State Universities Retirement System of Illinois

Actuarial Valuation as of June 30, 1992

October, 1992

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October 27, 1992

Board of Trustees
State Universities Retirement System of Illinois
P.O. Box 2710-Station A
1901 Fox Drive
Champaign, IL 61825-2710

Dear Members of the Board:

We are pleased to present the report of the actuarial valuation of the State Universities Retirement System of Illinois ("SURS") as of June 30, 1992.

This valuation provides information on the funding of SURS and includes a determination of State contribution levels for 1994 under State law. It is based on the provisions of SURS in effect as of June 30, 1992.

This actuarial valuation process uses data on the SURS membership and the asset value of the Trust Fund. Both of these were provided by SURS staff. While certain checks for reasonableness were performed, these data were used unaudited.

The actuarial assumptions, actuarial cost method, and asset valuation method used in this valuation are identical to those used in the prior actuarial valuation of SURS.

To the best of our knowledge, this actuarial statement is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practice.

Respectfully submitted,
THE WYATT COMPANY

By Denise Patterson
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Associate of the Society of Actuaries

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State Universities Retirement System of Illinois

Actuarial Valuation As Of June 30, 1992

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Section I

Executive Summary

At your request, we have completed an actuarial valuation of the State Universities Retirement System ("SURS") as of June 30, 1992.

The purposes of an actuarial valuation are:

(1) To develop State contribution levels to SURS for the fiscal year ending June 30, 1994 under Section 15-155, Chapter 108-1/2, IRS, and

(2) To examine the funding status of SURS as of the valuation date.

This actuarial valuation is based on:

(1) Data on active, inactive, and retired SURS members provided by SURS staff;

(2) Information on the assets of SURS provided by SURS staff;

(3) Actuarial assumptions adopted by the Board at its December, 1991 meeting, effective July 1, 1991; and

(4) Actuarial methods required under Section 15-155, IRS.

The actuarial assumptions and methods utilized in this valuation are identical to those used in the prior valuation for determination of the 1992-93 State contribution.

The eligibility and benefit provisions of SURS recognized in this valuation are identical to those recognized in the prior valuation except that HB 1620, enacted effective July 1, 1991, added a large number of part-time employees to SURS.

Key results in this valuation, compared to comparable results from the prior valuation are as follows:

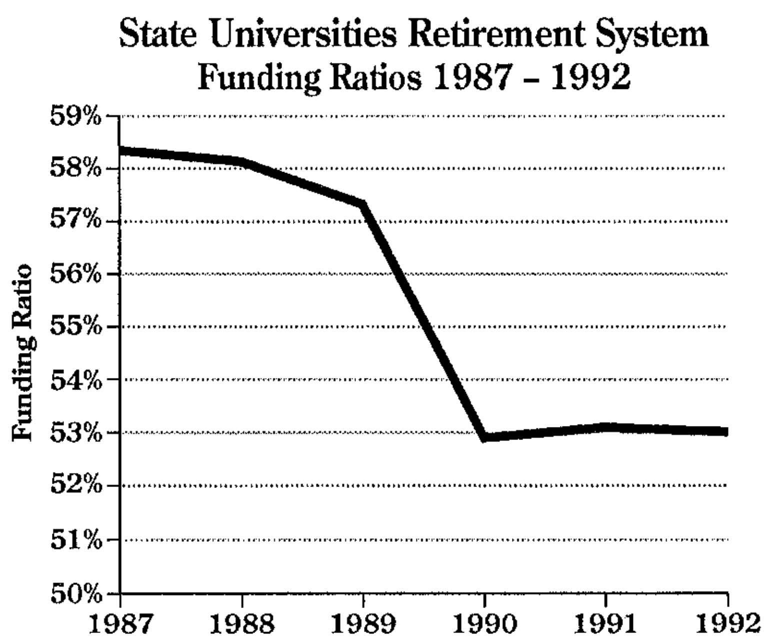
	Actuarial Valuation as of June 30, [$ in millions]	
	1991	1992
Members		
Active Members	55,374	75,281
Total Payroll	$1,768.5	$1,947.9
Inactive Members	7,024	10,508
Retirees & Survivors	18,909	20,173

