**Item Name:** Amortization Policy (Second Reading)

**Program:** Actuarial Office

**Item Type:** Action

**Recommendation**

Adopt the following changes to the Amortization Policy for all Public Agency, State and Schools actuarial valuations:

1. Shorten the period over which actuarial gains and losses are amortized from 30 years to 20 years. This change applies only to new gains/losses established on or after the effective date of the policy change (see item 5).
2. Amortization payments for all unfunded accrued liability (UAL) bases will be computed to remain a level dollar amount throughout the amortization period. This change applies only to new UAL bases established on or after the effective date of the policy change (see item 5).
3. Remove the 5-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses established on or after the effective date of the policy change (see item 5).
4. Remove the 5-year ramp-down on investment gains/losses established on or after the effective date of the policy change (see item 5).
5. Approve an effective date of June 30, 2019 for policy changes 1-4 above.
6. Set a maximum amortization period of 15 years for all unfunded accrued liability of Inactive Employers (no active members). This change would be effective for the June 30, 2017 actuarial valuations. The actuary will retain the ability to further shorten the period on any valuation date based on the life expectancy of plan members and projected cash flow needs of the plan.

**Executive Summary**

This agenda item is the second reading of the Actuarial Office’s recommended changes to the Actuarial Amortization Policy. This policy has been examined in conjunction with the Asset Liability Management (ALM) process to study the impact of policy changes on projected funded status, contribution volatility, and contribution levels. The recommended changes would shorten the amortization periods in some cases, modify the direct rate smoothing method and change the escalation rate from level percentage of payroll to level dollar amortization. The recommended changes to the policy also include additional provisions for employers that no longer have any active members.

For plans with active members, the amortization bases established prior to the effective date of the revised policy would continue as originally scheduled.
The effective date of any adopted changes could be as early as the June 30, 2017 actuarial valuations. However, given the timing of this Item, staff estimates the delivery of the June 30, 2017 valuation reports would be delayed by about 8 weeks.

Alternatively, implementation of amortization policy changes could be set to occur with the June 30, 2018 actuarial valuations. While staff would have adequate time to incorporate any amortization policy changes into these reports, these policy changes could affect amortization payments related to the scheduled discount rate change from 7.25 percent to 7 percent. These future amortization payments have been previously projected by staff and considered for budgeting purposes by CalPERS agencies under the current policy. This could result in unanticipated increases to required employer contributions beginning in fiscal year 2020-21.

Therefore, staff recommends implementation of policy changes 1-4 above to occur with the June 30, 2019 actuarial valuations. This would result in all known or expected UAL changes for investment gains/losses and assumption changes being amortized under the current policy.

Strategic Plan
This agenda item supports the Fund Sustainability Goal and the Reduce Complexity Goal of the CalPERS 2017-2022 Strategic Plan.

Background
In September 2017, the Actuarial Office informed members of this Committee that the amortization policy would be reviewed with the ALM process. The CalPERS amortization policy was last revised in April 2013 to replace open amortization periods with closed periods for gains and losses. The policy utilizes a level percentage of payroll approach for open (active) plans and a level dollar approach for closed (inactive) plans. The policy was also modified to add 5-year “direct rate smoothing” for certain unfunded liability bases. This change was primarily made to allow for gradual recognition of investment gains and losses which was formerly accomplished through asset smoothing.

While the policy adopted in 2013 improved sustainability for the system and reduced contribution volatility over the prior policies, there are concerns with the current amortization policy with regard to negative amortization, actuarial industry guidance and intergenerational equity. There are also growing concerns over the amortization of the unfunded liability for inactive employers.

Analysis
Negative amortization occurs when the payments on a debt are not sufficient to cover the interest accrual. Under the current amortization policy, the combination of longer amortization periods, direct rate smoothing and the payment escalator contribute to the negative amortization experienced in the earlier years of the amortization bases.

The current amortization policy uses a 30-year amortization period for gains and losses and a 20-year period for assumption, method, and benefit changes other than golden handshakes. Golden handshakes are amortized over 5 years.

It is strongly recommended that the amortization period for future gains and losses be reduced from 30 years to 25 years or lower. The specific staff recommendation is for 20 years although other periods may also be acceptable. Longer amortization periods provide a lower initial annual contribution to that layer but greater cumulative contributions due to interest costs. Reducing the amortization period for certain sources of unfunded liability would be expected to increase future average funding ratios, provide faster recovery of funded status following market downturns,
decrease expected cumulative contributions and mitigate concerns over intergenerational equity. Reducing the amortization period may, however, increase the likelihood of year-to-year contribution changes that are somewhat larger than those expected under a longer period.

Actuarial assumptions are intended to be long-term assumptions and are not likely to be exactly realized in any given year. The costs associated with the difference in actual experience from assumed experience emerges as gains or losses which impact the unfunded liability. To control contribution volatility, the current amortization policy uses a form of direct rate smoothing that phases in costs over a 5-year period and phases them out again during the last 5 years of the amortization period. This is especially important with respect to investment gains and losses.

