Memo

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

From: StepStone Group

Date: July 31, 2015

Subject: Infrastructure Performance through March 31, 2015

StepStone has reviewed the performance of CalPERS' Infrastructure Program (the "Program") as of March 31, 2015 provided in Wilshire's Executive Summary. Based on our review, we make the following comments with respect to the Program:

- For the quarter ending March 31, 2015, the Program continued to outperform, returning net 4.0% compared to the policy benchmark of 1.5%.[1] Over the trailing one, three, and five-year periods, the program returned net 13.2%, 13.7%, and 17.8%, respectively. Returns for each of these periods exceeded the benchmark by 9.3%, 8.7%, and 11.7% in the respective periods.

Infrastructure Performance	Quarter	One Year	Three Year	Five Year
Infrastructure Program Returns[1]	4.0%	13.2%	13.7%	17.8%
Policy Benchmark (CPI+400 BPS)	1.5%	3.9%	5.0%	6.1%
Difference	2.5%	9.3%	8.7%	11.7%

[1] Net of management fees and other costs

- As during prior periods, the Program's performance has benefitted from its Defensive Plus commitments, (including a legacy Commingled Fund commitment). Since the performance of more recent commitments to Defensive Custom Accounts and Commingled Funds is not yet meaningful, we expect performance to moderate over time. Further, as infrastructure is a long-term, private market investment strategy, quarterly results will be less significant than performance over longer periods.
- Market conditions for core infrastructure remained competitive during the first half of 2015, and we expect this to continue over the medium-term period. As we discuss below, demand for core infrastructure assets is particularly high in established infrastructure markets such as the US, UK, and Australia, which are a focus of the Program.
- Continued demand for infrastructure among institutional investors globally has been a key driver of competition. In addition to infrastructure funds, a number of direct investors, particularly large sovereign wealth funds, insurance companies, and public pension plans have become increasingly active in the infrastructure market. Despite an apparent slow-down in the rate of new allocations and commitments to infrastructure during the first half of 2015, we expect that aggregate allocations to infrastructure will continue to increase, driven by higher penetration of medium and small institutional investment allocations and by a continuing low interest rate, low inflation environment.

[1] CalPERS' Infrastructure policy benchmark is CPI + 400 BPS.

- Several factors, including low interest rates, a preference for income-oriented investments, concerns about rising inflation, and a greater appreciation for the role that infrastructure can play within a total investment portfolio, have contributed to growth in investor allocations to the asset class. Similar to CalPERS, other institutional investors have given preference to infrastructure assets and strategies with defensive characteristics: high quality assets with the potential to deliver long-term, stable and predictable cash flows through regulatory or contractual frameworks, or strong market positions. Established infrastructure markets including the US, UK, Europe, and Australia continue to attract the most capital.
- The supply/demand imbalance has been reflected in prices paid for infrastructure assets. Over the past year, several large transactions in the ports and roads sectors in North America, the UK, and Australia resulted in valuations that are considerably higher than historical levels. Similarly, conventional and renewable power generation assets with long-term off-take contracts attract interest from core infrastructure investors – funds, direct institutional investors, and listed income-focused vehicles (i.e., "yieldcos").
- Despite these competitive conditions, infrastructure market fundamentals continue to be attractive for investment for the following reasons:
    - i. While debt is widely available for high-quality infrastructure borrowers and leverage ratios have increased in certain transactions, the overall use of leverage in the industry, in terms of aggregate levels and debt structures, has generally remained prudent;
    - ii. Initiatives by many governments are driving the supply of new infrastructure investment opportunities, which over time may lead to a moderation of the downward pressure on infrastructure returns. These initiatives include the £400 billion National Infrastructure Plan in the UK, the privatization plans of federal and state governments in Australia, and the gradual implementation of private infrastructure investment programs by many US states;
    - iii. A combination of shorter-term dislocations and longer-term growth trends should provide attractive opportunities for investment in the energy sector (generation, transmission, and midstream assets), and elsewhere in the economy; and
    - iv. An eventual rise in interest rates will likely result in a transfer of capital from infrastructure to fixed income allocations, thereby alleviating some of the capital imbalance observed over recent periods.

StepStone welcomes the opportunity to answer any questions of the Investment Committee.