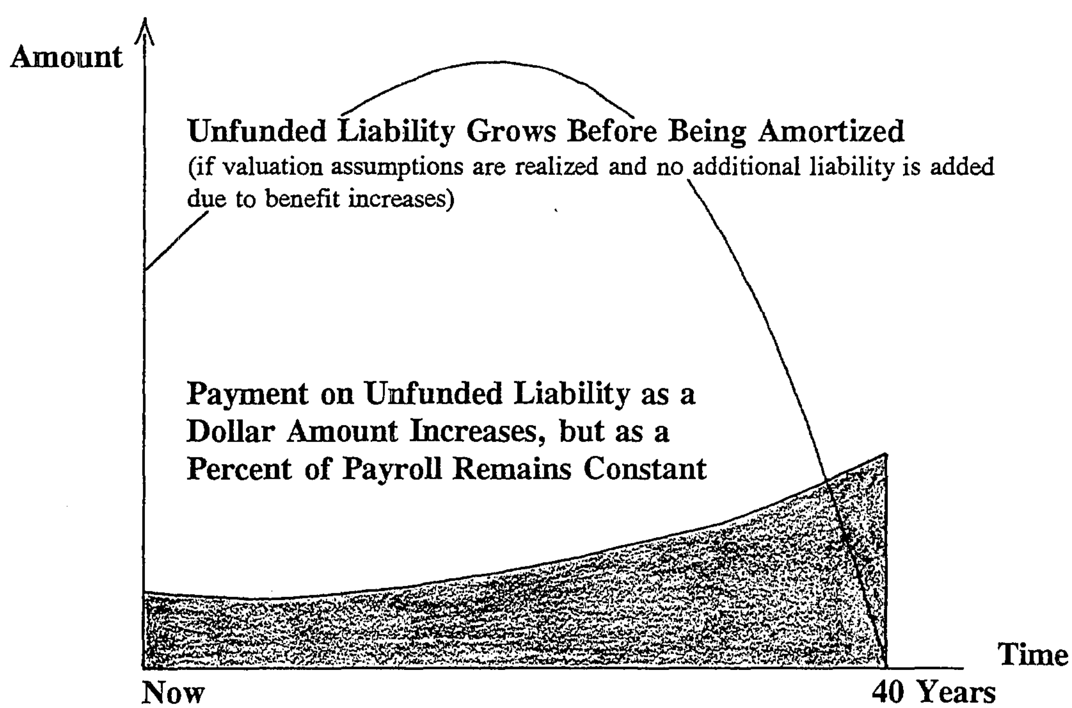
ERISA minimum funding standards require that initial unfunded liability existing on January 1, 1976 be amortized over a 40 year period. We have calculated the cost of amortizing the existing unfunded liability.

Both of these first two 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.



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:

		Required 1990 Tax Levy	Ultimate Required Multiple[1]	Unfunded Liability Will[1]	Portion Required for Amortization of Unfunded Liability[1]
1.	**Normal Cost Plus Interest Only**	$11,116,006	1.01	Remain constant at $29,501,398	$2,271,019
2.	**ERISA: Normal Cost Plus 40-Year Amortization**	$11,230,154	1.02	Decrease to $0	$2,380,600
3.	**Normal Cost Plus 40-Year Level % of Payroll Increasing 4% a Year (Inflation Only)**	$10,268,739	0.93	Increase to about $44,250,629 in 22 years and decrease thereafter	$1,457,642 increasing to $6,992,989
4.	**Present Law (Includes Park)**	$16,392,000	1.37		

[1] Assuming all valuation assumptions are realized and no future benefit liberalization.

The preceding 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 1991 should be $11,116,006, which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll (as of December 31, 1990) of $145,612,704 and an active membership of 4,498 persons. The detail is shown in the table that follows.

Detail of Annual City Contribution

	Last Year Amount	This Year Amount	Last Year Percent of Salary	This Year Percent of Salary	Last Year Dollars Per Active Member	This Year Dollars Per Active Member
1. Normal Cost for Current Service	$17,819,965	$20,777,427	12.55%	14.27%	$3,881	$4,619
2. Interest on Unfunded Liability	0	2,271,019	0.00	1.56	0	505
3. Total Actuarial Requirement (1 + 2)	17,819,965	23,048,446	12.55	15.83	3,881	5,124
4. Employee Contributions	12,072,065	12,377,080	8.50	8.50	2,629	2,752
5. Employer Requirement (3 - 4)	5,747,900	10,671,366	4.05	7.33	1,252	2,372
6. Expected Net Employer Contribution from Tax Levy	15,273,000	16,392,000				
After a 4% Loss	14,662,080	15,736,320	10.32	10.81	3,193	3,498
7. Expected Net Annual Deficiency (Excess)	(8,914,180)	(5,064,954)	(6.28)	(3.48)	(1,941)	(1,126)
8. Tax Levy Required (Assume 4% Loss)	5,987,396	11,116,006				
9. Required Multiple	0.56	1.01				
10. Present Authorized Multiple	1.37	1.37				
11. Amortization Period	N/A	5 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 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).

Detail of Normal Cost

	Last Year % of Salary	This Year % of Salary	Last Year $/Active Member	This Year $/Active Member
Retirement Annuity	6.00%	6.68%	$1,858	$2,162
Post-Retirement Annuity Increase	1.25	1.41	386	456
Post-Retirement Spouse Annuity	0.60	.67	185	218
Spouse Annuity for Death in Service	0.55	.58	169	189
Health Insurance	0.19	.18	56	57
Child's Annuity	0.08	.09	25	30
Ordinary Disability	0.80	.82	248	264
Duty Disability	0.95	.81	295	261
Refunds	1.29	2.10	400	681
Widows'/Widowers' Compensation	0.00	0.00	0	0
Expense of Administration[1]	0.67	.74	207	241
Reciprocal Benefits	0.17	.19	52	60
Total	12.55%	14.27%	$3,881	$4,619

[1] Net of investment expense

Change in the Unfunded Liability

The total unfunded liability as of December 31, 1990 is $29,501,398. As of December 31, 1989, the total surplus was $12,418,903.

Detail of Change in Unfunded Liability

1.	Increase in Salaries under 6.0% Assumed		$ (5,117,094)	Decrease
2.	Investment Yield under 8.0% Assumed		2,118,850	Increase
3.	Excess in Annual Contribution:			
	1990 Total Actuarial Requirement	$17,819,965		
	Less Employer Net to Fund 1990 Tax Levy	17,029,493		
	Less Employee Contributions for 1990	12,805,485	(12,015,013)	Decrease
4.	Change in Benefits		42,423,925	Increase
5.	Change in Assumptions		10,229,489	Increase
6.	Miscellaneous Actuarial Experience		4,280,144	Increase
	Net Change in Unfunded Liability		$41,920,301	Increase

See the historical tabulation in the back of this report.

Funded Ratio

The ratio of assets to liabilities is 95.88% as of December 31, 1990, and was 101.96% as of December 31, 1989. This ratio represents the extent to which present and future benefit promises are secured by present assets. The funded ratio decreased because assets increased 6.3% while liabilities increased 13.1%.

Ratio of Active Employees to Annuitants and Beneficiaries

The ratio of active employees to annuitants and beneficiaries is 1.10 as of December 31, 1990, and was 1.13 as of December 31, 1989. 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.

	1989	1990
Liability for Retired Annuitants and Widows/Widowers Spouses of Annuitants	$241,519,125	$271,401,625
Salary Deductions Contributed by Active Fund Members	143,445,325	150,398,932
Total	384,964,450	421,800,557
Assets at Book Value	646,313,443	687,103,206
Excess Upon Termination	261,348,993	265,302,649
Quick Ratio	168%	163%
Available Assets for Actives (Retirees Fully Funded)	$404,794,318	$415,701,581
Available Per Active Employee	88,152	92,419
Refundable per Active Employee	31,236	33,436
Ratio of Available to Refundable	282%	276%

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 because the value of a retirement annuity for an eligible employee is greater than the amount of his or her accumulated salary deductions.

	1989	**1990**
Liability for Retired Annuitants and Widows/ Widowers and Spouses of Annuitants	$241,519,125	$271,401,625
Value of Active Employees Eligible to Retire	264,497,917	294,049,860
Accumulated Salary Deductions of Active Employees Eligible for Refund and Not Annuity	87,990,078	93,475,242
Active Vested Liability	352,487,995	387,525,102
Total Vested Liability	594,007,120	658,926,727
Assets at Book Value	646,313,443	687,103,206
Unfunded Vested Liability	$(52,306,323)	$(28,176,479)
Vested Funded Ratio	108.81%	104.28%

The average amount of assets required per active employee to provide for vested benefits as of the valuation date is $86,154. 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 $98,978.

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, 1986.

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 non-vested 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.

	1989	1990
Pension Benefit Obligation (PBO)		
APV of Credited Projected Benefits		
Accumulated contributions (with interest)	$143,445,325	$150,398,932
Payable to retirees and beneficiaries	241,519,125	271,401,625
Payable to vested and non-vested current employees	183,786,037	215,227,559
Total APV	568,750,487	637,028,116
Net Assets Available for Benefits (book value)	646,313,443	687,103,206
Excess Assets over APV of Credited Projected Benefits	$77,562,956	$50,075,090
Percentage Funded	113.64%	107.86%
Surplus APV as Percent of Payroll	54.61	34.39

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 6.0% increases assumed in the salary scale, the unfunded liability will be increased by about \$3.06. This will be in addition to the additional current annual service cost for every dollar in salary over the 6.0% salary scale assumed.

These additional costs will be reduced to some extent by the annual amount of investment income earned over the assumed 8.0% 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.

