Finance and Administration Committee

Agenda Item 7b

September 14, 2021

Item Name: Long-Term Care Valuation

Program: Actuarial

Item Type: Information

Executive Summary

This agenda item provides the results of the California Public Employees' Retirement System Long-Term Care (LTC) Program's annual actuarial valuation for the fiscal year ending June 30, 2020. As of June 30, 2020, the program's funded status is 101%, increased from 69% last year, and the margin is positive 1.34%, increased from negative 85.46% last year.

This valuation report reflects the following program stabilization efforts approved by the board since November 2020.

- An asset allocation change for the LTC fund. This change increased the discount rate of the program from 4% to 4.75%. The increase in the discount rate improved the margin by 29%.
- A two-phase rate increase plan that is scheduled to be implemented in 2021 and 2022. The increase in future premiums improved the margin by 61%.

This valuation report also incorporates the findings from this year's annual experience study. Assumption updates were made to reflect two morbidity trends:

- An increasing trend in the benefit utilization rate.
- A reduction of the claim incidence improvement trend due to lack of consistent industry evidence and direct data support.

These updates increased the projected liability and reduced the margin by 8%. Other minor assumption updates improved the margin by 2%.

A few other factors impacted the margin on a relatively small scale. Demographic experience during fiscal year 2019-20 improved the margin by 2%. Higher-than-expected claim payments and higher-than-expected premiums combined to reduce the margin by 0.1%. Higher-than-expected investment returns improved the margin by 0.9%.

In fiscal year 2019-20, premiums received were $279 million, administrative expenses $27 million, and claims payments $337 million. The balance of the LTC Fund increased by $137 million resulting in a new fund balance of $4.87 billion as of June 30, 2020. This actuarial

valuation reflects the demographic data as of June 30, 2020, with 116,832 policies in-force, 6,980 of which are on claim. The majority of the COVID-19 impacts occurred after June 2020. Therefore, the impact to the program liabilities due to COVID-19 reflected in this valuation were minimal.

Strategic Plan

This agenda item supports the strategic plan goal of fund sustainability.

Background

The CalPERS LTC Program started in 1995 and has 116,832 policyholders as of June 30, 2020. Information on the types of policies offered through the program and the number of policyholders under each type can be obtained from Appendix D of the valuation report.

Since its inception, the CalPERS LTC Program has experienced worse-than-expected morbidity, higher-than-expected claims, lower-than-expected voluntary termination, and lower-than-expected investment income. This experience is similar to that of other LTC insurance providers. Due to this experience, CalPERS has taken corrective action to stabilize the LTC Fund.

The 2019 valuation reported an underfunded status for the program due to higher projected liabilities and lower projected future investment returns. As a result, the board approved stabilization efforts that consisted of an asset allocation change and premium increases. A new discount rate of 4.75% was approved by the board in November 2020 and the associated asset allocation target was approved by the board in March 2021. The board also approved a two-year phased in premium increase of 52% in year one and an additional increase of up to 25% in year two. Options to convert to less expensive policies will be offered to policyholders.

In 2017, the actuarial valuation adopted the First Principles Based modeling method. This modeling method is standard in the LTC insurance industry and provides better information to analyze assumptions. Assumptions for the First Principles Model have been developed and refined over the years to reflect emerging experience and new findings.

Analysis

Funded Status and Margin of the Program

The result of this actuarial valuation is based on the in-force data, revised assumptions, and fund balance as of June 30, 2020. The funded status, as of June 30, 2020, is 101% and the margin is 1.34%.

The following table shows how the funded status and margin were derived and compares the key results from the June 30, 2020 valuation to the key results from the June 30, 2019 valuation:

Component	6/30/2019 ($ in Millions)	6/30/2020 ($ in Millions)
1. Present Value of Future Benefits	$8,952	$8,348
2. Present Value of Future Expenses	$396	$389
3. Present Value of Future Premiums (PVFP)	$2,488	$3,919
4. Valuation Liabilities (= 1 + 2 - 3)	$6,860	$4,818
5. Valuation Assets	$4,734	$4,871
6. Valuation Margin (= 5 - 4)	-$2,126	$53
7. Margin as a % of PVFP (= 6 / 3)	-85.46%	1.34%
8. Funded Status (= 5 / 4)	69%	101%

Main Reasons for Changes in Margin

The following updates had a positive impact to the margin:

Due to the low interest rate environment, in the 2019 valuation, the expected return of the program's previous target asset allocation was reduced to 4%. In March 2021, the board approved a new strategic asset allocation for the program, which increased the portfolio's expected return to 4.75%. This change improved the margin by 29.07%

In November of 2021, the board approved a premium increase plan, which consists a 52% premium increase in 2021 for all policies and an up to 25% premium increase in 2022 for a cumulative increase up to 90%. Offered in conjunction with the increases, policyholders have the option to convert to less expensive policies. For this valuation, no conversion is assumed in the liability projection. The higher future premiums improved the margin by 61.18%

Other factors that had a positive impact to the margin include morbidity assumption updates, demographic experience during the fiscal year, and a higher-than-expected investment return during the fiscal year. These factors improved the margin by 6.28%.

