

**South Carolina Retirement System  
(SCRS)**

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**ACTUARIAL VALUATION**

**July 1, 2001**

March 26, 2002

State Budget and Control Board  
South Carolina Retirement System  
P.O. Box 11960  
Columbia, SC 29211-1960

**Subject: July 1, 2001 Actuarial Valuation for SCRS**

This is the July 1, 2001 actuarial valuation for the South Carolina Retirement System (SCRS).

#### **Basic Contribution Requirements**

Our valuation finds the SCRS in good actuarial condition. Current contribution levels are (i) employee contributions of 6.0%, and (ii) employer contributions of 7.55% for State employees and teachers, and 6.7% for other employers.

The employer contribution rates are the sum of a 4.61% normal cost contribution and a 2.94% (state employees and teachers) or 2.09% (other employees) contribution intended to amortize the unfunded liability. With these amortization payments, the current unfunded liability will be eliminated in 18 years. The funding period from the July 1, 2000 valuation was 16 years. The increase was mostly due to the 3.4% cost-of-living adjustment effective as July 1, 2001.

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.

#### **Changes in System Benefits, Actuarial Assumptions and Methods**

This actuarial valuation reflects the current provisions of the System as outlined on Table X. No material changes to the benefit structure have been made since the previous valuation.

The assumptions remained the same as those used in the July 1, 2000 valuation.

### **Valuation Data**

This valuation was based on 191,494 active members with a payroll of \$6.0 billion. This represents a decrease in the number of active members of 2.7% and an increase of 2.3% in covered payroll since the previous year's valuation. The decrease in the number of active members, and the abnormally small increase in total payroll, are due to the adoption of the TERI provisions. There are about 6,300 members in TERI as of June 2001, and they have been counted as retirees in this report.

The number of people receiving benefits increased since the last valuation by 15.7%. The annual benefits being paid increased by 31.7%. This reflects the 3.4% COLA that was effective July 1, 2001, as well as the new TERI "retirees."

### **Valuation Assets**

The market value of the SCRS assets as of July 1, 2001 was \$18.6 billion. The comparable figure one-year before was \$17.4 billion. The market value rate of investment return on assets for the 2000-2001 year was 7.3%.

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, 2001 was \$18.5 billion as compared to \$17.3 billion the previous year. The estimated rate of return on an actuarial value basis was 7.4%.

### **Unfunded Liability and Experience Factors**

After recognizing the actuarial value of assets and the 3.4% COLA, the unfunded liability as of July 1, 2001 was \$2.68 billion. There was an increase in unfunded liability of \$0.55 billion. The factors causing the increase, in millions, are:

Required amortization payment	\$ (26)
3.4% COLA	353
Asset experience	25
Salary experience	179
Other experience	<u>16</u>
Net change	\$ 547

### **Governmental Accounting Standards Board (GASB) Calculations**

Our report includes information that is required by GASB. The calculations indicate that the System's funded ratio has decreased slightly since the previous valuation. As of the last valuation the funded ratio was 89.0%. This has decreased to 87.4%. In addition, the unfunded liability as a percentage of covered payroll has increased from 36.2% to 44.5%. The primary reason for the changes in both statistics was the 3.4% cost-of-living adjustment effective as of July 1, 2001.

### **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, 2001. 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.

### **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,

Gabriel, Roeder, Smith & Company

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Senior Consultant

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Enclosure

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SUMMARY OF ACTUARIAL VALUATION RESULTS

