# **ACTUARIAL VALUATION**

South Carolina Retirement System (SCRS)

As of July 1, 2000



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January 25, 2001

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Gentlemen:

Subject: July 1, 2000 Actuarial Valuation for SCRS

This report constitutes the July 1, 2000 actuarial valuation for the South Carolina Retirement System (SCRS). The report includes this commentary and a series of actuarial tables and summaries of the plan provisions and methods and assumptions.

# **Basic Contribution Requirements**

Our valuation finds the SCRS in good actuarial condition. The current plan benefits including the recently adopted reduction to the normal retirement requirements, 28 years of service regardless of age (28 and Out), and the implementation of the Teachers and Employees Retention Incentive (TERI), can be adequately funded by the current contribution levels. These current contribution levels consist of employee contributions of 6.0% and employer contributions of 7.55% for State employees including teachers and 6.7% for other employers.

The employer contribution rates reflecting the TERI and the 28 and Out are 4.61% for normal cost contributions and the remainder for amortization of the unfunded liability. With these amortization payments, the current unfunded liability will be eliminated in 16 years. As can be seen on page 4 of this report, the funding period from the July 1, 1999 valuation was two years. This does not reflect the change in provisions. The funding period resulting from using July 1, 2000 data and the prior year's provisions and methods is three years.

Our determination of the System's liabilities do not reflect any changes to the calculation of Average Final Compensation as currently administered and contrary to the plaintiff's interpretation in the Kennedy court case.

We have also determined that the Group Life Insurance employer contribution of 0.15% is reasonable and will adequately fund the expected benefit payments. The separate fund for this benefit has built sufficient reserves.



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# Changes in System Benefits, Actuarial Assumptions and Methods

This actuarial valuation reflects the current provisions of the System as outlined on Table X. The current provisions changed from the prior year are the adoption of the TERI and the 28 and Out normal retirement provision.

The actuarial assumptions and methods are outlined on Table IX. In conjunction with developing this year's valuation results, we have made a technical change to the currently used Entry Age Normal Cost Method. Specifically, we have changed the technique used to develop the gross normal cost to a technique based upon the gross normal cost of a cohort of new entrants in the System. We further discuss this change in Table IX. We believe the change will better reflect the true normal cost of the System in consideration of the TERI and this change will provide increased cost stability. The assumptions remained the same as those used in the July 1, 1999 valuation with the addition of assumptions used for the valuation of the TERI. The assumptions are outlined in Table IX.

#### **Valuation Data**

This valuation was based on approximately 196,800 active members with a payroll of \$5.9 billion. This represents an increase in the number of active members of about 1.9% and an increase of 7.5% in covered payroll since the previous year's valuation.

The number of people receiving benefits increased since the last valuation by 4.8%. The annual benefits being paid increased by about 10.2%. This takes into account the 2.7% COLA that was effective July 1, 2000.

#### **Valuation Assets**

The market value of the SCRS assets as of July 1, 2000 was \$17.4 billion. The comparable figure one-year before was \$16.6 billion. The market value rate of investment return on assets for the 1999-2000 year was 4.8%.

For purposes of the actuarial valuation, we are using an actuarial value of assets that phases-in investment return different than the assumed 7.25% rate over a 5-year period. This actuarial value as of July 1, 2000 was \$17.3 billion as compared to \$16.6 billion the previous year. The estimated rate of return on an actuarial value basis was 7.4%.



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# **Unfunded Liability and Experience Factors**

After recognizing the actuarial value of assets and the plan change, the unfunded liability as of July 1, 2000 was \$2.13 billion. There was an increase in unfunded liability of \$1.95 billion. The factors causing the increase (in billions) are:

Required amortization payment	\$ (0.11)
Asset experience	(0.03)
Salary experience	0.36
Other experience	(0.08)
Plan Change	 1.81
Net change	\$ 1.95

# Governmental Accounting Standards Board (GASB) Calculations

Our report includes information that is required by GASB. Basically, the calculations indicate that the System's funded ratio has decreased since the previous valuation. As of the last valuation the funded ratio was 98.9%. This has decreased to 89.0%. In addition, the unfunded liability as a percentage of covered payroll has increased from 3.3% to 35.1%. The primary reason for the changes in both statistics was the adoption of the TERI and the addition of the 28 and Out normal retirement provision.

