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December 26, 2003

Board of Trustees
Public School Teachers' Pension
and Retirement Fund of Chicago
55 West Wacker Drive - 13th Floor
Chicago, Illinois 60601-1613

ACTUARIAL CERTIFICATION

We have completed the annual actuarial valuation of the Public School Teachers' Pension and Retirement Fund of Chicago (the Fund) as of June 30, 2003. The purpose of the valuation was to determine the financial condition and funding requirements of the Fund.

Since the effective date of the last actuarial valuation, there have been no changes in the benefit provisions of the Fund. Under the funding plan established by Public Act 89-15, the minimum contribution to the Fund by the Board of Education shall be an amount determined by the Fund to be sufficient to bring the total assets of the Fund up to 90% of the total actuarial liabilities by the end of fiscal year 2045. The required Board of Education contribution is to be calculated as a level percent of payroll over the years through 2045. For fiscal years 1999 through 2010, the Board of Education's contribution, as a percentage of the applicable payroll, is to be increased in equal annual increments so that by Fiscal Year 2011, the Board of Education is contributing at the required rate.

Public Act 90-548, signed into law on December 4, 1997 revised the above funding plan to provide that the Board of Education contribution shall not be in excess of the amounted needed to maintain the ratio of assets to total actuarial liability at the 90% level.

Based on the results of the June 30, 2003 actuarial valuation and the funding plan established by Public Act 89-15 and Public Act 90-548, we have estimated the Board of Education contribution requirement for Fiscal Year 2005 to be $0.

The actuarial assumptions used for the June 30, 2003 actuarial valuation were based on an experience analysis of the Fund over the three-year period 2000-2002. Based on this experience analysis, we recommended certain changes in actuarial assumptions from the assumptions used for the June 30, 2002 actuarial valuation. The assumptions used for the June 30, 2003 valuation were adopted by the board as of June 30, 2003 upon recommendation of the actuary. We have estimated that the changes made in the actuarial assumptions used for the June 30, 2003 valuation had the impact of increasing the fund's total actuarial liability by $130,707,000.The projected unit credit actuarial cost method was used for the June 30, 2003 actuarial valuation. This is the same actuarial cost method that was used for the June 30, 2002 valuation. This cost method was adopted as of August 31, 1991.

The funding plan currently in effect does not meet the requirements for amortizing the unfunded liability provided under GASB Statement No. 25. In all other respects, the assumptions and methods used for funding purposes meet the parameters set forth for the disclosures presented in the financial section by GASB Statement No. 25.

The asset values used for the valuation were based on the asset information contained in the audited financial statements prepared by the Fund. For purposes of the actuarial valuation, a 4-year smoothed market value of assets was used to determine the actuarial value of assets. The valuation has been based on the membership data, which was supplied by the administrative staff of the Fund. We have made additional tests to ensure its accuracy.

The trend data schedules presented in the financial section of the Comprehensive Annual Financial Report (CAFR) were prepared by the staff of the Fund based on information contained in our actuarial reports. All exhibits, tables, schedules, and appendices included in the accompanying actuarial section were prepared by us based on information provided by the Fund.

In our opinion, the following valuation results fairly represent the financial condition of the Public School Teachers' Pension and Retirement Fund of Chicago as of June 30, 2003.

Respectfully submitted,

Sandor Goldstein

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Consulting Actuary

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Associate Actuary

Actuarial Report

A. PURPOSE AND SUMMARY

We have carried out an actuarial valuation of the Public School Teachers' Pension and Retirement Fund of Chicago (the Fund) as of June 30, 2003. The purpose of the valuation was to determine the financial position and funding requirements of the Fund. This report is intended to present the results of the valuation. The results of the valuation are summarized below:

1. Total Actuarial Liability	$ 11,411,528,364
2. Actuarial Value of Assets	10,494,754,698
3. Unfunded Actuarial Liability	916,773,666
4. Funded Ratio	92.0%
5. Employer's Normal Cost for FY 04 as a percent of payroll	9.69%
6. Annual Required Contribution for FY 04 Based on GASB Statement No. 25	202,971,485
7. Board of Education Contribution Requirement For FY 04 Based on Public Act 89-15 and Public Act 90-548	0

B. DATA USED FOR THE VALUATION

Participant Data. The participant data required to carry out the valuation was supplied by the Fund. The membership of the Fund as of June 30, 2003, on which the valuation was based, is summarized in Exhibit 1. It can be seen that there were 36,548 active contributors, 18,565 pensioners, and 1,444 vested terminated members included in the valuation. The total active payroll as of June 30, 2003 was $1,706,205,814.

