Finance and Administration Committee

Agenda Item 9a

February 21, 2019

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 annual actuarial valuation for the fiscal year ending June 30, 2018. A copy of the actuarial valuation report is attached to this agenda item.

In the 2017-18 fiscal year, premiums received were about $296 million, administrative expenses $30 million, and claims payments $307 million. The balance of the LTC Fund increased by approximately $138 million resulting in a new balance of the fund of approximately $4.47 billion as of June 30, 2018. This actuarial valuation includes 124,472 policies, among them 6,778 are on claim.

The results of this year's valuation indicate a margin of 1.20 percent and a funded status of 101 percent – slightly higher than last year's results. Several factors impacted the margin either negatively or positively during the fiscal year. Model refinement had the biggest positive impact on the margin, which contributed to an increase to the margin by about 6 percent. In addition, morbidity assumption changes and better than expected liability cash flow contributed to the margin improvement. Two primary assumption revisions as compared to last year's annual valuation are lapse rates and mortality improvement factors. Both those revisions had negative impact on the margin. For further details on changes in margin, please refer to the Analysis section of this agenda item.

The margin slightly improved from last year and we are not recommending any premium changes this year. The LTC program has a long-term funding horizon and changes should not be made simply in reaction to short term losses or gains due to worse or better than expected experience. Experience of the program should be reviewed and monitored annually for long-term trends to make sure the Program will be stable over the next 60 years.

Strategic Plan

This agenda item supports the Strategic Plan Goal of Fund Sustainability.

Background

The CalPERS LTC Program started in 1995 and has 124,472 policyholders as of June 30, 2018. Information on the types of policies offered through the program and the number of policyholders under each type can be obtained in Appendix E 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 other LTC insurance providers. CalPERS has taken corrective action to stabilize the LTC Fund. In October 2012, the CalPERS Board adopted the Stabilization Plan. For certain policies, this included either a premium increase of 85 percent (two 36 percent premium increases applied over 2015 and 2016 respectively), or a one-time 79 percent increase in 2015. Conversions to a less expensive policy was also permitted. LTC4 was launched in December 2013 and is still open for new enrollment.

Analysis

Funded Status and Margin for the Program

The results of the actuarial valuation are based on the membership data and fund balance as of June 30, 2018. The funded status as of June 30, 2018, is 101 percent and the margin is 1.20 percent.

The following table shows how the funded status and margin were derived and compares the key results from the June 30, 2018 valuation to the key results from the June 30, 2017, actuarial valuation.

Component	6/30/2017 ($ in Millions)	6/30/2018 ($ in Millions)
1. Present Value of Future Benefits	$6,498	$6,458
2. Present Value of Future Expenses	$336	$343
3. Present Value of Future Premiums (PVFP)	$2,455	$2,358
4. Valuation Liabilities (= 1 + 2 - 3)	$4,378	$4,443
5. Valuation Assets	$4,343	$4,471
6. Valuation Margin (= 5 - 4)	($35)	$28
7. Margin as a % of PVFP (= 6 / 3)	(1.45%)	1.20%
8. Funded Status (= 5 / 4)	99%	101%

Main Reasons for Changes in Margin

The margin for the LTC program increased from negative 1.45 percent in 2017 to positive 1.20 percent in 2018. The assumption revisions of mortality improvement factors and lapse rates, and lower than expected investment return in the fiscal year had the most negative impact on the margin. The updated expense assumption also decreased the margin slightly. These margin decreases were offset by some modeling improvements and revisions, along with morbidity assumption changes and better than expected liability cash flow.

Please refer to the “Risk Analysis” section on pages 15 to 20 of the attached valuation report for more information on how sensitive the margin of the LTC Program is to changes in the key actuarial assumptions.

The table below provides the breakdown for the decrease in margin between 2017 and 2018.

	Change in Margin	Resulting Margin
Margin under Claim Cost Model as of 6/30/17:		(1.45%)
2017 Margin with 2017 Restated Fund Balance	(0.40%)	(1.85%)
Projected One Year Forward and with 2018 Demographic	1.40%	(0.45%)
Updated 2018 Actual Liability Cash Flow	0.80%	0.35%
Investment Loss for FY 2017-2018	(2.07%)	(1.72%)
Model Improvements	6.09%	4.37%
Morbidity Assumption Change	1.10%	5.47%
Mortality/Lapse Change	(0.65%)	4.82%
Mortality and Morbidity Improvement	(3.02%)	1.80%
Expenses Assumption Change	(0.60%)	1.20%
Margin under First Principle Based Model as of 6/30/18		1.20%

For more information on the experience of each key actuarial assumption in the last fiscal year, please refer to the "Summary of Key Assumptions" section in the valuation report.

History of Funded Status and Margin

The table below shows the funded status and the margin/(deficit) for the LTC Program for the last 5 years. With the implementation of the Stabilization Plan, the Program's funded status was more than 100 percent funded and the margin was positive from 2013 until 2016. The 2017 results would have continued these results; however, a change in the discount rate assumption resulted in a decrease of the funded status and margin. The main driver of margin decrease in the past 5 year is lower-than-expected investment returns and last year's adoption of a lower discount rate reflecting lower-than-expected future investment returns.

5 Year History of Funded Status and Margin

Valuation Date	Funded Status	Margin
June 30, 2014	123%	23.49%
June 30, 2015	111%	14.44%
June 30, 2016	106%	9.59%
June 30, 2017	99%	(1.45%)
June 30, 2018	101%	1.20%

Budget and Fiscal Impacts

The June 30, 2018, actuarial valuation was prepared by CalPERS Actuarial Team along with United Health Actuarial Services, Inc. (UHAS). Funding was already identified within existing budgetary resources.

Benefits and Risks

The actuarial calculations performed as part of the actuarial valuation are based on a number of assumptions about very long-term demographic and economic behavior. Unless these assumptions (morbidity, lapses, deaths, expenses, and investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and 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 result in a need for premium changes to ensure the financial integrity of the LTC Program. To minimize the risk that actual experience is not in line with assumptions, actuarial assumptions are periodically revised as they were in this valuation.

One of the key assumptions that poses the most risk to the program if not realized is the investment return. 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.

Other assumptions that can have a significant impact on the LTC Program if not realized over a long period of time include the morbidity assumption (i.e. amount of claims paid each year), lapses and mortality. These assumptions, (i.e. excluding investment returns) are not subject to wide variances from year-to-year and typically the changes to these additional assumptions only gradually change over time. Please refer to the "Risk Analysis" section of the valuation report for more information on how sensitive the margin of the LTC Program is to changes in the key actuarial assumptions.

Attachments

Attachment 1 – LTC Actuarial Valuation Report as of June 30, 2018.

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