# Census Data and System Assets

The Retirement System staff provided the asset information and the member data for retired, active and inactive participants as of June 30, 2000. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data.

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# Conclusions

In our opinion, the information contained in this actuarial report fairly represents the actuarial condition of the South Carolina Retirement System.

We look forward to reviewing this report with the State Budget and Control Board and the Director and staff of the Retirement System.

Sincerely,

W. Michael Carter, FSA

Vice President

John J. Garrett, Jr., ASA

Actuary

Terry J. McFadden, FSA

Actuary

Enclosure

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Table I

South Carolina Retirement System (SCRS)

# **Summary of Actuarial Valuation Results**

		Current Plan July 1, 2000	Prior Plan July 1, 2000	July 1, 1999 (3)
		(1)	(2)	(3)
1.	Number of Active Members and Compensation			
1.	a. State Employees b. Compensation	65,912 \$ 2,138,783	65,912 \$ 2,138,783	66,020 \$ 2,038,900
	B. Componentian	05.005	85,905	83,765
	c. Teachers d. Compensation	85,905 \$ 2,549,770	\$ 2,549,770	\$ 2,343,149
-	•	45,008	45,008	43,428
- Annah - Anna	e. Others f. Compensation	\$ 1,193,294	\$ 1,193,294	\$ 1,091,710
3	-	196,825	196,825	193,213
* France	<ul><li>g. Total number of active members</li><li>h. Total compensation</li></ul>	\$ 5,881,847	\$ 5,881,847	\$ 5,473,759
•	Number of Persons Receiving Benefits and Benefits			
2.	Number of revisions 23000	64,005	64,005	61,063
Å	a. Total number receiving benefits	\$ 824,630	\$ 824,630	\$ 748,310
	b. Total amount of benefits	φ 624,650	<b>4</b> ·,	
3	. Trust Fund Assets			
		\$ 17,386,719	\$ 17,386,719	\$ 16,639,506
Mag	a. Market value	\$ 17,286,108	\$ 17,286,108	\$ 16,120,513
ٺ <u>ب</u>	b. Actuarial value		\$ 318,742	\$ 177,925
4	. Unfunded Actuarial Accrued Liability (UAAL)	\$ 2,128,864		,
ئــ 5	. Remaining Liquidation Period (Years)	16	3	2
84 	6. Required Contribution as a Percent of Compensation			
	a. State Employees and Teachers	4 (10)	5.00%	5.00%
4	i) Normal cost contribution	4.61% 2.94%	2.55%	2.55%
	ii) UAAL contribution	0.15%	- 4 - 4 - 61	<u>0.15%</u>
ű <del>≥</del>	iii) Pre-retirement death contribution	7.70%		7.70%
	iv) Total			
	b. Others	4.61%	5.00%	5.00%
<b>E</b>	i) Normal cost contribution	2.09%	1.70%	1.70%
	ii) UAAL contribution	0.15%	<u>0.15%</u>	0.15%
agra.	iii) Pre-retirement death contribution	6.85%		6.85%
E in	iv) Total			11/
	All dollar amounts in thousands			

Table II

# **Determination and Amortization of Unfunded Liability**

South Carolina Retirement System (SCRS)

