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December 12, 2008

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

Re: Mandated Study and Report on St. Paul Teachers' Retirement Fund Association Post-Retirement Adjustment Experience

Dear Phil:

We have estimated the cost impact of the post-retirement benefit adjustment provisions under the pilot project authorized by the Legislature. Unless otherwise noted, the cost impact was measured using the same methods, assumptions, and data as were used in the actuarial valuation of the St. Paul Teachers' Retirement Fund Association ("SPTRFA") as of July 1, 2008, performed by Gabriel, Roeder, Smith & Company.

Prior to the pilot project, benefits for current retirees were increased 2.0 % compounded annually. Additional ad hoc increases were given in years when the five year time-weighted rate of asset return exceeded 8.50 %. Increases occurred 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. For purposes of this analysis this benefit provision will be referred to as the "Old COLA".

For calendar years 2008 and 2009, the post-retirement adjustment was determined under a pilot project (the "Pilot COLA") authorized by the Legislature (Laws of Minnesota 2007, Chapter 134, Article 7). Increases were to be based on the annual increase in average third quarter values of 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.

The Pilot COLA was not to be a negative number and was not to exceed 2.5% if the rate of investment return of the retirement fund either for the most recent fiscal year or for the most recent five year period was less than 8.5%. In any case, the increase was limited to a maximum of 5.0% in any year. Partial increases were granted for new retirees in the calendar year immediately preceding the increase on the basis of whole calendar quarters that the benefit recipient had been in pay status.

The actual cost-of-living adjustments granted at January 1, 2008 and January 1, 2009, under these new provisions were 2.3% and 2.5%, respectively.

The cost impact was measured using two different methodologies.

Methodology 1 – Short-term approach:

We compared the baseline retiree liabilities at July 1, 2008, with what they would have been had the Old COLA remained in place. Had the Pilot COLA not been in place, we calculate that five year asset returns would have resulted in ad hoc increases of 6.2% and 4.5% at January 1, 2008 and 2009, respectively. We adjusted the retiree benefits payable as of July 1, 2008 to reflect the 6.2% increase that would have been granted the preceding January 1 (rather than the actual increase of 2.3%), as well as removed the more favorable eligibility conditions that would have been applied to new retirees under the pilot program. We also applied the Old COLA increase of 4.5% as of January 1, 2009, in place of the actual increase of 2.5%.

The impact of the higher increases that would have been granted under the Old COLA provisions as of January 1, 2008 and 2009 is shown below.

Current Annuitants Actuarial Accrued Liability		
Baseline Valuation Results	**Old COLA Applied as of 1/1/2008 and 1/1/2009**	**Pilot Project Savings**
$936,297,077	$983,300,612	$47,003,535

Methodology 2 – Long-term approach:

The period over which the Pilot COLA was actually in place is likely too short to draw meaningful conclusions. For a longer term perspective we examined the Fund's one and five-year rates of return over the last 20 years to determine the cost-of-living adjustments that would have been granted had the Old COLA and Pilot COLA programs been in effect during that time.

The following table shows the one and five year asset return rates and contribution rate deficiency as of June 30, as well as the annual increase in Old and Pilot COLAs for the following January 1, and the annual increase in CPI for the third quarter. SPTRFA staff provided actual COLA increases for 1998-2009, annual asset returns since June 30, 1989 and time-weighted five year average returns for 2002-2008. Five year geometric asset returns were used for periods prior to 2002, as time-weighted return data was not readily available, however we do not believe the results are materially affected by the use of geometric averages.

Fiscal Year End	Annual Asset Return	5 Year Average Return[1]	Contribution Rate Deficiency	Old COLA[2,3]	Pilot COLA[2]	CPI[4]
6/30/2008	-6.6%	11.0%	-1.9%	4.5%	2.5%	5.9%
6/30/2007	19.8%	13.1%	-8.0%	6.2%	2.3%	2.3%
6/30/2006	12.6%	8.2%	-8.7%	2.0%	2.5%	4.2%
6/30/2005	11.8%	4.9%	-7.3%	2.0%	2.5%	3.2%
6/30/2004	19.7%	4.6%	-5.0%	2.0%	2.5%	2.9%
6/30/2003	2.9%	3.1%	-3.5%	2.0%	2.1%	2.1%
6/30/2002	-3.7%	5.7%	-1.5%	2.0%	1.2%	1.2%
6/30/2001	-2.4%	10.4%	1.3%	3.7%	2.5%	2.8%
6/30/2000	10.8%	14.4%	0.7%	7.7%	3.7%	3.7%
6/30/1999	9.5%	16.0%	-0.6%	9.3%	2.2%	2.2%
6/30/1998	16.7%	14.2%	-1.2%	7.2%	1.4%	1.4%
6/30/1997	18.9%	13.6%	-1.1%	7.1%	2.1%	2.1%
6/30/1996	16.6%	12.2%	-1.1%	5.7%	2.9%	2.9%
6/30/1995	18.8%	10.8%	-2.1%	4.2%	2.8%	2.8%
6/30/1994	1.2%	9.4%	-3.1%	2.8%	2.5%	2.6%
6/30/1993	13.3%	12.0%	-3.3%	5.4%	2.7%	2.7%
6/30/1992	12.0%	8.0%	-4.6%	2.0%	2.5%	3.1%
6/30/1991	9.2%	7.8%	-3.5%	2.0%	2.5%	4.2%
6/30/1990	11.5%	11.9%	-3.3%	5.2%	4.8%	4.8%
6/30/1989	14.0%	12.5%	-3.8%	5.9%	5.0%	5.0%

