



## MEMORANDUM

**TO:** Members of the Investment Committee, CalPERS  
**FROM:** Meketa Investment Group  
**DATE:** September 14, 2020  
**RE:** Real Estate Annual Program Review and Semi-Annual Report as of June 30, 2020

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### Purpose

As the Board Real Estate Consultant, Meketa Investment Group ("Meketa") conducted the following two reviews of the Real Estate Portfolio (the "Portfolio") for the period ending June 30, 2020:

- Semi-Annual Performance Review; and
- Annual Program Review.

As of June 30, 2020, Real Estate comprised 84% of CalPERS' \$44 Billion Real Assets portfolio. In the context of the revised Investment Committee meeting schedule for the Fiscal Year Ending 2021, the two reviews have been requested for the same Investment Committee meeting. As such, we have combined them into this single deliverable. Our reviews are based on data provided in Wilshire Associates' California Public Employees' Retirement System ("CalPERS") Real Assets Performance Analysis Review for the period ended June 30, 2020, and selected CalPERS reports.<sup>1</sup>

This memorandum organizes our coverage of the combined Semi-Annual Performance and Annual Program Reviews into the following topical areas:

- Summary of Review Findings
- Portfolio Performance
- Implementation
- Investment Policy
- Staffing and Resources
- Market Commentary
- Investment Beliefs
- Conclusion

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<sup>1</sup> Real Assets Quarterly Performance Report, Partnership Financial Statements (pdf) and Datasheets (Excel), Period Ending March 31, 2020, and Real Assets March 31, 2020 Quarterly Review (pdf).



## Summary of Review Findings

- **Portfolio Performance:** Private real estate is a long duration asset class. The Portfolio's 2020 five-year net total return of 6.1% trailed its Policy Benchmark, the MSCI/PREA U.S. ACOE Quarterly Property Fund Index (Unfrozen), Net of Fees of 7.5% by -1.4%. The Portfolio's income returns continue to outperform the benchmark's income returns over all periods, fulfilling the role of the asset class in the broader CalPERS portfolio.
- **Implementation:** The Net Asset Value ("NAV") was \$37.4 billion, up \$0.8 billion, or 2.1%, over the December 31, 2019 NAV of \$36.6 billion. Current NAV is 9.6% of the Total Fund.
- **Investment Policy:** The Real Estate Portfolio complies with all policy guidelines.
- **Staffing and Resources:** The Real Assets Program had 44 authorized positions as of June 30, 2020, of which 42 were filled and two were vacant. Subsequent to the end of the period, the open Real Assets ("RA") Managing Investment Director ("MID") position, vacated by Paul Mouchakkaa in April 2020, was filled as of July 1, 2020 with the appointment of Sarah Corr, who had been the Interim MID for the Private Equity Program from April 2017 to July 2019, and otherwise an Investment Director ("ID") in that program.
- **Market Commentary:** COVID has materially disrupted what was previously a healthy supply/demand landscape across virtually all property sectors. Near-term impairment to cash flows will impact short-term returns, but it will be the depth and duration of declines in cash flows, as well as the longer term changes in behavior, that will ultimately dictate valuations across the various real estate assets that CalPERS holds.
- **Investment Beliefs:** In our view, the Real Estate Portfolio, as implemented by Staff, supports many of CalPERS' Investment Beliefs.
- **Conclusion:** The Real Estate Program is executing on its objectives in a scalable and fee-efficient mode with a relatively small number of long-standing trusted partners. Because of the high quality of construction and location, very small exposure to non-core risks, creditworthy tenancies, relatively low leverage, and the System's staying power, CalPERS is likely to be advantaged compared to many other institutional investors. Close monitoring of the unfolding COVID situation during the next 12 to 24 months will inform needed near-term capital reserves, as well as longer term strategic pivots in portfolio construction.

## Portfolio Performance<sup>1</sup>

### Portfolio-Level Returns

CalPERS' Real Estate Portfolio continues its positive transformation towards a primarily income-oriented portion of the Real Assets Program and Total System Portfolio. This provides reliable, positive cash flow to the System with which to pay benefits, and long term diversification benefits.

<sup>1</sup> Per Wilshire's CalPERS Real Assets Performance Analysis Review for the period ended June 30, 2020, reported with a 1-quarter lag, so as of March 31, 2020. Based on State Street Bank's data.