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
<b>1. <u>Number of Active Members and Compensation</u></b>		
a. State Employees	61,787	65,912
b. Compensation	\$ 2,097,420	\$ 2,138,783
c. Teachers	83,817	85,905
d. Compensation	\$ 2,675,546	\$ 2,549,770
e. Others	45,890	45,008
f. Compensation	\$ 1,244,571	\$ 1,193,294
g. Total number of active members	191,494	196,825
h. Total compensation	\$ 6,017,537	\$ 5,881,847
<b>2. <u>Number of Persons Receiving Benefits and Benefits</u></b>		
a. Total number receiving benefits	74,054	64,005
b. Total amount of benefits	\$ 1,085,634	\$ 824,630
<b>3. <u>Trust Fund Assets</u></b>		
a. Market value	\$ 18,585,912	\$ 17,386,719
b. Actuarial value	\$ 18,486,773	\$ 17,286,108
<b>4. <u>Unfunded Actuarial Accrued Liability (UAAL)</u></b>	\$ 2,675,374	\$ 2,128,864
<b>5. <u>Remaining Liquidation Period (Years)</u></b>	18	16
<b>6. <u>Required Contribution as a Percent of Compensation</u></b>		
a. State Employees and Teachers		
i) Normal cost contribution	4.61%	4.61%
ii) UAAL contribution	2.94%	2.94%
iii) Pre-retirement death contribution	<u>0.15%</u>	<u>0.15%</u>
iv) Total	7.70%	7.70%
b. Others		
i) Normal cost contribution	4.61%	4.61%
ii) UAAL contribution	2.09%	2.09%
iii) Pre-retirement death contribution	<u>0.15%</u>	<u>0.15%</u>
iv) Total	6.85%	6.85%

*All dollar amounts in thousands  
 Compensation shown excludes amounts for ORP and TERI  
 participants*

**DETERMINATION AND AMORTIZATION OF UNFUNDED LIABILITY**

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
<b>1. <u>Actuarial Present Value of Future Benefits</u></b>		
a. Present retired members and beneficiaries	\$ 10,367,913	\$ 7,484,050
b. Present active and inactive members	<u>16,418,215</u>	<u>17,425,893</u>
c. Total Actuarial Present Value	\$ 26,786,128	\$ 24,909,943
<b>2. <u>Present Value of Future Normal Contributions</u></b>		
a. Employee at 6.00%	\$ 3,010,752	\$ 2,921,448
b. Employer at 4.61%	<u>2,613,229</u>	<u>2,573,523</u>
c. Total Future Normal Contributions	\$ 5,623,981	\$ 5,494,971
<b>3. <u>Actuarial Accrued Liability = 1.c. – 2.c.</u></b>	\$ 21,162,147	\$ 19,414,712
<b>4. <u>Current Actuarial Value of Assets</u></b>	\$ 18,486,773	\$ 17,286,108
<b>5. <u>Unfunded Actuarial Accrued Liability = 3. – 4.</u></b>	\$ 2,675,374	\$ 2,128,864
<b>6. <u>Unfunded Accrued Liability Rates</u></b>		
a. State Employees and Teachers	2.94%	2.94%
b. Others	2.09%	2.09%
<b>7. <u>Unfunded Accrued Liability Liquidation Period</u></b>	18 years	16 years

*All dollar amounts in thousands*

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

1. <u>Actuarial Value of Assets on July 1, 2000</u>	\$ 17,286,108
2. <u>2000/2001 Net Cash Flow</u>	
a. Contributions	920,697
b. Disbursements	<u>995,354</u>
c. Net Cash Flow	\$ (74,657)
3. <u>Expected Investment Return</u> [1. x .0725] + [2.c. x .03625]	\$ 1,250,537
4. <u>Expected Actuarial Value of Assets on July 1, 2001</u> (1. + 2.c. + 3.)	\$ 18,461,988
5. <u>Market Value of Assets on July 1, 2001</u>	\$ 18,585,912
6. <u>Excess of Market Value over Expected Actuarial Value</u> (5. – 4.)	\$ 123,924
7. <u>20% Adjustment towards Market</u> (.20 x 6.)	\$ 24,785
8. <u>Actuarial Value of Assets on July 1, 2001</u> (4. + 7.)	<u>\$ 18,486,773</u>

*All dollar amounts in thousands*



ACCOUNTING INFORMATION

1. **Number of Active and Retired Members as of July 1, 2001**

<u>Group</u>	<u>Number</u>
Retiree and Beneficiaries Currently Receiving Benefits	74,054
Terminated Employees Entitled to Benefits But not yet Receiving Benefits	138,434
Active Members	<u>191,494</u>
Total	<u>403,982</u>

