

State Universities Retirement System

Champaign, Illinois

REPORT ON AN ACTUARIAL VALUATION OF THE
ASSETS AND LIABILITIES OF THE SYSTEM
AS OF AUGUST 31, 1979

A. A. Weinberg, Consulting Actuary
Chicago

State Universities Retirement System

Champaign, Illinois

REPORT ON

AN ACTUARIAL VALUATION OF THE ASSETS

AND LIABILITIES OF THE SYSTEM

August 31, 1979

A. A. Weinberg, Actuary
Chicago

C O N T E N T S

	<u>Page</u>
LETTER OF TRANSMITTAL	ii
Part 1. PURPOSE OF AN ACTUARIAL VALUATION	1- 2
Part 2. RESULTS OF ACTUARIAL VALUATION	3- 4
Part 3. SUMMARY OF STATISTICS	5- 7
Part 4. ACTUARIAL ASSUMPTIONS	8- 9
Part 5. ACTUARIAL VALUATION	9-11
VALUATION BALANCE SHEET	12-16
Part 6. CERTIFICATION	17
Part 7. FUTURE PENSION AND BENEFIT PAYOUTS.....	18
Part 8. FUNDING THE PENSION LIABILITY	19-20
Part 9. RECOMMENDED STANDARDS FOR FINANCING, ACCOUNTING AND REPORTING FOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS	21-22
Part 10. PROPOSED LEGISLATIVE AMENDMENTS	23-26
APPENDIX -	27
Summary of Benefit and Contribution	
Provisions	28-34
Statistical Tables	35-63

SUITE 1507
14 EAST JACKSON BLVD

TELEPHONE:
(312) 939-7124
(312) 922-4573
(305) 931-8267

A. A. WEINBERG
CONSULTING ACTUARY
CHICAGO 60604

August 15, 1980

Board of Trustees
State Universities Retirement System
50 Gerty Drive
Champaign, Illinois 61820

Gentlemen:

We are pleased to submit herewith our report on an Actuarial Valuation of the State Universities Retirement System as of August 31, 1979.

The valuation was based upon the provisions of the retirement plan in force at the aforesaid date. These provisions are summarized in the appendix.

The report presents the accrued liabilities for the prescribed benefits of the System and the net assets at the said date for meeting these liabilities. The basic operating factors applied in this valuation are described in the report. The lack of adequate revenues to meet the full funding requirements of the pension liabilities on an accrual basis has resulted in an increase in the unfunded accrued liability.

The management policies and administrative procedures in force in the operations of the System are in accord with progressive standards resulting in the maintenance of a high level of efficiency in administration.

The statistical and financial data forming the basis of this report were compiled under the able direction of Donald E. Hoffmeister, Executive Director, and were submitted to us in excellent form.

Respectfully submitted,



A. A. Weinberg,
Consulting Actuary

REPORT ON AN ACTUARIAL VALUATION OF THE
STATE UNIVERSITIES RETIREMENT SYSTEM
AS OF AUGUST 31, 1979

Section 15-173 of the "Illinois Pension Code" governing the the State Universities Retirement System provides that the Board of Trustees shall: -

"cause an annual determination to be made by a competent Actuary of the reserves and liabilities of the System and an annual determination of the amount and distribution of the required employer contributions".

Such a determination has been completed and the results thereof are presented in this report. In the process thereof, a calculation was made of the employer's contributions for meeting the accruing funding requirements of the system in accordance with actuarial criteria. The valuation was predicated upon the benefit and contribution provisions in force at the valuation date, as summarized in the latter part of this report, and the statistical and financial data as of such date.

PART 1. PURPOSE OF THE ACTUARIAL VALUATION

The fundamental aspects of the pension liabilities have given emphasis to the necessity for periodic valuations of the accruing pension cost and the need for systematic funding of such cost as it is incurred. By these valuations, the pension liability and the prospective costs are calculated to be utilized for funding and budgeting purposes.

The standard method for funding pension cost, one that has proved most practical for public agencies, is that technically referred to as "Entry-Age-Normal-Cost". This method contemplates a level

annual contribution by the employer from the date of the employee's entry into service until the assumed age of retirement. In this manner, provision is made for each year's pension liability for meeting the funded requirements for the ultimate retirement annuity. This is frequently referred to as the "year's pension liability", or the "normal cost". The contribution to be made by the employer under this method does not include the liability for previous service, or the interest accruing on such liability, although for total normal cost purposes the accruing interest properly forms a part of such annual cost.

In the presentation of the financial condition of the retirement system, an actuarial balance sheet is prepared showing the accrued liabilities and the accumulated assets available to meet these liabilities. Such a statement is frequently referred to as a "Valuation Balance Sheet". The excess of the accrued liabilities over net present assets at any given date constitutes an actuarial deficiency, otherwise known as an "unfunded accrued liability". The liabilities for the several pension and benefit obligations and the required reserves are calculated. The rates of mortality before and after retirement, rates of turnover in employment and the investment earnings expectancy are major factors that are basic in this process. Other factors are considered in this procedure, including the rates of salary increments and their progression to the assumed retirement ages, the incidence of disability and the possible survivors' benefits that may become payable.

The required actuarial functions reflecting these basic factors are formulated and applied in the valuation process. Some variations from the stated assumptions frequently occur in current operations. These variations are taken into account by the Actuary by means of arbitrary revisions or adjustments during the course of the valuation, as required.

PART 2. RESULTS OF ACTUARIAL VALUATION

In the valuation of the State Universities Retirement System a determination has been made of the annual requirements from the employer for each year's pension liability. These requirements are (1) the normal cost as calculated according to the "entry-age-normal-cost" method, and (2) the interest accrual on the unfunded accrued liability. This represents the minimum actuarial cost for the funding of the pension liability of a governmental retirement system.

Death, disability and survivors' benefits were valued on a "one-year-term" basis similar to that generally used in the valuation of group life insurance. The cost of each year's accruing pension liability is intended to cover the actuarial value of pension credits earned by the members during the year, plus the cost of these ancillary benefits.

Based upon the existing provisions of the retirement law and on the stated assumptions of appropriate actuarial functions, a valuation has been made of the State Universities Retirement System. This valuation has disclosed the normal cost requirements for the fiscal year beginning September 1, 1979 and the total unfunded accrued liability at August 31, 1979, as reported herein.

<u>1) Employer's Normal Cost</u>	<u>Percent of Budgeted Payroll</u>	<u>Annual Amount on Valuation Payroll</u>
Service retirement pensions	15.02%	
Disability benefits	1.10	
Death benefits - Employer's cost	0.06	
Survivors' benefits	2.04	
Post-retirement increment	2.26	
Administrative expense	<u>0.18</u>	
Total Normal Cost	20.66%	
<u>Less: Employee Contributions</u>	<u>- 8.00</u>	
Employer's Normal Cost	<u>12.66%</u>	<u>\$84,061,218</u>

2) Actuarial reserve requirements for accrued liabilities -		<u>Annual Amount</u>
		\$1,706,735,998
Less: Net present assets		<u>857,013,637</u>
Unfunded Accrued Liability @ 8-31-79		<u>\$ 849,722,361</u>
3) Annual requirements from the employer to finance its share of total cost -	<u>Percent of Budgeted Payroll</u>	<u>Annual Amount</u>
Normal cost	12.66%	\$ 84,061,218
Accrued liability (interest at 5% on the unfunded accrued liability at Sept. 1, 1979)	<u>6.40</u>	<u>42,486,118</u>
Employer's cost, effective as of September 1, 1979	19.06%	<u>\$ 126,547,336</u>
4) Reconciliation of changes in the unfunded accrued liability during the fiscal year ended August 31, 1979		
(a) Normal cost requirements -		
12.66% applied to payroll of \$663,990,661		\$ 84,061,218
Less: Actual employer's con- tributions for the year		<u>61,595,360</u>
Deficiency in normal cost contributions		\$ 22,465,858
(b) Annual interest accrual for the year at 5% per annum on the un- funded accrued liability		42,486,118
(c) Investment income for the year above 5% of average net assets for the year		(13,240,088)
(d) Lower mortality among active parti- cipants and annuitants than assumed according to applied mortality table		35,049,725
(e) Increase in average annual salaries above assumed rate of 4% per year		<u>(29,413,389)</u>
TOTAL - Increase in unfunded accrued liability for the 1979 fiscal year		<u>\$ 57,348,224</u>

5) <u>Alternate standard for minimum reserve requirements of the system</u>	
(a) Contribution credits of the participants at August 31, 1979	\$510,986,382
(b) Actuarial value of annuities and benefits in force	<u>446,522,472</u>
Total	\$957,508,854
(c) <u>Less: Net present assets</u>	<u>857,013,637</u>
Deficiency in reserves at August 31, 1979 to meet the minimum standard for funded reserve requirements	<u><u>\$100,495,217</u></u>

PART 3. SUMMARY OF STATISTICS

The statistical data applied in this valuation is summarized below. The statistics were compiled by the administrative staff of the system. Detailed tables reflecting this data are presented in the appendix.