Exhibit 1
Summary of Membership Data

1. Number of Members	
(a) Active Members	
(i) Vested Board of Education Employees	22,182
(ii) Non-vested Board of Education Employees	13,444
(iii) Vested Charter School Employees	131
(iv) Non-vested Charter School Employees	791
(v) Total Active Members	36,548

(b) Members Receiving	
(i) Retirement Pensions	15,930
(ii) Disability Pensions	371
(iii) Survivor Pensions	2,191
(iv) Reversionary Pensions	73
(v) Total Pensioners	18,565
(c) Vested Terminated Members	1,444
(d) Total	56,557

2. Annual Salaries	
(a) Salary for Board of Education Employees	$1,671,928,207
(b) Salary for Charter School Employees	34,277,607
(c) Total Salary	$1,706,205,814
(d) Average Salary	46,684
3. Total Accumulated Contributions of Active Members	$1,158,355,645
4. Annual Benefit Payments Currently Being Made	
(a) Retirement Pensions	$510,625,004
(b) Disability Pensions	8,126,443
(c) Survivor Pensions	25,133,425
(d) Reversionary Pensions	597,057
(e) Total Pensions	$544,481,929

Assets. In November of 1994, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 25, which establishes standards of financial reporting for governmental pension plans. The statement is effective for periods beginning after June 15, 1996. Under GASB Statement No. 25, the actuarial value of assets to be used for determining a plan's funded status and annual required contribution needs to be market related. In determining the actuarial value of assets, smoothing changes in the market value of assets over a period of three to five years is considered to be appropriate.

The asset values used for the valuation were based on the asset information contained in the audited financial statements for the year ending June 30, 2003 prepared by the Fund. All assets of the fund were included in the valuation, including assets that are being segregated by the fund in a separate Health Insurance Account for the payment of retiree health insurance premiums. For the last actuarial valuation, such segregated assets were not included in the valuation.

The actuarial value of assets was determined by smoothing unexpected gains or losses over a period of 4 years. The resulting actuarial value of assets is $10,494,754,698. The development of this actuarial value of assets is outlined in Exhibit 2.

Exhibit 2

Actuarial Value of Assets

A. Development of Investment Gain/(Loss) For Year Ending June 30, 2003

1. Revised Actuarial Value of Assets as of 6/30/02	$ 10,640,947,039
2. Employer Contributions	78,783,758
3. Employee Contributions	159,931,110
4. Expenses	621,947,679
5. Expected Investment Income	836,241,354
6. Actual Investment Income	313,502,170
7. Investment Gain/(Loss) (6 – 5)	$ (522,739,184)

B. Development of Actuarial Value of Assets

8. Expected Actuarial Value of Assets as of June 30, 2003 (1 + 2 + 3 – 4 + 5)	$ 11,093,955,582
9. One-fourth of Investment Gain/(Loss) For Year Ending June 30, 2000	65,310,416
10. One-fourth of Investment Gain/(Loss) For Year Ending June 30, 2001	(237,323,180)
11. One-fourth of Investment Gain/(Loss) For Year Ending June 30, 2002	(296,503,324)
12. One-fourth of Investment Gain/(Loss) For Year Ending June 30, 2003	(130,684,796)
13. Actuarial Value of Assets as of June 30, 2003 (8+9+10+11+12)	$ 10,494,754,698

C. FUND PROVISIONS

Our valuation was based on the provisions of the Fund in effect as of June 30, 2003 as provided in Article 17 of the Illinois Pension Code. A summary of the principal provisions of the Fund on which the valuation was based is provided in Appendix 2.

D. ACTUARIAL ASSUMPTIONS AND COST METHOD

Based on a study of the experience of the Fund over the period 2000-2002 we have made some changes in the actuarial assumptions used for the June 30, 2003 actuarial valuation. The mortality rates, disability rates, withdrawal rates and retirement rates for teachers with 33 or more years of service have been changed to bring them in line with recent experience. The salary increase assumption has been reduced to bring it in line with recent experience, with the reduction being 1% per year at most ages. The other actuarial assumptions used for the June 30, 2003 actuarial valuation are the same as those used for the June 30, 2002 valuation. The actuarial assumptions used for the June 30, 2003 valuation are outlined in Appendix 1. In our opinion, the actuarial assumptions used for the valuation are reasonable, in the aggregate, taking into account Fund experience and future expectations and represent our best estimate of anticipated experience.

