



January 27, 2014

VIA ELECTRONIC MAIL

Ms. Barbara Quinn, Fiscal Services Bureau Chief
Public Employee Retirement Administration
100 North Park, Suite 200
Helena, Montana 59620

Re: Actuarial Impact – Proposal to Close PERS to Future Hires at State Fund

Dear Barb:

You have requested an estimate of the actuarial impact of a proposal to close the Public Employees' Retirement System (PERS) to future hires at the State Fund. The proposed change would not affect the benefits of current employees at the State Fund, nor any retirees or other inactive members who earned benefits in PERS while working at the State Fund.

Data, Methods and Assumptions

The calculations in this letter are based upon the data, actuarial methods and assumptions as were used in the actuarial valuation of the System as of June 30, 2013. In preparing our letter, we relied without audit on information (some oral and some written) supplied by the staff of the Systems. This information includes, but is not limited to plan provisions, membership data and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The actuarial assumptions reflect our understanding of the likely future experience of the Systems and the assumptions as a whole represent our best estimate for the future experience of the Systems. The results of this letter are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the proposed legislation could vary from our results.

The calculations with regard to the State Fund have used the actual membership data for the State Fund identified by employer number CP6103.

For purposes of projections shown with this letter, we have assumed that the number of active plan members will remain constant from the June 30, 2013 Actuarial Valuation and that total payroll will increase at the assumed rate of 4.0%, except for the reduction in future payroll associated with not including future hires of the State Fund. The projections also assume that all actuarial assumptions will be exactly realized including the assumption that plan assets will earn 7.75% per annum on market value.



In addition, we made the following assumptions with respect to the proposal:

- The actuarial impact presented in the letter assumes that this change is the only change being considered for PERS. If other changes are also adopted, the fiscal impact associated with this bill could be different.
- We have assumed that the PERS benefit provisions fully reflect the changes to PERS due to House Bill 454, including changes to the GABA. We have not considered the effects if the GABA changes are ultimately changed due to a court order.
- There have been no adjustments for actuarial gains and losses or for changes in membership or financial data since the last valuation as of June 30, 2013.
- We have assumed that the change would be effective as of June 30, 2016.

Actuarial Impact

The change will have no effect on actuarial valuations until future hires of the State Fund are not enrolled in PERS. At such time, the member and employer contributions received by PERS from the State Fund would be less than those received if such future hires were to continue participation in PERS. In addition, future liability accruals would also be less under this scenario. Over the long term, this is projected to have the effect of increasing the unfunded liability over what it otherwise would be if future hires of the State Fund were to remain in PERS.

We are including two projections over the next 20 years:

- The first table shows the expected differences in total payroll and contributions on behalf of State Fund employees. By fiscal year 2034, the amount of contributions to PERS would be expected to be \$4 million lower than if future State Fund employees participate in PERS.
- The second table shows the projected funded state of PERS. The effect of funded status is very gradual. By the valuation as of June 30, 2033, the unfunded actuarial liability would be expected to be about \$102 million higher and the funded ratio would be expected to be about 0.8% lower if future State Fund employees do not participate in PERS.

Certification

To the best of my knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as a credentialed actuary, I meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this letter. This letter does not address any contractual or legal issues. I am not an attorney and our firm does not provide any legal services or advice.

Ms. Barbara Quinn
January 27, 2014
Page 3 of 3

This letter was prepared exclusively for Montana Public Employee Retirement Administration for the purpose described herein. This letter is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

If you have any questions or need additional information, please feel free to contact me.