<u>Active participants</u>	<u>Male</u>	<u>Female</u>
Number	21,590	16,963
Percent of total	56.6%	43.4%
Aggregate earnings	\$442,497,381	\$201,664,626
Average annual earnings	\$20,495	\$11,889
Average age	44.4	41.7
Average service	9.8	6.7
Accumulated contributions	\$358,013,396	\$118,699,622
Average contributions	\$16,582	\$6,998

<u>Inactive participants</u>		
Number	2,626	2,435
Percent of total	51.9%	48.1%
Aggregate earnings	\$11,159,773	\$6,581,638
Average age	46.1	43.2
Average service	6.7	3.9
Accumulated contributions	\$25,464,488	\$8,668,881
Average contributions	\$9,697	\$3,560

<u>Service retirement</u>	<u>Male</u>	<u>Female</u>
Number	3,296	2,823
Percent of total	53.8%	46.2%
Total annual payments	\$24,818,388	\$10,089,414
Average annual payment	\$7,530	\$3,574
Average age	69.6	69.8

Disability beneficiaries

Number	605	617
Percent of total	50.0%	50.0%
Total annual payments	\$4,252,091	\$3,135,936
Average annual payment	\$7,028	\$5,083
Average age	57.4	54.1

Reversionary annuity beneficiaries -
Death Before Retirement

Number	--	6
Total annual payments	--	\$16,185
Average annual payment	--	\$2,698
Average age	--	82.5

Reversionary annuity beneficiaries -
Death After Retirement

Number	--	80
Total annual payments	--	\$187,258
Average annual payment	--	\$2,341
Average age	--	77.1

Beneficiary annuitants

Number	7	107
Percent of total	6.1%	93.9%
Total annual payments	\$4,152	\$57,740
Average annual payment	\$593	\$540
Average age	61.6	69.8

Survivors' insurance beneficiaries - (Widows)

Number	1,214
Total annual payments	\$3,278,165
Average annual payments	\$2,700
Average age	66.1

Survivors' insurance beneficiaries - (Children)

Number	414
Total annual payments	\$733,385
Average annual payment	\$1,771
Average age	14.1

Survivors' insurance beneficiaries - (Widowers) (Parents)

Number	94	4
Annual payments	\$198,605	\$9,927
Average annual payment	\$2,113	\$2,482
Average age	63.1	84.8

Prospective survivors' insurance beneficiaries

	(Widowers)	(Widows)
Number	6	58
percent of total	10.0%	90.0%
Total annual payments	\$16,466	\$144,262
Average annual payments	\$2,744	\$2,487
Average age	46.3	50.2

Refund Payments (Male) (Female)

	(Male)	(Female)
Number	1,731	2,429
Percent of total	41.3%	58.7%
Total payments	\$6,825,685	\$4,672,008
Average payment	\$3,943	\$1,923
Average age	35.8	33.2
Average service	2.8	2.4

PART 4. ACTUARIAL STANDARDS AND ASSUMPTIONS

The principal benefit and contribution provisions of the retirement plan that were applied in this valuation are briefly described in the appendix. The several actuarial factors that were assumed in this valuation are as follows:

1) Mortality expectancy. Select mortality table

2) Rates of death of employees in active service per 1,000

<u>Select Ages</u>	<u>Male</u>	<u>Female</u>
20	0.52	0.28
25	0.76	0.34
30	0.96	0.52
35	1.33	0.75
40	1.98	1.11
45	2.41	1.85
50	4.20	3.81
55	7.62	5.79
60	10.82	7.79

3) Rates of death among retirants per 1,000

<u>Select Ages</u>	<u>Male</u>	<u>Female</u>
55	8.5	3.3
60	13.1	5.5
65	21.3	9.6
70	36.1	16.5
75	55.3	32.3
80	87.4	56.1
85	130.1	89.2
90	179.5	138.6

4) Rates of separation from service with refunds - per 1,000

<u>Select Ages</u>	<u>Male</u>	<u>Female</u>
20	281.3	303.5
25	185.2	292.5
30	158.4	209.6
35	104.5	135.1
40	72.0	88.4
45	38.0	60.5
50	14.2	22.1
55	2.1	4.0

5) Rates of retirement per 1,000 members

<u>Select Ages</u>	<u>Male</u>	<u>Female</u>
55	5.2	6.4
56	5.6	10.2
57	7.9	13.0
58	10.1	15.9
59	12.3	18.7
60	21.1	23.2
61	29.0	27.8
62	37.4	32.3
63	45.8	36.8
64	54.3	60.0
65	62.7	83.2
68	100.0	100.0

- 6) Interest rate assumption - 5% per annum
- 7) Annual salary increments - 4% per year
- 8) Disability rates - Actual operating experience; 15% of disablements assumed to occur in line of duty.
- 9) Marital status - 80% of male employees and 70% of female employees in service were assumed to be married with an average age differential between the employee and spouse of 4-years.
- 66-2/3% of employees retiring on pension assumed to be married.
- 10) Administrative expense - Actual budget requirements

PART 5. ACTUARIAL VALUATION

As required under Section 15-173 of the law governing the System, the usual actuarial analysis of the System has been completed as August 31, 1979

A valuation balance sheet, embodying the results of the computation of reserves and liabilities, is presented in the following pages. The method used in the preparation of this statement is similar to that used in the preparation of a financial balance sheet. However, a valuation balance sheet is broader in scope. It includes, in addition to present assets and current liabilities, the Actuary's evaluation of the accrued actuarial liabilities, generally referred to as the "actuarial reserve requirements".

A retirement system represents a long term commitment which results in a continuous upward trend in payouts by the system.

The system experiences relatively small payments during its early years of operation; however, the expenditures increase steadily until considerably higher levels are attained with continued operations. An actuarial valuation is made for the purpose of establishing the accrued and prospective liabilities under the prescribed benefit schedule, in order to determine if these liabilities can be met by the revenues to be provided under the prescribed method of funding.

As previously stated, the valuation is made with the use of the actuarial functions determined by the Actuary in a survey of the operating experience of the system for past years. In formulating these functions, the Actuary assumes that the operations with respect to rates of mortality among active and retired members, rates of separation, salary increments and investment earnings will be substantially duplicated in the future. It is the responsibility of the Actuary to evaluate the results of the past and modify his findings as necessary, to give effect to current and prospective trends with the view of formulating actuarial functions for each valuation that will realistically reflect the probable future experience.

Long range valuations, or cost estimates, regardless of how they are determined, cannot be precise no matter how accurately they are computed. Differences generally arise between actual results in operations and the stated assumptions with respect to the several operating factors available for such valuations. Never-

theless, valuations and cost determinations are undertaken in order that an indication may be had regarding the possible future experience for the calculation of the current accruing cost and the accrued obligations for past service, and to ascertain current cost trends. This is especially important in a retirement system in which a steady and persistent increase in pension payouts occurs over the years.

VALUATION BALANCE SHEET

AUGUST 31, 1979

VALUATION BALANCE SHEET - AUGUST 31, 1979

A S S E T S

PRESENT ASSETS:

Cash	\$ (754,708)	
Contributions receivable	4,955,676	
Accrued interest on investments	11,567,994	
Investments at cost	846,119,687	
Due from Building Fund	<u>498,447</u>	\$862,387,096
<u>Less: Current liabilities</u>		<u>5,373,459</u>
NET PRESENT ASSETS		\$857,013,637

DEFERRED ASSETS

Due from the employer for accrued and unfunded pension credits prior to 9-1-79		<u>849,722,361</u>
<u>TOTAL ASSETS</u>		<u>\$1,706,735,998</u>

VALUATION BALANCE SHEET - AUGUST 31, 1979

LIABILITIES AND RESERVE REQUIREMENTS

PARTICIPANTS' CONTRIBUTION CREDITS

Applied to accrued service retirement, disability, survivors' and death benefits	\$ 340,233,178	
For future refunds and death benefits of participants' contributions	<u>170,753,204</u>	\$ 510,986,382

EMPLOYERS' CONTRIBUTIONS

Accrued requirements for service retirement, disability, survivors' and death benefits	1,089,460,252	
Less: Participants' contribution credits	<u>340,233,108</u>	749,227,144

RETIREMENT AND BENEFITS IN FORCE

Actuarial value of:		
Retirement annuities	336,826,721	
Present and prospective reversionary annuities	5,233,884	
Beneficiary annuities	721,183	
Disability benefits	70,633,970	
Survivors' insurance beneficiaries	<u>33,106,714</u>	<u>446,522,472</u>
TOTAL LIABILITIES AND RESERVES		<u>\$1,706,735,998</u>

The following explanation is given of the several items comprising the "Valuation Balance Sheet".