The projected unit credit actuarial cost method was used for the June 30, 2003 actuarial valuation. This is the same actuarial cost method that was used for the June 30, 2002 valuation.

E. ACTUARIAL LIABILITY

The actuarial liability as determined under the valuation for the various classes of members is summarized in Exhibit 3. The total actuarial liability is then compared with the actuarial value of assets in order to arrive at the unfunded actuarial liability.

As of June 30, 2003, the total actuarial liability is $11,411,528,364, the actuarial value of assets is $10,494,754,698, and the unfunded liability is $916,773,666. The ratio of the actuarial value of assets to the actuarial liability, or funded ratio, is 92%.

Exhibit 3

Actuarial Liability as of June 30, 2003

1. Actuarial Liability for Active Members	
(a) Basic Retirement Annuity	$ 3,506,248,463
(b) Post Retirement Increase	916,606,144
(c) Lump Sum Death Benefit	12,574,185
(d) Survivor's Pension	311,505,097
(e) Disability Pension	82,170,188
(f) Withdrawal Benefit	242,547,915
(g) Total	$5,071,651,992
2. Actuarial Liability Members Receiving Benefits	
(a) Retirement Pensions	$ 5,897,876,168

(b) Survivor Pensions	250,121,418
(c) Disability Pensions	93,476,649
(d) Total	$ 6,241,474,235

3. Actuarial Liability for Inactive Members	$ 98,402,137
4. Total Actuarial Liability	$ 11,411,528,364
5. Actuarial Value of Assets	$ 10,494,754,698
6. Unfunded Actuarial Liability	$ 916,773,666
7. Funded Ratio	92.0%

Estimate of Impact of Changes in Assumptions. We have estimated that the changes in assumptions used for the June 30, 2003 actuarial valuation had the impact of increasing the Fund's total actuarial liability by $130,706,801.

F. EMPLOYER'S NORMAL COST

The employer's share of the normal cost for the year beginning July 1, 2003 is developed in Exhibit 4. The total normal cost is $318,912,509, employee contributions are estimated to be $153,558,523, resulting in the employer's share of the normal cost of $165,353,986.

Based on a payroll of $1,706,205,814 as of June 30, 2003, the employer's share of the normal cost can be expressed as 9.69% of payroll.

Exhibit 4

Employer's Normal Cost For Year Beginning July 1, 2002

	Dollar Amount	Percent Of Payroll
1. Basic Retirement Pension	$ 173,133,388	10.15%
2. Post Retirement Increases	45,501,718	2.67
3. Lump Sum Death Benefits	952,652	.05
4. Survivor's Pension	17,769,486	1.04
5. Disability Benefits	5,740,125	.34
6. Withdrawal Benefits	29,011,844	1.70

7.	**Health Insurance Reimbursement**	40,000,000	2.34
8.	**Administrative Expenses**	6,803,296	.40
9.	**Total Normal Cost**	$ 318,912,509	18.69%
10.	**Employee Contributions**	153,558,523	9.00
11.	**Employer's Share of Normal Cost**	$ 165,353,986	9.69%

Note. The above figures are based on a total active payroll of $1,706,205,814 as of June 30, 2003.

G. BOARD OF EDUCATION CONTRIBUTION REQUIREMENT FOR FISCAL YEAR 2005

Under the funding plan established by Public Act 89-15, the minimum contribution to the Fund by the Board of Education shall be an amount determined by the Fund to be sufficient to bring the total assets of the Fund up to 90% of the total actuarial liabilities by the end of fiscal year 2045. The required Board of Education contribution is to be calculated as a level percent of payroll over the years through 2045. For fiscal years 2000 through 2010, the Board of Education's contribution, as a percentage of the applicable payroll, is to be increased in equal annual increments so that by Fiscal Year 2011, the Board of Education is contributing at the required rate.

Public Act 90-548, signed into law on December 4, 1997 revised the above funding plan to provide that the Board of Education contribution shall not be in excess of the amount needed to maintain the ratio of assets to total actuarial liability at the 90% level.