Sincerely,
Cheiron



Stephen T. McElhaney, FCA, FSA
Principal Consulting Actuary

cc: Roxanne Minnehan
Melanie Symons
Margaret Tempkin, FSA

Attachments

Proposal to Close PERS to Future Hires at State Fund

Amounts shown in millions

Projections of Contributions				
Fiscal Year	Projected Payroll		Change in Payroll	Change in Contributions
	Current	Proposed		
2014	\$ 16.5	\$ 16.5	\$ -	\$ -
2015	17.2	17.2	-	-
2016	17.8	17.8	-	-
2017	18.6	17.1	(1.5)	(0.2)
2018	19.3	16.2	(3.1)	(0.4)
2019	20.1	15.5	(4.6)	(0.6)
2020	20.9	14.8	(6.1)	(0.8)
2021	21.7	14.1	(7.6)	(1.0)
2022	22.6	13.5	(9.1)	(1.3)
2023	23.5	12.8	(10.7)	(1.5)
2024	24.4	12.0	(12.4)	(1.7)
2025	25.4	11.2	(14.2)	(2.0)
2026	26.4	10.4	(16.0)	(2.2)
2027	27.5	9.8	(17.7)	(2.4)
2028	28.6	9.0	(19.6)	(2.7)
2029	29.7	8.2	(21.5)	(3.0)
2030	30.9	7.5	(23.4)	(3.2)
2031	32.1	6.8	(25.3)	(3.5)
2032	33.4	6.1	(27.3)	(3.8)
2033	34.8	5.5	(29.3)	(4.0)
2034	36.2	4.8	(31.4)	(4.3)

Proposal to Close PERS to Future Hires at State Fund

Projections of Funded Status										
Valuation Year	Current Projections (\$ millions)				State Fund Closed to New Hires (\$ millions)				Change	
	AL	AVA	UAL	Funded Ratio	AL	AVA	UAL	Funded Ratio	UAL	Funded Ratio
2013	\$ 5,206.2	\$ 4,139.9	\$ 1,066.3	79.5%	\$ 5,206.2	\$ 4,139.9	\$ 1,066.3	79.5%	\$ -	0.0%
2014	5,403.6	4,471.8	931.8	82.8%	5,403.6	4,471.8	931.8	82.8%	-	0.0%
2015	5,633.8	4,704.7	929.1	83.5%	5,633.8	4,704.7	929.1	83.5%	-	0.0%
2016	5,845.6	4,981.4	864.2	85.2%	5,845.6	4,981.4	864.2	85.2%	-	0.0%
2017	6,057.9	5,212.5	845.4	86.0%	6,057.7	5,212.3	845.4	86.0%	-	0.0%
2018	6,271.2	5,449.4	821.8	86.9%	6,270.5	5,448.5	822.0	86.9%	0.2	0.0%
2019	6,484.6	5,694.4	790.2	87.8%	6,482.9	5,692.0	790.9	87.8%	0.7	0.0%
2020	6,697.0	5,944.3	752.7	88.8%	6,693.4	5,939.5	753.9	88.8%	1.2	0.0%
2021	6,908.9	6,200.2	708.7	89.7%	6,902.5	6,191.6	710.9	89.7%	2.2	0.0%
2022	7,121.2	6,463.4	657.8	90.8%	7,110.7	6,449.2	661.5	90.7%	3.7	-0.1%
2023	7,335.3	6,736.0	599.3	91.8%	7,319.1	6,714.0	605.1	91.7%	5.8	-0.1%
2024	7,552.7	7,020.3	532.4	93.0%	7,529.0	6,987.9	541.1	92.8%	8.7	-0.2%
2025	7,775.3	7,318.7	456.6	94.1%	7,741.8	7,272.8	469.0	93.9%	12.4	-0.2%
2026	8,005.3	7,634.5	370.8	95.4%	7,959.4	7,571.2	388.2	95.1%	17.4	-0.3%
2027	8,245.5	7,971.2	274.3	96.7%	8,184.1	7,886.1	298.0	96.4%	23.7	-0.3%
2028	8,499.0	8,332.7	166.3	98.0%	8,418.2	8,220.8	197.4	97.7%	31.1	-0.3%
2029	8,768.1	8,722.6	45.5	99.5%	8,663.9	8,577.8	86.1	99.0%	40.6	-0.5%
2030	9,056.0	9,145.1	(89.1)	101.0%	8,923.5	8,960.5	(37.0)	100.4%	52.1	-0.6%
2031	9,366.2	9,604.9	(238.7)	102.5%	9,199.9	9,372.7	(172.8)	101.9%	65.9	-0.6%
2032	9,702.7	10,107.3	(404.6)	104.2%	9,496.3	9,818.6	(322.3)	103.4%	82.3	-0.8%
2033	10,069.4	10,657.6	(588.2)	105.8%	9,815.8	10,302.4	(486.6)	105.0%	101.6	-0.8%