CIO INVESTMENT REPORT
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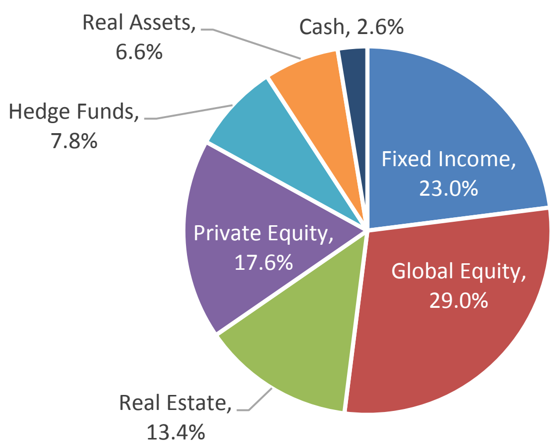
MPERS Board Meeting – September 29, 2016

2nd Quarter 2016 Investment Performance Report

NEPC will present MPERS' Fiscal Year 2016 performance report. A high level summary of the report is provided below.

Big Picture Perspective on Investment Performance:



1-year Return:	1.00%
Benchmark:	1.85%
Excess Return:	-0.85%
3-year Return:	8.19%
Benchmark:	7.05%
Excess Return:	1.14%
5-year Return:	8.09%
Benchmark:	6.83%
Excess Return:	1.26%
10-year Return:	5.82%
Benchmark:	5.86%
Excess Return:	-0.04%

- MPERS' portfolio posted an even 1.0% return in fiscal year 2016, underperforming the policy benchmark by nearly 0.85%. Most of underperformance can be attributed to the performance of Master Limited Partnerships (MLPs) and losses in the Hedge Fund and Real Assets portfolios. The policy benchmark once again proved to be a very difficult hurdle, as it outperformed 85% of the public fund peer universe for the year (ranking in the 15th percentile). MPERS' return of 1.00% still ranked in the top 34% of public funds and looks even better considering that global equities lost 3.7% of their value during the year.
- Longer term, the fund continues to perform very well relative to policy benchmarks and the public fund peer universe. MPERS' three and five year returns rank in the top 1% and 2% of the peer universe, respectively, and the ten year return ranks in top 27% while having a risk profile that is lower than 74% of the peer group (with risk defined by standard deviation of returns).
- Fiscal year 2017 is off to a good start, as the financial markets continue to rebound from the Brexit-induced selloff in June. The U.S. equity markets set new all-time highs before selling off modestly over the past few weeks. As of September 15th, MPERS fiscal year to date return (July 1st – September 15th) stands at an estimated 1.60%.
- With equity markets trading at or near all-time highs and interest rates at historically low levels, we continue to maintain a defensive positioning with the investment portfolio. Details on the current asset allocation positioning are on the following page.

- **Current Asset Allocation Overview / Positioning Relative to Targets**

  It's been a relatively quiet quarter in terms of asset allocation changes, as financial markets gradually trade higher following the Brexit-induced selloff in late June. The U.S. equity markets recently broke a string of 42 consecutive trading days without a 1% move in prices, which is mind-boggling given the volatily surrounding the Brexit vote. Fears of the Federal Reserve raising interest rate hikes have sent markets somewhat lower in recent weeks, but U.S. markets remain near all-time highs. The bond markets have also rallied (sending yields lower) during the quarter, causing mortgages to pay down faster and government agencies to call (refinance) their higher yielding (or even moderately high yielding) securities. The proceeds from mortgage prepayements and called agency securities, together with a moderate underweight position to the equity markets, has pushed MPERS cash balance up to $75 million (or 3.75% of assets).

  Listed below are some key movements and initiatives with the portfolio, along with the current positioning relative to policy targets.