Actuarial Valuation of

State Universities Retirement System of Illinois

SURS

as of June 30, 1995

September, 1995

Watson Wyatt
Worldwide

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September 19, 1995

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, 1995.

This valuation provides information on the funding of SURS and includes a determination of State contribution level for 1997 under State law. This valuation is based on the provisions of SURS in effect as of June 30, 1995.

The 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, this 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,

WATSON WYATT WORLDWIDE

Denise Patterson

Denise Patterson
Fellow of the Society of Actuaries

Norman S. Kosk
Fellow of the Society of Actuaries

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Enclosure

STATE UNIVERSITIES RETIREMENT SYSTEM OF ILLINOIS

ACTUARIAL VALUATION AS OF JUNE 30, 1995

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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, 1995.

The purpose of the actuarial valuation are:

(1) To develop State contribution levels to SURS for the fiscal year ending June 30, 1997 under Section 15-155, Chapter 40, Act 5, ICS, and

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

This actuarial valuation is based on:

(1) Data for 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, ICS (reflecting the changes adopted with Senate Bill 533).

The actuarial assumptions and methods utilized in this valuation are identical to those used in the prior valuation for determination of the 1995-1996 State contribution.

The eligibility and benefit provisions of SURS recognized in this valuation are identical to those recognized in the prior valuation. To our knowledge, no changes were enacted during the year ended June 30, 1995.

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

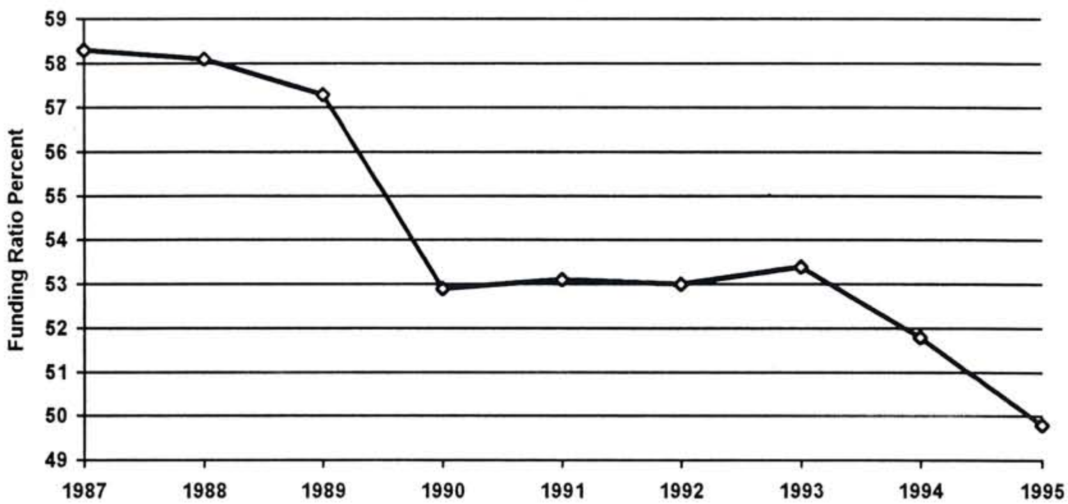
	Actuarial Valuation as of June 30, [$ in millions]	
Members	1994	1995
Active Members	80,350	73,527
Total Payroll	$ 2,140.1	$ 2,237.0
Inactive Members	17,756	27,399
Retirees & Survivors	22,642	23,991

State Contribution Levels	Actuarial Valuation as of June 30, [$ in millions] 1994	1995
[1996 & 1997, respectively]		
Normal Cost:		
• % of Pay	9.238%	8.844%
• Dollars	$ 219.0	$ 215.9
Contribution under Section 15-155:		
• % of Pay	5.704%	7.355%
• Dollars	$ 141.9	$ 179.5
Funding Status		
GASB #5 Liability	$ 8,585.5	$ 9,378.5
Assets (Book Value)	$ 4,446.9	$ 4,673.3
Unfunded Actuarial Accrued Liability	$ 4,138.6	$ 4,705.2
Funding Ratio	51.8%	49.8%

Continuing deficiencies in State contributions to SURS and actuarial losses from investment performance (based on book value of assets) during the 1994-1995 fiscal year produced a decrease in the Funding Ratio (from 51.8% to 49.8%). This funding level is low given the age and maturity of SURS.

