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November 9, 1981

F. Tim Witsman
Director of Budget & Management
City Hall, Room 604
Chicago, Illinois 60601

Dear Mr. Witsman:

Enclosed are the latest consolidated actuarial figures for the four Chicago Pension Funds - Municipal, Laborers', Police and Fire.

On a cash basis, the consolidated picture is as follows: Total income is \$320 million (investment income, \$111 million; employer contribution, \$127 million; employee salary deductions, \$82 million). The total benefit payout in 1980 was \$154 million. Then an excess of income over payouts of \$166 million results.

On an actuarial basis, the accrued actuarial liability (taking into account future service and salary increases) is \$3,541.

The book value of assets as of 12-31-80 is \$1,754 million. The difference is the unfunded liability of \$1,787 million. This unfunded liability increased \$73 million over that of last year principally because of salary increases, actuarial losses and inadequate contributions to fund the liability. The accrued liability is funded at 49.5% (called the funded ratio).

On an actuarial basis, making provision for a systematic funding of the unfunded liability on a rational basis using 3 alternative methods described later, and using a valuation payroll of \$928 million, the following was the 1980 experience:

1. Normal Cost plus interest only (freeze unfunded liability): 4.23% of payroll additional was needed.
2. Normal Cost plus ERISA 40 year amortization: 5.49% of payroll additional was needed.
3. Normal Cost plus 40 year 3½% increasing amortization: adequately financed.

In the past, the Normal Cost plus interest only has been the desired standard.

On a solvency or hypothetical termination basis, the following is indicated. Assets at book value of \$1,754 million (\$1,245 million market value) are more than adequate to 100% fund the liability for retired lives of \$1,124 million. When the liability for salary deductions is included, the present assets are adequate to cover only 92% of the total liability upon termination -i.e. pay all future benefits to present retirees and refund salary deductions to active employees. To fully fund the termination liability an additional \$152 million is needed.

The present assets would be sufficient to pay benefits at the present level for 11.4 years assuming no future income from any source (employee, employer or investment).

The yield on invested assets excluding any realized gains or losses for 1980 was 8.9%. The average salaries increased 6.9% for the year.

Please note that pension costs are calculated utilizing various actuarial assumptions as to future mortality, turnover, investment earnings, salary increases, and retirement. These assumptions represent our best estimate of expected future experience. The assumptions are detailed in each individual report.

Respectfully submitted,



Donald F. Campbell
Consulting Actuaries

DFC: DPC: jd
Enclosures
cc: Retirement Boards

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CHICAGO PENSION FUNDS

The City of Chicago has four contributory pension funds which provide coverage for policemen, firemen, general employees, and laborers. The total number of covered employees in active service at the end of 1980 was 49,312, which included about 13,600 persons who were employees of the Board of Education and not City employees. The total number of beneficiaries for the four funds was 27,876.

Each pension fund is financed by employee contributions and City contributions. Both are fixed by State Statute. The employee rate of contribution is eight and one-half per cent of salary for the Municipal and Laborers' Funds -- nine per cent and nine and one-eighth per cent of salary for the Police and Fire Funds, respectively.

The City contributions are multiples of the employee contributions made two years prior. The multiple for the Municipal Fund is 1.69 and for the Laborers' Fund 1.37. The multiple for the Police Fund is 1.97 and for the Fire Fund 2.23. The 1981 session of the legislature changed the future Police and Fire multiples slightly.

The actuarial funding method used is the Entry Age Normal Method.

This Entry Age Normal Method assigns to each year of employment a constant percentage of an employee's salary, called the Current Service 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 investment earnings, since the actual pension can only be known at the time of retirement. These are called actuarial assumptions and reflect long range expectations of the plan on an ongoing or permanent basis. An annual review of these assumptions is made and appropriate changes are made when required.

The Accrued Liability of the fund at any point in time is the accumulated value of all Current Service Costs which should have been paid to that time for active employees plus the full prospective cost of pensions for all retired employees. The extent that the actual Plan Assets are less than the Accrued Liability is called the Unfunded Liability.

An amount of money is required each year to keep the Unfunded Liability from increasing if all assumptions are realized. This amount is called Interest Only on the Unfunded Liability. (This is actually an infinite amortization using a level annual dollar amount).

The total Annual Actuarial Contribution required by the funds (financed by the employee and employer) is equal to the Current Service Cost plus Interest Only on the Unfunded Liability. This method of funding has evolved over the years and seeks to give effect to all interested groups including opinions often expressed by the Civic Federation and is the minimum recommended by the Illinois Public Employees Pension Laws Commission. For 1980 the actual experience was such that an additional 4.23% of payroll or \$36,999,574 was required in order to meet this standard. This additional requirement could be phased in over a period of years.

The financial position can be described as follows by means of a consolidated statement for the four funds: The Municipal Employees, Police, Fire and Laborers' Funds.

HISTORY OF FINANCIAL INFORMATION*

<u>Year End</u>	<u>Employee Contributions(1)</u>	<u>Employer Contributions(2)</u>	<u>Investment Income (3)</u>	<u>Total Income</u>
71	\$44,472,370	\$ 46,040,581	\$32,668,288	\$123,181,239
72	48,319,176	54,014,363	38,165,332	140,498,871
73	50,937,157	65,641,519	37,650,727	154,229,403
74	54,571,813	71,639,749	43,832,441	170,044,003
75	60,776,204	76,209,791	56,532,758	193,518,753
76	65,294,654	83,446,950	68,170,118	216,911,722
77	69,295,488	93,801,552	77,728,120	240,825,160
78	73,892,774	102,360,366	90,866,343	267,119,483
79	77,953,556	119,308,480	92,129,615	289,691,651
80	82,066,886	127,033,747	111,255,642	320,356,275

<u>Year End</u>	<u>Pay Outs(4)</u>	<u>Income Less Pay Outs(5)</u>	<u>Pay Outs To Assets</u>	<u>Income To Assets</u>	<u>Pay Outs To Income</u>
71	\$ 56,576,772	\$ 66,604,467	7.8%	16.9%	45.9%
72	65,364,952	75,133,919	8.1	17.5	46.5
73	75,361,340	78,868,063	8.6	17.6	48.9
74	82,522,694	87,521,309	8.6	17.7	48.5
75	90,054,902	103,463,851	8.4	18.2	46.5
76	101,614,128	115,297,594	8.6	18.4	46.8
77	110,842,563	129,982,597	8.5	18.4	46.0
78	122,005,287	145,114,196	8.4	18.3	46.0
79	136,615,690	153,075,961	8.6	18.2	47.2
80	154,214,640	166,141,635	8.8	18.3	48.1

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

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

HISTORY OF FINANCIAL INFORMATION

ANNUAL ACTUARIAL REQUIREMENTS

ACTUARIAL RECOMMENDED CONTRIBUTION (EMPLOYER AND EMPLOYEE)

Normal Cost plus alternative amortizations of the Unfunded Liability

Year	<u>A</u>	<u>B</u>	<u>C</u>	<u>A</u>	<u>B</u>	<u>C</u>
	NC Plus Interest	NC Plus 40 Year Amortization	ERISA NC Plus Increasing % of Salary at 3 1/2	Expressed as a Percentage of Salary Beginning of Year		
77	\$202,375,370	\$211,714,580	\$171,656,328	27.26%	28.52%	23.13%
78	215,257,483	225,122,376	182,196,487	27.10	28.34	22.94
79	231,819,756	242,264,218	196,816,401	27.61	28.86	23.44
80	246,100,207	257,177,659	208,975,469	28.11	29.37	23.87
81 EST	264,346,677	275,894,437	225,645,758	28.48	29.73	24.31