Respectfully submitted,

Donald F. Campbell

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Enrolled Actuary No. 90-1248

Donald P. Campbell

Donald P. Campbell, F.S.A., M.C.A., M.A.A.A.
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DPC:iwh

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Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago

Actuarial Balance Sheet

as of

December 31, 1990

Assets and Liabilities

ASSETS

Actuarial Balance Sheet as of December 31, 1990

Cash		
In Bank	$ 113,923.85	
Investment Trust Cash	118,241.60	
Total Cash		$ 232,165.45
Investments		
Cash Equivalent (Market $56,712,396.75)	56,704,648.14	
Bonds, Par Value (Market $323,805,706.65)	335,169,187.01	
Bond Premiums and Discounts	(17,161,743.99)	
Common Stocks, Cost (Market $242,404,562.85)	236,185,845.99	
Venture Capital (Market $10,992,686.00)	10,531,382.00	
Real Estate (Market $42,078,534.62)	43,535,141.37	
Accrued Bond Interest	5,735,115.07	
Accrued Dividends	572,486.78	
Total Investments		671,272,062.37
(Total Market $682,301,488.72)		
Accounts Receivable - Taxes		
(See Exhibit D)		
Replacement Tax Due from State	3,173,000.00	
Tax Extension	14,235,599.79	
Less: Estimates for Loss on Collection	2,194,915.77	
Net Taxes Receivable		15,213,684.02
Other Accounts Receivable		
Salary Deductions Accrued	656,191.59	
Miscellaneous Employee Accounts	202,217.83	
Miscellaneous Inactive Employee Accounts	31,938.83	
Accrued Ryan Settlement	1,663,348.09	
Accrued Interest on Tax Income	88,313.28	
Due from Broker	13,244.00	
Total Other Accounts Receivable		2,655,253.62
Other Assets		
Furniture and Equipment	80,473.51	
Accumulated Depreciation	(31,900.87)	
		48,572.64
Gross Ledger Assets		689,421,738.10
Less: Accounts Payable		
Investment Manager Fees Payable	285,002.38	
Miscellaneous Employee Accounts	1,509,647.94	
Professional Fees Payable	30,989.94	
Former Child Annuitants Payable	492,891.94	
Total Accounts Payable		2,318,532.20
Net Ledger Assets		$687,103,205.90

LIABILITIES AND FUND BALANCES

Actuarial Balance Sheet as of December 31, 1990

Annuity Payment Fund Account		
(Based on 3% Comb. and 4% Amer. Exp. Tables)		
Employee Annuitants	$71,794,981.20	
Spouse Annuitants	25,838,358.33	
Spouses' Annuities Fixed	18,687,675.63	
Total Annuity Payment Fund		$116,321,015.16
Salary Deduction Fund Account		
Employees	116,656,318.46	
Spouses of Employees	26,099,225.62	
Total Salary Deduction Fund		142,755,544.08
City Contribution Fund Account		
Employees	108,493,680.43	
Spouses of Employees	35,200,756.23	
Compensation Annuities	4,349.99	
Total City Contribution Fund		143,698,786.65
Other Reserves		
Supplementary Payment Reserve	77,264.47	
Annuity Payment Fund Account	(0.00)	
Total Other Reserves		77,264.47
Prior Service Fund Account		
(Based on 3% Comb. and 4% Amer. Exp. Tables)		
Employee Annuitants	162,744,484.32	
Spouse Annuitants	19,527,749.76	
Spouses' Annuities Fixed	10,896,718.44	
Salary Deductions--Annuity Increase	11,256,329.99	
Estimated Excess Liability[1]	109,326,711.13	
Total Prior Service Fund Account		313,751,993.64
Total Liabilities		716,604,604.00
Obligations of Fund for Prior Service Liabilities[1]		(29,501,398.10)
Total Net Liabilities and Fund Balances		$687,103,205.90

[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 1990

Income and Expenditures

INCOME FOR YEAR OF 1990

Salary Deductions		
Total Contributions by Employee		
Employee	$ 9,041,208.64	
Spouse	2,086,431.95	
Automatic Increase	695,434.31	
Ordinary Disability	202,235.84	
Received from Municipal and Police Funds	161,633.75	
Temporary Service Payments	38,895.51	
Miscellaneous Accounts Receivable	71,124.90	
Total Contributed by Employee		$12,296,964.90
Total Contributed by City for Duty Disability, Deductions in Lieu	508,519.95	
Total Contributed by City		508,519.95
Total Salary Deductions		12,805,484.85
City Contributions:		
(1990 taxes of $12,088,000 [City] plus $12,000 [Park], less 5% for loss of collection $605,000 plus replacement tax due from State of $3,173,000)		
Employees	9,011,322.57	
Spouses of Employees	2,996,978.25	
Ordinary Disability Fund	1,186,935.01	
Duty Disability Benefits	1,173,540.29	
Child's Annuity Payment Fund	136,620.00	
Expense Fund	3,340,152.18	
Health Insurance	1,784,877.65	
Interest on Income	318,313.69	
Prior Service Annuity Fund	(5,280,739.64)	
Total City Contributions		14,668,000.00
Ryan Case		2,079,604.60
Interest on Tax Income		281,888.14
Investment Income		
Interest on Bonds	33,151,723.86	
Dividends	8,692,381.85	
Income on Venture Capital	595,965.00	
Income on Real Estate	2,973,392.90	
Gain (Loss) on Sale of Bonds	(2,628,766.20)	
Gain (Loss) on Sale of Stocks	6,354,711.37	
Gain (Loss) on Real Estate	125,791.81	
Total Investment Income		49,265,200.59
Total Income Forwarded		$79,100,178.18

Exhibit B

EXPENDITURES FOR YEAR 1990

Total Income Forwarded			$79,100,178.18
Benefits			
Employees' Annuities	$23,449,216.35		
Spouses' Annuities	4,276,814.19		
Compensation Annuities	0.00		
Children	136,620.00		
Ordinary Disability (includes $202,235.84 DIL)	1,186,935.01		
Duty Disability (includes $508,519.95 DIL)	1,173,540.29		
Supplemental Annuities	26,086.56		
Annuitant Health Insurance	1,784,877.65		
Total Benefits	32,034,090.05		
Reciprocal Act Reimbursements	(4,906.10)		
Net Benefits Paid		$32,029,183.95	
Expense of Administration			
Salaries			
Regular Employees	348,843.97		
Health Care	67,315.87		
Insurance Premiums	1,777.68		
Services			
Actuarial Consulting	32,932.86		
Annuity Computation and Certification	99,480.39		
Employee Accounts and Data Processing	76,166.89		
Check Production	60,157.90		
Legal Expense	27,432.00		
Medical Expense	23,424.00		
Auditing	18,800.00		
Database System Development	48,260.00		
Consulting	4,000.00		
Public Education	9,000.00		
Conference and Association Expense	16,756.57		
Election Expense	939.80		
Printing and Stationery	12,006.35		
Office Supplies and Equipment	6,861.20		
Postage	23,585.75		
Rent and Electricity	112,803.05		
Telephone	3,405.13		
Depreciation Expense	15,409.94		
Miscellaneous	6,722.43		
Total Expenses		1,016,081.78	
Litigation Expense		68,362.92	
Refunds		3,064,232.05	
Investment Manager Fees		2,041,186.36	
Investment Custodian Fees		214,521.12	
Total Expenditures			38,433,568.18
Excess Income Over Expenditures			40,666,610.00
Net Change in Reserve for Loss of Collection and Taxes Receivable for Prior Years			13,344.68
Net Change in Reserve for Payables and Receivables			109,808.29
Increase in Net Assets for Year			$40,789,762.97

Laborers' and Retirement Board Employees' Annuity and Benefit Fund of Chicago

Comparative Analysis - Year 1990

Assets and Liabilities

COMPARATIVE ANALYSIS
ASSETS

	01/01/90	12/31/90	Increase (Decrease)
Cash			
Total Cash	$ (859,843)	$ 232,165	$ 1,092,008
Investments			
Bonds (Par Value)	373,551,766	391,873,835	18,322,069
Bond Premiums and Discounts	(12,340,402)	(17,161,744)	(4,821,342)
Common Stocks	217,381,351	236,185,846	18,804,495
Real Estate	40,547,888	43,535,141	2,987,253
Investment in Venture Capital	6,830,582	10,531,382	3,700,800
Accrued Bond Interest	5,836,070	5,735,115	(100,955)
Accrued Dividends	372,639	572,487	199,848
Accrued Real Estate Income	255,055	0	(255,055)
Total Investments	632,434,949	671,272,062	38,837,113
Accounts Receivable - Taxes			
Replacement Tax from State	3,210,000	3,173,000	(37,000)
Tax Extension	14,376,963	14,235,600	(141,363)
Less: Estimates for L/C	1,897,970	2,194,916	296,946
Net Taxes Receivable	15,688,993	15,213,684	(475,309)
Other Accounts Receivable			
Salary Deductions Accrued	649,454	656,192	6,738
Miscellaneous Employee Accounts	205,523	202,218	(3,305)
Miscellaneous Inactive Employee Accounts	34,105	31,939	(2,166)
Accrued From Ryan Settlement	0	1,663,348	1,663,348
Accrued Interest on Tax Income	0	88,313	88,313
Due from Broker	0	13,244	13,244
Total Other Accounts Receivable	889,082	2,655,254	1,766,172
Other Assets			
Furniture and Equipment	50,805	80,474	29,669
Accumulated Depreciation	(16,491)	(31,901)	(15,410)
Total Other Assets	34,314	48,573	14,259
Gross Ledger Assets	648,187,495	689,421,738	41,234,243
Less: Accounts Payable			
Investment Manager Fees Payable	258,896	285,002	26,106
Miscellaneous Employee Accounts	1,585,667	1,509,648	(76,019)
Professional Fees Payable	29,489	30,990	1,501
Former Child Annuitants Payable	0	492,892	492,892
Total Accounts Payable	1,874,052	2,318,532	444,480
Net Ledger Assets	$646,313,443	$687,103,206	$40,789,763

COMPARATIVE ANALYSIS

LIABILITIES AND FUND BALANCES

Liability Reserves	01/01/90	12/31/90	Increase (Decrease)
Annuity Payment Fund			
Employee Annuitants	$ 66,376,500	$ 71,794,981	$ 5,418,481
Spouse Annuitants	24,337,519	25,838,358	1,500,839
Spouses' Annuities Fixed	16,885,323	18,687,676	1,802,353
Total	107,599,342	116,321,015	8,721,673
Salary Deduction Fund Account			
Employees	111,388,282	116,656,318	5,268,036
Spouses of Employees	24,666,617	26,099,226	1,432,609
Total	136,054,899	142,755,544	6,700,645
City Contribution Fund Account			
Employees	103,732,163	108,493,681	4,761,518
Spouses of Employees	33,356,933	35,200,756	1,843,823
Compensation Annuities	4,158	4,350	192
Total	137,093,254	143,698,787	6,605,533
Other Reserves			
Supplemental Payment Reserve	73,351	77,264	3,913
Annuity Fund Account	(0)	(0)	(0)
Total	73,351	77,264	3,913
Prior Service Fund Account			
Employee Annuitants	145,109,149	162,744,485	17,635,336
Spouse Annuitants	11,221,595	19,527,750	8,306,155
Spouses' Annuities Fixed	9,003,135	10,896,718	1,893,583
Salary Deductions--Annuity Increase	10,617,100	11,256,330	639,230
Estimated Excess Liability	77,122,715	109,326,711	32,203,996
Total	253,073,694	313,751,994	60,678,300
Total Liabilities	633,894,540	716,604,604	82,710,064
Unfunded Obligations	12,418,903	(29,501,398)	(41,920,301)
Total Net Liabilities	$646,313,443	$687,103,206	$40,789,763

TAXES RECEIVABLE

December 31, 1990

Year	Uncollected Taxes 12/31/90	Estimate for Loss 12/31/89	Additional Est. Setup 12/31/90	Total Est. for Loss 12/31/90	Taxes Collectible 12/31/90
City					
1986	$ 489,546.71	$ (480,725.00)	$ (25,531.23)	$ (506,256.23)	$ (16,709.52)
1987	273,917.55	(268,439.00)	(14,980.00)	(283,419.00)	(9,501.45)
1988	569,380.89	(345,611.43)	(86,969.11)	(432,580.54)	136,800.35
1989	801,759.35	(611,600.00)	244,640.00	(366,960.00)	434,799.35
1990	12,088,000.00	0.00	(604,400.00)	(604,400.00)	11,483,600.00
Total	$14,222,604.50	$(1,706,375.43)	$(487,240.34)	$(2,193,615.77)	$12,028,988.73
Park					
1986	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
1987	0.00	0.00	0.00	0.00	0.00
1988	0.00	0.00	0.00	0.00	0.00
1989	995.29	(700.00)	0.00	(700.00)	295.29
1990	12,000.00	0.00	(600.00)	(600.00)	11,400.00
Total	$ 12,995.29	$ (700.00)	$ (600.00)	$ (1,300.00)	$ 11,695.29
Total City and Park					
	$14,235,599.79	$(1,707,075.43)	$(487,840.34)	$(2,194,915.77)	$12,040,684.02
	Replacement Tax from State			1990	3,173,000.00
					$15,213,684.02

Note: The loss on the 1990 tax levy was 5%. Due to the 100% collection of the personal property replacement tax, the overall loss is 4%. The statutory requirement of $15,273,000 is the sum of $12,088,000 plus $12,000 plus $3,173,000.

MEMBERSHIP STATISTICS

Year 1990

	Number at Beginning of Year	Increases	Decreases	Number at End of Year
A. Changes in Active Participants				
Male	4,263	258	351	4,170
Female	329	43	44	328
Total	4,592	301	395	4,498
B. Changes in Inactive Participants				
Male	1,431	383	232	1,582
Female	93	42	32	103
Total	1,524	425	264	1,685
C. Changes in Annuitants and Beneficiaries				
Employee Annuitants	2,384	152	145	2,391
Spouse Annuitants	1,261	82	64	1,279
Children's Annuities	80	19	13	86
Ordinary Disability Benefits	79	99	108	70
Duty Disability Benefits	138	422	415	145
Reciprocal Employee	92	5	7	90
Spouse	34	5	1	38
Widow/Widower Compensation Annuities	1	0	0	1
Total	4,069	784	753	4,100
D. Ratio of Active Participants to Annuitants and Beneficiaries	1.13			1.10

SALARY AND AGE STATISTICS
Year 1990

Ages and Salaries as of December 31, 1990

Male

Age	Number	Annual Salaries	Average Annual Salaries
Without DOB	2	$ 72,384	$36,192
Under 20	3	65,232	21,744
20 - 24	61	1,722,576	28,239
25 - 29	295	9,219,984	31,254
30 - 34	597	19,623,408	32,870
35 - 39	692	23,058,696	33,322
40 - 44	549	18,629,952	33,934
45 - 49	451	15,339,552	34,012
50 - 54	475	16,136,568	33,972
55 - 59	429	14,021,688	32,685
60 - 64	368	12,128,928	32,959
65 - 69	169	5,428,128	32,119
70 +	79	2,628,144	33,268
Active	4,170	$138,075,240	$33,112

Female

Age	Number	Annual Salaries	Average Annual Salaries
Without DOB	0	$ 0	$ 0
Under 20	0	0	0
20 - 24	17	440,712	25,924
25 - 29	27	810,648	30,024
30 - 34	41	1,115,640	27,211
35 - 39	33	935,184	28,339
40 - 44	25	727,752	29,110
45 - 49	19	512,928	26,996
50 - 54	27	610,800	22,622
55 - 59	36	690,024	19,167
60 - 64	57	961,080	16,861
65 - 69	35	584,352	16,696
70 +	11	148,344	13,486
Active	328	$ 7,537,464	$22,980
Total Male and Female	4,498	$145,612,704	$32,373

SALARY AND AGE STATISTICS

Year 1990

Ages at Entrance

	Male		Female	
Age	**Number**	**Annual Salaries**	**Number**	**Annual Salaries**
Under 25	1,510	$ 51,805,008	48	$1,329,720
25 - 29	884	29,425,320	51	1,250,808
30 - 34	632	20,433,480	74	1,726,992
35 - 39	388	12,476,448	76	1,580,760
40 - 44	345	11,031,120	42	862,824
45 - 49	216	6,811,128	23	496,344
50 - 54	112	3,459,768	11	222,384
55 - 59	66	2,093,952	2	48,240
60 and over	15	466,632	1	19,392
Without record	2	72,384	0	0
Totals	4,170	$138,075,240	328	$7,537,464

	Male	Female
Average Annual Salary	$33,112	$22,980
Average Attained Age	45.0	47.9
Average Service	15.0	13.7
Average Age at Entrance	30.0	34.2

AGE AND SERVICE DISTRIBUTION
Year 1990

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

	Years of Service									
Age	Under 1	1 - 4	5 - 9	10-14	15-19	20-24	25-29	30-34	35+	Total
00-20	1	2								3
	$19,392	$22,920								$21,744
20-24	15	57	6							78
	$27,136	$27,133	$34,948							$27,734
25-29	15	129	119	59						322
	$27,966	$28,551	$32,852	$34,214						$31,151
30-34	14	112	159	306	47					638
	$27,341	$27,835	$33,034	$33,782	$35,090					$32,506
35-39	7	118	124	275	185	16				725
	$27,507	$28,601	$33,509	$32,998	$35,553	$38,723				$33,095
40-44	7	59	92	177	142	91	6			574
	$29,808	$28,741	$31,995	$34,494	$34,851	$35,522	$37,168			$33,724
45-49	6	32	62	108	91	78	80	13		470
	$22,004	$29,518	$33,622	$32,444	$33,686	$35,790	$35,442	$38,073		$33,729
50-54	2	24	42	100	63	81	129	59	2	502
	$19,392	$28,613	$30,230	$31,304	$32,671	$34,407	$33,882	$39,550	$36,156	$33,361
55-59	2	24	35	92	71	63	95	54	29	465
	$20,028	$28,766	$30,429	$32,064	$31,911	$32,414	$31,292	$31,541	$33,885	$31,638
60-64	1	4	20	56	65	68	87	56	68	425
	$19,392	$26,160	$31,728	$32,183	$30,586	$30,821	$25,906	$32,433	$34,930	$30,800
65-69		2	9	34	32	41	44	14	28	204
		$21,780	$34,680	$31,069	$32,804	$28,256	$24,203	$29,544	$32,631	$29,473
70+			1	12	17	14	15	14	17	90
			$35,880	$34,698	$31,951	$29,350	$25,208	$33,381	$30,865	$30,850
W/O DOB		2								2
		$36,192								$36,192
Number	70	565	669	1,219	713	452	456	210	144	4,498
Salary	$26,574	$28,329	$32,693	$33,138	$33,865	$33,491	$30,918	$34,423	$33,810	$32,373
Age										45.2
Service										14.9

AGE AND SERVICE DISTRIBUTION

Year 1990

Age and Service Grouping (Showing the Number of Inactive Members, of Males and Females Combined)

	Years of Service									
Age	Under 1	1 - 4	5 - 9	10-14	15-19	20-24	25-29	30-34	35+	Total
00-20	4	1								5
20-24	30	24	1							55
25-29	195	75	8	3						281
30-34	294	84	23	26	4					431
35-39	160	76	22	23	7	1				289
40-44	94	52	10	13	5	2				176
45-49	48	31	11	7	5	6	2			110
50-54	36	24	9	10	5	4	2	2		92
55-59	35	21	7	2	5	6	1	3		80
60-64	27	15	9	7	5	5	3	2	4	77
65-69	10	18	7	2	3		4	3	3	50
70+	7	6	5	9	4	2	2	2		37
W/O DOB	1	1								2
Number	941	428	112	102	43	26	14	12	7	1,685
Age										39.4
Service										3.3