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

State Universities Retirement System
Funding Ratios 1987 - 1995



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 the required employer contributions."
> [Chapter 40, Act 5, Par. 15-173]

Watson Wyatt Worldwide, as Actuary, has completed a valuation as of June 30, 1995, based upon membership and financial data compiled by the administrative staff of SURS. The results of the valuation are presented in this report.

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.

Appendix C summarizes the plan provisions used as the basis for the June 30, 1995 report. To our knowledge, no changes were made to the benefit provisions of the system during the 1994-1995 fiscal year.

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

		June 30, 1994	June 30, 1995
1.	Number of Active Members	80,350	73,527
2.	Annualized Reported Earnings		
	Full-time Payroll	$ 2,074,690,000	$ 2,056,149,000
	(Average)	(31,398)	(33,262)
	Total Payroll	$ 2,140,139,000	$ 2,237,025,000
	(Average)	(26,635)	(30,425)
3.	Number of Members Receiving Payments	22,642	23,991
4.	Annual Benefit Payments	$ 306,908,953	$ 345,033,001
5.	Assets:		
	(a) Book Value	$ 4,446,941,755	$ 4,673,287,388
	(b) Market Value	$ 5,175,287,535	$ 5,950,118,365
6.	State Normal Cost	$ 197,708,420	$ 197,837,362
	(% Total Payroll)	(9.238%)	(8.844%)
	(% Full-time Payroll)	(9.530%)	(9.622%)
7.	Accrued Actuarial Liability ("AAL")	$ 8,585,512,000	$ 9,378,486,000
	(Funding Ratio)	(51.8%)	(49.8%)
8.	Unfunded Accrued Actuarial Liability ("UAAL")	$ 4,138,570,245	$ 4,705,198,612

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

Changes in membership data and fund assets during the year affect the results of the valuation. The unfunded accrued actuarial liability (UAAL) increased by $566,628,367 in the year ending June 30, 1995. A detailed description of this increase follows:

1.	UAAL at 6/30/94 for purposes of disclosure			$	4,138,570,245
2.	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) to 6/30/95	$	331,085,620
		(ii)	Employee Contributions (including Early Retirement Option ("ERO") payments)		185,899,240
		(iii)	Employer Normal Cost		205,994,763
		(iv)	Employer ERO Payments		4,855,744
		(v)	Service Credit Purchases		9,532,112
		(vi)	Interest on (ii) through (v) to 6/30/95		15,938,634
		(vii)	Total	$	753,306,113
	(b)	Contribution Paid:			
		(i)	Participants (including ERO payments)	$	185,899,240
		(ii)	State Appropriations		102,236,700
		(iii)	Employer ERO Payments		4,855,744
		(iv)	Reciprocity		205,975
		(v)	Federal, Trust Funds and Other		20,817,739
		(vi)	Interest on Contributions to 6/30/95		12,318,976
		(vii)	Total	$	326,334,374
	(c)	Increase in the UAAL due to Contribution Shortfall [(a) minus (b)]		$	426,971,739
3.	Actuarial (Gains) Losses				
	(a)	Loss from investment return less than 8%		$	59,372,362
	(b)	(Gain) from salary increases less than 7%			(14,624,948)
	(c)	(Gain) due to age and service retirement			(5,901,854)
	(d)	Loss due to terminations			76,104,109
	(e)	Loss from other sources			24,706,959
	(f)	Net Actuarial (Gain)/Loss		$	139,656,628
4.	Total Increase in UAAL [2 + 3]			$	566,628,367
5.	UAAL at 6/30/95			$	4,705,198,612

C. *Appropriation Requirements for Fiscal Year 1997*

Section 15-155, governing the funding of the System, provides that:

(i) Contributions, beginning in fiscal year 1996, are based on the process outlined below:

(a) The objective after 50 years is to achieve a funding ratio of 90%.

(b) Contribution incidence is to grade in equal steps (as a percentage of pay) from the fiscal year 1995 level to the ultimate level in fiscal year 2010.

(c) After fiscal year 2010, the State contribution rate is to remain (theoretically) a constant percentage of pay through fiscal year 2045.

(d) After fiscal year 2045, the State contribution rate is the amount sufficient to maintain a funding ratio of 90%.

(ii) State contributions shall be budgeted by continuing appropriations.

