

**ST. PAUL TEACHERS' RETIREMENT FUND ASSOCIATION**  
**ACTUARIAL VALUATION**  
**AS OF JULY 1, 2010**



November 10, 2010

Ms. Christine MacDonald  
St. Paul Teachers' Retirement Fund Association  
1619 Dayton Avenue, Room 309  
St. Paul, MN 55104-6206

Dear Ms. MacDonald:

We are pleased to present the report of the actuarial valuation of the St. Paul Teachers' Retirement Fund Association ("Fund") as of July 1, 2010. This report provides among other things, the required annual contribution rate of the Fund for the Plan Year commencing July 1, 2010, and ending on June 30, 2011. The actuarial assumptions and actuarial cost method are those used in the prior valuation.

The necessary participant and financial data was provided by the Fund's staff. Their efforts in furnishing the materials needed are gratefully acknowledged. Data was checked for internal consistency, but was not otherwise audited by us.

The report has been prepared in accordance with Section 356.215 of the Minnesota Statutes as well as the Standards for Actuarial Work established by the State of Minnesota Legislative Commission on Pensions and Retirement. To the best of our knowledge, this report is complete and accurate, and has been prepared in accordance with generally accepted actuarial principles and practice.

Determinations of the liability associated with the benefits described in this report for purposes other than those described above may produce significantly different results. This report may be provided to parties other than the Fund or State oversight entities only in its entirety and only with the permission of the Fund.

The undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We will be pleased to review this report with you at your convenience.

Respectfully submitted,

W. James Koss, ASA, EA, MAAA

Cathy Nagy, FSA, EA, MAAA

WJK/CN:mrp

# TABLE OF CONTENTS

---

<b>Summary of Valuation Results</b>		1-4
<b>Section 1</b>	<b>Asset Information</b>	
	Assets of the Plan	5
Table 1	Accounting Balance Sheet	6
Table 2	Changes in Assets Available for Benefits	7
<b>Section 2</b>	<b>Total Membership Data</b>	
Table 3	Active Members	8
Table 4	Service Retirements	9
Table 5	Disability Retirements	10
Table 6	Survivors	11
Table 7	Reconciliation of Members	12
<b>Section 3</b>	<b>Funding Status</b>	
Table 8	Actuarial Balance Sheet	13
Table 9	Determination of Unfunded Actuarial Accrued Liability (UAAL) and Supplemental Contribution Rate	14
Table 10	Changes in Unfunded Actuarial Accrued Liability (UAAL)	15
Table 11	Determination of Contribution Sufficiency	16
<b>Section 4</b>	<b>Actuarial Methods and Assumptions</b>	
Table 12	Summary of Actuarial Assumptions and Methods	17-23
<b>Section 5</b>	<b>Basic Plan</b>	
	<b>Membership Data</b>	
Table 3A	Active Members	24
Table 4A	Service Retirements	25
Table 5A	Disability Retirements	26
Table 6A	Survivors	27

## TABLE OF CONTENTS (CONT'D.)

---

### Section 5 (Cont'd.)

#### Funding Status

Table 11A	Determination of Contribution Sufficiency	28
-----------	---	----

#### Plan Provisions

	Summary of Benefit Provisions for Basic Members	29-32
--	---	-------

### Section 6 Coordinated Plan

#### Membership Data

Table 3B	Active Members	33
----------	----------------	----

Table 4B	Service Retirements	34
----------	---------------------	----

Table 5B	Disability Retirements	35
----------	------------------------	----

Table 6B	Survivors	36
----------	-----------	----

#### Funding Status

Table 11B	Determination of Contribution Sufficiency	37
-----------	---	----

	Summary of Benefit Provisions for Coordinated Members	38-40
--	---	-------

### Section 7 GASB Disclosures

Table 14	Schedule of Funding Progress	41
----------	------------------------------	----

Table 15	Schedule of Employer Contributions	42
----------	------------------------------------	----

Table 16	Development of the Fund	43
----------	-------------------------	----

Table 17	GASB Supplementary Information	44
----------	--------------------------------	----

## **SUMMARY OF VALUATION RESULTS**

**(dollars in thousands)**

---

This report sets forth the results of the actuarial valuation of the St. Paul Teachers' Retirement Fund Association ("Fund") as of July 1, 2010. The purposes of this valuation are:

1. To develop the annual required contribution (ARC) rates under GASB requirements.
2. To compare the ARC rates with the current funding policy in place.
3. To review the funding status of the Fund.

The funding status, in basic terms, is a comparison of the fund's liabilities to assets expressed as either an unfunded liability (i.e., the difference between the assets and liabilities) or as a ratio of assets to liabilities. This comparison can be measured in various ways. Fund liabilities are dependent on the actuarial assumptions and actuarial cost method. Fund assets can be measured at market value, book value, or some variation to smooth the fluctuations that invariably occur from year to year. The Actuarial Value of Assets is determined from market value with investment gains and losses smoothed over a five-year period.

### **Comments on Results**

Total actuarial liabilities increased from \$1,454.3 to \$1,471.6 million. Increases due to expected growth were offset by liability gains from better than expected demographic experience. The main component of the demographic experience gain was salary increases less than expected. There was also a reduction in liability due to a one-year freeze on COLA benefits as of January 1, 2011, as a result of the 2010 Omnibus Pension Bill.

The funded ratio based on actuarial value of assets decreased from 72.20% at July 1, 2009, to 68.05% at July 1, 2010. This decrease was due to the portion of recognized investment losses from fiscal years 2008 and 2009. Without substantial investment gains from the Fund earning returns in excess of 8.50%, the funded ratio is expected to deteriorate at each of the next two valuations as those losses continue to be phased in.

The required contribution rate increased from 18.40% for fiscal year ending June 30, 2010, to 19.84% for fiscal year ending June 30, 2011, due to investment losses. The statutory contributions currently in place are not sufficient to cover this contribution rate. The statutory contribution rate for the current plan year based on the Basic Plan and Coordinated Plan active population at the valuation date is 15.60%, a shortfall of 4.24%.

**SUMMARY OF VALUATION RESULTS**  
(dollars in thousands)

	July 1, 2009	July 1, 2010
	<u>Valuation</u>	<u>Valuation</u>
<b>A. CONTRIBUTIONS % OF PAYROLL (Table 11)</b>		
1. Statutory Contributions - Chapter 354A	15.64%	15.60%
2. Required Contributions - Chapter 356	<u>18.40%</u>	<u>19.84%</u>
3. Sufficiency / (Deficiency)	(2.76%)	(4.24%)
<b>B. FUNDING RATIOS</b>		
1. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 1,049,954	\$ 1,001,444
b. Actuarial Accrued Liability (Table 9)	<u>1,454,314</u>	<u>1,471,630</u>
c. Funding Ratio	72.20%	68.05%
2. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 1,552,760	\$ 1,579,825
b. Current and Expected Future Benefit Obligations	<u>1,668,532</u>	<u>1,684,504</u>
c. Funding Ratio	93.06%	93.79%
<b>C. PLAN PARTICIPANTS</b>		
1. Active Members		
a. Number (Table 3)	3,860	3,749
b. Projected Annual Earnings	\$ 252,726	\$ 250,225
c. Average Annual Earnings (Projected dollars)	\$ 64,144	\$ 64,714
d. Average Age	45.3	45.5
e. Average Service	12.0	12.3
f. Additional Members on Leave of Absence	80	88
2. Others		
a. Service Retirements (Table 4)	2,615	2,721
b. Disability Retirements (Table 5)	25	23
c. Survivors (Table 6)	293	300
d. Deferred Retirements (Table 7)	1,823	1,863
e. Terminated Other Non-Vested (Table 7)	<u>1,451</u>	<u>1,419</u>
f. Total - Others	6,207	6,326
3. Grand Total (1.a + 1.f + 2f.)	10,147	10,163

## SUMMARY OF VALUATION RESULTS

---

### **Participants**

Active membership decreased 2.6 percent during fiscal year 2010 from 3,940 to 3,837 (figures include members on leave of absence). Total participants receiving benefits under the Fund, including disabled retirees and beneficiaries, increased 3.8 percent during fiscal year 2010 from 2,933 to 3,044. Total expenditures for these benefits increased from \$93.0 million to \$96.4 million during fiscal year 2010, or 3.6 percent.

### **Changes in Provisions of the Fund**

Employee and employer contributions will increase by a total of one percent over four years, with the first 0.25 percent increase scheduled for July 1, 2011. There was also a one-year freeze on COLA benefits as of January 1, 2011, as a result of the 2010 Omnibus Pension Bill.

### **Actuarial Assumptions**

Actuarial assumptions are used to project future demographic and economic expectations for purposes of valuing the liabilities of the plan. The assumptions should reflect current patterns. However, their primary orientation is the long-term outlook for each factor affecting the valuation. Thus, while actual experience will fluctuate over the short run, actuarial assumptions are chosen in an attempt to model the future long-term experience. The actuarial assumptions were developed in accordance with the Standards for Actuarial Work. To comply with revisions to the Standards adopted August 11, 2010, retirement and termination decrements are now assumed to occur at the end of the year, with death and disability decrements occurring middle of year. In addition, the January 1, 2011, COLA assumption was set to 0.00 percent in accordance with the provision change.

### **Asset Valuation Method**

The method used to develop the Fund's Actuarial Value of Assets, as set out in the Standards for Actuarial Work, is as follows: In years when Fund assets earn above 8.5 percent (i.e., experience gain) or below 8.5 percent (i.e., experience loss) the gain (or loss) will be gradually recognized over five years. This approach both smoothes the Fund's level of contributions and ensures the Fund's assets will track the market value of assets.

### **Experience Analysis**

Overall, the Fund experienced a loss of \$48.0 million. In general, salary increases were smaller than predicted under the current valuation assumption and produced an actuarial gain of \$14.0 million. There were fewer retirements than expected, resulting in a gain of \$4.8 million. The one-year COLA freeze reduced liabilities by \$17.9 million. The change in decrement timing increased liabilities by \$4.9 million.

The largest component of the Fund's loss was due to investment losses. Although the market value of Fund assets returned 13.1% (net of fees) for the year ended June 30, 2010, higher than the 8.5% assumption, this was not sufficient to offset the asset losses that occurred in 2008 and 2009. As a result, the scheduled recognition of gains and losses from prior years produced an overall loss of \$77.3 million on the actuarial value of assets. The rate of return on the actuarial value of assets for 2010 is 0.9%.

The changes in unfunded actuarial accrued liabilities are shown in Table 10.

## SUMMARY OF VALUATION RESULTS

---

### Looking Ahead

Investment markets continue to be volatile. A 5-year smoothed value of assets, used to determine both the funded status and required contribution level, reduces the volatility of the valuation results.

The rate of investment return assumption is set in State Statute. Given the events in financial markets over the past three years, many retirement funds are reviewing their investment return assumption. We suggest that the Board consider a review of the assumed investment return. Note that a decrease in the assumed rate of investment return will result in an increase in the required contribution rate.

As of July 1, 2010, the actuarial value of assets was 122.8% of market value. This means that meeting the actuarial assumption in the next few years will require average future market returns that exceed the 8.5% investment return assumption.

The following table shows the July 1, 2010, valuation results, if they had been based on the market value instead of smoothed actuarial value:

<b>Market Value Results as of July 1, 2010</b>	
Actuarial Accrued Liability	\$1,471.6 million
Market Value of Assets	\$ 815.3 million
Unfunded Actuarial Accrued Liability (Market Value Basis)	\$ 656.3 million
Funded Ratio (Market Value Basis)	55.40%
Required Contribution Rate (Market Value Basis)	24.32%
Shortfall (Market Value Basis)	8.72%



---

## **SECTION 1**

### **ASSET INFORMATION**

---

## ASSETS OF THE PLAN

---

The cost value of the plan assets decreased from \$720.1 million as of June 30, 2009, to \$702.4 million as of June 30, 2010. The market value of the plan assets increased from \$ 773.3 million as of June 30, 2009, to \$ 815.3 million as of June 30, 2010. The expected return on assets using the valuation interest rate assumption of 8.5 percent was \$63.3 million. The actual plan experience showed a return on assets of \$100.1 million. Twenty percent of the asset return above the expected \$63.3 million is recognized as an actuarial gain in the development of the actuarial value of assets. The recognized gain from the current year along with the portion of prior gains and losses recognized this year results in an overall loss of \$77.3 million on the actuarial value of assets.

Table 1 shows the composition of assets as of June 30, 2010, and the development of the actuarial value of assets as of June 30, 2010. Table 2 details the development of asset values during fiscal year 2010.

**TABLE 1**  
**ACCOUNTING BALANCE SHEET**  
**AS OF JUNE 30, 2010**  
**(dollars in thousands)**

	Market Value	Cost Value
<b>A. ASSETS</b>		
1. Cash, Equivalents, Short-Term Securities	\$ 4,536	\$ 4,536
2. Investments		
a. Fixed Income	187,989	146,763
b. Equity	542,988	466,407
c. Real Estate	67,908	73,264
d. Alternative	9,565	9,152
3. Other Assets*	4,570	4,570
<b>B. TOTAL ASSETS</b>	\$ 817,556	\$ 704,692
<b>C. AMOUNTS CURRENTLY PAYABLE</b>	\$ 2,249	\$ 2,249
<b>D. ASSETS AVAILABLE FOR BENEFITS</b>		
1. Member Reserves	\$ 144,542	\$ 144,542
2. Employer Reserves	670,765	557,901
3. Total Assets Available for Benefits	\$ 815,307	\$ 702,443
<b>E. TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS</b>	\$ 817,556	\$ 704,692
<b>F. DETERMINATION OF ACTUARIAL VALUE OF ASSETS</b>		
1. Market Value of Assets Available for Benefits (D.3)	\$ 815,307	
2. Unrecognized Asset Returns		
a. June 30, 2010	\$ 36,792	
b. June 30, 2009	(280,135)	
c. June 30, 2008	(175,830)	
d. June 30, 2007	114,209	
3. UAR Adjustment: $.80 * 2(a) + .60 * 2(b) + .40 * 2(c) + .20 * 2(d)$		(186,137)
4. Actuarial Value of Assets (F.1 - F.3)	\$ 1,001,444	

* DERIVATION OF OTHER ASSETS	Market Value
Accounts Receivable	
Employer Contribution	\$ 1,604
Employee Contribution	88
Service Purchases Receivable	75
Pensions Receivable	4
State Contributions	0
Real Estate Income receivable	44
Commission Recapture Receivable	6
Interest Receivable	3
Dividend Receivable	154
Misc. Receivable	1
Security Purchases Receivable	-
Sale of Securities	2,566
Total Accounts Receivable	\$ 4,545
Fixed Assets	25
Total Other Assets	\$ 4,570

**TABLE 2**  
**CHANGE IN ASSETS AVAILABLE FOR BENEFITS**  
**AS OF JUNE 30, 2010**  
(dollars in thousands)

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 773,259	\$ 720,145
B. OPERATING REVENUES		
1. Member Contributions	\$ 13,832	\$ 13,832
2. Employer Contributions	21,018	21,018
3. Supplemental Contributions	4,108	4,108
4. Investment Income	7,972	7,972
5. Investment Expenses	(4,606)	(4,606)
6. Net Realized Gain / (Loss)	36,938	36,938
7. Other	-	-
8. Net Change in Unrealized Gain / (Loss)	<u>59,750</u>	<u>-</u>
9. Total Operating Revenue	\$ 139,012	\$ 79,262
C. OPERATING EXPENSES		
1. Service retirements	\$ 86,392	\$ 86,392
2. Disability benefits	668	668
3. Survivor benefits	8,240	8,240
4. Refunds	1,062	1,062
5. Administrative expenses	<u>602</u>	<u>602</u>
6. Total operating expenses	\$ 96,964	\$ 96,964
D. OTHER CHANGES IN RESERVES	\$ -	\$ -
E. ASSETS AVAILABLE AT END OF PERIOD	<u>\$ 815,307</u>	<u>\$ 702,443</u>
F. DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN		
1. Average Balance		
(a) Assets available at BOY:		\$ 773,259
(b) Assets available at EOY:		815,307
(c) Average balance $\{[(a) + (b) - \text{Net Investment Income}] / 2\}$ {Net investment income: B.4+B.5+B.6+B.7+B.8}		\$ 744,256
2. Expected Return: $.085 * F.1$		63,262
3. Actual Return		100,054
4. Current year gross asset return: $F.3 - F.2$		\$ 36,792

---

## **SECTION 2**

### **TOTAL MEMBERSHIP DATA**

---

**TABLE 3**  
**ACTIVE MEMBERS AS OF JUNE 30, 2010\***

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	61	0	0	0	0	0	0	0	61
25-29	256	54	0	0	0	0	0	0	310
30-34	153	219	62	0	0	0	0	0	434
35-39	101	133	247	32	0	0	0	0	513
40-44	86	105	198	147	9	0	0	0	545
45-49	73	77	121	127	104	17	0	0	519
50-54	45	61	97	108	85	71	25	0	492
55-59	64	51	111	97	97	82	79	10	591
60-64	43	36	43	50	44	32	31	26	305
65+	27	9	9	4	9	4	0	5	67
<b>ALL</b>	909	745	888	565	348	206	135	41	3,837

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	21,600	0	0	0	0	0	0	0	21,600
25-29	35,252	52,859	0	0	0	0	0	0	38,319
30-34	37,781	56,351	63,540	0	0	0	0	0	50,831
35-39	41,725	56,599	67,795	76,706	0	0	0	0	60,315
40-44	35,068	62,027	68,769	75,941	93,874	0	0	0	64,501
45-49	36,344	64,636	71,343	74,200	82,703	88,645	0	0	68,967
50-54	29,507	58,266	68,842	77,054	77,332	82,139	83,984	0	69,891
55-59	33,530	48,789	67,614	75,889	76,579	78,335	85,202	83,215	69,231
60-64	19,500	43,997	71,306	76,287	75,551	83,874	83,361	85,179	65,934
65+	14,173	33,684	56,098	77,628	68,274	81,394	0	104,309	44,221
<b>ALL</b>	33,774	56,567	68,342	75,839	78,696	81,417	84,554	87,033	61,381

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	ALL
<b>ALL</b>	30,702	42,142	60,687	42,849	27,386	16,772	11,415	3,568	235,521

\* Including those on leave of absence.

**TABLE 4**  
**SERVICE RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Retired									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	1	0	0	0	0	0	0	0	1
55-59	134	1	0	0	0	0	0	0	0	135
60-64	367	250	0	0	0	0	0	0	0	617
65-69	184	296	177	3	0	0	1	0	0	661
70-74	32	129	256	84	1	0	0	0	0	502
75-79	3	21	106	179	53	1	1	0	0	364
80-84	1	3	11	71	103	39	1	0	0	229
85-89	0	2	2	11	56	64	10	0	0	145
90+	0	1	0	1	5	20	34	6	0	67
<b>ALL</b>	721	704	552	349	218	124	47	6	0	2,721

**AVERAGE ANNUAL BENEFIT**

Age	Years Retired									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	2,400	0	0	0	0	0	0	0	2,400
55-59	27,068	19,947	0	0	0	0	0	0	0	27,015
60-64	30,183	36,828	0	0	0	0	0	0	0	32,876
65-69	22,912	30,664	30,471	19,558	0	0	53,170	0	0	28,438
70-74	26,160	31,137	37,316	36,961	64,022	0	0	0	0	35,011
75-79	18,882	14,065	41,547	39,072	31,536	58,219	56,772	0	0	37,188
80-84	1,465	15,527	35,638	49,499	31,687	25,480	62,703	0	0	36,134
85-89	0	26,260	36,534	46,286	31,823	31,848	30,424	0	0	32,823
90+	0	55,535	0	73,878	22,545	27,317	23,593	22,187	0	25,728
<b>ALL</b>	27,483	32,347	35,897	40,845	31,624	29,327	27,214	22,187	0	32,562

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
<b>ALL</b>	19,815	22,773	19,815	14,255	6,894	3,637	1,279	133	0	88,601

**TABLE 5**  
**DISABILITY RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	1	0	0	0	0	0	0	0	0	1
45-49	2	0	0	0	0	0	0	0	0	2
50-54	0	1	0	1	0	0	0	0	0	2
55-59	5	2	0	0	0	0	0	0	0	7
60-64	6	4	1	0	0	0	0	0	0	11
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	14	7	1	1	0	0	0	0	0	23

**AVERAGE ANNUAL BENEFIT**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	7,492	0	0	0	0	0	0	0	0	7,492
45-49	12,238	0	0	0	0	0	0	0	0	12,238
50-54	0	23,472	0	5,364	0	0	0	0	0	14,418
55-59	18,849	17,838	0	0	0	0	0	0	0	18,560
60-64	21,586	55,392	59,152	0	0	0	0	0	0	37,294
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	18,266	40,102	59,152	5,364	0	0	0	0	0	26,129

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	256	281	59	5	0	0	0	0	0	601



**TABLE 6**  
**SURVIVORS AS OF JUNE 30, 2010**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	5	4	5	0	0	0	0	0	0	14
45-49	0	0	0	0	0	0	0	0	0	0
50-54	3	1	0	0	0	0	0	0	0	4
55-59	1	4	1	0	0	0	0	0	1	7
60-64	2	7	3	4	3	1	0	0	0	20
65-69	0	7	8	6	4	1	0	0	0	26
70-74	1	5	13	20	8	2	2	0	0	51
75-79	0	1	3	14	19	6	1	0	0	44
80-84	0	0	0	5	26	27	5	2	0	65
85-89	0	0	0	2	6	19	11	2	0	40
90+	0	0	0	0	3	6	12	8	0	29
ALL	12	29	33	51	69	62	31	12	1	300

**AVERAGE ANNUAL BENEFIT**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	1,592	14,239	1,814	0	0	0	0	0	0	5,285
45-49	0	0	0	0	0	0	0	0	0	0
50-54	8,769	660	0	0	0	0	0	0	0	6,742
55-59	18,344	13,622	13,331	0	0	0	0	0	3,350	12,788
60-64	31,642	15,056	31,159	27,821	19,689	19,389	0	0	0	22,595
65-69	0	29,061	32,418	36,844	19,696	23,172	0	0	0	30,223
70-74	61,382	17,957	37,985	37,976	28,903	17,994	23,131	0	0	33,686
75-79	0	38,329	28,552	37,817	34,120	26,288	26,544	0	0	33,772
80-84	0	0	0	27,290	30,300	28,555	19,791	40,216	0	28,840
85-89	0	0	0	39,970	34,274	27,286	25,728	18,497	0	28,101
90+	0	0	0	0	31,388	23,907	20,834	24,808	0	23,658
ALL	14,773	18,932	28,930	36,033	30,507	26,922	22,735	26,324	3,350	27,723

**Total Annual Benefit (IN THOUSANDS) by Years Since Member Death**

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	177	549	955	1,838	2,105	1,669	705	316	3	8,317

**TABLE 7**  
**RECONCILIATION OF MEMBERS**  
**AS OF JUNE 30, 2010**

	Active Participants	Leave of Absence	Vested Terminated	Other Non-Vested	Retired Participants	Disabled	Survivors and Beneficiaries	Alternate Payees	Total
A. Number as of June 30, 2009	3,860	80	1,823	1,451	2,593	25	293	22	10,147
B. Additions	350	60	150	287	162	4	26	-	1,039
C. Deletions									
1. Retirements	(114)	(2)	(41)	-	-	-	-	-	(157)
2. Disability	-	(1)	(3)	-	-	-	-	-	(4)
3. Died With Beneficiary	(1)	-	(1)	-	(22)	-	-	(1)	(25)
4. Died Without Beneficiary	(1)	(1)	-	(1)	(33)	(1)	(18)	-	(55)
5. Terminated - Deferred	(102)	(19)	-	(29)	-	-	-	-	(150)
6. Terminated - Not Vested	(283)	(3)	(1)	-	-	-	-	-	(287)
7. Refunds	(32)	(1)	(36)	(122)	-	-	-	-	(191)
8. Rehired as Active	132	(25)	(34)	(67)	-	-	-	-	6
9. Leave of Absence	(60)	-	-	-	-	-	-	-	(60)
10. Expired Benefits	-	-	-	-	-	-	(1)	-	(1)
11. Disability to Retirement	-	-	-	-	-	(5)	-	-	(5)
12. Write-offs	-	-	-	(100)	-	-	-	-	(100)
D. Data Adjustments <sup>1</sup>	-	-	6	-	-	-	-	-	6
E. Total on June 30, 2010	3,749	88	1,863	1,419	2,700	23	300	21	10,163

<sup>1</sup> Includes members not valued in prior valuation who repaid refunds for prior service.