The Real Estate Portfolio returns outperformed the Policy Benchmark for the one-year trailing period and underperformed the Policy Benchmark for the three-, five-, and ten-year trailing periods as shown below.

Net Returns (%)	1 Year	3 Year	5 Year	10 Year
Real Estate Portfolio Returns	5.5	5.2	6.1	9.5
Real Estate Policy Benchmark <sup>1</sup>	3.9	5.8	7.5	10.5
Over (Under) Performance	1.6	-0.6	-1.4	-1.0

We observe that the absolute one-year returns are generally lower than prior periods, reflecting multiple effects including impacts of COVID-19, lower US GDP in 2020, lower risk-free rates and perhaps a dispersion in the willingness of managers who contribute data to the benchmark to take write-downs (between CalPERS' managers and those that populate the index universe). By comparison, six months ago as of December 31, 2019, the trailing one-year return was 6.3%, with three-, five-, and ten-year returns at 6.0%, 8.0%, and 8.5%, respectively.

### Performance Attribution<sup>2</sup>

Among the risk categories, Core investments continue to deliver the strongest returns, posting a 6.9% trailing one-year return as of March 31, 2020 (in excess of the benchmark), followed by Value Add at -0.4%, and Opportunistic at -2.3%. The Core Portfolio represents 87.4% of the Real Estate Portfolio, virtually all held directly in lower-cost separate accounts.

Net Returns (%) As of March 31, 2020	NAV (\$ billion)	1 Year	3 Year	5 Year	10 Year
Core	31.3	6.9	5.9	8.0	13.7
Value Add	2.7	-0.4	3.5	4.1	4.7
Opportunistic	3.3	-2.3	1.3	0.4	3.8
Real Estate Policy Benchmark <sup>1</sup>		3.9	5.8	7.5	10.4

The real estate portfolio has produced consistently strong income returns in excess of the benchmark income returns over the last five years. This current yield is consistent with Staff's expectations of net income between 3% and 5% over the long term.

Net Income Returns (%) As of March 31, 2020	1 Year	3 Year	5 Year	10 Year
Real Estate Portfolio	3.7	3.6	3.7	3.3
Core Real Estate Portfolio	4.1	4.0	4.2	4.5
Real Estate Policy Benchmark <sup>1</sup>	3.2	3.3	3.4	3.9

<sup>1</sup> CalPERS Real Estate Policy Benchmark, with historical composition as follows: As of July 1, 2018 is the MSCI/PREA U.S. ACOE Quarterly Property Fund Index (Unfrozen), Net of Fees. From July 1, 2011 through June 30, 2018, the Policy Benchmark was the NCREIF Fund Index Open-End Diversified Core Equity, Net of Fees. The Policy Benchmark results are shown on a blended basis during the relevant trailing periods.

<sup>2</sup> Real Assets Quarterly Performance Report as of March 31, 2020.



## Implementation

### Current NAV and Historical Portfolio Growth

The Portfolio's Net Asset Value (NAV) as of June 30, 2020, was \$37.4 billion, an increase \$0.8 billion, or 2.1%, compared to the December 31, 2019 NAV of \$36.6 billion. The current NAV represents 9.6% of the Total Fund.<sup>1</sup> For the second quarter, the Real Estate Portfolio reduced overall Real Assets' performance amid the challenging macro backdrop for private real estate. Various shutdown and stay-at-home orders due to the pandemic created severe disruptions that adversely impacted commercial real estate incomes and valuations.

### Fiscal Year 2020 Investment Activity

The increase in NAV from 2019 to 2020 of \$2.6 billion is mostly attributable to a combination of new contributions to existing investment vehicles and income from existing investments, offset by unrealized depreciation. CalPERS' managers made 43 new acquisitions during the period totaling \$2.6 billion NAV (\$4.0 billion GAV). All real estate acquisitions were made in the U.S., and 42 of the 43 have a Core risk profile. Approximately 41% and 40% of the capital were deployed in Industrial and Multifamily assets, respectively. The remaining capital was comprised mainly of Retail (17%), with Office (2%) making up the balance. All appear consistent with the managers' mandates and Portfolio objectives.

### Managers and Investment Vehicles

The Real Estate Portfolio's investments are managed by 18 General Partners, comprising 32 separate accounts and six commingled funds. Over the last 10 years, the number of relationships with external managers has declined by 75%, reflecting the deliberate shift away from commingled funds to the separate account model, which affords CalPERS scale, fee efficiency, governance, and a closeness to the assets that enhances portfolio and risk management. The reliance on separate accounts is consistent with the Real Asset Program's Strategic Plan and Investment Beliefs.

### Sustainability

There has been substantial collaboration between the Real Assets ("RA") portfolio and Board Governance and Sustainability (BGS) over the course of the last several years. Together, RA and BGS finalized the energy optimization guidelines that outline Real Asset's systematic approach to energy optimization for real estate. Additionally, there was further progress on Environmental, Social, and Corporate Governance ("ESG") integration efforts in portfolio construction and management. CalPERS continues to emphasize its Responsible Contractor Policy, which has virtually 100% compliance across the separate accounts and is recognized as an industry best practice. Fiscal Year ("FY") 2020/2021 marked the fifth year where external managers submitted energy optimization projects as a part of the Annual Investment Planning ("AIP") process with 107 proposed capital expenditure projects across 10 partnerships in the Portfolio with an expected annual energy savings of approximately 12 million kWh/year or \$1.7 million (where energy

<sup>1</sup> The Total Fund market value was \$389 billion as of June 30, 2020, per Staff.



savings were able to be quantified at the time of submission). This continues the upward trend in projects submitted each year (76 projects were submitted in 2019 across nine investment strategies, up from 18 projects presented by five managers in the inaugural year).

The energy optimization initiative has also motivated managers to propose innovative pilot projects, including exploring onsite renewable energy opportunities, electric vehicle charging stations, utility automation, installation of more efficient lighting, equipment retrofits, and others. RA and BGS are working together to evaluate these opportunities for systematic implementation across the Portfolio.

During the FY 2019/2020, CalPERS completed the first carbon footprint measurement of its Real Assets portfolio, meeting one of the objectives in the climate change workstream of the strategic plan for sustainable investments. In total, CalPERS received greenhouse gas emissions data from its external managers and asset operators representing 93% of the Real Assets Portfolio's net asset value (as of December 31, 2018).

### **Future Portfolio Evolution**

CalPERS governs its Real Assets program in part through the AIP process. The Investment Staff reviews and grants discretion to its separate account managers who submit annual business plans for their respective portfolios. The AIP process covers both new capital allocations (representing prospective future funding commitments for acquisitions and enhancements) as well as the evaluation and approval of partnership related decisions requiring CalPERS' approval, including, but not limited to, such items as changes to minimum return guidelines, leverage constraints, asset financing and dispositions, etc. For the FY 2020/2021, CalPERS approved \$8.2 billion of investment activity in the Real Assets program, of which \$5.7 billion represents new investment allocation. The new investment allocation is \$150 million greater than the allocation in FY 2019/2020, in part recognizing that the uncertainty in commercial property markets may offer CalPERS additional opportunities.

Capital commitments approved through the AIP process are intended to further strengthen the portfolio and position it for the future market environment, including, but not limited to, expected investments in yield-generating core and tactical value add investments in North American markets. Additionally, lower performing investments will continue to be pruned through selective sales.

Meketa believes the future evolution of the portfolio will be influenced by the attributes and influences identified below.

#### **Strengths:**

- Strong purpose and board direction.
- Long-term strategy integrated within Total Fund strategy.
- Effective, diverse investment staff, familiar with assets and markets.
- Scale, which is translating to lower fees and costs.
- Notable and meaningful integration of ESG into decision-making and portfolio management.

**Weaknesses:**

- Scale and the challenges associated with needing to deploy large amounts of capital into discrete real estate assets.
- Innovation.
- Costs of maintaining and improving assets are increasing.
- Limited control over constraints (e.g., availability and pricing of attractive investment opportunities) that impact ability to deploy capital.
- Required rates of return.

**Opportunities:**

- Placing capital with partners who can add value at the operational level.
- Accessing new acquisitions at attractive spreads to risk-free nominal rates.
- Creating core at better pricing than acquisition.
- Controlling leverage at the portfolio level, instead of partnership level, for better execution, longer fixed-rate duration and more aligned borrowings, especially in a lower than normal interest rate environment.
- Influences changing the way people interact with the built environment.
- Increased use of data analytics in portfolio management.
- ESG initiatives.
- Current position at lower end of target allocation for Real Assets.

