Actuarial Amortization Policy

Purpose
The Actuarial Amortization Policy establishes the amortization methods to eliminate positive or negative unfunded liabilities in a manner that maintains benefit security for the members of the System while minimizing substantial variations in employer contribution rates.

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Background

This Policy uses a principled approach in the allocation of the cost of unfunded accrued liabilities in respect to retirement benefits - that is, to fairly allocate the costs of experience gains/losses, changes due to plan amendments, actuarial assumption changes, and actuarial methods in a manner that controls contribution volatility while promoting intergenerational equity. This principled approach has evolved over time between Board, stakeholders, and the Actuarial Office.

Strategic Objective

This policy establishes amortization methods that are aimed at ensuring that future contributions and current plan assets will be sufficient to provide for all benefits expected to be paid to members and their beneficiaries with the following considerations:

- Impact on the preservation/advancement of funded status
- Impact on the estimated volatility of the annual change in employer contribution rates
- Impact on the estimated average employer contribution rate
- Likelihood of high levels of employer contribution rates in any given year
- Likelihood of large changes in employer contribution rates in any given year

Policy

(A) CalPERS shall use professionally accepted amortization methods to eliminate unfunded liabilities in a manner that maintains benefit security for the members of the System while minimizing substantial variations in employer contribution rates.

(B) CalPERS shall amortize different portions of the total unfunded liability over different periods of time, depending upon the type of event that created the particular portion of the unfunded liability. For bases established on or after the effective date of this policy, the unfunded liability shall be amortized as a level dollar amount with the following specifications.

1) Investment Gains and Losses

The contribution amount with regard to any investment gains and losses recognized in that valuation shall be the annual amount determined in accordance with the following schedule:

- Year 1: 20% of base payment
- Year 2: 40% of base payment
- Year 3: 60% of base payment
- Year 4: 80% of base payment
- Years 5 through 20: base payment

Where the base payment shall be the contribution amount necessary for the gains and losses to be fully amortized over a fixed 20-year period using the above schedule.
2) **Non-Investment Gains and Losses**
The contribution amount with regard to any non-investment gains and losses recognized in that valuation shall be amortized over a period of 20 years.

3) **Change in Actuarial Assumptions or Actuarial Methods**
The contribution amount with regard to a change in unfunded liability due to a change in actuarial assumptions, or a change in actuarial methods, shall be amortized over a period of 20 years.

4) **Change in Plan Provisions**
The contribution amount with regard to a change in unfunded liability due to a change in plan provisions (other than a Golden Handshake) shall be the dollar amount required to amortize that change in unfunded liability over a period of 20 years from the date of the actuarial valuation which first recognizes that change in unfunded liability.

5) **Golden Handshakes**
The annual contribution amount with regard to a change in unfunded liability due to a Golden Handshake shall be the contribution rate or dollar amount required to amortize that change in unfunded liability over a period of 5 years from the date of the actuarial valuation which first recognizes that change in unfunded liability.

6) **Inactive Agency**
For a public agency with no active members in any plan, the unfunded liability shall be amortized over a closed amortization period of no more than 15 years at the discretion of the Chief Actuary.

7) **New Contracting Agency**
Any agency contracting with CalPERS for the first time shall have the initial unfunded liability amortized over a period equal to the smaller of 20 years or the average future working lifetime of that agency's active members.

8) **Mathematical Inconsistencies**
In certain cases, this section provides for a Fresh Start of the amortization bases.

   (a) A Fresh Start may be used whenever application of policies as set forth in paragraphs (B)(1) through (B)(5) result in mathematical inconsistencies or a violation of the goals as stated in the strategic objectives, including, without limitation, the following circumstances:

   1) A negative employer contribution rate; or

   2) A negative employer amortization payment on a positive unfunded liability; or
2) The effect of adding multiple amortization base payments results in a net amortization payment that completely amortizes the total unfunded liability/surplus in a very short time period, which results in a large change in the employer contribution rate; or

3) Whenever application of the methods set forth in paragraph (B), in the professional judgment of the Chief Actuary, does not accomplish the goals as stated in paragraph (A).

(b) The amortization period of the Fresh Start base shall be determined by policies established by the Chief Actuary in a manner which best meets the goals stated in paragraph (A).

9) Plans First Joining a Risk Pool
The amortization schedule with regard to the unfunded accrued liabilities for agencies joining a risk pool for the first time shall remain the same as the amortization schedule before joining the risk pool. If a non-pooled plan is required to be split into separate rate plans due to differing retirement formulae, then the unfunded liabilities will be allocated in an appropriate manner that meets the needs of the contracting agency consistent with paragraph (11).

10) Request to Extend Amortization due to Financial Necessity
(a) Approval Process
1) Pension Contracts and Prefunding Programs (PCPP)
   Analysis by PCPP is required prior to approval by the Chief Actuary. PCPP will review if the employer i) demonstrates a financial necessity, and ii) provides sufficient evidence that the payment of all future required contributions under the extended amortization period is financially sustainable.

2) Chief Actuary
   The Chief Actuary will review the financial analysis provided by the PCPP and all other relevant facts and circumstances and determine whether an extension in the amortization payment schedule is appropriate.