	Actuarial Valuation as of June 30, [$ in millions] 1991	1992
State Contribution Levels		
[1993 & 1994, respectively]		
Normal Cost:		
• % of Pay	10.274%	9.872%
• Dollars	$201.3	$213.0
Contribution under Section 15-155:		
• % of Pay	8.623%	9.598%
• Dollars	$168.9	$207.1
Funding Status		
GASB #5 Liability	$6,647.5	$7,359.6
Assets (Book Value)	$3,529.8	$3,901.5
Unfunded Actuarial Accrued Liability	$3,117.7	$3,458.1
Funding Ratio	53.1%	53.0%

The effect of HB 1620 was to add a large number of relatively low paid, high turnover members to SURS. Thus, while these new members produced a large increase in active membership, they produced a reduction in average pay (from $31,938 to $25,875) and a very small increase (about 0.18%) in SURS actuarial liability.

The continuing deficiencies in State contributions to SURS has produced a slight decline in the Funding Ratio (from 53.1% to 53.0%) in spite of excellent investment performance during the 1991-92 fiscal year. This funding level is low given the age and maturity of SURS.

The chart below illustrates the lack of funding progress in recent years.



The remainder of this report details the development of these results.

Section II

Development of the Valuation

A. Introduction

The law governing the State Universities Retirement System requires the actuary, as the technical advisor to the Board of Trustees, to make:

> "An annual determination of the liabilities and reserves of this System and an annual determination of the amount and distribution of required employer contributions."
> [Chapter 108-1/2, Par. 15-173]

The Wyatt Company, as Actuary, has completed a valuation as of June 30, 1992, based upon membership and financial data compiled by the administrative staff of SURS. The results of the valuation are presented in this report.

House Bill 1620, which became effective on July 1, 1991, extended membership to part-time employees under the system. This change is reflected in the results of this valuation.

The results of this valuation are based on the same actuarial methods and assumptions as used in the prior valuation. The assumptions, which are based on an experience review for the four year period ending June 30, 1991, are described in detail in Appendix B.

Important information on the data used in this valuation and the results of this valuation are summarized below:

		June 30, 1991	June 30, 1992
1.	Number of Active Members	55,374	75,281
2.	Annualized Reported Earnings		
	Full-time Payroll	$1,768,548,990	$1,786,294,000
	(Average)	(31,938)	(33,429)
	Total Payroll	N/A	$1,947,913,000
	(Average)	–	(25,875)
3.	Number of Members Receiving Payments	18,909	20,173
4.	Annual Benefit Payments	$207,348,176	$236,085,075
5.	Assets:		
	(a) Book Value	3,529,759,901	3,901,516,705
	(b) Market Value	4,209,125,051	4,639,699,918
6.	State Normal Cost	181,692,749	192,296,205
	(% Total Payroll)	N/A	(9.872%)
	(% Full-time Payroll)	(10.274%)	(10.765%)
7.	Accrued Actuarial Liability ("AAL")	6,647,500,584	7,359,592,554
	(Funding Ratio)	(53.1%)	(53.0%)
8.	Unfunded Accrued Actuarial Liability ("UAAL")	3,117,740,683	3,458,075,849

N/A = Not Applicable

B. *Analysis of Increase in Unfunded Accrued Actuarial Liability*

House Bill 1620 was approved and became effective July 1, 1991. Special turnover assumptions have been used with respect to the part-time employees. Changes in membership data and fund assets also affected the results of the valuation.

