Finance & Administration Committee

California Public Employees' Retirement System

Agenda Item 5c

June 18, 2013

ITEM NAME: State and Schools Actuarial Valuation and Employer Contribution Rates

PROGRAM: Actuarial Office

ITEM TYPE: Action

RECOMMENDATION
Adopt the employer contribution rates for the period July 1, 2013 to June 30, 2014 as set forth in the table on page 2 of this agenda item.

EXECUTIVE SUMMARY
This is the first actuarial valuation of the State and Schools plans prepared after the passage of Assembly Bill 340 (AB 340) which includes the Public Employees' Pension Reform Act of 2013. One of the provisions of AB 340 added Government Code Section 20683.2 which changes the contribution rates of many members effective July 1, 2013. In addition it requires that the "savings realized by the state employer as a result of the employee contribution rate increases required by this section shall be allocated to any unfunded liability, subject to appropriation in the annual Budget Act." While the requirement to make additional contributions does not directly affect our recommended contribution rates, the State employer will need additional information to implement this requirement. The necessary information is included in a separate section later in this agenda item.

Employer contribution rates (as a percentage) for the State plans are going to increase for some plans and decrease for others from the 2012-13 fiscal year to the 2013-14 fiscal year. Overall, the expected contribution amount (in dollars) for the State plans is estimated to decrease by approximately $71.3 million prior to the additional contribution the State is to make under Government Code Section 20683.2.

The employer contribution rate (as a percentage) for Schools is increasing slightly from the 2012-13 fiscal year to the 2013-14 fiscal year. However, the expected contribution amount (in dollars) for the Schools plan is expected to *decrease* by approximately $31.5 million.

Since this valuation is as of June 30, 2012, there are no active members under the new benefit formulas implemented by AB 340. However, the lower benefits for new members will be reflected in future valuations and this will result in a gradual reduction in the normal cost as these new members appear in future valuations.

STRATEGIC PLAN

This action item is being presented as part of the regular and ongoing workload of the Actuarial Office and supports Strategic Plan Goal A: Improve long-term pension and health benefit sustainability.

BACKGROUND

This agenda item is being presented in June, which is one month later than it would be presented in a typical year. The implementation of AB340 and the first-time use of data from the my|CalPERS system resulted in some delays. In the future, we anticipate this agenda item will be presented in May.

ANALYSIS

State and Schools Employer Contribution Rates for 2013-14

The Actuarial Office has completed the calculation of the employer contribution rates for the State and Schools for the fiscal year 2013-14. The full actuarial report is expected to be completed late this summer and will be provided to the Board and posted online when complete .

The table below compares the fiscal year 2013-14 contribution rates and the dollar amounts these rates are anticipated to generate with the rates and contributions for the current fiscal year 2012-13.

	2012-13 Fiscal Year		2013-14 Fiscal Year	
	Expected Employer Contribution[1]	Employer Contribution Rate[1]	Expected Employer Contribution	Employer Contribution Rate
State Miscellaneous Tier 1	$2,064,654,743	20.503%	$2,093,047,896	21.121%
State Miscellaneous Tier 2	72,880,957	20.457%	72,151,897	20.992%
State Industrial	100,447,274	16.302%	90,690,285	15.682%
State Safety	347,275,501	17.503%	326,678,917	17.205%
State Peace Officers & Firefighters	1,028,095,419	30.297%	954,994,296	30.495%
California Highway Patrol	263,068,361	33.728%	267,523,309	34.616%
Subtotal State	**$3,876,422,255**		**$3,805,086,600**	
Schools	1,203,430,156	11.417%	1,171,945,558	11.442%
Total	**$5,079,852,411**		**$4,977,032,158**	

In 2012, the CalPERS Board adopted new economic assumptions that were used for the first time in the June 30, 2011 valuation. In an effort to mitigate the impact this assumption change had on employers' budgets, the Board chose to phase-in the impact of the assumption change over two years. Last year during the May meeting of the Pension and Health Benefits Committee, representatives from the Department

[1] Without phase-in of the assumption change adopted by the Board in 2012.

of Finance requested that the Board not adopt a two-year phase-in of the assumption change for the State plans. The Board adopted employer contribution rates with the two-year phase-in for the State plans and the Schools Pool and indicated to the representatives of the Department of Finance that the employer contribution rates adopted by the Board were the minimum required contribution rates and the State could, as part of its regular budget setting process, agree to send additional contributions to CalPERS. Last June, the Governor signed a budget that included funds to be allocated to CalPERS based on contribution rates derived without a phase-in of the assumption change.

The above table compares the expected contributions in 2012-13 without the phase-in of the assumption change for the State plans to the expected contributions for 2013-14. Please refer to Attachment 1 for the development of the employer rate for each plan.

At its April 17, 2013 meeting, the Board approved a change to the CalPERS amortization and smoothing policies. Beginning with the June 30, 2014 valuation, the newly adopted direct smoothing method will be used to set the 2015-16 rates for the State and Schools. Under this new direct rate smoothing method, all gains and losses will be paid over a fixed 30-year period with the increases or decreases in the rate spread over a 5-year period. The estimated impact of the first 5 years of the new methodology beginning with the projected 2015-16 rates will be shown in the valuation report that is expected to be released later this summer.

Reasons for Changes in Employer Contributions for the State Plans

Overall, the required contributions (in dollars) for the State plans have decreased between fiscal year 2012-13 and fiscal year 2013-14. There are two main reasons for the decrease: 1) the Plans' experience in fiscal year 2011-12, which includes demographic, contribution and asset gains/losses, 2) increases in member contributions implemented as part of pension reform legislation (AB340). The main reasons for the changes in employer contributions from 2012-13 to 2013-14 are shown on the table below. Some gains and losses were not fully separated out and are categorized as "Other Gains and Losses" below. This category also includes a refinement in the 415(b) limit calculation for CHP members which is a minor increase in contribution and only impacts that plan. Note that the table below compares the expected contribution amounts in 2012-13 without the phase-in of the assumption change for the State plans to the expected contribution amount for 2013-14.

Reason for Change	Change in Required Contribution (millions)
Change due to normal progression of existing amortization bases	$54.6
Change due to reduction in overall payroll	(73.6)
Actuarial gains and losses:	
• Impact of investment return less than expected in fiscal year 2011-12	108.3
• Lower than expected individual salary increases in fiscal year 2011-12	(82.6)
• Lower than expected contributions received in 2011-12	3.6
• Impact of additional member contributions as per AB 340	(63.1)
• Other Gains and Losses	(18.5)
Total Change in Required Contributions due to plan experience	($71.3)

Reasons for Changes in Employer Contributions for the Schools Pool

Overall, the required contributions (in dollars) for the Schools Pool have decreased between fiscal year 2012-13 and fiscal year 2013-14 by $31.5 million. As mentioned earlier, in 2012, the CalPERS Board updated the economic assumptions that were used beginning with the June 30, 2011 valuation. The Board chose to phase-in the impact of the assumption change over two years. The 2013-14 contributions are approximately $63.9 million higher than 2012-13 because this is the second year of the phase-in. The investment return for 2011-12 was less than expected and caused an increase in contributions of approximately $41.1 million. These increases in required contributions are offset by large liability gains due to demographic experience, mainly individual salary increases and overall payroll growth being less than expected in 2011-12.

Additional Detailed Information

Please refer to Attachment 2 for a reconciliation of employer contribution rates and expected employer contributions.

Attachment 3 shows the development of the accrued and unfunded liabilities as well as the funded ratio for each plan based on the market value of assets.

Please refer to Attachment 4 for the development of the actuarial value of assets for each plan. Note that the actuarial value of assets is still included in this valuation since the method change that eliminates the use of an actuarial value of assets will be first reflected in the June 30, 2014 annual valuation.

Data

This actuarial valuation was the first performed using participant data extracted from the new my|CalPERS system. While staff has found the participant data in the my|CalPERS system to be of generally higher quality than the data that had previously come from the various legacy data systems, the change to the underlying data source did add significant challenges to this actuarial valuation.

Due to some of the difficulties with the completion of the PSR project, the programs to extract the data from the my|CalPERS system to the Actuarial Valuation System (AVS) were incomplete at the time of the passage of pension reform but were expected to be ready in time to prepare this valuation. The passage of pension reform with a very short implementation timeframe had two significant effects, it diverted resources that could otherwise have been working on the extract programs and it resulted in changes to the structure of the underlying my|CalPERS database.

These issues meant that the data provided for the State and Schools valuation required more manipulation than is normally necessary with some increase risk of inaccuracy. In addition, in some cases staff had to make reasonable assumptions to compensate for incomplete or inaccurately transformed data. Staff believes that any data issues that may still be present in the data used to perform the actuarial valuation have not had a material impact on the results of the valuation or the employer contribution rates being recommended.

Additional Contribution Pursuant to G.C. Section 20683.2

One of the provisions of AB 340 added Government Code Section 20683.2 which changes the contribution rates of many members effective July 1, 2013. In addition it requires that the “savings realized by the state employer as a result of the employee contribution rate increases required by this section shall be allocated to any unfunded liability, subject to appropriation in the annual Budget Act.” Under the California Constitution, the Board has “plenary” authority over the actuarial function at CalPERS consistent with the fiduciary duties of a trustee. This includes authority to set employer contribution rates. By statute, the State may pay additional contributions in addition to the actuarially-required contribution rates set by the Board and, of course, CalPERS will generally accept these payments. AB 340 effectively augments the contributions of the State when increased employee contributions actually result in a savings to the employer.

The table below shows the:

- actuarially required contributions (these are the rates that staff is recommending that the Board set for the State plans),
- the additional contributions that the State is to make to offset the savings due to the increased member contributions, and
- the total contributions that the State is to make for each plan.

