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November 28, 2001

Legislative Commission on  
Pensions and Retirement  
55 State Office Building  
St. Paul, Minnesota 55155

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**RE: St. Paul Teachers' Retirement Fund  
July 1, 2001 Actuarial Valuation Report**

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Commission Members:

Pursuant the terms of our actuarial services contract, we have performed an actuarial valuation of the St. Paul Teachers' Retirement Fund as of July 1, 2001.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. We have relied on the basic employee data and asset figures as submitted by the St. Paul Teachers' Retirement Fund.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards of Actuarial Work, adopted by the Commission.

We, Thomas K. Custis and Lance M. Burma, are actuaries for Milliman USA. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,

Milliman USA

Thomas K. Custis, F.S.A., M.A.A.A.  
Consulting Actuary

Lance M. Burma, F.S.A., M.A.A.A.  
Consulting Actuary

**St. Paul Teachers' Retirement Fund**  
***ACTUARIAL VALUATION REPORT***

July 1, 2001

**St. Paul Teachers' Retirement Fund**  
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**St. Paul Teachers' Retirement Fund**  
**Report Highlights**  
*(dollars in thousands)*

	July 1, 2000 Valuation	July 1, 2001 Valuation
<b>A. CONTRIBUTIONS % OF PAYROLL (Table 11)</b>		
1. Statutory Contributions - Chapter 354A	17.29%	17.07%
2. Required Contributions - Chapter 356	16.57%	15.81%
3. Sufficiency / (Deficiency)	0.72%	1.26%
<b>B. FUNDING RATIOS</b>		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$ 801,823	\$ 869,045
b. Current Benefit Obligations (Table 8)	946,827	1,009,535
c. Funding Ratio	84.69%	86.08%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 801,823	\$ 869,045
b. Actuarial Accrued Liability (Table 9)	998,253	1,060,931
c. Funding Ratio	80.32%	81.91%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 1,163,430	\$ 1,247,302
b. Current and Expected Future Benefit Obligations	1,156,863	1,226,096
c. Funding Ratio	100.57%	101.73%
<b>C. PLAN PARTICIPANTS</b>		
1. Active Members		
a. Number (Table 3)	4,445	4,671
b. Projected Annual Earnings	\$ 198,974	\$ 214,775
c. Average Annual Earnings (Actual dollars)	\$ 42,283	\$ 43,441
d. Average Age	43.1	43.1
e. Average Service	10.8	10.5
f. Additional Members on Leave of Absence*	283	253
2. Others		
a. Service Retirements (Table 4)	1,728	1,807
b. Disability Retirements (Table 5)	23	23
c. Survivors (Table 6)	213	220
d. Deferred Retirements (Table 7)	243	324
e. Terminated Other Non-Vested (Table 7)	1,697	1,671
f. Total	3,904	4,045

\* Valued as deferred retirements, liability included with actives.

## **St. Paul Teachers' Retirement Fund**

### ***Commentary***

#### ***Purpose***

The purpose of this valuation is to determine the financial status of the Plan. To achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

#### ***Report Highlights***

The financial status of the Plan can be measured by three different funding ratios:

The *Accrued Benefit Funding Ratio* is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. As of July 1, 2001, the *Accrued Benefit Funding Ratio* is 86.08%.

The *Accrued Liability Funding Ratio* is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 2001 the *Accrued Liability Funding Ratio* is 81.91%.

The *Projected Benefit Funding Ratio* is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 101.73% shows that the current statutory contributions are sufficient in the long run.

Please see additional commentary on page 1 of this report regarding the comparable funding ratios determined as of July 1, 2000.

#### ***Asset Information (Tables 1 and 2)***

Effective with the July 1, 2000 valuation of the fund, Minnesota Statutes require that the asset value used for actuarial purposes spread differences between actual return (measured on a market-value basis) and expected return on assets over a five year period. The previous method required under Minnesota Statutes recognized one third of the unrealized gains and losses. An Asset Valuation Method requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year. The intent of the change to the current method is to employ a more effective asset smoothing technique which is market-value based and which eliminates artificial bias related to manager style. The effective date of this requirement is July 1, 2000 with full transition to be accomplished as of July 1, 2003.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines F.1 to F.4. Actuarial Value of Assets is determined as:

Market Value of Assets at June 30, 2001, *less*

80% of the current year Unrecognized Asset Return at July 1, 2001 (the difference between actual net return on Market Value of Assets between June 30, 2000 and June 30, 2001 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 2000 Actuarial Valuation); *less*

60% of the current year Unrecognized Asset Return at July 1, 2000 (the difference between actual net return on Market Value of Assets between June 30, 1999 and June 30, 2000 and the asset return expected during that period based on the assumed interest rate employed in the July 1, 1999 Actuarial Valuation); *less*

30% of the Unrecognized Asset Return at July 1, 1999 (the difference between Market Value of Assets on June 30, 1999 and the Actuarial Value of Assets used in the July 1, 1999 Actuarial Valuation).

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets", the latter phrase will be used in the remainder of this report.

The following table presents the components of Table 1, line A.4:

**Other Assets**  
**Table 1 Item A.4**  
*(dollars in thousands)*

	<u>Market Value</u>
Accounts Receivable	
Employer Contribution	\$ 1,769
Employee Contribution	22
State Amortization Aid	746
Interest	1,103
Dividends	148
Variations Margins	439
Commission Recapture	5
Securities Lending	<u>7</u>
Total Accounts Receivable	\$ 4,239
Fixed Assets	<u>33</u>
Total Other Assets	<u>\$ 4,272</u>

### ***Actuarial Balance Sheet (Table 8)***

An actuarial balance sheet provides a method for evaluating current and future levels of funding.

The Current Benefit Obligation used to measure current funding level is calculated as follows:

For Active Members - salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.

For Non-active Members - the discounted value of benefits, including augmentation in cases where benefits have not commenced.

### ***Actuarial Cost Method (Table 9)***

The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level of percentage of payroll.

A comparison of this actuarial method (Table 9) to the actuarial balance sheet (Table 8) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and the corresponding liabilities, on the basis of service. The method used in Table 9 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 8 and line A6, column 1, of Table 9).

An Unfunded Actuarial Accrued Liability is computed under the Entry Age Normal Actuarial Cost Method by comparing the liabilities allocated to past service (Actuarial Accrued Liability) to the Current Assets. This amount, line B3, is funded over the remaining years to the amortization date by a series of payments that remain a constant percentage of payroll each year.

The payments will increase 5.0% each year because that is the assumed rate of increase in payroll. Although the payment schedule will be adequate to amortize the existing unfunded, the lower payments in the earlier years will not be sufficient to cover the interest on the unfunded liability. After a few years, the annual payment will cover the interest and also repay a portion of the unfunded.

### ***Sources of Actuarial Gains and Losses (Table 10)***

The assumptions used in making the calculations using the Entry Age Normal Actuarial Cost Method are based on long-term expectations. Each year, the actual experience will deviate from the long-term expectation. For an analysis of the major components of the Actuarial Gain or Loss refer to Table 10.



### ***Contribution Sufficiency (Table 11)***

This report determines the adequacy of Statutory Contributions by comparing the Statutory Contributions to the Required Contributions.

The Required Contributions, set forth in Chapter 356, consist of:

Normal Costs based on the Entry Age Normal Actuarial Cost Method.

A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.

An Allowance for Expenses.

Table 11 shows the Fund has a current year contribution sufficiency of 1.26% since the Statutory Contribution Rate is 17.07% compared to the Required Contribution Rate of 15.81%.