Present Assets - comprise the assets on hand as shown in the report of audit submitted by Filbey, Summers, Abolt, Good & Kidoo, Certified Public Accountants, dated November 30, 1979.

Current Liabilities - include the accrued benefits and administrative expenses shown by the said audit report.

Deferred Assets - represent the accrued and unfinanced pension credits for service rendered prior to the balance sheet date. This is an accrued and unfunded obligation of the employers to be discharged in future years by increased appropriations to the system.

Reserve Requirements - comprise the several items representing the amounts necessary to provide for the accrued liabilities for pensions earned on account of service rendered prior to the balance sheet date, namely:

1) Participants' Contribution Credits - consist of the total participants' contributions and accumulated interest thereon at the balance sheet date. Part of these credits are payable in future years as refunds upon separation from service due to resignation, dismissal or death of the participants. The remainder is to finance a portion of the retirement annuities and survivors' benefits payable in the case of present participants in service who may qualify for retirement or to meet payments to beneficiaries of participants who may qualify for benefits.

2) Employers' Contributions - represent the amounts required to finance the employers' share of the accrued and earned pension credits for the participants. These amounts concern participants in service who may ultimately qualify for retirement annuities at the assumed ages for retirement, or whose beneficiaries may become eligible for benefit payments from the Fund

3) Retirement and Benefits in Force - constitutes the lifetime value, actuarially computed, of the amounts payable in future years to present pensioners and beneficiaries as pensions or other benefits that have been granted and are in force at the balance sheet date.

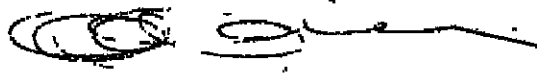
PART 6. CERTIFICATION

We have completed an actuarial valuation of the Assets and Liabilities of the State Universities Retirement System as of August 30, 1979.

Present assets and current liabilities at the aforesaid date were derived from financial statements embodied in the report of Filbey, Summers, Abolt, Good & Kiddoo, Certified Public Accountants, dated November 30, 1979.

In our opinion, the accompanying Valuation Balance Sheet correctly presents the condition of the State Universities Retirement System at August 31, 1979, giving effect to accrued liabilities and actuarial reserve requirements under the law in force at such date.

A. A. Weinberg,



Consulting Actuary

August 15, 1980

PART 7. FUTURE PENSION AND BENEFIT PAYOUTS

A projection of future pension and benefit payouts is presented as a part of this report for a period of years in the future to illustrate the funds that will be required to meet pension payrolls. This statement is intended to illustrate the importance of current or accrual funding of the pension costs on a systematic basis.

The statement presents the amount of the yearly pension payout liability. It gives emphasis to the meaning of pension costs in terms that may be more readily understood.

<u>Fiscal Year Ended August 31st</u>	<u>Estimated Future Pension and Benefit Payments (in millions)</u>
1979	\$ 47.1
1980	62.3
1985	102.7
1990	158.8
1995	254.8
2000	421.6

Liberalizing changes in the rates of benefit or in the qualifying conditions of the retirement plan will require a revision of the foregoing projections.

PART 8. FUNDING THE PENSION LIABILITY

In its real meaning, pension cost is a current operating cost of government. It constitutes an obligation which cannot logically be deferred. It has a direct and immediate relationship to the entire fiscal operations of government. There is no short cut method for financing pension cost. A retirement plan is considered to be a legitimate part of an employee welfare program of governmental concern. The plan operates as an essential adjunct of a progressive personnel policy.

The principle that government should bear a measure of responsibility for employees whose productivity has become impaired due to old age or disability is now universally accepted. Since this is the case, government must face up to its responsibility and provide for the cost of the retirement plan on the most practical basis. The most effective method of meeting this cost is according to actuarial principles and procedures. This constitutes, in essence, current or accrual funding which reflects actuarial considerations.

The basic cost of pensions, for any year, is represented by the value of the pension credits earned by the members during the year. These yearly pension credits in a cumulative form constitute the ultimate retirement benefits that will become payable to the members when they fulfill the prescribed age and service requirements. The annuity payments made during any year, therefore, are derived from the accumulation of these earned pension credits covering a number

of years which comprises the total service of the annuitants. It is the sum total of these yearly pension credits which makes up the reserve required to finance the pension payments to the qualifying members when the pension obligations mature. This current accumulation of pension credits represents the real annual cost of pensions in any fiscal period.

The foregoing remarks illustrate the funding principle underlying a retirement system. Actuarial criteria govern all retirement system operations, reflecting the accrual concept which is implicit in all actuarial procedure. Even if a retirement law did not specifically spell out the method of funding, the foregoing principle would still apply. Rates of contribution on the part of the employees, or employer, or both, must be formulated with the view of accumulating reserves in the form of assets to meet the ultimate payouts by the retirement system. The revenues produced by these rates generally exceed current expenditures for benefits because of the reserve required to meet the maturing pension payments in future years.

It is this reserve for future pension payouts which frequently finds appeal among some public official for diversion or reduction, particularly in the case of officials having to do with the formulation of budgets. These officials view it as a means of withholding current revenues from the retirement system by arbitrary reductions in appropriations. Pressures from public officials also arise from time to time for the application of some or all of the accumulated reserves for other governmental purposes.

PART 9. RECOMMENDED STANDARDS FOR FINANCING, ACCOUNTING,
REPORTING FOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS

For the purpose of providing adequate information concerning the financial operations of a retirement system, including the present and prospective liabilities of the system and the methods of funding these liabilities to insure adequate revenues for meeting them, the Financial Accounting Standard's Board, created by the American Institute of Certified Public Accountants, has formulated certain standards for funding, accounting and reporting to govern the operation of these retirement systems. While these standards were designed primarily for retirement systems operating in private enterprise, the proposed standards could well be applicable to retirement systems relating to employees in public administration.

These standards are to apply principally to defined pension plans. The great majority of the retirement plans in operation in public administration are of that form. These retirement plans, for the most part, also provide benefits on account of death, disability, and termination of employment. Such a schedule of benefits is a basic characteristic of the retirement plans in operation for public employees.

The "Annual Report" of the public retirement plan should include, among other things, the following information:

- 1) The actuarial value of vested benefits at the close of the fiscal year.
- 2) The amount of liabilities pertaining to employees in service who have not acquired vested rights.
- 3) The amount of net present assets available to fund the liabilities of the retirement plan.
- 4) The assumed rate of interest applied in the calculation of the actuarial value of the plan benefits.
- 5) The several actuarial assumptions applied in determining the liabilities, both present and prospective, defining fully the actuarial standards.
- 6) Finally, a summary of the statistical data compiled for the determination of costs and liabilities giving pertinent information such as the number of plan participants, their aggregate salaries, their average periods of service and their marital status, with a possible division between male and female members. The division of the membership as to sex is rapidly becoming outmoded because of the unisex factor, now accepted in the operation of many pension plans.

PART 10. PROPOSED LEGISLATIVE AMENDMENTS

A comparison of the retirement benefits provided by the System with those in effect for personnel of other state universities has disclosed that these benefits are below the standards in effect for the personnel of such other state universities.

Accordingly, several recommendations have been formulated by the Employees' Advisory Committee and presented to the Board of Trustees of the State Universities Retirement System. These recommendations consist of changes that are of immediate concern to the membership of the System and are recommended for enactment by the General Assembly at its forthcoming Fall session.

The proposals have been submitted to the Illinois Public Employees Pension Laws Commission for evaluation, report and approval. It is the function of this Commission to review all such amendatory proposals and submit its report for the guidance and direction of the Governor and the members of the General Assembly.

These proposals, briefly stated, are as follows:

PROPOSAL 1. Provide a monthly survivor's benefit to a spouse equal to 40% of salary, plus an additional 10% of current salary for each unmarried child under age 18, not to exceed 75% of current salary. The maximum dollar benefit would be \$600 for one dependent; and \$1,000 for two or more dependents.

COST OF THIS PROPOSAL: \$1,200,000 per year

Comment: The survivors' benefits under the present law are 30% of final average salary for a spouse, plus (a) 20% of such average salary for each eligible child; and (b) plus 10% of average salary divided by the number of children subject to a maximum for the family of 80% of final average salary. The said maximum is limited to \$300 per month for one dependent; and \$500 per month for a family. It is obvious that the current maximum is totally inadequate under existing economic standards. The proposal would establish levels for survivors' benefits comparable to the amounts of survivors' benefits provided by Federal Social Security.