ACTUAL EMPLOYER AND EMPLOYEE CONTRIBUTION

Year	<u>D</u>	<u>E</u>	<u>D</u>	<u>E</u>
	Employer	Employee	Expressed as a Percentage of Salary Beginning of Year	
77	\$ 93,801,552	\$69,295,488	12.64%	9.34%
78	102,360,366	73,892,774	12.89	9.30
79	119,308,480	77,953,556	14.21	9.29
80	127,033,747	82,066,886	14.51	9.37
81 EST	132,946,560	81,601,093	14.33	8.79

DEFICIENCY (EXCESS) IN ANNUAL CONTRIBUTION

Year	<u>F</u>	<u>G</u>	<u>H</u>	<u>F</u>	<u>G</u>	<u>H</u>
	NC Plus Interest	NC Plus 40 Year Amortization	ERISA NC Plus Increasing % of Salary	Expressed as a Percentage of Salary Beginning of Yr.		
77	\$39,278,339	\$48,617,549	\$ 8,559,297	5.29%	6.55%	1.15%
78	39,004,343	48,869,236	5,943,347	4.91	6.15	.75
79	34,557,720	45,002,182	(445,635)	4.12	5.36	(.05)
80	36,999,574	48,077,026	(125,164)	4.23	5.49	(.01)
81 EST	49,799,024	61,346,784	11,098,105	5.37	6.61	1.20

HISTORY OF FINANCIAL INFORMATION

ACCRUED AND UNFUNDED LIABILITIES

<u>Year End</u>	<u>Accrued Liability</u>	<u>Assets At Book Value</u>	<u>Funded Ratio</u>	<u>Unfunded Accrued Liability</u>	<u>Payroll</u>	<u>Unfunded Accrued % Payroll</u>
71 *	\$1,778,827,705	\$ 728,515,022	41.0%	\$1,050,312,683	\$548,746,869	191%
72	1,913,199,816	803,411,249	42.0	1,109,788,567	572,698,853	194
73 *	2,076,822,460	877,828,198	42.3	1,198,994,262	601,979,270	199
74	2,253,518,954	962,426,211	42.7	1,291,092,743	647,632,248	199
75	2,614,251,849	1,065,830,280	40.8	1,548,421,569	719,025,336	215
76 *	2,626,432,666	1,181,076,850	45.0	1,445,355,816	742,265,232	195
77	2,837,743,456	1,311,033,205	46.2	1,526,710,251	794,397,168	192
78	3,072,572,223	1,456,166,593	47.4	1,616,405,630	839,527,608	193
79	3,301,143,789	1,586,775,648	48.1	1,714,368,141	875,633,440	196
80	3,540,993,418	1,753,839,468	49.5	1,787,153,950	928,044,960	193

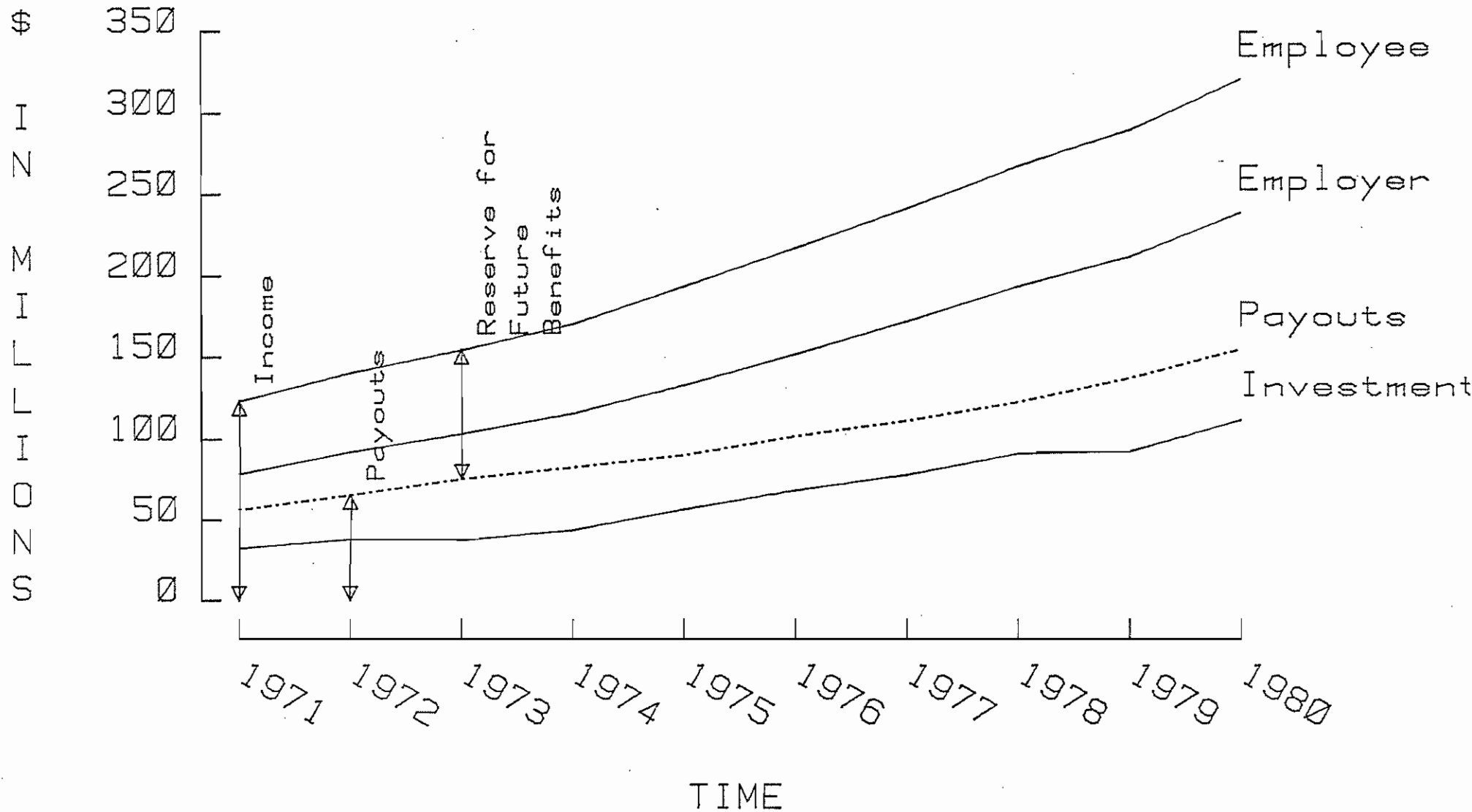
SOLVENCY (TERMINATION) TEST

<u>Year End</u>	<u>Retired Liability</u>	<u>Active Member Salary Deductions</u>	<u>Total Termination Liability</u>	<u>Assets At Book Value</u>	<u>Termination Cost</u>	<u>Quick Ratio Assets To Term Liab.</u>
75 \$	732,784,634	\$526,930,421	\$1,259,715,055	\$1,065,830,280	\$193,884,775	85%
76*	759,417,168	573,852,681	1,333,269,849	1,181,076,850	152,192,999	89
77	823,641,407	631,120,261	1,454,761,668	1,311,033,205	143,728,463	90
78	908,238,294	692,207,283	1,600,445,577	1,456,166,593	144,278,984	91
79	1,017,310,979	737,937,282	1,755,248,261	1,586,775,648	168,472,613	90
80	1,123,697,681	782,498,626	1,906,196,307	1,753,839,468	152,356,839	92