The unfunded accrued actuarial liability (UAAL) increased by $340,335,166 in the year ending June 30, 1992. A detailed description of this increase follows:

1. UAAL at 6/30/91 for purposes of disclosure	$3,117,740,683
2. Decrease to adjust for new assumptions adopted 7/1/91	(82,835,320)
3. Effect of contribution being less than the amount necessary to fund normal cost and interest on the UAAL:	
(a) Contributions Due:	
(i) Interest on (1) and (2) to 6/30/92	$ 242,792,429
(ii) Employee Contributions (including Early Retirement Option ("ERO") payments)	170,426,227
(iii) Employer Normal Cost	206,366,633
(iv) Employer ERO Payments	1,849,227
(v) Service Credit Purchases	8,696,046
(vi) Interest on (ii) - (v)	15,195,463
(vii) Total	$645,326,025
(b) Contribution Paid:	
(i) Participants (including ERO Payments)	$ 170,426,227
(ii) State Appropriations	91,922,000
(iii) Employer ERO Payments	1,849,227
(iv) Reciprocity	228,721
(v) Federal, Trust Funds and Other	14,639,120
(vi) Interest on Contributions to 6/30/91	10,947,867
(vii) Total	$290,013,162
(c) Increase in the UAAL due to Contribution Shortfall [(a) minus (b)]	$355,312,863
4. Actuarial (Gains) Losses	
(a) (Gain) from investment return more than 8%	$(79,562,844)
(b) (Gain) from salary increases less than 7%	(26,402,198)
(c) Loss due to age and service retirement	37,685,188
(d) Loss due to terminations	113,055,565
(e) Loss from other sources	9,753,912
(f) Net Actuarial (Gain)/Loss	$ 54,529,623
5. Non-recurring Items - Addition of Part-time Employees (H.B. 1620)	$ 13,328,000
6. Total Increase in UAAL [2 + 3 + 4 + 5]	$340,335,166
7. UAAL at 6/30/92	$3,458,075,849

C. *Appropriation Requirements For Fiscal Year 1994*

(1) General

The law governing the System requires that the State make contributions to the System. These contributions, combined with employee contributions, investment income and other income of the System will be:

> "sufficient to meet the requirements of this Article in accordance with actuarial determinations. In no event shall employer contributions from State appropriations for any fiscal year be less than an amount which, when added to contributions from other sources, is sufficient to meet (1) the total accruing normal costs plus interest at the prescribed rate on the unfunded accrued liabilities, or (2) the accruing requirements necessary to retain qualified status under Section 401(a) of the United States Internal Revenue Code, or any similar provision as successor thereof."

The law defines normal cost as:

> "the liability for pensions and other benefits which accrues to the system because of the credits earned for service rendered by the participants during the fiscal year and expenses of administering the system."

Section 401(a) of the Internal Revenue Code ("IRC") would require essentially the same contribution as required on the prior page. This amount is shown below as the Required Contribution. While the cited IRC Section does require a different minimum contribution for private plans, the "40-year amortization" amount shown for comparison purposes corresponds to the minimum requirements for private plans upon passage of ERISA.

It may also be deemed the minimum amount required as expense pursuant to Accounting Principles Board Opinion No. 8, although any "balance sheet accruals" prior to June 30, 1992 are ignored. Until the Governmental Accounting Standards Board ("GASB") issues accounting standards for public retirement systems, this is one of the standards available for development of pension expense. Thus, the following can be considered measures of pension expense for Plan Year ending 6/30/94.

	% of Payroll [1]	**Required Contribution** [1]
Normal Cost and Interest	23.553%	$508,263,000
Normal Cost and 40 Year Amortization[2]	24.2685	$523,708,000

[1] Based upon an assumed payroll of $2.158 billion for fiscal year July 1, 1993 - June 30, 1994.

[2] Assuming a starting date of July 1, 1992.

(2) Under Section 15-155

The law governing the System provides that:

> "Starting with...fiscal year...1990, the State's contribution shall be increased incrementally over a 7-year period so that by...fiscal year...1996, the minimum contribution...shall be ...sufficient to meet the normal cost and amortize the unfunded liability over 40 years as a level percentage of payroll, determined under the projected unit credit actuarial cost method." [Chapter 108-1/2, Par. 15-155(a), IRS]

However, the State's projected contribution of $116,728,100 to SURS for fiscal year 1993 is insufficient to meet the System's total required contribution for that year of $168,925,000. As a result, State contribution pattern below has been developed on the basis of a 4-year period, starting with fiscal year 1993, rather than the 7-year period set out in statute. The target date for completely amortizing the unfunded accrued actuarial liability remains unchanged at June 30, 2035.