PROPOSAL 2. Provide a total and permanent disability benefit to distinguish between a permanent disability and one which is of temporary or limited duration. The rate of payment shall be 35% of salary at date of disability, payable upon expiration of the temporary disability benefit currently payable under the existing law. No pension credit would accrue during the period that this total and permanent disability benefit is payable, and the benefit would be paid for the remainder of the lifetime of the disabled employee, assuming disability continues. If the employee has sufficient pension credit to qualify for service retirement, an option would be provided for him to retire on such annuity when he has attained the prescribed minimum age.

COST OF THIS PROPOSAL: . \$590,000 per year

Comment: The present law does not distinguish between a total and permanent disability and one which is only of temporary duration. The benefit presently payable is equal to 50% of salary, payable until the disability benefits are equal to 50% of total earnings. In addition, the employee is entitled to pension credit for the period of disability. If the employee is permanently disabled and is under age 55 when disability benefits terminate, no provision exists under the present law for disability coverage subsequent to the date when disability payments have terminated.

PROPOSAL 3. Extend the age for the termination of disability benefits from September 1 following attainment of the 68th birthday by the employee to September 1 following the employee's attainment of age 70.

COST OF THIS PROPOSAL: . \$600,000 per year

Comment: This provision would place the law in strict compliance with the Federal Age Discrimination Act. It would also comply with the requirements of the Equal Employment Opportunity Commission. Under the law, disability benefits are payable until the employee has received payments equal to 1/2 of total earnings, but payments may not be made after September 1 next following the employee's attainment of age 68. Thus, a change in the present law is mandated by Federal government requirements.

PROPOSAL 4. House Bill 1009, which was not sponsored by this System, was approved by the General Assembly and at the date of this report was before the Governor for his consideration and approval.

This bill provides principally for the following changes affecting the State Universities Retirement System:

1) A one time increase in retirement annuity for those retirees who retired prior to January 1, 1976, equal to \$1.00 per month for each year of creditable service. Thus, for a retiree with 30-years of service, the increase would be \$30.00 per month.

2) An increase in survivors' annuities of 1% for each completed year on annuity since the commencement of payment of such annuities.

3) An increase in the maximum survivor's annuity from \$300 per month to \$400 per month in the case of one dependent; and from \$500 to \$600 per month where two or more dependents exist. The increase in benefits would occur in two steps; the first, to be \$50 per month, effective January 1, 1981; and the second, another \$50 per month, effective July 1, 1981.

A P P E N D I X

Summary of Benefit and Contribution
Provisions

Statistical Tables

Table 1 including 21

Summary of Benefit and Contribution Provisions ^{1/}

1. RETIREMENT ANNUITY

Conditions for retirement. A participant may retire beginning at age 60 with at least 8-years of service at an unreduced benefit, or between ages 55 and 60 years on an actuarially equated benefit. A participant may retire at any age on an unreduced benefit with 35 or more years of validated service. Retirement may also occur beginning at age 62, after 5 years of service at the full rate of annuity.

Retirement is compulsory for any participant on September 1st next following the participant's attainment of age 68. Retirement may be deferred at the option of the employer beyond such age for periods not to exceed one year.

Vesting of pension rights. A participant who terminates employment after contributing to the retirement system for 5 or more years receives a vested interest in his retirement annuity which may be exercised at age 62 or over.

A participant who terminates his employment after 8 or more years of service is entitled to a retirement annuity beginning at age 60 at an unreduced rate; or at age 55 on an actuarially reduced basis.

Amount of retirement annuity. The annuity payable is the larger of the amounts provided under the following paragraphs (a) and (b):

(a) An amount based upon "final rate of earnings" (defined below) equal to 1.67% for each of the first 10 years of service; 1.90% for each of the next 10 years of service; 2.10% for each of the third 10 years of service; and 2.30% for each year of service above 30 years. The annuity is subject to reduction by 1/2 of 1% for each month that a participant is under age 60 at date of retirement unless the participant has 35 or more years of service; or

(b) The amount produced as an actuarial equivalent at the beginning date of annuity from (1) the participant's normal contributions (6 1/2% of earnings), plus credited interest, plus (2) 1.4 times that portion of the normal annuity which is applicable to normal contributions based upon earnings paid by an employer covered by the system, plus (3) an amount equal to that portion of the normal annuity which is applicable to regular normal contributions paid for other public employment.

^{1/} In force at August 31, 1979

Maximum retirement annuity. The maximum retirement annuity is 75% of final rate of earnings for retirement at age 62 or under, 76% for retirement at age 63, 78% at age 64 and 80% at age 65 or over.

"Final rate of earnings" defined. Highest average earnings for any 4 consecutive years within the total service of the participant.

Additional annuity. In addition to the aforesaid annuities, as may be applicable, a participant is entitled to receive, on an actuarial equivalent basis, an annuity from additional contributions over and above the normal rate, plus credited interest.

Post-retirement adjustment in retirement annuity. Beginning January 1st nearest the first anniversary of retirement, or January 1st nearest the 61st birthday of the annuitant, whichever is later, and on January 1st of each year thereafter during the lifetime of the annuitant, the retirement annuity described above shall be increased 1-1/2% each year based upon the initial grant of annuity, if service of the participant terminated after August 14, 1969. The rate of increase is 2% per year (not compounded) between the period from January 1, 1971 through December 31, 1977 and 3% per year (not compounded) beginning January 1, 1978.

2. SUPPLEMENTAL ANNUITY TO PAST RETIREES

Any participant whose status as an employee terminated prior to August 15, 1969, with 15 years of total service or more, was granted an increase in retirement annuity, effective January 1, 1972, or September 1st nearest his 65th birthday. The increase is 1-1/2% of the initial grant of annuity for each year on retirement to January 1, 1972, 2% per year from that date until January 1, 1978 and 3% per year thereafter.

3. OPTIONAL REVERSIONARY ANNUITY

A reversionary annuity option is prescribed which must be exercised by a participant at least 30 days before the date of retirement of not less than \$10 per month, nor more than the amount which when added to the survivor's annuity would exceed the participant's reduced annuity.

This annuity is payable in addition to the death benefit provided upon death after retirement or the survivor's annuity.

4. DISABILITY BENEFITS

Conditions for payment. A disability benefit is payable to any participant who becomes incapacitated from any cause so as to render the participant unfit for service to an employer in his assigned position.

Immediate coverage is provided for accidental disability but at least 2 years' service is required for disability resulting from causes other than bodily injuries.

Waiting period. Payment of benefits begins to accrue from the 61st day following the date of disability or upon expiration of salary and sick leave payments, whichever date is later.

Amount of benefit. The disability benefit is equal to the greater of the following: (a) 50% of base salary on the date disability occurs, or (b) 50% of the average earnings during the 24 months immediately preceding the month in which disability occurs. The rate of earnings during disability for retirement annuity purposes is equal to the greater of the following: (a) base salary on the date disability occurs; or (b) average earnings during the 24 months immediately preceding the month in which disability occurs. During disability for which benefits are payable, the participant also receives service credit for retirement annuity purposes.

Duration of payment. Payable until the total paid is equal to 50% of the total earnings received by the participant during his membership in the system, but in no event beyond September first following his 68th birthday. If an employee is injured on the job and qualifies for workmen's compensation benefits the 50% of earnings limitation is not applied until age 65.

Limitations. The benefit is subject to reduction by the excess of earnings from personal or professional service above the disability benefit payable during disability.

Workmen's compensation. Disability benefits are subject to offset by Workmen's Compensation payments.

5. DEATH BENEFITS - SURVIVOR'S ANNUITY

Death before retirement. Upon death of a contributing participant after at least 1½ years of service, a qualified dependent beneficiary may elect to receive a benefit under one of the following options:

Option 1 -

- (a) Lump sum survivor's insurance of \$1,000, plus
- (b) A monthly survivor's annuity up to \$300 for one eligible beneficiary or \$500 for two or more eligible beneficiaries, plus
- (c) A refund of the 7% retirement deductions, including credited interest.

Option 2 -

- (a) Refund of the 7% retirement annuity deductions and 1% survivor's annuity deductions, including credited interest, plus
- (b) Payment from employer contributions up to \$5,000 depending upon the average earnings of the participant.

If the beneficiary elects the payments under Option 1, but remarries or dies before receiving payments equal to that under Option 2, the balance is payable to the eligible beneficiary or the estate of the participant.

Survivor's annuity. Payable upon death of an employee participant with at least 1-1/2 years of service, or upon death of a former employee with at least 10 years of service, or upon death of a retired participant.

Beneficiaries. A beneficiary is (a) a spouse to whom the employee was married before retirement and at least a period of 1 year immediately prior to the employee's death, (b) an unmarried child under age 18, or (c) a dependent parent.

