

Risk and Audit Committee Agenda Item 6a

November 15, 2016

Item Name: Third Party Valuation and Certification of the Contracting Public Agency Plans as of

June 30, 2014

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 contracting public agency plans as of June 30, 2014. 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 comments 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 contracting public agency plans as of June 30, 2014. This activity represents the completion of Task 1 of Contract 2015-8123.

Analysis

Buck reviewed the actuarial assumptions and methods used in the public agency valuations and concluded that the assumptions used in the public agency valuations are reasonable and the methodology used to select these assumptions is appropriate and consistent with the guidance provided in Actuarial Standard of Practice (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 20 of the public agency plans and compared their key valuation results with those published in the valuation reports CalPERS actuarial staff prepared for the 20 plans. Buck found four of the public agency plans had discrepancies greater than 5 percent between the two sets of valuations. As required by the contract, Buck determined the reasons for the discrepancies greater than 5 percent.

Specifically, CalPERS provided a list of the 10 largest public agency plans, and Buck selected an additional 10 public agency plans using a random sampling technique. Buck produced valuations for each of the 20 plans using a commercially available valuation system, ProVal[®], and compared their key results, such as total present values of future benefits, actuarial accrued liabilities, normal costs, and total employer contribution rates, to the key results produced by CalPERS professional actuarial staff.

- For the 10 largest public agency plans, all of Buck's calculations for the key results differed by less than 5 percent from the corresponding results reported by CalPERS actuarial staff.
- For four of the 10 randomly selected public agency plans, there were discrepancies of more than 5 percent between Buck's calculation and CalPERS' calculation. All discrepancies greater than 5 percent were for small pooled public agencies.

Buck analyzed differences in the development of their results as compared to the development of CalPERS' results to identify the reasons for discrepancies exceeding 5 percent. Buck found that there was a difference in the application of the probabilities of termination for certain participants. In general, the affected participants had less than five years of service, were employed part-time, or had service less than their elapsed time since entry into the plan.

Because this issue primarily affects the valuation of liabilities for part-time participants, its impact is immaterial for large plans with many full-time employees. For very small plans with a significant number of short-service and part-time participants, the effect was more pronounced. However, focusing solely on the 5 percent threshold as a reasonableness test can be misleading for small plans because a small difference in dollar values can amount to a percentage difference greater than 5 percent.

During the parallel valuation and review of the public agency valuations, Buck also provided three recommendations to CalPERS:

- Add information to the valuation reports to meet new ASOP 4 requirements, effective for measurements made as of dates on or after December 31, 2014.
- Consider revising either the termination decrement tables or the process the valuation system uses to draw the probabilities.
- Consider including additional demographic data in pooled public agency valuation reports to increase transparency although it is not required by actuarial standards.

Budget and Fiscal Impacts

The fee for the parallel valuation and certification of the 2014 annual valuations of contracting public agency plans is \$86,000. 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 CalPERS Public Agency Valuations as of June 30, 2014.

BELIZ CHAPPUIE	
Chief Auditor	
Office of Audit Services	
MATTHEW G. JACOBS General Counsel	
SCOTT TERANDO	
Deputy Chief Actuary	