Using this phase-in approach, the initial payment is one-fifth of the full payment, which results in negative amortization. Shortening the ramp may increase contribution volatility but would reduce negative amortization and total contributions over the life of the amortization base. Removal of the down ramp at the end of the schedule does not materially impact contribution volatility but, in the case of a market downturn or other actuarial loss, would slightly reduce the ultimate amortization payment. The recommended change to the amortization policy is to remove the use of direct rate smoothing for all sources of unfunded liability except for investment gains and losses, as investment return volatility tends to be the largest contributor to contribution volatility. Based on staff’s analysis, shortening the ramp did not materially reduce overall contributions or significantly improve the average funded status of the plans to merit the increase to the contribution volatility. The recommended amortization policy does not reflect changes to the length of the direct rate smoothing period but does remove the down ramp at the end of the schedule.

Required employer contributions are currently calculated with the goal of remaining level as a percentage of payroll, at least for active plans. To achieve this goal, the application of the amortization policy produces a payment which begins with a lower initial payment that increases year after year by the payroll growth assumption, currently 3 percent (changing to 2.875 percent with the June 30, 2017 actuarial valuations). Amortizing without an escalator, as is currently done for inactive plans, would reduce interest costs and eliminate negative amortization by requiring higher payments in the earlier years. In exchange, the payments beyond the first year would remain the same throughout the remainder of the amortization period, assuming no changes to the discount rate or amortization methods occur. Amortizing without an escalator also reduces the intergenerational equity issue.

Pension reform effectively closed many pooled classic public agency plans to new entrants. Using an assumption that payroll will grow on a plan-by-plan basis no longer produces a payment that will maintain a level percentage of payroll. CalPERS also recently began billing public agencies for their unfunded liability as a dollar amount. This change no longer ties the contribution amount to payroll for public agency employers. State and school employers continue to be billed using a contribution rate. Regardless of how unfunded liability payments are billed to employers, the amortization payment escalation rate can be eliminated.

Several organizations have released guidance on amortization policies for public sector pension plans. These include the California Actuarial Advisory Panel (CAAP), the Conference of Consulting Actuaries (CCA), the Government Finance Officers Association (GFOA), and the Society of Actuaries (SOA) Blue Ribbon Panel. The general recommendations for the length of the amortization period vary by source but indicate a period of 15 to 20 years for gains and losses, a period of no longer than twenty-five years for assumption changes, and a period of the lesser of expected future service or 15 years for benefit changes that impact active members.
The CAAP paper also provides that the amortization policy should reflect explicit consideration of the level and duration of negative amortization as well as supporting policy objectives of accountability and transparency.

Analysis has also been performed regarding the amortization policies employed by other major retirement systems in California and the United States. Many systems have adopted shorter amortization periods than are employed in the current policy, especially with regard to the 30-year period that CalPERS currently uses for gains and losses.

The CAAP paper also considers transition policies, that is, how to handle existing amortization layers when amending the amortization policy. To avoid undue disruption to an employer’s budget, the CAAP suggests that existing layers may be allowed to continue as originally scheduled, and the new policy only be applied to new layers.

**Inactive Employers**
There is growing concern over the funding policy for employers that no longer have active members. Currently, the amortization policy for active employers is applied to inactive plans with the exception that unfunded liability for inactive plans is amortized as a level dollar amortization rather than a level percentage of pay. The periods used to pay down the unfunded liability are sometimes longer than the duration of the liability. The recommended change to the policy is to require a maximum 15-year level dollar amortization of the unfunded liability for employers with no active members in any of their pension plans and discretion for the actuary to reduce the period based on the demographics of the plan.

**Budget and Fiscal Impacts**
Not applicable.

**Benefits and Risks**
The adoption of the recommended changes to the policy will result in a policy that is consistent with industry best practice and reduces the amount of negative amortization. Adopting the changes may result in somewhat higher year-to-year contribution increases due to actuarial losses than those that would be expected under a longer period. This may put more strain on employers’ budgets. Implementing the change on a prospective basis is in line with the CAAP paper and will provide minimal changes to contributions in the near-term than if the current amortization bases were modified under the new policy.

Not adopting any changes and keeping our existing policy in place maintains the current issues with negative amortization and intergenerational equity and falls outside of industry guidance.
Attachments
Attachment 1 - Amortization Policy Presentation (PowerPoint)
Attachment 2 - Actuarial Amortization Policy (redline version)
Attachment 3 - Actuarial Amortization Policy (final version)
Attachment 4 - Estimated Change in Contributions Due to Proposed Amortization Policy
Attachment 5 - Alternate Amortization Policies – Impact on Sample Plan (PowerPoint)

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