Pension & Health Benefits Committee

California Public Employees' Retirement System

Agenda Item 7

May 15, 2012

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

PROGRAM: Actuarial Office

ITEM TYPE: Action

RECOMMENDATION

Staff recommends that the Pension and Health Benefits Committee accept and recommend to the Board of Administration (Board) the adoption of employer contribution rates for the State and Schools for the period July 1, 2012, to June 30, 2013, (with a phase-in of the impact of the assumption change) as set forth in Attachment 1.

EXECUTIVE SUMMARY

Employer contribution rates for the State plans are going to increase from the 2011-2012 fiscal year to the 2012-2013 fiscal year. The increase in contributions for the State plans overall is approximately $213 million. The increase in employer contributions impacts both general and special fund agencies.

The employer contribution rate for Schools is also increasing from the 2011-2012 fiscal year to the 2012-2013 fiscal year, however the expected contribution amount (in dollars) for the Schools plan reflects a *decrease* of approximately $29.1 million.

See Attachment 1 for a listing of the employer contribution rates with a phase-in of the impact of the assumption change. Since, at the time of this item preparation, the State had not requested that the phase-in not apply to its plans, these are the rates that staff is recommending.

See Attachment 2 for a listing of the employer contribution rates with the phase-in applied to the Schools pool only. Should the State request that the phase-in not apply to its plans, these would be the rates that staff would recommend.

BACKGROUND

In March 2012, the CalPERS Board adopted new economic actuarial assumptions to be used in the June 30, 2011, actuarial valuations of all plans at CalPERS. In April 2012, the CalPERS Board adopted a two year phase-in of the impact of changing the actuarial assumptions. The Board's decision allows for the State to choose not to phase-in the cost of the assumption change for the State plans. As of the date this agenda item was prepared, no such request has been received from the State.

ANALYSIS
State and Schools Employer Contribution Rates for 2012-2013

The Actuarial Office has completed the calculation of the employer contribution rates for the State and Schools for the fiscal year July 1, 2012, through June 30, 2013. The full actuarial report is expected to be completed by August and will be provided to the Board when complete.

The table below compares the fiscal year 2012-2013 contribution rates and the dollar amounts these rates are anticipated to generate with the rates and contributions for the current fiscal year July 1, 2011, through June 30, 2012. The employer contribution rates shown below reflect a phase-in of the impact of the assumption change.

	2011-12 Fiscal Year		2012-13 Contribution based on New Assumptions with phase-in of impact of assumption change	
	Employer Contribution	Employer Rate	Employer Contribution	Employer Rate
State Miscellaneous Tier 1	$1,841,648,485	18.175%	$1,978,781,516	19.651%
State Miscellaneous Tier 2	65,054,003	17.025%	69,842,873	19.605%
State Industrial	91,966,115	14.934%	97,182,571	15.773%
State Safety	329,227,399	16.428%	338,320,571	17.052%
State Peace Officers & Firefighters	947,128,065	27.415%	990,397,248	29.186%
California Highway Patrol	239,927,089	31.264%	253,293,196	32.474%
Subtotal State	**$3,514,951,156**		**$3,727,817,975**	
Schools	1,232,486,937	10.923%	1,203,430,156	11.417%
Total	**$4,747,438,093**		**$4,931,248,131**	

Please refer to Attachment 3 for the development of the employer rate for each plan.

Reasons for Changes in Employer Contributions for the State Plans

Overall, the required contributions for the State plans have increased between fiscal year 2011-2012 and fiscal year 2012-2013. There are two main reasons for the increase: 1) the Plans' experience in fiscal year 2010-2011 which includes demographic, contribution and asset gains/losses, 2) changes in actuarial assumptions and the phase-in of the impact of the changes in actuarial assumptions.

