

Memo

To: Members of the Investment Committee

California Public Employees' Retirement System

From: StepStone Group
Date: August 15, 2016

Subject: Infrastructure Performance through June 30, 2016

StepStone has reviewed the performance of CalPERS' Infrastructure Program (the "Program") as of June 30, 2016 provided in Wilshire's Executive Summary. Based on our review, we make the following comments with respect to the Program:

• For the quarter ending June 30, 2016, the Program continued to outperform its benchmark, returning net 1.8% compared to the policy benchmark of 1.7%. Over the trailing one, three, and five-year periods, the program returned net 9.0%, 14.9%, and 11.7%, respectively. Returns for each of these periods exceeded the benchmark by 4.1%, 10.1%, and 6.4% in the respective periods.

Infrastructure Performance	Quarter	One Year	Three Year	Five Year
Infrastructure Program Returns ¹	1.8%	9.0%	14.9%	11.7%
Policy Benchmark (CPI+400 BPS)	1.7%	5.0%	4.8%	5.3%
Difference	0.1%	4.0%	10.1%	6.4%

¹ Net of management fees and other costs

- By investment type and risk classification, the Program's Direct Investments and Defensive Plus investments, respectively, have consistently delivered strong performance through all reporting periods. 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.
- Competition for core infrastructure assets did not ease in the first half of 2016, and particularly not in
 developed markets, such as North America, the UK, Europe, and Australia. Robust capital flows into mature,
 operational infrastructure assets were supported by the low interest conditions. On a risk-adjusted basis, the
 stable and predictable cash flow profile of high-quality infrastructure appears attractive relative to the yields
 offered by sovereign or corporate debt securities. Other factors, such as concerns about rising inflation also
 contributed to the increasing demand for infrastructure investments globally.
- Fundraising conditions offer evidence of the continued demand for infrastructure investment. Two of the industry's largest private infrastructure funds ever achieved record fundraising milestones in 2016. Brookfield Infrastructure Fund III held its final close at the end of June, raising an aggregate of US\$14 billion of equity commitments. The fund's final close was US\$ 4 billion above target and double the size of Brookfield's second private infrastructure fund raised in 2013. And, Global Infrastructure Partners III held an interim close on US\$10.8 billion in April. The fund is targeting US\$12.5 billion and has a hard cap of US\$15 billion. Increasing demand for infrastructure is also evident in both in the rate at which infrastructure funds are achieving and

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



even exceeding their target size, and the amount of dry powder currently in private infrastructure funds. In addition to traditional infrastructure fund managers, pension funds sovereign wealth funds, and insurance companies were active investing directly into infrastructure, individually and as consortia, and particularly into mature, core infrastructure assets.

- Two major transportation infrastructure deals were completed during the year to date period at record high transaction multiples. In the US, a consortium of Canadian institutions, including Ontario Teachers' Pension Plan, Canada Pension Plan Investment Board, and Ontario Municipal Employees Retirement System acquired the Chicago Skyway for US\$2.88 billion, equating to approximately 35x 2015 EBITDA. The 7.8 mile toll bridge has 89 years remaining on its concession. Also in February, another concession led by several Canadian institutions (Ontario Teachers' Pension Plan, Alberta Investment Management Company, and Borealis Infrastructure) and Wren House, the infrastructure arm of the Kuwait Investment Authority, were selected as preferred bidders to acquire London City Airport from Global Infrastructure Partners and Oaktree (formerly Highstar). The reported purchase price of US\$2 billion equated to approximately 43x the airport's 2015 EBITDA.
- There was also notable transaction activity in the utilities and energy sectors. In North America, Alinda Capital
 Partners and General Electric sold Source Gas, a distribution business based in Colorado, to Black Hills
 Corporation in February. The acquisition price of US\$1.1 billion equates to approximately 15.8x 2015 EBITDA.
 And, IFM Investors exited Pacific Hydro, a 900MW hydroelectric and wind business with facilities in Australia
 and South America, to State Power Investment Corporation of China.
- Similar to other asset classes, the longer-term impact of the UK's Brexit vote on infrastructure remains unclear, both with respect to existing investments and fundraising conditions in the UK and Europe, a region that is arguably home to the largest core infrastructure market. In response to the UK's vote to exit the European Union in June, infrastructure managers with investments in the region have expressed concern that uncertainty may postpone decision making with respect to infrastructure spending by the public sector.

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