---

**SECTION 3**  
FUNDING STATUS

---

**TABLE 8**  
**ACTUARIAL BALANCE SHEET**  
**AS OF JULY 1, 2010**  
(dollars in thousands)

---

A. CURRENTS ASSETS (TABLE 1; Line F.4)	\$	1,001,444
B. EXPECTED FUTURE ASSETS		
1. Present Value of Expected Future Statutory Supplemental Contributions*	\$	365,506
2. Present Value of Future Normal Costs		212,875
3. Total Expected Future Assets	\$	578,381
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$	1,579,825
D. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS	\$	1,684,504
E. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (D - C)	\$	104,679

\* Includes effect of scheduled employee and employer contribution increases of 1.0% each, in 0.25% increments starting July 1, 2011.

**TABLE 9**  
**DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**  
**AND SUPPLEMENTAL CONTRIBUTION RATE**  
**AS OF JULY 1, 2010**  
**(dollars in thousands)**

	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	\$ 634,842	\$ 169,146	\$ 465,696
b. Disability Benefits	7,196	2,975	4,221
c. Surviving Spouse and Child Benefits	9,819	3,689	6,130
d. Withdrawals	27,699	37,065	(9,366)
e. Total	<u>\$ 679,556</u>	<u>\$ 212,875</u>	<u>\$ 466,681</u>
2. Deferred Retirements	52,181	-	\$ 52,181
3. Former Members Without Vested Rights	1,909	-	1,909
4. Annuitants	950,858	-	950,858
5. Total	<u>\$ 1,684,504</u>	<u>\$ 212,875</u>	<u>\$ 1,471,629</u>
<b>B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</b>			
1. Actuarial Accrued Liability (A.5)			\$ 1,471,629
2. Current Assets (Table 1; Line F.4)			<u>1,001,444</u>
3. Unfunded Actuarial Accrued Liability (B.1 - B.2)			<u>\$ 470,185</u>
<b>C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE</b>			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2035 (25-year rolling amortization)			4,153,074
2. Supplemental Contribution Rate (B.3 / C.1)			<u>11.32%</u>

\*Includes members on leave of absence.

**TABLE 10**  
**CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**  
**AS OF JULY 1, 2010**  
**(dollars in thousands)**

---

A. UAAL AT BEGINNING OF YEAR	\$	404,360
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING		
1. Normal Cost and Expenses	\$	22,162
2. Contributions		(38,958)
3. Interest		34,573
4. Total	<u>\$</u>	<u>17,777</u>
C. EXPECTED UAAL AT END OF YEAR (A + B.4)	\$	422,137
D. INCREASE / (DECREASE) DUE TO ACTUARIAL LOSSES / (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED		
1. Age and Service Retirements	\$	(4,834)
2. Disability Retirements		220
3. Death-in-Service Benefits		(504)
4. Withdrawals		(1,233)
5. Salary Increases		(13,954)
6. Investment Income		77,284
7. Mortality of Annuitants		1,666
8. Other Items		2,304
9. Total	<u>\$</u>	<u>60,949</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C + D.9)	\$	483,086
F. CHANGE IN UAAL DUE TO PLAN AMENDMENTS <sup>1</sup>		(17,846)
G. CHANGE IN UAAL DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS <sup>2</sup>		<u>4,945</u>
H. UAAL AT END OF YEAR (E + F + G)	<u>\$</u>	<u>470,185</u>

<sup>1</sup> COLA at January 1, 2011 set to 0.00 percent. Employee contributions increased by 1.00 percent in 0.25 percent increments starting July 1, 2011.

<sup>2</sup> Decrement timing changed to be consistent with Standards for Actuarial Work established by the Minnesota Legislative Commission on Pensions and Retirement updated August 11, 2010.

**TABLE 11**  
**DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2010**  
**(dollars in thousands)**

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.56%	\$ 13,917
2. Employer Contributions	8.42%	\$ 21,072
3. Supplemental Contribution		
a. 1996 Legislation	0.49%	1,230
b. 1997 Legislation	1.13%	2,827
4. Total	<u>15.60%</u>	<u>\$ 39,046</u>
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	6.58%	\$ 16,475
b. Disability Benefits	0.12%	295
c. Surviving Spouse and Child Benefits	0.14%	354
d. Withdrawals	1.44%	3,611
e. Total	<u>8.28%</u>	<u>\$ 20,735</u>
2. Supplemental Contribution Amortization	11.32%	28,325
3. Allowance for Administrative Expenses	0.24%	601
4. Total	<u>19.84%</u>	<u>\$ 49,661</u>
C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.4 - B.4)	(4.24%)	(10,615)
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 250,225

---

## **SECTION 4**

### ACTUARIAL METHODS AND ASSUMPTIONS

---



**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

**I. ACTUARIAL COST METHOD**

An Actuarial Cost Method is a set of techniques used by the actuary to develop contribution levels under a retirement plan. The Actuarial Cost Method used in this valuation for all purposes is the Entry Age Actuarial Cost Method. Under this Method, a Normal Cost is developed by amortizing the actuarial value of benefits expected to be received by each active participant (as a level percentage of pay) over the total working lifetime of that participant, from hire to termination.

To the extent that current assets and future Normal Costs do not support participants' expected future benefits, an Unfunded Actuarial Accrued liability ("UAAL") develops. The UAAL is amortized over the statutory amortization period using level percent of payroll assuming payroll increases of 5.00% per annum. The total contribution developed under this method is the sum of the Normal Cost and the payment toward the UAAL.

**II. CURRENT ACTUARIAL ASSUMPTIONS**

**A. Demographic Assumptions**

Mortality:

1. Healthy Pre-Retirement:
  - a. Male: 1983 Group Annuity Mortality Table for Males set back 7 years
  - b. Female: 1983 Group Annuity Mortality Table for Females set back 5 years
2. Healthy Post-Retirement
  - a. Male: 1983 Group Annuity Mortality Table for Males set back 4 years
  - b. Female: 1983 Group Annuity Mortality Table for Females set back 1 year
3. Disabled Mortality
  - a. Male: 1977 Railroad Retirement Board Mortality Table for Disabled Lives
  - b. Female: 1977 Railroad Retirement Board Mortality Table for Disabled Lives

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

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

<u>Age</u>	<u>Pre-Retirement Mortality</u>		<u>Post-Retirement Mortality</u>		<u>Post-Disability Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	3	1	3	2	57	57
21	3	1	3	2	60	60
22	3	2	4	2	63	63
23	3	2	4	2	66	66
24	3	2	4	2	69	69
25	4	2	4	2	72	72
26	4	2	4	3	75	75
27	4	2	4	3	79	79
28	4	2	4	3	82	82
29	4	2	5	3	87	87
30	4	3	5	3	91	91
31	4	3	5	3	95	95
32	5	3	5	4	99	99
33	5	3	6	4	103	103
34	5	3	6	4	107	107
35	5	3	6	4	273	273
36	6	4	7	5	273	273
37	6	4	7	5	273	273
38	6	4	8	5	273	273
39	7	4	9	6	273	273
40	7	5	9	6	273	273
41	8	5	10	7	273	273
42	9	5	10	7	273	273
43	9	6	11	8	274	274
44	10	6	12	8	274	274

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

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

<u>Age</u>	<u>Pre-Retirement Mortality</u>		<u>Post-Retirement Mortality</u>		<u>Post-Disability Mortality</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
45	10	7	14	9	274	274
46	11	7	15	10	275	275
47	12	8	17	11	276	276
48	14	8	19	12	279	279
49	15	9	22	14	283	283
50	17	10	25	15	289	289
51	19	11	28	16	297	297
52	22	12	31	18	310	310
53	25	14	35	19	327	327
54	28	15	39	21	348	348
55	31	16	43	23	371	371
56	35	18	48	25	395	395
57	39	19	52	28	417	417
58	43	21	57	31	437	437
59	48	23	61	34	455	455
60	52	25	66	38	473	473
61	57	28	71	42	494	494
62	61	31	77	47	516	516
63	66	34	84	52	541	541
64	71	38	92	58	569	569
65	77	42	101	64	598	598
66	84	47	111	71	628	628
67	92	52	124	78	658	658
68	101	58	139	87	687	687
69	111	64	156	97	716	716

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

Rates of Disability:

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

Age	Disability	Age	Disability
20	1	45	4
21	1	46	4
22	1	47	4
23	1	48	4
24	1	49	4
25	1	50	7
26	1	51	7
27	1	52	7
28	1	53	7
29	1	54	7
30	2	55	14
31	2	56	14
32	2	57	14
33	2	58	14
34	2	59	14
35	2	60	29
36	2	61	29
37	2	62	29
38	2	63	29
39	2	64	29
40	2		
41	2		
42	2		
43	2		
44	2		

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

Rates of Termination:

Years of Service	Number of Terminations per 1,000 Active Members	
	Male	Female
0	400	400
1	180	160
2	110	100
3	90	70
4	44	62
5	41	55
6	38	48
7	35	41
8	32	30
9	29	28
10	26	26
11& Over	16	10

Rates of Retirement:

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

Age	Basic Members Eligible for Rule of 90 Provision	Basic Members Not Eligible for Rule of 90 Provision	Coordinated Members Eligible for Rule of 90 Provision	Coordinated Members Not Eligible for Rule of 90 Provision
<55	5,000	0	5,000	0
55	5,000	800	5,000	500
56	5,000	1,300	5,000	500
57	4,000	1,300	4,000	500
58	4,000	1,800	4,000	700
59	3,500	1,800	4,000	700
60	3,500	2,000	4,000	700
61	3,500	2,000	4,500	1,000
62	3,500	4,000	4,500	2,000
63	3,500	4,000	3,000	2,000
64	4,000	4,000	3,000	2,000
65	5,000	5,000	5,000	3,500
66	3,000	5,000	3,000	3,000
67	3,000	5,000	3,000	3,000
68	3,000	5,000	3,000	3,000
69	3,000	5,000	3,000	3,000
70 & Over	10,000	10,000	10,000	10,000

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

**B. Economic Assumptions**

- Investment Return Rate: Pre-retirement - 8.50% per annum  
Post-retirement - 8.50% per annum
- Cost of Living Increases: 0.00% at January 1, 2011 (actual); 2.00% per annum thereafter
- Future Salary Increases: In addition to the age-based rates shown below, during the first ten years of employment, a service-based component of 0.30% x (10-T), where T is completed years of service, is included in the salary increase used.

*Annual Salary Increases*

Age	Ultimate Rate of Annual Salary Increases	Age	Ultimate Rate of Annual Salary Increases
<22	6.90%	45	5.75%
23	6.85	46	5.70
24	6.80	47	5.65
		48	5.60
25	6.75	49	5.55
26	6.70		
27	6.65	50	5.50
28	6.60	51	5.45
29	6.55	52	5.40
		53	5.35
30	6.50	54	5.30
31	6.45		
32	6.40	55	5.25
33	6.35	56	5.20
34	6.30	57	5.15
		58	5.10
35	6.25	59	5.05
36	6.20		
37	6.15	60 & Over	5.00
38	6.10		
39	6.05		
40	6.00		
41	5.95		
42	5.90		
43	5.85		
44	5.80		

- Asset Value: The actuarial value of assets is smoothed by using a five-year average market value.

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2010**

---

**C. Other Assumptions**

Marital Status:	It is assumed that 85% of male members and 60% of female members have an eligible spouse. The male spouse is assumed four years older than the female spouse. Married members are assumed to have two dependent children.
Deferred Benefit Commencement:	Basic Plan members who terminate vested are assumed to commence benefits at age 60. Coordinated Plan members are assumed to commence benefits at age 63. If the member is already past the assumed deferral age, the member is assumed to commence benefits one year from the valuation date.
Administrative Expenses:	Prior year administrative expenses (excluding investment expenses) expressed as a percentage of prior year payroll.
Allowance for Combined Service Annuity:	7.00% load on liabilities for active members and 30.00% load on liabilities for former members.
Missing Salary and Salary Minimums:	Active members with reported salaries of \$100 or less were assumed to have the average non-zero active salary. Deferred vested members without salary information were valued using accumulated contributions. For members on leave of absence at valuation date who were not on leave at the prior valuation date, the prior year's valuation pay was used. Active members with salaries less than those reported at the prior valuation date are valued using their prior salary amount.
Accelerated Benefit Option:	Retired members who have elected the accelerated benefit option and who have not yet attained the age of 65 are assumed to receive 50 percent of their pre-65 benefit after age 65.
Supplemental Contributions:	According to 1996 legislation, the St. Paul School District and the State of Minnesota are scheduled to make a combined annual supplemental contribution of \$1,230,000. According to 1997 legislation, annual supplemental contributions of \$2,827,000 are scheduled to be paid on October 1.
Decrement Timing:	Retirement and Termination: end of valuation year - consistent with retirements and terminations occurring at the end of the school year.  Death and Disability: middle of valuation year.

---

**SECTION 5**  
BASIC PLAN

---



**TABLE 3A**  
**BASIC ACTIVE MEMBERS AS OF JUNE 30, 2010**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<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	0	0	0	0	0
50-54	0	0	0	0	0	0	1	0	1
55-59	0	0	0	0	1	4	24	5	34
60-64	0	0	0	0	0	2	11	18	31
65+	0	0	0	0	0	0	0	3	3
ALL	0	0	0	0	1	6	36	26	69

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<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	0	0	0	0	0
50-54	0	0	0	0	0	0	82,829	0	82,829
55-59	0	0	0	0	91,307	77,798	83,261	84,081	82,976
60-64	0	0	0	0	0	81,265	88,445	82,829	84,721
65+	0	0	0	0	0	0	0	114,637	114,637
ALL	0	0	0	0	91,307	78,954	84,833	86,740	85,134

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	ALL
ALL	0	0	0	0	91	474	3,054	2,255	5,874

**TABLE 4A**  
**BASIC SERVICE RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Retired									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	47	1	0	0	0	0	0	0	0	48
60-64	158	195	0	0	0	0	0	0	0	353
65-69	45	190	147	2	0	0	1	0	0	385
70-74	4	60	204	75	1	0	0	0	0	344
75-79	0	2	73	160	53	1	1	0	0	290
80-84	0	0	8	58	99	39	1	0	0	205
85-89	0	0	0	11	50	63	10	0	0	134
90+	0	1	0	1	4	19	34	6	0	65
ALL	254	449	432	307	207	122	47	6	0	1,824

**AVERAGE ANNUAL BENEFIT**

Age	Years Retired									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	41,894	19,947	0	0	0	0	0	0	0	41,437
60-64	43,549	41,530	0	0	0	0	0	0	0	42,434
65-69	41,659	39,325	34,462	19,522	0	0	53,170	0	0	37,674
70-74	82,222	48,179	43,319	40,076	64,022	0	0	0	0	43,972
75-79	0	52,304	53,675	42,095	31,536	58,219	56,772	0	0	43,257
80-84	0	0	47,124	56,979	32,804	25,480	62,703	0	0	38,955
85-89	0	0	0	46,286	34,449	32,154	30,424	0	0	34,041
90+	0	55,535	0	73,878	27,324	28,559	23,593	22,187	0	26,409
ALL	43,517	41,517	42,126	44,520	32,922	29,674	27,214	22,187	0	40,245

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	11,053	18,641	18,198	13,668	6,815	3,620	1,279	133	0	73,407

**TABLE 5A**  
**BASIC DISABILITY RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	2	0	0	0	0	0	0	0	0	2
60-64	3	4	1	0	0	0	0	0	0	8
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	5	4	1	0	0	0	0	0	0	10

**AVERAGE ANNUAL BENEFIT**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	32,909	0	0	0	0	0	0	0	0	32,909
60-64	40,015	55,392	59,152	0	0	0	0	0	0	50,095
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	37,173	55,392	59,152	0	0	0	0	0	0	46,658

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	186	222	59	0	0	0	0	0	0	467

**TABLE 6A**  
**BASIC SURVIVORS AS OF JUNE 30, 2010**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	1	0	0	0	0	0	0	0	1
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	2	1	0	0	0	0	0	1	4
60-64	1	4	3	3	3	1	0	0	0	15
65-69	0	4	7	6	4	1	0	0	0	22
70-74	1	1	11	20	8	2	2	0	0	45
75-79	0	1	2	12	19	6	1	0	0	41
80-84	0	0	0	4	26	27	5	2	0	64
85-89	0	0	0	1	6	19	11	2	0	39
90+	0	0	0	0	3	6	12	8	0	29
ALL	2	13	24	46	69	62	31	12	1	260

**AVERAGE ANNUAL BENEFIT**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	0	11,317	0	0	0	0	0	0	0	11,317
45-49	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	0	0	0
55-59	0	11,857	13,331	0	0	0	0	0	3,350	10,099
60-64	47,825	17,084	31,159	32,776	19,689	19,389	0	0	0	25,761
65-69	0	40,001	36,494	36,844	19,696	23,172	0	0	0	33,567
70-74	61,382	9,345	40,393	37,976	28,903	17,994	23,131	0	0	35,290
75-79	0	38,329	35,866	41,339	34,120	26,288	26,544	0	0	35,090
80-84	0	0	0	33,742	30,300	28,555	19,791	40,216	0	29,268
85-89	0	0	0	66,874	34,274	27,286	25,728	18,497	0	28,486
90+	0	0	0	0	31,388	23,907	20,834	24,808	0	23,658
ALL	54,604	23,927	36,597	38,627	30,507	26,922	22,735	26,324	3,350	30,283