### ***Changes in Actuarial Assumption***

All actuarial assumptions are the same as those used in the prior valuation. Table 12 contains a summary of all actuarial assumptions and methods.

### ***Changes in Plan Provisions***

Effective with this July 1, 2001 valuation, the following plan provisions have been added or amended:

Effective January 1, 2002, the annual lump sum benefits payable to pre-1974 retirees will be paid as monthly installments.

All other plan provisions are the same as those used in the prior actuarial valuation of the Fund. Tables 13A and 13B contain summaries of current plan benefits.

**St. Paul Teachers' Retirement Fund**  
**Accounting Balance Sheet**  
*(dollars in thousands)*

July 1, 2001

	Market Value	Cost Value
<b>A. ASSETS</b>		
1. Cash, Equivalents, Short-Term Securities	\$ 12,717	\$ 12,717
2. Investments		-
a. Fixed Income	235,604	157,445
b. Equity	567,625	534,432
c. Real Estate	-	-
d. Alternative	4,957	4,973
3. Equity in Minnesota Post-Retirement Investment Fund	-	-
4. Other Assets*	4,272	4,272
<b>B. TOTAL ASSETS</b>	<u>\$ 825,175</u>	<u>\$ 713,839</u>
<b>C. AMOUNTS CURRENTLY PAYABLE</b>	\$ 950	\$ 950
<b>D. ASSETS AVAILABLE FOR BENEFITS</b>		
1. Member Reserves	\$ 106,786	\$ 106,786
2. Employer Reserves	717,439	606,103
3. MPRIF Reserves	-	-
4. Non-MPRIF Reserves	-	-
5. Total Assets Available for Benefits	<u>\$ 824,225</u>	<u>\$ 712,889</u>
<b>E. TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS</b>	<u>\$ 825,175</u>	<u>\$ 713,839</u>
<b>F. DETERMINATION OF ACTUARIAL VALUE OF ASSETS</b>		
1. Market Value of Assets Available for Benefits (D.5)	\$ 824,225	
2. Unrecognized Asset Returns		
a. June 30, 2001	\$ (104,645)	
b. June 30, 2000	15,965	
c. June 30, 1999	97,722	
3. UAR Adjustment: $.80 * 2(a) + .60 * 2(b) + .30 * 2(c)$		(44,820)
4. Actuarial Value of Assets (F.1 - F.3)		<u>\$ 869,045</u>

\*See "Asset Information" in the Commentary Section of this report.

**St. Paul Teachers' Retirement Fund**  
**Change In Assets Available for Benefits**  
*(dollars in thousands)*

June 30, 2001

	Market Value	Cost Value
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 873,228	\$ 685,832
B. OPERATING REVENUES		
1. Member Contributions	\$ 13,170	\$ 13,170
2. Employer Contributions	19,996	19,996
3. Supplemental Contributions	3,573	3,573
4. Investment Income	12,847	12,847
5. MPRIF Income	-	-
6. Investment Expenses	(2,769)	(2,769)
7. Net Realized Gain / (Loss)	34,804	34,804
8. Other	-	-
9. Net Change in Unrealized Gain / (Loss)	(76,060)	-
10. Total Operating Revenue	\$ 5,561	\$ 81,621
C. OPERATING EXPENSES		
1. Service Retirements	\$ 48,197	\$ 48,197
2. Disability Benefits	761	761
3. Survivor Benefits	4,367	4,367
4. Refunds	795	795
5. Administrative Expenses	444	444
6. Total Operating Expenses	\$ 54,564	\$ 54,564
D. OTHER CHANGES IN RESERVES	\$ -	\$ -
E. ASSETS AVAILABLE AT END OF PERIOD	\$ 824,225	\$ 712,889
F. DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN		
1. Average Balance		
(a) Assets Available at Beginning of Period	\$ 873,228	
(b) Assets Available at End of Period	824,225	
(c) Average Balance $\{[(a) + (b) - \text{Net Investment Income}] / 2\}$	\$ 864,316	
{Net Investment Income: B.4+B.5+B.6+B.7+B.8+B.9}		
2. Expected Return: $.085 * F.1$	73,467	
3. Actual Return	(31,178)	
4. Current Year UAR: $F.3 - F.2$	\$ (104,645)	

**TABLE 3**  
**Total Plan**

**St. Paul Teachers Retirement Fund**  
**ACTIVE MEMBERS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years of Service</u>								<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	100	28	0	0	0	0	0	0	128
25-29	142	405	25	0	0	0	0	0	572
30-34	111	313	200	7	0	0	0	0	631
35-39	49	194	161	94	20	0	0	0	518
40-44	76	165	136	81	63	10	0	0	531
45-49	64	164	128	97	96	87	8	0	644
50-54	43	162	119	98	79	129	131	96	857
55-59	30	66	73	62	59	58	74	146	568
60-64	8	31	18	19	18	24	20	34	172
65+	3	20	2	5	3	11	3	3	50
ALL	626	1,548	862	463	338	319	236	279	4,671

**AVERAGE ANNUAL EARNINGS**

<u>Age</u>	<u>Years of Service</u>								<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	12,648	24,388	0	0	0	0	0	0	15,216
25-29	17,787	30,389	39,311	0	0	0	0	0	27,651
30-34	21,956	32,617	40,599	54,802	0	0	0	0	33,518
35-39	22,405	35,350	45,059	52,272	60,977	0	0	0	41,203
40-44	17,929	31,262	46,655	54,497	57,603	61,328	0	0	40,532
45-49	18,726	28,595	49,181	54,343	57,868	65,629	71,283	0	45,481
50-54	19,939	33,544	48,792	57,723	60,542	63,526	66,681	67,900	53,659
55-59	15,890	28,901	52,136	59,773	59,316	67,880	67,842	68,575	56,981
60-64	19,326	28,045	54,501	55,913	58,308	68,240	68,024	72,460	55,691
65+	17,197	16,296	8,008	42,809	62,273	64,029	76,287	65,002	38,452
ALL	18,254	31,293	45,947	55,339	58,943	65,194	67,437	68,778	43,014

**Prior Fiscal Year Earnings (In THOUSANDS) by Years of Service**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>ALL</u>
ALL	11,427	48,442	39,606	25,622	19,923	20,797	15,915	19,189	200,918

**TABLE 4**  
**Total Plan**

**St. Paul Teachers Retirement Fund**

**SERVICE RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	58	103	1	0	0	0	0	162
60-64	38	225	72	0	0	0	0	335
65-69	16	155	202	52	2	1	0	428
70-74	1	17	134	140	53	2	2	349
75-79	0	3	17	86	110	18	0	234
80-84	0	0	2	15	74	49	1	141
85+	0	0	0	0	9	62	87	158
ALL	113	503	428	293	248	132	90	1,807

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	29,558	22,291	9,808	0	0	0	0	24,816
60-64	26,554	30,357	29,403	0	0	0	0	29,720
65-69	17,932	31,523	33,703	23,200	54,222	47,286	0	31,176
70-74	13,524	24,309	38,838	29,409	23,605	26,391	57,413	31,997
75-79	0	30,612	35,593	28,836	26,531	20,285	0	27,609
80-84	0	0	52,073	27,344	24,102	22,971	32,051	24,506
85+	0	0	0	0	20,634	17,862	19,757	19,063
ALL	26,760	28,862	34,692	28,033	25,190	20,440	20,730	28,453

**Total Annual Benefit (IN THOUSANDS) by Years RETIRED**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	3,024	14,518	14,848	8,214	6,247	2,698	1,866	51,415

**TABLE 5**  
**Total Plan**

**St. Paul Teachers Retirement Fund**

**DISABILITY RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	2	1	0	0	0	0	3
50-54	0	2	2	0	0	0	0	4
55-59	0	5	3	0	0	0	0	8
60-64	0	3	3	1	0	1	0	8
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	12	9	1	0	1	0	23

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	18,747	4,467	0	0	0	0	13,987
50-54	0	25,519	48,056	0	0	0	0	36,788
55-59	0	38,881	24,699	0	0	0	0	33,562
60-64	0	50,484	28,082	43,725	0	16,096	0	36,940
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	36,199	28,769	43,725	0	16,096	0	32,744

**Total Annual Benefit (IN THOUSANDS) by Years DISABLED**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	0	434	259	44	0	16	0	753

**TABLE 6**  
**Total Plan**

**St. Paul Teachers Retirement Fund**

**SURVIVORS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Since Death</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	1	3	0	0	0	1	5
50-54	0	0	2	2	1	0	0	5
55-59	0	3	3	3	1	0	0	10
60-64	1	4	6	5	1	3	0	20
65-69	0	3	6	13	5	1	0	28
70-74	0	1	2	8	19	5	2	37
75-79	0	0	1	10	18	9	2	40
80-84	0	0	0	1	7	17	9	34
85+	0	0	0	0	6	13	22	41
ALL	1	12	23	42	58	48	36	220

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Since Death</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	10,885	4,928	0	0	0	3,350	5,804
50-54	0	0	31,917	19,568	16,149	0	0	23,824
55-59	0	24,061	22,677	20,740	19,300	0	0	22,173
60-64	36,521	22,280	32,756	24,225	10,218	16,058	0	25,084
65-69	0	38,409	40,986	24,751	21,545	11,440	0	28,645
70-74	0	27,354	30,143	25,291	25,857	17,107	17,611	24,379
75-79	0	0	1,236	31,674	21,114	16,842	8,789	21,679
80-84	0	0	0	24,700	11,761	18,324	13,864	15,980
85+	0	0	0	0	17,522	18,150	19,858	18,975
ALL	36,521	26,231	28,287	25,904	20,900	17,587	17,161	21,654

**Total Annual Benefit (IN THOUSANDS) by Years SINCE DEATH**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	37	315	651	1,088	1,212	844	618	4,764

TABLE 7

**St. Paul Teachers' Retirement Fund**  
**Reconciliation of Members**

	<u>Actives</u>	<u>Terminated</u>		
		<u>Leave of Absence</u>	<u>Deferred Retirement</u>	<u>Other Non-Vested</u>
A. ON JUNE 30, 2000	4,445	283	243	1,697
B. ADDITIONS	706	92	130	331
C. DELETIONS				
1. Service Retirement	(98)	(3)	(7)	(20)
2. Disability	0	(1)	0	0
3. Death - Survivor	(1)	0	0	0
4. Death - Other	0	(1)	0	(1)
5. Terminated - Deferred	(90)	(40)	0	0
6. Terminated - Refund	(84)	(12)	(12)	(215)
7. Terminated - Other Non-Vested	(403)	(18)	(1)	(1)
8. Returned as active	192	(52)	(15)	(125)
D. DATA ADJUSTMENTS	4	5	(14)	5
1. Vested	3,189	253	324	1,671
2. Non-Vested	1,482	0	0	0
E. TOTAL ON JUNE 30, 2001	4,671	253	324	1,671

	<u>Recipients</u>			
	<u>Retirement Annuitants</u>	<u>Disabled</u>	<u>Survivors</u>	<u>Other Beneficiary</u>
A. ON JUNE 30, 2000	1,728	23	213	0
B. ADDITIONS	129	1	24	0
C. DELETIONS				
1. Service Retirement	0	(1)	0	0
2. Death	(57)	(1)	(15)	0
3. Annuity Expired	0	0	0	0
4. Returned as Active	0	0	0	0
D. DATA ADJUSTMENTS	7	1	(2)	0
E. TOTAL ON JUNE 30, 2001	1,807	23	220	0



**St. Paul Teachers' Retirement Fund**  
**Actuarial Balance Sheet**  
*(dollars in thousands)*

July 1, 2001

A. CURRENT ASSETS (Table 1; Line F.6)				\$	869,045
B. EXPECTED FUTURE ASSETS					
1. Present Value of Expected Future Statutory Supplemental Contributions				\$	213,092
2. Present Value of Future Normal Costs					165,165
3. Total Expected Future Assets					<u>378,257</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				\$	<u>1,247,302</u>
D. CURRENT BENEFIT OBLIGATIONS					
		Non-Vested	Vested		Total
1. Benefit Recipients					
a. Retirement Annuities			\$ 554,796	\$	554,796
b. Disability Benefits			7,384		7,384
c. Surviving Spouse and Child Benefits			42,443		42,443
2. Deferred Retirements			7,302		7,302
3. Former Members Without Vested Rights			936		936
4. Active Members					
a. Retirement Annuities *	\$	125,121	240,514		365,635
b. Disability Benefits		10,989	-		10,989
c. Surviving Spouse and Child Benefits		4,110	-		4,110
d. Deferred Retirements		4,090	8,560		12,650
e. Refund Liability Due to Death or Withdrawal		-	3,290		3,290
5. Total Current Benefit Obligations	\$	<u>144,310</u>	\$ <u>865,225</u>	\$	<u>1,009,535</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>216,561</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>1,226,096</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D.5 - A)				\$	140,490
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F - C)				\$	(21,206)

\* Includes members on leave of absence.

**St. Paul Teachers' Retirement Fund**  
**Determination of Unfunded Actuarial Accrued Liability (UAAL) and**  
**Supplemental Contribution Rate**  
*(dollars in thousands)*

July 1, 2001

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
<b>A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)</b>			
1. Active Members			
a. Retirement Benefits	\$ 557,398	\$ 127,029	\$ 430,369
b. Disability Benefits	18,861	8,017	10,844
c. Surviving Spouse and Child Benefits	7,254	2,933	4,321
d. Deferred Retirements	22,920	16,795	6,125
e. Refund Liability Due to Death or Withdrawal	6,802	10,391	(3,589)
f. Total	<u>\$ 613,235</u>	<u>\$ 165,165</u>	<u>\$ 448,070</u>
2. Deferred Retirements	\$ 7,302		\$ 7,302
3. Former Members Without Vested Rights	936		936
4. Annuitants in MPRIF	-		-
5. Annuitants Not in MPRIF	604,623		604,623
6. Total	<u>\$ 1,226,096</u>	<u>\$ 165,165</u>	<u>\$ 1,060,931</u>
<b>B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</b>			
1. Actuarial Accrued Liability (A.6)			\$ 1,060,931
2. Current Assets (Table 1; Line F.6)			869,045
3. Unfunded Actuarial Accrued Liability (B.1 - B.2)			<u>\$ 191,886</u>
<b>C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE</b>			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2020			2,932,070
2. Supplemental Contribution Rate (B.3 / C.1)			<u>6.54%</u>

**St. Paul Teachers' Retirement Fund**  
**Changes in Unfunded Actuarial Accrued Liability (UAAL)**  
*(dollars in thousands)*

June 30, 2001

A. UAAL AT BEGINNING OF YEAR	\$ 196,430
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$ 19,097
2. Contributions	(36,739)
3. Interest	16,758
4. Total	<u>\$ (884)</u>
C. EXPECTED UAAL AT END OF YEAR (A. + B.4)	\$ 195,546
D. INCREASE / (DECREASE) DUE TO ACTUARIAL LOSSES / (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
1. Age and Service Retirements *	\$ -
2. Disability Retirements *	-
3. Death-in-Service Benefits *	-
4. Withdrawal *	-
5. Salary Increases	(2,602)
6. Contribution Income *	-
7. Investment Income **	(8,279)
8. Mortality of Annuitants	(2,475)
9. Other Items	9,695
10. Total	<u>\$ (3,660)</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C + D.10)	\$ 191,886
F. CHANGE IN UAAL DUE TO PLAN AMENDMENTS	-
G. CHANGE IN UAAL DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	<u>-</u>
H. UAAL AT END OF YEAR (E + F + G)	<u><u>\$ 191,886</u></u>

\* Included in Item D.9.

