August 27, 2024

Mr. David Miller
Chair of the Investment Committee
California Public Employees' Retirement System
400 P Street
Sacramento, CA 95814

Re: Agenda Item 5a: Mid-Cycle Asset Liability Management Review: Long Term Care

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Dear Mr. Miller,

You requested Wilshire's opinion regarding the Long-Term Care (LTC) mid-cycle asset allocation (AA) recommendation. Unique to other Affiliate funds, whose mid-cycle asset allocation reviews were recently approved during the June 2024 Investment Committee (IC) meeting, much of the LTC analysis and underlying portfolio identification process was outsourced to an external investment management provider. The provider was retained as part of an extensive RFP process conducted in 2020. Consistent with this structure, Wilshire's review is limited to the output from the manager's process. However, we understand that Staff worked closely with the external provider throughout the project, and we generally recognize the manager's underlying quantitative techniques, forecasting process and optimization approach to be robust and consistent with those deployed by Staff in conducting AA analysis for other funds.

Capital Market Assumptions (CMAs) & Constraints

As can be seen on slide 14 of Staff's presentation, the manager's proprietary CMAs are broadly consistent with those collected via CalPERS' CMA survey process and used in other fund reviews. As such, and as was the case when using CalPERS' assumptions for other Affiliate fund reviews, the CMAs used in the mid-cycle review are materially different from those utilized in the prior LTC AA review. As you will recall, this change in the capital market environment contributed to the IC approving some notable reductions in risk profile for several other Affiliate funds; specifically, the Health Care Fund (HCF), the Legislators' Retirement System Fund (LRS), and the Judges' Retirement System II Fund (JRSII). As we discuss below, Staff's recommended portfolio reflects a similar directional reduction in risk versus the current allocation mix.

In addition to noting the reasonableness of the embedded CMA inputs, Wilshire is also generally comfortable with the underlying asset class benchmarks and constraints. Several constraints, such as for Global Equity and Fixed Income, were removed as they were no longer needed to maintain minimum levels of desired diversification against the current CMA environment. Other constraints, such as for Commodities, were replaced and broadened to drive minimum holdings across a group of strategic asset classes (i.e., the specific 3% minimum constraint on Commodities was replaced by an 8% minimum to the combination of Commodities, TIPS and REITS).

Candidate Portfolios

To further highlight the profound change in the underlying capital market environment, we note that the current portfolio's projected return today (6.24%) is ~1% higher than its 5.25% projected return when using the prior full-cycle review's CMAs (slide 16 of Staff's presentation highlights this dispersion within an efficient frontier graph). Staff's recommendation attempts to capitalize on this improved outlook by shifting the LTC Fund's AA mix to a lower risk portfolio. To that end, Candidate B is recommended with 5.48% projected return, 11.2% projected drawdown risk and 6.4% projected volatility risk. Wilshire is comfortable with this recommendation and notes several of Candidate B's attractive attributes:

- <u>Return/Risk</u>: The portfolio is projected to return ~0.25% more than was targeted during the prior, full-cycle process with ~40% less drawdown risk (11.2% vs. 19.1%) and a third less volatility (6.4% vs. 9.6%).
- <u>Depletion Risk</u>: the recommended portfolio slightly lowers the Probability of Fund Depletion from 31% to 29%, pushes out the First Year Occurrence of Possible Depletion down from 12 to 15 years, and reduces the Average Present Value of Liabilities of Depletion from $1,170M to $925M.

Staff has provided other candidate portfolios. Candidates A & C at 5.25% and 5.75% target returns, which are adjacent to Candidate B's 5.50% return target, and Candidate D, whose 6.25% return target is similar to the current portfolio's projected return. While Wilshire agrees that Staff's recommendation strikes an appropriate balance between downside risk protection and expected return, we note that Candidates A & C offer slightly different risk characteristics should the IC's risk preferences differ from those embedded in Staff's recommendation. Finally, IC approval of the LTC Fund's allocation mix includes approval of an accompanying custom benchmark as recommended by the external manager. Wilshire supports these underlying benchmark recommendations.

We look forward to further discussing these recommendations with you in September; however, please do not hesitate to contact us should you require anything further or have any questions.

Best regards,

Steven J. Foresti
Senior Advisor, Investments
Wilshire Advisors

