



Thomas Toth
Managing Director, Wilshire Consulting

July 19, 2017

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

Re: Trust Level Portfolio Management Program Review

Dear Mr. Jones,

You requested Wilshire's initial review of the Trust Level Portfolio Management program (TLPM). Wilshire has reviewed the Staff materials and discussed the broad structure and goals of the TLPM program with the Managing Investment Director. While we touch on some important risks and considerations below, ***Wilshire views the build out of the Trust Level Portfolio Management team constructively.***

Overview

The TLPM is the evolution of the Asset Allocation & Risk Management function, with the goal of improving and formalizing the decision making process at the Total Fund level. The objective is to produce investment returns that help meet CalPERS' commitments at a reasonable level of risk. The TLPM program has been in existence for a relatively short period of time so this review is meant to highlight some of the key characteristics and goals of the program, which will be regularly evaluated as the program matures and evolves.

There are four primary areas of responsibility animate the TLPM group.

- Strategic Asset-Liability Management – coordination of the regular PERS' strategic asset allocation process. This would include analyzing capital market assumptions, evaluation of risk targets and risk tolerance, benchmarking, and research into alternative approaches to asset allocation.
- Dynamic Asset Allocation – implementation of a Total Fund Overlay which can encompass strategic exposures, liquidity management, replication, rebalancing, and active portfolio management. In addition, multi-asset class strategies and partnerships would be overseen by TLPM.



- Portfolio Strategy Research – ongoing examination of macro-economic factors, long term trends in capital markets, and ESG issues impacting the Total Fund would be handled by the team. In addition, potential enhancements to PERS’ ability to model valuation factors, liabilities, and regime shifts fall into this category.
- Strategic Business Planning and Management – developing and coordinating long term strategic plans and ensuring alignment with INVO 2020. TLPM would also handle strategic partnerships in a variety of areas such as academia, asset management, and industry groups.

Future program reviews will delve into more areas for due diligence once the TLPM program has been fully established and a track record exists for analytical purposes. These areas would include the following, which are elaborated on below:

- Organizational structure and governance model
- Strategy - research, analysis, model development, implementation
- Risk positioning and Implementation
- Environmental, Social and Governance (ESG) integration

Governance and Organizational Structure

TLPM is governed by the CalPERS Total Fund Investment Policy, which provides the framework under which CalPERS’ assets are managed. This is an important point as the decisions made and implemented by TLPM will need to be in accordance with established policies, which provide guidelines for what is, and is not, allowable.

Over the past year, the TLPM team has been expanded to more than twenty individuals including a dedicated Managing Investment Director. The MID is a member of the Asset Liability Management Advisory Committee (ALMAC) as well as the chairperson of Investment Strategy Group (ISG). The ISG includes four subcommittees on portfolio allocation, risk & attribution, investment review, and governance & sustainability, which draw from the collective expertise of senior INVO staff.

The MID is supported by an Investment Director, six Investment Managers, two Associate Investment Managers and twelve Investment Officers of varying seniority. At this point, the TLPM team is well resourced for the work they are tasked to accomplish. Going forward, the group would also likely utilize the extensive experience of INVO across asset classes. Wilshire views the size of the team as a positive reflection of the importance that decision making at the Total Fund level can have on overall investment performance.

Strategy

TLPM has four primary responsibilities as laid out above. This includes the significant responsibility of managing the process of strategic asset allocation under the Investment



Committee's authority, which sets the target rate of return, and selects the asset allocation mix. The milestones for the asset-liability management process, which is being undertaken now, are laid out in the Staff materials. Wilshire feels the TLPM team has demonstrated the expertise and experience necessary to properly plan and execute this process.

Dynamic asset allocation is another key area of responsibility, one where there has been progress made, and which is expected to evolve and advance over time. Wilshire has provided input into the overlay program as one component of this responsibility. Striving to improve efficiencies and the cost of managing liquidity and portfolio exposures is a very real benefit that can be provided by the overlay program, and will require robust trading and operational procedures. TLPM is aware of this and working to establish and refine these procedures during the initial pilot phase which is expected to last at least twelve months. Any dynamic strategies will be rigorously tested to increase the probability that they are additive to the portfolio's return and/or provide risk mitigation. In discussion with the MID, considerable emphasis was placed on the importance of examining potential dynamic strategies to ferret out datamining pitfalls or strategies without an explainable economic rationale. Finally, any tilts within the portfolio will be vetted by committees such as the ISG and will fall within the policy ranges established by the Investment Committee. Regular reviews of the performance of TLPM activities should include the rationale for establishing positions away from the strategic targets and attribution to examine strategy effectiveness.

Research activities with implications across the Total Fund will be coordinated and driven by TLPM. Wilshire views this line of responsibility as important in establishing ownership and accountability. The expectation is that this research will draw on strategic partnerships as well as internal INVO expertise.

Finally, strategic & business planning and human capital management are an important component of all of CalPERS' internal programs. TLPM is aware of this and will incorporate regular updates into their planned reviews with the Investment Committee as well as ongoing discussions with Wilshire.

Risk Positioning and Implementation

Wilshire views the proposed development of implementation protocols positively. Staff's phased implementation plan for the overlay program is indicative of how the MID foresees new strategies emanating from TLPM. This pilot program with a relatively small capital base provides Staff the opportunity to identify implementation challenges, refine various procedural issues and can ensure that robust processes are in place prior to fully scaling a TLPM program. It will be important to determine the criteria upon which assessments will be made at the end of any evaluation period as objective feedback will be critical for Staff to gain comfort that it is prepared to move forward with full implementation and/or to determine what additional enhancements would be required to move to that stage.

ESG Integration



Environmental, Social, and Governance issues are a prime example of the importance of establishing cross asset class expertise as they likely impact multiple parts of the portfolio. A holistic view of the impacts of ESG factors should provide efficiencies and increased scale to make CalPERS' engagement on these issues more impactful. Further, a multi-asset class approach can protect against the risk of not propagating strategies around ESG as broadly as possible or, worse, working at cross purposes.

Conclusion

Wilshire views the build out of the Trust Level Portfolio Management team constructively. While the roles, strategies, and processes are likely to evolve going forward, establishing more formal and centralized responsibilities should aid in improving decision making at the Total Fund level. This has the potential to improve outcomes when looked at through the lenses of both risk and return over time.

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

Best regards,

A handwritten signature in black ink, appearing to read 'T. Toth', enclosed in a rectangular box.

Thomas Toth
Managing Director

A handwritten signature in black ink, appearing to read 'T. Toth', located at the bottom of the page.