As of June 30, 2003, the ratio of the actuarial value of assets to the total actuarial liability is 92.0%. Using the results of the June 30, 2003 valuation as a starting point and assuming no Board of Education contribution in Fiscal Year 2004, we have projected the ratio of the actuarial value of assets to the total actuarial liability as of June 30, 2005 to be 81.0%. Thus, on the basis of the funding plan established by Public Act 89-15 as revised by Public Act 90-548, we have calculated the total employer required contribution for Fiscal Year 2005 to be $76,100,000. State appropriations are estimated to be $65 million and other employer contributions are estimated to be $13.7 million. Thus, based on the total employer required contribution for Fiscal Year 2005, estimated State appropriations and other employer contributions for Fiscal Year 2005, the net Board of Education contribution requirement for Fiscal Year 2005 is estimated to be $0.

H. ANNUAL REQUIRED CONTRIBUTION FOR GASB STATEMENT NO. 25

GASB Statement No. 25 requires the disclosure of the annual required employer contribution (ARC), calculated in accordance with certain parameters. Based on the results of the June 30, 2003 actuarial valuation, we have therefore calculated the annual required contribution for Fiscal Year 2004. In accordance with the parameters prescribed in GASB Statement No. 25, in calculating the annual required contribution, we have used a 40-year level-percent-of-payroll amortization of the unfunded liability. On this basis, the annual required contribution for Fiscal Year 2004 has been determined to be as follows:

	Fiscal Year 2004
1. Employer's normal cost	$ 165,353,986
2. Annual amount to amortize the unfunded liability (surplus) over 40 years as a level percent of payroll	37,617,499
3. Annual required contribution (1 + 2)	$ 202,971,485

I. RECONCILIATION OF CHANGE IN UNFUNDED ACTUARIAL LIABILITY

The net actuarial experience during the period July 1, 2002 to June 30, 2003 resulted in an increase in the Fund's unfunded actuarial liability of $510,352,914. This increase in unfunded actuarial liability is a result of several kinds of gains and losses. The financial effect of the most significant gains and losses is illustrated in Exhibit 5.

Restating the June 30, 2002 actuarial value of assets to include assets segregated in the Health Insurance Fund had the impact of decreasing the unfunded liability by $21,885,581.

The employer contribution requirement for the year of normal cost plus interest on the unfunded actuarial liability amounted to $213,120,588. The total actual employer contribution for the year, including the amount allocated to the Health Insurance Fund, amounted to $78,783,758. Thus, the employer contribution for the year fell short of the funding requirement of normal cost plus interest on the unfunded liability by $134,336,830. Had all other aspects of the Fund's experience been in line with the actuarial assumptions, the unfunded liability would have increased by this amount.

The net rate of investment return earned by the Fund during the year, based on the actuarial value of assets, was approximately 2.3%, in comparison to the assumed rate of 8.0%. This resulted in an increase in the unfunded liability of $599,200,884. Salary increases lower than expected resulted in a decrease in the unfunded liability of $360,506,774.

Certain changes were made in the valuation of benefits, based on the actuarial audit performed by Buck Associates. The result of these changes in the valuation of benefits was to increase the unfunded liability by $70,470,829. We have estimated that the changes in actuarial assumptions used for the June 30, 2003 actuarial valuation had the impact of increasing the unfunded liability by $130,706,801.

The various other aspects of the Fund's experience resulted in a net decrease in the unfunded liability of $41,970,075. The aggregate financial experience of the Fund resulted in an increase in the unfunded liability of $510,352,914.

Exhibit 5

Reconciliation of Change in Unfunded Actuarial Liability
Over the Period July 1, 2002 to June 30, 2003

1. Unfunded Actuarial Liability as of 7/1/02	$ 406,420,752
2. Decrease in Unfunded Liability due to Revision of Actuarial Value of Assets to include all assets	21,885,581
3. Employer Contribution Requirement of Normal Cost Plus Interest on Unfunded Liability for Period 7/1/02 to 6/30/03	213,120,588
4. Actual Employer Contribution for the Year	78,783,758
5. Increase in Unfunded Liability Due to Employer Contribution Being Less Than Normal Cost Plus Interest on Unfunded Liability (2 – 3)	$ 134,336,830
6. Increase in Unfunded Liability Due to Investment Return Lower Than Assumed	599,200,884
7. Decrease in Unfunded Liability Due to Salary Increases Lower Than Assumed	360,506,774
8. Increase in Unfunded Liability Due to Changes in Valuation of Benefits	70,470,829
9. Increase in Unfunded Liability Due to Changes in Actuarial Assumptions	130,706,801
10. Decrease in Unfunded Liability Due to Other Sources	41,970,075
11. Net Increase in Unfunded Liability for the Year (5 – 2 + 6 – 7 + 8 + 9 – 10)	510,352,914
12. Unfunded Actuarial Liability as of June 30, 2003 (1 + 11)	$ 916,773,666