Plan	Actuarially Required Employer Contribution for 2013-14	Additional Statutory Contribution to Offset Increased Member Contributions	Total Contribution 2013-14
State Miscellaneous Tier 1	21.121%	0.082%	21.203%
State Miscellaneous Tier 2	20.992%	0.363%	21.355%
State Industrial	15.682%	0.764%	16.446%
State Safety	17.205%	0.700%	17.905%
State Peace Officers & Firefighters	30.495%	0.825%	31.320%
California Highway Patrol	34.616%	1.319%	35.935%

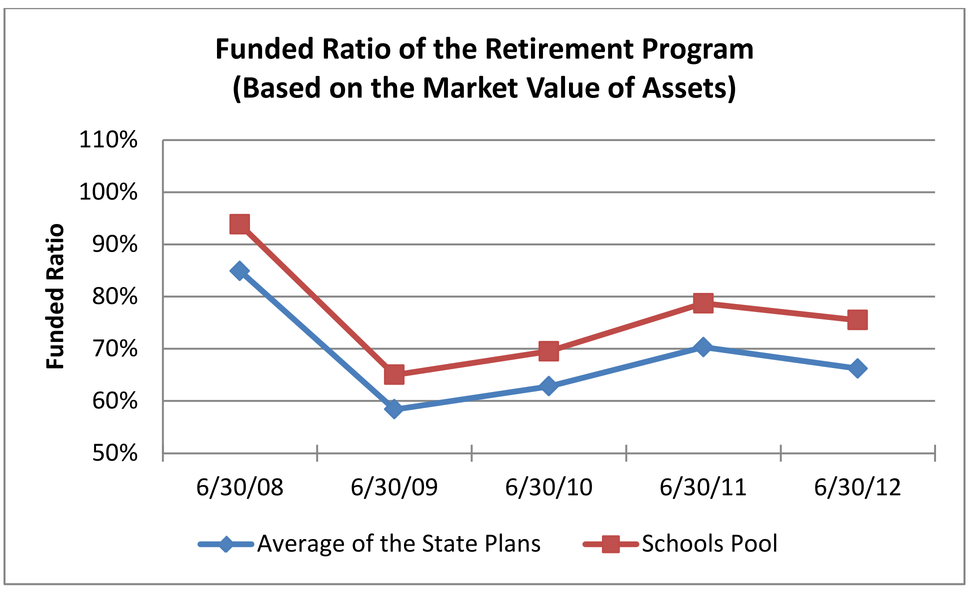
In all cases, the savings are less than the actual increase in member contributions. This is because the additional member contributions increase the value of the benefit in some circumstances. The obvious example is when the member terminates and takes a refund. A less obvious example is for Tier 2 members where the members are assume to elect to receive a Tier 1 benefit with an actuarial equivalent reduction to offset the missed Tier 1 contributions. Because the members are now required to make member contributions (although only at 1.5 percent of pay for the 2013-14 fiscal year) a smaller reduction will apply in the future.

BENEFITS/RISKS

The Actuarial Office presented the Annual Review of Funding Levels and Risks to the Board in March of 2013. One of the risk measures identified in that report was the Volatility Index (assets/payroll ratio). Employer contribution rate volatility is heavily influenced by the ratio of plan assets to active member payroll. The volatility index for the plans are displayed in the table below.

As of June 30, 2012	Market Value of Assets without Receivables	Annual Covered Payroll	Asset Volatility Ratio
	(1)	(2)	(1)/(2)
State Miscellaneous	54,775,231,553	9,665,137,942	5.7
State Industrial	2,148,979,669	545,112,340	3.9
State Safety	5,511,156,902	1,789,794,486	3.1
POFF	20,479,556,138	2,951,833,630	6.9
CHP	5,207,738,960	728,467,347	7.1
Schools	44,824,395,294	9,654,303,484	4.6

Another measure of risk is the funded status of a plan. The funded status of a pension plan is defined as the ratio of assets to a plan's accrued liabilities. All other things being equal (and they never are) plans with a lower funded ratio are more at risk of not being able to meet their future benefit obligations. Because the investment return experienced by CalPERS in fiscal year 2011-12 was less than the assumed 7.5 percent, the funded status decreased in the range of 3.2 percent to 4.8 percent for all plans. The graph below shows the average funded status for the past five years for the State plans and for the Schools Pool based on the market value of assets.



Attachment 5 shows the funded status of the plans using the market value of assets on June 30, 2012 and the funded status for each of the plans for the last five years.

ATTACHMENTS
Attachment 1 – Development of Employer Contribution Rates
Attachment 2a – Reconciliation of Employer Contribution Rates
Attachment 2b – Reconciliation of Employer Contributions
Attachment 3 – Development of Accrued and Unfunded Liabilities
Attachment 4 – Development of the Actuarial Value of Assets
Attachment 5 – Funded Status and History of Funded Status

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