The required State contribution rates and amounts are as follows:

Fiscal Year	Normal Cost	Amortization of Unfunded Liability	Total Required Rate	Assumed Payroll (Billions)	Total Required Contribution
1994	9.872%	(0.274%)	9.598%	$2.158	$207,111,000
1995	9.872%	3.631%	13.503%	2.271	306,663,000
1996	9.872%	7.536%	17.408%	2.390	416,097,000
1997	9.872%	7.536%	17.408%	2.516	437,943,000
1998	9.872%	7.536%	17.408%	2.648	460,935,000
1999	9.872%	7.536%	17.408%	2.787	485,134,000

Contribution levels are shown on a gross State contribution basis. The net State General Fund appropriation requirement can be determined by adjusting for such items as State Pension Fund appropriations and contributions from federal and trust funds.

These contribution levels are based on the Projected Unit Credit Actuarial Cost Method, the data provided, and assumptions used for the June 30, 1992 actuarial valuation. To determine projected contribution rates and amounts, the following additional assumptions and estimates were used:

(1) Covered payroll of $2,050,000,000 for fiscal year 1993.

(2) 5.25% per annum rate of increase in covered payroll.

(3) Total State contributions of $116,728,100 for fiscal year 1993.

The contribution rates were determined in the following manner:

- The Projected Unit Credit Actuarial Cost Method was used. The normal cost rate calculated for fiscal year 1993 was based on the results of the June 30, 1992 valuation.
- The difference between the total 1993 appropriation and the required normal cost was considered the 1993 amortization payment, and this payment was converted to a percentage of the expected 1993 payroll.
- An amortization schedule was then determined on the assumption that:
  (1) The UAAL existing at June 30, 1993 would be completely amortized by June 30, 2035.
  (2) The amortization rates for fiscal years 1994 - 1996 would not be uniform, but the rate for any one of these years would exceed the rate for the previous year by a uniform percentage of payroll.
  (3) The amortization rates for fiscal years 1996 - 2035 would be a uniform percentage of payroll.

The normal cost rate calculated for fiscal year 1993 (based on the results of the June 30, 1992 valuation) was assumed to remain unchanged.

D. GASB Statement 5 Disclosure: Pension Benefit Obligation

GASB Statement No. 5 sets forth certain standards of disclosure in the annual financial statements of a defined benefit pension plan.

This statement requires the disclosure of the actuarial present value of credited projected benefits and the effect of any changes in actuarial assumptions or benefit provisions. The actuarial present value of credited projected benefits is a standardized measure of the accrued pension benefit obligation (PBO). It is the discounted amount of benefits estimated to be payable in the future as a result of employee service through the balance sheet date, computed by attributing an equal benefit amount (including the effects of projected salary increases and step-rate benefits) to each year of credited and expected future employee service.

The PBO was computed for both this year's and last year's valuation, using the same assumptions as were used to process the respective valuations. Summarized on the following page are key results for both years.

GASB Statement 5 Disclosure

Actuarial Present Value (APV) of Credited Projected Benefits

	June 30, 1991	June 30, 1992
Accumulated Contributions		
Current employees	$1,650,510,792	$1,800,008,000
Inactive members	145,139,515	134,727,704
Payable to		
Retirees and beneficiaries	2,042,069,540	2,296,873,491
Terminated employees not yet receiving benefits – employer-financed portion	213,241,899	219,599,359
Vested current employees – employer-financed portion	2,496,846,806	2,790,481,000
Non-vested current employees – employer-financed portion	99,692,032	117,903,000
Total APV of Credited Projected Benefits	$6,647,500,584	$7,359,592,554
Net Assets Available for Benefits (Market value at June 30, 1992 is $4,639,699,918)	$3,529,759,901	$3,901,516,705
Unfunded APV of Credited Projected Benefits	$3,117,740,683	$3,458,075,849

Compared to the assets valued on the same basis as for funding purposes, the credited projected benefits are 53.0% funded compared with 53.1% last year. Plan amendments since the last valuation had the following effect on the actuarial present value of credited projected benefits.