Quick ratio is defined as assets divided by the termination liability

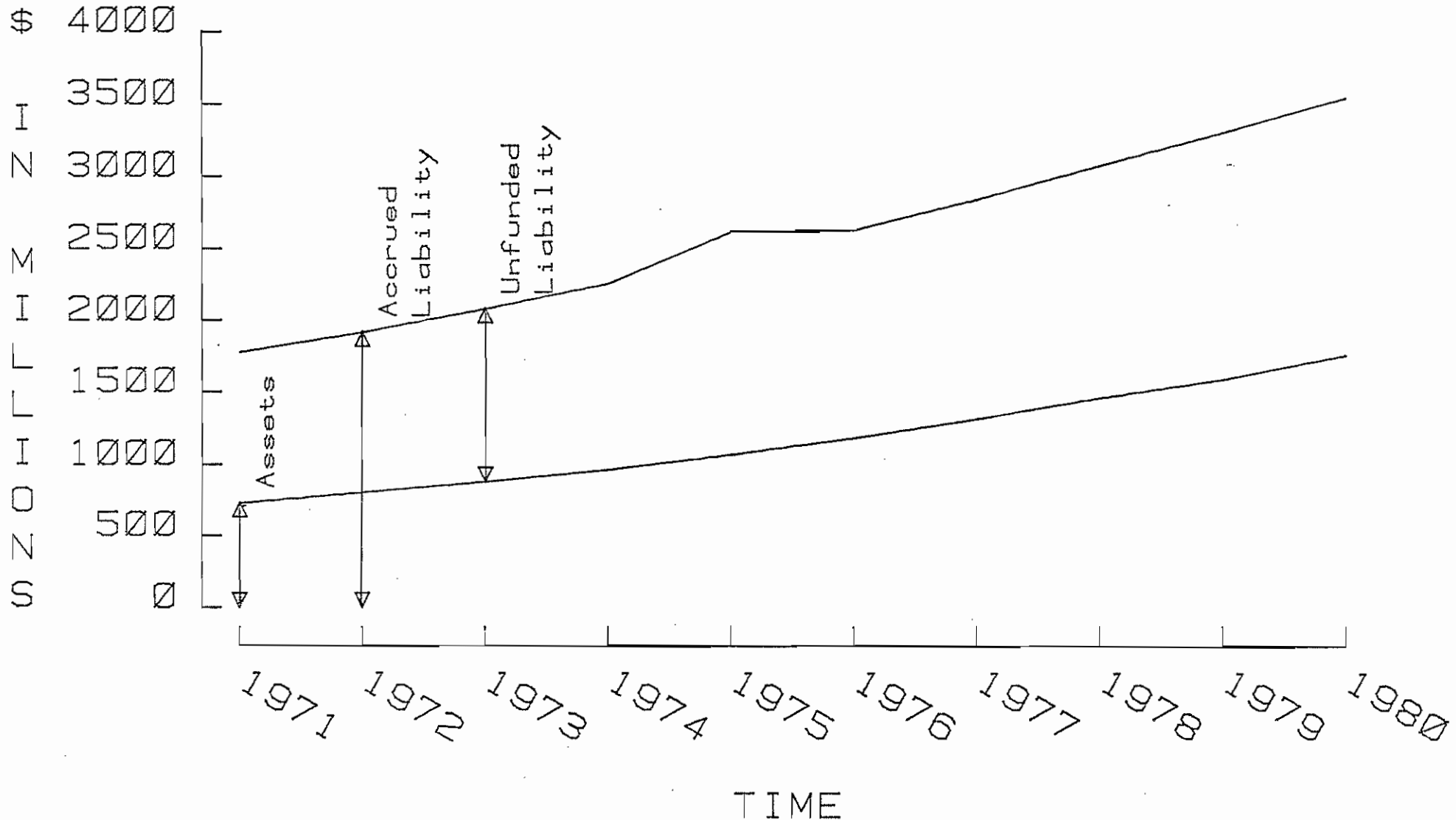
*Change in actuarial assumptions

CITY OF CHICAGO Income and Payouts



CITY OF CHICAGO

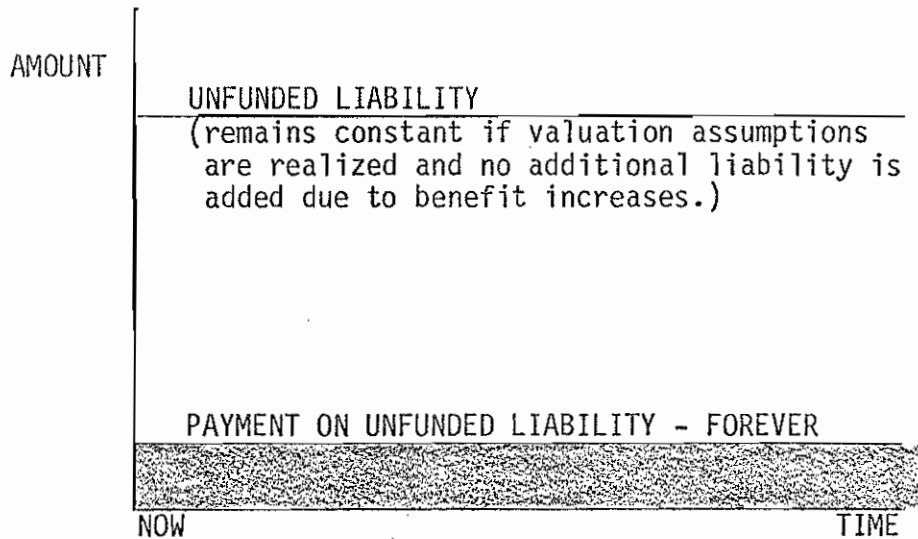
Assets, Unfunded Liability, Accrued Liability



THREE METHODS OF FINANCING THE UNFUNDED LIABILITY

1.) The method of valuation used for this report, is the same as for the last report. It is known as a Normal Cost-plus-Interest Basis and is intended to continue the current provisions of the Article governing the funds in full force and effect on a permanent basis. The method is also referred to as a middle of the road method of funding since the unfunded liability is recognized but not amortized.

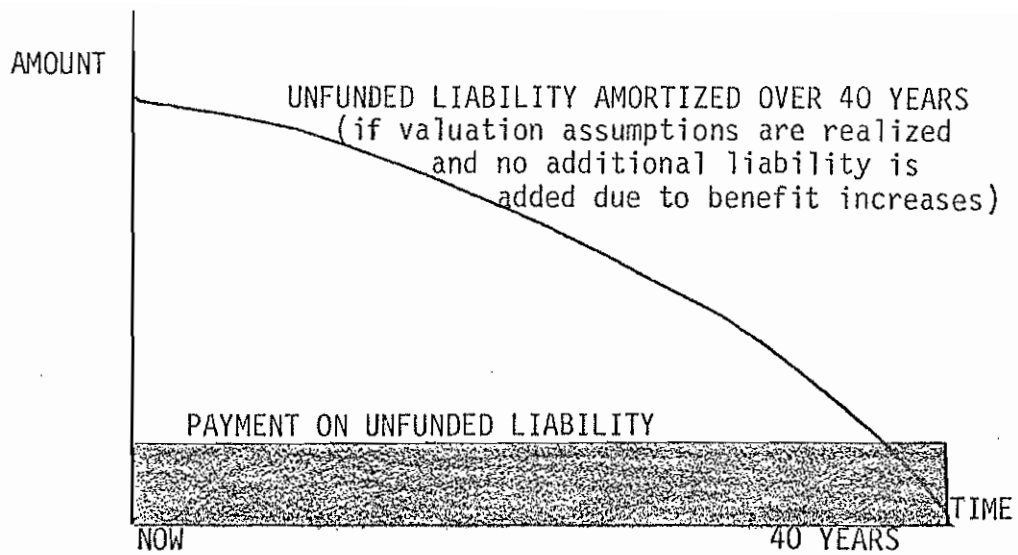
The normal cost plus interest only method of funding is that recommended by the Illinois Public Employees Pension Laws Commission. It was also the minimum required for private pension plan for IRS qualification before ERISA.