		Current Plan (1)	Prior Plan (2)
1.	Actuarial Present Value of Future Benefits		
	<ul> <li>a. Present retired members and beneficiaries</li> <li>b. Present active and inactive members</li> <li>c. Total Actuarial Present Value</li> </ul>	\$ 7,484,050 <u>17,425,893</u> \$ 24,909,943	\$ 7,484,050 <u>16,101,822</u> \$ 23,585,872
2.	Present Value of Future Normal Cost Contributions		
	<ul> <li>a. Employee at 6.00%</li> <li>b. Employer at 4.61% (5.00% under prior plan)</li> <li>c. Total Future Normal Cost Contributions</li> </ul>	\$ 2,921,448 2,573,523 \$ 5,494,971	\$ 3,262,376 2,718,646 \$ 5,981,022
3.	Actuarial Accrued Liability (= 1.c 2.c.)	\$ 19,414,712	\$ 17,604,850
4.	Current Actuarial Value of Assets	\$ 17,286,108	\$ 17,286,108
5.	<u>Unfunded Actuarial Accrued Liability (= 3. – 4.)</u>	\$ 2,128,864	\$ 318,742
6.	Unfunded Actuarial Accrued Liability Rates		
	<ul><li>a. State Employees and Teachers</li><li>b. Others</li></ul>	2.94% 2.09%	2.55% 1.70%
7.	Unfunded Actuarial Accrued Liability Liquidation Period	16 years	3 years



# Table III

# South Carolina Retirement System (SCRS)

# **Development of Actuarial Value of Assets**

1.	Actuarial Value of Assets on July 1, 1999	\$ 16,120,513
2.	1999/2000 Net Cash Flow  a. Contributions b. Disbursements ** c. Net Cash Flow	830,303 (857,608) \$ (27,305)
3.	Expected Investment Return [1. x .0725] + [2.c. x .03625]	\$ 1,167,747
4.	Expected Actuarial Value of Assets on July 1, 2000 (1. + 2.c. + 3.)	\$ 17,260,955
5.	Market Value of Assets on July 1, 2000	\$ 17,386,719
6.	Excess of Market Value over Expected Actuarial Value (54.)	\$ 125,764
7.	20% Adjustment towards Market (.20 x 6.)	\$ 25,153
8.	Actuarial Value of Assets on July 1, 2000 (4. + 7.)	<u>\$ 17,286,108</u>



Table IV

# South Carolina Retirement System (SCRS)

# **Accounting Information**

# 1. Number of Active and Retired Members as of July 1, 2000

	Group	Number
	iree and Beneficiaries Currently ceiving Benefits	64,005
	minated Employees Entitled to Benefits not yet Receiving Benefits	134,159
Act	ive Members	196,825
Tot	al	<u>394,989</u>

# 2. Schedule of Funding Progress

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a) (c)	Funded Ratio (a/b) (d)	Covered Payroll (e)	UAAL as a Percentage of Covered Payroll (c/e) (f)
07/01/2000	\$ 17,286,108	\$ 19,414,972	\$ 2,128,864	89.0%	\$ 6,067,185	35.1%
07/01/1999	16,120,513	16,298,438	177,925	98.9%	5,473,759	3.3%
07/01/1998	14,946,070	15,952,345	1,006,275	93.7%	5,191,048	19.4%
07/01/1997	13,621,362	14,977,179	1,355,817	90.9%	4,927,124	27.5%
07/01/1996	12,499,235	14,062,092	1,562,857	88.9%	4,540,100	34.4%
07/01/1995	11,453,462	12,980,497	1,527,035	88.2%	4,318,827	35.4%