**Threats:**

- Organizational challenges: changes in senior INVO management personnel; abilities to train and develop younger professionals through remote operations.
- Temporary COVID and longer-term technology driven changes, space use disruption, innovation, and obsolescence.
- Retention of professionals.
- Material downturn in market growth rates and demand.
- Significant dry powder seeking assets similar to those CalPERS desires.



## Investment Policy

### Governing Policies and Guidelines

The following CalPERS policies and guidelines currently govern the Real Assets Program, and the Real Estate Portfolio therein:

- Total Fund Investment Policy (the “Fund Policy”), June 17, 2020;
- Policy-Related Procedures Total Fund Investment Policy Investment Leverage Section, September 16, 2019;
- Investment Policy for Real Assets Program (the “Real Assets Policy”), December 16, 2019; and
- Policy-Related Procedures for the Real Assets Program, December 16, 2019.<sup>1</sup>

### Key Policy Parameters

The Portfolio is compliant with all key parameters related to diversification and other limits applicable at the Portfolio level, as demonstrated in the table below.

Key Portfolio Parameter	Policy Range/Limit	NAV 6/30/20 Exposure
<b>Risk Classification</b>	(%)	(%) <sup>2</sup>
Core	75-100	87.5
Value Add	0-25	7.5
Opportunistic-All Strategies	0-25	5.1
<b>Geographic Region</b>	(%) <sup>3</sup>	(%) <sup>1</sup>
United States	75-100	93.0
International Developed	0-25	2.6
International Developing	0-15	4.4
International Frontier	0-5	0.0
<b>Manager Exposure<sup>4</sup></b>	(%)	(%)
Largest Partner Relationship	20 max	15.0
Investments with No External Manager	20 max	0.0
<b>Leverage<sup>5</sup></b>		
Loan to Value	50% max	31.9%
Debt Service Coverage Ratio	1.5x min	3.2x

<sup>1</sup> These previously were titled Investment Policy Procedures & Guidelines (“IPPG”).

<sup>2</sup> Real Assets March 31, 2020 Quarterly Review and Real Assets Characteristics Report Datasheet, calculated based on asset-level risk and geography.

<sup>3</sup> Geographic NAV policy ranges effective as of December 16, 2019.

<sup>4</sup> Real Assets Allocation Report Datasheet, calculated based on manager- and account-level NAV. Percent calculated using relevant NAV plus total unfunded commitments for relationships/investments and same for the Real Assets Program (\$59.5 billion).

<sup>5</sup> Real Assets March 31, 2020 Leverage Report.



## Staffing and Resources

The Real Assets Program had 44 authorized positions as of June 30, 2020, of which 42 were filled and two were vacant. Subsequent to the end of the period, the open Real Assets (“RA”) Managing Investment Director (“MID”) position, vacated by Paul Mouchakkaa in April 2020, was filled as of July 1, 2020 with the appointment of Sarah Corr, who had been the Interim MID for the Private Equity Program from April 2017 to July 2019, and otherwise an Investment Director (“ID”) in that program. Mike Inglett, an ID and head of the RA Strategy, Portfolio Analytics, Research & Risk<sup>1</sup> (“SPARR”) group, served as the RA Interim MID in the intervening months. The Program is not actively recruiting for the single vacancy, an ID that would head the New Investments Team. The process to fill this position had been underway prior to Mr. Mouchakkaa’s departure and was put on hold pending the appointment of a new MID.

The Program’s current position count is down from July 1, 2019 when it had 55 authorized positions, of which 49 were filled and six were vacant, a net change of -11. Ten positions were transferred to other CalPERS units, including: four administrative positions to the Total Fund Business & Analytical Services (“TFBAS”) section and one administrative position to the Board Governance & Sustainability (“BGS”) Program (previously Sustainable Investments, or SI); three Investment Officers (“IO”) to the Investment Servicing Division (“ISD”); and one Investment Manager (“IM”) to the Research & Strategy Group (“RSG”). Additionally three Seasonal Clerk (“SC”) positions were deactivated. Five positions were filled over the fiscal year, with three external hires and two internal transfers.

We are told the transfer of the administrative positions occurred at the end of 2019 and was part of an organization-wide effort to centralize administrative and related support staff. Previously, the RA Program’s administrative staff members were 100% dedicated to the RA Program; they are now part of a pool where individuals may not have any formal dedication to a specific asset class group(s).

