



## Pennsylvania Public School Employees' Retirement System

Asset Allocation / Investment Structure Recommendations
March 9, 2006

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### **US Equity**

- Reduce Target Allocation to 30.0% from 40.0%
  - Elimination of Home Country Bias
- Maintain Capitalization Targets
  - 80% Large Capitalization
  - 20% Small / Mid Capitalization
- Explore Opportunities to Relax the "Long-Only" Constraint With Applicable Existing Managers
- Continue to Utilize the DJ Wilshire 5000 Index as the US Equity Composite Benchmark



# **Investment Structure**

## **US Equity**

Philosophy	Current Policy	Recommended Policy	Policy Variance	Current Exposure *	
Core Strategies	90.00%	90.00%	0.00%	88.12%	
Passive / Index	62.50%	59.00%	-3.50%	61.43%	
Enhanced Index	27.50%	31.00%	+3.50%	26.69%	
Short Term Fixed Income	17.50%	17.50%	0.00%	17.11%	
Global Macro	10.00%	13.50%	+3.50%	9.58%	
Active / Style Strategies	10.00%	10.00%	0.00%	11.88%	
Core	2.00%	2.00%	0.00%	2.20%	
Growth	3.00%	3.00%	0.00%	3.72%	
Value	3.00%	3.00%	0.00%	3.93%	
Micro Cap	2.00%	2.00%	0.00%	2.03%	
Market Capitalization	100.00%	100.00%	0.00%	100.00%	
Large Cap	80.00%	80.00%	0.00%	77.10%	
Small Cap	20.00%	20.00%	0.00%	22.90%	
Small / Mid Cap	18.00%	18.00%	0.00%	20.88%	
Micro Cap	2.00%	2.00%	0.00%	2.02%	

<sup>\*</sup> As of January 31, 2006



### **Non-US Equity**

- Increase Target Allocation to 30.0% from 20.0%
  - Elimination of Home Country Bias
- Increase the PSERS ACW x-US Index Portfolio Exposure to 30% of Non-US Equity
  - Maintain Commitment to Internal Management
  - Reflect Evolving Efficiency in Non-US Equity Market
- Increase Exposures to Small Cap / Developed and Emerging Markets
- Explore Opportunities to Relax the "Long-Only" Constraint With Applicable Existing Managers
- Introduce Currency Hedging as a Strategic Element of the Non-US Equity Exposure to Reduce Risk
  - Target Hedge at 30% of Non-US Equity Exposure
- Diversify Strategic Emerging Markets Exposure by Style and Organization
  - Place Three Additional Emerging Markets Managers With Growth Orientation
    - > Batterymarch Financial Management, Inc.: 2.00% of Non-US Equity / 0.59% of Total Fund
    - > Wellington Management: 2.00% of Non-US Equity / 0.59% of Total Fund
    - William Blair & Company, LLC: 1.00% of Non-US Equity / 0.30% of Total Fund
- Continue to Utilize the MSCI ACW x-US Index as the Non-US Equity Composite Benchmark



# **Investment Structure**

## **Non-US Equity**

Philosophy	Curre Poli		Recomn Poli			licy ance	Curre Expos	
Core Strategies	5.00%		30.00%		+25.00%		4.80%	
Passive / Index		5.00%		30.00%		+25.00%		4.80%
Active / