

**ST. PAUL TEACHERS' RETIREMENT FUND ASSOCIATION**  
**ACTUARIAL VALUATION**  
**AS OF JULY 1, 2011**

December 2, 2011

Mr. Paul V. Doane  
Executive Director  
St. Paul Teachers' Retirement Fund Association  
1619 Dayton Avenue, Room 309  
St. Paul, MN 55104-6206

Dear Mr. Doane:

We are pleased to present the report of the actuarial valuation of the St. Paul Teachers' Retirement Fund Association ("Fund") as of July 1, 2011. This report provides among other things, the required annual contribution rate of the Fund for the Plan Year commencing July 1, 2011, and ending on June 30, 2012.

The valuation was based upon information furnished by the Fund staff, concerning Retirement Fund benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. Their efforts in furnishing the materials needed are gratefully acknowledged. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Fund.

The report has been prepared at the request of the Fund's Board of Trustees 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. This report is intended for use by the Fund and those determined or approved by the Fund's Board of Trustees. This report may be provided to parties other than the Fund only in its entirety and only with the permission of the Board.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

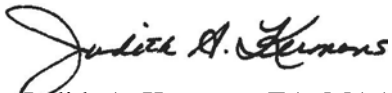
Mr. Paul V. Doane  
December 2, 2011  
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This report should not be relied on for any purpose other than the purpose described in the primary communication.

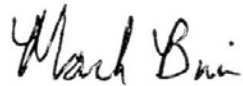
The undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. The signing actuaries are independent of the plan sponsor.

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

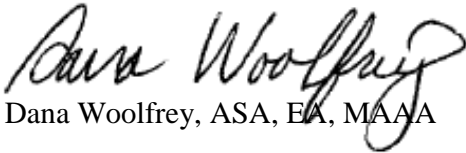
Respectfully submitted,



Judith A. Kermans, EA, MAAA, FCA



Mark Buis, FSA, EA, MAAA



Dana Woolfrey, ASA, EA, MAAA

JAK/MB/DW:lr

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## **SUMMARY OF VALUATION RESULTS**

**(dollars in thousands)**

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This report sets forth the results of the actuarial valuation of the St. Paul Teachers' Retirement Fund Association ("Fund") as of July 1, 2011. 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 decreased from \$1,471.6 to \$1,389.9 million. Increases due to expected growth were offset by changes to the benefit provisions. The changes to the benefit provisions reduced the liabilities by \$116.9 million. The main component of the liability changes due to experience during the year was salary increases less than expected which created a gain of \$10.9 million. Also, there were losses on an actuarial value of assets of \$51.2 million.

The funded ratio based on actuarial value of assets increased from 68.05% at July 1, 2010, to 69.99% at July 1, 2011. This increase was due to changes in benefit provisions. The improvement would have been greater had it not been for the portion of recognized investment losses from fiscal years 2008 and 2009. All investment losses from fiscal year 2008 have now been recognized.

The required contribution rate decreased from 19.84% for fiscal year ending June 30, 2011, to 18.37% for fiscal year ending June 30, 2012, due to plan changes. 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 16.10%, a shortfall of 2.27%.

### **Comment on Mortality Assumptions**

The Actuarial Standard of Practice with regard to the mortality assumption has recently been revised. ASOP No. 35 Disclosure Section 4.1.1 now states "The disclosure of the mortality assumption should contain sufficient detail to permit another qualified actuary to understand the provision made for future mortality improvement. If the actuary assumes zero mortality improvement after the measurement date, the actuary should state that no provision was made for future mortality improvement."

There is currently no margin for future mortality improvement in the current mortality assumption. We recommend that the mortality assumption be reviewed in conjunction with an experience study to determine the appropriate margin (if any) to be used in the July 1, 2012 valuation.

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

	<b>July 1, 2010</b>	<b>July 1, 2011</b>
	<b>Valuation</b>	<b>Valuation</b>
<b>A. CONTRIBUTIONS % OF PAYROLL (Table 11)</b>		
1. Statutory Contributions - Chapter 354A	15.60%	16.10%
2. Required Contributions - Chapter 356	19.84%	18.37%
3. Sufficiency / (Deficiency)	(4.24%)	(2.27%)
<b>B. FUNDING RATIOS</b>		
1. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 1,001,444	\$ 972,718
b. Actuarial Accrued Liability (Table 9)	1,471,630	1,389,875
c. Funding Ratio	68.05%	69.99%
2. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 1,579,825	\$ 1,543,568
b. Current and Expected Future Benefit Obligations	1,684,504	1,581,075
c. Funding Ratio	93.79%	97.63%
<b>C. PLAN PARTICIPANTS</b>		
1. Active Members		
a. Number (Table 3)	3,749	3,469
b. Projected Annual Earnings	\$ 250,225	\$ 239,501
c. Average Annual Earnings (Projected dollars)	\$ 64,714	\$ 66,937
d. Average Age	45.5	45.5
e. Average Service	12.3	12.4
f. Additional Members on Leave of Absence	88	109
2. Others		
a. Service Retirements (Table 4)	2,721	2,864
b. Disability Retirements (Table 5)	23	29
c. Survivors (Table 6)	300	319
d. Deferred Retirements (Table 7)	1,863	1,880
e. Terminated Other Non-Vested (Table 7)	1,419	1,698
f. Total - Others	6,326	6,790
3. Grand Total (1.a + 1.f + 2.f)	10,163	10,368

## SUMMARY OF VALUATION RESULTS

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### Participants

Active membership decreased 6.8% during fiscal year 2011 from 3,837 to 3,578 (figures include members on leave of absence). Total participants receiving benefits under the Fund, including disabled retirees and beneficiaries, increased 5.5% during fiscal year 2011 from 3,044 to 3,212. Total expenditures for these benefits increased from \$96.4 million to \$98.2 million during fiscal year 2011, or 1.9%.

### Changes in Provisions of the Fund

Effective July 1, 2011, for the next COLA payable January 1, 2012, the 2011 Omnibus Pension Bill modified statutes to provide a transitional change to the COLA. If the Accrued Liability Funding Ratio, based on the Actuarial Value of Assets, as determined by the most recent actuarial valuation is:

- Less than 80 percent, the COLA: 1.00 percent
- At least 80 percent, but less than 90 percent: 2.00 percent
- If at least 90 percent, then the subdivisions for the 1 percent and 2 percent provisions above will expire and COLAs will be paid as follows:
  - 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 COLA to recipients of federal old age, survivors, and disability insurance. The final amount may not be a negative number and may not exceed 5.0 percent.

In addition, interest credited to member contribution accounts was reduced from 6.00% to 4.00%. Augmentation of deferred retirement benefits was changed prospectively, starting July 1, 2012, to a rate of 2.0%.

The effect of these provision changes is shown on the following page.



## SUMMARY OF VALUATION RESULTS

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	<b>July 1, 2011 Prior to Plan Changes</b>	<b>July 1, 2011 Valuation</b>
<b>A. FUNDING RATIOS</b>		
1. Accrued Liability Funding Ratio		
a. Current Assets	\$ 972,718	\$ 972,718
b. Actuarial Accrued Liability	1,506,763	1,389,875
c. Funding Ratio	64.56%	69.99%
2. Projected Benefit Funding Ratio		
a. Current and Expected Future Assets	\$ 1,543,568	\$ 1,543,568
b. Current and Expected Future Benefit Obligations	1,712,677	1,581,075
c. Funding Ratio	90.13%	97.63%
<b>B. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.78%	5.78%
2. Employer Contributions	8.63%	8.63%
3. Supplemental Contribution		
a. 1996 Legislation	0.51%	0.51%
b. 1997 Legislation	1.18%	1.18%
4. Total	16.10%	16.10%
<b>C. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost	8.17%	7.59%
2. Supplemental Contribution Amortization	13.43%	10.49%
3. Allowance for Administrative Expenses	0.29%	0.29%
4. Total	21.89%	18.37%
<b>D. CONTRIBUTION SUFFICIENCY / (DEFICIENCY)</b>	(5.79)%	(2.27)%

### 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. In accordance with the provision change, the cost-of-living increase assumption was changed to 1.0% per annum. No other changes were made to the actuarial assumptions.

We recommend performing an experience study, covering the period from July 1, 2006 to June 30, 2011, prior to the July 1, 2012 actuarial valuation.

# SUMMARY OF VALUATION RESULTS

## 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 required contributions and ensures the Fund's assets will track the market value of assets.

## Experience Analysis

Overall, the Fund experienced a net gain of \$75.8 million (\$41.1 experience loss, \$116.9 provision changes). In general, salary increases were smaller than predicted under the current valuation assumption and produced an actuarial gain of \$10.9 million.

The largest component of the Fund's experience loss was once again investment losses. Although the market value of Fund assets returned 25% (net of fees) for the year ended June 30, 2011, higher than the 8.5% assumption, this was not sufficient to fully 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 \$51.2 million on the actuarial value of assets. The rate of return on the actuarial value of assets for 2011 is 3.2%.

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

## 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.

As of July 1, 2011, the actuarial value of assets was 102.4% 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, 2011, valuation results, if they had been based on the market value instead of smoothed actuarial value:

<b>Market Value Results as of July 1, 2011</b>	
Actuarial Accrued Liability	\$1,389.9 million
Market Value of Assets	\$ 950.1 million
Unfunded Actuarial Accrued Liability (Market Value Basis)	\$ 439.8 million
Funded Ratio (Market Value Basis)	68.36%
Required Contribution Rate (Market Value Basis)	18.94%
Shortfall (Market Value Basis)	2.84%

The State of Minnesota Legislative Commission on Pensions and Retirement established new Standards for Actuarial Work effective August 11, 2010. As part of the revised standards, the actuarial report as of July 1, 2012, for St. Paul Teachers' Retirement Fund Association must contain 30-year open group projections. The 30-year projections must be performed under three scenarios assuming:

1. All actuarial assumptions used in the valuation are met in future years including the assumed rate of return;
2. All actuarial assumptions are met but investments earn the valuation rate less 1.5 percent; and
3. All actuarial assumptions are met but investments earn the valuation rate plus 1.5 percent.

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## **SECTION 1**

### **ASSET INFORMATION**

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## ASSETS OF THE PLAN

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The cost value of the plan assets decreased from \$702.4 million as of June 30, 2010, to \$684.1 million as of June 30, 2011. The market value of the plan assets increased from \$815.3 million as of June 30, 2010, to \$950.1 million as of June 30, 2011. The expected return on assets using the valuation interest rate assumption of 8.5 percent was \$66.7 million. The actual plan experience showed a return on assets of \$194.9 million. Twenty percent of the asset return above the expected \$66.7 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 \$51.2 million on the actuarial value of assets.

Table 1 shows the composition of assets as of June 30, 2011, and the development of the actuarial value of assets as of June 30, 2011. Table 2 details the development of asset values during fiscal year 2011.

**TABLE 1**  
**ACCOUNTING BALANCE SHEET**  
**AS OF JUNE 30, 2011**  
**(dollars in thousands)**

	<u>Market Value</u>	<u>Cost Value</u>
<b>A. ASSETS</b>		
1. Cash, Equivalents, Short-Term Securities	\$ 11,558	\$ 11,558
2. Investments		
a. Fixed Income	160,270	117,919
b. Equity	681,854	462,609
c. Real Estate	83,565	80,748
d. Alternative	10,959	9,353
3. Other Assets*	<u>3,458</u>	<u>3,458</u>
<b>B. TOTAL ASSETS</b>	<u>\$ 951,664</u>	<u>\$ 685,645</u>
<b>C. AMOUNTS CURRENTLY PAYABLE</b>	\$ 1,543	\$ 1,542
<b>D. ASSETS AVAILABLE FOR BENEFITS</b>		
1. Member Reserves	\$ 142,548	\$ 142,548
2. Employer Reserves	<u>807,573</u>	<u>541,555</u>
3. Total Assets Available for Benefits	<u>\$ 950,121</u>	<u>\$ 684,103</u>
<b>E. TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS</b>	<u>\$ 951,664</u>	<u>\$ 685,645</u>
<b>F. DETERMINATION OF ACTUARIAL VALUE OF ASSETS</b>		
1. Market Value of Assets Available for Benefits (D.3)	\$ 950,121	
2. Unrecognized Asset Returns		
a. June 30, 2011	\$ 128,185	
b. June 30, 2010	36,792	
c. June 30, 2009	(280,135)	
d. June 30, 2008	(175,830)	
3. UAR Adjustment: $.80 * 2(a) + .60 * 2(b) + .40 * 2(c) + .20 * 2(d)$	<u>(22,597)</u>	
4. Actuarial Value of Assets (F.1 - F.3)	<u>\$ 972,718</u>	
<b>* DERIVATION OF OTHER ASSETS</b>	<u><b>Market Value</b></u>	
Accounts Receivable		
Employer Contribution	\$ 1,744	
Employee Contribution	100	
Service Purchases Receivable	52	
Pensions Receivable	17	
State Contributions	-	
Real Estate Income Receivable	39	
Commission Recapture Receivable	2	
Interest Receivable	1	
Dividend Receivable	192	
Misc. Receivable	1	
Security Purchases Receivable	-	
Sale of Securities	<u>1,290</u>	
Total Accounts Receivable	\$ 3,438	
Fixed Assets	<u>20</u>	
Total Other Assets	<u>\$ 3,458</u>	