\*\* Includes a gross investment gain of \$17,650, offset by \$9,371 used to provide next year's cost of living adjustments to retirees.

**St. Paul Teachers' Retirement Fund**  
**Determination of Contribution Sufficiency**  
*(dollars in thousands)*

July 1, 2001

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.97%	\$ 12,831
2. Employer Contributions	8.97%	19,256
3. Supplemental Contribution		
a. 1996 Legislation	0.81%	1,750
b. 1997 Legislation	1.32%	2,827
4. Administrative Expense Assessment	0.00%	-
5. Total	17.07%	\$ 36,664
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	6.96%	\$ 14,938
b. Disability Benefits	0.45%	974
c. Surviving Spouse and Child Benefits	0.15%	324
d. Deferred Retirements	0.89%	1,914
e. Refund Liability Due to Death or Withdrawal	0.60%	1,297
f. Total	9.05%	\$ 19,447
2. Supplemental Contribution Amortization	6.54%	14,056
3. Allowance for Administrative Expenses	0.22%	466
4. Total	15.81%	\$ 33,969
<b>C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.5 - B.4)</b>	1.26%	2,695
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 214,775

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

<b><i>Interest:</i></b>	Pre-Retirement:	8.50% per annum
	Post-Retirement:	8.50% per annum
<b><i>Salary Increases:</i></b>	Total reported pay for prior fiscal year increased through the salary increase assumption to current fiscal year. Graded rates are shown in the rate table.	
<b><i>Mortality:</i></b>	<u>Pre-Retirement:</u>	
	Male:	1983 Group Annuity Mortality Table male rates set back 5 years.
	Female:	1983 Group Annuity Mortality Table female rates set back 3 years.
	<u>Post-Retirement:</u>	
	Male:	1983 Group Annuity Mortality Table male rates set back 3 years.
	Female:	1983 Group Annuity Mortality Table female rates set back 1 years.
	<u>Post-Disability:</u>	
	Male:	1987 Railroad Retirement Board Mortality for Disabled Annuitants
	Female:	1987 Railroad Retirement Board Mortality for Disabled Annuitants
<b><i>Retirement Age:</i></b>	<u>Active Members:</u>	
	Active Members are assumed to retire according to the graded rates shown in the rate table. Rates are applied beginning at the participant's first early retirement age.	
	<u>Deferred Members:</u>	
	Basic Members are assumed to retire at age 60. Coordinated Members are assumed to retire at age 63. If over the assumed retirement age, one year from valuation date.	
	<u>Other Non-Vested Members:</u>	
	Return of contributions is assumed to occur immediately.	

<b>Separation:</b>	Graded rates shown in the rate table.												
<b>Disability:</b>	Graded rates shown in the rate table.												
<b>Administrative Expenses:</b>	Prior year administrative expenses (excluding investment expenses) expressed as a percentage of prior year payroll.												
<b>Return of Contributions:</b>	All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.												
<b>Family Composition:</b>	85% of male Members and 60% of female Members are assumed to be married. Female is assumed to be four years younger than male. Married members are assumed to have two children.												
<b>Social Security:</b>	N/A												
<b>Benefit Increases After Retirement:</b>	2.0% per annum												
<b>Special Consideration:</b>	Additional post retirement benefit increase is accounted for by increasing the reserve value for all service retirements, disability retirements and survivors eligible for the increase by an amount that equals the excess of the five year time weighted total rate of return over the assumed interest rate of 8.50% multiplied by the quantity of one minus the rate of contribution deficiency.												
<b>Optional Benefit Forms:</b>	<p>Married Members are assumed to elect the following forms of benefit:</p> <table> <tr> <td>Males:</td><td>35% elect life annuity option</td></tr> <tr> <td></td><td>15% elect 50% J&amp;S option</td></tr> <tr> <td></td><td>50% elect 100% J&amp;S option</td></tr> <tr> <td>Females:</td><td>80% elect life annuity option</td></tr> <tr> <td></td><td>10% elect 50% J&amp;S option</td></tr> <tr> <td></td><td>10% elect 100% J&amp;S option</td></tr> </table>	Males:	35% elect life annuity option		15% elect 50% J&S option		50% elect 100% J&S option	Females:	80% elect life annuity option		10% elect 50% J&S option		10% elect 100% J&S option
Males:	35% elect life annuity option												
	15% elect 50% J&S option												
	50% elect 100% J&S option												
Females:	80% elect life annuity option												
	10% elect 50% J&S option												
	10% elect 100% J&S option												
<b>Actuarial Cost Method:</b>	Entry Age Normal Actuarial Cost Method with normal costs expressed as a level percentage of earnings. Under this method Actuarial Gains (Losses) reduce (increase) the Unfunded Actuarial Accrued Liability.												

***Asset Valuation Method:*** Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less of a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). Transition rules apply between July 1, 2000 and July 1, 2003, when the method is fully in effect.

***Payment on the Unfunded Actuarial Accrued Liability:*** The Unfunded Actuarial Accrued Liability is amortized as level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5.00% per annum.

***Missing Data:*** The submitted participant data has been reviewed for reasonableness and constancy with data submitted for prior valuations. We have not audited this data, and the results of this valuation may change based on the accuracy of the underlying data. In cases where submitted data was missing or incomplete, the following assumptions were applied:

Date of Birth:	Average age of participant group based on prior years valuation report.
Date of Hire:	Current valuation date minus years of service.
Years of Service:	Years of service on last year's valuation plus one year.
Sex:	Male.
Deferred Benefit:	Calculated. Salary at termination is estimated based on termination date. Estimated salary is \$51,459 for 2000/2001 terminations and is decreased by 6.5% for each year that actual termination precedes July 1, 2001.

***Supplemental Contributions:*** The St. Paul School District and the State of Minnesota are scheduled to make the following supplemental contributions to the plan:

1996 Legislation:

Supplemental contributions according to the following schedule (thousands of dollars):

<u>Year</u>	<u>State</u>	<u>School</u>
06/30/02	950	800
06/30/03+	1,050	800

1997 Legislation:

Annual supplemental contributions of \$2,827,000 made on October 1.