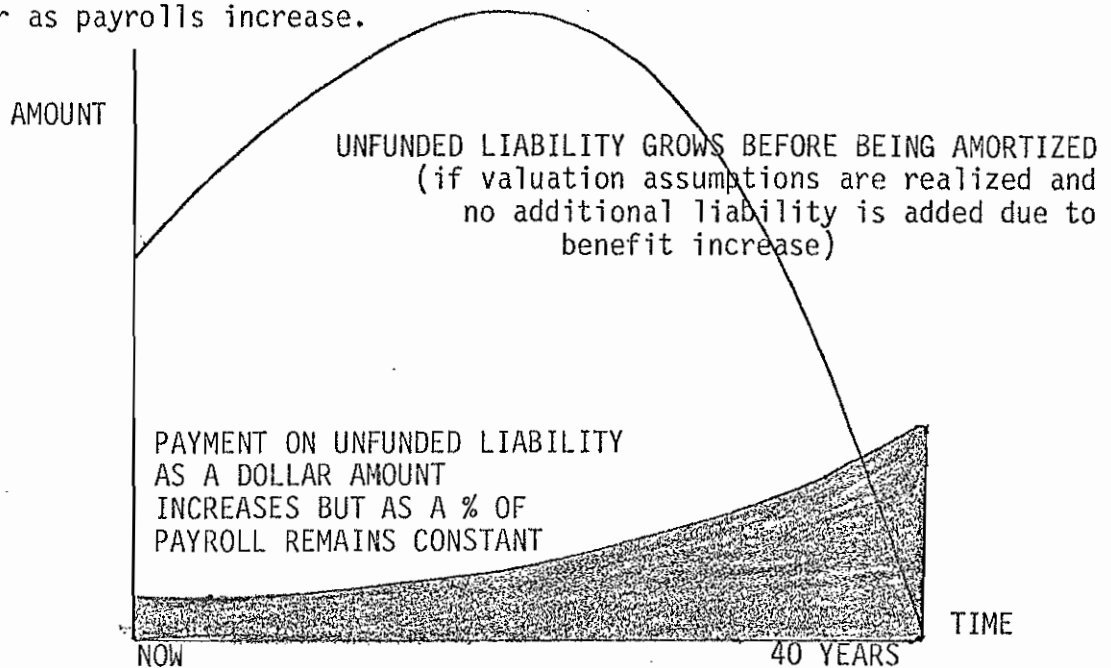
2.) ERISA now requires that initial unfunded liability be amortized over a forty year period.

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

Under both methods, level dollar amounts represent a greater percent of payroll initially and a decreasing percent of payrolls as future payrolls increase.



3.) An alternative method for funding that is receiving increased attention for public employee pension plans is a method which sets the funding standard cost objective as a Level Annual Percent Of Payroll rather than as a level annual amount. This method will result in increasingly greater dollar amounts each year as payrolls increase.



This constant percent of payroll method is not an acceptable funding method under ERISA. It may be more acceptable in view of the presumably permanent nature of public retirement systems, and the desire to place a relatively constant tax burden (as percentage of salary) on future generations of taxpayers.

We have estimated the financial effects of different funding methods. The results are given in the following table:

Required 1981 Tax Levy and
Ultimate Required Multiple

	<u>Municipal</u>	<u>Laborers</u>	<u>Police</u>	<u>Fire</u>	<u>Total</u>
1. Normal Cost + Interest Only	\$67,101,945 2.12	\$16,423,503 1.96	\$74,220,087 3.07	\$32,614,447 3.35	\$190,359,982
2. ERISA: Normal Cost + 40 Year Amortization	\$71,443,928 2.26	\$17,144,517 2.04	\$79,196,600 3.27	\$34,603,854 3.55	\$202,388,899
3. Normal Cost + 40 Yr. Level % of Payroll Increasing 3½% a Yr. (Inflation Only)	\$52,550,313 1.66	\$14,007,114 1.67	\$57,541,906 2.38	\$25,947,193 2.66	\$150,046,526
4. Present	\$55,970,000 1.69	\$12,951,000 1.37	\$50,385,000 1.97	\$19,240,000 2.23	\$138,546,000

The preceding comparative table indicates the need to take into consideration in the funding policy future annual costs expressed both as a level annual dollar amount and as a level percent of payroll.

The level annual percent of payroll method results in substantially increasing costs and contributions in future years, especially at the end of a funding period.

In determining funding policy it is essential to provide a margin of safety for unfavorable operating experience such as salaries over anticipated salaries, decreasing age of retirement, increasing longevity, declining fund membership.