Test of dependency. Dependency is presumed in the case of a widow, widower and children under age 18. A dependent parent is one who must be receiving at the date of the employee's death at least one-half of support from the participant.

Amount of annuity. (a) To a widow or widower, 30% of average earnings (as defined for retirement annuity purposes); (b) to eligible children, 20% of average earnings, plus 10% of such earnings divided by the number of eligible children; or (c) to a dependent parent, 20% of average earnings, plus 10% thereof divided among the two parents who qualify.

Minimum and maximum payments. The minimum annuity upon death of a participant is 50% of the retirement annuity which may be payable at age 60, or on the date of death, whichever is later, from the earned accumulated pension credits. The total survivor's annuity payments to all beneficiaries may not exceed: (a) 80% of average earnings, or (b) \$300.00 per month if no eligible children survive, or (c) \$500.00 per month if eligible children exist.

If death occurs after retirement, or after termination of employment in the case of a participant who dies while out of service with 10 or more years of credit, the total survivor's annuity may not exceed 80% of the retirement annuity received by the member or which would have been payable to him at age 60 based upon the participant's service credits at the date of death. The minimum survivor's annuity payable upon death of an annuitant is 50% of the retirement annuity.

To adjust the payments within the prescribed limitations, each annuity is reduced proportionately or eliminated entirely as the case may require.

Commencement of payments. The annuity begins at age 50 of the spouse and continues until the spouse remarries or dies. If the spouse has eligible minor children under care of the spouse, annuity payments begin immediately even though the age of the spouse is under 50, but the annuity to the spouse would be suspended while under age 50 when children attain age 18 or otherwise become ineligible.

Payments on account of an unmarried child under age 18 begin immediately upon death of the participant and continue until the child attains age 18, marries or dies.

Payments to a dependent parent begin when the parent attains age 55. Payment is subject to termination upon death or remarriage.

Death before retirement. Upon death of a participant, (a) the sum of \$1,000.00 is payable to those who qualify for survivor's annuity divided equally; and (b) normal retirement contributions, plus credited interest, are payable to the beneficiary designated by the participant.

If death occurs after retirement, only the \$1,000.00 is payable in addition to the monthly survivor's annuity.

Disability. If a participant dies before completing 1-1/2 years of service while a member of the system, the dependent beneficiary is entitled to a death benefit equal to (a) an amount equal to the participant's final rate of earnings during his contributing service, but not less than \$2,000.00 nor more than \$5,000.00, less normal compensation payments, if any; (b) the participant's normal retirement contributions, plus credited interest; and (c) the survivor's annuity contributions plus credited interest.

Death after retirement. A dependent beneficiary may elect to receive:

- (a) a lump sum payment of \$1,000.00 plus a monthly survivor's annuity; or
- (b) an amount equal to the participant's contributions and interest credits at retirement, less the sum of the retirement annuity payments received by the participant.

If the beneficiary elects the benefits under option (a), but he arrives or dies before receiving payments equal to that which could have been received under option (b), the balance is payable to the beneficiary or estate of the participant.

Beneficiary election. A participant may direct that the beneficiary receive the full amount of the death benefit in a single sum, or as an annuity as may be provided by such sum, but not less than \$10 per month. If the participant directs that the entire death benefit be paid as a life income, the beneficiary may elect to receive up to 300% of the death benefit in a lump sum.

6. REFUND OF CONTRIBUTIONS

Upon separation from service, regardless of cause, a participant may receive a refund of all accumulated normal contributions, including credited interest, and survivors' annuity contributions, including credited interest. However, interest credits on refunds may not exceed 4-1/2% per annum.

7. FINANCING

Contributions by participants. Contributions by participants are at the rate of 7% of salary by means of salary deductions. An additional 1% is contributed towards the survivor's annuity.

Contributions by the State of Illinois. The State is legally obligated to meet the remainder of the actuarial requirements of the system and the expense of administration after applying the contributions by the participants. The established rate of State contributions for normal cost is 12.667% of payroll, as of September 1, 1980.

Table 1. NUMBER OF ACTIVE PARTICIPANTS CLASSIFIED BY AGE, EARNINGS AND ACCUMULATED CONTRIBUTIONS

Age	Number	M A L E	
		Earnings	Accumulated Contributions
17	2	\$ 1,861	\$ 149
18	10	40,481	3,489
19	24	123,072	10,559
20	42	235,989	25,848
21	49	380,827	46,835
22	62	433,130	63,897
23	118	1,038,613	156,701
24	153	1,435,122	253,810
25	165	1,672,706	320,441
26	231	2,469,627	467,430
27	267	3,287,702	674,388
28	340	4,333,019	920,754
29	352	4,749,373	1,161,654
30	387	5,275,659	1,391,420
31	474	7,569,798	2,334,539
32	594	10,205,994	3,323,627
33	495	8,741,226	3,232,922
34	570	10,606,933	4,657,542
35	655	12,468,126	5,830,703
36	768	15,113,255	7,852,484
37	679	14,247,648	8,128,474
38	683	14,625,555	8,758,588
39	591	12,842,902	8,247,785
40	672	14,542,485	9,727,265
41	690	15,523,635	10,795,359
42	631	14,231,117	9,994,860
43	643	14,666,450	10,892,497
44	646	15,142,643	11,783,013
45	610	14,275,105	11,157,566
46	610	14,188,770	11,909,910
47	631	15,129,428	13,110,306
48	650	15,466,246	13,663,551
49	608	14,303,032	12,867,554
50	602	13,842,365	13,348,472
51	629	14,560,189	13,855,052
52	596	14,037,050	14,010,855
53	587	13,171,443	13,911,907
54	611	13,677,724	14,370,659

Table 1 - continued

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
55	533	\$ 11,975,741	\$ 13,133,728
56	517	11,140,292	12,736,283
57	536	12,040,998	14,194,779
58	518	11,611,298	14,071,836
59	462	9,996,985	11,967,997
60	350	7,372,308	9,046,781
61	337	7,633,009	9,218,798
62	316	6,602,769	8,365,407
63	242	4,433,888	6,018,997
64	225	4,099,266	5,725,177
65	163	2,634,160	3,783,596
66	118	2,151,746	3,305,705
67	88	1,399,301	2,294,414
68	38	374,027	601,743
69	7	117,038	86,419
70	5	109,910	99,657
71	2	15,736	3,971
72	1	17,874	24,834
73	1	38,500	19,085
76	1	12,480	9,068
82	1	25,811	38,903
Unknown	2	37,944	3,353
TOTALS	21,590	\$442,497,381	\$358,013,396

Average Age = 44.4 years

Average Earnings = \$20,495

Average Accum. Cont. = \$16,582

Table 2. NUMBER OF ACTIVE PARTICIPANTS
CLASSIFIED BY AGE, EARNINGS AND
ACCUMULATED CONTRIBUTIONS

F E M A L E

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
17	6	\$ 6,341	\$ 507
18	32	92,818	8,035
19	66	310,803	31,579
20	135	711,773	82,522
21	186	1,137,876	157,415
22	237	1,601,690	224,196
23	272	1,926,594	293,983
24	306	2,270,185	406,544
25	366	3,126,815	549,261
26	432	3,687,037	774,231
27	448	4,207,625	996,426
28	471	4,539,936	1,214,536
29	458	4,545,646	1,218,611
30	474	5,142,640	1,589,399
31	462	5,250,779	1,762,047
32	539	6,299,052	2,163,658
33	379	4,559,026	1,826,850
34	390	4,956,675	2,097,515
35	433	5,409,186	2,256,670
36	470	6,345,335	3,089,335
37	466	6,115,890	2,907,155
38	396	5,360,048	2,695,576
39	372	5,151,210	2,657,064
40	432	5,858,360	3,136,830
41	407	5,615,855	3,154,936
42	387	5,299,403	2,715,954
43	396	5,237,394	2,820,981
44	359	5,138,741	3,012,174
45	382	5,026,720	3,056,909
46	360	4,748,500	2,981,926
47	326	4,293,390	2,833,921
48	419	5,704,988	3,754,372
49	384	5,048,716	3,428,012

Table 2 - continued

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
50	422	\$ 5,414,854	\$ 3,687,343
51	425	5,472,187	3,917,382
52	408	5,380,763	4,153,760
53	396	5,367,477	4,198,668
54	426	5,617,617	4,529,992
55	404	5,350,429	4,471,089
56	402	5,357,539	4,634,175
57	383	4,935,610	4,261,898
58	350	4,430,530	4,171,286
59	311	3,695,742	3,511,863
60	283	3,500,731	3,177,313
61	212	2,372,224	2,484,214
62	211	2,588,767	2,847,184
63	196	2,550,899	2,847,041
64	156	1,819,809	2,003,567
65	111	985,325	1,198,574
66	83	843,780	1,190,759
67	76	766,608	1,033,192
68	30	278,804	294,260
69	9	92,642	109,861
70	3	40,270	31,264
71	4	49,888	43,800
Unknown	4	25,084	2,007
TOTALS	16,963	\$201,664,626	\$118,699,622