2. **Schedule of Funding Progress**

Actuarial Valuation Date	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 % of Covered Payroll (c / e) (f)
7/1/01	\$18,486,773	\$21,162,147	\$2,675,374	87.4%	\$6,017,537	44.5%
7/1/00	17,286,108	19,414,972	2,128,864	89.0%	5,881,847	36.2%
7/1/99	16,120,513	16,298,438	177,925	98.9%	5,473,759	3.3%
7/1/98	14,946,070	15,952,345	1,006,275	93.7%	5,191,048	19.4%
7/1/97	13,621,362	14,977,179	1,355,817	90.9%	4,927,124	27.5%
7/1/96	12,499,235	14,062,092	1,562,857	88.9%	4,540,100	34.4%

*All dollar amounts in thousands*

3. **Assumptions and Methods**

Valuation date	July 1, 2001
Actuarial cost method	Entry Age Normal
Amortization method	Level percent open
Remaining amortization period	18 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

VALUATION BALANCE SHEET

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
<b>1. <u>Assets</u></b>		
a. <u>Current Assets (Actuarial Value)</u>		
i) Employee Annuity Savings Fund	\$ 4,339,747	\$ 4,563,513
ii) Employer Annuity Accumulation Fund	<u>14,147,026</u>	<u>12,722,595</u>
iii) Total Current Assets	\$ 18,486,773	\$ 17,286,108
b. <u>Future Member Contributions to Employee Annuity Savings Fund</u>	\$ 3,010,752	\$ 2,921,448
c. <u>Prospective Contributions to Employer Annuity Accumulation Fund</u>		
i) Normal Contributions	\$ 2,613,229	\$ 2,573,523
ii) Accrued Liability Contributions	<u>2,675,374</u>	<u>2,128,864</u>
iii) Total Prospective Employer Contributions	\$ 5,288,603	\$ 4,702,387
d. <u>Total Assets</u>	<u>\$ 26,786,128</u>	<u>\$ 24,909,943</u>
<b>2. <u>Liabilities</u></b>		
a. <u>Employee Annuity Savings Fund</u>		
i) Past Member Contributions	\$ 4,339,747	\$ 4,563,513
ii) Future Member Contributions	<u>3,010,752</u>	<u>2,921,448</u>
iii) Total Contributions to Employee Annuity Savings Fund	\$ 7,350,499	\$ 7,484,961
b. <u>Employer Annuity Accumulation Fund</u>		
i) Benefits Currently in Payment	\$ 10,367,913	\$ 7,484,050
ii) Benefits to be Paid to Current Active Members	<u>9,067,716</u>	<u>9,940,932</u>
iii) Total Benefits Payable from Employer Annuity Accumulation Fund	\$ 19,435,629	\$ 17,424,982
c. <u>Total Liabilities</u>	<u>\$ 26,786,128</u>	<u>\$ 24,909,943</u>

*All dollar amounts in thousands*

NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF  
 BENEFIT RECIPIENTS AS OF JULY 1, 2001

	<u>Number</u>	<u>Annual Retirement Allowances</u>
<b>1. <u>Service Retirement</u></b>		
a. <u>Employees</u>		
Life Annuity	17,597	\$232,505
10 Year Certain and Life	782	10,158
100% J & S	2,048	33,995
100 % Pop-Up	2,233	40,408
50% J & S	1,331	30,368
50% Pop-Up	2,391	55,845
Level Off	<u>3,398</u>	<u>64,716</u>
	29,780	\$467,995
b. <u>Teachers</u>		
Life Annuity	19,364	\$268,418
10 Year Certain and Life	890	12,600
100% J & S	772	10,121
100 % Pop-Up	1,007	16,764
50% J & S	558	11,500
50% Pop-Up	1,356	29,570
Level Off	<u>5,859</u>	<u>128,743</u>
	29,806	\$477,716
c. <u>Total</u>		
Life Annuity	36,961	\$500,923
10 Year Certain and Life	1,672	22,758
100% J & S	2,820	44,116
100 % Pop-Up	3,240	57,172
50% J & S	1,889	41,868
50% Pop-Up	3,747	85,415
Level Off	<u>9,257</u>	<u>193,459</u>
	59,586	\$945,711

NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF  
 BENEFIT RECIPIENTS AS OF JULY 1, 2001

	<u>Number</u>	<u>Annual Retirement Allowances</u>
<b>2. <u>Disability Retirement</u></b>		
a. <u>Employees</u>		
Life Annuity	3,849	\$38,922
10 Year Certain and Life	214	2,054
100% J & S	490	3,836
100 % Pop-Up	235	2,026
50% J & S	190	2,228
50% Pop-Up	<u>220</u>	<u>2,841</u>
	5,198	\$51,907
b. <u>Teachers</u>		
Life Annuity	2,790	\$30,716
10 Year Certain and Life	120	1,346
100% J & S	179	1,395
100 % Pop-Up	71	603
50% J & S	76	1,014
50% Pop-Up	<u>82</u>	<u>1,269</u>
	3,318	\$36,343
c. <u>Total</u>		
Life Annuity	6,639	\$69,638
10 Year Certain and Life	334	3,400
100% J & S	669	5,231
100 % Pop-Up	306	2,629
50% J & S	266	3,242
50% Pop-Up	<u>302</u>	<u>4,110</u>
	8,516	\$88,250
<b>3. <u>Beneficiaries of Deceased Retired Members and Active Members</u></b>		
a. <u>Employees and Teachers</u>	5,952	51,673
<b>4. <u>Grand Total</u></b>	<b>74,054</b>	<b>\$1,085,634</b>

**DISTRIBUTION OF ACTIVE MEMBERS BY AGE GROUPS AND SERVICE GROUPS AS OF JULY 1, 2001**

Age Group	<u>Years of Service</u>										Total
	0 – 4	5 – 9	10- 14	15 – 19	20 – 24	25 – 29	30 – 34	35 –39	40 -44	45 & Up	
Under 20	304	-	-	-	-	-	-	-	-	-	304
20 – 24	6,322	84	-	-	-	-	-	-	-	-	6,406
25 – 29	13,901	3,266	71	-	-	-	-	-	-	-	17,238
30 – 34	11,104	7,720	2,663	81	-	-	-	-	-	-	21,568
35 – 39	9,866	5,501	5,857	2,703	101	-	-	-	-	-	24,008
40 – 44	9,546	5,940	5,162	5,505	3,242	154	-	-	-	-	29,549
45 – 49	8,334	5,924	5,265	4,342	6,041	3,770	54	-	-	-	33,730
50 – 54	6,290	4,892	4,811	3,965	3,973	4,811	714	16	-	-	29,472
55 – 59	3,907	3,002	3,176	2,629	2,695	2,065	500	73	4	-	18,051
60 – 64	1,756	1,482	1,408	1,151	1,114	869	194	73	13	1	8,061
65 – 69	674	412	363	210	141	148	55	21	17	3	2,044
70 – 74	279	184	89	64	44	36	15	3	4	2	720
75 – 79	99	103	28	21	13	12	2	2	-	3	283
80 & Up	<u>23</u>	<u>8</u>	<u>9</u>	<u>9</u>	<u>5</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>1</u>	<u>60</u>
Total	72,405	38,518	28,882	20,680	17,369	11,868	1,535	189	38	10	191,494

	<u>Prior Year</u>	<u>Current Year</u>
Average Age	43.4 years	43.32 years
Average Service	10.2 years	9.68 years
Average Pay	\$29,892	\$31,424
Percent Female	69.2%	69.6%