REQUIRED ANNUAL ACTUARIAL CONTRIBUTION

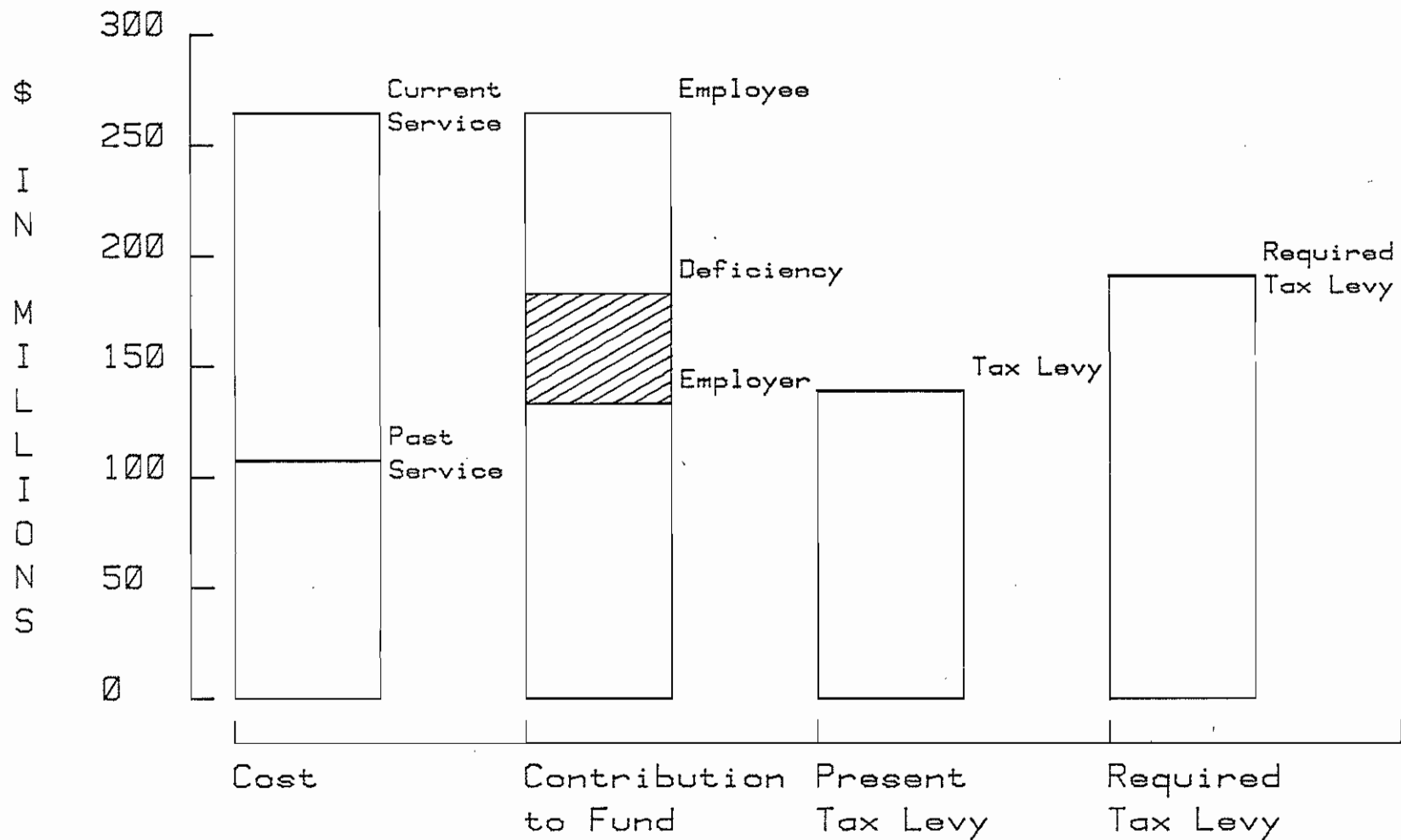
Based on the Normal Cost-Plus-Interest-Method of funding we find that the city tax levy for 1981 should be \$190,359,982 which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1980 of \$928,044,960 and an active membership of 49,312 persons. The detail of the total for the four funds is as follows:

	<u>Amount</u>	<u>Percent Of Salary</u>	<u>Dollar Per Active</u>
1. Normal Cost - For Current Service	\$157,117,441	16.93%	\$3,186
<u>2. 6% Interest on Unfunded Liability</u>	<u>\$107,229,237</u>	<u>11.55</u>	<u>\$2,174</u>
<u>3. Total Actuarial Requirement (1)+(2)</u>	<u>\$264,346,677</u>	<u>28.48</u>	<u>\$5,360</u>
4. Employee Contributions	\$ 81,601,093	8.79	\$1,655
5. Employer Requirement (3)-(4)	\$182,745,584	19.69	\$3,706
6. Expected Net Employer Contribution from 1981 Tax Levy of \$138,546,000 after a 4% Loss	<u>\$132,946,560</u>	<u>14.33</u>	<u>\$2,696</u>
7. Expected Net Annual Deficiency	\$ 49,799,024	5.37	\$1,010
8. Tax Levy Required (assume 4% Loss)	\$190,359,982		
9. Increase in Tax Levy Required	\$ 51,813,982		
10. Required Ultimate Multiple:			
Municipal	2.12		
Laborers'	1.96		
Police	3.07		
Fire	3.35		
11. Present Authorized Ultimate Multiple:			
Municipal	1.69		
Laborers'	1.37		
Police	1.97		
Fire	2.23		
12. Increase in Ultimate Multiple Needed:			
Municipal	.43		
Laborers'	.59		
Police	1.10		
Fire	1.12		

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

The above table indicates the need for additional contributions to maintain the funds on this basis.

CITY OF CHICAGO
 Annual Actuarial Cost 1981
 (Normal Cost plus Interest Only)



REQUIRED ANNUAL ACTUARIAL CONTRIBUTION

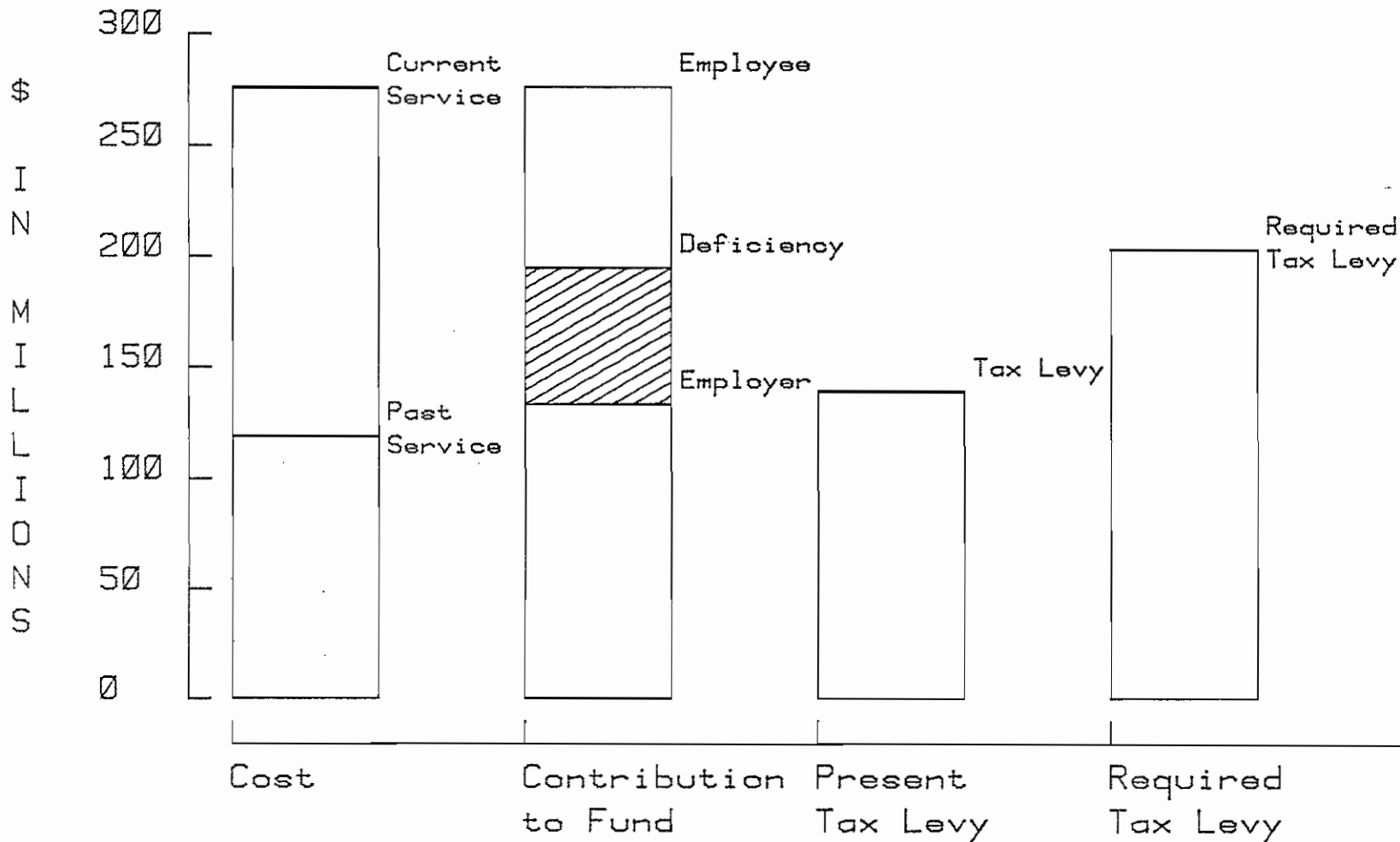
Based on the Normal Cost-Plus-40-Year-Amortization-Method of funding we find that the city tax levy for 1981 should be \$202,388,899 which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1980 of \$928,044,960 and an active membership of 49,312 persons. The detail of the total for the four funds is as follows:

	<u>Amount</u>	<u>Percent Of Salary</u>	<u>Dollar Per Active</u>
1. Normal Cost - For Current Service	\$157,117,441	16.93%	\$3,186
2. <u>Amortization of Unfunded Liability</u>	<u>\$118,776,996</u>	<u>12.80</u>	<u>\$2,409</u>
3. <u>Total Actuarial Requirement (1)+(2)</u>	<u>\$275,894,437</u>	<u>29.73</u>	<u>\$5,595</u>
4. Employee Contributions	\$ 81,601,093	8.79	\$1,655
5. Employer Requirement (3)-(4)	\$194,293,344	20.94	\$3,940
6. <u>Expected Net Employer Contribution from 1981 Tax Levy of \$138,546,000 after a 4% Loss</u>	<u>\$132,946,560</u>	<u>14.33</u>	<u>\$2,696</u>
7. Expected Net Annual Deficiency	\$ 61,346,784	6.61	\$1,244
8. Tax Levy Required (assume 4% Loss)	\$202,388,899		
9. Increase in Tax Levy Required	\$ 63,842,899		
10. Required Ultimate Multiple:			
Municipal	2.26		
Laborers'	2.04		
Police	3.27		
Fire	3.55		
11. Present Authorized Ultimate Multiple:			
Municipal	1.69		
Laborers'	1.37		
Police	1.97		
Fire	2.23		
12. Increase in Ultimate Multiple Needed:			
Municipal	.57		
Laborers'	.67		
Police	1.30		
Fire	1.32		

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

The above table indicates the need for additional contributions to maintain the funds on this basis.

CITY OF CHICAGO
 Annual Actuarial Cost 1981
 (Normal Cost plus ERISA 40 Year Amortization)



REQUIRED ANNUAL ACTUARIAL CONTRIBUTION

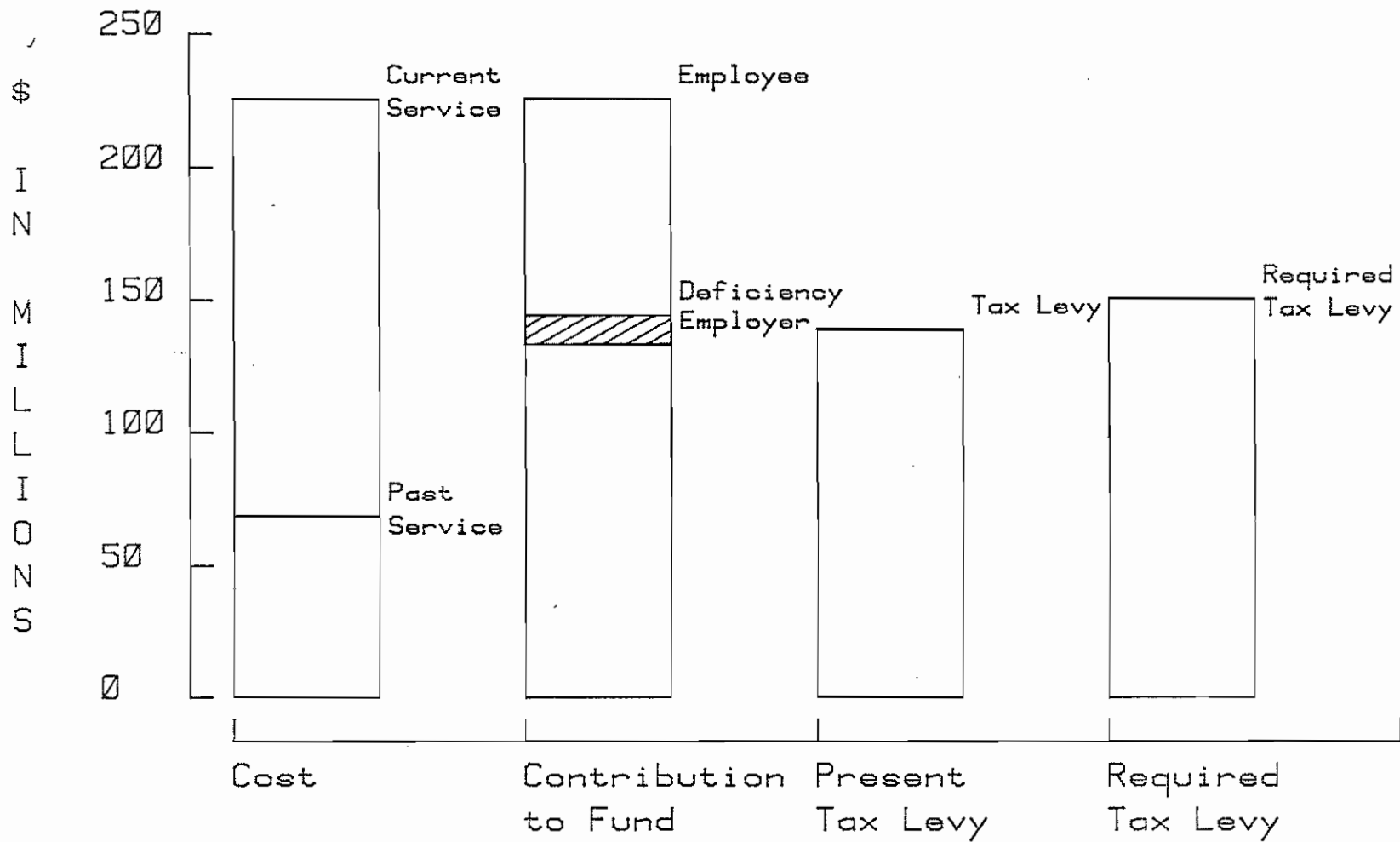
Based on the Level Annual Percent of Payroll Method of funding we find that the city tax levy for 1981 should be \$150,046,526 which amount includes a 4% reserve for loss on collection. This amount is based on an annual payroll as of December 31, 1980 of \$928,044,960 and an active membership of 49,312 persons. The detail of the total for the four funds is as follows:

	<u>Amount</u>	<u>Percent Of Salary</u>	<u>Dollar Per Active</u>
1. Normal Cost - For Current Service	\$157,117,441	16.93%	\$3,186
2. <u>Amortization of Unfunded Liability</u>	\$ 68,528,317	7.38	\$1,390
3. <u>Total Actuarial Requirement (1)+(2)</u>	\$225,645,758	24.31	\$4,576
4. Employee Contributions	\$ 81,601,093	8.79	\$1,655
5. Employer Requirement (3)-(4)	\$144,044,665	15.52	\$2,921
6. <u>Expected Net Employer Contribution from 1981 Tax Levy of \$138,546,000 after a 4% Loss</u>	\$132,946,560	14.33	\$2,696
7. Expected Net Annual Deficiency	\$ 11,098,105	1.20	\$ 225
8. Tax Levy Required (assume 4% Loss)	\$150,046,526		
9. Increase in Tax Levy Required	\$ 11,500,526		
10. Required Ultimate Multiple:			
Municipal	1.66		
Laborers'	1.67		
Police	2.38		
Fire	2.66		
11. Present Authorized Ultimate Multiple:			
Municipal	1.69		
Laborers'	1.37		
Police	1.97		
Fire	2.23		
12. Increase in Ultimate Multiple Needed:			
Municipal	None		
Laborers'	.30		
Police	.41		
Fire	.43		

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

The above table indicates the need for additional contributions to maintain the funds on this basis.