# Table IV (continued)

# 3. Assumptions and Methods

Valuation date

July 1, 2000

Actuarial cost method

Entry-Age-Normal

Amortization method

Level percent open

Remaining amortization period

16 years

Asset valuation method

5 year smoothed market

Actuarial assumptions

Investment rate of return\*

7.25%

Projected salary increases\*

4.00% - 9.00%

\*Including inflation at

3.75%

Cost-of-living adjustments

None



Table V

# South Carolina Retirement System (SCRS)

# **Valuation Balance Sheet**

	July 1, 2000 (1)	July 1, 1999 (2)
1. Assets		
<ul> <li>a. <u>Current Assets</u></li> <li>i) Employee Annuity Savings Fund</li> <li>ii) Employer Annuity Accumulation Fund</li> <li>iii) Total Current Assets</li> </ul>	\$ 4,563,513 <u>12,722,595</u> \$ 17,286,108	\$ 4,278,861 <u>11,841,652</u> \$ 16,120,513
b. Future Member Contributions to Employee Annuity Savings Fund	\$ 2,921,448	\$ 3,058,239
c. Prospective Contributions to Employer Annuity Accumulation Fund i) Normal Contributions ii) Accrued Liability Contributions iii) Total Prospective Employer Contributions	\$ 2,573,523 2,128,864 \$ 4,702,387 \$ 24,909,943	\$ 2,548,532
d. <u>Total Assets</u>	<u>3 24,909,943</u>	<u>\$_21,903,209</u>
2. <u>Liabilities</u>		
<ul> <li>a. Employee Annuity Savings Fund</li> <li>i) Past Member Contributions</li> <li>ii) Future Member Contributions</li> <li>iii) Total Contributions to Employee Annuity</li> <li>Savings Fund</li> </ul>	\$ 4,563,513 2,921,448 \$ 7,484,961	\$ 4,278,861 3,058,239 \$ 7,337,100
<ul> <li>b. Employer Annuity Accumulation Fund</li> <li>i) Benefits Currently in Payment</li> <li>ii) Benefits to be Paid to Current</li> </ul>	\$ 7,484,050	\$ 6,944,021
Active Members	9,940,932	<u>7,624,088</u>
iii) Total Benefits Payable from Employer Annuity Accumulation Fund	\$ 17,424,982	\$ 14,568,109
c. Total Liabilities	<u>\$ 24,909,943</u>	<u>\$ 21,905,209</u>



Table VI

South Carolina Retirement System (SCRS)

# Number and Annual Retirement Allowances of Benefit Recipients as of July 1, 2000

1. Service Retirement	Number (1)	Annual Retirement Allowances (2)
a. Employees		
a <u>mining</u>		
Life Annuity	14,253	\$ 152,423
10 Year Certain and Life	822	10,196
100% J & S	2,061	32,758
100 % Pop-Up	1,383	19,914
50% J & S	1,349	29,049
50% Pop-Up	1,471	29,945
Level Off	3,244	<u>59,764</u>
	24,583	\$ 334,049
b. <u>Teachers</u>		
Life Annuity	16,242	\$ 185,810
10 Year Certain and Life	959	12,925
100% J & S	790	9,880
100 % Pop-Up	669	9,365
50% J & S	577	11,107
50% Pop-Up	875	17,187
Level Off	5,606	118,534
	25,718	\$ 364,808
c. <u>Total</u>		
Life Annuity	30,495	\$ 338,233
10 Year Certain and Life	1,781	23,121
100% J & S	2,851	42,638
100 % Pop-Up	2,052	29,279
50% J & Ŝ	1,926	40,156
50% Pop-Up	2,346	47,132
Level Off	<u>8,850</u>	<u>178,298</u>
	50,301	\$ 698,857



# Table VI (continued)

2.	<b>Disability Retirement</b>	Number (1)	Re	Annual etirement lowances (2)
	a. Employees			
	Life Annuity 10 Year Certain and Life 100% J & S 100 % Pop-Up 50% J & S 50% Pop-Up	3,598 226 514 214 191 185 4,928	\$	34,515 2,106 3,838 1,694 2,135 2,298 46,586
	Life Annuity 10 Year Certain and Life 100% J & S 100 % Pop-Up 50% J & S 50% Pop-Up	2,618 124 186 57 73 71 3,129	\$	27,424 1,330 1,400 521 914 1,051 32,640
	Life Annuity 10 Year Certain and Life 100% J & S 100 % Pop-Up 50% J & S 50% Pop-Up	6,216 350 700 271 264 256 8,057	\$	61,939 3,436 5,238 2,215 3,049 3,349 79,226
3.	Beneficiaries of Deceased Retired Members and Ac	ctive Members		
	a. Employees and Teachers	5,647	\$	46,547
4.	<b>Grand Total</b>	<u>64,005</u>	<u>\$</u>	824,630