1) Plans' experience in fiscal year 2010-2011

The reasons for the changes in employer contributions for the State between fiscal year 2010-2011 and fiscal year 2011-2012 are shown in the table below:

Reason for Change	Change in Required Contribution (millions)
Increase due to growth in payroll and normal progression of existing amortization bases	$41.7
Actuarial gains and losses:	
• Impact of the third year of smoothing the -24 percent investment return from fiscal year 2008-2009	50.1
• Lower than expected individual salary increases and overall pay increases less than expected in fiscal year 2010-2011	(125.3)
• Greater than expected number of retirements in fiscal year 2010-2011	72.4
• Less than expected contributions received in fiscal year 2010-2011	7.1
• Other Gains and Losses	31.4
Total Change in Required Contributions due to plan experience	$77.4

2) Changes in Actuarial Assumptions and Phase-in

The CalPERS Actuarial office conducted a study and hired an independent evaluator to assess current economic assumptions. Based on the information from both studies, the CalPERS Board has adopted updated economic assumptions to be used beginning with the June 30, 2011, valuation. In particular, the recommendation based on both studies was to lower the price inflation from 3.00 to 2.75 percent.

Lowering the price inflation also had a direct impact on the discount rate and the overall payroll growth assumptions. The discount rate assumption is calculated as the sum of the price inflation and the real rate of return. The assumed real rate of return is 4.75 percent. When added to the new price inflation of 2.75 percent, the resulting investment return is 7.50 percent. The overall payroll growth is calculated as the sum of the price inflation and real wage inflation. The assumed real wage inflation is 0.25 percent. When added to the new price inflation of 2.75 percent, the resulting overall payroll growth is 3.00 percent.

In April 2012, the CalPERS Board adopted a two year phase-in of the impact of changing the actuarial assumptions. The phase-in will result in amortizing over a 20-year period the increase in actuarial liabilities resulting from the change in assumptions, with the payment in year one equal to one-third of the payment that would have been required without the phase-in and the unpaid balance amortized over the remaining 19 years.

The adoption of the new actuarial assumptions account for an approximately $284 million total increase in contribution for the State plans, however the phase-in will reduce that amount in the first year only by about $149 million.

The table below outlines the change in rates and total dollar amount for the various State Plans as a result of the new actuarial assumptions. The table also outlines the impact of the two year phase-in.

	2012-13 Contribution based on Old Assumptions		**2012-13 Contribution based on New Assumptions without phase-in of impact of assumption change**		**2012-13 Contribution based on New Assumptions with phase-in of impact of assumption change**	
	Employer Contribution	**Employer Rate**	**Employer Contribution**	**Employer Rate**	**Employer Contribution**	**Employer Rate**
State Miscellaneous Tier 1	$1,907,441,780	18.850%	$2,064,654,743	20.503%	$1,978,781,516	19.651%
State Miscellaneous Tier 2	68,310,772	19.082%	72,880,957	20.457%	69,842,873	19.605%
State Industrial	93,427,100	15.090%	100,447,274	16.302%	97,182,571	15.773%
State Safety	324,918,382	16.297%	347,275,501	17.503%	338,320,571	17.052%
State Peace Officers & Firefighters	953,395,786	27.960%	1,028,095,419	30.297%	990,397,248	29.186%
California Highway Patrol	244,903,945	31.247%	263,068,361	33.728%	253,293,196	32.474%
Subtotal State	**$3,592,397,765**		**$3,876,422,255**		**$3,727,817,975**	
Schools	1,141,045,303	10.773%	1,269,209,651	12.041%	1,203,430,156	11.417%
Total	**$4,733,443,068**		**$5,145,631,906**		**$4,931,248,131**	

Should the State request the phase-in apply to the Schools pool and not to its plans, the recommendation would be for the rates as set forth in Attachment 2.

Reasons for Changes in Employer Contributions for the Schools Pool

There are two main reasons for the change in contribution levels for Schools. The first reason is due to the Plan's experience in fiscal year 2010-2011 which includes liability, contribution and asset gains/losses. Plan experience during the 2010-2011 fiscal year indicates a decrease in contribution of approximately $91.4 million mainly due to salary increases and overall pay increases less than expected. The second main reason for the change in contribution was due to the changes in actuarial assumptions adopted by the Board in March 2012, which accounted for a $128.2 million increase. The phase-in will reduce the employer contributions for the 2012-2013 fiscal year by about $65.8 million.

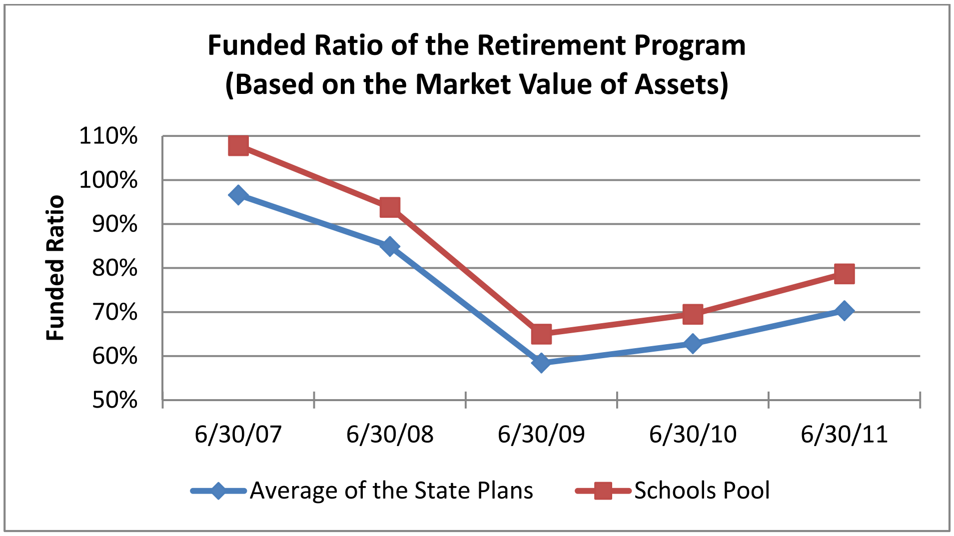
Please refer to Attachment 4 for a reconciliation of employer contribution rates and expected employer contributions.

Attachment 5 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. The actuarial value of assets is only used for setting employer rates and keeping them as stable as possible.

Please refer to Attachment 6 for the development of the actuarial value of assets for each plan.

Funded Status

As a result of the 21 percent investment return experienced by CalPERS in fiscal year 2010-2011 versus the assumed 7.75 percent, the funded status has increased by about 6.9 percent to 9.4 percent for all plans. The graph on the next page shows the average funded status for the State plans and for the Schools pool, based on the market value of assets, for the last five years.



Attachment 7 shows the funded status of the plans using the market value of assets on June 30, 2011, and the funded status for each of the plans for the last five years.

Risk Analysis

With the goal of being more transparent and providing additional information to all employers to better help them budget for future years, the Actuarial Office includes an investment return scenario analysis and a discount rate sensitivity analysis in the annual actuarial valuation reports.

Investment return scenario analysis can show potential risk to contribution rates. Since the fiscal year has not yet ended and the investment return for 2011-2012 is not yet known, the Actuarial Office will include the analysis in its full actuarial valuation report. This report is expected to be available in August and will include projected rates for 2013-2014 using the investment return rate from 2011-2012 fiscal year and an investment return scenario analysis for the three years following.

In addition, the Actuarial Office will include a discount rate sensitivity analysis in the annual actuarial valuation report that will look at the 2012-2013 rate using discount rate scenarios if the Public Employees' Retirement Fund were to realize investment returns of 1 percent lower and 1 percent higher than the current valuation discount rate of 7.50 percent.

BENEFITS/RISKS

The benefit of adopting the phase-in rate is it gives employers more time to adjust to the higher contribution rates. However, because the contributions will be delayed, the assets will be less until the end of the 20-year amortization period resulting in slightly higher risk to the members.

ATTACHMENTS

Attachment 1: State and Schools Contribution Rates with Phase-in
Attachment 2: State Contribution Rates without Phase-in; Schools Contribution Rates with Phase-in
Attachment 3: Development of Employer Contribution Rates
Attachment 4a: Reconciliation of Employer Contribution Rates
Attachment 4b: Reconciliation of Employer Contributions
Attachment 5: Development of Accrued and Unfunded Liabilities
Attachment 6: Development of the Actuarial Value of Assets
Attachment 7: Funded Status and History of Funded Status

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