CALSTRS

Regular Meeting

Item Number 4c – Open Session

Subject: Actuarial Valuation of the Cash Balance Benefit Program and Consideration for the Adoption of an Additional Earnings Credit

Presenter(s): David Lamoureux and Rick Reed, CalSTRS / Nick Collier and Scott Preppernau, Milliman

Item Type: Action

Date & Time: May 3, 2023 – 5 minutes

Attachment(s):

Attachment 1 – June 30, 2022 Actuarial Valuation for the Cash Balance Benefit Program

Attachment 2 – Proposed Resolution for the Adoption of an Additional Earnings Credit

PowerPoint(s):

Summary of Valuation Results for the Cash Balance Benefit Program

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Item Purpose

The purpose of this item is to present the results of the June 30, 2022 actuarial valuation of the Cash Balance Benefit Program and to consider the adoption of an additional earnings credit of 4.19%.

Recommendation

Staff recommends that an additional earnings credit of 4.19% of the June 30, 2022, account balance be awarded to members of the Cash Balance Benefit Program who have not retired as of the day of the board's decision.

Executive Summary

The attached report is the annual actuarial valuation of the Cash Balance Benefit Program required as per Section 26211 of the Education Code. The actuarial valuation provides a snapshot of the fund's assets and liabilities as of June 30, 2022.

Funded Ratio

The funded ratio of a pension plan is defined as the ratio of a plan's assets to its actuarial obligation. The following table compares key information about the funded ratio of the Cash Balance Benefit Program between June 30, 2021 and June 30, 2022 actuarial valuations.

Summary of Key Results for Cash Balance Benefit Program

	June 30, 2022 Valuation	June 30, 2021 Valuation
Actuarial Obligation	$379.4 Million	$330.9 Million
Actuarial Value of Assets	$438.1 Million	$483.0 Million
Unfunded Actuarial Obligation / (Actuarial Surplus)	($58.7 Million)	($152.1 Million)
Proposed Additional Earnings Credit	$15.3 Million[1]	$37.1 Million[2]
Final Unfunded Actuarial Obligation / (Actuarial Surplus)	$43.4 Million	$115.0 Million
Funded Ratio		
- Before Additional Earnings Credit	115.5%	146.0%
- After Additional Earnings Credit	111.0%	131.2%

As illustrated, both the funded status and the actuarial surplus have decreased since the 2021 valuation. These decreases were primarily the result of the negative investment return for fiscal year 2021-22, which was significantly less than the assumed investment return of 6.5% and the minimum interest rate credited to the member's account of 1.53%. For more details on the changes in the surplus, please refer to table 4 on page 12 of the attached report.

The funded ratio for the Cash Balance Benefit Program is based on the market value of assets. This differs from the Defined Benefit Program which uses an actuarial value of assets which smooths the volatility in the investment markets by reflecting only one-third of the net accumulated investment gains and losses in a year. For the Cash Balance Benefit Program the volatility of the investment market is managed by establishing a gain and loss reserve, which, if positive, includes investment earnings in excess of the amount needed to fund the program liabilities and, if negative, reflects an unfunded actuarial obligation of the program. If, in any year, investment earnings are less than necessary, any positive balance in the gain and loss reserve is used to fund the minimum interest rate. If the balance in the gain and loss reserve is sufficient to properly protect the program against investment losses, any remaining actuarial surplus can be used to fund an additional earnings credit.

[1] Subject to approval by the board at the May 2023 meeting.
[2] Approved by the board in May 2022.

Asset Allocation and 2021-22 Investment Return

As shown on page 1 of the attached report, the investment return for the Cash Balance Benefit Program was calculated to be -10.2% for fiscal year 2021-22. This return was significantly lower than the calculated return of -2.5% for the Defined Benefit Supplemental Program. The main reason for the significant difference between the investment returns is how the assets are invested for the Cash Balance Benefit Program. As per a previous board decision, the assets of the Cash Balance Benefit Program are not invested in private equity and real estate. The board made the decision at the time to not invest in illiquid asset classes such as private equity and real estate due to concerns over the uncertainty of the cash flow needs for the program.

The different asset allocation is also the reason why the assumed investment return for the Cash Balance Benefit Program is lower at 6.5% than the assumed return of 7% used for both the Defined Benefit Program and Defined Benefit Supplement Program.

Note that, as part of the asset liability management study currently under way, staff intends to recommend to the board that the assets of the Cash Balance Benefit Program be invested the same way as the assets of other programs, including investing in private equity and real estate. Now that the Cash Balance Benefit Program has been in place for several years, previous concerns over cash flows are no longer applicable.

Additional Earnings Credit

Section 26605 of the Education Code allows the board to declare and additional earnings credit for members of the Cash Balance Benefit Program. The board has adopted a policy stating that additional earnings credits may be awarded if the funded ratio of the program surpasses certain thresholds. The thresholds are determined using a two-step allocation process.

1. The first step in the process allocates the excess of the actuarial surplus over the standard deviation of the expected long-term rate of return on the investment portfolio, limited to the difference between the minimum interest rate from the previous valuation and the long-term assumed rate of earnings.
2. The second step in the process allocates 50% of the remaining actuarial surplus over two times the standard deviation of the expected long-term rate of return on the investment portfolio.

The additional earnings credit awarded would be the sum of the allocation from the two steps.

The standard deviation for the Cash Balance Benefit Program was set at 11.0% when the board adopted the most recent experience study in January 2020. This means that the board is asked to consider an additional earnings credit only when the program has a funded status greater than 111.0%. For the second threshold, the funded ratio would have to exceed 122.0% following the first threshold allocation. As of June 30, 2022, the Cash Balance Benefit Program had a funded ratio of 115.5%, which exceeds the first threshold. After the first allocation, the funded status is 111.0% which does not exceed the second threshold.

Based on board policy, an additional earnings credit of 4.19% has been calculated. Awarding a 4.19% additional earnings credit will reduce the funded status of the program from 115.5% down to 111.0% and reduce the actuarial surplus by $15.3 million, from $58.7 million down to $43.4 million. For more details on the calculation of the recommended additional earnings credit refer to table 6 on page 14 of the attached report.

If awarded, the additional earnings credit of 4.19% will be applied to the June 30, 2022, account balance for members who have not yet retired as of the day of the board's decision.

Strategic Plan Linkage: Goal 1: Trusted stewards – Ensure a well-governed financially sound trust fund. (FY 2022-25 Strategic Plan).

Board Policy Linkage: Board Governance Manual: Section 7G - Benefits and Services Policy - Actuarial Valuations of the Defined Benefit Supplement Program and the Cash Balance Benefit Program.
