



# California Public Employees' Retirement System

## Actuarial Amortization Policy

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**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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# Actuarial Amortization Policy

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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 than controls contribution volatility while promoting intergenerational equity to minimize employer cost volatility. 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 returning the System to fully-funded status within 30 years consistent with the following considerations/principles:

- 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) It is the policy of the Board to CalPERS shall use professionally accepted amortization methods to eliminate unfunded liabilities ~~or surpluses~~ in a manner that maintains benefit security for the members of the System while minimizing substantial variations in employer contribution rates.
- (B) It is also the policy of the Board to CalPERS shall amortize different portions of the total unfunded liability ~~or surplus~~ over different periods of time, depending upon

the type of event that created the particular portion of the unfunded liability ~~or surplus~~. 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.

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## Actuarial Amortization Policy, Continued

Policy,  
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### (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
- ~~Year 27: 80% of base payment~~
- ~~Year 28: 60% of base payment~~
- ~~Year 29: 40% of base payment~~
- ~~Year 30: 20% of base payment~~

~~Where t~~The base payment, ~~for this paragraph (B)(1),~~ shall be the contribution ~~rate or dollar~~ amount ~~(which may take into account the annual payroll increase assumption adopted by the Board)~~ necessary for the gains and losses to be fully amortized over a fixed ~~320~~ 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.~~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 16: base payment~~
- ~~Year 17: 80% of base payment~~
- ~~Year 18: 60% of base payment~~

- ~~Year 19: 40% of base payment~~
- ~~Year 20: 20% of base payment~~

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## Actuarial Amortization Policy, Continued

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Policy,  
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~~The base payment, for this paragraph (B)(2), shall be the contribution rate or dollar amount (which may take into account the annual payroll increase assumption adopted by the Board) necessary for the change in unfunded liability to be fully amortized over a fixed 20 year period using the above schedule.~~

### **(43) 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 ~~(increasing each year by the overall payroll increase assumption adopted by the Board)~~ required to amortize that change in unfunded liability over a period of twenty years from the date of the actuarial valuation which first recognizes that change in unfunded liability.

### **(54) 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 ~~(which may take into account the annual payroll increase assumption adopted by the Board)~~ required to amortize that change in unfunded liability over a period of five 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

### **(75) 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 ~~twenty~~ years or the average future working lifetime of that agency's active members. ~~with a contribution rate or dollar amount, which may take into account the annual payroll increase assumption adopted by the Board.~~

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## Actuarial Amortization Policy, Continued

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Policy,  
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### **(86) 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  
a negative employer amortization payment on a positive unfunded liability; or

~~2) a positive employer amortization payment on a negative unfunded liability (i.e. an actuarial surplus); or~~

~~3)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~~

~~4)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 staff~~ in a manner which best meets the goals stated in paragraph (A).

### **(97) 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 ~~(119)~~.

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## Actuarial Amortization Policy, Continued

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Policy,  
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**(108) Request up to a ~~for~~ 30 year Extension due to Severe Financial Hardship**

The following guidelines are for evaluating requests by employers for a re-amortization of its unfunded liability, extensions of up to 30 years to amortize unfunded liabilities. If granted, the unfunded liability shall be amortized as a level dollar amount over a period not to exceed 30 years. These guidelines ~~They~~ are not meant to be exclusive and additional facts or criteria may be examined where deemed necessary by the Chief Actuary prior to approval or denial of extension requests:

- a) Evidence of a need for rate relief consisting of:
  - 1) A statement of hardship from the employer;
  - 2) A statement that the employer has notified employees or employee groups of the request for an extension of the employer's amortization period; and
  - 3) A statement that the employer is aware of the potential for a reduction in benefits in the event that the employer terminates the plan without providing continuation of funding that would be adequate to fully fund the liabilities upon termination.
- b) Evidence that the extension will, in fact provide rate relief – that is if the current net amortization period is already nearly 30 years, then extending to 30 years will not produce measurable rate relief and is unwarranted.
- c) Evidence that the reductions in the employer rate will produce no long-term harm to the employer's plan, including:
  - 1) A review of the plan's future cash flows to ensure that benefit payments and refunds are not jeopardized in any way;
  - 2) A review of future funded status of the plan;

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## Actuarial Amortization Policy, Continued

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**Policy,**  
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- 3) A review of the plan's funded status on a termination basis i.e. in the event that the employer terminates the plan (as current State law allows) to determine if the plan's assets will be sufficient in the future to cover all plan termination liabilities without any reduction in benefits. If the plan's assets will not be sufficient, other factors will be considered on a case by case basis based on the specific facts and circumstances of each request, including without limitation, the likelihood of the employer terminating its contract, the employer's ability to provide continuation of funding at termination, whether annual contributions continue to and are projected to continue to exceed benefits paid to retirees and beneficiaries, and/or whether the rate relief would have a material impact on the plan's funded status.
- d) A request for extension will be approved only if the Chief Actuary determines that approval would not constitute a breach of the Board's fiduciary duties or violate applicable tax laws.
- e) If it is known that employer contributions are expected to increase in the next few years, the Chief Actuary will ascertain how the agency plans to provide for such anticipated future rate increases.
- f) Any request for an extension shall be submitted to CalPERS on or before May 31<sup>st</sup> prior to the beginning of the fiscal year for which the employer contribution rate would be recalculated, and CalPERS shall grant or deny the request no later than June 30 prior to the beginning of the fiscal year for which the employer contribution rate would be recalculated.
- g) Additional facts or criteria may be examined where deemed necessary by the Chief Actuary.
- h) Annually, the Chief Actuary will report to the Board actions taken pursuant to these guidelines.

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## Actuarial Amortization Policy, Continued

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Policy,  
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### **(119) 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.

### **(120) 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.

### **(141) 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.

### **(152) 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.

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**Key Terms /  
Definitions**

<b>Key Term</b>	<b>Definition</b>
Fresh Start	Combining multiple amortization bases into a single base

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# Actuarial Amortization Policy, Continued

**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.

**Authoritative Sources**

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

Source	Description
Cal. Gov't. Code §20812	Establishes authority and criteria for adoption of amortization extensions
<u><a href="#">Cal. Gov't Code §7522.52</a></u>	<u><a href="#">Effectively prohibits amortization of surplus</a></u>

**Related Documents**

For additional information, please refer to:

Document	Relevance
Funding Risk Mitigation Policy	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.

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## Actuarial Amortization Policy, Continued

### Revision History

The following revisions have been made to this policy:

Version	Effective Date	Summary of Changes
1.0	4/20/2016	<p>Combined and reformatted existing resolutions;</p> <p>This policy supersedes:</p> <ul style="list-style-type: none"> <li>• ACT-96-05E (Rev.) Amortization and Smoothing Policy Resolution dated 5/21/14</li> <li>• 05-02-AESD (Rev.) Smoothing Employer Contribution Rates dated 5/21/14</li> <li>• 30 Year Amortization Extension Policy Guidelines (Rev 9-2010)</li> <li>• Funding Stability Directive effective 1/1/2015</li> </ul>
<u>2.0</u>	<u>2/14/2018 for the 6/30/2019 funding valuations</u>	<ul style="list-style-type: none"> <li>• <u>Shortened amortization period for gains and losses to 20 years</u></li> <li>• <u>Limited direct rate smoothing to the first five years for investment gains and losses</u></li> <li>• <u>Established that the unfunded liability for inactive agencies be amortized over a closed period.</u></li> <li>• <u>Eliminated amortization of surplus</u></li> </ul>