**TABLE 2**  
**CHANGE(S) IN ASSETS AVAILABLE FOR BENEFITS**  
**AS OF JUNE 30, 2011**  
**(dollars in thousands)**

	<u>Market Value</u>	<u>Cost Value</u>
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 815,307	\$ 702,443
B. OPERATING REVENUES		
1. Member Contributions	\$ 13,745	\$ 13,745
2. Employer Contributions	21,013	21,013
3. Supplemental Contributions	4,077	4,077
4. Investment Income	7,690	7,690
5. Investment Expenses	(4,447)	(4,447)
6. Net Realized Gain / (Loss)	38,533	38,533
7. Other	-	-
8. Net Change in Unrealized Gain / (Loss)	<u>153,155</u>	<u>-</u>
9. Total Operating Revenue	\$ 233,766	\$ 80,612
C. OPERATING EXPENSES		
1. Service Retirements	\$ 87,997	\$ 87,997
2. Disability Benefits	731	731
3. Survivor Benefits	8,559	8,559
4. Refunds	943	943
5. Administrative Expenses	<u>722</u>	<u>722</u>
6. Total operating Expenses	<u>\$ 98,952</u>	<u>\$ 98,952</u>
D. OTHER CHANGES IN RESERVES	\$ -	\$ -
E. ASSETS AVAILABLE AT END OF PERIOD	<u>\$ 950,121</u>	<u>\$ 684,103</u>
F. DETERMINATION OF CURRENT YEAR UNRECOGNIZED ASSET RETURN		
1. Average Balance		
(a) Assets available at BOY:		\$ 815,307
(b) Assets available at EOY:		950,121
(c) Average balance $\{[(a) + (b) - \text{Net Investment Income}] / 2\}$ {Net investment income: B.4+B.5+B.6+B.7+B.8}		\$ 785,249
2. Expected Return: $.085 * F.1$		66,746
3. Actual Return		194,931
4. Current Year Gross Asset Return: $F.3 - F.2$		\$ 128,185

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## **SECTION 2**

### **TOTAL MEMBERSHIP DATA**

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**TABLE 3**  
**ACTIVE MEMBERS AS OF JUNE 30, 2011\***

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	48	0	0	0	0	0	0	0	48
25-29	220	41	0	0	0	0	0	0	261
30-34	152	197	53	0	0	0	0	0	402
35-39	91	114	265	21	0	0	0	0	491
40-44	74	90	195	176	12	0	0	0	547
45-49	53	67	120	130	87	29	0	0	486
50-54	55	62	96	114	79	76	17	0	499
55-59	41	47	94	91	80	82	69	3	507
60-64	41	38	49	47	39	25	27	11	277
65+	26	7	5	7	10	1	0	4	60
<b>ALL</b>	801	663	877	586	307	213	113	18	3,578

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	17,837	0	0	0	0	0	0	0	17,837
25-29	34,790	53,013	0	0	0	0	0	0	37,653
30-34	39,570	58,390	63,872	0	0	0	0	0	51,997
35-39	44,150	59,127	69,558	75,409	0	0	0	0	62,677
40-44	38,461	62,725	70,333	76,532	87,167	0	0	0	67,133
45-49	36,423	64,014	72,823	77,560	85,993	86,602	0	0	72,086
50-54	23,974	62,154	71,106	79,438	78,471	85,000	81,413	0	70,336
55-59	19,321	49,636	69,520	75,958	78,465	80,324	85,281	85,415	70,171
60-64	21,875	47,923	69,650	74,680	79,039	85,889	81,101	87,369	65,059
65+	13,386	39,883	61,576	80,011	68,505	91,222	0	109,196	45,137
<b>ALL</b>	33,301	58,277	69,958	77,089	80,689	83,552	83,700	91,894	63,030

**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>	26,675	38,638	61,354	45,174	24,771	17,796	9,458	1,654	225,520

\* Including those on leave of absence.



**TABLE 4**  
**SERVICE RETIREMENTS AS OF JUNE 30, 2011**

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	1	1	0	0	0	0	0	0	0	2
55-59	131	0	0	0	0	0	0	0	0	131
60-64	418	245	0	0	0	0	0	0	0	663
65-69	221	313	197	3	0	0	1	0	0	735
70-74	33	130	254	84	1	0	0	0	0	502
75-79	6	20	121	178	58	1	0	0	0	384
80-84	0	5	11	85	92	46	0	1	0	240
85-89	0	2	1	9	52	70	13	0	0	147
90+	0	0	0	1	3	20	27	9	0	60
<b>ALL</b>	810	716	584	360	206	137	41	10	0	2,864

**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	29,613	2,400	0	0	0	0	0	0	0	16,007
55-59	25,797	0	0	0	0	0	0	0	0	25,797
60-64	30,082	34,495	0	0	0	0	0	0	0	31,713
65-69	23,735	32,582	29,056	36,043	0	0	53,170	0	0	29,019
70-74	20,426	28,197	36,357	36,123	64,022	0	0	0	0	33,213
75-79	20,967	18,813	35,533	41,119	28,265	58,219	0	0	0	35,985
80-84	0	11,866	30,292	49,707	34,381	27,759	0	62,703	0	38,001
85-89	0	26,260	38,163	41,298	32,540	29,310	27,203	0	0	31,019
90+	0	0	0	73,878	37,991	29,804	26,959	15,627	0	27,541
<b>ALL</b>	27,196	31,851	33,612	42,034	32,391	29,072	27,676	20,335	0	31,980