ANNUITANTS CLASSIFIED BY AGE AS OF DECEMBER 31, 1990

Retirement Annuities

Age	Male Number	Annual Payments	Average Annual Payments	Female Number	Annual Payments	Average Annual Payments
20 - 24						
25 - 29						
30 - 34						
35 - 39	1	$ 4,200.00	$ 4,200.00			
40 - 44	3	12,600.00	4,200.00			
45 - 49	2	8,400.00	4,200.00			
50 - 54						
55 - 59	48	782,463.48	16,301.32	4	$ 45,722.76	$11,430.69
60 - 64	228	3,998,184.84	17,535.90	30	224,842.80	7,494.76
65 - 69	408	5,843,576.04	14,322.49	114	740,775.60	6,498.03
70 - 74	444	5,195,032.32	11,700.52	207	1,233,432.36	5,958.61
75 - 79	320	3,066,494.52	9,582.80	206	1,054,889.52	5,120.82
80 - 84	156	1,201,223.76	7,700.15	131	586,769.52	4,479.16
85 - 89	54	340,977.72	6,314.40	66	305,343.36	4,626.41
90 - 94	13	79,499.52	6,115.35	31	134,464.92	4,337.58
95 - 99	4	18,140.40	4,535.10	9	38,137.44	4,237.49
100-105	1	3,000.00	3,000.00	1	4,200.00	4,200.00
Totals	1,682	$20,553,792.60	$12,219.85	799	$4,368,578.28	$ 5,467.56
Average Age			71			76

Spouse Annuities (Not Including Compensation)

Age	Male Number	Annual Payments	Average Annual Payments	Female Number	Annual Payments	Average Annual Payments
20 - 24						
25 - 29				1	$ 3,600.00	$ 3,600.00
30 - 34				3	10,800.00	3,600.00
35 - 39				6	21,600.00	3,600.00
40 - 44				8	29,244.60	3,655.58
45 - 49				25	90,194.64	3,607.79
50 - 54				44	187,982.16	4,272.32
55 - 59	1	$ 3,600.00	$ 3,600.00	74	324,116.28	4,379.95
60 - 64				135	582,538.20	4,315.10
65 - 69	2	7,200.00	3,600.00	216	937,000.56	4,337.97
70 - 74	4	14,400.00	3,600.00	277	1,117,082.76	4,032.79
75 - 79	9	32,400.00	3,600.00	254	972,801.12	3,829.93
80 - 84	3	10,800.00	3,600.00	156	589,234.56	3,777.14
85 - 89				69	249,795.96	3,620.23
90 - 94				25	90,000.00	3,600.00
95 - 99				3	10,800.00	3,600.00
100-105				2	7,200.00	3,600.00
Totals	19	$68,400.00	$3,600.00	1,298	$5,223,990.84	$4,024.65
Average Age			74			71

Exhibit I

HEALTH INSURANCE SUPPLEMENT
CLASSIFIED BY AGE AS OF DECEMBER 31, 1990

Retirement Annuitants

Age	Single Coverage	Family Coverage	Total Participants	Total Non-Part.	Total Annuitants	% Part/ Annuitants
Less 30	0	0	0	0	0	N/A
30 - 39	0	0	0	1	1	N/A
40 - 49	2	0	2	3	5	40.00%
50 - 59	12	22	34	18	52	65.38
60 - 69	250	346	596	184	780	76.41
70 - 79	432	342	774	403	1,177	65.76
80 - 89	153	75	228	179	407	56.02
Over 90	19	1	20	39	59	33.90
Total	868	786	1,654	827	2,481	66.67%

Spouse Annuitants[1]

Age	Single Coverage	Family Coverage	Total Participants	Total Non-Part.	Total Annuitants	% Part/ Annuitants
Less 30	0	1	1	0	1	100.00%
30 - 39	2	3	5	4	9	55.56
40 - 49	5	7	12	21	33	36.36
50 - 59	51	6	57	63	120	47.50
60 - 69	171	6	177	175	352	50.28
70 - 79	213	5	218	326	544	40.07
80 - 89	68	0	68	160	228	29.82
Over 90	5	0	5	25	30	16.67
Total	515	28	543	774	1,317	41.23%

[1] Does not include widow compensation.

NEW ANNUITIES GRANTED DURING 1990

	Male Annuitants	Female Annuitants	Widows/ Widowers of Deceased Employees	Widows/ Widowers of Deceased Annuitants
Number Retired	123[1]	32	21	66
Average Age Attained	64.4	65.6	52.1	71.5
Average Length of Service	28.7	26.0	19.5	N/A
Average Annual Salary (4 out of 10)	$28,584	$14,556	N/A	N/A
Average Annual Final Salary	$31,884	$15,300	$28,056	N/A
Total Annual Annuity	$2,175,727.56	$262,727.28	$118,488.48	$320,654.04
Average Annual Annuity	$17,688.84	$8,210.23	$5,642.31	$4,858.39
Total Liability (8.0% UP-1984)	$23,648,830	$3,031,885	$1,313,847	$2,627,571
Average Liability	$192,266	$94,747	$62,564	$39,812
Total Cost for Income Tax Purposes	$2,235,152	$261,882	$253,779	N/A
Average Cost	$18,172	$8,184	$12,085	N/A
Expected Future Lifetime (years)	15.35	18.14	28.62	14.05
Payback Period (years)	1.03	1.00	2.14	N/A
Replacement Ratio	55.5%	53.7%	N/A	N/A
Liability/Salary	6.03	5.54	N/A	N/A

[1] Of 125 male retirees, 123 were still receiving annuity as of December 31, 1990.

RETIREES AND BENEFICIARIES BY TYPE OF BENEFIT

Last 11 Years

Year	Employee Annuitants	Spouse Annuitants[1]	Child Annuities	Ordinary Disability	Duty Disability	Widow Comp.	Reciprocal Employees	Reciprocal Widows
1980	2,337	1,155	139	152	25	2	42	6
1981	2,420	1,154	137	136	26	2	49	11
1982	2,419	1,175	109	113	25	2	56	11
1983	2,363	1,198	112	110	57	3	56	13
1984	2,386	1,213	96	111	77	2	83	15
1985	2,343	1,191	104	108	110	2	76	19
1986	2,406	1,205	93	119	155	2	81	21
1987	2,416	1,209	84	82	152	2	82	31
1988	2,405	1,232	79	90	172	1	89	33
1989	2,384	1,261	80	79	138	1	92	34
1990	2,391	1,279	86	70	145	1	90	38

[1] Includes reversionary

AVERAGE EMPLOYEE RETIREMENT BENEFITS PAYABLE

Year Ended	Average Annual Retirement Benefit	Percent Increase	Average Annual Benefit at Retirement Current Year	Percent Increase	Average Current Age of Retirees	Average Age at Retirement Current Year	Average Years of Service at Retirement Current Year
1979	$3,581.85				71.8	65.1	23.1
1980	3,765.74	5 %	$5,250.68		71.8	65.4	21.4
1981	4,111.60	9	5,756.53	10%	71.0	64.9	22.3
1982	4,433.95	8	7,129.16	24	72.1	64.6	23.8
1983	4,774.89	8	7,520.11	5	72.1	65.3	24.0
1984	5,315.46	11	9,226.74	23	72.7	65.9	25.3
1985	5,867.92	10	10,456.00	13	72.4	64.8	25.5
1986	6,730.00	15	12,485.10	19	72.4	64.9	27.0
1987	7,934.57	18	13,822.53	11	72.3	65.0	28.0
1988	8,516.46	7	13,047.88	(6)	72.6	65.0	27.5
1989	9,035.92	6	12,581.68	(4)	72.6	64.7	26.4
1990	10,045.29	11	15,731.97	25	72.6	64.6	28.1

HISTORY 1965 TO 1990

History of Average Annual Salaries - Entire Fund

Year End	Members in Service[1]	Percent Increase	Total Salary	Percent Increase	Average Salary	Percent Increase	Actuarial Salary Assumption	CPI Chicago
1965	7,936	0.9%	$45,872,832	3.2%	$5,780	2.3%	1.00%	1.4%
1966	7,995	0.7	47,598,552	3.8	5,954	3.0	1.00	2.9
1967	8,102	1.3	52,268,304	9.8	6,451	8.3	1.75	2.7
1968	7,891	(2.6)	56,165,136	7.5	7,118	10.3	1.75	4.3
1969	7,777	(1.4)	60,523,296	7.8	7,782	9.3	1.75	5.4
1970	7,220	(7.2)	62,916,768	4.0	8,714	12.0	1.75	5.6
1971	6,864	(4.9)	66,142,320	5.1	9,636	10.6	3.50	3.9
1972	6,971	1.6	69,950,692	5.8	10,035	4.1	3.50	2.9
1973	6,752	(3.1)	73,108,848	4.5	10,828	7.9	3.50	6.2
1974	6,638	(1.7)	78,526,728	7.4	11,830	9.3	5.00	10.7
1975	7,032	5.9	89,276,280	13.7	12,696	7.3	5.00	7.9
1976	6,811	(3.1)	90,487,008	1.4	13,285	4.6	5.00	4.8
1977	6,752	(0.9)	98,029,296	8.3	14,519	9.3	5.00	6.4
1978	6,613	(2.1)	103,399,152	5.5	15,636	7.7	5.00	8.6
1979	6,175	(6.6)	105,825,264	2.3	17,138	9.6	5.00	12.5
1980	5,847	(5.3)	108,854,496	2.9	18,617	8.6	5.00	14.4
1981	5,765	(1.4)	118,054,512	8.5	20,478	10.0	5.00	9.6
1982	5,970	3.6	134,293,920	13.8	22,495	9.8	6.00	6.8
1983	5,424	(9.1)	131,355,840	(2.2)	24,218	7.7	6.00	4.0
1984	5,341	(1.5)	131,327,856	(0.0)	24,589	1.5	6.00	3.8
1985[3]	5,138	(3.8)	125,594,688	(4.4)	24,444	(0.6)	7.00	3.8
1986	4,844	(5.7)	128,601,816	2.4	26,549	8.6	6.00	2.0
1987	4,873	0.6	135,453,096	5.3	27,797	4.7	6.00	4.1
1988	4,725	(3.0)	132,685,608	(2.0)	28,082	1.0	6.00	3.9
1989	4,592	(2.8)	142,024,296	7.0	30,929	10.0	6.00	5.1
1990	4,498	(2.0)	145,612,704	2.5	32,373	4.7[2]	6.00	5.4
Average Increase (Decrease) for the Last 5 Years		(2.6)%		3.0%		5.8%		4.1%
Average Last 10 Years		(2.5)%		3.1%		5.7%		4.9%

[1] Includes those members who were on disability.

