

Thomas Toth, CFA
Managing Director

March 21, 2016

Mr. Henry Jones Chair of the Investment Committee California Public Employees' Retirement System 400 Q Street Sacramento, CA 95814

Re: Health Care Reserve Fund Asset Allocation

Dear Mr. Jones:

In accordance with CalPERS Investment Policy to regularly review target asset allocations, Staff is presenting a recommendation to maintain the current Health Care Fund reserve (HCF) asset allocation in core fixed income with the Barclays U.S. Aggregate Index as the appropriate benchmark. This study is part of the regularly scheduled cycle for reviewing the asset allocation at least every four years.

## **Investment Strategy and Objectives**

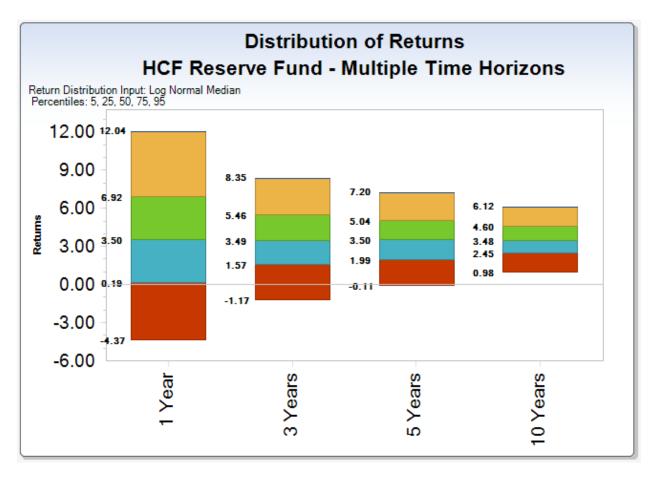
Health care benefits are pay-as-you-go for funding purposes through annually established health care premiums. The strategic role of the HCF reserve fund centers on providing stability of principal and liquidity along with a moderate level of income generation. The fund acts as a backstop for the self-funded Preferred Provider Organization program in the event that claims are higher than expected or a plan shuts down. This objective places a premium on investment in liquid, high quality, investment grade instruments which are appropriately characterized by the Barclays U.S. Aggregate Index.

Wilshire's core fixed income forward looking expectation for return is 3.5% with an expected volatility level of 5.0% over a 10 year horizon. Wilshire's forecast model begins with current market conditions, including inflation, and projects a gradual normalization of real yields as well as market spreads such that the historical equilibrium of maturity premiums and credit premiums are re-established. The core bond market is comprised of four major segments: Treasuries, Government-related, Corporate and Securitized. Wilshire has modeled each segment based on an environment of rising Treasury rates but also normalizing spreads versus



a historical average. The segments are then combined into a market duration portfolio to generate the core fixed income assumption.

Utilizing these forward looking assumptions, Wilshire examined the distribution of expected returns over multiple time horizons using Monte Carlo simulation with 5000 trials, shown in the graph below. Over intermediate to longer term time periods, the portfolio provides reasonably good principal protection. On top of this beta return, the HCF reserve fund has also managed to outperform the market over both short and longer periods as outlined in Staff's letter.



Based on the information outlined in the Staff memo, Wilshire examined the portfolio exposure using independent analytical tools. We found similar results for the scenario analysis and the expectation for risk based on Wilshire's proprietary Global Credit Risk Model.

	Scenario 1 - Steepener	Scenario 2 - Twist	Scenario 3 - Parallel
Price Return	-3.51	2.21	-5.35
Income (Yield) Return	3.47	2.39	3.80
Total Return	-0.04	4.60	-1.55



Wilshire's risk model also supports the low forecasted volatility over shorter time horizons with an expected risk level of 3.4% (vs. 4.0% forecast by the risk system Staff uses).

## Conclusion

Wilshire concurs with the recommendation to maintain the current asset allocation given the HCF reserve fund's investment objective. The conservative positioning will help mitigate substantial asset drawdowns and produce moderate investment income, while maintaining a high level of liquidity.

Should you require anything further or have any questions, please do not hesitate to contact us.

Best regards,

Managing Director