Additional Actuarial Tables

Summary of Actuarial Liability and Unfunded Actuarial Liability

Fiscal Year	Total Actuarial Liability	Actuarial Value of Assets	Assets as a % of Actuarial Liability	Unfunded Actuarial Liability (UAL)	Active Member Payroll	UAL as a % of Active Member Payroll
1994	6,247,417,779	5,106,254,796	81.7%	1,141,162,983	1,162,159,018	98.2%
1995	6,523,543,057	5,276,538,889	80.9%	1,247,004,168	1,169,319,610	106.6%
1996	6,949,831,870	6,533,031,737	94.0%	416,800,133	1,278,738,666	32.6%
1997	7,248,109,505	7,264,691,704	100.2%	(16,582,199)	1,362,611,111	(1.2%)
1998	8,015,603,364	7,798,404,136	97.3%	217,199,228	1,434,015,017	15.1%
1999	8,551,879,683	8,620,059,765	100.8%	(68,180,082)	1,521,181,503	(4.5%)
2000	9,940,371,587	9,612,202, 813	96.7%	328,168,774	1,651,810,084	19.9%
2001	10,392,704,659	10,387,568,945	99.9%	5,135,714	1,690,264,167	.3%
2002	11,025,482,210	10,619,061,458	96.3%	406,420,752	1,759,045,853	23.1%
2003	11,411,528,364	10,494,754,698	92.0%	916,773,666	1,706,205,814	53.7%

Solvency Test

	ACCRUED LIABILITIES FOR:						
Fiscal Year	(1) Active Members Accumulated Contributions	(2) Members Currently Receiving Benefits	(3) Active Member Employer Portion	Actuarial Value of Assets	Percent of Accrued Liabilities Covered by Assets (1)	(2)	(3)
1994	853,538,324	2,942,839,717	2,451,039,738	5,106,254,796	100%	100%	53%
1995	847,054,700	3,391,248,620	2,285,239,737	5,276,538,889	100%	100%	45%
1996	937,992,220	3,485,257,311	2,526,582,339	6,533,031,737	100%	100%	84%
1997	1,011,117,705	3,541,795,771	2,695,196,029	7,264,691,704	100%	100%	100%
1998	1,080,981,685	3,669,980,250	3,264,641,429	7,798,404,136	100%	100%	93%
1999	1,143,906,163	3,923,581,558	3,484,391,962	8,620,059,765	100%	100%	100%
2000	1,185,452,979	4,744,351,443	4,010,567,165	9,612,202,813	100%	100%	92%
2001	1,212,958,502	5,211,311,326	3,968,434,831	10,387,568,945	100%	100%	100%
2002	1,227,035,375	5,829,728,535	3,968,718,300	10,619,061,458	100%	100%	90%
2003	1,158,355,645	6,241,474,235	4,011,698,484	10,494,754,698	100%	100%	77%

Additional Actuarial Tables

Schedule of Actual Employer Contributions and Actuarially Determined Contribution Requirements

Fiscal Year	Active Member Payroll	Actual Employer Contribution: Dollar Amount	Actual Employer Contribution: Percent of Payroll	Actuarially Determined Contribution Requirement as a Percent of Payroll
1994	1,162,159,018	257,438,703 (a)	22.15%	16.57%
1995	1,169,319,610	86,171,177 (b)	7.37%	16.71%
1996	1,278,738,666	72,580,416 (c)	5.68%	16.42%
1997	1,362,611,111	91,776,705	6.74%	15.42%
1998	1,434,015,017	75,072,817	5.24%	7.93%
1999	1,521,181,503	60,781,723	4.00%	8.25%
2000	1,651,810,084	79,729,145	4.83%	8.38%
2001	1,690,264,167	77,135,200	4.65%	11.18%
2002	1,759,045,853	77,679,068	4.42%	10.17%
2003	1,706,205,814	78,783,758	4.62%	9.39%

(a) The Fiscal Year 1993 employer contribution of $164,010,589 includes special employer contributions of $69,485,416 required for establishing additional service credit under the early retirement incentive program. Excluding these special employer contributions, the regular employer contribution for Fiscal Year 1993 was $94,525,173, which can be expressed as 7.73% of payroll.

