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Circular Letter

TO: PUBLIC AGENCIES

SUBJECT: ACTUARIAL EXPERIENCE STUDY

This circular letter is intended to provide you with information about recent changes in the actuarial assumptions and the impact this will have on employer contribution rates.

At its meeting on April 20, 2010, the CalPERS' Board of Administration adopted updated actuarial assumptions based on a recently completed experience study. This Board action will affect the employer contributions rates beginning in fiscal year 2011-2012. Generally, employer contributions rates will increase as a result of this actuarial assumption change.

Background

An experience study measures actual plan demographic experience over a defined period of time. An experience study is used to refine and improve actuarial assumptions used in future actuarial valuations. This recently completed experience study presents the results of the (demographic) experience study on the California Public Employees Retirement System using data from 1997 to 2007. It focused on patterns of termination, death, disability, retirement and salary increases.

The last study was completed in May 2004. This experience study was originally scheduled to be completed in the summer of 2009 but was delayed in part due to the mandatory furloughs that were imposed on CalPERS employees.

The majority of the liabilities of a retirement system such as CalPERS are in the retirement benefits. Other sources of liability include benefits related to death, disability and employment termination. Assumptions that affect retirement benefits will have a larger impact on employer contribution rates than assumptions that only affect death, disability or termination benefits. Since retirement rates, salary increases and post-retirement mortality all affect the valuation of retirement benefits, these assumptions generally have a much greater impact on contribution rates than do other assumptions.

Discussion

The new demographic assumptions adopted by the Board will be substantially better at predicting future experience than the current assumptions and will result in more secure retirement benefits.

This experience study is the first one in which we were able to collect data for the most recent enacted retirement formulas available for public agency miscellaneous members (2.5% @ 55, 2.7% @ 55 and 3% @ 60). Prior to this study, the current assumptions were extrapolated from data under another formula and were based on age only. We moved to an age and service based retirement assumption for these formulas similar to all of the other retirement formulas. This change should more accurately predict future retirements.

Results

The new assumptions have the following estimated impacts on local public agency employers:

- An average increase of 0.4% of payroll in the employer contribution rates for public agency miscellaneous plans covered under either the 2% at age 60 or 2% at age 55 formula.
- An average increase ranging between 1.1% to 1.7% of payroll in the employer contribution rates for public agency miscellaneous plans covered under the 2.5% @ 55, the 2.7% @ 55 or the 3% @ 60 formulas (based on a small sample of plans).
- An average increase ranging between 1% and 2% of payroll in the employer contribution rates for public agency safety plans (based on a small sample of plans).

The new assumptions predict:

- Longer post-retirement life expectancy. The life expectancy of males is increasing on average by a full year while it is increasing on average by about 0.3 years for female.
- Slightly earlier retirement ages overall for all State plans, the Schools pool and local agency miscellaneous members while they produce slightly higher retirement ages on average for local agency safety members.
- Higher salary increases for members with longer service.
- Mixed results for other assumptions (these are described in detail in the experience study report).

The assumptions causing the biggest impact on employer rates for all plans are the assumptions for post-retirement mortality, service retirement and salary increases. Of these, the one assumption causing the biggest increase in rate for all plans is the

proposed change in post-retirement mortality. Since the life expectancy of male members continues to increase at a faster pace than female members, safety plans, which tend to have a much higher proportion of male members, are affected more by this change than miscellaneous plans. The impact from the change in post-retirement mortality alone is causing employer rates for miscellaneous groups to increase by about 0.6% to 1% of payroll, while causing the employer rates for safety plans to go up by about 1% to 1.8% of payroll.

This new experience study provided a basis to establish and apply age and service based retirement assumptions to the 2.5% @ 55, 2.7% @ 55 or the 3% @ 60 formulas. Previous experience studies had already applied age and service based retirement assumptions to other retirement benefit formulas. The age and service based retirement assumptions predict the timing and cost of future retirements more accurately. In this case, the experience study revealed that members in these formula groups (miscellaneous 2.5% @ 55, 2.7% @ 55 or the 3% @ 60 formulas) with higher credited service were more likely to retire than was previously known. This result also added to the employer contribution rate increase.

The measured impact for public agencies will be known when the Actuarial Office has completed the June 30, 2009 actuarial valuations for all employers in the fall of 2010. The June 30, 2009 actuarial valuations will set the employer contribution rates that take effect on July, 1 2011.

If you have any questions, please contact the Employer Contact Center at **888 CalPERS** (or **888-225-7377**).

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