Table VII

# South Carolina Retirement System (SCRS)

# Distribution of Active Members by Age Groups and Service Groups as of July 1, 2000

١	≾
I	ears
	잌
	Serv
	င်

	80 & Up Total	75 – 79	70 – 74	65 – 69	60 - 64	55 – 59	50 – 54	45 – 49	40 – 44	35 – 39	30 - 34	25 – 29	20 - 24	Under 20	Age Group
	72,585	100	285	593	1,608	3,561	5,994	8,301	9,645	10,065	10,952	14,727	6,392	340	0-4
	37,419	76	177	405	1,321	2,781	4,648	5,850	5,862	5,577	7,302	3,348	68		5-9
Average Age Average Service Average Pay Percent Female	29,710	32	102	340	1,422	2,975	4,865	5,503	5,397	6,172	2,822	73			10- 14
ge ervice ay male	20,337	21	64	232	1,076	2,434	3,847	4,300	5,386	2,889	81		•		15 – 19
43 10	18,011	18	47	168	1,178	2,631	4,067	6,200	3,554	146	•				20 – 24
Prior Year 43.20 years 10.23 years \$28,330 68.9%	14,192	. 16	46	196	1,119	2,480	6,070	4,071	190	•					25 - 29
	3,968	o 00	20	92	515	1,237	1,966	126							30 – 34
— <u>Cu</u> 43.,	493	4 +	10	37	194	230	17					•	<b>⊕</b>		<u>35 –39</u>
Current Year 43.40 years 10.20 years \$29,892 69.2%	87	w	· 00	24	44	∞	•			•	•	•	•	•	40 - 44
	23	. K	, 9	9	_	•							•		45 & Up
	196,825	51 280	768	2,098	8,478	18,337	31,474	34,351	30,034	24,849	21,157	18,148	6,460	340	<u>Total</u>



Table VIII

# South Carolina Retirement System (SCRS)

# **Distribution of Participants Receiving Benefits**

# 1. Service Retirement

Current Age Group	Nu <u>mber</u>	Tota	l Annual Benefit	Average	Annual Benefit
(1)	(2)		(3)		(4)
Under 50	121	\$	1,199,297	\$	9,912
50 <i>–</i> 54	1,540		37,189,485		24,149
55 – 59	3,796		96,939,812		25,537
60 - 64	6,889		115,726,857		16,799
65 – 69	10,793		139,173,164		12,895
70 – 74	9,797		121,171,854		12,368
75 – 79	7,964	•	93,061,528		11,685
80 & Over	9,401		94,395,299		<u> 10,041</u>
Total	50,301	\$	698,857,296	\$	13,894

# 2. <u>Disability Retirement</u>

Current Age Group (1)	Number (2)	Total	Annual Benefit (3)	<u>Average</u>	Annual Benefit (4)
Under 50	1,369	\$	12,507,561	\$	9,136
50 <b>–</b> 54	1,221		13,919,080		11,400
55 – 59	1,374		15,137,923		11,017
60 – 64	1,403		13,088,778		9,329
65 – 69	1,069		9,462,364		8,852
70 – 74	701		6,456,310		9,210
75 <b>–</b> 79	499		4,733,171		9,485
80 & Over	421		3,920,538		9,312
Total	8,057	\$	79,225,725	\$	9,833

# 3. Beneficiaries

Current Age Group (1)	Number (2)	<u>Total</u>	Annual Benefit (3)	<u>Average</u>	Annual Benefit (4)
Under 50	858	\$	4,943,117	\$	5,761
50 - 54	339		2,735,975		8,071
55 – 59	393		3,297,382		8,390
60 - 64	451		4,153,813		9,210
65 – 69	621		5,500,357		8,857
70 <b>-</b> 74	731		7,037,353		9,627
75 <b>–</b> 79	886		7,764,775		8,764
80 & Over	1,368		11,114,616		8,1 <u>25</u>
Total	5,647	\$	46,547,388	\$	8,243



#### Table IX

# South Carolina Retirement System (SCRS)

# Outline of Actuarial Assumptions and Methods

# 1. Interest to be Earned by Fund

7.25% per annum, compounded annually, composed of an assumed 3.75% inflation rate and a 3.50% real rate of return.