Increase due to addition of part-time employees	$ 13,328,000

APPENDIX A

Results of Actuarial Valuation

Table 1

[Page 1 of 3]

Summary of Results of Actuarial Valuation as of June 30, 1992

Member Data

1. Number of Members:

(a) Members Receiving Annuities:		
• Retirement	15,269	
• Survivor (includes prospective Widows and Widowers)	3,816	
• Disability	1,088	
• Subtotal	20,173	
(b) Other Inactive Members		10,508
(c) Active: • Full-time	53,436	
• Part-time	21,845	
• Subtotal		75,281 *
(d) Total		105,962

2. Annual Reported Earnings:

(a) Full-time	$1,786,294,000
(b) Part-time	161,619,000
(c) Total	$1,947,913,000

3. Annual Annuity Payments currently being made:

(a) Retirement	$205,298,835
(b) Survivor	19,276,001
(c) Disability	11,510,239
(d) Total	$236,085,075

* In addition, there were 1,017 disability beneficiaries who were recognized as active for valuation purposes.

Table 1

[Page 2 of 3]

Summary of Results of Actuarial Valuation as of June 30, 1992

Valuation Results

	Normal Cost	Actuarial Liability
4. Actuarial Liability for Members Receiving Annuities:		
(a) Retirement		$2,055,506,404
(b) Survivor		192,712,310
(c) Disability		48,654,777
(d) Total		$2,296,873,491
5. Actuarial Liability for Inactive Members		$354,327,063
6. Active Members:		
(a) Pension Benefits	$249,412,000	$3,805,390,000
(b) Death Benefits (Excludes refunds)	17,206,000	274,612,000
(c) Disability	19,018,000	235,904,000
(d) Withdrawals and Refunds	42,250,000	392,486,000
(e) Expenses	15,168,815	—
(f) Total Actives	$343,054,815	$4,708,392,000
7. Total	$343,054,815	$7,359,592,554
8. Assets		$3,901,516,705
9. Unfunded Actuarial Liability		$3,458,075,849
10. Expected Employee Contributions	$150,758,610	
11. Annual Normal Cost to be Provided by the State	$192,296,205	
% of Full-time Payroll	10.765%	
% of Total Payroll	9.872%	

Table 1

[Page 3 of 3]

Summary of Results of Actuarial Valuation as of June 30, 1992

Annual Funding Requirement for Fiscal Year 1994

	Percent of Payroll	Amount
12. "Interest Only Funding":		
(a) Normal Cost	9.872%	$213,038,000
(b) Interest on Unfunded	13.681%	295,225,000
(c) Total	23.553%	$508,263,000
13. "40 Year Amortization" from 7/1/92:		
(a) Normal Cost	9.872%	$213,038,000
(b) Contributions towards Unfunded	14.396%	310,670,000
(c) Total	24.268%	$523,708,000

Notes: (1) All figures have been adjusted by the appropriate interest factor for monthly contributions.

(2) Funding requirements are based on an assumed payroll of $2.158 billion.

Table 2

Actuarial Present Value of Accumulated Plan Benefits at June 30, 1992

	Vested	Non-Vested	Total
Members Currently Receiving Payments	$2,296,873,491	—	$2,296,873,491
Inactive Members	354,327,063	—	354,327,063
Active Members:			
(a) Pension Benefits	2,978,032,000	$100,238,000	3,078,270,000
(b) Death Benefits (without refunds)	234,720,000	19,981,000	254,701,000
(c) Disability	190,252,000	18,037,000	208,289,000
(d) Withdrawal and Refunds	300,812,000	55,859,000	356,671,000
(e) Sub-total	$3,703,816,000	$194,115,000	$3,897,931,000
Total:	$6,355,016,554	$194,115,000	$6,549,131,554

Non-Retired Member Contributions with Interest:	
Active	$1,800,008,000
Inactive	134,727,704
Total:	$1,934,735,704

Notes: (1) Accumulated benefits were calculated in accordance with plan provisions in effect on June 30, 1992, based on the member's history of pay and service as of such date.