Average Age = 41.7 years

Average Earnings= \$11,889

Average Accum.Contr. = \$6,998

Table 3. NUMBER OF ACTIVE PARTICIPANTS
CLASSIFIED BY LENGTH OF SERVICE,
EARNINGS AND ACCUMULATED
CONTRIBUTIONS

<u>M A L E</u>			
<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
Less than			
1 year	995	\$ 4,202,107	\$ 512,732
1	1,693	26,183,817	2,399,209
2	1,365	24,503,506	3,984,498
3	1,181	21,771,979	5,292,244
4	1,090	20,157,803	6,475,428
5	976	19,457,623	7,755,683
6	816	16,108,472	7,811,967
7	709	15,135,897	8,495,735
8	835	18,112,686	11,698,606
9	1,417	31,176,543	22,372,114
10	1,379	31,449,606	24,902,784
11	1,475	33,473,897	29,140,160
12	1,542	35,943,805	33,357,095
13	1,105	25,933,881	26,203,773
14	814	18,717,283	20,034,991
15	538	12,429,923	13,898,838
16	468	10,383,369	12,412,345
17	410	9,406,984	11,807,867
18	272	6,334,036	8,196,841
19	311	6,882,798	9,446,639
20	262	6,036,282	8,511,457
21	242	5,751,991	8,436,648
22	219	5,191,063	7,919,885
23	160	4,128,347	6,355,755
24	143	3,388,233	5,360,908
25	130	3,219,525	5,416,880
26	141	3,554,973	6,045,343
27	130	2,859,121	5,094,301
28	112	2,817,302	4,856,569
29	117	2,883,972	5,337,678

Table 3 - continued

<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
30	117	\$ 3,138,993	\$ 5,769,695
31	89	2,294,966	4,246,859
32	79	2,062,463	3,954,614
33	83	2,461,300	4,649,000
34	55	1,578,774	3,032,486
35	36	1,034,897	2,062,918
36	36	903,655	1,824,575
37	19	508,757	1,102,723
38	10	300,311	626,169
39	10	332,356	663,484
40	6	181,691	356,450
41	3	102,385	189,450
TOTALS	<u>21,590</u>	<u>\$ 442,497,381</u>	<u>\$358,013,396</u>

Average Service = 9.8 years

Average Earnings = \$20,495

Average Accum. Contr. = \$16,582

Table 4. NUMBER OF ACTIVE PARTICIPANTS
CLASSIFIED BY LENGTH OF SERVICE,
EARNINGS AND ACCUMULATED
CONTRIBUTIONS

<u>F E M A L E</u>			
<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
Less than 1 year	1,397	\$ 3,648,126	\$ 289,940
1	2,346	22,323,462	2,048,044
2	1,925	21,218,813	3,437,511
3	1,327	15,251,364	3,573,626
4	1,144	14,192,740	4,481,935
5	966	11,895,699	4,562,546
6	689	9,033,727	4,192,439
7	552	7,292,305	3,956,476
8	626	8,604,280	5,290,209
9	904	13,232,436	9,140,498
10	913	13,155,505	10,063,450
11	788	11,774,166	9,749,631
12	875	13,015,737	11,724,452
13	562	8,961,353	8,800,382
14	351	5,408,461	5,499,665
15	222	3,127,051	3,300,954
16	216	2,982,333	3,531,146
17	182	2,401,103	2,942,664
18	148	2,049,701	2,513,238
19	109	1,493,013	1,956,056
20	88	1,257,953	1,697,977
21	95	1,399,893	2,089,403
22	82	1,104,492	1,711,875
23	68	956,544	1,594,074
24	47	621,385	963,238
25	44	604,317	1,035,609
26	55	637,383	1,173,815
27	46	618,327	1,083,473
28	43	666,881	1,154,698
29	25	445,737	794,995

Table 4 - continued

<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
30	29	\$ 476,868	\$ 938,123
31	22	431,441	728,324
32	23	358,361	733,747
33	18	390,410	709,813
34	9	128,040	250,491
35	13	192,031	378,476
36	7	156,409	300,247
37	2	47,730	81,332
38	3	73,653	157,013
40	1	14,736	25,752
43	1	20,660	42,285
TOTALS	16,963	\$201,664,626	\$118,699,622

AVERAGE SERVICE = 6.7 years

AVERAGE EARNINGS = \$11,889

AVERAGE ACCUM. CONTR. = \$6,998

Table 5. INACTIVE PARTICIPANTS CLASSIFIED
BY AGE, EARNINGS AND ACCUMULATED
CONTRIBUTIONS

M A L E

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
19	4	\$ 12,226	\$ 1,130
20	9	22,560	3,082
21	12	37,886	3,217
22	10	47,393	6,691
23	14	63,029	7,442
24	12	45,804	6,881
25	28	113,001	17,819
26	23	103,073	24,477
27	48	193,502	36,801
28	46	214,185	51,079
29	46	192,367	35,034
30	51	236,267	71,756
31	41	217,478	56,068
32	58	321,604	110,743
33	45	232,306	131,645
34	61	337,229	232,572
35	62	345,987	252,871
36	64	360,621	339,972
37	70	261,413	482,747
38	54	295,867	398,551
39	65	343,881	397,714
40	53	211,407	341,971
41	83	378,244	676,303
42	78	393,563	738,557
43	58	182,745	538,556
44	61	245,014	560,306
45	83	263,331	941,216
46	63	59,898	602,826
47	59	151,916	655,316
48	77	88,285	995,802
49	87	140,339	955,785

Table 5 - continued

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
50	81	\$ 149,212	\$ 907,437
51	79	135,395	980,736
52	66	201,258	892,333
53	74	131,270	979,916
54	79	129,062	1,048,344
55	79	259,589	1,493,169
56	85	461,563	1,350,276
57	84	241,920	1,138,175
58	52	219,161	967,060
59	74	378,776	1,072,944
60	62	387,123	1,040,288
61	40	233,556	468,126
62	43	420,037	705,114
63	35	249,554	535,093
64	30	352,957	483,199
65	28	356,180	525,740
66	17	112,378	147,705
67	19	162,724	245,667
68	29	381,959	653,464
69	19	79,151	112,526
70	6	--	24,278
71	2	--	1,162
72	2	--	1,046
73	2	--	3,660
74	3	--	2,090
75	1	--	35
76	2	--	584
77	1	--	36
78	1	--	699
79	1	--	653
82	1	--	439
85	1	--	56
Unknown	3	4,527	7,508
TOTALS	2,626	\$11,159,773	\$25,464,488

AVERAGE AGE = 46.1 yrs.
 AVG. EARNINGS \$4,250
 AVG. ACCUM. CONTRIBUTIONS = \$9,697

Table 6. INACTIVE PARTICIPANTS CLASSIFIED
BY AGE, EARNINGS AND ACCUMULATED
CONTRIBUTIONS

Age	Number	F E M A L E		Accumulated Contributions
			Earnings	
18	3	\$	2,719	\$ 43
19	11		17,166	956
20	17		68,461	8,530
21	15		37,784	2,724
22	15		32,414	8,288
23	33		160,965	24,844
24	38		178,539	35,890
25	37		174,487	37,094
26	45		205,008	46,938
27	59		255,390	58,356
28	70		358,157	77,965
29	68		247,542	73,458
30	64		308,034	85,746
31	70		236,628	113,446
32	94		313,507	185,902
33	66		206,253	138,664
34	51		141,113	96,949
35	73		188,884	160,656
36	71		218,622	182,844
37	59		181,279	221,001
38	56		118,218	164,844
39	46		109,885	170,003
40	53		206,901	247,586
41	54		204,501	227,046
42	47		143,025	180,426
43	48		112,843	148,411
44	47		95,479	144,236
45	38		24,054	142,552
46	65		105,361	215,842
47	43		98,878	173,066
48	60		105,425	238,880
49	65		65,937	299,232

Table 6 - continued

<u>Age</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
50	60	\$ 68,665	\$ 389,432
51	54	56,333	274,737
52	57	27,088	309,943
53	60	38,914	216,356
54	69	127,496	384,191
55	61	42,338	334,527
56	63	64,910	308,290
57	47	84,630	334,509
58	53	20,480	293,480
59	48	103,444	243,553
60	43	143,194	323,333
61	37	93,729	230,583
62	36	162,400	234,658
63	33	123,774	193,960
64	32	158,527	180,737
65	22	85,934	173,345
66	17	64,718	90,510
67	13	56,981	55,076
68	17	132,061	173,165
69	6	2,800	1,326
70	8	--	5,196
71	6	--	1,873
73	2	--	756
74	2	--	364
75	1	--	19
81	1	--	86
83	1	--	121
85	2	--	1,432
92	1	--	124
Unknown	<u>2</u>	<u>9,763</u>	<u>781</u>
TOTALS	<u>2,435</u>	<u>\$6,591,638</u>	<u>\$8,668,881</u>

AVERAGE AGE = 43.2 yrs.

