Agenda Item 5a

September 17, 2013

ITEM NAME: Third Party Valuation and Certification of the Contracting Public Agency Plans as of June 30, 2011

PROGRAM: Actuarial Office

ITEM TYPE: Action

RECOMMENDATION

Accept Cheiron's report on the June 30, 2011, parallel valuation and certification of the actuarial valuation of all contracting public agency plans in completion of Task 4 of Contract 2009-5377. A copy of the report is included in Attachment 1.

EXECUTIVE SUMMARY

Cheiron recently completed their independent parallel valuation of the contracting public agencies. Cheiron has certified our results as "accurate" and "computed in accordance with generally accepted actuarial principles."

STRATEGIC PLAN

This item is not a specific product of the Strategic or Annual Plans but is part of the regular and ongoing workload of the Actuarial Office.

BACKGROUND

Proposition 162 granted the Board of Administration plenary authority and fiduciary responsibility to provide actuarial services. With this authority, the Board adopted Resolution ACT-95-05A (Actuarial Policies – General) in May of 1995. With this resolution, the Board hired a Chief Actuary to advise the Board and to direct the activities of the Board's professional actuarial staff. Furthermore, the Board will retain the services of an outside actuarial firm to review the work of the Board's actuarial staff and to certify that such work satisfies actuarial professional standards. Under Contract 2009-5377, the Board hired EFI Actuaries (EFI) to perform parallel actuarial valuations and certify the results of the actuarial valuations produced by the Actuarial Office. During the term of the contract EFI merged with Cheiron. Cheiron performed parallel valuations and certified the Contracting Public Agency Plans as of June 30, 2011, in the attached report.

ANALYSIS

Cheiron recently completed their independent parallel valuation of the contracting public agencies as of June 30, 2011. Cheiron has certified our results as "accurate" and "computed in accordance with generally accepted actuarial principles."

Cheiron uses a three step audit approach:

- First, Cheiron reviews the actuarial assumptions and methods. Cheiron found the actuarial assumptions and methods to be within acceptable standards of practice.
- Second, Cheiron performs a parallel valuation using its own actuarial models. Cheiron relies on the member and asset data supplied by CalPERS staff. This data is neither audited nor independently verified. Parallel valuations were performed for 23 participating non-pooled plans and two risk pools. Cheiron focused on four specific actuarial calculations: present value of future payroll, present value of future benefits (PVB), actuarial accrued liability (AAL), and normal cost (NC). Cheiron's independent valuation results for the four key measures were within 5% for all of the audited plans, without exception.
- Finally, Cheiron reconciles the results. If the results computed by Cheiron and CalPERS differ by more than 5%, then Cheiron will reconcile the difference. This reconciliation can be accomplished by comparing the member data, researching methodology differences or by comparing individual computations through test lives.

During the audit, Cheiron identified a few areas that could be improved:

- **Application of the Defined Benefit Limits [IRS Section 415(b)]**: For many years very few CalPERS members were impacted by the Defined Benefit Limit (DBL). Therefore, the Actuarial Office considered the DBL to be immaterial in regards to the annual actuarial valuation process. However with the recent increase in the number of CalPERS members who are impacted by the DBL, the Actuarial Office decided to factor the limit into the actuarial valuation process during the 2011 valuation cycle. During the implementation process, the DBL was applied to all projected benefits for active members.
    - There are exceptions to the rule.
        - Safety members with 15 years: If a safety member has at least 15 years of service, the DBL is ignored. This exception was applied appropriately in the actuarial valuations.
        - Industrial Death and Disability: As part of their review, Cheiron discovered that during the 2011 valuation cycle, actuarial staff missed the exception for Industrial Death and Disability. The DBL does not apply to Industrial Death and Disability benefits. Staff agrees with their finding. In fact, staff discovered this issue earlier this spring and made the necessary programming changes for the June 30, 2012, valuations that are currently being prepared by the actuarial office.
    - Vested Terminations: When an active member quits and defers their retirement benefit to a later date, they are considered a vested termination. As part of their review, Cheiron discovered that during the implementation of the DBL, the DBL at decrement age was applied instead of the actual assumed retirement age. Staff agrees with their

finding and corrections will be made in the June 30, 2013, valuations that will be prepared in the fall of 2014.

Cheiron estimated that revising these 415(b) limits would have a minor impact on the valuation results. The revisions would increase the PVB and AAL by less than 0.2% and the overall employer contribution rates by less than 0.2% of payroll.

- **Deferred Domestic Relations Orders:** When members get divorced, their service may be split as the result of a court order. When this occurs, the non-member is considered an alternate payee. In our valuation system, we assume alternate payees follow the same retirement pattern as the member. In the valuation system, the retirement pattern is based on entry date, which is a data element that is not populated for alternate payees. Cheiron discovered that the lack of an entry date resulted in the retirement decrements being ignored and the system assumes the person will retire at age 80. Staff agrees with this finding and will make the necessary changes to fix this issue in the June 30, 2013, valuations that will be prepared in the fall of 2014. Because alternate payees represent a small portion of the total membership, Cheiron estimated that implementing a retirement pattern for alternate payees would have a minor impact. Using one sample safety plan as an example, revisions increased the PVB and AAL by 0.1% and the overall employer contribution rate by about 0.05% of payroll. The impact will depend on the proportion of alternate payees.
- **Maximum Historical Compensation**: Participant benefits are based on a certain period of years of their highest average compensation. The current Actuarial Valuation System stores the highest compensation, but uses the most recent compensation for valuation purposes. For some participants, their highest average compensation could have occurred in the past. In these circumstances, the liabilities determined using the most recent compensation will be understated. Staff agrees with this finding and will make the necessary changes to fix this issue in the June 30, 2013, valuations that will be prepared in the fall of 2014. Cheiron estimates that using this maximum value will have a minor impact. Using one sample plan as an example, including the maximum compensation could increase the PVB and AAL by 0.1% and the overall employer contribution rate by about 0.04% of payroll.

As part of EFI's previous audit, EFI reviewed the reasonableness of the surcharges for Class 1 benefits for each risk pool. Issues were raised by EFI regarding the Class 1 surcharges for two specific benefit types. These two benefit types were Cost of Living Adjustments (COLA) and Post Retirement Survivor Allowances (PRSA). Cheiron continues to recommend corrective steps for future valuations.

- Public agencies have the ability to contract for 3%, 4%, and 5% COLAs. In general, the cumulative COLA under the PERL is less than the cumulative consumer price index. EFI noted that "in reality a 4% or 5% COLA is a more valuable benefit than a 3% COLA." Staff was aware of this issue at the time of pooling implementation. However, staff decided to have the same Class 1 surcharge for all three COLAs because the cost differences were deemed to be immaterial due to the 3% inflation assumption. Note that if the inflation assumption had to be increased in the future, we would no longer have the same surcharge for the three COLAs.

- Likewise, the surcharge for PRSA is the same for the 25% and 50% allowances. Again Staff was aware of this issue at the time of pooling implementation and decided to group these benefits together since the cost differences were deemed to be negligible and also to simplify the administration of the plan.

BUDGET AND FISCAL IMPACTS

The consulting fee for this audit was $81,130. Funding was already identified within existing budgetary resources.

BENEFITS/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 (Legislative Retirement System, Judges Retirement System I & II, and the 1959 Survivor Program). The Board's current outside actuarial firm, Cheiron, 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.

ATTACHMENTS

Attachment 1 – Cheiron Audit of Public Agencies 2011 valuation

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