[2] Average annual increase in salary 1965-1990, 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.

HISTORY OF TOTAL ANNUITIES

Employee Annuitants (Male and Female)

Year End	Number of Annuitants	Total Annuities	Average Annuities
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
1989	2,476	22,372,931	9,036
1990	2,481	24,922,371	10,045

Spouse Annuitants (Not Including Compensation)

Year End	Number of Annuitants	Total Annuities	Average Annuities
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
1989	1,295	4,039,290	3,119
1990	1,317	5,292,391	4,019

Exhibit O

HISTORY OF INVESTMENT YIELDS

	Book Value							
	Investment Yield on Total Assets				Investment Yield on Invested Assets			
	Excluding		Including		Excluding		Including	
Year	Gains/Losses		Gains/Losses		Gains/Losses		Gains/Losses	
1972	5.47%		4.79%		5.70%		5.00%	
1973	5.76		3.60		6.03		3.77	
1974	6.58		3.55		6.98		3.76	
1975	7.25		6.17		7.73		6.58	
1976	7.23		6.98		7.65		7.39	
1977	7.01		7.00		7.35		7.35	
1978	6.61		5.34		6.97		5.62	
1979	7.38		6.61		7.82		7.00	
1980	7.69		5.66		8.20		6.03	
1981	8.46		3.99		9.11		4.29	
1982	9.88		7.64		10.47		8.09	
1983	9.37	9.30%[1]	11.14	11.07%[1]	9.79	9.72%[1]	11.64	11.57%[1]
1984	9.67	9.58[1]	8.88	8.79[1]	10.12	10.03[1]	9.30	9.21[1]
1985	8.89	8.72[1]	16.34	16.17[1]	9.27	9.10[1]	17.07	16.89[1]
1986	7.44	7.14[1]	16.06	15.74[1]	7.72	7.41[1]	16.69	16.34[1]
1987	6.50	6.20[1]	11.90	11.59[1]	6.71	6.40[1]	12.29	11.96[1]
1988	6.81	6.55[1]	7.78	7.52[1]	7.00	6.73[1]	7.99	7.72[1]
1989	7.06	6.71[1]	11.50	11.14[1]	7.21	6.85[1]	11.75	11.38[1]
1990	7.05	6.69[1]	7.67	7.31[1]	7.22	6.85[1]	7.85	7.48[1]
5-Yr. Avg.	6.97%	6.66%	10.98%	10.66%	7.17%	6.85%	11.31%	10.98%

					Market Value[1]	
Year	Actuarial Assumption	Average Insurance Company	30 Year Treasury	3-Month Treasury Bills	Investment Yield on Total Assets	Investment Yield on Invested Assets
1972	4.50%	5.56%	N/A	4.071%		
1973	5.00	5.88	N/A	7.041		
1974	5.00	6.25	N/A	7.886		
1975	5.00	6.36	N/A	5.838		
1976	6.00	6.55	N/A	4.989		
1977	6.00	6.89	N/A	5.265		
1978	6.00	7.31	8.49%	7.221		
1979	6.00	7.73	9.29	10.041		
1980	6.00	8.02	11.30	11.506		
1981	6.00	8.57	13.44	14.029		
1982	6.75	8.91	12.76	10.686		
1983	6.75	8.96	11.18	8.520		
1984	6.75	9.45	12.39	9.570	7.35%[1]	7.68%[1]
1985	7.00	9.63	10.79	7.470	22.41[1]	23.37[1]
1986	7.50	9.35	7.80	5.970	12.33[1]	12.77[1]
1987	7.50	9.10	8.59	5.820	3.67[1]	3.78[1]
1988	7.50	9.03	8.96	6.690	10.84[1]	11.09[1]
1989	8.00	9.10	8.45	8.120	16.95[1]	17.32[1]
1990	8.00	N/A	8.61	7.510	2.46[1]	2.52[1]
5-Yr. Avg.		9.24%	8.48%	6.822%	9.25%	9.50%

[1]Investment income is net of investment expense. Yields for illustration only; not valid for comparison.
Notes: Yield = Investment Income/.5(Beginning Assets + End Assets - Investment Income)
Bonds valued at amortized value, stocks at cost. Market values considered only in Market Value section.

LEGISLATIVE CHANGES

1984 Session

- Direct deposit.
- Illinois Public Employees' Pension Laws Commission abolished.

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 January 1, 1988.
- Provide for certain "Good Government" initiatives.
- Remove chronic alcoholism restriction for ordinary disability.

LEGISLATIVE CHANGES

1988 Session

- No changes.

1989 Session

SB 95 - Signed August 23, 1989. Changed the amount of fund paid health insurance "supplement" from January 1, 1988 until December 31, 1992 to $65 per month for each annuitant not qualified to receive Medicare benefits (and $35 if qualified) and from January 1, 1993 until December 31, 1997 the amounts are $75 and $45, respectively. Widows will now be supplemented and employee annuitants will no longer be required to meet the age 65 and 15 years of service requirements. The City will be required to pay 50% of the aggregated cost of health care claims for the retired group under all health care plans offered by the City. A procedure was established for the City to determine, with the help of an independent actuary, the aggregate cost of claims and premiums for each calendar year from 1989 through 1997 for the retired group.

HB 332 - Signed August 23, 1989. Eliminated age related discriminatory provisions as required by Federal law or regulation. Provided for Age Discrimination changes effective January 1, 1988 to eliminate age 65 requirements for marriage in service and children's benefits, provided contributions after age 65 for spouse benefits, provided employee accumulation annuities be computed after age 70, provided employee and spouse accumulation annuities not be "fixed" at age 65, provided no age 70 restriction on disability benefits, provided for active members over age 65 that their accounts be "unfixed" and accumulate interest until the date of withdrawal, and provided that there be no age 70 membership limitation and removed the permitted "no spouse" refund at age 65.

- Eliminated the $300, $400 or $500 maximum spouse annuity limitation for spouses of employees who retired before January 23, 1987 but die after January 23, 1987.
- Allow for local labor officials on a leave of absence from the Fund to contribute for their current service as a local labor official.

1990 Session

SB 136 - Amends Chapter 120, Paragraph 671 of the Revenue Act to provide for a separate listing on the tax bill of the dollar amount of tax due from the person assessed which is allocable to a tax levied under the Illinois Pension Code, or any other tax levied by a municipality or township for public pension or retirement purposes. Effective January 1, 1990.

LEGISLATIVE CHANGES

SB 1951
- Signed January 14, 1991. Beginning for withdrawals on or after January 1, 1991, annuity payments will be made as of the first day of the calendar month during the annuity payment period.
- 2.2% benefit accrual rate for employees retiring on or after July 1, 1990.
- No discount for employee age less than 60 if employee has at least 30 years of service and retires on or after July 1, 1990.
- Minimum employee annuity of $350 and minimum spouse of $300 under certain conditions.
- Spouses and widows of employees retiring or dying in service on or after July 1, 1990 with 20 or more years of service at age 55 or over will be eligible for half of the employee's annuity discounted .25% for each month the spouse or widow is less than 55.
- Retroactive eligibility for 35 years no discount and spouse and widow annuities computed as half of employee annuity.
- Refund in lieu of $300 annuity.
- Disability benefit retroactive one year from application; duty disability deductions in lieu for heart attack or stroke; 10% increase in duty disability benefit January 1 of the sixth year.
- Collateral for securities lending expanded.
- Fractional payment for refund repayment and temporary service authorized. Credit established by fractional payment shall be earliest service for which credit may be established.

