Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 13, 2012

Mr. David L. Senn
Executive Director
Teachers' Retirement System
State of Montana
1500 Sixth Avenue
Helena, MT 59620-0139

Subject: LCsa06

Dear Dave:

As requested we a have determined the impact of LCsa06 on the Teachers' Retirement System.

Background

LCsa06 provides for additional funding to the Retirement System from both the members and the State. It also creates a second tier benefit structure for members hired after July 1, 2013.

Additional revenue from the State comes from two sources. The first is an additional annual State contribution equal to $25 million paid to the System in monthly installments. The second is a one-time contribution payable to the Retirement System by the trustees of a school district maintaining a retirement fund. The one-time contribution to the Retirement System shall be the amount earmarked as an operating reserve in excess of 20% of the adopted retirement fund budget for the fiscal year 2013. This amount has been estimated to be $14.7 million payable July 1, 2013.

Members hired prior to July 1, 2013 (Tier 1) under LCsa06 are required to contribute a supplemental contribution equal to an additional 1% of the member's earned compensation. The Board may decrease the tier one member supplemental contribution if i) the average funded ratio of the System based on the last three actuarial valuations is equal to or greater than 90%; and ii) the period necessary to amortize all liabilities of the System based on the most recent annual actuarial valuation is less than 15 years.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144
Phone (678) 388-1700 • Fax (678) 388-1730
www.CavMacConsulting.com
Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE • Hilton Head Island, SC

The second tier benefit structure for members hired on or after July 1, 2013 is summarized below.

(1) Increase the averaging period for determining final average compensation from three years to five years
(2) Change the unreduced retirement eligibility date to the earlier of age 55 with 30 years of service or age 60 with 5 years of service
(3) Change the reduced retirement eligibility date from age 50 with 5 years of service to age 55 with 5 years of service
(4) Increase the member contribution rate from 7.15% to 8.15% of compensation
(5) A member will not be eligible for a disability retirement if the member is or will be eligible for a service retirement on the date of termination
(6) A beneficiary of a member who dies prior to retirement may receive a retirement allowance only if the member died within one year of the last day on which the member was employed in a position reportable to the retirement system
(7) A member age 60 with at least 30 years of creditable service will receive a retirement allowance equal to 2% of the member's average final compensation multiplied by the sum of the number of years of creditable service. Otherwise, the multiplier used to calculate the retirement allowance will be equal to 1.67%

Data, Methods and Assumptions

The data, methods and assumptions used to determine the impact of the changes above are the same as those used in the July 1, 2012 valuation. For item (7) above, we have changed the rates of retirement to reflect the assumption that members close to eligibility for the 2.0% formula are more likely to wait until they are eligible for the 2.0% formula to retire. Specifically, we have assumed that in the five years preceding eligibility for the 2.0% formula, members will only retire at 90%, 80%, 60%, 40% and 20% of the current valuation assumptions respectively. In addition, we have assumed more members will retire in the 1st and 2nd years after they are eligible for the 2.0% formula. As a result, we have increased the rates of retirement assumed in the valuation by 185% in the first year and 140% in the second year and beyond.

Costs

A detailed cost exhibit is included with this letter. It compares the results of the valuation as of July 1, 2012 and the impact of LCsa06. The only impact that LCsa06 has on the current valuation is the proposed supplemental member contribution of up to 1% and the increased annual contribution from the State and a one-time contribution from the local school districts. The remaining changes impact new hires beginning July 1, 2013.