**Total Annual Benefit (IN THOUSANDS) by Years Since Member Death**

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	109	311	878	1,777	2,105	1,669	705	316	3	7,874

**TABLE 11A**  
**BASIC DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2010**  
**(dollars in thousands)**

---

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	8.00%	\$ 494
2. Employer Contributions	11.64%	718
3. Supplemental Contribution		
a. 1996 Legislation	0.49%	30
b. 1997 Legislation	1.13%	70
4. Total	21.26%	\$ 1,312
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	10.42%	\$ 644
b. Disability Benefits	0.30%	18
c. Surviving Spouse and Child Benefits	0.11%	7
d. Deferred Retirements	2.31%	142
e. Total	13.14%	\$ 811
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 6,174

# **SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2010**

---

## **STATUTORY CONTRIBUTIONS**

The statutory contributions for members and the employer are 8.00% and 11.64% of salary respectively. The member rate will increase from 8.00% to 9.00%, and the employer rate will increase from 11.64% to 12.64%, by 0.25% increments over four years, with the first increase scheduled on July 1, 2011.

## **PARTICIPANTS**

Professional Educators first employed prior to July 1, 1978 by schools in the City of St. Paul or St. Paul Technical College (including charter schools) whose position requires a license from the Minnesota Department of Education, who are not covered under the Social Security Act.

## **ACCREDITED SERVICE**

Service which has been verified and accredited by the Association for the purpose of determining dues and benefits. May include service earned while working outside of St. Paul Public Schools, previous St. Paul service, military service and governmental service.

## **ACCREDITED ST. PAUL SERVICE**

Service earned as a licensed educator in the St. Paul Public Schools, in the St. Paul Technical College, or in certain charter schools, or as an employee of the Association. Also includes accredited service earned as a licensed teacher on leave.

## **SALARY**

Total compensation earned during a school year (July 1 to June 30) excluding lump sum payments for unused leave at termination and employer-paid insurance coverage.

## **AVERAGE SALARY**

Average of the highest five years of Salary during the last 10 years of St. Paul service while making contributions or while disabled.

## **NORMAL RETIREMENT BENEFIT**

### ***Eligibility***

Attainment of age 65 and 5 years of Accredited Service.

### ***Benefit***

2.50 percent of Average Salary for each year of Accredited Service.

## SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2010

---

### **EARLY RETIREMENT BENEFIT**

#### ***Eligibility***

Attainment of age 55 and 5 years of Accredited Service.

#### ***Benefit***

The greater of the following benefits:

- 2.00 percent of Average Salary per year of Accredited Service, subject to a maximum of 40 years with a 0.25% reduction for each month the member is under age 65. If the member has 25 years of Accredited Service, the reduction is taken from age 60, and no reduction is required if the member is age 60 or older. No reduction is taken if age plus years of Accredited Service totals at least 90.
- 2.50 percent of Average Salary per year of Accredited Service, subject to a maximum of 40 years, augmented at 3.00 percent compounded annually from the age at retirement until age 65 and then actuarially reduced for each month the member is under age 65.

### **DISABILITY RETIREMENT BENEFIT**

#### ***Eligibility***

Total and permanent disablement before attaining age 65 and 5 years of Accredited Service.

#### ***Benefit***

If the member is under age 65, 75 percent of the member's annual contract salary less any Social Security and Workers' Compensation benefits payable until age 65. At age 65, a normal retirement benefit is calculated using the projected service and average salary as if the member had continued to teach in their position held at the time of disability. Members age 65 or older at time of disability receive a normal retirement benefit.

### **DEFERRED RETIREMENT BENEFIT**

#### ***Eligibility***

5 years of Accredited Service.

#### ***Benefit***

2.50 percent of Average Salary per year of Accredited Service augmented at 3.00 percent compounded annually from the age at termination until 55 and then augmented at 5.00 percent compounded annually from age 55 to the age at which benefits commence. The benefit is actuarially reduced for each month the member is under age 65 at benefit commencement.

## SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2010

---

### **ACTIVE SURVIVOR BENEFIT (Family Benefit)**

#### ***Eligibility***

Active member with three years of Accredited Service.

#### ***Benefit***

- Children's Benefit: 25 percent of the maximum B.A. salary for the year in which the member died for each eligible child up to a maximum of two. Benefits are paid until the child attains age 18, or 22 for full-time students.
- Spousal Benefit: 15 percent of the maximum B.A. salary for an eligible spouse who has legal custody of an eligible child. Spousal benefits cease when the spouse remarries, dies, or elects the regular survivor benefit. Electing the regular survivor benefit does not disqualify the child from receiving the family benefit.

### **SURVIVOR BENEFIT (Active or Retired Member)**

#### ***Eligibility***

Active member or retired member with five years of Accredited Service. A surviving spouse must have been married to the member for three years at the earlier of his death or retirement.

#### ***Benefit***

Retirement benefit earned at the time of death or retirement, whichever is earlier, reduced by the use of one hundred percent joint survivorship tables, based on the ages of the member and survivor at the time of retirement.

### **REFUND OF CONTRIBUTIONS**

#### ***Eligibility***

Termination or death where no annuity is payable or a refund of contributions is chosen in lieu of an annuity.

#### ***Benefit***

Member contributions with 6.00 percent interest (5.00 percent if terminated before May 16, 1989).

### **NORMAL FORM OF RETIREMENT BENEFITS**

Unreduced annuity payments made until the death of the member, with a 100 percent Joint & Survivor adjusted pension payable to the surviving beneficiary.



## SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2010

---

### **BENEFIT INCREASES**

#### ***Statutory Formula***

2.00 percent compounded annually. Increases occur on January 1st of each year. To be eligible, the member must have been receiving benefits for at least 12 months at the prior fiscal year end. Survivors and beneficiaries are entitled to the same benefit increases the member would have received.

#### ***Temporary Session Law Pilot Study Formula***

For calendar years 2010 and 2011, the post-retirement adjustment is to be determined differently under a pilot project authorized by the Legislature. Increases will be equal to the Consumer Price Index urban wage earners and clerical workers all items index as reported by the Bureau of Labor Statistics within the United States Department of Labor each year as part of the determination of annual cost of living adjustments (COLA) to recipients of federal old age, survivors, and disability insurance.

The cost-of-living adjustment is determined by dividing the most recent average of third quarter monthly index values by the same average third quarter index value from the previous year, subtracting the quantity one from the resulting quotient, and expressing the result as a percentage amount, which must be rounded to the nearest one-tenth of one percent. The final amount may not be a negative number and may not exceed 5.0 percent. Partial increases are granted for new retirees in the calendar year immediately preceding the increase on the basis of whole calendar quarters that the benefit recipient has been in pay status, calculated to the third decimal place.

The 2010 Omnibus Pension Bill superseded the pilot COLA project and mandated a zero COLA for 2011.

---

**SECTION 6**  
COORDINATED PLAN

---

**TABLE 3B**  
**COORDINATED ACTIVE MEMBERS AS OF JUNE 30, 2010**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	61	0	0	0	0	0	0	0	61
25-29	256	54	0	0	0	0	0	0	310
30-34	153	219	62	0	0	0	0	0	434
35-39	101	133	247	32	0	0	0	0	513
40-44	86	105	198	147	9	0	0	0	545
45-49	73	77	121	127	104	17	0	0	519
50-54	45	61	97	108	85	71	24	0	491
55-59	64	51	111	97	96	78	55	5	557
60-64	43	36	43	50	44	30	20	8	274
65+	27	9	9	4	9	4	0	2	64
<b>ALL</b>	909	745	888	565	347	200	99	15	3,768

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	21,600	0	0	0	0	0	0	0	21,600
25-29	35,252	52,859	0	0	0	0	0	0	38,319
30-34	37,781	56,351	63,540	0	0	0	0	0	50,831
35-39	41,725	56,599	67,795	76,706	0	0	0	0	60,315
40-44	35,068	62,027	68,769	75,941	93,874	0	0	0	64,501
45-49	36,344	64,636	71,343	74,200	82,703	88,645	0	0	68,967
50-54	29,507	58,266	68,842	77,054	77,332	82,139	84,032	0	69,864
55-59	33,530	48,789	67,614	75,889	76,425	78,362	86,049	82,350	68,391
60-64	19,500	43,997	71,306	76,287	75,551	84,048	80,566	90,466	63,809
65+	14,173	33,684	56,098	77,628	68,274	81,394	0	88,817	40,920
<b>ALL</b>	33,774	56,567	68,342	75,839	78,659	81,490	84,452	87,541	60,946

