October 12, 2026

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

Re: Consultant TFPM Program Review

Executive Summary: Total Fund Portfolio Management (TFPM)

The Total Fund Portfolio Management (TFPM) program played a central role over the past year in moving the Total Portfolio Approach (TPA) from policy design into an operating framework, effective July 1, 2026. The team built TPA's analytical, governance, and operational foundations and led much of the education and change management required for its adoption, while operating under interim leadership for much of the year.

With the initial framework in place, TFPM's focus has shifted to refinement, a phase referred to within the Investment Office as "TPA 1.1." Priorities include clarifying decision rights, strengthening coordination across programs, expanding balance-sheet management capabilities, and investing in data and technology. The appointment of a permanent Managing Investment Director (MID) addresses the leadership transition highlighted in last year's review, and Wilshire has raised the Program's independent score from the 4th to the 3rd decile.

Key Achievements:

- Led development of the core TPA building blocks: Investment Strategy Analyses (ISAs), Equity Equivalent Exposure (Triple-E) funding mixes, Reference Portfolio implementation, the active risk and Cost of Capital frameworks, and the first portfolio construction exercise under TPA
- Supported Board education, adoption of the TPA policy, and related governance changes
- Completed the asset liability management cycle for CalPERS' affiliate funds
- Expanded financing channels and eligible collateral, and conducted the organization's first liquidity stress tabletop exercise
- Oversaw $90 billion of trading to implement the 2025 ALM/TPA portfolio transition and facilitated $64 billion in gross pension flows and $32 billion in gross capital calls and distributions
- Managed $71.3 billion in total leverage usage (11.2% of PERF net asset value) as of June 30, 2026

Team Resources

Last year's review noted that the search for a successor to the departing MID was ongoing. That search has concluded, and the new MID brings experience across portfolio construction, risk, implementation, and treasury functions. Wilshire would also like to recognize the interim leadership that maintained stability through a demanding year.

TFPM comprises 39 positions with three open, unchanged from last year. Short-term liquidity risk monitoring moved from Portfolio Design to Liquidity Management, consolidating liquidity oversight within the treasury function. The Economics function now focuses on global macroeconomic scenarios and portfolio stress testing with Portfolio Design and provides regular macroeconomic analysis to the Board and other stakeholders.

Wilshire has observed improved role clarity and collaboration within TFPM. However, the team's broader role in the Investment Office's decision-making continues to evolve, particularly where it advises, facilitates, or is accountable for decisions. Team cohesion should remain a management priority as TFPM moves to a TPA 1.1 operating model.

Wilshire believes TFPM is adequately staffed for its current mandate. However, the data and technology modernization initiative will place significant demands on the team, particularly within Treasury, and expanding balance-sheet management capabilities may warrant additional resources over time, including operational support. Strategy Development's growing scope of work may also warrant attention to resourcing over time.

Some of TFPM's contributions, such as financing costs, liquidity efficiency, and allocation tracking, can be measured directly. Others, including portfolio construction, governance design, and strategy research, shape the quality of total fund decisions but are harder to attribute. TFPM leadership should remain cognizant of how the team's value add is best assessed, so that contributions to total fund outcomes are appropriately recognized.

Wilshire's Team score remains in the 5th decile but has improved meaningfully, reflecting permanent leadership, a stable headcount, better role clarity, and the delivery of a major institutional initiative. Continued progress on team culture and resource alignment would support a move into the 4th decile in future reviews.

Areas of Responsibility

As of 2026, TFPM continues to focus on three primary areas:

- Portfolio Implementation, including Liquidity Management and Beta Management
- Portfolio Construction
- Strategy Development

Portfolio Implementation manages financing, liquidity, and the total fund's risk profile. The liquidity management framework built over the last several years remains one of TFPM's clearest strengths. During the year, the team diversified its funding capacity through a new securities lending agent, additional asset types, and new counterparties, expanded its financing channels, including using the fund's CLO holdings as a source of funding, and broadened the collateral eligible for margin requirements, improving flexibility under stressed conditions. Integrating the liquidity risk team allowed Treasury to combine its liquidity dashboard and coverage framework, giving a clearer view of the fund's liquidity and reinvestment capacity. The team also conducted the organization's first liquidity stress tabletop exercise. Active balance sheet management added approximately $800 million of value. Balance sheet management has been a clear strength of the TFPM team, with plans to continue to expand and refine the approach to add additional value to the Total Fund. Within Beta Management, the team oversaw the 2025 ALM/TPA portfolio transition and maintained the fund's day-to-day risk profile through pension flows, capital calls, and distributions.