The contribution patterns developed on this basis are shown below for fiscal years 1997 through 2002. Estimates for all fiscal years through 2045 are summarized in Appendix D.

The required State contribution rates and amounts for 1997 and estimates for 1998 through 2001 are as follows:

Fiscal Year	Required Rate	Assumed Payroll (Billions)	Total Required Contribution	Funding Ratio
1997	7.355%	$ 2.441	$ 179,547,000	47.5%
1998	8.625%	2.557	220,580,000	46.7%
1999	9.896%	2.678	265,016,000	46.2%
2000	11.166%	2.805	313,178,000	46.0%
2001	12.436%	2.939	365,474,000	46.0%
2002	13.707%	3.078	421,884,000	46.1%

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, 1995 actuarial valuation. To determine projected contribution rates and amounts, the following additional assumptions and estimates were used:

(1) The population statistics, valuation results and expected cash flows for future years were developed using a deterministic projection model.

(2) Constant active population with new entrants having the same demographic characteristics as recent new hires.

(3) Total State contributions of $141,911,000 for fiscal year 1996.

(4) Population changes are in accordance with the decrements used as the basis for the June 30, 1995 actuarial valuation.

(5) The amortization rates for fiscal years 1997-2010 are not uniform, but the rate for each year exceeds the rate for the previous year by a uniform percentage of payroll.

(6) The amortization rates for fiscal years 2010-2045 would be uniform percentage of payroll.

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 valuation 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 in the respective valuations. Summarized below are key results for both years.

GASB Statement 5 Disclosure

Actuarial Present Value (APV) of Credited Projected Benefits

	June 30, 1994	June 30, 1995
Accumulated Contributions		
Current employees	$ 2,035,886,000	$ 2,224,092,000
Inactive members	$ 220,154,000	$ 257,480,000
APV of Credited Projected Benefits Payable to:		
Retirees and beneficiaries	$ 3,046,334,000	$ 3,421,911,000
Terminated employees not yet receiving benefits-employer-financed portion	84,298,000	26,717,000
Vested current employees-employer-financed portion	3,019,852,000	3,247,380,000
Non-vested current employees-employer-financed portion	178,988,000	200,906,000
Total APV of Credited Projected Benefits	$ 8,585,512,000	$ 9,378,486,000
Net Assets Available for Benefits (Market value at June 30, 1995 is $5,950,118,365)	$ 4,446,941,755	$ 4,673,287,388
Unfunded APV of Credited Projected Benefits	$ 4,138,570,245	$ 4,705,198,612
Funding Ratio	51.8%	49.8%

APPENDIX A

RESULTS OF ACTUARIAL VALUATION

SUMMARY OF RESULTS OF ACTUARIAL VALUATION AS OF JUNE 30, 1995

Member Data

1.	Number of Members:		
	(a) Members Receiving Annuities:		
	• Retirement	18,341	
	• Survivor (includes prospective Widows and Widowers)	4,474	
	• Disability	1,176	
	• Subtotal		23,991
	(b) Other Inactive Members		27,399
	(c) Active: • Full-time	61,816	
	• Part-time	11,711	
	• Subtotal		73,527
	(d) Total		124,917
2.	Annual Reported Earnings:		
	(a) Full-time		$ 2,056,149,000
	(b) Part-time		180,876,000
	(c) Total		$ 2,237,025,000
3.	Annual Annuity Payments currently being made:		
	(a) Retirement		$ 304,187,559
	(b) Survivor		26,521,910
	(c) Disability		14,323,532
	(d) Total		$ 345,033,001

SUMMARY OF RESULTS OF ACTUARIAL VALUATION AS OF JUNE 30, 1995

Valuation Results

		Normal Cost	Actuarial Liability
4.	Actuarial Liability for Members Receiving Annuities:		
	(a) Retirement		$ 3,053,243,000
	(b) Survivor		265,011,000
	(c) Disability		103,657,000
	(d) Subtotal		$ 3,421,911,000
5.	Actuarial Liability for Inactive Members		$ 284,197,000
6.	Active Members:		
	(a) Pension Benefits	$ 287,010,000	$ 4,612,891,000
	(b) Death Benefits (excludes refunds)	20,783,000	336,222,000
	(c) Disability	23,630,000	281,087,000
	(d) Withdrawals and Refunds	46,087,000	442,178,000
	(e) Administrative Expenses	7,141,840	--
	(f) Subtotal	$ 384,651,840	$ 5,672,378,000
7.	Total	$ 384,651,840	$ 9,378,486,000
8.	Assets at Book Value		$ 4,673,287,388
9.	Unfunded Actuarial Liability		$ 4,705,198,612
10.	Expected Employee Contributions	$ 186,814,478	
11.	Annual Normal Cost to be Provided by the State	$ 197,837,362	
	% of Full-time Payroll	9.622%	
	% of Total Payroll	8.844%	

SUMMARY OF RESULTS OF ACTUARIAL VALUATION AS OF JUNE 30, 1995

Annual Funding Requirement for Fiscal Year 1997

	Percent of Payroll	Amount
12. "Interest Only Funding":		
(a) Normal Cost	8.844%	$ 215,882,000
(b) Interest on Unfunded	16.310%	398,127,000
(c) Total	25.154%	$ 614,009,000
13. "40-Year Amortization" from 7/1/95:		
(a) Normal Cost	8.844%	$ 215,882,000
(b) Contribution toward Unfunded	17.163%	418,949,000
(c) Total	26.007%	$ 634,831,000

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 $2.441 billion.

TABLE 2

ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AT JUNE 30, 1995

			Vested	Non-Vested	Total
Members Currently Receiving Payments			$ 3,421,911,000	--	$ 3,421,911,000
Inactive Members			$ 284,197,000	--	$ 284,197,000
Active Members:					
	(a)	Pension Benefits	$ 3,463,857,000	$ 170,519,000	$ 3,634,376,000
	(b)	Death Benefits (without refunds)	271,782,000	35,796,000	307,578,000
	(c)	Disability	219,157,000	29,683,000	248,840,000
	(d)	Withdrawal and Refunds	319,208,000	70,896,000	390,104,000
	(e)	Subtotal	$ 4,274,004,000	$ 306,894,000	$ 4,580,898,000
Total			$ 7,980,112,000	$ 306,894,000	$ 8,287,006,000
Non-Retired Member Contributions with Interest:					
	Active				$ 2,224,092,000
	Inactive				257,480,000
	Total				$ 2,481,572,000

Notes:

(1) Accumulated benefits were calculated in accordance with plan provisions in effect on June 30, 1995, 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.

TABLE 3

ACTUARIAL PRESENT VALUE OF CREDITED PROJECTED BENEFITS AT JUNE 30, 1995

			Vested	Non-Vested	Total
Members Currently Receiving Payments			$ 3,421,911,000	--	$ 3,421,911,000
Inactive Members			$ 284,197,000	--	$ 284,197,000
Active Members:					
	(a)	Pension Benefits	$ 4,415,605,000	$ 197,286,000	$ 4,612,891,000
	(b)	Death Benefits (without refunds)	298,655,000	37,567,000	336,222,000
	(c)	Disability	246,672,000	34,415,000	281,087,000
	(d)	Withdrawal and Refunds	370,091,000	72,087,000	442,178,000
	(e)	Subtotal	$ 5,331,023,000	$ 341,355,000	$ 5,672,378,000
	(f)	Employee Contributions	$ 2,083,643,000	$ 140,449,000	$ 2,224,092,000
	(g)	Employer Financed	$ 3,247,380,000	$ 200,906,000	$ 3,448,286,000
Total			$ 9,037,131,000	$ 341,355,000	$ 9,378,486,000

Notes:

(1) Credited projected benefits were calculated in accordance with plan provisions in effect on June 30, 1995, based on the member's service as of that date and on the member's historical and projected pay.

(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.

TABLE 4

ANALYSIS OF FINANCIAL EXPERIENCE

		Activity	(Gain) Loss	
1.	Actuarial (Gains) Losses:			
	(a)	Age & Service Retirements	$ (5,901,854)	
	(b)	Incidence of Disability	5,379,658	
	(c)	In-Service Mortality	14,942,057	
	(d)	Retiree Mortality	6,720,479	
	(e)	Disabled Mortality	(447,228)	
	(f)	Termination of Employment	76,104,109	
	(g)	Salary Increases	(14,624,948)	
	(h)	Investment Income	59,372,362	
	(i)	Other	(1,888,007)	
	(j)	Total Actuarial (Gain) Loss		$ 139,656,628
2.	Contribution (Income) Shortfall			426,971,739
3.	Total (Gain) Loss			$ 566,628,367

Appendix B

Description of Actuarial Basis

ACTUARIAL COST METHOD
(ADOPTED JUNE 30, 1989)

The Projected Unit Credit Cost Method is used in this valuation. Under this method, the projected pension at retirement age is first calculated for each member. The actuarial present value of that benefit is determined at the member's current age. The normal cost for the member for the current year is equal to such actuarial present value, divided by the member's projected service at retirement. The normal cost for the plan for the year is the sum of the normal costs for all members.