(2) Projected years of service were considered only in determining members' expected eligibility for particular benefits.

(3) Future automatic cost-of-living increases were recognized.

Actuarial Assumptions (Adopted June 30, 1991)

Mortality: 1986 Projected Experience Table, a table based on experience underlying the 1971 Group Annuity Mortality Table, without margins, with a projections for mortality improvements to 1986, with a 3-year setback for males and a 2-year setback for females.

Interest: 8% per annum, compounded annually.

Termination: Illustrative rates of withdrawal from the plan are as follows:

Age	Males	Females
20	0.050	0.050
25	0.047	0.047
30	0.042	0.042
35	0.034	0.037
40	0.024	0.031
45	0.017	0.025
50	0.013	0.024
55	0.018	0.024
60	0.026	0.033
65	0.041	0.051
70	0.054	0.065

For the first 10 years of service, the termination rate is increased by multiplying the initial rate by the following:

Service Year	Males	Females
0	5.75	5.90
1	5.57	56.0
2	4.70	4.75
3	3.90	3.95
4	3.20	3.30
5	2.50	2.60
6	2.15	2.30
7	1.80	2.00
8	1.50	1.65
9	1.25	1.30

Part-time employees with less than 3 years of service are assumed to terminate within the plan year.

Salary Increases: 7% per annum compounded annually with the 7% increased by the following multiples for the first six years of service:

Service Year	Multiplier
0	1.0400
1	1.0300
2	1.0175
3	1.0175
4	1.0175
5	1.0100

Disability: Incidence of disability amongst employees:

Age	Males	Females
20	0.0000	0.0000
25	0.0003	0.0003
30	0.0006	0.0008
35	0.0007	0.0011
40	0.0009	0.0014
45	0.0013	0.0021
50	0.0021	0.0031
55	0.0043	0.0050
60	0.0088	0.0081
65	0.0104	0.0113
70	0.0050	0.0100

Retirement: Employees are assumed to retire after becoming eligible according to the following schedule:

Age	Males	Females
50-55	.075	.065
56	.040	.045
57-58	.040	.040
59	.050	.065
60	.100	.105
61	.095	.065
62	.115	.145
63	.110	.115
64	.130	.175
65	.240	.225
66	.200	.155
67	.200	.165
68	.165	.200
69	.200	.200
70	1.000	1.000

Assets: Assets available for benefits are used at book value.

Expenses: As estimated and advised by SURS staff, based on current expenses with an allowance for expected increases.

Marital Status: Employees are assumed to be married in accordance with the following table:

Age	Males	Females
20	25%	40%
30	70%	75%
40	80%	80%
50	85%	80%
60	85%	70%

Spouse's Age: The female spouse is assumed to be 3 years younger than the male spouse.

Remarriage: The surviving spouses of deceased employees are assumed to remarry in accordance with the following table:

Age	Rate of Remarriage
20	0.145
25	0.095
30	0.060
35	0.041
40	0.029
45	0.019
50	0.012
55	0.007

Children: It is assumed that married members have 2.0 children with a one age difference.

The age of the youngest child of a deceased employee at his date of death is assumed to be as follows:

Age at Death of Employee	Age of Youngest Child
20	0
25	1
30	3
35	5
40	7
45	9
50	12
55	15
60	18

Effective Rate of Interest: The rate of interest credited on member contributions is assumed to be 8% per annum.

Missing Data: If earnings were not available, the annual salary was assumed to be $30,000. If a birth date was not available, the employee was assumed to be age 40.

Procedure for Determining Prior Year Earnings: In November of each year, the System provides the Actuary with a tape containing actual salaries for the 12-month period ended August 31. That tape is matched against the valuation tape that contains actual salaries for the 10-month period ended June 30 resulting in a file with salaries for July and August. When the following year's valuation tape is received, it is matched against this special file resulting in a file with salaries for the period July 1 - June 30.