**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Separations Expressed as the Number of Occurrences per 10,000:*

<u>Age</u>	<u>Withdrawal</u>		<u>Disability</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	2,000	2,000	4	4
21	2,000	2,000	4	4
22	2,000	2,000	4	4
23	1,800	1,800	5	5
24	1,600	1,600	5	5
25	1,400	1,400	5	5
26	1,200	1,200	5	5
27	1,000	1,000	5	5
28	850	850	5	5
29	750	750	5	5
30	690	690	6	6
31	630	630	6	6
32	570	570	6	6
33	530	530	6	6
34	490	490	6	6
35	450	450	6	6
36	420	420	7	7
37	400	400	7	7
38	380	380	8	8
39	360	360	8	8
40	340	340	8	8
41	320	320	9	9
42	300	300	9	9
43	280	280	10	10
44	260	260	10	10
45	240	240	11	11
46	220	220	12	12
47	200	200	13	13
48	180	180	14	14
49	160	160	16	16
50	140	140	17	17
51	120	120	19	19
52	100	100	22	22
53	80	80	26	26
54	60	60	30	30

**TABLE 12**  
(Continued)

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Separations Expressed as the Number of Occurrences per 10,000:*

<u>Age</u>	<u>Withdrawal</u>		<u>Disability</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	50	50	36	36
56	40	40	41	41
57	30	30	47	47
58	20	20	52	52
59	10	10	58	58
60	0	0	63	63
61	0	0	69	69
62	0	0	76	76
63	0	0	84	84
64	0	0	93	93
65	0	0	93	93
66	0	0	93	93
67	0	0	93	93
68	0	0	93	93
69	0	0	93	93
70	0	0	93	93

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Deaths Expressed as the Number of Occurrences per 10,000:*

<u>Age</u>	<b>Pre-Retirement Mortality</b>		<b>Post-Retirement Mortality</b>		<b>Post-Disability Mortality</b>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	3	2	3	2	271	271
21	3	2	4	2	271	271
22	3	2	4	2	271	271
23	4	2	4	2	272	272
24	4	2	4	2	272	272
25	4	2	4	2	272	272
26	4	2	4	3	272	272
27	4	2	4	3	272	272
28	4	3	5	3	272	272
29	4	3	5	3	272	272
30	5	3	5	3	272	272
31	5	3	5	3	272	272
32	5	3	6	4	272	272
33	5	3	6	4	272	272
34	6	4	6	4	273	273
35	6	4	7	4	273	273
36	6	4	7	5	273	273
37	7	4	8	5	273	273
38	7	5	9	5	273	273
39	8	5	9	6	273	273
40	9	5	10	6	273	273
41	9	6	10	7	273	273
42	10	6	11	7	273	273
43	10	7	12	8	274	274
44	11	7	14	8	274	274
45	12	8	15	9	274	274
46	14	8	17	10	275	275
47	15	9	19	11	276	276
48	17	10	22	12	279	279
49	19	11	25	14	283	283
50	22	12	28	15	289	289
51	25	14	31	16	298	298
52	28	15	35	18	310	310
53	31	16	39	19	327	327
54	35	18	43	21	348	348

**TABLE 12**  
(Continued)

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Separations Expressed as the Number of Occurrences per 10,000:*

<u>Age</u>	<b>Pre-Retirement Mortality</b>		<b>Post-Retirement Mortality</b>		<b>Post-Disability Mortality</b>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	39	19	48	23	371	371
56	43	21	52	25	395	395
57	48	23	57	28	417	417
58	52	25	61	31	437	437
59	57	28	66	34	455	455
60	61	31	71	38	473	473
61	66	34	77	42	494	494
62	71	38	84	47	516	516
63	77	42	92	52	541	541
64	84	47	101	58	569	569
65	92	52	111	64	598	598
66	101	58	124	71	628	628
67	111	64	139	78	658	658
68	124	71	156	87	687	687
69	139	78	176	98	716	716

**TABLE 12**  
(Continued)

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Retirements Expressed as the Number of Occurrences per 10,000:*

<b>Age</b>	<b>Basic Members Eligible for Rule of 90 Provision</b>	<b>Basic Members Not Eligible for Rule of 90 Provision</b>	<b>Coordinated Members Eligible for Rule of 90 Provision</b>	<b>Coordinated Members Not Eligible for Rule of 90 Provision</b>
<55	4,000	0	4,000	0
55	4,000	1,000	4,000	500
56	4,000	1,000	4,000	500
57	4,000	1,000	4,000	500
58	4,000	1,000	4,000	500
59	4,000	1,000	4,000	500
60	4,000	1,000	4,000	500
61	4,000	1,000	4,000	500
62	4,000	4,000	4,000	2,000
63	4,000	4,000	4,000	2,000
64	4,000	4,000	4,000	2,000
65	4,000	4,000	4,000	2,000
66	5,000	5,000	4,000	4,000
67	5,000	5,000	4,000	4,000
68	5,000	5,000	4,000	4,000
69	5,000	5,000	4,000	4,000
70	5,000	5,000	4,000	4,000
71	8,000	8,000	8,000	8,000
72	8,000	8,000	8,000	8,000
73	8,000	8,000	8,000	8,000
74	8,000	8,000	8,000	8,000
75	8,000	8,000	8,000	8,000
76	8,000	8,000	8,000	8,000
77	8,000	8,000	8,000	8,000
78	8,000	8,000	8,000	8,000
79	8,000	8,000	8,000	8,000
80 or more	10,000	10,000	10,000	10,000

**St. Paul Teachers' Retirement Fund**  
**Summary of Actuarial Assumptions and Methods**

*Annual Salary Increases*

<u>Age</u>	<u>Male</u>	<u>Female</u>
<22	7.25%	7.25%
23	7.25	7.25
24	7.20	7.20
25	7.15	7.15
26	7.10	7.10
27	7.05	7.05
28	7.00	7.00
29	6.95	6.95
30	6.90	6.90
31	6.85	6.85
32	6.80	6.80
33	6.75	6.75
34	6.70	6.70
35	6.65	6.65
36	6.60	6.60
37	6.55	6.55
38	6.50	6.50
39	6.40	6.40
40	6.30	6.30
41	6.20	6.20
42	6.10	6.10
43	6.00	6.00
44	5.90	5.90
45	5.80	5.80
46	5.70	5.70
47	5.65	5.65
48	5.60	5.60
49	5.55	5.55
50	5.50	5.50
51	5.45	5.45
52	5.40	5.40
53	5.35	5.35
54	5.30	5.30
55	5.25	5.25

**TABLE 3A**  
**Basic Plan**

**St. Paul Teachers Retirement Fund**  
**ACTIVE MEMBERS AS OF JUNE 30, 2001**

Age	Years of Service								ALL
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	5	23	7	0	35
50-54	0	0	0	0	9	49	118	91	267
55-59	0	0	0	0	2	14	64	136	216
60-64	0	0	0	0	0	4	15	32	51
65+	0	0	0	0	0	2	2	2	6
ALL	0	0	0	0	16	92	206	261	575

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	47,978	65,031	72,256	0	64,040
50-54	0	0	0	0	48,427	64,368	66,624	67,765	65,986
55-59	0	0	0	0	66,728	68,413	67,450	68,526	68,183
60-64	0	0	0	0	0	67,810	68,304	73,000	71,212
65+	0	0	0	0	0	66,762	80,043	67,876	71,560
ALL	0	0	0	0	50,574	65,351	67,325	68,804	67,214

**Prior Fiscal Year Earnings (In THOUSANDS) by Years of Service**

Age	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>ALL</u>
ALL	0	0	0	0	809	6,012	13,869	17,958	38,648

**TABLE 4A**  
**Basic Plan**

**St. Paul Teachers Retirement Fund**

**SERVICE RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	48	85	1	0	0	0	0	134
60-64	22	183	62	0	0	0	0	267
65-69	6	111	180	52	2	1	0	352
70-74	0	7	108	130	53	2	2	302
75-79	0	2	14	79	107	18	0	220
80-84	0	0	2	12	72	49	1	136
85+	0	0	0	0	9	60	87	156
ALL	76	388	367	273	243	130	90	1,567

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	32,210	25,181	9,808	0	0	0	0	27,584
60-64	36,771	34,272	32,300	0	0	0	0	34,020
65-69	28,669	39,052	36,533	23,200	54,222	47,286	0	35,355
70-74	0	43,747	44,981	31,215	23,605	26,391	57,413	35,234
75-79	0	39,655	39,398	30,503	27,113	20,285	0	28,668
80-84	0	0	52,073	33,288	24,460	22,971	32,051	25,164
85+	0	0	0	0	20,634	18,377	19,757	19,277
ALL	33,251	33,847	38,425	29,573	25,545	20,718	20,730	31,016