CITY OF CHICAGO
 Annual Actuarial Cost 1981
 (Normal Cost plus 40 Yr. 3.5% Incr. Amortiz.)



TERMINATION LIABILITY

A minimum measure of plan funding is to compare the assets to liabilities for present retirees on pension and amount of contributions of active and inactive employees. This amount would be a minimum measure of what it would cost to terminate the Fund as of the valuation date. Retired lives are valued using the latest actuarial assumptions, and salary deductions include statutory interest where applicable.

TOTAL FOR FOUR FUNDS:

(1) Liability for Annuitants, Widows, Spouses of Annuitants...	\$1,123,697,681
(2) Salary Deductions Contributed by Fund Members.....	782,498,626
(3) Total Termination Liability.....	<u>\$1,906,196,307</u>
(4) Assets (at book value).....	1,753,839,468
(5) Cost of Termination.....	<u>\$ 152,356,839</u>
(6) Excess Upon Termination.....	\$

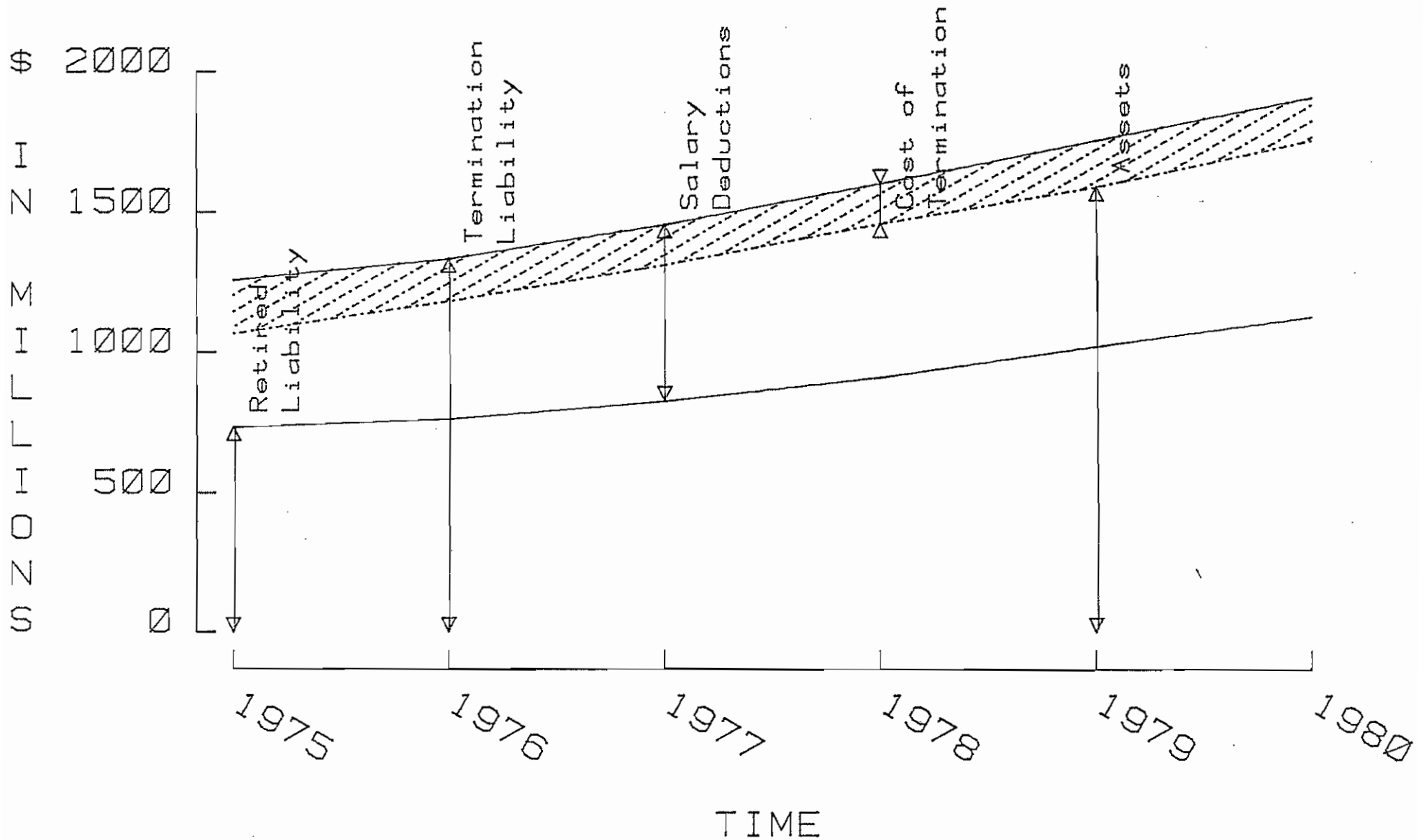
Using the numbered headings above, the detail for the four funds is as follows:

	<u>Municipal</u>	<u>Laborers</u>	<u>Police</u>	<u>Fire</u>
(1)	\$466,237,293	\$ 97,598,923	\$362,220,462	\$197,641,003
(2)	<u>302,042,729</u>	<u>35,939,360</u>	<u>292,815,979</u>	<u>101,650,558</u>
(3)	\$768,280,022	\$183,588,283	\$655,036,441	\$299,291,561
(4)	<u>686,910,951</u>	<u>238,242,772</u>	<u>542,904,478</u>	<u>285,781,267</u>
(5)	\$ 81,369,071		\$112,131,963	\$ 13,510,294
(6)		\$ 54,654,489		

In other words....if the pension funds were terminated, it would cost \$152,356,839 to provide lifetime pensions to those now retired and to return all active members' contributions.

CITY OF CHICAGO

Assets and Termination Liability



ACTUARIAL ASSUMPTIONS

The major actuarial assumptions for the latest valuation are as follows:

Investment return - 6% compounded annually

Salary increases - 5% compounded annually

Age and service retirement - plan specific assumptions based on recent plan experience - varying by age and length of service;

Benefit changes after retirement - depending upon the plan - a fixed percentage of the annuity at retirement - employee retirement annuity only.

Withdrawal from employment - plan specific assumptions based on recent plan experience - varying by age and length of service.

Death before retirement

51 Group Annuity Table male and female rates for Municipal, Laborers' and Firemen. Plan experience for the Police.

Death after retirement

51 Group Annuity Table male and female rates for Municipal, Laborers' - Combined Annuity Experience male rates and male rates set back 4 years for females - for Police and Fire.