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	ALL
<b>ALL</b>	30,701	42,142	60,687	42,849	27,295	16,298	8,361	1,313	229,646

**TABLE 4B**  
**COORDINATED SERVICE RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Retired									ALL	
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over		
<45	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0
50-54	0	1	0	0	0	0	0	0	0	0	1
55-59	87	0	0	0	0	0	0	0	0	0	87
60-64	209	55	0	0	0	0	0	0	0	0	264
65-69	139	106	30	1	0	0	0	0	0	0	276
70-74	28	69	52	9	0	0	0	0	0	0	158
75-79	3	19	33	19	0	0	0	0	0	0	74
80-84	1	3	3	13	4	0	0	0	0	0	24
85-89	0	2	2	0	6	1	0	0	0	0	11
90+	0	0	0	0	1	1	0	0	0	0	2
ALL	467	255	120	42	11	2	0	0	0	0	897

**AVERAGE ANNUAL BENEFIT**

Age	Years Retired									ALL	
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over		
<45	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0
50-54	0	2,400	0	0	0	0	0	0	0	0	2,400
55-59	19,059	0	0	0	0	0	0	0	0	0	19,059
60-64	20,079	20,156	0	0	0	0	0	0	0	0	20,095
65-69	16,843	15,141	10,916	19,631	0	0	0	0	0	0	15,555
70-74	18,151	16,317	13,767	10,998	0	0	0	0	0	0	15,500
75-79	18,882	10,040	14,718	13,622	0	0	0	0	0	0	13,404
80-84	1,465	15,527	5,008	16,127	4,041	0	0	0	0	0	12,037
85-89	0	26,260	36,534	0	9,937	12,577	0	0	0	0	17,981
90+	0	0	0	0	3,431	3,717	0	0	0	0	3,574
ALL	18,763	16,203	13,476	13,978	7,202	8,147	0	0	0	0	16,938

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	8,762	4,132	1,617	587	79	16	0	0	0	15,194

**TABLE 5B**  
**COORDINATED DISABILITY RETIREMENTS AS OF JUNE 30, 2010**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	1	0	0	0	0	0	0	0	0	1
45-49	2	0	0	0	0	0	0	0	0	2
50-54	0	1	0	1	0	0	0	0	0	2
55-59	3	2	0	0	0	0	0	0	0	5
60-64	3	0	0	0	0	0	0	0	0	3
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	9	3	0	1	0	0	0	0	0	13

**AVERAGE ANNUAL BENEFIT**

Age	Years Disabled									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	7,492	0	0	0	0	0	0	0	0	7,492
45-49	12,238	0	0	0	0	0	0	0	0	12,238
50-54	0	23,472	0	5,364	0	0	0	0	0	14,418
55-59	9,475	17,838	0	0	0	0	0	0	0	12,821
60-64	3,157	0	0	0	0	0	0	0	0	3,157
65-69	0	0	0	0	0	0	0	0	0	0
70-74	0	0	0	0	0	0	0	0	0	0
75-79	0	0	0	0	0	0	0	0	0	0
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	0	0	0	0	0	0	0
90+	0	0	0	0	0	0	0	0	0	0
ALL	7,763	19,716	0	5,364	0	0	0	0	0	10,337

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

Age	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	ALL
ALL	70	59	0	5	0	0	0	0	0	134

**TABLE 6B**  
**COORDINATED SURVIVORS AS OF JUNE 30, 2010**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	5	3	5	0	0	0	0	0	0	13
45-49	0	0	0	0	0	0	0	0	0	0
50-54	3	1	0	0	0	0	0	0	0	4
55-59	1	2	0	0	0	0	0	0	0	3
60-64	1	3	0	1	0	0	0	0	0	5
65-69	0	3	1	0	0	0	0	0	0	4
70-74	0	4	2	0	0	0	0	0	0	6
75-79	0	0	1	2	0	0	0	0	0	3
80-84	0	0	0	1	0	0	0	0	0	1
85-89	0	0	0	1	0	0	0	0	0	1
90+	0	0	0	0	0	0	0	0	0	0
ALL	10	16	9	5	0	0	0	0	0	40

**AVERAGE ANNUAL BENEFIT**

Age	Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
<45	1,592	15,213	1,814	0	0	0	0	0	0	4,821
45-49	0	0	0	0	0	0	0	0	0	0
50-54	8,769	660	0	0	0	0	0	0	0	6,742
55-59	18,344	15,388	0	0	0	0	0	0	0	16,373
60-64	15,460	12,351	0	12,955	0	0	0	0	0	13,094
65-69	0	14,474	3,885	0	0	0	0	0	0	11,827
70-74	0	20,111	24,737	0	0	0	0	0	0	21,653
75-79	0	0	13,925	16,690	0	0	0	0	0	15,768
80-84	0	0	0	1,483	0	0	0	0	0	1,483
85-89	0	0	0	13,066	0	0	0	0	0	13,066
90+	0	0	0	0	0	0	0	0	0	0
ALL	6,807	14,875	8,484	12,177	0	0	0	0	0	11,083

Age	Total Annual Benefit (IN THOUSANDS) by Years Since Member Death									ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Over	
ALL	68	238	76	61	0	0	0	0	0	443

**TABLE 11B**  
**COORDINATED DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2010**  
**(dollars in thousands)**

	Percent of Payroll	Dollar Amount
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.50%	\$ 13,423
2. Employer Contributions	8.34%	\$ 20,354
3. Supplemental Contribution		
a. 1996 Legislation	0.49%	1,200
b. 1997 Legislation	1.13%	2,757
4. Total	15.46%	\$ 37,734
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	6.49%	\$ 15,831
b. Disability Benefits	0.11%	277
c. Surviving Spouse and Child Benefits	0.14%	347
d. Deferred Retirements	1.42%	3,469
e. Total	8.16%	\$ 19,924
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 244,051

# SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS AS OF JULY 1, 2010

---

## **STATUTORY CONTRIBUTIONS**

The statutory contributions for members and the employer are 5.50% and 8.34% respectively. The member rate will increase from 5.50% to 6.50%, and the employer rate will increase from 8.34% to 9.34%, by 0.25% increments over four years, with the first increase scheduled on July 1, 2011.

## **PARTICIPANTS**

Professional educators in the public schools of the City of St. Paul, excluding charter schools, whose position requires a license from the Minnesota Department of Education, and who are covered under the Social Security Act and make contributions to the St. Paul Teachers' Retirement Fund Association are covered under the Coordinated Plan.

## **ALLOWABLE SERVICE**

Service rendered while making employee contributions. Service is granted on a proportional basis for part-time teachers.

## **SALARY**

Total compensation excluding lump sum payments for unused leave at termination and employer-paid insurance coverage.

## **AVERAGE SALARY**

Average of the highest five successive years of Salary while making contributions. In cases where the Allowable Service is less than five years, Average Salary is based on the years available.

## **NORMAL RETIREMENT BENEFIT**

### ***Eligibility***

Three years of Allowable Service. The eligibility age is 65 for those hired before July 1, 1989, and the earlier of eligibility for full Social Security retirement benefits to a maximum of age 66 for those hired on or after July 1, 1989. A Proportionate Retirement Annuity is available at Normal Retirement Age with one year of Allowable Service.

### ***Benefit***

1.70 percent of Average Salary for each year of Allowable Service.



# SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS AS OF JULY 1, 2010

---

## **EARLY RETIREMENT BENEFIT**

### ***Eligibility***

Attainment of age 55 and 3 years of Allowable Service.

### ***Benefit***

Members hired before July 1, 1989, are eligible for the greater of the following benefits. Members hired after July 1, 1989, are eligible for the benefits shown in item (b):

- a) 1.20 percent of Average Salary for each of the first ten years of Allowable Service plus 1.70 percent of Average Salary for each subsequent year of Allowable Service. There is a reduction of 0.25 percent for each month the member is under age 65, or under age 62 with 30 years of Allowable Service. No reduction applies if the age plus years of service totals at least 90.
- b) 1.70 percent of Average Salary per year of Allowable Service augmented at 3.00 percent compounded annually from the age at retirement until age 65 and then actuarially reduced for each month the member is under age 65. The augmentation rate is 2.50 percent for members first hired after June 30, 2006.