AVGE. EARNINGS = \$2,707

AVERAGE ACCUM. CONTRIBUTIONS \$3,560

Table 7. INACTIVE PARTICIPANTS CLASSIFIED
BY LENGTH OF SERVICE, EARNINGS
AND ACCUMULATED CONTRIBUTIONS

M A L E

<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
Less than 1 year	605	\$ 212,327	\$ 74,438
1	254	1,159,711	282,109
2	211	1,331,112	496,871
3	140	622,850	553,153
4	121	797,609	689,436
5	158	475,389	1,338,699
6	125	331,535	1,234,843
7	114	251,429	1,339,669
8	110	313,493	1,468,680
9	100	587,089	1,480,507
10	132	430,905	2,224,672
11	80	334,908	1,517,894
12	81	405,699	1,627,363
13	45	169,803	930,384
14	38	158,994	840,663
15	29	195,834	697,813
16	41	127,188	799,745
17	22	106,770	505,338
18	19	114,051	452,366
19	19	93,482	487,890
20	12	116,179	288,383
21	14	109,285	399,292
22	6	28,554	112,072
23	7	68,155	286,078
24	9	88,471	317,620
25	8	146,653	307,803
26	8	53,116	262,136
27	8	78,249	226,042
28	4	68,960	81,905
29	7	112,951	367,648

Table 7 - Continued

<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
30	6	\$ 97,662	\$ 200,083
31	9	123,838	291,194
32	7	200,562	323,215
33	7	113,231	181,540
34	23	526,111	863,354
35	16	302,496	620,067
36	13	299,584	500,405
37	7	141,558	328,164
38	1	14,795	28,765
39	4	94,160	172,348
40	3	56,500	57,439
41	2	81,253	168,438
42	1	17,272	37,964
TOTALS	<u>2,626</u>	<u>\$11,159,773</u>	<u>\$25,464,488</u>

AVERAGE SERVICE = 6.7 yrs.

AVERAGE EARNINGS = \$4,250

AVGE. ACCUMULATED CONTR. = \$9,697

Table 8. INACTIVE PARTICIPANTS CLASSIFIED
BY LENGTH OF SERVICE, EARNINGS,
AND ACCUMULATED CONTRIBUTIONS

F E M A L E

<u>Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
Less than 1 year	752	\$ 269,615	\$ 73,343
1	356	1,160,013	264,318
2	253	1,043,621	440,418
3	170	892,163	492,936
4	138	542,172	510,836
5	140	452,124	699,385
6	97	222,106	645,830
7	86	151,242	592,170
8	69	215,287	591,441
9	60	255,877	539,533
10	58	82,416	509,733
11	46	140,016	446,934
12	43	135,788	456,019
13	17	73,736	230,096
14	24	169,863	318,652
15	20	49,980	229,388
16	19	81,799	279,260
17	17	86,152	254,984
18	9	51,269	114,018
19	6	51,107	86,538
20	8	45,171	93,457
21	5	47,521	110,307
22	8	27,561	122,285
23	4	28,381	53,949
24	2	53,460	26,631
25	4	--	20,623
26	3	3,779	56,754
27	4	36,823	94,466
28	3	14,286	22,494
29	2	26,292	47,403
31	1	35,805	7,440
32	1	21,865	28,611
33	2	28,460	24,052
34	2	22,973	42,677

Table 8 - continued

<u>Length of Service</u>	<u>Number</u>	<u>Earnings</u>	<u>Accumulated Contributions</u>
35	2	\$ 3,559	\$ 145
36	2	36,183	74,769
38	1	20,714	39,138
40	1	12,459	27,848
TOTALS	2,435	\$6,591,638	\$8,668,881

AVERAGE SERVICE = 3.9 YRS.

AVERAGE EARNINGS = \$2,707

AVGE. ACCUMULATED CONTRIBUTIONS = \$3,560

Table 9. RETIREMENT ANNUITANTS CLASSIFIED
BY AGE AND ANNUAL PAYMENTS

M A L E

<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
53	2	\$ 24,410	85	25	\$ 104,132
54	3	42,097	86	22	80,871
55	14	117,284	87	21	67,525
56	31	282,866	88	14	48,270
57	41	295,117	89	11	54,022
58	46	387,649	90	6	14,220
59	71	629,249	91	8	25,578
60	68	646,611	92	5	16,849
61	119	923,032	93	1	4,551
62	117	963,258	95	1	729
63	139	1,146,906	97	2	7,514
64	137	1,086,674			
65	158	1,315,081	TOTALS	3,296	\$24,818,388
66	169	1,366,125			
67	210	1,528,774			
68	183	1,382,760			
69	203	1,754,731			
70	215	1,715,083	AVERAGE AGE =	69.6 years	
71	207	1,480,966	AVERAGE ANNUAL		
72	176	1,473,156	PAYMENT =	\$7,530	
73	158	1,205,745			
74	135	1,041,270			
75	114	807,869			
76	78	642,688			
77	86	493,959			
78	65	426,539			
79	61	408,272			
80	42	196,102			
81	39	197,309			
82	33	142,740			
83	30	156,138			
84	30	111,667			

Table 10. RETIREMENT ANNUITANTS CLASSIFIED
BY AGE AND ANNUAL PAYMENTS

F E M A L E

<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
53	1	\$ 12,515	85	24	\$ 67,840
54	1	1,298	86	22	54,568
55	7	6,850	87	24	70,402
56	28	61,624	88	4	13,139
57	39	123,972	89	8	19,482
58	42	111,576	90	7	12,958
59	40	96,994	91	2	3,414
60	64	230,864	92	5	9,200
61	81	261,662	93	1	1,528
62	91	293,758	94	4	9,492
63	121	367,592	95	4	6,790
64	151	443,409	101	1	568
65	128	380,340			
66	168	579,186			
67	170	617,693			
68	146	528,321			
69	183	723,525			
70	175	695,719			
71	168	641,252			
72	136	601,862			
73	130	541,167			
74	115	570,980			
75	72	328,750			
76	98	433,145			
77	73	271,605			
78	59	179,272			
79	49	183,365			
80	44	146,209			
81	42	117,609			
82	37	113,665			
83	32	89,891			
84	26	64,363			
			TOTALS	2,823	\$10,089,414

AVERAGE AGE = 69.8 yrs.

AVERAGE ANNUAL PAYMENT \$3,574

Table 12. DISABILITY BENEFICIARIES CLASSIFIED
BY AGE AND TOTAL ANNUAL PAYMENTS

F E M A L E

<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
Unknown	1	\$ 4,437	60	29	\$ 134,136
21	1	4,154	61	30	136,947
23	2	9,990	62	25	131,223
24	2	9,266	63	31	135,745
			64	30	121,622
25	3	12,361	65	38	171,381
26	6	23,331	66	35	147,541
27	3	15,008	67	24	105,905
28	8	41,219	68	7	28,423
29	7	38,259			
			70	1	4,144
30	8	37,319			
31	8	39,983			
32	10	43,362	Totals	617	\$3,135,936
33	5	26,086			
34	2	8,454			
35	2	10,652			
36	4	32,317			
37	5	23,716			
38	3	17,633			
39	4	17,800			
40	2	12,401			
41	7	33,278			
42	9	53,820			
43	8	40,384			
44	11	45,895			
45	6	23,296			
46	6	26,005			
47	14	304,195			
48	3	12,292			
49	12	61,864			
50	11	46,648			
51	18	97,964			
52	19	80,155			
53	19	84,791			
54	16	79,670			
55	18	89,399			
56	13	60,863			
57	37	181,091			
58	19	84,309			
59	35	185,202			