**Total Annual Benefit (IN THOUSANDS) by Years RETIRED**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	2,527	13,132	14,101	8,073	6,207	2,693	1,865	48,602



**TABLE 5A**  
**Basic Plan**

**St. Paul Teachers Retirement Fund**

**DISABILITY RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	1	0	0	0	0	0	1
50-54	0	1	2	0	0	0	0	3
55-59	0	4	1	0	0	0	0	5
60-64	0	3	1	1	0	1	0	6
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	9	4	1	0	1	0	15

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	35,323	0	0	0	0	0	35,323
50-54	0	49,267	48,056	0	0	0	0	48,460
55-59	0	44,809	52,575	0	0	0	0	46,362
60-64	0	50,484	56,524	43,725	0	16,096	0	44,633
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	46,142	51,303	43,725	0	16,096	0	45,354

**Total Annual Benefit (IN THOUSANDS) by Years DISABLED**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	0	415	205	43	0	16	0	680

**TABLE 6A**  
**Basic Plan**

**St. Paul Teachers Retirement Fund**

**SURVIVORS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Since Death</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	1	0	0	0	1	2
50-54	0	0	2	2	1	0	0	5
55-59	0	1	3	3	1	0	0	8
60-64	1	3	6	5	1	3	0	19
65-69	0	3	6	12	5	1	0	27
70-74	0	1	2	8	19	5	2	37
75-79	0	0	0	10	18	9	2	39
80-84	0	0	0	1	7	17	9	34
85+	0	0	0	0	6	13	22	41
ALL	1	8	20	41	58	48	36	212

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Since Death</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	9,625	0	0	0	3,350	6,488
50-54	0	0	31,917	19,568	16,149	0	0	23,824
55-59	0	27,960	22,677	20,740	19,300	0	0	22,189
60-64	36,521	22,198	32,756	24,225	10,218	16,058	0	25,219
65-69	0	38,409	40,986	26,255	21,545	11,440	0	29,458
70-74	0	27,354	30,143	25,291	25,857	17,107	17,611	24,379
75-79	0	0	0	31,674	21,114	16,842	8,789	22,204
80-84	0	0	0	24,700	11,761	18,324	13,864	15,980
85+	0	0	0	0	17,522	18,150	19,858	18,975
ALL	36,521	29,642	32,211	26,373	20,900	17,587	17,161	22,044

**Total Annual Benefit (IN THOUSANDS) by Years SINCE DEATH**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	36	237	644	1,081	1,212	844	617	4,673

**St. Paul Teachers' Retirement Fund**  
**Determination of Contribution Sufficiency**  
*(dollars in thousands)*

July 1, 2001

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	8.00%	\$ 3,258
2. Employer Contributions	11.64%	4,740
3. Supplemental Contribution		
a. 1996 Legislation	0.81%	330
b. 1997 Legislation	1.32%	538
4. Administrative Expense Assessment	0.00%	-
5. Total	21.77%	\$ 8,866
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	7.79%	\$ 3,173
b. Disability Benefits	0.78%	319
c. Surviving Spouse and Child Benefits	0.15%	63
d. Deferred Retirements	1.49%	605
e. Refund Liability Due to Death or Withdrawal	1.48%	601
f. Total	11.69%	\$ 4,761
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 40,724

**St. Paul Teachers' Retirement Fund**  
***Summary of Plan Provisions***

**GENERAL**

<i>Eligibility:</i>	A teacher who is employed in a public school district located in the corporate limits of the City of St. Paul and who is not covered by the Social Security Act. Also includes employees of the St. Paul Teachers Retirement Fund.
<i>Contributions:</i>	Member: 8.00% of Salary. Employer: 11.64% of Salary.
<i>Allowable Service:</i>	All periods of service for which salary deductions were made and service during sabbatical leave. After June 30, 1974, St. Paul service for part-time teachers is granted on a proportional basis using actual duty days vs. the agreed number of annual duty days. Years of service credited prior to May 31, 1976 are not recomputed.
<i>Salary:</i>	Total compensation. Excludes lump sum payments for unused vacation leave or unused sick leave at separation.
<i>Average Salary:</i>	Average of the 5 highest years of Salary during the last 10 years while making contributions or while disabled.

**RETIREMENT**

***Normal Retirement Benefit:***

<i>Eligibility:</i>	Age 65 and 5 years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and 1 year of Allowable Service.
<i>Amount:</i>	2.50% of Average Salary for each year of Allowable Service.

***Early Retirement Benefit:***

***Eligibility:***

An unreduced benefit is available upon the attainment of age 60 and 25 years of Allowable Service, or Rule of 90 (Age plus Allowable Service totals 90).

A reduced benefit is available upon the attainment of age 55 and 5 years of Allowable Service.

***Amount:***

The greater of:

2.00% of Average Salary for each year of Allowable Service not to exceed 40 years with reduction of 0.25% for each month the Member is under age 65 (age 60 if 25 years of Allowable Service). No reduction if age plus years of Allowable Service totals 90.

or

2.50% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00% per year and actuarial reduction for each month the Member is under age 65.

***Form of Payment:***

Life annuity.

***Benefit Increases:***

Benefits are increased 2.0% annually beginning on the January 1 following fiscal year end if the Member has been receiving benefits for at least 12 months at fiscal year end. Beneficiaries are entitled to the increase the Member would have received.

In addition, if the time weighted rate of return over the last 5 years exceeds 8.5%, the Board of Trustees will increase benefits by the excess rate of return multiplied by the quantity of one minus the rate of contribution deficiency.

## **DISABILITY**

### ***Disability Benefit:***

*Eligibility:* Totally and permanently disabled before the age of 65 with 5 years of St. Paul service.

*Amount:* An annuity of 75% of the annual contract salary for the last full year of service reduced by any Social Security and Workers' Compensation benefits.

Payments are recomputed as a retirement at age 65.  
Payments stop if disability ceases or death occurs.

*Form of Payment:* Life annuity.

*Benefit Increases:* Same as for retirement.

### ***Retirement After Disability:***

*Eligibility:* Age 65 with continued disability.

*Amount:* Normal Retirement Benefit based on Average Salary and Allowable Service as if Member had continued in his latest position during the period of his disability.

*Form of Payment:* Life annuity.

*Benefit Increases:* Same as for retirement.

## **DEATH**

### ***Family Benefits:***

*Eligibility:* Active Member with 3 years of St. Paul service.

*Amount:* Benefit of 15% of B.A. salary to spouse plus 25% of B.A. salary to each eligible child (maximum of 2). B.A. salary is the maximum salary payable to a teacher holding a B.A. degree.

Spouse's benefits cease upon death or when the spouse elects to receive survivor's benefits. Such election does not affect benefits paid to children but total benefits may not exceed 90% of the Member's final salary. Children's benefits cease upon marriage or age 18 (22 if full time student).

***Survivor's Benefits:***

*Eligibility:* Active or retired Member with 5 years of St. Paul service. A surviving spouse must have been married to the Member for 3 years at the time of his death or retirement, whichever occurs first.

*Amount:* Survivor's payment of the 100% joint and survivor benefit earned by the Member to the date of his death or his retirement, whichever occurs first.

*Benefit Increases:* Same as for a retired person if payments have been made over one year. The allocation is based on the years of Allowable Service of the person on whose behalf the annuity is paid and the years receiving the payment.

***Refund of Contributions:***

*Eligibility:* Death of a Member or former Member when Family Benefits and Survivor's Benefits are not payable.