## **DISABILITY RETIREMENT BENEFIT**

### ***Eligibility***

Total and permanent disablement and three years of Allowable Service with at least two years of Allowable Service since the last interruption in service.

### ***Benefit***

Normal retirement benefit payable for life without reduction for early commencement. The benefit is reduced by any Workers' Compensation benefits payable.

## **DEFERRED RETIREMENT BENEFIT**

### ***Eligibility***

Three years of Allowable Service.

### ***Benefit***

Benefit computed under law in effect at termination and payable as a normal or early retirement benefit. For members hired on or before June 30, 2006, the benefit is augmented at 3.00 percent compounded annually from the age at termination until 55 and then augmented at 5.00 percent compounded annually from age 55 to the age at which benefits commence. For members hired after June 30, 2006, the benefit is augmented at 2.5% compounded annually from the age at termination to the age at which benefits commence.

## **SURVIVOR BENEFIT (Active Members)**

### ***Eligibility***

Active member with three years of Allowable service. A surviving spouse is defined as the person legally married to the member at the time of death. If none, a dependent child who is the legal child of the member, who is less than 20 years of age and unmarried.

## **SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS AS OF JULY 1, 2010**

---

### ***Benefit***

Retirement benefit earned at the time of death reduced for 100 percent joint survivorship and payable at the time the member would have attained age 55 or immediately if the former member had attained age 55 at time of death. The benefit is subject to 50 percent of the applicable actuarial reduction for early commencement from normal retirement age.

### **REFUND OF CONTRIBUTIONS**

#### ***Eligibility***

Termination or death where no annuity is payable or a refund of contributions is chosen in lieu of an annuity.

#### ***Benefit***

Member contributions with 6.00 percent interest (5.00 percent if terminated before May 16, 1989).

### **NORMAL FORM OF RETIREMENT BENEFITS**

Straight life annuity. Actuarially equivalent options are available to provide post-retirement survivor benefits.

### **BENEFIT INCREASES**

#### ***Statutory Formula***

2.00 percent compounded annually. Increases occur on January 1<sup>st</sup> of each year. To be eligible, the member must have been receiving benefits for at least 12 months at the prior fiscal year end. Beneficiaries are entitled to the same benefit increases the member would have received.

#### ***Temporary Session Law Pilot Study Formula***

For calendar years 2010 and 2011, the post-retirement adjustment is to be determined differently under a pilot project authorized by the Legislature. Increases will be equal to the Consumer Price Index urban wage earners and clerical workers all items index as reported by the Bureau of Labor Statistics within the United States Department of Labor each year as part of the determination of annual cost of living adjustments (COLA) to recipients of federal old age, survivors, and disability insurance.

The cost-of-living adjustment is determined by dividing the most recent average of third quarter monthly index values by the same average third quarter index value from the previous year, subtracting the quantity one from the resulting quotient, and expressing the result as a percentage amount, which must be rounded to the nearest one-tenth of one percent. The final amount may not be a negative number and may not exceed 5.0 percent. Partial increases are granted for new retirees in the calendar year immediately preceding the increase on the basis of whole calendar quarters that the benefit recipient has been in pay status, calculated to the third decimal place.

The 2010 Omnibus Pension Bill superseded the pilot COLA project and mandated a zero COLA for 2011.

---

**SECTION 7**  
GASB DISCLOSURES

---

**TABLE 14**  
**SCHEDULE OF FUNDING PROGRESS**  
(dollars in thousands)

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%
07/01/02	899,572	1,141,300	241,728	78.82%	201,456	119.99%
07/01/03	898,760	1,189,361	290,601	75.57%	205,655	141.31%
07/01/04	898,860	1,251,460	352,600	71.82%	221,685	159.05%
07/01/05	905,292	1,299,832	394,540	69.65%	223,762	176.32%
07/01/06	938,919	1,346,072	407,153	69.75%	226,351	179.88%
07/01/07	1,015,722	1,380,151	364,429	73.59%	229,172	159.02%
07/01/08	1,075,951	1,432,040	356,089	75.13%	235,993	150.89%
07/01/09	1,049,954	1,454,314	404,360	72.20%	243,166	166.29%
07/01/10	1,001,444	1,471,630	470,186	68.05%	239,996	195.91%

**TABLE 15**  
**SCHEDULE OF EMPLOYER CONTRIBUTIONS**  
(dollars in thousands)

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 <sup>(1)</sup>	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	77.95
1995	18.63%	139,175	8,788	17,140	13,084	76.34
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	21,898	21,066	96.20
2000	18.09%	187,950	13,184	20,816	22,622	108.68
2001	16.57%	202,915	13,170	20,453	23,569	115.23
2002	15.81%	201,456	14,468	17,382	24,216	139.32
2003	18.56% <sup>(2)</sup>	205,655	14,222	23,948	23,370	97.59
2004	20.36%	221,685	14,308	30,827	23,771	77.11
2005	21.59%	223,762	13,587	34,723	23,833	68.64
2006	23.78%	226,351	13,453	40,373	24,015	59.48
2007	24.55%	229,172	13,438	42,823	24,117	56.32
2008	23.40%	235,993	13,642	41,580	24,285	58.40
2009	17.63%	243,166	13,864	29,007	24,844	85.65
2010	18.40%	239,996	13,832	30,328	25,126	82.85

<sup>(1)</sup> Includes contributions from other sources (if applicable)

<sup>(2)</sup> Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 16.19%

**TABLE 16**  
**DEVELOPMENT OF THE FUND**  
(dollars in thousands)

<u>Year Ended June 30</u>	<u>Employer Contributions</u>	<u>Employee Contributions</u>	<u>Supplemental Contributions</u>	<u>Net Investment Return</u>	<u>Administrative Expenses</u>	<u>Benefit Payments</u>	<u>Actuarial Value of Assets EOY</u>
2002	-	-	-	-	-	-	\$ 899,572
2003	\$ 19,186	\$ 14,222	\$ 4,184	\$ 26,429	\$ 499	\$ 64,334	898,760
2004	20,378	14,308	3,393	31,417	516	68,880	898,860
2005	20,435	13,587	3,398	43,082	559	73,510	905,293
2006	19,815	13,453	4,200	76,317	591	79,567	938,919
2007	19,666	13,438	4,451	124,214	696	84,271	1,015,722
2008	20,775	13,642	3,509	112,804	691	89,810	1,075,951
2009	21,501	13,864	3,343	28,924	605	93,024	1,049,954
2010	21,018	13,832	4,108	9,496	602	96,362	1,001,444

**TABLE 17**  
**GASB SUPPLEMENTARY INFORMATION**

---

<b>Valuation Date</b>	July 1, 2010
<b>Actuarial Cost Method</b>	Entry Age Normal
<b>Amortization Method</b>	Level Percent of Pay, Open, Assuming Five Percent Payroll Growth
<b>Amortization Period</b>	25 year open period
<b>Asset Valuation Method</b>	5-Year Smoothed Market
<b>Actuarial Assumptions:</b>	
Investment rate of return	8.50% Pre-retirement and Post-retirement
Projected salary increases	5.00% - 9.90%; age and service based
Cost-of-living adjustments	2.00% *
<b>Plan Membership:</b>	
Active Members	3,837
Retirees and Beneficiaries	3,044
Terminated Vested Members	1,863
Other Non-Vested Terminated Members	<u>1,419</u>
Total	10,163

*\*Cost-of-living adjustments at January 1, 2011 will be 0.00% due to the COLA Pilot Program.*

November 8, 2010

Ms. Christine MacDonald  
St. Paul Teachers' Retirement Fund Association  
1619 Dayton Avenue, Room 309  
Saint Paul, MN 55104-6206

Dear Chris:

Enclosed are 16 bound copies and one unbound copy of the July 1, 2010 actuarial valuation report for the St. Paul Teachers' Retirement Fund Association. I look forward to presenting the results of the report to the Board of Trustees in December.

Sincerely,



W. James Koss

WJK:mrb  
Enclosures

cc: Mr. Larry Martin, Executive Director,  
Legislative Commission on Pensions and Retirement, (2 bound copies)  
Mr. Tom Hanson, Commissioner,  
Minnesota Management & Budget, (2 bound copies)  
Legislative Reference Library, (2 bound copies)  
Cathy Nagy, GRS