## Commonwealth of Pennsylvania Public School Employees' Retirement System

DATE:

March 10, 2011

SUBJECT:

Asset Allocation Recommendation - Asset/Liability Analysis and Investment Review

TO:

Members of the Board

FROM:

Alan H. Van Noord, CFA

Chief Investment Officer

William G. Bensur, Jr., CFA

Wilshire Associates

At the upcoming Finance Committee meeting in March, Bill Bensur, Marlin Pease and Stephen Marshall from Wilshire Associates will review the fourth quarter investment performance and the results of their annual asset/liability analysis. A copy of Wilshire's presentation entitled "Investment Review – For the Period Ending December 31, 2010; Asset/Liability Analysis" dated March 2011 has been included in your Finance Committee materials. This review is the basis for the asset allocation recommendations. The following are the changes recommended to the current asset allocation:

Asset Class	<b>Current Target</b>	Recommended Policy	Increase/(Decrease)
	05.000/	05.000/	(0.000()
Public Market Global Equity	25.60%	25.00%	(0.60%)
Private Markets	21.00%	21.00%	0.00%
Private Real Estate	<u>10.50%</u>	<u>9.75%</u>	(0.75%)
Total Equity	<u>57.10%</u>	<u>55.75%</u>	<u>(1.35%)</u>
Global Fixed Income	2.00%	10.25%	8.25%
U.S. Core Fixed Income	5.00%	0.00%	(5.00%)
TIPS (Leveraged)*	5.00%	5.00%	0.00%
High Yield (Opportunistic)	8.00%	6.00%	(2.00%)
Emerging Markets Fixed Income	2.90%	0.00%	(2.90%)
Cash	<u>5.00%</u>	<u>5.00%</u>	<u>0.00%</u>
Total Fixed Income	<u>27.90%</u>	<u>26.25%</u>	<u>(1.65%)</u>
Absolute Return	10.00%	12.00%	2.00%
Commodities	5.00%	<u>6.00%</u>	<u>1.00%</u>
	<u> 100.00%</u>	<u>100.00%</u>	0.00%

Current Target represents the last approved asset allocation; actual policy target will differ based on actual allocations to Private Markets and Private Real Estate.

leverage of 3:1 permitted in current and recommended policy; modeled for asset allocation purposes at 2:1 leverage.

The following are some observations regarding the recommended policy:

- 1. The recommended allocation is a more efficient allocation than our current policy. While the recommended policy has an expected return that is equal to the current policy (7.65%), it is expected to have 16 basis points less risk.
- Given the expected contributions to and distributions from Private Markets, we expect the Private Markets allocation to remain static. The allocation will increase or decrease as the capital is put to work or distributed through the next year with funding coming from or going to the Global Equity allocation.
- In Private Real Estate, the actual allocation is currently around 9.25% and we expect it to increase to 9.75% during the course of 2011. Any underweight to Private Real Estate will be invested in Global Equity until the capital is called.
- 4. In fixed income, we recommend that we adopt a global allocation, similar to equities. We recommend combining the allocations to U.S. Core Fixed Income, Global Fixed Income, and Emerging Markets Fixed Income into a Global Fixed Income allocation benchmarked to the Barclays Global Aggregate GDP Weighted Index to reflect the greater global emphasis on emerging market debt within the fixed income opportunity set. We would continue to maintain dedicated allocations to TIPS, High Yield (opportunistic), and Cash, each of which has different risk characteristics than Global Fixed Income. The recommendation is to decrease the overall fixed income allocation by 1.65%, with 2.00% coming from High Yield (Opportunistic) and a modest increase of 0.35% to Global Fixed Income.
- 5. We recommend increasing the Absolute Return program from 10.00% to 12.00%. The Absolute Return program has attractive risk/return characteristics and is not correlated with the other major traditional asset classes. We will look to increase the number of managers in this program during 2011 by adding 5 to 10 new managers to the program.
- 6. We recommend increasing the allocation to Commodities from 5.0% to 6.0% and using existing managers to implement the increase.

Staff and Wilshire recommend adopting the changes to Exhibits B, C, and D of the Investment Policy Statement, Objectives, and Guidelines that record the changes recommended. Black-lined copies have been included for your review of the changes recommended. Other recommended changes not directly related to the asset allocation changes above include:

- 1. In Exhibit C, we recommend that the benchmark for Global Fixed Income be changed from the combination of the Barclays Capital U.S. Universal Index, Barclays Capital Multiverse Index, and the JP Morgan Government Bond Index-Emerging Markets (BGI-EM) Global Diversified (USD Unhedged) to the Barclays Capital Global Aggregate GDP Weighted Index to reflect the greater global emphasis on emerging market debt within the fixed income opportunity set at the composite level;
- In Exhibit C, we recommend that the benchmark for Absolute Return be changed from 8.0% annualized to 7.5% annualized in accordance with staff's recommendation to reduce the actuarial assumed investment rate of return. This change will also allow us to reduce the risk level as we construct the Absolute Return portfolio;
- 3. In Exhibit D, we recommend adding target ranges for two internally managed portfolios: MSCI World Small Cap Index ex. U.S. and MSCI Emerging Markets Index. Previously, we did not manage these portfolios internally;
- 4. In Exhibit D, we recommend increasing the maximum permitted percentage to be invested in Internally Managed LIBOR-Plus Short-Term Investment Pool from 6% to 8%. This change will provide staff with additional flexibility in synthetically managing beta exposures; and,
- 5. In Exhibit D, we recommend revising the currency portfolio mandates from \$1 billion notional to \$250 million notional and increasing the tracking error from 4% to 16%. The overall risk taken in these portfolios remains unchanged (\$40 million per portfolio); however, the targeted tracking error is more in line with other tactical trading portfolios in the Absolute Return allocation.

If you have any questions or comments, please contact me at 717-720-4702.