(b) Modified Amortization Schedule
   Provided approval by the Chief Actuary to extend the amortization period, the Chief Actuary will set the modified amortization method and period.
1) For Plans Other Than Inactive Agency Plans

The standard method of amortization will be a Fresh Start of the total UAL and level dollar amortization over a 25-year or shorter period.

In extreme cases, the Chief Actuary may consider an amortization period up to 30 years, or an amortization method that results in increasing payments over the amortization period. Such increases in payments will not be greater than the expected annual increase in payroll of plan members.

In no event will payments under the modified amortization schedule be less than interest on the UAL at the valuation interest rate.

2) For Inactive Agency Plans

The standard method of amortization will be a Fresh Start of the total UAL and level dollar amortization over a 20-year or shorter period.

(c) Reassessment After 3-5 Years

After 3-5 years of payments under the modified amortization schedule, the PCPP will reevaluate whether the employer continues to face a financial necessity. If a financial necessity no longer exists, the Chief Actuary may Fresh Start the UAL and amortize as a level dollar over a 20-year period if such Fresh Start results in an acceleration of the existing amortization schedule.

(d) Annually, the Chief Actuary will report to the Board actions taken pursuant to these guidelines.

(e) If a plan’s amortization period is extended due to financial necessity under this section, the agency may not apply for a subsequent extension for that plan within the following 5 years.

11) Flexibility to Address Funding Needs

In the event that a public agency requests to change any amortization bases to achieve fiscal necessities staff may fresh start existing bases, shorten existing individual bases, and/or combine/split existing bases to achieve the public agencies goals. However, in no event shall any change in amortization under this section result in a deferral of funding.

12) Funding Stability

When an agency is faced with significant increases or decreases in amortization payments and it is desired to smooth out the funding volatility, the Chief Actuary may rebalance amortization payments as long as it does not result in a deferral of funding.
13) Surplus Plans
If an actuarial surplus exists (i.e. the Market Value of Assets exceeds the plan’s accrued liability) any prior amortization layers shall be considered fully amortized, and the surplus shall not be amortized.

In the event of any subsequent unfunded liability a Fresh Start shall be used with an amortization period of 20 years or less in accordance with policies established by the Chief Actuary in a manner which best meets the goals stated in paragraph (A). The schedule described in paragraph (B)(2) may be used.

14) Small Amounts
Where small unfunded liabilities are identified in annual valuations which result in small payment amounts, the actuary may shorten these bases to achieve a payment that is proportional to the size of liabilities of the plan.

15) Funding Risk Mitigation
In the event of a risk mitigation event as outlined in the Funding Risk Mitigation Policy, investment gains due to that event will be amortized to offset the impact of the discount rate change.

Key Terms / Definitions
For the purposes of this document, the following terms and definitions apply.

<table>
<thead>
<tr>
<th>Key Term</th>
<th>Definition</th>
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<tr>
<td>Fresh Start</td>
<td>Combining multiple amortization bases into a single base</td>
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Roles and Responsibilities
CalPERS Chief Actuary shall:

- Review the appropriateness of the actuarial amortization methods from time to time or at any time for each of the benefit programs (including the affiliate programs) and make recommendations to the Board as appropriate.
- Direct and oversee the ongoing and effective implementation and maintenance of this policy.

All CalPERS actuaries shall comply with this policy in the execution of their duties.
Compliance
All methodologies contained in this policy are subject to the auditing procedures of the CalPERS Office of Audit Services.

Consequences of Non-Compliance
Not Applicable

Authoritative Sources
CalPERS will administer this policy in compliance with the following legal, regulatory, and policy requirements:

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
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<tbody>
<tr>
<td>Cal. Gov’t Code §20812</td>
<td>Establishes authority and criteria for adoption of amortization extensions</td>
</tr>
<tr>
<td>Cal. Gov’t Code §7522.52</td>
<td>Effectively prohibits amortization of surplus</td>
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Related Documents
For additional information, please refer to:

<table>
<thead>
<tr>
<th>Document</th>
<th>Relevance</th>
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<tr>
<td>Funding Risk Mitigation Policy</td>
<td>The Funding Risk Mitigation Policy seeks to reduce CalPERS funding risk over time by lowering the discount rate when the CalPERS actual investment performance significantly outperforms the assumed discount rate.</td>
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## Revision History

The following revisions have been made to this policy:

<table>
<thead>
<tr>
<th>Version</th>
<th>Modification Date</th>
<th>Summary of Changes</th>
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| 1.0     | 4/20/2016         | Combined and reformatted existing resolutions; This policy supersedes:  
  - ACT-96-05E (Rev.) Amortization and Smoothing Policy Resolution dated 5/21/14  
  - 05-02-AESD (Rev.) Smoothing Employer Contribution Rates dated 5/21/14  
  - 30 Year Amortization Extension Policy Guidelines (Rev 9-2010)  
  - Funding Stability Directive effective 1/1/2015 |
| 2.0     | 2/14/2018 for the 6/30/2019 funding valuations | • Shortened amortization period for gains and losses to 20 years  
  • Limited direct rate smoothing to the first five years for investment gains and losses  
  • Established that the unfunded liability for inactive agencies be amortized over a closed period.  
  • Eliminated amortization of surplus |
| 3.0     | November 15, 2018 | • Updated Section 10 Regarding Requests to extend Amortization Periods due to financial necessity |