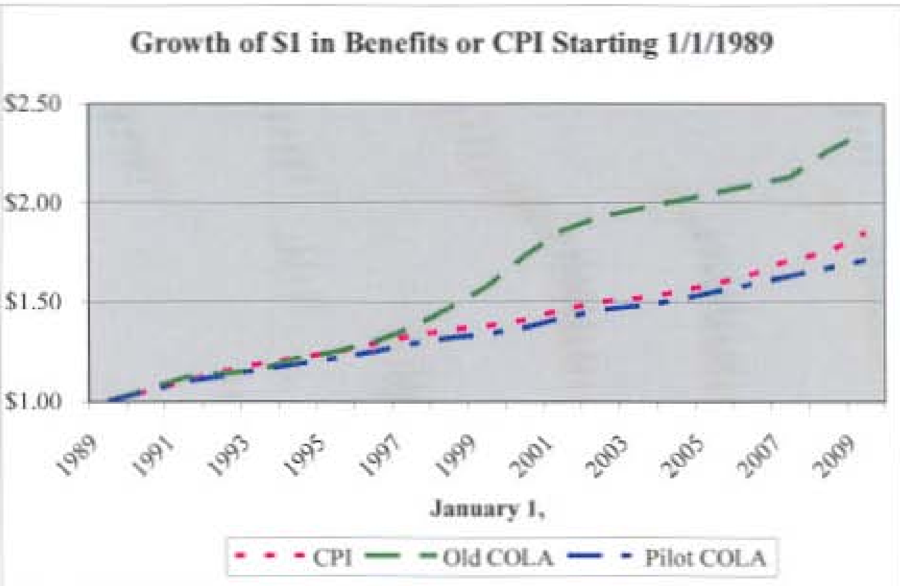
Notes:

1. *Time-weighted returns for 2002-2008 provided by SPTRFA. Geometric averages for 2001 and prior.*
2. *COLA for January 1 following fiscal year end.*
3. *2% plus the 5-year average rate of return in excess of 8.5% times one minus the contribution deficiency.*
4. *Annual increase in average calendar third quarter CPI.*

COLAs in shaded cells are actual values as provided by SPTRFA.

Note that ad hoc increases over the fixed 2% COLA would have been paid in 13 of the previous 20 years under the Old COLA program. COLA increases under the Pilot program would have been equal to the CPI target in 12 of the past 20 years and limited to 2.5% in the remaining 8 years.

The compounding effect of the annual adjustments under the Old and Pilot COLA programs is compared to the effect of inflation (as measured by the CPI) over the past 20 years in the following graph. For purposes of this graph, the growth of $1.00 in goods or benefits is shown. The geometric average increase over this period results in an annual increase in CPI of 3.1%, Old COLA increase of 4.4%, and Pilot COLA increase of 2.7%.



The Minnesota Legislative Commission on Pensions and Retirement Standards for Actuarial Work determines, among other things, the assumptions to be used and the benefits to be recognized when preparing actuarial valuations. Current practice does not take future ad hoc increases under the Old COLA program into account for purposes of determining Fund liabilities (the base 2% annual increases is taken into account). The effect of any ad hoc increase is recognized as an actuarial loss in the year the increase is granted, and amortized over a period of years (currently 25).

Understanding that past history is not always an accurate predictor of future events, we nevertheless believe that it is useful to show what the July 1, 2008 valuation results would have been assuming the historical rates of COLA increases under the Old and Pilot programs were to continue in the future. We have provided alternative valuation results assuming a 4.4% and 2.7% annual COLA assumption (instead of 2%) for comparison. The long-term cost-of-living adjustment assumption is applied first at January 1, 2010. These valuation results are provided in Appendix I.

The date of the valuation was July 1, 2008. This means that the results included in this analysis will indicate the probable effects of what the July 1, 2008 valuation would have shown if the various provisions were in effect on that date.

Both actuaries submitting this report are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

If you have any questions or require additional information, please don't hesitate to contact us.