# 2. Salary Increases

Salary increases are assumed in accordance with the following representative rates:

<u>Age</u>	Annual <u>Increases</u>	Age	Annual Increases
25	9.00%	45	4.50%
30	7.50%	50	4.25%
35	6.00%	55	4.00%
40	5.25%	60	4.00%

# 3. Decrement Rates

# a. Service Retirement

	Annual Rates of					
	Reduced	Unreduced	Reduced	Unreduced	Reduced	Unreduced
	Service	Service	Service	Service	Service	Service
<u>Age</u>	Retirement	Retirement*	<u>Retirement</u>	Retirement*	<u>Retirement</u>	Retirement*
		•				_
					=- :	& Female
	Male T	eachers	Female '	<u> reachers</u>	Empl	oyees
				1 E 50		12.0%
50		10.0%		15.0%	<b>-</b>	15.0%
55	10.0%	15.0%	10.0%	20.0%	7.5%	
60	10.0%	15.0%	12.0%	20.0%	7.5%	15.0%
61	15.0%	20.0%	15.0%	25.0%	10.0%	20.0%
62	20.0%	30.0%	20.0%	45.0%	25.0%	30.0%
63	15.0%	30.0%	20.0%	30.0%	15.0%	25.0%
64	15.0%	30.0%	20.0%	30.0%	15.0%	30.0%
65	15.070	30.0%	20.0.0	30.0%		30.0%
66		20.0%		20.0%		20.0%
		10.0%		20.0%		15.0%
67				20.0%		15.0%
68		10.0%				15.0%
69		10.0%		20.0%	•	100.0%
70		100.0%		100.0%		100.0%

<sup>\*</sup>Plus 25% in year when first become eligible for unreduced service retirement before age 65.



# Table IX (continued)

# b. In-service Mortality, Disability and Withdrawal

	Annual Rates of				
	Withdrawal				
			Years of Service		
<u>Age</u>	Mortality	<b>Disability</b>	0-4	5-9	10+
		Male T	<u>'eachers</u>		
25	0.06%	0.04%	12.65%	8.25%	
30	0.07%	0.06%	10.95%	4.95%	2.80%
35	0.07%	0.08%	11.25%	5.55%	2.10%
40	0.10%	0.15%	8.85%	5.35%	1.50%
45	0.18%	0.25%	10.15%	4.75%	1.50%
50	0.30%	0.40%	8.45%	4.75%	1.90%
55	0.46%	0.65%	8.45%	4.35%	2.90%
60	0.65%	1.00%			
64	0.90%	1.25%			
		Female ]	<u> Ceachers</u>		
25	0.03%	0.05%	9.55%	6.85%	
30	0.04%	0.07%	10.05%	4.95%	3.15%
35	0.04%	0.07%	8.95%	4.75%	2.45%
40	0.05%	0.12%	7.45%	4.05%	2.15%
45	0.08%	0.25%	7.05%	3.65%	1.95%
50	0.13%	0.40%	7.05%	3.75%	1.95%
55	0.21%	0.65%	7.35%	3.55%	2.35%
60	0.33%	1.00%			
64	0.49%	1.25%			
		Male En	nployees		
25	0.06%	0.05%	15.85%	9.45%	
30	0.07%	0.10%	13.25%	7.15%	4.35%
35	0.07%	0.15%	12.25%	6.65%	3.65%
40	0.10%	0.25%	11.35%	6.25%	3.05%
45	0.18%	0.35%	9.95%	<i>5.</i> 35%	2.75%
50	0.30%	0.50%	8.65%	5.35%	2.45%
<b>55</b> .	0.46%	0.80%	8.45%	4.75%	2.85%
60	0.65%	1.00%			
64	0.90%	1.25%			
Female Employees					
25	0.03%	0.05%	14.15%	8.65%	
30	0.04%	0.07%	12.75%	7.45%	4.75%
35	0.04%	0.14%	11.85%	6.15%	3.45%
40	0.05%	0.18%	10.65%	5.65%	3.15%
45	0.08%	0.26%	9.25%	5.35%	2.55%
50	0.13%	0.44%	8.95%	4.75%	2.85%
55	0.21%	0.70%	7.55%	4.65%	2.75%
60	0.33%	1.07%			
64	0.49%	1.49%			



