Risk and Audit Committee

Agenda Item 7a

February 13, 2017

Item Name: Third Party Valuation and Certification of the State and Schools Plans as of June 30, 2015

Program: Audits

Item Type: Information

Executive Summary

The third-party actuarial firm, Buck Consultants, LLC (Buck), completed its independent review of the actuarial valuations of the State and Schools Plans as of June 30, 2015. Overall, Buck found the actuarial process followed by CalPERS actuarial staff is thorough, complete, and complies with applicable Actuarial Standards of Practice (ASOP). The report summarizing the review and including findings and recommendations is attached as Attachment 1 of this agenda item.

Strategic Plan

This agenda item supports Strategic Plan Goal A – Improve long-term pension and health benefit sustainability.

Background

Under the California Constitution, the CalPERS Board of Administration (Board) has plenary authority and fiduciary responsibility to provide for actuarial services. The CalPERS Chief Actuary advises the Board and directs the activities of the CalPERS actuarial staff. The Board also retains the services of an outside actuarial firm to review the work of the CalPERS actuarial staff and to certify that such work complies with actuarial professional standards. The Board's Delegation Resolution RA-16-01 includes the delegation to the Risk and Audit Committee to oversee key internal auditor activities including parallel valuations.

In November 2015, the Board selected a third-party actuarial firm, Buck, to provide the parallel valuation and certification services to the Board. Buck has completed the parallel valuation and certification services for the State and Schools Plans as of June 30, 2015. This activity represents the completion of Task 2 of Contract 2015-8123.

The State Plan provides retirement benefits to members employed by the State of California, and consists of the following separate plans: State Miscellaneous Tier 1, State Miscellaneous Tier 2, State Industrial, State Safety, State Peace Officers and Firefighters (SPOFF), and the California Highway Patrol (CHP).

The Schools Plan provides retirement benefits to members employed by school districts and community college districts in California. It does not cover teachers as they are covered by the California State Teachers' Retirement System.

Analysis
Buck reviewed the actuarial assumptions and methods used in the State and School valuations and concluded that the assumptions used are reasonable and the methodology used to select these assumptions is appropriate and consistent with the guidance provided in ASOP 27 and 35. ASOP 27 discusses the selection of economic assumptions for the measurement of pension liabilities, and ASOP 35 discusses the selection of demographic assumptions for the measurement of pension liabilities.

Buck also completed parallel actuarial valuations for the State and Schools pension plans and compared their key results to the key results produced by CalPERS actuarial staff on an aggregate and individual basis in order to uncover potential discrepancies that offset each other, producing aggregate results that fall within the 5 percent tolerance level.

For the State Miscellaneous Tier 1, State Industrial, State Safety, SPOFF, CHP, and Schools Plans, Buck's key results differed by less than 5 percent from the corresponding results reported by CalPERS actuarial staff.

For the State Miscellaneous Tier 2 plan, the Employer Contribution Rate was within the 5 percent threshold; however, there were discrepancies of more than 5 percent between Buck's calculation and CalPERS' calculation of the present value of benefits, accrued liabilities and normal cost. Buck analyzed all discrepancies greater than 5 percent to identify the reasons for these discrepancies yielding two findings.

1. Tier 2 Findings
   - For some separated participants, CalPERS set the special employee contribution account to zero with balances accumulating only for future years, resulting in a smaller offset to the gross liability and an overstatement of the expected net liability.
   - For separated participants, CalPERS accumulated the special employee contribution account with additional employee contributions in the future, even though they are no longer in covered employment and unable to make such contributions. This resulted in an overstatement of the value of the special employee contribution account and an understatement of the liability.
   - For active employees, there was a slight difference in approaches when applying the Entry Age Normal Cost method. Although both methods are reasonable and the difference in these approaches affects only the split of actuarial liabilities between past and future services and not the amount of the liabilities, CalPERS' approach resulted in a higher normal cost related to future services and lower actuarial accrued liability related to past services.

2. Other Findings:
   - For separated employees in all plans, Buck observed that the mortality assumption (decrement) was not being applied in the period prior to retirement for participants who have separated from employment and are entitled to benefits at a future retirement age.

During the parallel valuation and review of the State and Schools valuations, Buck provided three recommendations to CalPERS:

1. Add information to the valuation reports to more completely fulfill the new ASOP 4 requirements.
2. Consider revising the calculation of projected accumulated employee contributions for Tier 2 participants.
3. Consider reflecting pre-retirement mortality for all separated participants.

Budget and Fiscal Impacts

The fee for the parallel valuation and certification of the 2015 annual valuations of the State and Schools Plans is $73,000. Funding is identified within existing budgetary resources.

Benefits and Risks

It is essential to periodically review contribution requirements and funding levels to ensure the ongoing financial soundness of a pension system. The Actuarial Office has divided the retirement plans at CalPERS into three categories: Public Agencies, State and Schools, and Affiliates (Legislators' Retirement System, Judges Retirement System, Judges Retirement System II, and the 1959 Survivor Benefit Program). The Board's current independent actuarial firm, Buck performs one parallel valuation for each of the three categories on a rotating three year cycle. These parallel valuations provide an additional "check and balance" that increases the financial security of the retirement system for its participating members by reducing the risk of undetected errors in actuarial calculations.

Attachment

Attachment 1 – Parallel Valuation and Certification Report State and Schools Valuations as of June 30, 2015.

____

BELIZ CHAPPUIE
Chief Auditor
Office of Audit Services

____

MATTHEW G. JACOBS
General Counsel

____

SCOTT TERANDO
Chief Actuary