APPENDIX C

Summary of Plan Provisions

Summary of Plan Provisions

The following is a summary of the major provisions of the State Universities Retirement System as in effect on the date of the valuation (6/30/92).

Membership: The System covers faculty and non-academic permanent employees of State Universities and Colleges, Community Colleges, State Scientific Surveys and other related agencies. In addition, employees in a position where services are expected to be rendered on a continuous basis for the lesser of 4 months or one academic term will also be covered by the System.

Employees employed on a temporary basis at less than full-time and attending classes with an employer are ineligible to participate.

Member Contributions: 8% of gross earnings. 6-1/2% of the 8% contributions are designated for retirement annuities, 1/2% for automatic annual increases and 1% for survivor benefits. Police officers and firefighters contribute 9-1/2% of earnings. The additional 1-1/2% is a normal retirement contribution.

Interest Credited on Member Contributions: The interest rate credited is fixed by the Board and has been 8% in recent years. (For FY89 it was 7-1/2%.) For purposes of lump sum payments to former members, the interest rate is 4-1/2%.

Normal Retirement: Members are eligible for normal retirement after 35 years of covered service, after 8 years of covered service and age 60, or after 5 years of covered service and age 62. Policemen and firemen are eligible for normal retirement at age 55 with 20 years of service, or at age 50 with 25 years of service.

The annuity payable is based on the largest of three formulas:

(1) The following percentages of "average earnings":

	General	Police & Firefighters
(a) For each of the first 10 years of service	1.67%	2.25%
(b) For each of the next 10 years of service	1.90%	2.50%
(c) For each of the next 10 years of service	2.10%	2.75%
(d) For each year of service over 30	2.30%	2.75%

Average earnings are the average of the highest earnings for any 4 consecutive years. Optionally, for all employees, except academic employees paid on other than a 12-month basis, average earnings may be based on the 48 consecutive calendar months ending with the last day of employment. A lump sum payment for up to 56 days of accrued vacation may be included in his computation.

(2) The actuarial equivalent of 2.4 times the accumulated member contributions for retirement annuities (6-1/2% of earnings for ordinary members, 8% of earnings for police officers and firefighters). The actuarial equivalent assumes a constant annuity payable for life.

(3) For each year of service up to a maximum of 30 years, if employed one-half time or more, the following monthly amount based on average earnings:

Average Annual Earnings	
Under $3,500	$8
$3,500 - $4,500	9
$4,500 - $5,500	10
$5,500 - $6,500	11
$6,500 - $7,500	12
$7,500 - $8,500	13
$8,500 - $9,500	14
$9,500 and above	15

For members first participating hired after September 14, 1977, the maximum annuity under (1) or (2) is 75% of average earnings. The maximum is 80% of average earnings for members who participated on or before September 14, 1977.

Early Retirement: Members are eligible for early retirement after 8 years of service and age 55, but the annuity calculated under formula (1) or (3) above is reduced by 1/2% for each month since retirement precedes age 60.

Early Retirement Without Discount: A member may retire between the ages of 55 and 60 with at least 8, but not more than 35 years service credit, without the 1/2 of 1% reduction provided:

(1) The member does so between June 1, 1981 and September 1, 1992.

(2) The member retires within 6 months of the last day of employment.

(3) The member and the employer make one-time lump sum payments to the Retirement System based upon the member's highest full-time annual salary rate during the 4-year average salary period. The member pays 7% of such salary rate for each year or fraction of a year prior to age 60 or for each year or fraction of a year that his service credit is less than 35 years, whichever is less. The employer payment is 20% of the salary rate for each year or fraction of a year prior to age 60.

The numbers of members using this provision may be limited, at the option of the employer, to no less than 15% of those eligible during any year. The right to participate is allocated among those applying on the basis of seniority in the service of the employer.

Disability:

Members with 2 years of covered service who are unable to perform their duties because of illness or any amount of covered service if because of an accident, are eligible for disability after 60 days of disability. Pregnancy and childbirth are considered a disability.