**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>	22,029	22,806	19,630	15,132	6,672	3,983	1,135	203	0	91,589

**TABLE 5**  
**DISABILITY RETIREMENTS AS OF JUNE 30, 2011**

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	3	0	0	0	0	0	0	0	0	3
50-54	0	1	0	1	0	0	0	0	0	2
55-59	9	3	0	0	0	0	0	0	0	12
60-64	5	5	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	18	9	1	1	0	0	0	0	0	29

**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	13,343	0	0	0	0	0	0	0	0	13,343
50-54	0	23,472	0	5,364	0	0	0	0	0	14,418
55-59	24,381	12,351	0	0	0	0	0	0	0	21,374
60-64	12,858	45,801	59,152	0	0	0	0	0	0	32,041
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	18,402	32,170	59,152	5,364	0	0	0	0	0	23,631

**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	331	290	59	5	0	0	0	0	0	685

**TABLE 6**  
**SURVIVORS AS OF JUNE 30, 2011**

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	6	5	0	0	0	0	0	0	16
45-49	0	0	0	0	0	0	0	0	0	0
50-54	3	0	0	0	0	0	0	0	0	3
55-59	3	3	2	0	1	0	0	0	1	10
60-64	0	4	2	5	2	1	0	0	0	14
65-69	0	10	8	5	4	2	0	0	0	29
70-74	1	3	13	21	7	3	3	0	0	51
75-79	0	1	8	16	22	7	0	0	0	54
80-84	0	0	1	6	21	30	4	3	0	65
85-89	0	0	0	3	11	22	6	1	0	43
90+	0	0	0	0	3	7	17	7	0	34
ALL	12	27	39	56	71	72	30	11	1	319

**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	7,040	6,906	1,814	0	0	0	0	0	0	5,357
45-49	0	0	0	0	0	0	0	0	0	0
50-54	8,284	0	0	0	0	0	0	0	0	8,284
55-59	15,006	13,956	7,157	0	40,249	0	0	0	3,350	14,480
60-64	0	27,189	28,114	29,707	23,495	19,389	0	0	0	27,136
65-69	0	20,542	31,433	23,300	25,941	17,720	0	0	0	24,572
70-74	61,382	23,813	32,072	40,501	35,598	31,252	19,280	0	0	35,315
75-79	0	38,329	35,071	42,774	32,124	22,299	0	0	0	34,557
80-84	0	0	32,842	25,833	32,178	29,602	18,744	35,460	0	29,738
85-89	0	0	0	22,966	35,081	30,066	24,767	20,006	0	29,880
90+	0	0	0	0	31,388	26,962	23,248	23,849	0	24,855
ALL	13,871	18,787	27,216	36,140	32,433	28,374	22,554	26,666	3,350	28,457

**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	166	507	1,061	2,024	2,303	2,043	677	293	3	9,078

**TABLE 7  
RECONCILIATION OF MEMBERS  
AS OF JUNE 30, 2011**

	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, 2010	3,749	88	1,863	1,419	2,700	23	300	21	10,163
B. Additions	367	80	138	378	225	8	43	5	1,244
C. Deletions									
1. Retirements	(168)	(2)	(51)	-	-	-	-	-	(221)
2. Disability	(2)	(3)	(3)	-	-	-	-	-	(8)
3. Died With Beneficiary	(3)	-	(2)	-	(37)	-	-	-	(42)
4. Died Without Beneficiary	(2)	-	(1)	(2)	(50)	-	(21)	-	(76)
5. Terminated - Deferred	(121)	(9)	-	(7)	-	-	-	-	(137)
6. Terminated - Not Vested	(367)	-	(5)	-	-	-	-	-	(372)
7. Refunds	(14)	(1)	(33)	(61)	-	-	-	-	(109)
8. Rehired as Active	108	(44)	(30)	(29)	-	-	-	-	5
9. Leave of Absence	(78)	-	(2)	-	-	-	-	-	(80)
10. Expired Benefits	-	-	-	-	-	-	(3)	-	(3)
11. Disability to Retirement	-	-	-	-	-	(2)	-	-	(2)
12. Write-offs	-	-	-	-	-	-	-	-	-
D. Data Adjustments <sup>1</sup>	-	-	6	-	-	-	-	-	6
E. Total on June 30, 2011	3,469	109	1,880	1,698	2,838	29	319	26	10,368

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

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**SECTION 3**  
FUNDING STATUS

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**TABLE 8**  
**ACTUARIAL BALANCE SHEET**  
**AS OF JULY 1, 2011**  
(dollars in thousands)

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A. CURRENT ASSETS (TABLE 1; Line F.4)	\$	972,718
B. EXPECTED FUTURE ASSETS		
1. Present Value of Expected Future Statutory Supplemental Contributions*	\$	379,650
2. Present Value of Future Normal Costs		191,200
3. Total Expected Future Assets	\$	<u>570,850</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS	\$	<u>1,543,568</u>
D. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS	\$	<u>1,581,075</u>
E. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (D - C)	\$	37,508

\* 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, 2011**  
**(dollars in thousands)**

	<u>Actuarial Present Value of Projected Benefits</u>	<u>Actuarial Present Value of Future Normal Costs</u>	<u>Actuarial Accrued Liability</u>
<b>A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)</b>			
1. Active Members*			
a. Retirement Benefits	\$ 548,146	\$ 150,401	\$ 397,745
b. Disability Benefits	6,658	2,727	3,931
c. Surviving Spouse and Child Benefits	8,864	3,312	5,552
d. Withdrawals	21,437	34,760	(13,323)
e. Total	<u>\$ 585,105</u>	<u>\$ 191,200</u>	<u>\$ 393,905</u>
2. Deferred Retirements	54,475	-	\$ 54,475
3. Former Members Without Vested Rights	2,490	-	2,490
4. Annuitants	939,005	-	939,005
5. Total	<u>\$ 1,581,075</u>	<u>\$ 191,200</u>	<u>\$ 1,389,875</u>
<b>B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)</b>			
1. Actuarial Accrued Liability (A.5)			\$ 1,389,875
2. Current Assets (Table 1; Line F.4)			\$ 972,718
3. Unfunded Actuarial Accrued Liability (B.1 - B.2)			<u>\$ 417,157</u>
<b>C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE</b>			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2036 (25-year rolling amortization)			3,975,095
2. Supplemental Contribution Rate (B.3 / C.1)			10.49%

\*Includes members on leave of absence.