HISTORY OF RECOMMENDED EMPLOYER MULTIPLES

Year of Report	Statutory Multiple	Normal Cost Plus Interest	Normal Cost Plus 40 Year Amortization	Normal Cost Plus 40 Year % of Salary Amortization
1974	1.235	1.48	---	---
1975	1.280	1.33	---	---
1976[a]	1.325	1.54	1.62	1.24
1977	1.370	1.53	1.62	1.24
1978[a]	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
1982[a]	1.370	1.34	1.40	1.03
1983[b]	1.370	1.54	1.60	1.21
1984	1.370	1.58	1.63	1.30
1985[a, b]	1.370	1.60	1.64	1.33
1986[a, b]	1.370	0.99	1.00	0.94
1987[a, b]	1.370	1.13	1.15	1.03
1988[a]	1.370	1.03	1.04	0.98
1989[a, b]	1.370	0.56	0.56	0.56
1990[a, b]	1.370	1.01	1.02	0.93

[a] Change in actuarial assumptions
[b] Change in benefits

HISTORY OF FINANCIAL INFORMATION

History of Change in Unfunded Liability

Year	Salary Scale	Investment	Contribution	Amendments
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
1989	15,101,648	(23,284,941)	(6,570,202)	20,350,471
1990	(5,117,094)	2,118,850	(12,015,013)	42,423,925
Totals	$ 15,563,073	$(138,778,712)	$(29,393,700)	$153,254,567

Year	Assumptions	Miscellaneous	Total
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)
1989	(39,817,812)	2,260,506	(31,960,330)
1990	10,229,489	4,280,144	41,920,301
Totals	$(74,831,317)	$ 13,219,715	$(60,966,374)

Over the last 15 years, the unfunded liability has decreased by $61.0 million. The biggest component of increase has been benefit changes which account for $153.2 million; followed by salary increase over the assumed amount of $15.6 million; followed by miscellaneous changes due to actuarial experience (retirement, disability, death and withdrawal) of $13.2 million. The components which reduced the unfunded liability over the same period were investment earnings in excess of the assumed amount of $138.8 million; followed by changes in actuarial assumptions of $74.8 million; and more than adequate contributions (on the interest only basis) of $29.4 million.

Investment earnings in excess of the assumed amount have been the general trend; however, this was not the case this year. 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.

HISTORY OF FINANCIAL INFORMATION

Accrued and Unfunded Liabilities

Year End	Accrued Liability	Assets at Book Value	Funded Ratio	Unfunded Accrued Liability (Surplus)	Payroll	Unfunded Accrued % Payroll (Surplus)
1971[a]	$158,815,569	$110,423,040	69.5%	$ 48,392,529	$ 66,142,320	73 %
1972	172,160,657	120,072,655	69.7	52,088,002	69,950,692	74
1973	197,782,050	128,624,035	65.0	69,158,015	73,108,848	95
1974	215,636,093	137,709,821	63.9	77,926,272	78,526,728	99
1975	242,216,859	151,749,085	62.7	90,467,774	89,276,280	101
1976[a]	252,410,689	168,219,982	66.6	84,190,707	90,487,008	93
1977	277,111,671	186,428,465	67.3	90,683,205	98,029,296	93
1978[a]	301,135,468	202,643,520	67.3	98,491,948	103,399,152	95
1979	323,368,034	220,810,778	68.3	102,557,256	105,825,264	97
1980	345,364,820	238,242,772	69.0	107,122,048	108,854,496	98
1981	367,980,498	254,234,605	69.1	113,745,893	118,054,512	96
1982[a]	391,353,993	281,708,565	72.0	109,645,428	134,293,920	82
1983[b]	444,711,069	321,404,078	72.3	123,306,991	131,355,840	94
1984	462,455,964	356,809,111	77.2	105,646,853	131,327,856	80
1985[a, b]	495,844,974	420,554,173	84.8	75,290,801	125,594,688	60
1986[a, b]	507,984,848	489,403,006	96.3	18,581,842	128,601,816	14
1987[a, b]	583,284,026	546,947,052	93.8	36,336,974	135,453,096	27
1988[a]	604,440,661	584,899,234	96.8	19,541,427	132,685,608	15
1989[a, b]	633,894,540	646,313,443	101.9	(12,418,903)	142,024,296	(9)
1990[a, b]	716,604,604	687,103,206	95.9	29,501,398	145,612,704	20

Solvency (Termination) Test

Year End	Retired Liability	Active Member Salary Deductions	Total Termination Liability	Assets at Book Value	Termination Cost (Excess)	Quick Ratio Assets to Termination Liability
1975	$ 56,403,573	$ 63,162,106	$119,565,679	$151,749,085	$ (32,183,406)	127 %
1976[a]	61,271,047	68,189,205	129,460,252	168,219,982	(38,759,730)	130
1977	67,977,467	73,608,310	141,585,777	186,428,466	(44,842,689)	132
1978[a]	77,603,101	78,072,062	155,675,163	202,643,520	(46,968,357)	130
1979	86,918,802	83,057,007	169,975,809	220,810,778	(50,834,969)	130
1980	97,598,923	85,989,360	183,588,283	238,242,772	(54,654,489)	130
1981	107,291,048	88,378,748	195,669,796	254,234,605	(58,564,809)	130
1982[a]	113,743,284	94,516,563	208,259,847	281,708,565	(73,448,718)	135
1983[b]	128,901,825	106,730,627	235,632,452	321,404,078	(85,771,626)	136
1984	142,713,639	111,888,474	254,602,113	356,809,111	(102,206,998)	140
1985[a, b]	158,514,452	117,882,073	276,396,525	420,554,173	(144,157,648)	152
1986[a, b]	179,881,434	122,432,246	302,314,080	489,403,006	(187,088,926)	162
1987[a, b]	215,483,599	126,554,299	342,037,898	546,947,052	(204,909,154)	160
1988[a]	229,024,543	133,793,756	362,818,299	584,899,234	(222,080,935)	161
1989[a, b]	241,519,125	143,445,325	384,964,450	646,313,443	(261,348,993)	168
1990[a, b]	271,401,625	150,398,932	421,800,557	687,103,206	(265,302,649)	163

[a] Change in valuation assumptions
[b] Change in benefits
Quick ratio is defined as assets divided by the termination liability.

HISTORY OF FINANCIAL INFORMATION

Vested (Termination) Liability Test

Year Fund	Vested Liability	Assets at Book Value	Unfunded Vested Liability (Surplus)	Vested Funded Ratio
1982	$368,579,867	$281,708,565	$86,871,302	76.43%
1983	413,979,589	321,404,078	92,575,411	77.64
1984	434,396,250	356,809,111	77,587,139	82.14
1985	452,742,177	420,554,173	32,188,004	92.89
1986	485,169,186	489,403,006	(4,233,820)	100.87
1987	536,192,096	546,947,052	(10,754,956)	102.01
1988	558,761,115	584,899,234	(26,138,119)	104.68
1989	594,007,120	646,313,443	(52,306,326)	108.81
1990	658,926,727	687,103,206	(28,176,479)	104.28

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, 1990 was $145,612,704. At December 31, 1990 the Laborers' Plan membership consisted of:

Retirees and beneficiaries currently receiving benefits (includes disabilities)	4,100
Terminated employees entitled to benefits or a refund of contributions but not yet receiving them	1,685
Current employees	4,498

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 2.2% per year service 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 if years of service are less than 30. 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% 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.

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 non-vested 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, 1990. Significant actuarial assumptions used in the valuation for 1990 include: (a) a rate of return on the investment of present and future assets of 8% per year (net of investment expense) compounded annually; (b) projected salary increases of 4% per year compounded annually, attributable to inflation; (c) additional projected salary increase of 2% per year, attributable to seniority/merit; and (d) post-retirement benefit increases of 3% per year (not compounded) for employee annuitants age 60 and over. The retirement rates have been changed to reflect anticipated earlier retirements for those employees under age 60 with 30 years of service.

At December 31, 1990, the excess of assets over the pension benefit obligation was $50,075,090. At December 31, 1989, this excess was $77,562,956.

Pension Benefit Obligation (PBO)	**1989**	**1990**
APV of Credited Projected Benefits		
Payable to Retirees and Beneficiaries	$241,519,125	$271,401,625
Current Employees:		
Accumulated Employee Contributions	143,445,325	150,398,932
Payable to Vested and Non-Vested Current Employees	183,786,037	215,227,559
Total APV	568,750,487	637,028,116
Net Assets Available for Benefits, at Cost (Market Value $687,485,749; $698,132,633)	646,313,443	687,103,206
Assets Over APV (Excess)	$(77,562,956)	$(50,075,090)
Percentage Funded	113.64%	107.86%
Surplus APV as Percent of Payroll	(54.61)	(34.39)

GASB DISCLOSURE

Current year changes in the actuarial assumptions and benefit provisions are reflected in the December 31, 1990 pension benefit obligation shown above. The changes in actuarial assumptions increased the pension benefit obligation by $10,955,711. The changes in benefits increased the pension benefit obligation by $36,975,139.

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 1990 (based on a 1990 multiple of 1.37), the City contributed (after tax levy losses of 4%) $17,029,493 or 11.99% of payroll. For 1990, the employee contributions were $12,805,486 or 9.02% of payroll. As the current cost requirement for the entry age normal method plus the requirement for interest only on the unfunded liability was 12.55% of payroll, an excess of 8.46% of payroll or $12,015,014 was contributed. Such contribution is applied to amortize the unfunded liability.

The annual actuarial contribution to the Fund for 1990 (based on normal cost plus interest only basis) increased by $1,109,061 because of the change in actuarial assumptions (investment return) and increased by $2,587,165 because of the changes in benefits.

It is estimated for 1991 that contributions will again more than meet the standard. If the excess of contributions continues as in 1990, the unfunded liability will be amortized over about 5 years. Consideration should be given to the steady decline in membership.