The amount of the disability benefit is as follows:

(1) 50% of basic compensation at disability or 50% of average earnings for the 24 months preceding disability, whichever is greater. Payments are made until (a) the total benefits paid equal 50% of the total earnings in covered service, or (b) September 1 following the employee's 70th birthday or the end of the month following the fifth year anniversary, if later. In case of disability caused by an on-the-job accident, where workers' compensation or occupational disease payments are granted, 50% of total earnings limitation does not apply and the benefit ceases only due to (b) above.

(2) After cessation of the benefit in (1), members who had 8 years of covered service will receive the normal retirement benefit commencing at or after age 55 (with no reduction for early retirement) if the member continues to be disabled.

The disability benefit will end upon death or recovery.

Disability Retirement Allowance:

If a member's disability benefits are discontinued due to 50% of total earnings limitation, the member is entitled to a disability retirement allowance of 35% of the basic compensation which was payable at the time the disability began. This benefit is payable only if at least 2 licensed and practicing physicians appointed by the Board certify that the member has a medically determined physical or mental impairment that would prevent him/her from engaging in any substantial gainful activity, and that either can be expected to result in death, or has lasted or can be expected to last for a continuous period of not less than 12 months.

The disability retirement allowance is payable for life unless the member is able to accept substantial gainful employment, or elects to receive a retirement annuity.

Death Benefits Before Retirement:

Upon the death of a participating employee with 1-1/2 years of covered service or of a former member with 10 years of covered service, the following amounts are paid to the member's survivors:

(1) A death benefit equal to the retirement contributions (7% for general employees, 8-1/2% for police and firefighters) and interest, plus

(2) A lump sum payment of $1,000, plus

(3) A monthly survivor's annuity equal to the greater of 50% of the member's accrued normal retirement benefit or the following amounts, if greater:

- (i) 30% of average earnings to a spouse, child or parent, up to $400 monthly.
- (ii) 60% of average earnings to a spouse and one child, up to $600 monthly.
- (iii) 80% of average earnings to a spouse and 2 or more children, up to $600 monthly.

Survivor's benefits are payable until children attain age 18, to a spouse after age 50, and a dependent parent after age 55. The spouse's benefit is payable at any age while children are under 18 and living with the spouse. If death occurs after termination of employment, the monthly survivors annuity may not exceed 80% of the earned retirement annuity. The children's benefit is payable at any age provided that (i) the member's death occurs before the child attains age 18, and (ii) upon attaining age 18, the child suffers a disability which would prevent him/her from engaging in any substantial gainful activities. If there are no dependent survivors, the member did not have the necessary service, or if the dependent survivors so elect in lieu of any other benefits, the following amounts will be paid:

(1) A refund of all contributions and interest, and

(2) If death occurred while a participating employee *

(i) to a dependent beneficiary, an amount equal to the employee's final annual rate of earnings, but not less than $2,000 nor more than $5,000.

(ii) to a non-dependent beneficiary, a lump sum payment of $2,500.

* The recipient of a disability benefit is a participating employee. The recipient of a disability retirement allowance is not.

Death of an Annuitant:

Upon the death of an annuitant receiving a retirement annuity or disability retirement annuity, a lump sum benefit of $1,000 is payable to the member's spouse, children or dependent parent. In addition, a survivor's annuity as outlined above is payable. If no survivor annuity is payable, a minimum death benefit of $1,000 or an amount equal to the excess of the member's contributions and interest at retirement over the benefits paid is payable.

Automatic Increases:

Retirement benefits are increased annually after retirement by 3% of the current retirement annuity. The increase is compounded and does apply to survivor's benefits. The first automatic annual increase in retirement annuity is paid on the January 1 following the annuitant's retirement date, and is based on the number of completed months that have elapsed since retirement began.

For the disability benefit, the first adjustment is effective on January 1 following the fourth anniversary of the granting of the disability. The first adjustment is 7%. At each subsequent January 1, an adjustment of 3% is made.

Termination of Service:

A lump sum refund of all member contributions and interest (at 4-1/2%) will be made. If a member has 5 years of covered service and does not apply for a refund, a normal retirement benefit will be payable at age 62.