(b) The Fiscal Year 1994 employer contribution of $257,438,703 includes special employer contributions of $26,532,254 required for establishing additional service credit under the second early retirement incentive program. Excluding these special employer contributions, the regular employer contribution for Fiscal Year 1994 was $230,906,449, which can be expressed as 19.87% of payroll.

(c) The Fiscal Year 1995 employer contribution of $86,171,177 includes special employer contributions of $3,753,006 required for establishing additional service credit under the second early retirement incentive program. Excluding these special employer contributions, the regular employer contribution for Fiscal Year 1995 was $82,418,171, which can be expressed as 7.05% of payroll.

Additional Actuarial Tables

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase (Decrease) In Average Pay
8-31-94	30,804	$ 1,162,159,018	$ 37,728	(2.6%)
8-31-95	31,308	1,169,319,610	37,349	(1.0%)
8-31-96	32,824	1,278,738,666	38,957	4.3%
8-31-97	33,632	1,362,611,111	40,515	4.0%
8-31-98	34,875	1,434,015,017	41,119	1.5%
6-30-99	34,720	1,521,181,503	43,813	6.5%
6-30-00	35,400	1,651,810,084	46,661	6.5%
6-30-01	37,648	1,690,264,167	44,897	(3.8)%
6-30-02	37,374	1,759,045,853	47,066	4.8%
6-30-03	36,548	1,706,205,814	46,684	(0.8%)

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Year Ended	Added-To-Rolls No.	Added-To-Rolls Annual Benefits	Removed-From-Rolls No.	Removed-From-Rolls Annual Benefits	Rolls-End-of-Year No.	Rolls-End-of-Year Annual Benefits	Average Annual Benefit	% Increase in Average Annual Benefit
1995	1,583	$45,829,213	544	$ 7,341,802	15,737	$ 313,082,045	$19,895	6.5%
1996	635	22,252,071	573	9,606,994	15,799	325,727,122	20,617	3.6%
1997	690	21,078,404	658	11,865,685	15,831	334,939,841	21,157	2.6%
1998	765	26,445,632	642	12,840,824	15,954	348,544,649	21,847	3.3%
1999	888	34,999,366	552	10,960,322	16,290	372,583,693	22,872	4.7%
2000	1,045	41,279,538	647	14,920,719	16,688	398,942,512	23,096	4.5%
2001	1,332	52,778,231	722	16,693,883	17,298	435,026,860	25,149	5.2%
2002	1,279	79,552,055	710	13,059,415	17,867	501,519,500	28,070	11.6%
2003	1,363	63,184,471	665	20,222,042	18,565	544,481,929	29,328	4.5%

(1) Detailed information prior to 1994 is unavailable.

Appendix 1

Summary of Actuarial Assumptions and Actuarial Cost Method

Actuarial Assumptions. The actuarial assumptions used for the June 30, 2003 valuation are summarized below. The assumptions were adopted as of June 30, 2003.

Mortality Rates. For males, the UP-94 Table for Males, rated down three years; for females, the UP-94 Table for Females, rated down two years.

Termination Rates. Termination rates based on the recent experience of the Fund. The following is a sample of the termination rates that were used:

1. Employees With 5 or Less Years of Service - Rates of Termination Per 1,000 Members

Years of Service	Under Age 60	Over Age 60
Less than 1 year	360	180
1 - 2 years	71	71
2 – 3 years	70	70
3 - 4 years	68	68
4 - 5 years	63	63

2. Employees With 5 to 10 Years of Service

Age	Rate of Termination 1,000 Members
25	46
30	48
35	44
40	37
45	32
50	30
55	30
60	30
62 and later	0

3. Employees With 10 or More Years of Service

Age	Rate of Termination Per 1,000 Members
30	24
35	25
40	19
45	12
50	10
55	10
60	10
62 and later	0

Disability Rates. Disability rates based on the recent experience of the Fund. The following is a sample of the disability rates that were used:

Age	Disabilities Per 1,000 Members
30	.7
40	1.0
50	2.0
60	2.5
62 and over	.0

Retirement Rates. Rates of retirement for each age from 55 to 75 based on the recent experience of the Fund were used. The following are samples of the rates of retirement that were used:

1. Employees With Less Than 33 Years of Service

Age	Rate of Retirement Per 1,000 Members
55	71
60	103
65	155
70	186
75	1,000

2. Employees With 33 or More Years of Service

Age	Rate of Retirement Per 1,000 Members
55	100
60	270
65	250
70	180
75	1,000

Salary Progression. Rates of salary increase, which vary by age. The following is a sample of the assumed rates of salary increase.

