

Board Responsibilities – Investments and Administration

2.2 – Actuarial Soundness and Funding

Date Adopted: November 13, 2014

Date Amended: July 14, 2016; July 12, 2018; October 11, 2018; February 11, 2021; December 9, 2021.

Policy

The Board of Trustees will make determinations regarding funding of defined benefit plans in accordance with the Constitution and laws of the State of Maine, based on the advice of professional actuaries and staff, and guided by the following principles:

- Long-term costs of statutory benefits must be funded;
- Contribution rates should be stable;
- Liabilities accrued today should not be imposed on future generations;
- Funding should be based on sound actuarial assumptions and methodologies; and
- Reasonable steps should be taken to manage funding risks.

Statutory/Legal Provisions

- [Me. Const. art. IX, §§ 18-A and 18-B.](#)
- [5 M.R.S. §§ 755, 803, 804, 1255, 1303, 1304, 17103, 17107, 17151, 17153, 17154, 17155, 17158, 17160, 17253, 17254, 17701, 17701-A, 17701-B, 17708, 17708-A, 17708-B, 17709, 17709-A, 17709-B, 17710, 17710-A, 17710-B, 17711, 17711-A, 17711-B, 17712, 17712-A, 17712-B, 18301, 18302, 18309, 18310, 18801.](#)
- [94-411 C.M.R. ch. 803 \(MainePERS Rule Chapter 803\).](#)

Actuarial Consultant

Professional actuaries are experts in valuing program liabilities, advising on the funding of those liabilities, and assessing risks associated with those liabilities. The Board shall engage professional actuarial consultants to work with professional staff to assist the Board and to provide comprehensive reporting and recommendations as follows:

- Annual valuations for each program;
- Employer rate recommendations as required by each program's funding schedule;
- Experience studies every five years or more frequently as needed; and
- Special reports or assistance in preparing reports as requested by the System on behalf of the Board or the Legislature.

Governance Manual

MainePERS Board of Trustees

The Board shall instruct the actuarial consultants to provide independent information and advice free from self-interested influence by any party. Actuarial consultants shall be directed to report any improper request to the Board Chair or Chief Executive Officer.

The Board shall engage an independent actuarial audit of the retained actuarial consultant every five years or as required by circumstances. The Board and staff shall conduct a review of the retained actuarial consultant at least every five years in conjunction with the completion of the audit. Based on this review, the Board shall determine whether to engage in a new competitive process to retain an actuarial consultant or to continue to retain the existing consultant without a new competitive process.

Funding Target

The target for each defined benefit plan is to be at least 100% funded, which means that the actuarial value of assets is at or above the actuarial accrued liability. These targets shall be considered met at those times when existing unfunded actuarial liabilities and any new unfunded liabilities resulting from experience losses are retired using actuarially sound amortization periods for the State Employee and Teacher Retirement Program in compliance with the State Constitution and using actuarially sound amortization periods in the Legislative Retirement Program, Judicial Retirement Program and Participating Local District (PLD) Consolidated Retirement Plan. The targets will be reset in an actuarially sound manner after reaching 100% to protect plan funding and maintain stabilized contribution rates.

Funding Methodology

Based on the advice of the actuarial consultant, the Board has determined that MainePERS shall use the funding methodology outlined below. The methodology consists of three elements: (1) an actuarial cost method; (2) an asset-smoothing method; and (3) an amortization method. Each of these shall be revisited periodically by the Board to ensure continued soundness.

Actuarial Cost Method

MainePERS uses the Individual Entry Age Normal method to calculate actuarial liabilities. Under this method, an individual's projected benefits at retirement are calculated based on actuarial assumptions and then allocated over the individual's career at a level percent of payroll.

Asset-Smoothing Method

To reduce volatility, MainePERS uses a three-year smoothing method in calculating the actuarial value of assets. This method involves calculating an expected value of the fund based on the beginning of the year actuarial value of assets adjusted for cash flows multiplied by the actuarial assumption for the discount rate. This expected value is then compared to the actual

Governance Manual

MainePERS Board of Trustees

market value of the assets, and one-third of the difference is added to the expected value to arrive at the final actuarial value of assets.