*Amount:* The excess of the Member's contributions with 6.00% interest (unless the Member was disabled) over total benefits paid.

**TERMINATION**

***Deferred Annuity:***

*Eligibility:* 5 years of Allowable Service.

*Amount:* Benefit computed under law in effect at termination and increased following annual percentage:

3.00% until January 1 of the year following the attainment of 55, and

5.00% thereafter until the annuity begins.

Amount is payable as a normal or early retirement benefit.

***Refund of Contributions:***

*Eligibility:* Termination of teaching service.

*Amount:* Member's contributions with 5.00% interest if termination occurred before May 16, 1989 and 6.00% interest if termination occurred after May 16, 1989. A deferred annuity may be elected in lieu of a refund.



**TABLE 3B**  
**Coordinated Plan**

**St. Paul Teachers Retirement Fund**  
**ACTIVE MEMBERS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years of Service</u>								<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	100	28	0	0	0	0	0	0	128
25-29	142	405	25	0	0	0	0	0	572
30-34	111	313	200	7	0	0	0	0	631
35-39	49	194	161	94	20	0	0	0	518
40-44	76	165	136	81	63	10	0	0	531
45-49	64	164	128	97	91	64	1	0	609
50-54	43	162	119	98	70	80	13	5	590
55-59	30	66	73	62	57	44	10	10	352
60-64	8	31	18	19	18	20	5	2	121
65+	3	20	2	5	3	9	1	1	44
ALL	626	1,548	862	463	322	227	30	18	4,096

**AVERAGE ANNUAL EARNINGS**

<u>Age</u>	<u>Years of Service</u>								<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<25	12,648	24,388	0	0	0	0	0	0	15,216
25-29	17,787	30,389	39,311	0	0	0	0	0	27,651
30-34	21,956	32,617	40,599	54,802	0	0	0	0	33,518
35-39	22,405	35,350	45,059	52,272	60,977	0	0	0	41,203
40-44	17,929	31,262	46,655	54,497	57,603	61,328	0	0	40,532
45-49	18,726	28,595	49,181	54,343	58,412	65,844	64,470	0	44,415
50-54	19,939	33,544	48,792	57,723	62,100	63,011	67,199	70,350	48,081
55-59	15,890	28,901	52,136	59,773	59,055	67,710	70,347	69,240	50,106
60-64	19,326	28,045	54,501	55,913	58,308	68,326	67,186	63,821	49,149
65+	17,197	16,296	8,008	42,809	62,273	63,421	68,777	59,253	33,937
ALL	18,254	31,293	45,947	55,339	59,359	65,131	68,208	68,391	39,617

**Prior Fiscal Year Earnings (In THOUSANDS) by Years of Service**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>ALL</u>
ALL	11,427	48,442	39,606	25,622	19,114	14,785	2,046	1,231	162,271

**TABLE 4B**  
**Coordinated Plan**

**St. Paul Teachers Retirement Fund**

**SERVICE RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	10	18	0	0	0	0	0	28
60-64	16	42	10	0	0	0	0	68
65-69	10	44	22	0	0	0	0	76
70-74	1	10	26	10	0	0	0	47
75-79	0	1	3	7	3	0	0	14
80-84	0	0	0	3	2	0	0	5
85+	0	0	0	0	0	2	0	2
ALL	37	115	61	20	5	2	0	240

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Retired</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0
55-59	16,834	8,647	0	0	0	0	0	11,571
60-64	12,506	13,300	11,446	0	0	0	0	12,841
65-69	11,490	12,530	10,553	0	0	0	0	11,821
70-74	13,524	10,703	13,321	5,939	0	0	0	11,198
75-79	0	12,526	17,841	10,026	5,780	0	0	10,969
80-84	0	0	0	3,572	11,224	0	0	6,633
85+	0	0	0	0	0	2,420	0	2,420
ALL	13,429	12,045	12,238	7,014	7,958	2,420	0	11,723

**Total Annual Benefit (IN THOUSANDS) by Years RETIRED**

<u>Age</u>	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	496	1,385	746	140	39	4	0	2,813

**TABLE 5B**  
**Coordinated Plan**

**St. Paul Teachers Retirement Fund**

**DISABILITY RETIREMENTS AS OF JUNE 30, 2001**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	1	1	0	0	0	0	2
50-54	0	1	0	0	0	0	0	1
55-59	0	1	2	0	0	0	0	3
60-64	0	0	2	0	0	0	0	2
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	3	5	0	0	0	0	8

**AVERAGE ANNUAL BENEFIT**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	2,171	4,467	0	0	0	0	3,319
50-54	0	1,772	0	0	0	0	0	1,772
55-59	0	15,172	10,761	0	0	0	0	12,231
60-64	0	0	13,862	0	0	0	0	13,862
65-69	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	6,372	10,743	0	0	0	0	9,103

**Total Annual Benefit (IN THOUSANDS) by Years DISABLED**

<u>Age</u>	<u>Years Disabled</u>							<u>ALL</u>
	<u>&lt;1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
ALL	0	19	53	0	0	0	0	72

TABLE 6B  
Coordinated Plan

St. Paul Teachers Retirement Fund

SURVIVORS AS OF JUNE 30, 2001

Age	Years Since Death							ALL
	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	1	2	0	0	0	0	3
50-54	0	0	0	0	0	0	0	0
55-59	0	2	0	0	0	0	0	2
60-64	0	1	0	0	0	0	0	1
65-69	0	0	0	1	0	0	0	1
70-74	0	0	0	0	0	0	0	0
75-79	0	0	1	0	0	0	0	1
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	4	3	1	0	0	0	8

AVERAGE ANNUAL BENEFIT

Age	Years Since Death							ALL
	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	
<50	0	10,885	2,580	0	0	0	0	5,348
50-54	0	0	0	0	0	0	0	0
55-59	0	22,112	0	0	0	0	0	22,112
60-64	0	22,527	0	0	0	0	0	22,527
65-69	0	0	0	6,714	0	0	0	6,714
70-74	0	0	0	0	0	0	0	0
75-79	0	0	1,236	0	0	0	0	1,236
80-84	0	0	0	0	0	0	0	0
85+	0	0	0	0	0	0	0	0
ALL	0	19,409	2,132	6,714	0	0	0	11,343

Total Annual Benefit (IN THOUSANDS) by Years SINCE DEATH

Age	<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>ALL</u>
ALL	0	77	6	6	0	0	0	90

**St. Paul Teachers' Retirement Fund**  
**Determination of Contribution Sufficiency**  
*(dollars in thousands)*

July 1, 2001

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.50%	\$ 9,573
2. Employer Contributions	8.34%	14,516
3. Supplemental Contribution		
a. 1996 Legislation	0.81%	1,420
b. 1997 Legislation	1.32%	2,289
4. Administrative Expense Assessment	0.00%	-
5. Total	15.97%	\$ 27,798
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	6.76%	\$ 11,765
b. Disability Benefits	0.38%	655
c. Surviving Spouse and Child Benefits	0.15%	261
d. Deferred Retirements	0.75%	1,309
e. Refund Liability Due to Death or Withdrawal	0.40%	696
f. Total	8.44%	\$ 14,686
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 174,051

**St. Paul Teachers' Retirement Fund**  
***Summary of Plan Provisions***

**GENERAL**

<i>Eligibility:</i>	A teacher who is employed in a public school district located in the corporate limits of the City of St. Paul and who is covered by the Social Security Act. Also includes employees of the St. Paul Teachers Retirement Fund.
<i>Contributions:</i>	Member: 5.50% of Salary. Employer: 8.34% of Salary.
<i>Allowable Service:</i>	All periods of service for which salary deductions were made and service during sabbatical leave. After June 30, 1974, St. Paul service for part-time teachers is granted on a proportional basis using actual duty days vs. the agreed number of annual duty days. Years of service credited prior to May 31, 1976 are not recomputed.
<i>Salary:</i>	Total compensation. Excludes lump sum payments for unused vacation leave or unused sick leave at separation.
<i>Average Salary:</i>	Average of the 5 highest successive years of Salary. Average Salary is based on all Allowable Service is less than 5 years

**RETIREMENT**

***Normal Retirement Benefit:***

<i>Eligibility:</i>	
First hired before July 1, 1989:	Age 65 and 3 years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and 1 year of Allowable Service.

