



OPEB ASSUMPTION MODEL

For Actuarial Valuations and Alternative Measurement Method Analyses
Based on Data Measured After August 15, 2012

In order to participate in the California Employers' Retiree Benefit Trust (CERBT) program, employers must provide periodic other post-employment benefit (OPEB) cost reports to the CalPERS Board of Administration.

The CalPERS Board requires that OPEB cost reports must be prepared using actuarial assumptions and methods that comply with Actuarial Standards of Practice and with Governmental Accounting Standards.

If an agency that participates in a defined benefit pension plan lacks reliable or specific information on which to base a choice of an assumption or method, the Board recommends that the agency rely on assumptions and methods used by its pension plan.

The assumptions and methods used by the CalPERS pension plan can be found on the CalPERS website in the OPEB Assumptions Model section of the CERBT program web pages.

Information and suggestions relevant to developing assumptions for an OPEB valuation (e.g., health care cost trend rate) unique to the CERBT program (e.g., expected return and volatility of CERBT investment strategies) as well as select pension plan assumptions are provided below.

**Information Relevant to the CalPERS CERBT Program
as of 10/15/2014**

Method or Assumption	Comments
Actuarial Cost Method	In pension valuations, CalPERS staff uses Entry Age Normal Cost Method.
Asset Valuation Method	If additional plan assets exist outside of the CalPERS trust fund, then the actuary should devise a method of dividing the liabilities between those to be covered by the CalPERS trust and those covered by the outside assets. The actuary should report to CalPERS only the liabilities of the plan to be covered by the CalPERS trust assets.
Amortization Period	In pension valuations, CalPERS staff assumes payroll increases of 3.00% per annum when calculating the amortization of unfunded accrued liability.
Health Cost Trend Assumptions	<p>CalPERS staff suggests the following Health Cost Trend Assumptions:</p> <p><u>Vision, Dental</u>, etc., other than medical benefits should use a flat trend rate between 2% and 5%.</p> <p><u>Medical benefits</u> should utilize a select and ultimate period, with the select period of no more than 10 years and the ultimate trend rate should be between 4% and 6%.</p> <p>If there is the need for a separate pharmacy trend rate, CalPERS staff suggests that it be the same as the medical trend rate assumption or no more than 0.5% higher.</p>
Demographic Assumptions	If the members are covered by a defined benefit pension plan, then CalPERS staff suggests the actuary use the same pre-retirement decrements, salary growth (due to Seniority, Merit and Promotion if OPEB benefits are based upon salary), percent married, etc. and post-retirement mortality as the assumptions used for the pension plan valuation.

Method or Assumption	Comments
<p>Economic Assumptions</p>	<p>For employers whose contribution policy is to contribute less than the ARC, but more than pay-as-you-go, the long term expected rate of return should be a blended rate that interpolates as prescribed by GASB Statements 43 and 45.</p> <p>The assumptions about expected real return, standard deviation, and correlation coefficient of each asset class were developed through a joint effort of the senior CalPERS investment and actuarial staff and outside consultants as part of the CalPERS Board Asset-Liability Workshop.</p> <p>The expected long term investment return assumptions were developed for each of the three asset allocation strategies using a building block approach based as well as taking into account the expected inflation rate, short and long term real return expectations, and the expected cash flows of a hypothetical large plan.</p> <p>CalPERS staff developed the following economic assumptions.</p> <p>General Inflation: 2.75% compounded annually</p> <p>Fees: Long term expected returns were reduced by 13 basis points (bps) which reflects CERBT fees in effect at the time this document was created. The proportion of administrative to investment fees is 70% administrative and 30% investment.</p> <p>Long Term Expected Return:</p> <p style="padding-left: 40px;">Real return rate assumptions</p> <p style="padding-left: 40px;"><u>Strategy 1</u></p> <p style="padding-left: 80px;">4.53% long term expected return – 60yr (net of fees)</p> <p style="padding-left: 80px;">11.74% std. dev. of expected returns</p> <p style="padding-left: 40px;"><u>Strategy 2</u></p> <p style="padding-left: 80px;">3.98% long term expected return – 60yr (net of fees)</p> <p style="padding-left: 80px;">9.32% std. dev. of expected returns</p> <p style="padding-left: 40px;"><u>Strategy 3</u></p> <p style="padding-left: 80px;">3.37% long term expected return – 60yr (net of fees)</p> <p style="padding-left: 80px;">7.14% std. dev. of expected returns</p>
<p>Implicit Rate Subsidy</p>	<p>Refer to ASOP No. 6 regarding valuing the Implicit Subsidy for health premiums for OPEB. Details regarding the age adjusted health premium rates for the CalPERS PEMHCA program can be found online on the CalPERS website in the CERBT OPEB assumptions model section.</p>