**TABLE 10**  
**CHANGES IN UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)**  
**AS OF JULY 1, 2011**  
(dollars in thousands)

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A. UAAL AT BEGINNING OF YEAR	\$	470,185
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING		
1. Normal Cost and Expenses	\$	21,458
2. Contributions		(38,835)
3. Interest		40,108
4. Total	<u>\$</u>	<u>22,731</u>
C. EXPECTED UAAL AT END OF YEAR (A + B.4)	\$	492,916
D. INCREASE / (DECREASE) DUE TO ACTUARIAL LOSSES / (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED		
1. Age and Service Retirements	\$	2,533
2. Disability Retirements		304
3. Death-in-Service Benefits		(785)
4. Withdrawals		(2,460)
5. Salary Increases		(10,866)
6. Investment Income		51,177
7. Mortality of Annuitants		(2,913)
8. Other Items		4,139
9. Total	<u>\$</u>	<u>41,129</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C + D.9)	\$	534,045
F. CHANGE IN UAAL DUE TO PLAN AMENDMENTS <sup>1</sup>		(116,888)
G. CHANGE IN UAAL DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS		<u>-</u>
H. UAAL AT END OF YEAR (E + F + G)	<u>\$</u>	<u>417,157</u>

<sup>1</sup> Assumed cost-of-living adjustment is 1.0% beginning January 1, 2012. Deferred retirement augmentation rates set to 2.0% beginning July 1, 2012. Interest credited on member contributions reduced to 4.00%.



**TABLE 11**  
**DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2011**  
**(dollars in thousands)**

	<u>Percent of Payroll</u>	<u>Dollar Amount</u>
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.78%	\$ 13,838
2. Employer Contributions	8.63%	\$ 20,661
3. Supplemental Contribution		
a. 1996 Legislation	0.51%	1,230
b. 1997 Legislation	1.18%	2,827
4. Total	<u>16.10%</u>	<u>\$ 38,556</u>
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	5.97%	\$ 14,291
b. Disability Benefits	0.11%	\$ 261
c. Surviving Spouse and Child Benefits	0.13%	\$ 313
d. Withdrawals	1.38%	\$ 3,300
e. Total	<u>7.59%</u>	<u>\$ 18,165</u>
2. Supplemental Contribution Amortization	10.49%	25,124
3. Allowance for Administrative Expenses	<u>0.29%</u>	<u>694</u>
4. Total	<u>18.37%</u>	<u>\$ 43,983</u>
<b>C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.4 - B.4)</b>	<b>(2.27%)</b>	<b>(5,427)</b>
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 239,501

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## **SECTION 4**

### ACTUARIAL METHODS AND ASSUMPTIONS

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**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2011**

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**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. Years of Service for valuation purposes was provided by the Retirement Fund. Age as of the valuation date was calculated based on the dates of birth provided by the Retirement Fund. Entry Age for valuation purposes was calculated as the age on the valuation date minus the years of service on the valuation date.

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**

The Cost-of-Living increase was changed from 2% to 1% per year effective with this valuation, in response to changes in COLA provisions that were included as part of the 2011 Omnibus Pension Bill. The remaining assumptions were last changed (if at all) in conjunction with an experience review completed in 2007 and adopted in 2008.

**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

Note that there is currently no provision made for future mortality improvements after the measurement date. Please see the comment on page 1 for additional information.

**TABLE 12**  
**ACTUARIAL METHODS AND ASSUMPTIONS**  
**AS OF JULY 1, 2011**

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*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, 2011**

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*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, 2011**

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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, 2011**

Rates of Termination:

<u>Years of Service</u>	<u>Number of Terminations per 1,000 Active Members</u>	
	<u>Male</u>	<u>Female</u>
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:*

<u>Age</u>	<u>Basic Members Eligible for Rule of 90 Provision</u>	<u>Basic Members Not Eligible for Rule of 90 Provision</u>	<u>Coordinated Members Eligible for Rule of 90 Provision</u>	<u>Coordinated Members Not Eligible for Rule of 90 Provision</u>
<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, 2011**

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***B. Economic Assumptions***

Investment Return Rate: Pre-retirement - 8.50% per annum  
 Post-retirement - 8.50% per annum

Cost of Living Increases: 1.00% per annum

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, 2011**

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**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.
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.

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**SECTION 5**  
BASIC PLAN

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**TABLE 3A**  
**BASIC ACTIVE MEMBERS AS OF JUNE 30, 2011**

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	0	0	0
55-59	0	0	0	0	0	5	10	1	16
60-64	0	0	0	0	0	2	5	5	12
65+	0	0	0	0	0	0	0	2	2
ALL	0	0	0	0	0	7	15	8	30

**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	0	0	0
55-59	0	0	0	0	0	82,597	80,054	85,549	81,192
60-64	0	0	0	0	0	83,521	82,269	79,984	81,526
65+	0	0	0	0	0	0	0	129,555	129,555
ALL	0	0	0	0	0	82,861	80,792	93,072	84,550

**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	0	580	1,212	745	2,536

**TABLE 4A  
BASIC SERVICE RETIREMENTS AS OF JUNE 30, 2011**

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	0	0	0	0	0	0	0	0	0	0
55-59	34	0	0	0	0	0	0	0	0	0	34
60-64	159	179	0	0	0	0	0	0	0	0	338
65-69	49	201	158	3	0	0	1	0	0	0	412
70-74	3	46	202	72	1	0	0	0	0	0	324
75-79	1	3	76	156	57	1	0	0	0	0	294
80-84	0	0	4	70	89	46	0	1	0	0	210
85-89	0	0	1	7	46	66	13	0	0	0	133
90+	0	0	0	1	3	20	26	9	0	0	59
ALL	246	429	441	309	196	133	40	10	0	0	1,804