With respect to the transfer of four investment positions out of RA, we understand that for three, their work went with them, and so the losses had minimal impact on workload capacity. However, the IM transfer represents a true loss of capacity, as well as a unique skill set, and remaining RA staff have had to step into the void. Effectively these transfers represent a net loss of one important IM position, and to date the Program has not gotten this back.

As described above, there have been a significant number of staffing changes in the last six to nine months. The pandemic and working remotely have also created new challenges around workflow, training and collaboration methods. From our vantage point, the Program has weathered these changes and the current situation relatively well. While Mr. Mouchakkaa’s departure is a meaningful loss, Mr. Inglett was a strong and steady steward pending Ms. Corr’s appointment, and he and the rest of the senior team are strong support for her during her transition to RA MID. As we have observed over the last several months, sourcing and diligence activities remain robust, investment processes are consistent, and deliberations and decision-making remain transparent and thoughtful. Additionally, the quality of the RA Program’s analysis and work products is high. Nonetheless, careful consideration

<sup>1</sup> Previously called the Portfolio Analytics, Research, Risk, Governance & Operations (“PARRGO”) group.





should be given to ensuring that the Program has the right number of positions with the necessary skill sets to successfully execute on its Strategic Plan. In particular, as the Real Assets Real Estate and Infrastructure Portfolios continue to grow in number of managers, accounts, committed amounts, and NAV, additional resources may be needed in the near future.

With respect to Meketa providing resources during 2020, we supported the Real Estate Portfolio in the following ways: attending the roughly weekly Real Asset Investment Committee (“RAIC”) meetings and commenting on market conditions, industry trends, prospective acquisitions, financings and dispositions, and the AIP submissions; weekly calls with RA Program leadership; conducting reviews of proposed policy revisions and providing opinions on them; meeting as requested with Investment Committee Chair and Vice Chair; and preparing periodic reports for the Board Investment Committee and attending those meetings. No investment opinion letters for the Real Estate Portfolio were requested during the fiscal year.

### Market Commentary

While real estate fundamentals were healthy across virtually all sectors at the beginning of the year, the COVID-19 pandemic is increasingly impacting the cash flows generated by real estate assets. Net operating income (NOI) for most property sectors is expected to decline this year, although there will be a wide dispersion of results across the different property types. Property types whose cash flows and valuations have held up well over the last six months, and may well continue to do so during the duration of the pandemic, include data centers, life science/research facilities, light industrial/warehouse distribution, and single family rentals. Assets in the discretionary retail and hospitality sectors, and those concentrated in densely populated urban centers, are experiencing the most pain.

Despite declining NOIs this year, we cautiously expect many high-quality core assets to continue to produce positive cash flows during the next six to 18 months, diminished from the typical 4% net to 2% to 3% net, as vacancies and reserves for non-payment increase. The impact to property valuations will depend on the depth and duration of the impairment to cash flows, as well as changes to expectations of rental growth over time, diminution in the rate of expected new supply, and more macro factors such as interest rates and financing underwriting. Sectors hit the hardest will take years to regain 2019 cash flow levels, while the impairment to growth in the more resilient sectors will be limited in scope and/or temporary in nature. Across the industry, we expect perhaps 5% to 15% declines in asset value during the next six to 18 months. This estimate is subject to change, and is likely correlated with the delivery of an effective and widely distributed vaccine and/or therapeutics for the coronavirus.

For non-core properties and portfolios, given the higher level of leverage, and lower number of cash flowing assets, we would not be surprised to see declines in value by 15% to 25%, in general, during the next six to 18 months. Those specialists in hotels, obviously, will likely do worse, and examples such as last-mile, light warehouse, and data center assets will do better.



So far, there have not been enough transactions to discern any trend as to price changes. Very few sales have occurred, the bid-ask spread remains historically wide, and the financing markets, which provide the bulk of the capital for new acquisitions, are still quite frozen. Secondary activity is also sparse; discounts have coalesced around single digits when observed at all. The decline in interest rates also informs valuation metrics, as many estimates of potential return are calculated as a “spread” of first year net income return to the 10-year Treasury rate. With the 10-year yielding less than 1%, and the typical spread for completed, leased and performing high quality assets to be 1.5% to 3.0%, prior cap rates have room to drift downward, all else being equal, offsetting lower growth and occupancy rates. In the absence of transactional data points, third party appraisers lack their traditional tools and are struggling to find alternative data points and develop recovery models on which to base opinions of value. Many valuations now come with “material uncertainty” clauses.