# Table IX (continued)

# 4. Mortality After Retirement

For healthy retirees and beneficiaries, the 1983 Group Annuity Mortality Table rates. A separate table of mortality rates is used for disabled retirees. The following are sample rates for the healthy retirees and beneficiaries:

_Age	Male	<u>Female</u>
50	0.39%	0.18%
55	0.61%	0.28%
60	0.92%	0.47%
65	1.56%	0.78%
70	2.75%	1.41%
75	4.46%	2.72%
80	7.41%	4.77%
85	11.48%	7.66%

# 5. Marriage Assumption

100% of all active members are assumed to be married, with female spouses being 3 years younger.

# 6. Asset Valuation Method

Actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed investment rate of return. The amount recognized each year is 20% of the difference between market and expected actuarial value. The actuarial value of assets is limited to a range between 80% and 120% of market value.

# 7. <u>Cost Methods</u>

# a. Normal Retirement, Termination, Death and Disability Benefits

Projected benefit with level percentage entry age normal cost and open-end unfunded actuarial accrued liability. The gross normal cost rate is based upon the new entrant cohort as of July 1, 2000. The gross normal cost rate will reflect any future changes in benefit provisions, assumptions and significant demographic trends. The gross normal derived in this manner will be updated as part of each future experience study. Gains and losses are reflected in the period remaining to liquidate the unfunded actuarial accrued liability.

# b. Group Life Insurance Benefit

One-year term cost method.



# Table IX (continued)

# 8. Additional Assumptions

There are certain other assumptions made that have a relatively minor effect on liabilities. These assumptions are available upon request.

# 9. <u>Cost-of-Living Increases</u>

None assumed.

# 10. Changes from Prior Valuation

The technique used as part of the Entry Age Normal Cost Method to develop the gross normal cost rate is changed to the method described in Item 7 of this table.

#### 11. Payroll Growth Rate

4.00% per annum.

# 12. Valuation of Teachers and Employees Retention Incentive (TERI)

In conjunction with the change to the Cost Method, we have made additional assumptions in the course of developing plan liabilities in consideration of the TERI. We have assumed all members elect TERI coverage when they are first eligible for an unreduced retirement benefit. We assume members in the TERI are exposed to the current retirement rates during TERI coverage and we assume 100% terminate employment at the end of the TERI period (5 years).



#### Table X

# South Carolina Retirement System (SCRS)

# **Outline of Principal Plan Provisions**

#### 1. Effective Date

July 1, 1945.

# 2. Eligibility Requirements

All full-time, part-time, or temporary personnel who fill a permanent position as a public school employee, public higher education personnel, state employees, and city, county and other local public employees of participating employers must join as a condition of employment as of the effective date of employment.

Employees in non-permanent positions may choose to join.

# 3. <u>Creditable Service</u>

The sum of "prior service" and "membership service." Prior service means service rendered prior to membership for which credit is allowed. Membership service means service during which contributions have been made. This is counted in years, months, and days.

There are a number of different types of service that may be purchased by an employee under special rules, including educational leave, medical leave, federal service, maternity leave, military leave, municipality service, non-member service, out-of-state service, additional service credit, and others.