First hired after  
 July 1, 1989:      The greater of age 65 or the age eligible for full Social Security retirement benefits (but not greater than age 66) and 3 years of Allowable Service. Proportionate Retirement Annuity is available at normal retirement age and 1 year of Allowable Service.

*Amount:*      1.70% of Average Salary for each year of Allowable Service.

***Early Retirement Benefit:***

*Eligibility:*      Age 55 and 3 years of Allowable Service. Any age with 30 years of Allowable Service. Rule of 90: Age plus Allowable Service totals 90.

*Amount:*

First hired before  
 July 1, 1989:

The greater of:

1.20% of Average Salary for each of the first 10 years of Allowable Service plus 1.70% of Average Salary for each subsequent year of Allowable Service with reduction of 0.25% for each month the Member is under age 65 (age 62 if 30 years of Allowable Service). No reduction if age plus years of Allowable Service totals 90.

or

1.70% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00% per year and actuarial reduction for each month the Member is under age 65.

First hired after  
 July 1, 1989:

1.70% of Average Salary for each year of Allowable Service assuming augmentation to Normal Retirement Age at 3.00% per year and actuarial reduction for each month the Member is under Normal Retirement Age.

*Form of Payment:* Life annuity. Actuarial equivalent options are:

- Guaranteed refund,
- 15 year certain and life, and
- 50% or 100% joint and survivor with bounce back feature without additional reduction.

*Benefit Increases:* Benefits are increased 2.0% annually beginning on the January 1 following fiscal year end if the Member has been receiving benefits for at least 12 months at fiscal year end. Beneficiaries are entitled to the increase the Member would have received.

In addition, if the time weighted rate of return over the last 5 years exceeds 8.5%, the Board of Trustees will increase benefits by the excess rate of return multiplied by the quantity of one minus the rate of contribution deficiency.

## **DISABILITY**

### ***Disability Benefit:***

*Eligibility:* Totally and permanently disabled before normal retirement age with 3 years of Allowable Service. Also, at least 2 of the years of Allowable Service must have been uninterrupted.

*Amount:* Normal Retirement Benefit based on Allowable Service and Average Salary at disability without reduction for commencement before normal retirement age. Benefit is reduced by Workers' Compensation.

Payments are recomputed as a retirement benefit at the normal retirement age. Payments stop if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment.

*Form of Payment:* Same as for retirement.

*Benefit Increases:* Same as for retirement.



***Retirement After Disability:***

<i>Eligibility:</i>	Normal retirement age with continued disability.
<i>Amount:</i>	Any optional annuity continues, otherwise the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at the normal retirement age, or an actuarially equivalent optional annuity.
<i>Benefit Increases:</i>	Same as for retirement.

**DEATH**

***Surviving Spouse Annuity:***

<i>Eligibility:</i>	<p>Any active Member who dies with 3 years of Allowable Service prior to retirement or disability benefits commence.</p> <p>Any former Member who dies before retirement or disability benefits commence.</p>
<i>Amount:</i>	<p>Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated.</p> <p>Upon the death of any vested active member, the benefit is calculated using 50% of otherwise applicable early retirement reduction from the Member's age 55 to the Member's benefit commencement age.</p> <p>If a former Member had attained age 55 prior to death and had earned at least 3 years of Allowable Service prior to separation of service, benefits will commence immediately reduced for early commencement from Normal Retirement Age. If a former Member had earned at least 30 years of Allowable Service prior to separation of service, benefit will commence immediately, reduced for early commencement from age 62. If a former Member dies prior to age 55, benefits are deferred to age 55.</p>

*Benefit Increases:* Same as for a retired person if payments have been made over one year. The allocation is based on the years of Allowable Service of the person on whose behalf the annuity is paid and the years receiving the payment.

***Refund of Contributions:***

*Eligibility:* Member or former Member dies before receiving any disability or retirement benefits and Survivor's Benefits are not payable.

*Amount:* Member's contributions with 5.00% interest if death occurred before May 16, 1989 and 6.00% interest if death occurred after May 16, 1989.

**TERMINATION**

***Deferred Annuity:***

*Eligibility:* 3 years of Allowable Service.

*Amount:* Benefit computed under law in effect at termination and increased by the following annual percentage:

3.00% until January 1 of the year following the attainment of 55, and

5.00% thereafter until the annuity begins.

Amount is payable as a normal or early retirement benefit.

***Refund of Contributions:***

*Eligibility:* Termination of teaching service.

*Amount:* Member's contributions with 5.00% interest if termination occurred before May 16, 1989 and 6.00% interest if termination occurred after May 16, 1989. A deferred annuity may be elected in lieu of a refund.

**St. Paul Teachers' Retirement Fund**  
**Schedule of Funding Progress**  
*(dollars in thousands)*

July 1, 2001

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (B)	Unfunded AAL (UAAL) (B)-(A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll ((B)-(A))/(C)
07/01/91	\$ 326,357	\$ 495,740	\$ 169,383	65.83%	\$ 110,131	153.80%
07/01/92	355,998	533,865	177,867	66.68%	115,274	154.30%
07/01/93	393,168	571,059	177,891	68.85%	122,930	144.71%
07/01/94	407,275	596,441	189,166	68.28%	129,308	146.29%
07/01/95	445,733	633,070	187,337	70.41%	139,175	134.61%
07/01/96	494,931	664,072	169,141	74.53%	145,677	116.11%
07/01/97	556,406	805,066	248,660	69.11%	151,363	164.28%
07/01/98	625,053	861,584	236,531	72.55%	168,564	140.32%
07/01/99	704,233	938,847	234,614	75.01%	178,254	131.62%
07/01/00	801,823	998,253	196,430	80.32%	187,950	104.51%
07/01/01	869,045	1,060,931	191,886	81.91%	202,915	94.56%

**St. Paul Teachers' Retirement Fund**  
**Schedule of Employer Contributions**  
*(dollars in thousands)*

July 1, 2001

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contributions [(A)*(B)]-(C)	Actual Employer Contributions*	Percentage Contributed
1991	18.86%	\$ 110,131	\$ 7,518	\$ 13,253	\$ 10,255	77.38%
1992	18.87%	115,274	7,821	13,931	10,489	75.29%
1993	19.74%	122,930	8,202	16,064	10,839	67.47%
1994	18.68%	129,308	9,100	15,055	11,736	77.96%
1995	18.63%	139,175	8,788	17,140	13,084	76.33%
1996	17.96%	145,677	9,093	17,071	15,101	88.46%
1997	16.97%	151,363	9,484	16,202	16,043	99.02%
1998	20.35%	168,564	11,057	23,246	21,702	93.36%
1999	18.82%	178,254	11,649	21,899	21,066	96.19%
2000	18.09%	187,950	13,184	20,814	22,622	108.69%
2001	16.57%	202,915	13,170	20,444	23,569	115.28%

\*Includes contributions from other sources (if applicable)