The following updates had a negative impact to the margin.

Experience analysis for the 2020 valuation indicated a gradual increasing trend in the claim utilization rate over the years. The structure of the claim utilization assumption in this valuation was refined to capture this trend. This assumption update reduced the margin by 7.17%.

Morbidity improvement is the assumption that models a decrease in future claims due to improvement in healthcare technology and standard of living. In recent years, there has not been consistent industry-wide evidence suggesting the morbidity improvement trend would continue in future years and analysis on CalPERS data did not show a clear morbidity improvement trend. As a result, the morbidity improvement factors were refined to more closely represent reality. The update to this assumption decreased the margin by 1.05%.

Other factors, including minor updates in expense, mortality, and lapse assumption, and higher-than-expected claims during the fiscal year decreased the margin by a total of 1.51%.

The table below provides the breakdown for impacts on margin between 2019 and 2020.

	Change in Margin	Resulting Margin	Funded Status
Result from 2019 Valuation		(85.46%)	69%
Discount Rate Change	29.07%	(56.39%)	78%
Rate Increase	61.18%	4.79%	104%
Update to 2020 Demographics	2.07%	6.86%	106%
FY 2019-20 Non-Investment Cashflow	(0.14%)	6.72%	106%
FY 2019-20 Investment Return	0.91%	7.63%	107%
Expense Assumption Update	(0.46%)	7.17%	106%
Mortality and Lapse Assumption Update	(0.91%)	6.26%	105%
Claim Utilization Assumption Update	(7.17%)	(0.91%)	99%
Morbidity Improvement Assumption Update	(1.05%)	(1.96%)	98%
Other Morbidity Assumption Update	3.30%	1.34%	101%
2020 Valuation Result		1.34%	101%

History of Funded Status and Margin

The table below shows the funded status and the margin/(deficit) for the LTC Program for the last five years. The low-interest-rate environment and the corresponding investment return expectation had a large negative impact on the margin in 2019. In addition, higher future morbidity projection and lower future lapse projection contributed to the large decrease in the 2019 valuation margin. The stabilization plan to change the asset allocation and increase premium brought the margin back to positive in 2020.

Five Year History of Funded Status and Margin

Valuation Date	Funded Status	Margin
June 30, 2016	106%	9.59%
June 30, 2017	99%	(1.45%)
June 30, 2018	101%	1.20%
June 30, 2019	69%	(85.46%)
June 30, 2020	101%	1.34%

Budget and Fiscal Impacts

The June 30, 2020 actuarial valuation was prepared by CalPERS Actuarial team along with UHAS Health Actuaries. Funding was already identified within existing budgetary resources.

Benefits and Risks

The actuarial calculations performed as part of the actuarial valuation are based on several assumptions related to very long-term demographic and economic behavior. Unless the assumptions (morbidity, lapses, deaths, expenses, and investment return) are exactly realized each year, there will be differences between actual and projected cash flows on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and will either increase or decrease the funded status and margin of the LTC Program. If the actual experience differs from the assumption over a prolonged period, it may indicate a need for assumption updates and result in a need for premium changes to ensure the financial integrity of the LTC Program.

Some LTC assumptions such as claim incidence rate, claim termination rate, and claim utilization rate can have more variability throughout a long period of time. These assumptions can be impacted over time by plan demographics, health care technologies, policy holder's preferences, and shock events such as pandemics. Timely updating of valuation assumptions to reflect this information is beneficial for adequately monitoring the funded status of the program and minimizing the risk that actual experience is not in line with assumptions.

Demographic assumptions such as mortality rate can have a significant impact on the LTC Program if not realized over a long period of time. These assumptions in general are not subject to wide variances from year-to-year and typically the changes to these additional assumptions only gradually occur over time. Refer to the "Risk Analysis" section of the valuation report for more information on how sensitive the margin of the LTC Program is to the changes in key actuarial assumptions.

Investment return also poses a significant risk to the program if not realized over time. LTC insurance is characterized by level premiums and increasing claim costs over the coverage period. The collected premiums are invested and the aggregate premiums plus investment income are used to pay out future claims. Investment income is a significant component of the income as the block of insurance matures. If investment returns are lower than expected over a prolonged period, more premiums will be needed to make up for the reduced growth in assets.

Attachments

Attachment 1 – Long-Term Care Valuation Report as of June 30, 2020

Attachment 2 – Long-Term Care Valuation Presentation

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