**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	0	0	0	0	0	0	0	0	0	0
55-59	43,612	0	0	0	0	0	0	0	0	0	43,612
60-64	44,233	41,183	0	0	0	0	0	0	0	0	42,618
65-69	44,113	41,152	33,556	36,043	0	0	53,170	0	0	0	38,583
70-74	58,954	50,979	42,242	40,421	64,022	0	0	0	0	0	43,300
75-79	90,383	57,421	47,578	44,797	28,680	58,219	0	0	0	0	42,721
80-84	0	0	58,496	56,992	35,359	27,759	0	62,703	0	0	41,476
85-89	0	0	38,163	44,778	35,463	30,742	27,203	0	0	0	32,823
90+	0	0	0	73,878	37,991	29,804	27,853	15,627	0	0	27,945
ALL	44,490	42,332	40,188	46,549	33,628	29,776	28,275	20,335	0	0	40,520

**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	10,945	18,161	17,723	14,384	6,591	3,960	1,131	203	0	73,097

**TABLE 5A**  
**BASIC DISABILITY RETIREMENTS AS OF JUNE 30, 2011**

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	2	5	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	4	5	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	49,519	0	0	0	0	0	0	0	0	49,519
60-64	27,411	45,801	59,152	0	0	0	0	0	0	42,872
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	38,465	45,801	59,152	0	0	0	0	0	0	44,202

**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	154	229	59	0	0	0	0	0	0	442

**TABLE 6A**  
**BASIC SURVIVORS AS OF JUNE 30, 2011**

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	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	0	1	2	0	1	0	0	0	1	5
60-64	0	2	2	4	2	1	0	0	0	11
65-69	0	6	6	5	4	2	0	0	0	23
70-74	1	0	9	21	7	3	3	0	0	44
75-79	0	1	7	16	20	7	0	0	0	51
80-84	0	0	1	6	21	30	4	3	0	65
85-89	0	0	0	1	11	22	6	1	0	41
90+	0	0	0	0	3	7	17	7	0	34
<b>ALL</b>	<b>1</b>	<b>10</b>	<b>27</b>	<b>53</b>	<b>69</b>	<b>72</b>	<b>30</b>	<b>11</b>	<b>1</b>	<b>274</b>

**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	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	0	22,731	7,157	0	40,249	0	0	0	3,350	16,129
60-64	0	40,663	28,114	33,894	23,495	19,389	0	0	0	30,864
65-69	0	25,427	39,182	23,300	25,941	17,720	0	0	0	27,972
70-74	61,382	0	38,093	40,501	35,598	31,252	19,280	0	0	37,626
75-79	0	38,329	38,092	42,774	33,668	22,299	0	0	0	35,663
80-84	0	0	32,842	25,833	32,178	29,602	18,744	35,460	0	29,738
85-89	0	0	0	54,349	35,081	30,066	24,767	20,006	0	30,983
90+	0	0	0	0	31,388	26,962	23,248	23,849	0	24,855
<b>ALL</b>	<b>61,382</b>	<b>29,495</b>	<b>35,110</b>	<b>37,667</b>	<b>32,889</b>	<b>28,374</b>	<b>22,554</b>	<b>26,666</b>	<b>3,350</b>	<b>31,336</b>

**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
<b>ALL</b>	<b>61</b>	<b>295</b>	<b>948</b>	<b>1,996</b>	<b>2,269</b>	<b>2,043</b>	<b>677</b>	<b>293</b>	<b>3</b>	<b>8,586</b>

**TABLE 11A**  
**BASIC DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2011**  
**(dollars in thousands)**

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	<b>Percent of Payroll</b>	<b>Dollar Amount</b>
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	8.25%	\$ 220
2. Employer Contributions	11.89%	317
3. Supplemental Contribution		
a. 1996 Legislation	0.51%	14
b. 1997 Legislation	1.18%	31
4. Total	21.83%	\$ 582
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	9.63%	\$ 257
b. Disability Benefits	0.28%	7
c. Surviving Spouse and Child Benefits	0.10%	3
d. Deferred Retirements	2.10%	56
e. Total	12.11%	\$ 323
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 2,665

# **SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2011**

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## **STATUTORY CONTRIBUTIONS**

The statutory contributions for members and the employer are 8.25% and 11.89% of salary respectively. The member rate will increase from 8.25% to 9.00%, and the employer rate will increase from 11.89% to 12.64%, by 0.25% increments over the next three years, with the next increase scheduled for July 1, 2012.

## **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 contributions 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 service credited after receipt of payment as required, for licensed educators 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% of Average Salary for each year of Accredited Service.



## SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2011

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### 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, therefore 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*

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 1<sup>st</sup> of the month following termination until the January 1<sup>st</sup> after turning age 55 and then augmented at 5.00 percent compounded annually from that date to July 1, 2012. For members hired after June 30, 2006, the benefit is augmented at 2.50 percent compounded annually from the 1<sup>st</sup> of the month following termination to July 1, 2012. Augmentation for all members, regardless of hire date, will change to 2.00 percent as of July 1, 2012 for the portion of benefit deferral which occurs after June 30, 2012.

## **SUMMARY OF BENEFIT PROVISIONS FOR BASIC MEMBERS AS OF JULY 1, 2011**

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### **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 prior to age 55, if 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). Interest accruing after July 1, 2011, will become 4.00 percent. Interest accrues annually on July 1<sup>st</sup>, so the 4.00 percent rate will apply with refund payments made on or after July 1, 2012.

### **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, 2011**

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### **BENEFIT INCREASES**

Effective July 1, 2011, for the next COLA payable January 1, 2012, the 2011 Omnibus Pension Bill modified statutes to provide a transitional change to the COLA. If the Accrued Liability Funding Ratio, based on Actuarial Value of Assets, as determined by the most recent actuarial valuation is:

Less than 80 percent, the COLA: 1.00 percent

At least 80 percent, but less than 90 percent: 2.00 percent

If at least 90 percent, then the subdivisions for the 1.00 percent and 2.00 percent provisions above will expire and COLAs will be paid as follows:

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 COLA to recipients of federal old age survivors, and disability insurance.

The COLA 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 final 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.