Exhibit S

GASB DISCLOSURE
Annual Actuarial Requirements
Actuarial Recommended Contribution (Employer and Employee)
Normal Cost Plus Various Amortization Methods

	A	B	C	D	A	B	C	D
Year	Normal Cost	NC Plus Interest	NC Plus ERISA 40-Year Amortization	NC Plus Increasing % of Salary	Expressed as a Percentage of Salary Beginning of Year			
1981	$18,591,872	$25,019,195	$25,711,368	$22,699,461	17.08%	22.98%	23.62%	20.85%
1982	17,061,001	23,885,754	24,620,727	21,422,580	14.45	20.23	20.86	18.15
1983[a]	17,083,585	24,484,651	25,070,322	21,442,931	12.72	18.23	18.67	15.97
1984[b]	17,764,567	25,818,914	26,456,281	22,731,331	13.52	19.66	20.14	17.31
1985	19,299,995	26,200,791	26,746,874	23,555,414	14.70	19.95	20.37	17.94
1986[a,b]	19,870,609	24,965,655	25,330,252	22,617,955	15.82	19.88	20.17	18.01
1987[a,b]	18,826,921	20,171,065	20,249,927	19,681,589	14.64	15.68	15.75	15.30
1988[a,b]	20,008,465	22,636,952	22,791,167	21,679,777	14.77	16.71	16.83	16.01
1989	19,803,585	21,217,142	21,300,076	20,702,389	14.93	15.99	16.05	15.60
1990[a,b]	17,819,965	17,819,965	17,819,965	17,819,965	12.55	12.55	12.55	12.55
1991[a,b]	20,777,427	23,048,446	23,158,027	22,235,069	14.27	15.83	15.90	15.27

Actual Employer and Employee Contribution

	E	F	E	F
Year	Employer	Employee	Expressed as a Percentage of Salary Beginning of Year	
1981	$12,392,694	$10,522,389	11.38%	9.67%
1982	12,589,417	11,546,286	10.66	9.78
1983[a]	13,681,225	11,608,537	10.19	8.64
1984[b]	14,996,619	11,531,243	11.42	8.78
1985	15,035,039	11,569,775	11.45	8.81
1986[a,b]	14,765,250	11,691,095	11.76	9.31
1987[a,b]	14,745,709	11,774,209	11.47	9.16
1988[a,b]	15,157,663	11,740,621	11.19	8.67
1989[a]	15,257,738	12,529,606	11.50	9.44
1990[a,b]	17,029,493	12,805,486	11.99	9.02
1991[a,b] est	15,736,320	12,377,080	10.81	8.50

Deficiency (Excess) in Annual Contribution

	G	H	I	G	H	I
Year	NC Plus Interest	NC Plus ERISA 40-Year Amortization	NC Plus Increasing % of Salary	Expressed as a Percentage of Salary Beginning of Year		
1981	$ 2,104,112	$ 2,796,285	$ (215,622)	1.93%	2.57%	(0.20)%
1982	(249,949)	485,024	(2,713,123)	(0.21)	0.41	(2.30)
1983[a]	(805,111)	(219,440)	(3,846,831)	(0.60)	(0.16)	(2.86)
1984[b]	(708,948)	(71,581)	(3,796,531)	(0.54)	(0.05)	(2.89)
1985	(404,023)	142,060	(3,049,400)	0.31	0.11	(2.32)
1986[a,b]	(1,490,690)	(1,126,093)	(3,838,390)	(1.19)	(0.90)	(3.06)
1987[a,b]	(6,348,853)	(6,269,991)	(6,838,329)	(4.94)	(4.88)	(5.32)
1988[a,b]	(4,261,332)	(4,107,117)	(5,218,507)	(3.15)	(3.03)	(3.85)
1989[a]	(6,570,202)	(6,487,268)	(7,084,955)	(4.95)	(4.89)	(5.34)
1990[a,b]	(12,015,014)	(12,015,014)	(12,015,014)	(8.46)	(8.46)	(8.46)
1991[a,b] est	(5,064,954)	(4,955,373)	(5,878,331)	(3.48)	(3.41)	(4.04)

[a] Change in actuarial assumptions
[b] Change in benefits

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 through 1990, the assets exceeded the amount needed for the pension benefit obligation.

Year	Assets Available for Benefits as a % of Pension Benefit Obligation	Unfunded Pension Benefit Obligation (Surplus) as a % of Covered Payroll	Employer Contributions as a % of Covered Payroll
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
1989	113.64	(54.61)	11.50
1990	107.86	(34.39)	11.99

Employer Contributions

Year	Required Normal Cost Plus Interest Only Basis	Required Statutory Basis[1]	Actual[2]
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
1989	9,938,865	14,843,700	15,257,738
1990	5,747,900	14,668,000	17,029,493

[1] Tax levy after 4% overall loss

[2] Net tax levy and miscellaneous income

Exhibit S

GASB DISCLOSURE
Income and Payouts

Year End	Employee Contributions[1]	Employer Contributions[2]	Investment Income[3]	Total Income
1972	$ 5,928,386	$ 4,793,135	$ 5,391,547	$16,113,068
1973	6,269,104	5,463,149	4,394,426	16,126,679
1974	6,597,012	6,103,125	4,646,080	17,346,217
1975	7,375,222	6,699,000	8,665,212	22,739,434
1976	7,887,179	7,287,000	10,785,585	25,959,764
1977	8,568,248	8,470,000	11,993,200	29,031,448
1978	9,077,825	9,477,125	10,112,216	28,667,166
1979	9,571,764	11,108,298	13,547,589	34,227,651
1980	9,729,912	11,791,330	12,626,861	34,148,103
1981	10,522,389	12,392,694	9,631,793	32,546,876
1982	11,546,286	12,589,417	19,729,269	43,864,972
1983	11,608,537	13,681,225	31,809,924	57,099,686
1984	11,531,243	14,996,619	28,832,621	55,360,483
1985	11,569,775	15,035,039	58,720,209	85,325,023
1986	11,691,095	14,765,250	67,653,382	94,109,727
1987	11,774,209	14,745,709	58,220,924	84,740,842
1988	11,740,621	15,157,663	42,386,313	69,284,597
1989	12,529,606	15,257,738	66,965,633	94,752,977
1990	12,805,485	17,029,493	49,265,200	79,100,178

Year End	Benefits	Administrative and Investment Expenses	Refunds	Total	Income Less Pay Outs[4]
1972	$ 5,014,917	$ 208,278	$1,201,934	$ 6,425,129	$ 9,687,939
1973	5,587,346	215,796	1,322,312	7,125,454	9,001,225
1974	6,329,476	231,455	1,438,356	7,999,287	9,346,930
1975	7,028,933	261,733	1,400,097	8,690,763	14,048,671
1976	7,710,946	288,228	1,483,562	9,482,736	16,477,028
1977	8,704,971	316,160	1,798,049	10,819,180	18,212,268
1978	9,764,039	350,648	2,339,764	12,454,451	16,212,715
1979	10,795,166	438,914	2,821,593	14,055,673	20,171,977
1980	12,161,292	440,591	4,195,056	16,796,939	17,351,164
1981	12,880,890	640,795	3,074,561	16,596,246	15,950,630
1982	13,851,434	626,772	1,860,636	16,338,842	27,526,130
1983	14,828,962	641,349	1,936,538	17,406,849	39,692,837
1984	16,582,310	766,485	3,124,454	20,473,249	34,887,234
1985	18,516,249	1,266,552	2,273,021	22,055,822	63,269,201
1986	20,881,472	2,006,912	2,886,317	25,774,701	68,335,026
1987	23,465,597	2,223,312	2,012,475	27,701,584	57,039,258
1988	27,467,689	2,264,746	1,756,290	31,488,725	37,795,872
1989	28,966,184	2,973,149	1,832,628	33,771,961	60,981,016
1990	32,029,184	3,340,152	3,064,232	38,433,568	40,666,610[5]

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 for taxes
[5] Does not include adjustment for payables and receivables

GASB DISCLOSURE

Analysis of Funding Progress[1]

Year	Net Assets Available for Benefit (Book)	Pension Benefit Obligation	Percentage Funded	Unfunded (Surplus) Pension Benefit Obligation	Annual Covered Payroll	Unfunded (Surplus) as a % of Covered Payroll
1984	$356,809,111	$415,442,598	85.89%	$ 58,633,487	$131,327,856	44%
1985[a, b]	420,554,173	447,815,793	93.91	27,261,620	125,594,688	21
1986[a, b]	489,403,006	455,604,084	107.42	(33,798,922)	128,601,816	(26)
1987[a, b]	546,947,052	521,981,791	104.78	(24,965,261)	135,453,096	(18)
1988[a]	584,899,234	541,629,895	107.99	(43,269,339)	132,685,608	(33)
1989[a, b]	646,313,443	568,750,487	113.64	(77,562,956)	142,024,296	(55)
1990[a, b]	687,103,206	637,028,116	107.86	(50,075,090)	145,612,704	(34)

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.

[1] 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

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Method: The actuarial funding method used is the **entry age normal method** which reflects actuarial gains and losses immediately in the **unfunded liability**.

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 to the fund is equal to the **current service costs** plus **interest only** on the **unfunded liability**. If there is a surplus rather than an unfunded liability, the required total actuarial contribution to the Fund is equal to the current service cost only. 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, 62 and 67 and over, are used.

The costs for the following items are valued on an actuarial cost basis. No reserves are set up, as these items tend to stabilize on a cash basis.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

1. Duty disability benefits
2. Ordinary disability benefits
3. Children's annuities
4. Refunds, including refunds for no spouse
5. Expense of administration (net of investment expense)

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

Actuarial Assumptions

Actuarial assumptions are selected by the actuary, but the statute calls for certain reserves to be computed with specified assumptions.

Mortality: Active members, present and future retired members and spouses: UP-1984 Mortality Table, male and female.

Interest: 8% a year (net of investment expense), 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 4% 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, for example, 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 low 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.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Rates 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 have been adjusted to reflect anticipated earlier retirements for employees under age 60 with at least 30 years of service.

Rates 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 at amortized value, stocks are at cost, real estate separate accounts are 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.

Group Health Insurance Premiums: It is assumed for valuation purposes that the current health insurance supplement will continue for life for all employee annuitants (and their future widows). The amount of the Fund paid health insurance from January 1, 1988 until December 31, 1992 is $65.00 per month for each annuitant (employees and widows) not qualified to receive Medicare benefits (and $35.00 if qualified) and from January 1, 1993 until December 31, 1997 the amounts will be $75.00 and $45.00, respectively. It is assumed that all annuitants age 65 or over will be eligible for Medicare and all annuitants less than age 65 will not be eligible for Medicare. Future widows of retirees are assumed to be eligible for Medicare, and widow annuitants currently receiving a health insurance supplement and for all active employees upon their retirement and their widows upon employee's death.