INVESTMENT YIELDS

The yield figures as calculated for the combined assets and income of the four funds are given below:

Nonrecurring Gains and Losses are Excluded from Income

<u>Year</u>	<u>Investment Yield on Total Assets</u>	<u>Investment Yield on Invested Assets</u>
1971	5.0%	5.4%
1972	5.5	5.9
1973	5.6	6.1
1974	6.1	6.7
1975	6.5	7.2
1976	6.8	7.5
1977	6.9	7.5
1978	7.2	8.0
1979	7.5	8.3
1980	8.0	8.9
Average of Last 5 Years	7.3	8.0

Nonrecurring Gains and Losses are Included in Income

<u>Year</u>	<u>Investment Yield on Total Assets</u>	<u>Investment Yield on Invested Assets</u>
1971	4.8%	5.2%
1972	5.1	5.6
1973	4.6	5.0
1974	4.9	5.4
1975	5.7	6.3
1976	6.3	6.8
1977	6.4	7.0
1978	6.8	7.5
1979	6.2	7.0
1980	6.9	7.7
Average of Last 5 Years	6.5	7.2

Notes:

$$\text{Yield} = \frac{\text{Investment Income}}{\text{Mean Assets} - \frac{1}{2} \text{Investment Income}}$$

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

SALARY HISTORY

<u>Year</u> <u>End</u>	<u>Members</u> <u>in</u> <u>Service</u>	<u>% Increase</u>	<u>Salary</u>	<u>% Increase</u>	<u>Average</u> <u>Salary</u>	<u>% Increase</u>
1964	43,322		\$286,762,644		\$ 6,619	
1965	44,025	1.6	292,814,627	2.1	6,651	0.5
1966	45,295	(1.0)	319,672,623	9.2	7,058	6.1
1967	45,321	0.1	346,169,935	8.3	7,638	8.2
1968	46,995	3.7	380,465,736	9.9	8,096	6.0
1969	46,631	(0.8)	438,964,018	15.4	9,414	16.3
1970	49,718	6.6	503,987,228	14.8	10,137	7.7
1971	50,056	0.7	548,746,869	8.9	10,963	8.1
1972	50,082	0.1	572,698,852	4.4	11,435	4.3
1973	50,470	0.8	601,979,270	5.1	11,927	4.3
1974	49,960	(1.0)	647,632,248	7.6	12,963	8.7
1975	50,731	1.5	719,025,336	11.0	14,173	9.3
1976	49,576	(2.3)	742,265,232	3.2	14,972	5.6
1977	50,232	1.3	794,397,168	7.0	15,815	5.6
1978	50,399	0.3	839,527,608	5.7	16,658	5.3
1979	49,751	(1.3)	875,563,440	4.3	17,599	5.6
1980	49,312	(.9)	928,044,860	6.0	18,820	6.9
Average Over Last 5 Years		(.6)		5.2		5.8

ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

Name of Retirement System: Municipal, Laborers', Police and Fire

Total Annual Payroll: \$928,044,960

Bill No. _____

Total Number of Active Employees: 49,312

PRESENT FINANCIAL CONDITION AS OF VALUATION DATE

Valuation Date	PRESENT PLAN
12-31-80	
(1) Accrued Pension Liability	\$3,540,993,418
(2) Present Assets	\$1,753,839,468
(3) Unfunded Liability = (1)-(2)	\$1,787,153,950
(4) Funded Ratio = (2) ÷ (1)	49.5%

II

PROPOSED LEGISLATION

III

PLAN IF PROPOSED LEGISLATION ENACTED

DIRECTION OF FINANCIAL CONDITION: FOR YEAR BEGINNING ON VALUATION DATE

	PRESENT PLAN	PER ACTIVE	% OF SALARY
(5) Minimum Recommended Annual Contribution Interest Only	\$264,346,677	\$5360	28.48
1981 Tax Levy \$138,546,000 Less 4% (6) Estimated Annual Employer Contribution	\$132,946,560	\$2696	14.33
(7) Estimated Annual Employee Contribution	\$ 81,601,093	\$1655	8.79
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 49,799,024	\$1010	5.37

PROPOSED LEGISLATION	PER ACTIVE	% OF SALARY

PLAN IF PROPOSED LEGISLATION ENACTED	PER ACTIVE	% OF SALARY

(9) Source of Funding Revenues:

(10) Remarks

IS THE ANNUAL COST FOR PROPOSED LEGISLATION

ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

Name of Retirement System: Municipal, Laborers', Police and Fire

Total Annual Payroll: \$928,044,960

Bill No. _____

Total Number of Active Employees: 49,312

PRESENT FINANCIAL CONDITION AS OF VALUATION DATE

Valuation Date <u>12-31-80</u>	PRESENT PLAN
(1) Accrued Pension Liability	\$3,540,993,418
(2) Present Assets	\$1,753,839,468
(3) Unfunded Liability = (1)-(2)	\$1,787,153,950
(4) Funded Ratio = (2) ÷ (1)	49.5%

II

PROPOSED LEGISLATION

III

PLAN IF PROPOSED LEGISLATION ENACTED

DIRECTION OF FINANCIAL CONDITION: FOR YEAR BEGINNING ON VALUATION DATE

	PRESENT PLAN	PER ACTIVE	% OF SALARY
(5) Minimum Recommended Annual Contribution <u>40 Yr. Amort.</u>	\$275,894,437	\$5595	29.73
1981 Tax Levy \$138,546,000 Less 4% (6) Estimated Annual Employer Contribution	\$132,946,560	\$2696	14.33
(7) Estimated Annual Employee Contribution	\$ 81,601,093	\$1655	8.79
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 61,346,784	\$1244	6.61

PROPOSED LEGISLATION	PER ACTIVE	% OF SALARY

PLAN IF PROPOSED LEGISLATION ENACTED	PER ACTIVE	% OF SALARY

(9) Source of Funding Revenues:

(10) Remarks

◀ **IS THE ANNUAL COST FOR PROPOSED LEGISLATION**

ILLINOIS PUBLIC EMPLOYEES PENSION LAWS COMMISSION IMPACT STATEMENT

Name of Retirement System: Municipal, Laborers', Police and Fire

Total Annual Payroll: \$928,044,960

Bill No. _____

Total Number of Active Employees: 49,312

PRESENT FINANCIAL CONDITION AS OF VALUATION DATE

Valuation Date <u>12-31-80</u>	PRESENT PLAN
(1) Accrued Pension Liability	\$3,540,993,418
(2) Present Assets	\$1,753,839,468
(3) Unfunded Liability = (1)-(2)	\$1,787,153,950
(4) Funded Ratio = (2) ÷ (1)	49.5%

II PROPOSED LEGISLATION	III PLAN IF PROPOSED LEGISLATION ENACTED

DIRECTION OF FINANCIAL CONDITION: FOR YEAR BEGINNING ON VALUATION DATE

	PRESENT PLAN	PER ACTIVE	% OF SALARY
(5) Minimum Recommended Annual Contribution 40-yr. Amort. ($3\frac{1}{2}\%$ INF)	\$225,645,758	\$4576	24.31
1981 Tax Levy \$138,546,000 Less 4%			
(6) Estimated Annual Employer Contribution	\$132,946,560	\$2696	14.33
(7) Estimated Annual Employee Contribution	\$ 81,601,093	\$1655	8.79
(8) Deficiency in Annual Contributions = (5)-(6)-(7)	\$ 11,098,105	\$ 225	1.20

PROPOSED LEGISLATION	PER ACTIVE	% OF SALARY	PLAN IF PROPOSED LEGISLATION ENACTED	PER ACTIVE	% OF SALARY

(9) Source of Funding Revenues:

IS THE ANNUAL COST FOR PROPOSED LEGISLATION

(10) Remarks

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