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**SECTION 6**  
COORDINATED PLAN

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**TABLE 3B**  
**COORDINATED ACTIVE MEMBERS AS OF JUNE 30, 2011**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	48	0	0	0	0	0	0	0	48
25-29	220	41	0	0	0	0	0	0	261
30-34	152	197	53	0	0	0	0	0	402
35-39	91	114	265	21	0	0	0	0	491
40-44	74	90	195	176	12	0	0	0	547
45-49	53	67	120	130	87	29	0	0	486
50-54	55	62	96	114	79	76	17	0	499
55-59	41	47	94	91	80	77	59	2	491
60-64	41	38	49	47	39	23	22	6	265
65+	26	7	5	7	10	1	0	2	58
ALL	801	663	877	586	307	206	98	10	3,548

**AVERAGE ANNUAL EARNINGS**

Age	Years of Service								ALL
	<5	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	17,837	0	0	0	0	0	0	0	17,837
25-29	34,790	53,013	0	0	0	0	0	0	37,653
30-34	39,570	58,390	63,872	0	0	0	0	0	51,997
35-39	44,150	59,127	69,558	75,409	0	0	0	0	62,677
40-44	38,461	62,725	70,333	76,532	87,167	0	0	0	67,133
45-49	36,423	64,014	72,823	77,560	85,993	86,602	0	0	72,086
50-54	23,974	62,154	71,106	79,438	78,471	85,000	81,413	0	70,336
55-59	19,321	49,636	69,520	75,958	78,465	80,176	86,167	85,348	69,811
60-64	21,875	47,923	69,650	74,680	79,039	86,095	80,836	93,522	64,313
65+	13,386	39,883	61,576	80,011	68,505	91,222	0	88,837	42,226
ALL	33,301	58,277	69,958	77,089	80,689	83,575	84,146	90,950	62,848

**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	26,674	38,638	61,354	45,174	24,771	17,216	8,246	910	222,983

**TABLE 4B**  
**COORDINATED SERVICE RETIREMENTS AS OF JUNE 30, 2011**

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	1	1	0	0	0	0	0	0	0	0	2
55-59	97	0	0	0	0	0	0	0	0	0	97
60-64	259	66	0	0	0	0	0	0	0	0	325
65-69	172	112	39	0	0	0	0	0	0	0	323
70-74	30	84	52	12	0	0	0	0	0	0	178
75-79	5	17	45	22	1	0	0	0	0	0	90
80-84	0	5	7	15	3	0	0	0	0	0	30
85-89	0	2	0	2	6	4	0	0	0	0	14
90+	0	0	0	0	0	0	1	0	0	0	1
ALL	564	287	143	51	10	4	1	0	0	0	1,060

**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	29,613	2,400	0	0	0	0	0	0	0	0	16,007
55-59	19,553	0	0	0	0	0	0	0	0	0	19,553
60-64	21,395	16,356	0	0	0	0	0	0	0	0	20,372
65-69	17,929	17,202	10,826	0	0	0	0	0	0	0	16,819
70-74	16,573	15,721	13,495	10,334	0	0	0	0	0	0	14,851
75-79	7,084	12,000	15,190	15,039	4,618	0	0	0	0	0	13,983
80-84	0	11,866	14,176	15,715	5,358	0	0	0	0	0	13,679
85-89	0	26,260	0	29,116	10,132	5,674	0	0	0	0	13,874
90+	0	0	0	0	0	0	3,717	0	0	0	3,717
ALL	19,652	16,184	13,334	14,683	8,148	5,674	3,717	0	0	0	17,446

**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	11,084	4,645	1,907	749	81	23	4	0	0	18,492

**TABLE 5B**  
**COORDINATED DISABILITY RETIREMENTS AS OF JUNE 30, 2011**

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	3	0	0	0	0	0	0	0	0	3
50-54	0	1	0	1	0	0	0	0	0	2
55-59	7	3	0	0	0	0	0	0	0	10
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	14	4	0	1	0	0	0	0	0	19

**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	13,343	0	0	0	0	0	0	0	0	13,343
50-54	0	23,472	0	5,364	0	0	0	0	0	14,418
55-59	17,198	12,351	0	0	0	0	0	0	0	15,744
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	12,670	15,132	0	5,364	0	0	0	0	0	12,804

**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	177	61	0	5	0	0	0	0	0	243

**TABLE 6B**  
**COORDINATED SURVIVORS AS OF JUNE 30, 2011**

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	6	5	0	0	0	0	0	0	16
45-49	0	0	0	0	0	0	0	0	0	0
50-54	3	0	0	0	0	0	0	0	0	3
55-59	3	2	0	0	0	0	0	0	0	5
60-64	0	2	0	1	0	0	0	0	0	3
65-69	0	4	2	0	0	0	0	0	0	6
70-74	0	3	4	0	0	0	0	0	0	7
75-79	0	0	1	0	2	0	0	0	0	3
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	2	0	0	0	0	0	2
90+	0	0	0	0	0	0	0	0	0	0
<b>ALL</b>	11	17	12	3	2	0	0	0	0	45

**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	7,040	6,906	1,814	0	0	0	0	0	0	5,357
45-49	0	0	0	0	0	0	0	0	0	0
50-54	8,284	0	0	0	0	0	0	0	0	8,284
55-59	15,006	9,568	0	0	0	0	0	0	0	12,831
60-64	0	13,715	0	12,955	0	0	0	0	0	13,462
65-69	0	13,214	8,187	0	0	0	0	0	0	11,538
70-74	0	23,813	18,526	0	0	0	0	0	0	20,792
75-79	0	0	13,925	0	16,690	0	0	0	0	15,768
80-84	0	0	0	0	0	0	0	0	0	0
85-89	0	0	0	7,275	0	0	0	0	0	7,275
90+	0	0	0	0	0	0	0	0	0	0
<b>ALL</b>	9,552	12,488	9,456	9,168	16,690	0	0	0	0	10,927

**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
<b>ALL</b>	105	212	113	28	33	0	0	0	0	492



**TABLE 11B**  
**COORDINATED DETERMINATION OF CONTRIBUTION SUFFICIENCY**  
**AS OF JULY 1, 2011**  
**(dollars in thousands)**