Required Tax Multiple: It 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.

SERVICE TABLE FUNCTIONS

Rates of Retirement

Male

Attained Age	Age at Entrance 22	27	32	37	42	47	52	57	62
55	0.30	0.03	0.01						
56	0.30	0.04	0.01						
57	0.30	0.30	0.02	0.07	0.01				
58	0.30	0.20	0.02	0.02	0.01				
59	0.35	0.20	0.03	0.04	0.01				
60	0.50	0.20	0.09	0.10	0.04	0.02	0.02	0.02	
61	0.50	0.22	0.09	0.12	0.04	0.02	0.02	0.05	
62	0.50	0.25	0.15	0.33	0.07	0.03	0.03	0.10	
63	0.75	0.30	0.24	0.40	0.09	0.05	0.03	0.10	0.02
64	0.75	0.35	0.28	0.45	0.11	0.06	0.05	0.15	0.05
65	1.00	0.50	0.40	0.65	0.08	0.08	0.30	0.20	0.10
66		0.75	0.45	0.65	0.42	0.13	0.15	0.20	0.15
67		1.00	0.50	0.70	0.46	0.22	0.20	0.50	0.20
68			0.75	0.75	0.50	0.50	0.50	0.50	0.50
69			0.75	0.75	0.75	0.75	0.75	0.75	0.75
70			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Female

Attained Age	22	27	32	37	42	47	52	57	62
55	0.25	0.05	0.04						
56	0.25	0.07	0.04						
57	0.35	0.30	0.05	0.01	0.01	0.01			
58	0.10	0.20	0.06	0.02	0.01	0.01			
59	0.25	0.20	0.08	0.03	0.01	0.01			
60	0.40	0.28	0.12	0.10	0.02	0.02	0.02	0.02	
61	0.50	0.30	0.15	0.13	0.04	0.02	0.03	0.03	
62	0.50	0.33	0.30	0.14	0.08	0.03	0.03	0.03	
63	0.75	0.50	0.33	0.15	0.09	0.03	0.04	0.03	0.02
64	0.75	0.50	0.22	0.15	0.10	0.03	0.05	0.04	0.04
65	1.00	0.75	0.24	0.42	0.25	0.13	0.05	0.06	0.15
66		0.75	0.27	0.20	0.27	0.15	0.06	0.08	0.18
67		1.00	0.30	0.30	0.33	0.25	0.07	0.12	0.22
68			0.50	0.50	0.50	0.50	0.50	0.50	0.50
69			0.75	0.75	0.75	0.75	0.75	0.75	0.75
70			1.00	1.00	1.00	1.00	1.00	1.00	1.00

Expected Average Age of Retirement

Present Membership	61.21
New Hires	62.20

SERVICE TABLE FUNCTIONS

Rates of Termination

Male

Attained Age	Age at Entrance 22	27	32	37	42	47	52	57	62
22	0.223								
27	0.116	0.262							
32	0.050	0.100	0.219						
37	0.021	0.046	0.098	0.221					
42	0.012	0.025	0.022	0.088	0.176				
47	0.005	0.012	0.010	0.034	0.080	0.142			
52		0.005	0.005	0.017	0.028	0.076	0.120		
57							0.046	0.112	
62									0.148
67									

Female

Attained Age	22	27	32	37	42	47	52	57	62
22	0.140								
27	0.108	0.174							
32	0.052	0.085	0.108						
37	0.022	0.038	0.062	0.074					
42	0.008	0.022	0.033	0.051	0.054				
47		0.013	0.017	0.028	0.033	0.063			
52		0.005	0.009	0.015	0.020	0.033	0.054		
57							0.036		
62								0.027	
67									

Attained Age	Male Death Rate UP-1984 Per Thousand	Female Death Rate UP-1984 Per Thousand	Proportion Married Percent
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

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 UP-84 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 Experience
Actual to Expected

	Mortality				
Year	**Active**	**Retired**	**Widow**	**Retirement**	**Withdrawal**
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	.95[1]	1.08
1983	.98[2]	1.49[2]	1.66[2]	.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	.75[1]	.68
1989	1.31	1.21	1.29	.64	.67
1990	1.47	1.23	1.48	.73	.49

[1] New retirement rates
[2] New mortality rates

ACTUARIAL EXPERIENCE

Attained Age at Retirement, 1990

					Age at Entrance - Male					
Age	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**Total**
55	10	1	1							12
56	1		1	1	1					4
57	3		1							4
58	3	1						1		5
59		1								1
60	5	1	2	2	1					11
61	3	1		1						5
62	4	2	2							8
63	4	5	1		3					13
64	1			2	3					6
65	2	4	1	3	4	1				15
66		2	1	2	2					7
67			1	1	1	1				4
68			1		2		1			4
69		1	1			1	1	2		6
70			1	2			1			4
Total	36	19	14	14	17	3	3	3		109

16 male employees retired before age 55 or after age 70 in 1990.

					Age at Entrance - Female					
Age	**22**	**27**	**32**	**37**	**42**	**47**	**52**	**57**	**62**	**Total**
55		1								1
56										
57										
58										
59										
60				1			1			2
61										
62			3	2						5
63			1							1
64		1		2						3
65			2	4						6
66				1						1
67				2	3					5
68				2	2					4
69					3					3
70										
Total		2	6	14	8		1			31

1 female employee retired before age 55 or after age 70 in 1990.

IMPACT STATEMENT

Fund	Laborers'
Annual Payroll	$145,612,704
Active Members	4,498
Valuation Date	December 31, 1990

		Present Plan
(1)	Accrued Pension Liability	$716,604,604
(2)	Present Assets	687,103,206
(3)	Unfunded Liability = (1) - (2)	29,501,398
(4)	Funded Ratio = (2)/(1)	95.88%

Direction of Financial Condition

			Per Active	Percent of Salary
(5)	Minimum Recommended Annual Contribution	$23,048,446	$5,124	15.83%
(6)	Estimated Annual Employer Contribution	15,736,320	3,498	10.81
(7)	Estimated Annual Employee Contribution	12,377,080	2,752	8.50
(8)	Deficiency (Excess) in Annual Contributions = (5) - (6) - (7)	(5,064,954)	1,126	(3.48)

PLAN SUMMARY

Participants

Person employed by the City in a position classified 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 Ordinary Disability credit, the exact number of days, months and years are used.

Retirement Annuity

Money Purchase Formula: Maximum is 60% of highest 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 the 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 or over; (c) resigning at the time of disability expiration.

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

a. An employee age 55 or older withdrawing on or after July 1, 1990, with at least 20 years of service, is qualified for an annuity equal to 2.2% for each year of service 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 unless he has at least 30 years of service. Employee could also choose the old factors (1.8%, 2.0%, 2.2%, 2.4%) for each 10 years of service credit if it is to his benefit.

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.

PLAN SUMMARY

c. The employee will receive a minimum annuity of $350 per month if the employee retires at age 60 or more with at least 10 years of service on or after January 1, 1991.

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 granted 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 an annuity based on combined service credits in two or more governmental units in Illinois to whose pension fund he or she has contributed.

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, 1987, 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 retires, 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.)

If the employee dies in service, the spouse's annuity is based on all sums accumulated to their credit.

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.

PLAN SUMMARY

Spouses' Minimum Annuity Formula: If the employee retires or dies in service before July 1, 1990 and is at least age 60 with 20 or more years of service, the spouse's annuity is equal to half 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 $500 if employee's death occurred before January 23, 1987. The spouse's annuity must then be discounted .25% for each month that the spouse is under age 60 at the time the annuity is fixed. For deaths on or after January 23, 1987 there is no maximum dollar amount of spouse annuity.

If the employee retires or dies in service after July 1, 1990 and is at least age 55 with 20 or more years of service, the spouse's annuity is equal to half the amount of annuity the employee was entitled to at time of retirement or death in service. This annuity must be then discounted .25% for each month the spouse is under age 55 at the time the employee retires or dies in service.

In the case of the spouse of a female employee, the 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 $300 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, 1991.

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 or *in esse* 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.

PLAN SUMMARY

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.

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. However, the employee will receive service credit and the City will contribute salary deductions for annuity purposes if the employee is receiving Workers' Compensation.

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 age 70 limitation was removed beginning January 1, 1987. As of January 1, 1991, a duty disability which continues for more than 5 years, the benefit will be increased by 10% on January 1st of the sixth year.

The City contributes salary deductions for annuity purposes for the duty disability benefit. 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: Benefit is granted for disability other than in performance of an act of duty and is 50% of salary as of last day worked less the sum ordinarily deducted from salary for annuity purposes. The first payment shall be made one month after the disablement occurs. Disability is payable until age 65 and limited to a maximum of 25% 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 25% of employee's total service, but no more than 5 years or age 70, whichever occurs first. The age 70 limitation was removed beginning January 1, 1987.

PLAN SUMMARY

Group Health Hospital and Surgical Insurance Premiums

The pension fund may provide up to a maximum of $65 per month for non-Medicare eligible annuitants (employees or widows, without regard to age or years of service) and up to $35 per month for Medicare eligible annuitants. From January 1, 1993 until December 31, 1997 these amounts will be $75 and $45 per month, respectively.

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 January 14, 1991, employee may choose a refund in lieu of annuity if annuity would be less than $300 per month.

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

To Spouse: In lieu of annuity if annuity would be temporary rather than life and spouse so chooses. Effective January 14, 1991, spouse may choose a refund in lieu of annuity if annuity would be less than $300 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[1]
Employee	6.5%	6.0%
Spouse	1.5	2.0
Annuity Increase	0.5	0.0
Total	8.5%	8.0%

[1] 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.

PLAN SUMMARY

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 W-2 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.