Amortization Method

MainePERS amortizes unfunded accrued liabilities on a level-percent-of-pay basis. The length and type of the amortization period will vary depending upon the applicable laws governing each program and the source of the unfunded accrued liability.

For the State Employee and Teacher Program, the maximum amortization periods are established in the Maine Constitution. The State Employee and Teacher Program's unfunded accrued liability existing on June 30, 1996 is amortized over a closed period ending June 30, 2028. Unfunded accrued liabilities arising from annual experience gains or losses are required to be amortized over 20-year periods. Finally, any plan changes that increase the plan's liabilities must be amortized over a one-year period.

For the Legislative and Judicial Programs, unfunded accrued liabilities are amortized over an open 10-year period.

For the PLD Consolidated Retirement Program, unfunded actuarial liabilities arising from annual gains or losses are amortized over 20-year periods. For individual un-pooled PLD plans, unfunded actuarial liabilities are amortized over periods that vary by PLD.

Actuarial Assumptions

The actuarial consultant shall provide the Board with independent demographic data analysis and recommendations for updating demographic assumptions at least every five years.

The assumed rate of return is a blend of the projected average gain or loss on investments over 10 and 20 years based on the adopted asset allocation. It may be different than the discount rate, which is the rate at which liabilities are discounted. Discount rates may be different from plan to plan based on the specific provisions, funding levels, and risks of each plan, even though the assets are co-mingled for investment purposes. This is because there is not a single specific discount rate that can ever be considered as appropriate for every plan. Thus, different plans may select different discount rates, although they are expected to remain within a small range (+ or – 25 basis points) of each other.

The Board will examine economic assumptions at least annually. The discount rate on liabilities shall be compared to a guideline range of a combination of the 120-month average of the 10-year constant maturity treasury rate published by the Federal Reserve Bank of St. Louis plus 3% to 4.5%. If the current discount rate(s) fall outside of this range, the actuarial consultant, Chief Executive Officer, Chief Investment Officer, and Board's general investment consultant shall make a recommendation as to whether an adjustment is needed, taking into account a 10-, 20-, and 30-year economic outlook. If the Board is satisfied that all economic assumption

Governance Manual

MainePERS Board of Trustees

recommendations were prepared using sound actuarial principles and economic theory, the Board shall adopt the actuarial consultant's recommended assumptions.

Based on the most recent experience review and the recommendations of the actuarial consultant, the Board has adopted the following actuarial assumptions:

State Employee and Teacher Program, Judicial Program, and Legislative Program

- Discount rate: 6.5%
- Inflation (included in the above assumption): 2.75%
- The other economic and demographic assumptions recommended by the actuarial consultant in the State Employee and Teacher Program experience study.

PLD Plans

- Discount rate: 6.5%
- Inflation (included in the above assumption): 2.75%
- The mortality assumptions recommended by the actuarial consultant in the State Employee and Teacher Program experience study, and the remaining economic and demographic assumptions recommended by the actuarial consultant in the PLD Consolidated Retirement Plan experience study.

Contribution Rate Setting

Contribution rates are set based on recommendations from the actuarial consultant using the above principles, methodology and assumptions and in accordance with statutes and rules. Employer contribution rates are composed of the normal cost rate and, for each source of unfunded actuarial liability, an unfunded actuarial liability rate. Employee rates in the PLD Consolidated Retirement Plan may also have normal cost and unfunded actuarial liability components in accordance with Rule Chapter 803.

The actuarial consultant shall provide the Board with annual valuation reports for each program. The actuarial consultant also shall provide the Board with recommended contribution rates for the State Employee and Teacher, Legislative, and Judicial Programs to keep each program soundly funded. The Board will consider the information in the reports and ensure that this information was prepared independently, free from any self-interested influence, and using sound actuarial principles. If the Board is satisfied that this information was prepared independently, free from any undue influences, and using sound actuarial principles, the Board shall adopt the actuarial consultant's recommended rates.

Governance Manual

MainePERS Board of Trustees

The Board delegates to the Chief Executive Officer the setting of the contribution rates for the PLD Consolidated Retirement Plan in consultation with the PLD Advisory Committee and in accordance with Rule Chapter 803, this Policy, and the Plan valuation approved by the Board.