	<u>Percent of Payroll</u>	<u>Dollar Amount</u>
<b>A. STATUTORY CONTRIBUTIONS - CHAPTER 354A</b>		
1. Employee Contributions	5.75%	\$ 13,618
2. Employer Contributions	8.59%	\$ 20,344
3. Supplemental Contribution		
a. 1996 Legislation	0.51%	1,216
b. 1997 Legislation	1.18%	2,796
4. Total	<u>16.03%</u>	<u>\$ 37,974</u>
<b>B. REQUIRED CONTRIBUTIONS - CHAPTER 356</b>		
1. Normal Cost		
a. Retirement Benefits	5.93%	\$ 14,034
b. Disability Benefits	0.11%	254
c. Surviving Spouse and Child Benefits	0.13%	310
d. Deferred Retirements	1.37%	3,244
e. Total	<u>7.54%</u>	<u>\$ 17,842</u>
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 236,836

# SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS AS OF JULY 1, 2011

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## STATUTORY CONTRIBUTIONS

The statutory contributions for members and the employer are 5.75% and 8.59% respectively. The member rate will increase from 5.75% to 6.50%, and the employer rate will increase from 8.59% to 9.34%, by 0.25% increments over the next three years, with the next increase scheduled for July 1, 2012.

## 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, or if credit is purchased during an authorized leave from St. Paul Schools. 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 Allowable Service years.

## 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.

## EARLY RETIREMENT BENEFIT

### *Eligibility*

Attainment of age 55 and 3 years of Allowable Service.

## **SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS AS OF JULY 1, 2011**

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### ***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 the Normal Retirement Age.

### **DISABILITY RETIREMENT BENEFIT**

#### ***Eligibility***

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

#### ***Benefit***

Calculated as a normal retirement benefit payable for life without reduction for early commencement. At normal retirement age, the benefit converts from a disability benefit to a retirement benefit. The disability 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 1<sup>st</sup> of the month following termination until the January 1<sup>st</sup> after turning age 55 and then augmented at 5.00 percent compounded annually from that date to July 1, 2012. For members hired after June 30, 2006, the benefit is augmented at 2.50 percent compounded annually from the 1<sup>st</sup> of the month following termination to July 1, 2012. Augmentation for all members, regardless of hire date, will change to 2.00 percent as of July 1, 2012 for the portion of benefit deferral which occurs after June 30, 2012.

### **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, 2011**

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### ***Benefit***

Retirement benefit earned at the time of death with choices for either a reduced for 100 percent joint survivorship, or 5-, 10-, 15-, or 20-year term certain. The benefit is available immediately upon application. Actuarial reductions for the calculation of the survivorship portion of a 100 percent joint and survivor benefit is determined based on the member's and survivor's ages at the death of the member.

Early retirement reductions apply to the survivor benefit based on the member's age when deceased. If the deceased member had not yet attained age 55 at time of death, the additional early retirement reduction from age 55 to the age of the member at death applies at only one-half of the actuarial rate.

### **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). Interest accruing after July 1, 2011, will become 4.00 percent. Interest accrues annually on July 1<sup>st</sup>, so the 4.00 percent rate will apply with refund payments made on or after July 1, 2012.

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

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

### **BENEFIT INCREASES**

Effective July 1, 2011, for the next COLA payable January 1, 2012, the 2011 Omnibus Pension Bill modified statutes to provide a transitional change to the COLA. If the Accrued Liability Funding Ratio based on the Actuarial Value of Assets, as determined by the most recent actuarial valuation is:

Less than 80 percent, the COLA: 1.00 percent

At least 80 percent, but less than 90 percent: 2.00 percent

If at least 90 percent, then the subdivisions for the 1 percent and 2 percent provisions above will expire and COLAs will be paid as follows:

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 COLA to recipients of federal old age, survivors, and disability insurance.

**SUMMARY OF BENEFIT PROVISIONS FOR COORDINATED MEMBERS  
AS OF JULY 1, 2011**

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The COLA 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 5.00 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.

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**SECTION 7**  
GASB DISCLOSURES

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

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (A)</b>	<b>Actuarial Accrued Liability (B)</b>	<b>Unfunded AAL (UAAL) (B)-(A)</b>	<b>Funded Ratio (A)/(B)</b>	<b>Actual Covered Payroll (Previous FY) (C)</b>	<b>UAAL as % of Covered Payroll ((B)-(A))/(C)</b>
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	470,185	68.05%	239,996	195.91%
07/01/11	972,718	1,389,875	417,157	69.99%	239,738	174.01%

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

<b>Year Ended June 30</b>	<b>Actuarially Required Contribution Rate (A)</b>	<b>Actual Covered Payroll (B)</b>	<b>Actual Member Contributions (C)</b>	<b>Annual Required Contributions [(A)*(B)]-(C)</b>	<b>Actual Employer Contributions <sup>(1)</sup></b>	<b>Percentage Contributed</b>
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
2011	19.84%	239,738	13,745	33,819	25,090	74.19

<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
2011	21,013	13,745	4,077	31,391	722	98,230	972,718

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

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<b>Valuation Date</b>	July 1, 2011
<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	1.00% *
<b>Plan Membership:</b>	
Active Members	3,578
Retirees and Beneficiaries	3,212
Terminated Vested Members	1,880
Other Non-Vested Terminated Members	<u>1,698</u>
Total	10,368

*\*Beginning with the cost-of-living adjustment payable January 1, 2012, COLA is 1.00% until 80% funding is achieved, 2.00% once 80% funding is achieved but funding is less than 90%. Once 90% funding is achieved, COLA determined by CPI with a maximum of 5.00% and a minimum of 0.00%.*

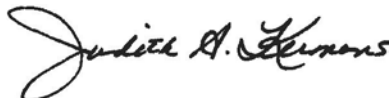
December 2, 2011

Mr. Paul V. Doane  
Executive Director  
St. Paul Teachers' Retirement Fund Association  
1619 Dayton Avenue, Room 309  
St. Paul, MN 55104-6206

Dear Mr. Doane:

Enclosed are 16 bound copies and one unbound copy of the July 1, 2011 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,



Judith A. Kermans

JAK:lr  
Enclosures

cc: Mr. Larry Martin, Executive Director,  
Legislative Commission on Pensions and Retirement, (2 bound copies)  
Mr. Jim Showalter, Commissioner,  
Minnesota Management & Budget, (2 bound copies)  
Legislative Reference Library, (2 bound copies)  
Dana Woolfrey, GRS