# 4. Average Final Compensation

The total of the highest 12 consecutive quarters of compensation earned divided by 3. Denoted AFC. Compensation generally includes gross salary or wages, overtime, sick pay, wage deferrals, and termination pay for unused annual leave. The unused annual leave is added to the sum of the highest 12 consecutive quarters prior to dividing by 3. For member who joined the system on or after January 1, 1997, compensation for benefit and contribution purposes is limited to \$160,000, subject to annual index.

# 5. Normal Retirement

a. Eligibility Attainment of age 65, or completion of 28 years of creditable service.

b. Benefit 1.82% of AFC times creditable service.



# Table X (continued)

# 6. Early Retirement

a. Eligibility Attainment of age 60, or attainment of age 55 with 25 years of creditable

service.

b. Benefit accrued to date of retirement, reduced 5% for each year prior to 65

(for age 60 eligibility), or 4% for each year prior to 28 years (for age 55

with 25 years eligibility).

# 7. <u>Teachers and Employees Retention Incentive (TERI)</u>

Upon meeting normal retirement eligibility, a member can elect to enter the TERI for a maximum of five (5) years, after which employment will cease. The retirement benefits will be accumulated in TERI accounts and will be paid to the members upon the earlier of actual retirement or the end of participation period. The amount credited to the TERI account is based upon the calculation and form of benefit selected by the member at TERI entry. No interest is credited to the TERI account. Member contributions cease, but employer contributions continue during TERI participation.

# 8. <u>Disability Retirement</u>

a. Eligibility Disability prior to normal retirement age with at least 5 years of

creditable service. The service requirement is waived for job

related disability.

b. Benefit equal to the amount that would have been payable at age

65 assuming continued employment and AFC at date of disability, less the equivalent benefit that would have been provided by the

employee contributions that would have been made until age 65.

#### 9. Death Benefits

# a. Death prior to age 60 or 15 years of creditable service

Refund of employee contributions with interest plus Group Life Insurance in a lump sum equal to annual earnable compensation at death of death. Group life Insurance only payable to those with at least 1 year of creditable service, unless death is job related, and whose employer participates.

# b. Death after age 60 or with 15 years of creditable service

Same as above, however, instead of the refund of employee contributions with interest, the beneficiary may elect to receive an annuity equal to the amount that would have been payable had the employee retired the day before death under option 2 described below.

# 10. Employee Contributions

6% of earnable compensation.



# Table X (continued)

# 11. Vested Benefit upon Termination

a. Eligibility 100

100% vesting upon completion of 5 years of creditable

service.

b. Benefit

Accrued benefit as of date of termination payable as of age

60.

# 12. Termination Benefit

a. Eligibility

Elect return of accumulated employee contributions.

b. Benefit

Return of employee contributions plus interest.

#### 13. Normal Form of Retirement Income

Monthly life annuity with guaranteed return of employee contributions plus interest.

# 14. Optional Forms of Retirement Income

a. Option 1 Monthly life annuity. If death occurs in first 10 years, employee contributions plus interest are refunded less 10% for each year of retirement.

b. Option 2 Monthly life annuity with 100% of reduced benefit continued to beneficiary upon death.

c. Option 2(a) Same as option 2 with revert to maximum option if beneficiary predeceases retiree.

d. Option 3 Monthly life annuity with 50% of reduced benefit continued to beneficiary upon death.

e. Option 3(a) Same as option 3 with revert to maximum option if beneficiary predeceases retiree.

f. Option 4 Social security leveling option which provides additional benefits before eligibility for social security and a lesser benefit after social security eligibility.

# 15. Cost of Living Adjustment

Granted upon approval of State Budget and Control Board if funding objectives are met. The amount is the increase in the calendar year CPI not in excess of 4%.

# 16. <u>Changes from Prior Valuation</u>

Reduction of the eligibility requirement for normal retirement from 30 years of service regardless of age to 28 years of service. Implementation of the Teachers and Employees Retention Incentive program.