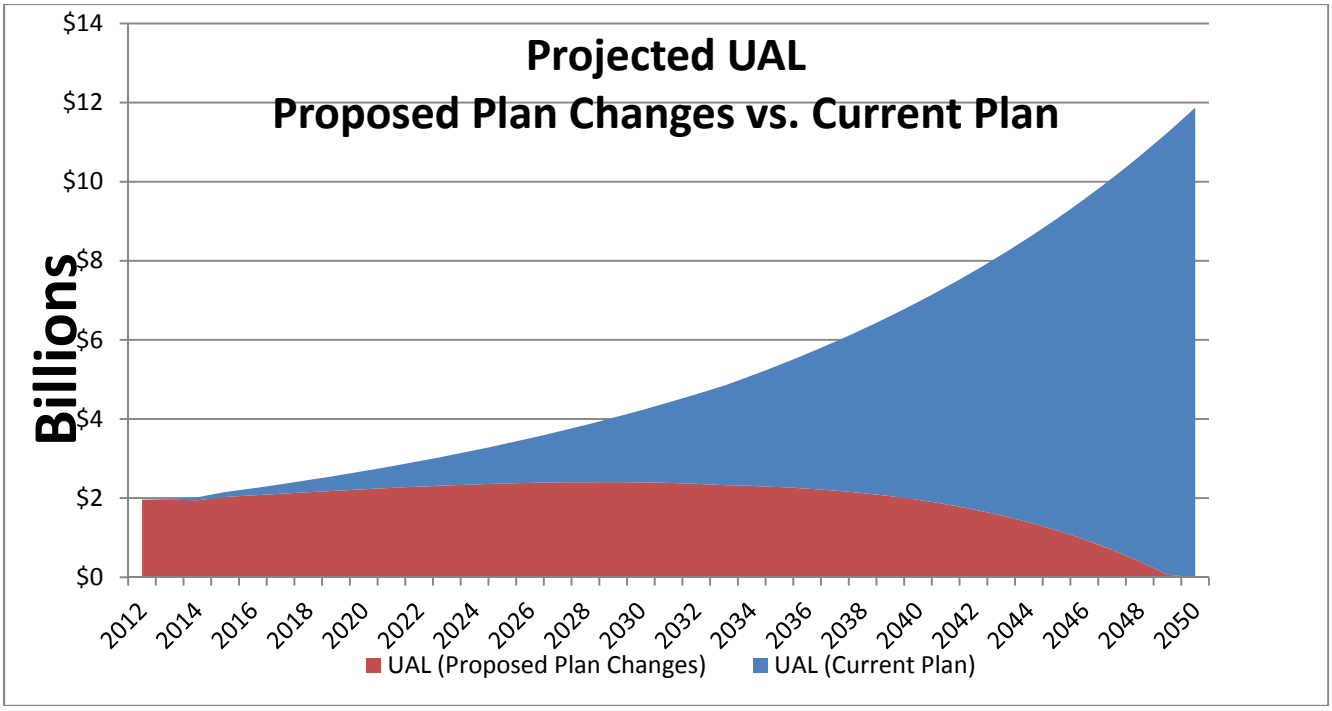
You will notice that the liabilities of the System have increase slightly due to LCsa06. This is due the 1.00% increase in the member contribution rate. As member contributions increase, the actuarial liability of the System associated with anticipated future refunded contributions will increase correspondingly and accounts for the increase in the liability of the System.

The second tier benefit structure on the previous page impacts new entrants only. Changes which affect only future active members will impact the normal cost rate of the employer. If such a change is enacted concurrent with the changes proposed on the previous page, the ultimate normal cost of the amended plan, 1.68%, would begin to decrease as the ratio of new members (with a lower normal cost) to all active members grows. Ultimately, when the active membership is composed entirely of members hired after the effective date for the new tier, the employer's normal cost rate would be expected to be the rate provided in our results, or 1.38%.

The table below shows the impact of the change for future active members only (hired after the effective date).

	Expected Employer Normal Cost Rate for Future Employees	Expected Ultimate Change in Employer Normal Cost Rate
Amended Plan	1.68%	
Second Tier Benefit Structure	1.38%	0.30%

The employer contribution to the Retirement System consists of the employer's portion of the System's normal cost and the employer contribution to amortize the unfunded liability. Overtime, the addition of a second tier benefit structure with a lower normal cost will increase the portion of the employer's contribution used toward the amortization of the unfunded liability which will result in an accelerated amortization of the unfunded liability. The chart on the following page illustrates this fact since the unfunded liability will be expected to be fully amortized by 2050 assuming all assumptions are met in the future and assuming the changes in LCsa06 are adopted.



Certification

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Sincerely,

Todd B. Green, ASA, FCA, MAAA
Principal and Consulting Actuary

TBG:jnw

S:\Montana Teachers\Legislation\2013\LCSA06\LCSA06.docx

Teachers' Retirement System

State of Montana

Cost Exhibit

All Dollar Values are in Millions

All calculations are based on the July 1, 2012 member and asset data

	(1) July 1,2012 Valuation	(2) LCsa06 as of July 1, 2013 (8.15% Member Contribution)*
Present Value of Future Benefits	$5,402.3	$5,415.9
Present Value of Future Normal Cost	(587.6)	(599.9)
Actuarial Accrued Liability	$4,814.7	$4,816.0
Actuarial Value of Assets	2,852.0	2,852.0
Unfunded Actuarial Accrued Liability	$1,962.7	$1,964.0
Total Normal Cost Rate	9.65%	9.83%
Employee Contribution Rate	(7.15)%	(8.15)%
Employer Normal Rate	2.50%	1.68%
Employer Statutory Contribution Rate		
Normal Rate	2.50%	1.68%
UAAL Amortization Rate	7.46%	8.28%
Total Rate	9.96%	9.96%
Amortization Period (Years)	Infinite	45
Required contribution rate increase effective July 1, 2013, 30-year amortization period	4.89%	2.02%

* Requires additional recurring $25 million per year in State funding beginning July 1, 2013 and a one-time contribution of $14.7 million on July 1, 2013