The accrued actuarial liability (AAL) at any point in time is the value of the projected pensions based on service to the valuation date.

For ancillary benefits for active members, in particular disability benefits, death and survivor benefits, termination benefits, and the postretirement increases, the same procedure as outlined above is followed.

Actuarial gains and losses are amortized as a level percentage of payroll over a 50-year period ending June 30, 2045, after an initial phase in period ending June 30, 2010.

Estimated annual administrative expenses are added to the normal cost. For valuation purposes, assets are valued at book.

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, net of investment expenses.

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	5.75	5.60
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. The 7% is 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	0.0105	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 administrative 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 spouse of a deceased employee is 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-year 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 is assumed to be the prior year's earnings increased by 5.25%. If the prior year's earnings are not available, the annual salary is assumed to be $30,000. If a birthdate was not available, the participant is assumed to be age 40 if active, age 50 if a widow(er), age 70 if a retiree and age 12 if a child.

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 special file with salaries for July and August. For the June 30, 1995 valuation, a tape was provided with seven months of salary from September, 1994 through the end of March, 1995. The final three months of pay were estimated based on such seven-month salary and then added to the July and August salary resulting in a file with estimated salaries for the period July 1, 1994 through June 30, 1995.

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 (6/30/95).

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. 6½% of the contributions is designated for retirement annuities, ½% for automatic annual increases and 1% for survivor benefits. Police officers and firefighters contribute 9½% of earnings. The additional 1½% 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 7½%.) For purposes of lump sum payments to former members, the interest rate is 4½%.

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 this computation.

(2) The actuarial equivalent of 2.4 times the accumulated member contributions for retirement annuities (6½% 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	Benefit Unit
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 after September 14, 1977, the maximum annuity under (1) or (2) is 75% of average earnings. The maximum for members who participated on or before September 14, 1977 is 80% of average earnings.

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 ½% for each month the 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 ½% 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 benefits 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 during covered service, or (b) the 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, the 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 or more 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 1½ 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, 8½% 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.