We do expect COVID-related behavioral changes will have longer-term impacts on demand, some positive and some negative. Retail will suffer disproportionately as e-commerce continues to accelerate. Data centers, warehouse distribution, life sciences, and single family rentals are likely to be long-term beneficiaries of permanent behavior changes. Lodging and healthcare real estate are likely to recover but over an extended horizon and not without potentially significant capital expenditures to address enhanced safety and sanitation protocols, air handling, vertical transportation, and other operational issues. The jury is still out on office and student housing as companies and universities continue to weigh the pros and cons of in-person interactions against de-densification needs.

At present, we think this may actually be an interesting, if somewhat turbulent, entry point for additional real estate investment, given the following factors:

- The lack of new supply that will accompany the COVID pandemic;
- capital market phenomena such as unprecedented and unknown government (including which government post 11/3/2020) intervention and such downward pressure on rates as to make spreads wide enough to present interesting risk adjusted returns, using moderate leverage; and
- changes in rental rate growth, absorption, underwriting inputs, capital expenditure needs, and tenant turnover.

For a long term investor who is not seeking liquidity from their private real estate portfolio beyond an expected distribution of net income after debt service of 3.0% to 4.5%, net of asset management fees, real estate is likely to be able to fulfill its classic role of diversification, the generation of current payments to fund benefits, and status as an inflation-advantaged asset.



## Investment Beliefs

In our view, the Real Estate Portfolio, as implemented by Staff, is well aligned with CalPERS' Investment Beliefs. We highlight below several Beliefs (#) that are particularly important to the Real Estate asset class, with our commentary largely unchanged from prior Annual Program Reviews but for the current data.

- ***Liabilities must influence the asset structure (#1):*** As an asset class, Real Estate consists of long-lived assets that have stable, inflation-protected revenue, and 83.9% of the Portfolio's NAV falls into this category. These attributes make Real Estate assets well aligned with CalPERS' time horizon and liability structure.
- ***A long time investment horizon is a responsibility and an advantage (#2):*** The Portfolio's investment approach consists of a buy and hold strategy, mainly targeting Core assets that are long-lived. Shorter-term investors without the liquidity to invest long-term in private Real Estate cannot access these assets.
- ***CalPERS will take risk only where we have a strong belief we will be rewarded for it (#7):*** The large majority of the real estate portfolio resides in lower-risk core properties. Incremental risk is only undertaken in situations where there is strong evidence that CalPERS will achieve commensurate returns, and then, only with trusted manager partners in well-aligned investment vehicles.
- ***Costs matter and need to be effectively managed (#8):*** The Portfolio has been successful in negotiating favorable terms with managers, focusing on providing reasonable operations support and strong economic alignment. Asset management fee rates have declined as the Portfolio focuses on lower-fee customized separate accounts and direct investments over commingled funds. However, profit sharing fees may increase where managers exceed performance hurdles. Additionally, as the Portfolio's NAV grows, total fees would be expected to increase, even as fee rates may decline.
- ***Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error (#9):*** As a private market asset class, Real Estate risk analysis incorporates many risk factors beyond price volatility, including financial and operating leverage, lifecycle risk, counterparty risk, interest rate risk, regulatory risk, and environmental risks. The additional governance secured under separate accounts over commingled funds helps mitigate these risks. Furthermore, the real estate portfolio's integration of ESG metrics and initiatives reflects a multi-faceted and longer-term risk assessment framework.



## Conclusion

The Real Estate Portfolio's development and its current construction remains appropriate and consistent with applicable policies and guidelines:

- *Risk*—Exposures are within classification policy ranges, with the observation that the portfolio is intentionally dominated by Core at 83.9% of the NAV;
- *Geography*—Exposures are within the categorical ranges;
- *Partner Relationships*—Fee-efficient structures and NAVs are well below the maximums allowed (from a manager concentration perspective); and
- *Leverage*—Metrics are comfortably compliant.

CalPERS can reasonably expect turbulence in the Portfolio's performance at least across the next two-four quarters, with material dispersion in performance across its separately managed partnerships depending on property sector focus. Nonetheless, we believe the Program is well positioned to weather the downdrafts and take advantage of future opportunities.

Please do not hesitate to contact us if you have questions or require additional information.

CF/DG/jls