To: Members of the Investment Committee
California Public Employees' Retirement System

Date: July 11, 2014

From: Pension Consulting Alliance, Inc. (PCA)

RE: Real Estate Performance through June 30, 2014

PCA received and reviewed Wilshire's Executive Summary of CalPERS' Investment Performance for the period ending June 30, 2014 as it relates to the Real Estate Portfolio. The following items should be considered in your assessment of Real Estate's performance:

- In an illiquid asset class populated with multi-year partnerships, longer term results are more significant than those of a shorter duration.
- **The real estate portfolio has changed to additive to the entire fund's performance from having been detrimental as a result of markets improving and REU's investments.**
- **The strategic shift to less risky real estate investing through focus on separate account core properties, more moderate leverage and increased control and alignment.**
- **In a heated market, it will be crucial to maintain a disciplined approach to underwriting.**
- Real Estate outperformed the benchmark as reported for the quarter ending June 30, 2014. Performance over the one-year period continued the upward trend started in the third quarter of 2010, yielding 13.9% net of fees. Over the longer term, the real estate program had less favorable results with net returns of 0.5% and 3.1% during the trailing five- and ten-year periods, respectively. These returns were less than the applicable benchmark returns by 9.4% and 6.6%, respectively.

Real Estate Performance	Quarter	1 Year	3 Year	5 Year	10 Year
Real Estate Returns	8.4%	13.9%	13.9%	0.5%	3.1%
Real Estate Policy Benchmark	2.3%	12.7%	11.9%	9.9%	9.7%
Difference	6.1%	1.2%	2.0%	-9.4%	-6.6%

- New construction remains relatively disciplined in retail, office, industrial and hotel sectors. Apartment and condominium starts continue to trend up towards historical average annual levels.
- Enormous amounts of capital have been and continue to be allocated by global investors to commercial real estate investments, particularly for completed and leased assets located in the US and a handful of major international cities in Europe and Asia. The capital is ecumenical: it comes from employees' retirement systems and other pension plans, endowments, foundations, sovereign wealth funds, public REITs, insurance

companies and high net worth individuals, both as traditional domestic investments and as "flight capital" seeking a safer place to land than home. These investors, many of whom have different thresholds than CalPERS to describe acceptable risk adjusted returns, have been joined by non-traditional property investors such as hedge funds, equity investors looking to take "money off the table" and place profits into what is perceived as less volatile assets; and fixed income investors and others for whom the bond market does not provide an adequate current return. The effect on prices has been material, with many assets' values exceeding the record levels observed before the Great Financial Crisis of 2008-09. PCA cautions "to not confuse brains with a bull market" in expecting these increases in value to be sustained when interest rates and new construction starts return to more normalized levels.

- As previously articulated, the longer term performance of the real estate portfolio has been hindered by three primary factors:
    - Significant amounts of CalPERS' capital were invested during the 2005 to 2007 period which exposed the portfolio to the risk of vintage-year concentration. The Portfolio continues to employ more systematic and disciplined approaches toward new capital allocations to managers in order to mitigate this risk;
    - A high proportion of the portfolio was invested for capital appreciation (not current income) in riskier, non-stabilized properties. The Portfolio continues to shift more in the direction of a current income focus, as more capital is deployed in core strategies, and less in new opportunistic transactions; and
    - High amounts of leverage were employed at the peak of the cycle. More in line with the real estate benchmark, lower levels of debt are being used. In addition, methods to manage the debt are being reviewed to determine whether, and how, CalPERS can more actively reduce debt costs at the portfolio level compared to the individual manager level.
- Non-stabilized, highly leveraged investments exacerbated historical underperformance compared to the benchmark, which is primarily composed of completed and leased properties, during the economic crisis. Non-stabilized assets provide less income to insulate against valuation declines. Increased leverage magnifies positive appreciation returns in upward market cycles, of which CalPERS portfolio has been the beneficiary during the past two years, and magnifies negative appreciation returns in downward market cycles such as 2008-10.
- The current Real Estate Strategic Plan was approved at the February 2011 Investment Committee meeting. This plan provides for the implementation of the revised role of real estate as re-iterated in the most recent asset allocation study. This role is primarily to provide (i) reliable current income and (ii) diversification from public and private equity return characteristics. Therefore, as seen in this year's results, and planned for the next several years, the portfolio will continue to shift in emphasis towards primarily strategic, stabilized, income producing domestic core assets held for a longer term, and away from more tactical, opportunistic, appreciation-oriented investments held for a shorter term.
- In general, the global commercial real estate markets continue to display improving fundamentals insofar as occupancy demand and increases in net rental rates; however, these rates of increase are still relatively mild. This risks associated with this slower pace are partially mitigated by below average new construction levels (except for multifamily residential) and historically low base rates for mortgage loans. Increases in value during the past year can be attributed primarily to (i) pent up demand for core property in major, primarily coastal and capital cities and (ii) relatively attractive current returns from

completed properties compared to other available income-oriented investments. As employment increases, uncertainties about economic trends and political instability are declining, it is reasonable to expect increases in rent and occupancy to continue during the next twenty four months.

Note: PCA does not believe any single quarter's reported performance relative to the benchmark is informative since the benchmark includes properties appraised ratably throughout a twelve month period, and CalPERS' current appraisal policy (which is being reviewed) provides for annual appraisals. The impact of the CalPERS appraisals is primarily incorporated into the results reported for the quarter ending June 30 (some commingled funds report appreciation/depreciation as valued by appraisers or general partners at other times). In other words, all else equal, compared to the portion of the benchmark relating to private real estate, PCA expects significantly more of a year's reported appreciation/depreciation in values to be concentrated in the quarter ending June 30, based on values recorded in the January through March quarter, and somewhat less to be recorded in CalPERS' results in the other three quarters.

PCA is available to take any questions of the Investment Committee.

Respectfully,

David Glickman
Managing Director