Sincerely,

Jim Koss

W. James Koss, ASA, EA, MAAA

Cathy Nagy

Cathy Nagy, FSA, EA, MAAA

WJK:CN/lr
Enclosures

cc Mr. Lawrence A. Martin, Executive Director of LCPR

St. Paul Teachers' Retirement Fund Association **Attachment One**

Actuarial Liabilities and Supplemental Contribution Rate as of July 1, 2008

Mandated Study and Report on St. Paul Teachers' Retirement Fund Association Post-retirement Adjustment Experience

(dollars in thousands)

	Published June 30, 2008 Valuation Results Average 2% COLA	Results if Pre-Fund Estimated Full COLA: Continue Prior Provisions Average 4.4% COLA	Results if Pre-Fund Estimated Full COLA: Continue Pilot Study Provisions Average 2.7% COLA
A. DETERMINATION OF PRESENT VALUE OF PROJECTED BENEFITS			
1. Active Members			
a. Retirement Benefits*	$ 616,607	$ 765,639	$ 654,748
b. Disability Benefits	7,447	8,719	7,782
c. Surviving Spouse and Child Benefits	10,053	12,508	10,676
d. Withdrawals	28,495	33,881	29,853
e. Total	$ 662,602	$ 820,747	$ 703,059
2. Deferred Retirements	$ 42,590	$ 49,576	$ 44,599
3. Former Members Without Vested Rights	1,737	1,737	1,737
4. Annuitants	936,297	1,131,630	986,900
5. Total	$ 1,643,226	$ 2,003,690	$ 1,736,295
B. PRESENT VALUE OF FUTURE NORMAL COSTS	211,186	258,338	223,222
C. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL) (A.5 - B)	1,432,040	1,745,353	1,513,073
D. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. Actuarial Accrued Liability (C)	$ 1,432,040	$ 1,745,353	$ 1,513,073
2. Current Assets	1,075,951	1,075,951	1,075,951
3. Unfunded Actuarial Accrued Liability (D.1 - D.2)	$ 356,089	$ 669,402	$ 437,122
E. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2033 (25-year rolling amortization)	4,104,379	4,104,379	4,104,379
2. Supplemental Contribution Rate (D.3 / E.1)	8.68%	16.31%	10.65%

**Includes members on leave of absence.*

St. Paul Teachers' Retirement Fund Association **Attachment Two**

Contribution Sufficiency as of July 1, 2008

Mandated Study and Report on St. Paul Teachers' Retirement Fund Association Post-retirement Adjustment Experience

(dollars in thousands)

	Published June 30, 2008 Valuation Results Average 2% COLA		Results if Pre-Fund Estimated Full COLA: Continue Prior Provisions Average 4.4% COLA		Results if Pre-Fund Estimated Full COLA: Continue Pilot Study Provisions Average 2.7% COLA	
	Percent of Payroll	Dollar Amount	Percent of Payroll	Dollar Amount	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A						
1. Employee Contributions	5.61%	$ 13,864	5.61%	$ 13,864	5.61%	$ 13,864
2. Employer Contributions	8.48%	$ 20,972	8.48%	$ 20,972	8.48%	$ 20,972
3. Supplemental Contribution						
a. 1996 Legislation	0.50%	1,230	0.50%	1,230	0.50%	1,230
b. 1997 Legislation	1.14%	2,827	1.14%	2,827	1.14%	2,827
4. Total	15.73%	$ 38,893	15.73%	$ 38,893	15.73%	$ 38,893
B. REQUIRED CONTRIBUTIONS - CHAPTER 356						
1. Normal Cost						
a. Retirement Benefits	7.22%	$ 17,843	8.95%	$ 22,121	7.66%	$ 18,938
b. Disability Benefits	0.14%	336	0.16%	400	0.14%	352
c. Surviving Spouse and Child Benefits	0.16%	400	0.20%	498	0.17%	425
d. Withdrawals	1.14%	2,817	1.29%	3,198	1.18%	2,909
e. Total	8.66%	$ 21,396	10.60%	$ 26,217	9.15%	$ 22,625
2. Supplemental Contribution Amortization	8.68%	21,465	16.31%	40,333	10.65%	26,336
3. Allowance for Administrative Expenses	0.29%	717	0.29%	717	0.29%	717
4. Total	17.63%	$ 43,578	27.20%	$ 67,268	20.09%	$ 49,679
C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.5 - B.4)	(1.90%)	(4,685)	(11.47%)	(28,374)	(4.36%)	(10,786)
D. FUNDED RATIOS						
1. Accrued Benefit Funded Ratio		77.72%		63.86%		73.59%
2. Projected Benefit Funded Ratio		95.26%		76.51%		89.69%
3. Accrued Liability Funded Ratio		75.13%		61.65%		71.11%
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		$ 247,291		$ 247,291		$ 247,291

This report is intended to describe the financial effect of the proposed plan changes. No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the author(s) of this report prior to relying on information in the report.

If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the author of the report prior to making such decision.

In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.