Age	Assumed Rate of Increase
25	11.2%
30	8.9
35	7.3
40	6.2
45	5.4
50	4.7
55 and later	4.0

Interest Rate. 8.0% per year, compounded annually.

Marital Status. 80% of participants were assumed to be married.

Spouse's Age. The age of the spouse was assumed to be 1 year older than the age of the employee.

Assumption Regarding Total Service Credit At Retirement. It was assumed that a teacher's total service credit at retirement would be 103.3% of the teacher's regular period of service at retirement.

Actuarial Cost Method. The projected unit credit actuarial cost method was used. Actuarial gains and losses are reflected in the unfunded actuarial liability. This actuarial cost method was adopted as of August 31, 1991.

Appendix 2
Summary of Principal Provisions

1. Eligibility for Pension. The right to a retirement pension vests (1) after 20 years of validated service, with the pension payable at age 55 or over; or (2) after 5 years validated service, with the pension payable at age 62 or over.

2. Amount of Retirement Pension. For service earned before July 1, 1998, the retirement pension is 1.67% of "final average salary" for each of the first 10 years of validated service, 1.90% for each of the next 10 years, 2.10% for each of the next 10 years, and 2.30% for each year above 30. For service earned after June 30, 1998, the pension is 2.2% of "final average salary" for each year of service.

Service earned before July 1, 1998 can be upgraded to the 2.2% formula through the payment of additional employee contributions of 1% of the teacher's highest salary within the last four years for each year of prior service. Maximum payment is 20% of salary, but all years are upgraded. The number of years for which contributions are required is reduced by one for each three full years of service after June 30, 1998. No contribution is required if the employee has at least 30 years of service. The maximum pension is 75% of final average salary or $1,500 per month, whichever is greater.

3. Final Average Salary Defined. "Final average salary" for pension computation is the average of the highest rates of salary for any 4 consecutive years of validated service within the last 10 years of service.

4. Reduction in Pension for Early Retirement. Except for retirement after 34 years of service, the retirement pension in the case of retirement prior to age 60 is reduced 1/2 of 1% for each month that the teacher is under age 60.

5. Early Retirement Without Discount. Subject to authorization by the employer, an employee who retires on or before June 30, 2005 may elect to make a one-time contribution and thereby avoid the early retirement reduction. The exercise of this election by the employee also obligates the employer to make a one-time nonrefundable contribution.

6. Non-Duty Disability Retirement. A disability retirement pension is payable in the event of total or permanent disability for teaching service after 10 or more years of service, irrespective of age. The rate of pension is 2.2% of average salary for each year of service after June 30, 1998 and for each year of service that has been upgraded, and 1-2/3% of average salary for each other year of service. Upon disability retirement after 20 years or more of contributing service, but under age 55, the accrued retirement pension is payable, discounted 1/2 of 1% for each month the disabled teacher is under age 55, down to a minimum of 50 years.

If total service is 20 years or more and the member has attained age 55, the accrued retirement pension is payable without reduction. After 25 years of service, regardless of age, the accrued retirement pension is payable without reduction.

7. Duty Disability Benefit. A duty-connected disability benefit is provided equal to 75% of final average salary upon total incapacity for teaching service as a result of an injury sustained while in the performance of teaching service. The benefit is reduced by "Workers' Compensation" payments.

8. Post-Retirement Increases. Automatic annual increases in pension equal to 3% of the current amount of pensions are provided. The increases accrued from the anniversary date of retirement or the 61st birthday, whichever is later.

9. Survivor's Pensions. Pensions are payable to survivors of teachers and pensioners under the following conditions:

Upon the death of a teacher or pensioner occurring on or after July 1, 1981, the maximum benefit is $400 per month to a spouse alone and $600 per month if there are other dependents. Payment of a survivor's pension is conditioned upon marriage having been in effect at least 1 year prior to death. On death after retirement, the total survivor's pension may not exceed retirement or disability pension paid to the deceased pensioner.

