Finance and Administration Committee

Agenda Item 9a

April 17, 2018

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, 2017. A copy of the actuarial valuation report is attached to this agenda item.

In the 2016-17 fiscal year, premiums received were about $306 million. Administrative expenses totaled approximately $27 million and claims payments amounted to $294 million. The balance of the LTC Fund increased by approximately $55 million and the new balance of the fund was approximately $4.34 billion as of June 30, 2017. This actuarial valuation includes 128,299 policies, among them 1,621 are LTC4 policies.

The results of this year's valuation indicate a margin of negative 1.45 percent and a funded status of 99 percent – lower than last year's results. Two major changes were implemented in this year's valuation. The first major change was the adoption of the new First Principles Model, which led to improved paid claim and claim reserve estimates, and helped to improve the margin. The second major change was the adoption of a lower discount rate assumption. This assumption went from 5.75 percent to 5.25 percent and was approved in February 2018 by the CalPERS Board. The decrease in margin from the previous year was primarily caused by the reduction in the assumed discount rate and the adverse investment results this last fiscal year. For further details on changes in margin, please refer to the Analysis section of this agenda item.

Despite the margin decrease 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 A - Improve long-term pension and health benefit sustainability.

Background

The CalPERS LTC Program started in 1995 and has 128,299 policyholders as of June 30, 2017. 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. They also permitted conversions to a less expensive policy.

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, 2017. The funded status as of June 30, 2017, is 99 percent and the margin is negative 1.45 percent.

The following table shows how the funded status and margin were derived and compares the key results from the June 30, 2017 valuation to the key results from the June 30, 2016, actuarial valuation.

Component	6/30/2016 ($ in Millions)	6/30/2017 ($ in Millions)
1. Present Value of Future Benefits	$6,225	$6,498
2. Present Value of Future Expenses	$404	$336
3. Present Value of Future Premiums (PVFP)	$2,589	$2,455
4. Valuation Liabilities (= 1 + 2 - 3)	$4,040	$4,378
5. Valuation Assets	$4,288	$4,343
6. Valuation Margin (= 5 - 4)	$248	($35)
7. Margin as a % of PVFP (= 6 / 3)	9.59%	(1.45%)
8. Funded Status (= 5 / 4)	106%	99%

Main Reasons for Changes in Margin

The margin for the LTC program lowered to negative 1.45 percent in 2017 from positive 9.59 percent in 2016. The main reason for the lower margin was the adjustment to a lower discount rate assumption from 5.75 percent to 5.25 percent. The adverse investment return last fiscal year and the morbidity assumption change also contributed to the lower margin.

Please refer to the “Risk Analysis” section on pages 15 to 18 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 2016 and 2017.

	Results as a Present-Value of Premiums
Margin under Claim Cost Model as of June 30, 2016:	9.59%
Projected One Year Forward (Passage of Time)	0.89%
Demographic Experience Gain	2.41%
Investment Loss for FY 2016-17	(7.05%)
Morbidity Assumption Change	(7.06%)
Expenses Assumption Change	4.30%
Mortality / Lapse Change	1.17%
Discount Rate Change	(14.11%)
Margin as of June 30, 2017:	(9.86%)
Model Changed from Claim Cost to First Principles	8.41%
Margin under First Principles Model as of June 30, 2017:	(1.45%)

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 in the funded status and margin. In the past three years, there has been a steady decline in the funded status and the margin. The main drivers for the decrease in the funded status and the margin are higher-than-expected claim experience, lower-than-expected investment returns and this year's adoption of a lower discount rate.

5 Year History of Funded Status and Margin

Valuation Date	Funded Status	Margin
June 30, 2013	123%	19.66%
June 30, 2014	123%	23.49%
June 30, 2015	111%	14.44%
June 30, 2016	106%	9.59%
June 30, 2017	99%	(1.45%)

Budget and Fiscal Impacts
The June 30, 2017, 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 – 2017 LTC Actuarial Valuation Presentation (PowerPoint).
Attachment 2 – LTC Actuarial Valuation Report as of June 30, 2017.

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