Finance and Administration Committee

Agenda Item 7a

April 18, 2022

Item Name: Long-Term Care Valuation Report

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, 2021. As of June 30, 2021, the program's funded status is 108% (an increase from 101% last year) and the margin is 10.51% (an increase from 1.34% last year). As of June 30, 2021, the program had 111,518 policies in-force, 6,470 of which are on claim.

This valuation report reflects the planned rate increases of 52% in 2021 and 25% in 2022.

This valuation report also incorporates the findings from this year's annual experience study. Among the assumption updates, the morbidity assumption update had the most negative impact to the margin. The morbidity assumption update lowered the margin by 7.9%. Morbidity assumption updates were made to reflect two trends:

- An increase in the claim incidence rate (i.e., the probability of a policy going on claim) for the population above age 90.
- Further reduction of the claim incidence improvement trend due to lack of consistent industry evidence and direct data support.

Other assumption updates and model changes increased the margin by 3.3%.

During the 2020-21 fiscal year, the program experienced an investment return of 13%, which exceeded the assumed long-term investment return of 4.75%. This higher-than-expected investment return improved the margin by 10.3%. The program also experienced higher mortality, fewer new claims, and less claim payments during the fiscal year, largely attributed to COVID-19. These experiences combined increased the margin by 3.4%.

In fiscal year 2020-21, premiums received were $272 million, administrative expenses were $27 million, and claims payments were $311 million. The balance of the LTC Fund increased by $571 million resulting in a new fund balance of $5.4 billion as of June 30, 2021.

Strategic Plan

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

Background

The CalPERS LTC Program started in 1995 and has 111,518 policyholders as of June 30, 2021. 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 like 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 2021 and an additional increase of up to 25% in 2022. Options to convert to less expensive policies are 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 results of this actuarial valuation are based on the in-force data, revised assumptions, and the fund balance as of June 30, 2021. The funded status, as of June 30, 2021, is 108% and the margin is 10.51%.

The following table shows how the funded status and margin were derived and compares the key results from the June 30, 2021 valuation to the key results from the June 30, 2020 valuation:

Component	6/30/2020 ($ in Millions)	6/30/2021 ($ in Millions)
1. Present Value of Future Benefits	$8,348	$8,473
2. Present Value of Future Expenses	$389	$385
3. Present Value of Future Premiums (PVFP)	$3,919	$3,819
4. Valuation Liabilities (= 1 + 2 - 3)	$4,818	$5,040
5. Valuation Assets	$4,871	$5,441
6. Valuation Margin (= 5 - 4)	$53	$401
7. Margin as a % of PVFP (= 6 / 3)	1.34%	10.51%
8. Funded Status (= 5 / 4)	101%	108%

Main Reasons for Changes in Margin

The following updates had the biggest positive impact to the margin:

- The Program experienced an investment return of 13% during the fiscal year 2020-21, which exceeded the discount rate assumption of 4.75%. The higher-than-expected return improved the margin by 10.30%.
- The program experienced higher mortality, fewer new claims, and less claim payments during the fiscal year 2020-21. These experiences were largely attributed to COVID-19 and increased the margin by 3.44%.
- Other factors that had a positive impact to the margin include assumption updates in morbidity, mortality improvement, expense, as well as model improvements. These factors improved the margin by 4.53%.

The following updates had the largest negative impacts to the margin:

- Experience analysis for the 2021 valuation identified that the probability of a policy going on claim increases rapidly between age 90 and age 96. As a result, the claim incidence assumption was adjusted to project more claims for the population above age 90. This update reduced the margin by 4.79%.
- Morbidity improvement is an assumption that projects claim incidence level to gradually decrease in future years due to advancement in healthcare technology and other factors. In recent years, there has not been consistent industry-wide evidence or direct data support suggesting this trend would continue. As a result, this assumption is further reduced in this valuation to reflect a lower outlook. This update decreased the margin by 3.08%.

- Mortality projections were refined to project more accurately for active lives (i.e., not on claim) and disabled lives (i.e., on claim). The active mortality assumption was lowered to account for historical mortality improvement prior to COVID-19. Lowering the active mortality had a negative impact to the margin. The disabled mortality projection was modified to account for the on-claim death variation by claim types, which increased the projected future disabled mortality and had a positive impact to the margin. The impact from the active and disabled mortality adjustments partially offset each other and in total reduced the margin by 1.23%.

The table below provides the breakdown for impacts on margin between 2020 and 2021.

	Change in Margin	Margin	Funded Status
Margin as of 6/30/20 valuation		1.34%	101%
FY20-21 Non-Investment Gain/Loss	1.09%	2.43%	102%
FY20-21 Investment Gain/Loss	10.30%	12.73%	110%
Update to 2021 Demographics	2.35%	15.08%	112%
Model Improvement	1.33%	16.41%	113%
Expense Assumption Update	0.24%	16.65%	113%
Lapse Assumption Update	0.00%	16.65%	113%
Mortality Assumption Updates	(1.23%)	15.42%	112%
Morbidity Assumption Updates	1.81%	17.23%	114%
Claim Incidence Assumption Update	(4.79%)	12.44%	110%
Mortality Improvement Assumption Update	1.15%	13.59%	111%
Morbidity Improvement Assumption Update	(3.08%)	10.51%	108%
Margin as of 6/30/21 valuation		10.51%	108%

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 long-term investment return expectation have had a large negative impact on the margin. In addition, morbidity assumption and lapse assumption adjustments also contributed to the large decrease in the 2019 valuation margin. The stabilization plan to change the asset allocation and increase premium rates brought the margin back to positive in the 2020 valuation. The higher-than-expected investment return and the program experience due to COVID-19 increased the margin in the 2021 valuation.

Five Year History of Funded Status and Margin

Valuation Date	Funded Status	Margin
June 30, 2017	99%	(1.45%)
June 30, 2018	101%	1.20%
June 30, 2019	69%	(85.46%)
June 30, 2020	101%	1.34%
June 30, 2021	108%	10.51%

Budget and Fiscal Impacts

The June 30, 2021 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, policyholder 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, 2021

Attachment 2 – Long-Term Care Valuation Presentation

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