Finance and Administration Committee

Agenda Item 8b

April 19, 2016

Item Name: Schools Actuarial Valuation and Employer/Employee Contribution Rates

Program: Actuarial Office

Item Type: Action

Recommendation
Staff recommends that the Board adopt the employer contribution rate of 13.888 percent and maintain current employee contribution rates for the period of July 1, 2016 through June 30, 2017 for the Schools Pool.

Executive Summary
The recommended employer contribution rate for the Schools Pool is less than was projected in the June 30, 2014 annual valuation report, but will still increase from Fiscal Year 2015-16 to Fiscal Year 2016-17. The following table summarizes the results of the valuation:

Comparison of Current and Prior Year Results		
	June 30, 2014	June 30, 2015
Market Value of Assets	$ 56,838,237,794	$ 56,814,247,327
Accrued Liability	$ 65,599,711,601	$ 73,324,977,003
Unfunded Accrued Liability	$ 8,761,473,807	$ 16,510,729,676
Employer Contribution Rate		
Normal Cost	7.621%	8.242%
Unfunded Liability	4.226%	5.646%
Total Contribution	11.847%	13.888%

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

Background

The Schools Pool provides retirement benefits to members employed by school districts and community college districts in California. It generally does not cover teachers as they are covered by a separate retirement system – the California State Teachers' Retirement System, also known as CalSTRS.

As per the Board's decision in February of 2014, the new actuarial assumptions are incorporated for the first time in this valuation for the Schools Pool. The resulting normal cost increase is recognized immediately and the increase in liability has been amortized over twenty years and phased in over five years.

This actuarial valuation sets forth the employer and employee contribution rates for the plan for Fiscal Year July 1, 2016 through June 30, 2017.

Analysis

Schools Employer Contribution Rates for 2016-17

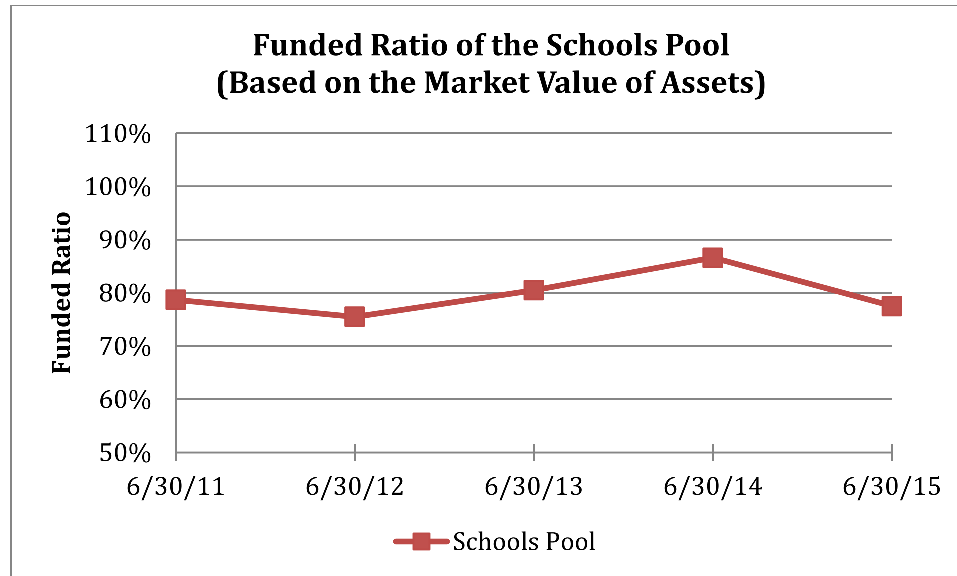
The Actuarial Office has completed the calculation of the employer contribution rates for the Schools Pool for the Fiscal Year 2016-17. The full actuarial report is expected to be completed this summer and will be provided to the Board and posted online when complete. The additional information provided in the full actuarial report includes details on assumptions, methods, and participant data. The Schools contribution rate has increased by 2.041 percent between Fiscal Year 2015-16 and Fiscal Year 2016-17 from 11.847 percent to 13.888 percent.

Funded Status

The funded status of a pension plan is defined as the ratio of assets to a plan's accrued liabilities. Plans with a lower funded ratio are, all other things being equal, more at risk of not being able to meet their future benefit obligations. The following table displays the development of the Schools Pool's funded status:

Unfunded Liability and Funded Status Comparison		
	June 30, 2014	June 30, 2015
1. Present Value of Benefits	$ 76,932,325,687	$ 86,037,664,407
2. Present Value of Future Normal Costs	$ 11,332,614,086	$ 12,712,687,404
3. Accrued Liability [(1) - (2)]	$ 65,599,711,601	$ 73,324,977,003
4. Market Value of Assets	$ 56,838,237,794	$ 56,814,247,327
5. Unfunded Liability/(Surplus) [(3) - (4)]	$ 8,761,473,807	$ 16,510,729,676
6. Funded Status [(4) / (3)]	86.6%	77.5%

The graph below shows the funded status of the Schools Pool for the past five years:



From June 30, 2014 to June 30, 2015 the funded status for the Schools Pool decreased by 9.1 percent. This was mainly caused by the increase in liability due to the change in assumptions. The investment return for Fiscal Year 2014-15 was less than expected and also contributed to the decrease.

Reasons for Changes in Employer Contributions for the Schools Pool

Overall, the required contributions for the Schools Pool have increased by $342.2 million between Fiscal Year 2015-16 and Fiscal Year 2016-17, to approximately $1,680 million. Note that the payroll used to calculate the expected dollar contributions is the payroll used in the valuation incorporating two years of payroll growth using the payroll growth assumption of 3 percent. To the extent that payroll in the contribution year is different than the projected payroll, the actual contribution amounts will be different than the expected contributions stated here. The change in required contributions is mainly driven by the factors listed below.

In February 2014 the CalPERS Board adopted new demographic actuarial assumptions to be used in the June 30, 2015 actuarial valuation for the Schools Pool. The adoption of these new actuarial assumptions accounted for about $177.2 million of the total increase in contribution for the Schools Pool. The change in liability due to new actuarial assumptions has been amortized over twenty years and phased in over five years, beginning with the contribution requirement for Fiscal Year 2016-17. The increase of $177.2 million accounts for the increase in normal cost and year one of the five year phase-in of the increase in unfunded liability.

CalPERS employs an amortization and smoothing policy that spreads rate increases or decreases over a five year period, and amortizes all experience gains and losses over a fixed thirty year period. This means that only one fifth of the total anticipated rate change caused by each gain or loss is realized in the first year, culminating in the full increase in the fifth year. As a result, the progression of these gain or loss amortization bases will affect contribution levels in increasing measure throughout the ramp period. A complete description of the actuarial methods used in the June 30, 2015 valuation will be shown in the valuation report that is expected to be released this summer.

Payroll for Fiscal Year 2014-15 has increased by 7.1 percent due to an increase in active counts and individual salary increases. This is greater than the payroll growth assumption of 3 percent used in our valuation. As a result, required contributions are increasing by $61.3 million.

The Public Employees' Pension Reform Act of 2013 (PEPRA) requires lower benefits for new members as defined by PEPRA, that are hired after January 1, 2013. The normal cost is lower than it would be otherwise due to the enrollment of new hires into the lower benefit level.

The net return on plan assets for the year ending June 30, 2015 was less than the assumed return of 7.5 percent. This has led to an experience loss that must be amortized with additional contributions over the next 30 years.

There are other events that affected the overall change in contributions for the Schools Pool between Fiscal Year 2015-16 and 2016-17. The table below highlights all major contributors to the change in required contributions.

Reason for Change	Change in Required Contribution (millions)
First year phase-in of the change in assumptions	$177.2
Change due to normal progression of existing amortization bases	68.4
Change due to increase in overall payroll	61.3
Decrease in normal cost due to new hires in lower benefit levels	(17.2)
First installment of the 5-year phased-in 30-year amortization of the following gains and losses:	
• Impact of investment experience	45.2
• Demographic gains and losses	7.8
• All other gains and losses	(0.5)
Total Change in Required Contributions	$342.2

PEPRA Member Contribution Rates

While classic employees' contribution rates are set by law and are currently not subject to change, new PEPRA members are required to contribute at least 50 percent of the total annual normal cost of their pension benefit as determined by the actuary. PEPRA contains a provision that states when the total normal cost has changed by more than 1 percent of payroll the member contribution rate must be adjusted to ensure the member pays half the normal cost.

For Fiscal Year 2016-17, the total normal cost for Schools' PEPRA members is 12.82 percent. As the base normal cost is 12.08 percent, 12.82 percent does not trigger a member rate change, leaving PEPRA employee contribution rates at 6 percent.

Expected Future Changes
The amortization and smoothing policy approved by the Board on April 17, 2013 spreads rate increases or decreases over a five year period, and amortizes all experience gains and losses over a fixed thirty year period. This inherently builds in future rate changes due to the progression of the amortization schedule. The table below shows the expected cumulative future employer contribution rate changes due to the five year phase-in of the assumption change and all known gains and losses as per the amortization policy. After Fiscal Year 2020-21 no further rate changes are currently projected.

Expected Employer Contribution Rate Change from 2016-17 Due to the Progression of Amortization Bases				
Year	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Schools Pool	1.6%	3.2%	4.7%	5.9%

A more comprehensive projection will be included in the Schools valuation report which will include the expected impact of the investment return for Fiscal Year 2015-16 as well as the anticipated decrease in normal cost due to new hires entering into a lower benefit formula due to PEPRA.

Budget and Fiscal Impacts
Not applicable.

Benefits and Risks

Volatility Ratios
The Actuarial Office presented the Annual Review of Funding Levels and Risks to the Board on November 17, 2015. One of the risk measures identified in that report was the Volatility Ratios (assets/payroll ratio, liability/payroll ratio).The asset/payroll volatility ratio for this plan is 5.0 and the liability/payroll ratio is 6.4. The volatility ratios indicate this plan has a lower than average risk of large changes to employer rates when it comes to investment earnings and changes in liability. Both numbers, as well as additional information about the risks associated with the funding of these plans will be included in the Risk Analysis section of the valuation report that is expected to be released this summer.

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