Appendix D

Estimated Contributions Under Section 15-155

State Universities Retirement System of Illinois

Estimated Contributions Under Section 15-155

Fiscal Year	Total Payroll	Contribution % of Payroll	Contribution Dollar Amount	Assets as of End of Year	PUC-AAL GASB#5	15-155 Ratio
1995	2,237,025,000	5.727%	128,116,158	4,673,287,388	9,378,486,000	49.83%
1996	2,332,265,647	6.085%	141,911,000	4,900,650,627	10,104,300,410	48.50%
1997	2,441,154,315	7.355%	179,546,717	5,168,991,784	10,889,438,860	47.47%
1998	2,557,358,981	8.625%	220,579,904	5,482,672,880	11,737,401,949	46.71%
1999	2,678,117,678	9.896%	265,016,055	5,845,753,224	12,646,730,676	46.22%
2000	2,804,770,180	11.166%	313,178,319	6,262,133,396	13,621,707,464	45.97%
2001	2,938,781,899	12.436%	365,473,546	6,736,016,773	14,666,098,551	45.93%
2002	3,077,975,825	13.707%	421,883,798	7,270,994,502	15,782,483,856	46.07%
2003	3,222,003,195	14.977%	482,554,331	7,870,362,571	16,972,234,840	46.37%
2004	3,371,360,520	16.247%	547,750,014	8,538,184,575	18,241,199,588	46.81%
2005	3,525,398,515	17.517%	617,560,227	9,279,155,399	19,591,668,231	47.36%
2006	3,685,179,554	18.788%	692,362,945	10,098,721,049	21,030,020,129	48.02%
2007	3,850,309,643	20.058%	772,298,003	11,000,906,786	22,561,117,283	48.76%
2008	4,021,489,327	21.328%	857,718,664	11,990,142,953	24,192,579,709	49.56%
2009	4,198,910,575	22.599%	948,898,857	13,071,784,477	25,929,011,817	50.41%
2010	4,383,426,703	23.869%	1,046,280,120	14,252,625,749	27,766,728,873	51.33%
2011	4,576,051,840	23.869%	1,092,257,814	15,479,647,288	29,706,122,290	52.11%
2012	4,775,833,167	23.869%	1,139,943,619	16,748,985,479	31,761,449,038	52.73%
2013	4,985,256,253	23.869%	1,189,930,815	18,058,385,697	33,919,828,641	53.24%
2014	5,206,178,493	23.869%	1,242,662,745	19,406,965,163	36,170,533,910	53.65%
2015	5,438,874,274	23.869%	1,298,204,900	20,792,696,441	38,514,588,160	53.99%
2016	5,684,748,701	23.869%	1,356,892,667	22,215,490,204	40,947,385,974	54.25%
2017	5,941,991,620	23.869%	1,418,293,980	23,670,988,378	43,500,289,866	54.42%
2018	6,215,235,459	23.869%	1,483,514,552	25,159,778,666	46,136,401,162	54.53%
2019	6,507,426,114	23.869%	1,553,257,539	26,684,187,459	48,835,619,842	54.64%
2020	6,814,248,767	23.869%	1,626,493,038	28,239,864,781	51,653,497,672	54.67%
2021	7,141,128,852	23.869%	1,704,516,046	29,829,163,412	54,539,566,251	54.69%
2022	7,489,911,704	23.869%	1,787,767,025	31,462,914,100	57,495,093,402	54.72%
2023	7,861,493,856	23.869%	1,876,459,968	33,155,942,830	60,520,578,205	54.78%
2024	8,257,837,229	23.869%	1,971,063,168	34,928,775,642	63,612,213,167	54.91%
2025	8,675,910,493	23.869%	2,070,853,076	36,790,021,043	66,835,342,473	55.05%
2026	9,122,690,935	23.869%	2,177,495,099	38,758,834,223	69,906,688,247	55.44%
2027	9,597,986,582	23.869%	2,290,943,417	40,854,464,983	72,949,827,984	56.00%
2028	10,105,630,822	23.869%	2,412,113,021	43,099,243,903	76,030,027,386	56.69%
2029	10,644,264,782	23.869%	2,540,679,561	45,511,447,076	79,244,832,330	57.43%
2030	11,212,986,902	23.869%	2,676,427,844	48,105,930,117	82,571,757,073	58.26%
2031	11,817,930,199	23.869%	2,820,821,759	50,910,291,957	86,016,019,814	59.19%
2032	12,460,507,819	23.869%	2,974,198,611	53,952,937,057	89,592,336,351	60.22%
2033	13,142,070,593	23.869%	3,136,880,830	57,264,530,699	93,312,061,747	61.37%
2034	13,862,765,263	23.869%	3,308,903,441	60,883,423,155	97,046,947,687	62.74%
2035	14,622,407,900	23.869%	3,490,222,542	64,833,509,218	100,950,389,648	64.22%
2036	15,427,102,371	23.869%	3,682,295,065	69,148,299,592	105,023,895,939	65.84%
2037	16,278,447,763	23.869%	3,885,502,697	73,864,699,971	109,280,301,753	67.59%
2038	17,177,613,993	23.869%	4,100,124,684	79,020,594,861	113,728,853,141	69.48%
2039	18,127,067,535	23.869%	4,326,749,750	84,688,745,352	117,750,700,687	71.92%
2040	19,126,280,719	23.869%	4,565,251,945	90,901,005,074	121,984,225,320	74.52%
2041	20,181,312,185	23.869%	4,817,077,405	97,699,049,762	126,428,923,936	77.28%
2042	21,294,831,433	23.869%	5,082,863,315	105,129,818,717	131,096,643,633	80.19%
2043	22,469,449,669	23.869%	5,363,232,941	113,244,073,186	135,994,827,336	83.27%
2044	23,707,802,220	23.869%	5,658,815,312	122,102,248,095	141,000,887,658	86.60%
2045	25,012,743,520	23.869%	5,970,291,751	131,754,794,746	146,399,893,526	90.00%