Upon the death of a teacher or pensioner occurring after December 31, 1986, the minimum total survivor's pension payable shall be 50% of the earned retirement pension of such teacher or pensioner.

If the surviving spouse is under age 50, and no unmarried minor children under age 18 survive, payment of the survivor's pension is deferred until age 50. Survivor's pensions are subject to annual automatic increases of 3% of the current amount of pension.

10. Reversionary Pension. By accepting a reduced retirement pension, a member can provide a reversionary pension for a surviving beneficiary. If the reversionary pension was elected on or after January 1, 1984, and the beneficiary survives the date of the teacher's retirement, but does not survive the retired teacher, the teacher's pension shall be restored to the full amount of pension.

11. Refund of Contributions. Upon separation of service, a teacher is entitled to receive a refund of his total contributions and those contributions made on his behalf, without interest.

12. Death Benefits. Upon death while in service, a refund equal to the total contributions less contributions for survivor's pension is payable without interest to a designated beneficiary or the estate of the teacher. Upon death after retirement, the death benefit consists of the excess, if any, of the total contributions over the total pension payments paid to the member or his beneficiary. In addition, the following death benefit is payable:

Death in service. The amount of the benefit is equal to the last month's salary for each year of validated service up to 6 month's salary but not exceeding $10,000.

Death while on pension. The death benefit is equal to 6 month's salary but not to exceed $10,000 less 1/5 of the death benefit for each year or part of a year that the member has been on pension, down to a minimum of $5,000.

13. Health Insurance Reimbursement. The board may pay each recipient of a retirement, disability, or survivor's pension an amount to be determined by the board, which shall represent partial reimbursement for the cost of the recipient's health insurance coverage, with the total amount of payment not to exceed $40,000,000 in any year.

14. Financing. Teachers are required to contribute a total of 9% of salary consisting of 7 1/2% towards the retirement pensions, 1% towards the survivor pension, and 1/2% towards the post-retirement increment. As of September 1981, the Board of Education has been paying 7% of the required teacher contributions for Chicago Public School Teachers. Charter School contributions may be contributed at various rates by the employers and teachers.

The remainder of the cost of benefits is financed by (1) contributions by the Chicago Board of Education; (2) allocations by the State of Illinois from the State Distributive Fund; and (3) investment income.

15. Retirement Systems Reciprocal Act. The Fund complies with the Retirement Systems Reciprocal Act (Chapter 40 Act 5 Article 20 of the Illinois Compiled Statutes) to provide reciprocal benefits if a member has service credit for other public employment in Illinois.

Appendix 3
Glossary of Terms used in Report

1. Actuarial Present Value. The value of an amount or series of amounts payable at various times, determined as of a given date by the application of a particular set of actuarial assumptions.

2. Actuarial Cost Method or Funding Method. A procedure for determining the actuarial present value of pension plan benefits and for determining an actuarially equivalent allocation of such value to time periods, usually in the form of a normal cost and an actuarial accrued liability.

3. Normal Cost. That portion of the present value of pension plan benefits, which is allocated to a valuation year by the actuarial cost method.

4. Actuarial Accrued Liability or Accrued Liability. That portion, as determined by a particular actuarial cost method, of the actuarial present value of pension benefits which is not provided for by future normal costs.

5. Actuarial Value of Assets. The value assigned by the actuary to the assets of the pension plan for purposes of an actuarial valuation.

6. Unfunded Actuarial Liability. The excess of the actuarial liability over the actuarial value of assets.

7. Projected Unit Credit Actuarial Cost Method. A cost method under which the projected benefits of each individual included in an actuarial valuation are allocated by a consistent formula to valuation years. The actuarial present value of benefits allocated to a valuation year is called the normal cost. The actuarial present value of benefits allocated to all periods prior to a valuation year is called the actuarial liability.

Under this method, the actuarial gains (losses), as they occur, generally reduce (increase) the unfunded actuarial liability.

8. Actuarial Assumptions. Assumptions as to future events affecting pension costs.

9. Actuarial Valuation. The determination, as of the valuation date, of the normal cost, actuarial liability, actuarial value of assets, and related actuarial present values for a pension plan.

10. Vested Benefits. Benefits that are not contingent on an employee's future service.