**DISTRIBUTION OF PARTICIPANTS RECEIVING BENEFITS**

**1. Service Retirement**

Current Age Group	Number	Total Annual Benefit	Average Annual Benefit
(1)	(2)	(3)	(4)
Under 50	544	\$ 9,040,237	\$16,618
50 – 54	4,842	118,708,302	24,516
55 – 59	6,391	169,361,487	26,500
60 – 64	8,485	158,813,026	18,717
65 – 69	11,173	153,515,633	13,740
70 – 74	10,147	131,465,357	12,956
75 – 79	8,082	99,635,530	12,328
80 & Over	<u>9,922</u>	<u>105,171,811</u>	<u>10,600</u>
Total	59,586	\$945,711,383	\$15,871

**2. Disability Retirement**

Current Age Group	Number	Total Annual Benefit	Average Annual Benefit
(1)	(2)	(3)	(4)
Under 50	1,369	\$13,020,438	\$ 9,511
50 – 54	1,313	15,763,871	12,006
55 – 59	1,530	17,881,809	11,687
60 – 64	1,514	15,157,214	10,011
65 – 69	1,128	10,307,304	9,138
70 – 74	707	6,741,080	9,535
75 – 79	492	4,935,253	10,031
80 & Over	<u>463</u>	<u>4,443,096</u>	<u>9,596</u>
Total	8,516	\$88,250,065	\$10,363

**3. Beneficiaries**

Current Age Group	Number	Total Annual Benefit	Average Annual Benefit
(1)	(2)	(3)	(4)
Under 50	910	\$5,516,835	\$6,062
50 – 54	342	2,878,918	8,418
55 – 59	438	3,804,121	8,685
60 – 64	484	4,722,881	9,758
65 – 69	629	5,990,759	9,524
70 – 74	754	7,666,226	10,167
75 – 79	898	8,352,250	9,301
80 & Over	<u>1,497</u>	<u>12,741,265</u>	<u>8,511</u>
Total	5,952	\$51,673,255	\$8,682

**SUMMARY 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>	<u>Annual Increases</u>	<u>Age</u>	<u>Annual Increases</u>
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

<u>Age</u>	<u>Annual Rates of</u>					
	<u>Reduced Service Retirement</u>	<u>Unreduced Service Retirement*</u>	<u>Reduced Service Retirement</u>	<u>Unreduced Service Retirement*</u>	<u>Reduced Service Retirement</u>	<u>Unreduced Service Retirement*</u>
	<u>Male Teachers</u>		<u>Female Teachers</u>		<u>Male &amp; Female Employees</u>	
50		10.0%		15.0%		12.0%
55	10.0%	15.0%	10.0%	20.0%	7.5%	15.0%
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		30.0%		30.0%		30.0%
66		20.0%		20.0%		20.0%
67		10.0%		20.0%		15.0%
68		10.0%		20.0%		15.0%
69		10.0%		20.0%		15.0%
70		100.0%		100.0%		100.0%

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

b. In-service Mortality, Disability and Withdrawal

<u>MALE TEACHERS</u>	<u>Annual Rates of</u>						
	<u>Age</u>	<u>Mortality</u>	<u>Disability</u>	<u>Withdrawal</u>			
				<u>Years of Service</u>			
			<u>0 – 4</u>	<u>5 – 9</u>	<u>10 +</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%				
<u>FEMALE TEACHERS</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%				
<u>MALE EMPLOYEES</u>							
	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%	5.35%	2.75%	
	50	0.30%	0.50%	8.65%	5.35%	2.45%	
	55	0.46%	0.80%	8.45%	4.75%	2.85%	
	60	0.65%	1.00%				
	64	0.90%	1.25%				
<u>FEMALE EMPLOYEES</u>							
	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%				



**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:

<u>Age</u>	<u>Male</u>	<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. Cost Methods**

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, 2001. 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.

8. Additional Assumptions

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

9. Cost-of-Living Increases

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).

**SUMMARY 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. Creditable Service**

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.

**6. Early Retirement**

- a. Eligibility      Attainment of age 60, or attainment of age 55 with 25 years of creditable service.
- b. Benefit          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. Teachers and Employees Retention Incentive (TERI)**

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. Disability Retirement**

- 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              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.

**11. Vested Benefit upon Termination**

- a. Eligibility 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%.