Treasury focuses on liquidity under a one-year horizon, while Portfolio Design leads longer-term liquidity planning, including modeling the effect of private-market commitments on future collateral availability. **Given the liquidity and financing enhancements described above, Wilshire's Implementation score remains in the 3rd decile (Grade: B), with an improved score for Resources** reflecting the integration of liquidity risk monitoring into the treasury function.

Portfolio Construction was a primary focus of TFPM's TPA work. The team developed and socialized the Triple-E funding mixes, Reference Portfolio implementation, and the active risk and Cost of Capital frameworks, and completed the first portfolio construction exercise under TPA, while maintaining its responsibilities for allocation management, analytics, and reporting. Wilshire has observed that concepts such as funding mixes, cost of capital, and total fund trade-offs are now commonly used across the Investment Office, which reflects the effectiveness of these efforts. Priorities for the coming year include refining the Cost of Capital framework, expanding scenario analysis, and improving liquidity planning. Wilshire's **Portfolio Construction score remains unchanged at the 2nd decile (Grade: A).** Wilshire would like to see the new frameworks tested through full market cycles before considering further changes.

Strategy Development led the ISA process, which became the analytical foundation for TPA, as well as development of the Triple-E exposures and funding mixes that serve as primary inputs to the Cost of Capital framework. These efforts were highly collaborative across TFPM, drawing on contributions from Portfolio Design and other teams. Working with every asset class, the team helped move the organization toward a common total fund language for risk and return. The team also worked with the Affiliate Investment Programs team to complete the asset liability management cycle for the affiliate funds. The next phase of the ISA process will focus on the sources of each asset class's expected alpha. Building on the foundation established through Insurance-Linked Securities, the team secured approval to incubate the Diversifying Multi-Strategy (DMS) initiative and established nine cross-functional INVO workstreams to support its execution. The team developed three distinct DMS strategies (Risk Mitigation, Absolute Return, and Dynamic Asset Allocation) and designed the initiative's governance and operating model, including objectives for fiscal year 2026-27. The team is also working with Treasury to assess the liquidity requirements of these strategies.

Wilshire's Information Gathering score remains in the 5th decile but has improved, reflecting the depth and breadth of the ISAs, the Triple-E exposure work, and the development of the Cost of Capital framework, among other key project work. **Wilshire's Forecasting score has increased from the 4th to the 3rd decile (Grade: B),** reflecting the organization-wide adoption of a consistent total fund framework for assessing strategy-level risk and return.

Data and Technology

Effective total fund management depends on consistent, timely data across public and private markets. TFPM relies heavily on the Investment Data & Technology Modernization Initiative, including the investment book of record and private markets data projects, which will require significant staff time over the coming year. Continued organizational support for these initiatives, and for modern analytical tools, will be important as TPA matures.

Using Wilshire's standard manager research scoring framework, the Program's independent score has increased from the 4th to the 3rd decile (Grade: B). This reflects improvements in Forecasting, Information Gathering, Implementation resources, and Team, driven by the delivery of TPA 1.0 and permanent leadership being in place. Continued progress on governance clarity and the data and technology modernization initiative, along with the new TPA frameworks being evaluated through full market cycles, would further strengthen the Program as TPA 1.1 matures.

CalPERS Total Fund Portfolio Management	Tier	Letter
TFPM Program Independent Score (ex-Firm)	3rd	B
Overall Score (including Firm)	4th	B

	Weight	Tier	Letter
Organization	20%	5th	C
FIRM	*50%*	5th	C
Quality and Stability of Senior Management			
Quality of Organization			
Ownership/Incentives			
TEAM	*50%*	5th	C
Stability of Investment Professionals			
Quality of Team			
Commitment to Improvement			
Information Gathering	20%	5th	C
Information Resources			
Depth of Information			
Breadth of Information			
Forecasting	20%	3rd	B
Clear & Intuitive Forecasting Approach			
Repeatable Process			
Strength, Clarity, and Intuitiveness of Valuation Methodology			
Forecasting Success			
Unique Forecasting Approach			
Portfolio Construction	20%	2nd	A
Risk Budgeting/Control			
Defined Buy/Sell Discipline			
Consistency of Portfolio Characteristics			
Implementation	10%	3rd	B
Resources			
Liquidity			
Compliance/Trading/Monitoring			
Attribution	10%	3rd	B
Depth of Attribution			
Integration of Attribution			