AVERAGE AGE = 54.1 yrs

AVERAGE ANNUAL PAYMENT= \$5,083

Table 15. SURVIVORS INSURANCE BENEFICIARIES
IN FORCE

<u>W I D O W S</u>					
<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
18	1	\$ 1,688	60	24	\$ 84,732
			61	44	139,171
25	2	3,600	62	54	175,015
27	1	2,073	63	38	115,495
29	1	2,250	64	39	118,895
31	1	3,528	65	39	136,531
32	5	10,350	66	41	138,500
33	3	6,004	67	44	140,678
34	1	2,250	68	41	103,624
			69	47	136,575
35	1	1,286			
36	4	7,314	70	36	92,645
37	4	6,660	71	44	126,187
38	3	5,475	72	37	107,333
39	2	3,825	73	36	88,459
			74	33	75,272
40	3	5,850			
41	5	9,450	75	22	47,358
42	7	14,940	76	22	54,348
43	7	13,364	77	28	63,521
44	6	13,458	78	25	49,228
			79	52	131,416
45	8	15,641			
46	9	19,623	80	23	42,285
47	7	11,798	81	28	50,656
48	6	10,635	82	21	37,481
49	4	8,741	83	21	40,751
			84	14	26,499
50	14	32,279			
51	9	20,226	85	9	13,429
52	16	48,216	86	9	17,472
53	20	62,992	87	5	10,443
54	20	70,910	88	7	13,203
			89	3	6,568
55	19	61,138			
56	27	78,073	90	2	4,800
57	24	70,312	94	1	1,638
58	43	133,689			
59	39	123,924	108	1	1,875
			109	1	3,000
			110	1	1,520
			Totals	1,214	\$3,278,165

AVERAGE AGE = 66.1 yrs.
AVGE. ANNUAL PAYMENT = \$2,700

Table 16. SURVIVORS INSURANCE BENEFICIARIES

<u>CHILDREN</u>			<u>WIDOWERS</u>		
<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>	<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
Unknown	12	\$ 18,180	38	1	\$ 2,896
Under 1	1	1,400	41	1	2,100
1	1	1,400	45	1	1,441
3	2	2,525	49	1	2,325
4	4	7,571			
5	5	6,632	51	1	1,146
6	9	15,855	52	5	10,811
7	8	13,215	53	1	2,250
8	10	17,537	54	3	8,027
9	13	19,753			
10	21	39,511	55	4	10,303
11	24	40,312	56	4	9,969
12	28	43,588	57	2	2,968
13	20	38,794	58	4	8,181
14	24	37,775	59	3	7,972
15	38	66,210	60	7	15,436
16	47	88,088	61	4	9,306
17	52	88,864	62	4	8,572
18	95	186,175	63	5	10,034
			64	3	7,836
TOTALS	414	\$733,385	65	4	9,909
			66	5	9,831
			67	6	12,844
			68	1	668
			69	1	2,222
			70	3	4,509
			71	2	3,365
			72	4	7,784
			73	3	6,922
			74	2	2,322
			75	2	4,032
			76	2	3,825
			77	1	1,872
			79	2	3,845
			86	1	1,446
			89	1	1,636
			TOTALS	94	\$198,605

<u>PARENTS</u>		
<u>Age</u>	<u>Number</u>	<u>ANNUAL Payments</u>
80	1	\$ 3,600
83	1	2,400
86	1	927
90	1	3,000
TOTALS	4	\$ 9,927

AVERAGE AGE = 14.1 yrs.	AVERAGE AGE = 63.1 yrs.
AVGE ANNUAL PAYMENTS = \$1,771	AVG. ANNUAL PAYMENT = \$2,113
AVERAGE AGE = 84.8 yrs.	
AVGE. ANNUAL PAYMENT = \$2,482	

Table 17. PROSPECTIVE SURVIVORS' INSURANCE ANNUITIES

W I D O W S

<u>Age</u>	<u>Number</u>	<u>Annual Payments</u>
37	1	\$ 3,600
40	1	3,600
42	1	3,000
43	3	7,913
44	1	3,000
45	2	5,563
46	4	9,678
47	5	13,275
48	6	14,709
49	2	7,200
50	6	14,867
51	6	13,717
52	8	16,790
53	2	4,795
54	7	15,087
58	1	2,248
59	1	3,000
99	1	2,220
TOTALS	58	\$144,262

AVERAGE AGE = 50.2 yrs.

AVERAGE ANNUAL PAYMENTS = \$2,487

W I D O W E R S

38	1	\$ 2,897
41	1	3,000
44	1	3,000
45	1	3,308
47	1	2,568
63	1	1,693
TOTALS	6	\$ 16,466

AVERAGE AGE = 46.3 Yrs.

AVERAGE ANNUAL PAYMENT = \$2,744

AVG ANNUAL PAYMENT

Table 18. NUMBER AND AMOUNT OF REFUNDS CLASSIFIED BY AGE

M A L E

<u>Age</u>	<u>Number</u>	<u>Refund</u>	<u>Age</u>	<u>Number</u>	<u>ReFund</u>
18	1	\$ 103	50	18	\$ 130,368
19	8	1,289	51	15	74,429
20	12	3,497	52	16	87,637
21	23	8,681	53	13	94,097
22	34	14,353	54	13	32,577
23	41	32,735	55	15	70,754
24	47	52,294	56	8	50,838
25	65	90,115	57	9	23,842
26	61	95,832	58	8	11,909
27	76	119,804	59	5	5,495
28	78	151,736	60	8	27,941
29	63	129,439	61	2	879
30	79	209,382	62	2	913
31	94	287,070	63	7	6,816
32	101	261,793	64	2	8,287
33	60	226,744	65	5	16,147
34	63	253,845	66	6	23,109
35	68	295,607	67	2	3,343
36	88	493,580	68	3	19,235
37	57	368,293	69	3	14,862
38	54	389,324	70	1	6,739
39	49	343,597	71	3	2,618
40	35	238,220	72	1	4,846
41	41	291,125	73	2	263
42	44	243,481	75	1	53
43	41	337,640	79	2	8,398
44	29	152,136			
45	25	158,480	TOTALS	1,731	\$6,825,685
46	39	302,856			
47	29	126,809			
48	26	252,136			
49	30	167,294			

AVERAGE AGE = 35.8 yrs.

AVERAGE REFUND = \$3,943

Table 19. NUMBER AND AMOUNT OF REFUNDS
CLASSIFIED BY LENGTH OF SERVICE

<u>M A L E</u>		
<u>Length of Service</u>	<u>Number</u>	<u>Amount</u>
Less than 1 year	358	\$ 84,313
1	377	396,839
2	280	645,900
3	179	702,656
4	124	646,562
5	100	626,441
6	72	557,685
7	47	441,390
8	44	493,938
9	51	610,032
10	28	418,319
11	29	463,372
12	15	255,391
13	5	96,954
14	9	130,568
15	3	55,674
16	3	44,121
17	1	16,798
18	1	17,125
19	2	51,979
21	1	36,207
24	1	23,644
40	1	9,777
TOTALS	1,731	\$6,825,685

Average Service = 2.8 yrs.

Average Refund = \$3,943

Table 20. NUMBER AND AMOUNT OF REFUNDS
CLASSIFIED BY AGE

F E M A L E

<u>Age</u>	<u>Number</u>	<u>Refund</u>	<u>Age</u>	<u>Number</u>	<u>Refund</u>
18	7	\$ 1,354	50	26	\$ 67,497
19	15	4,792	51	25	59,332
20	44	19,394	52	20	63,568
21	53	31,385	53	20	69,480
22	79	39,915	54	23	44,275
23	111	80,102	55	12	54,691
24	118	111,263	56	20	28,731
25	147	141,449	57	8	11,924
26	133	190,379	58	14	44,009
27	138	190,187	59	8	15,730
28	163	253,363	60	10	18,293
29	128	200,114	61	6	8,093
30	124	239,452	62	4	12,915
31	103	231,124	63	6	3,047
32	84	218,603	64	4	16,917
33	74	183,133	65	6	12,211
34	54	148,350	66	3	11,815
35	77	217,251	69	1	120
36	76	209,856	70	2	3,620
37	46	120,102	71	1	875
38	48	164,958	79	3	986
39	47	156,772	82	1	48
40	36	116,209	TOTALS	2,429	\$4,672,008
41	37	85,812			
42	50	135,656			
43	41	117,681			
44	34	96,104			
45	31	102,208	AVERAGE AGE =		33.2 yrs.
46	32	106,537	AVERAGE REFUND =		\$1,923
47	21	80,286			
48	30	72,231			
49	25	57,809			

Table 21. NUMBER AND AMOUNT OF REFUNDS
CLASSIFIED BY LENGTH OF SERVICE

<u>Length of Service</u>	<u>F E M A L E</u>	
	<u>Number</u>	<u>Amount</u>
Less than 1 year	578	\$ 121,201
1	645	483,503
2	410	622,040
3	257	606,823
4	161	519,483
5	103	403,478
6	69	345,563
7	41	261,407
8	49	303,301
9	42	295,807
10	28	218,777
11	16	155,895
12	11	116,860
13	8	101,718
14	4	44,344
15	1	9,960
16	2	14,300
17	-	-
18	1	10,212
19	-	-
20	1	10,522
21	1	13,894
24	1	12,920
TOTALS	2,429	\$4,672,008

Average Service = 2.4 yrs.

Average Refund = \$1,923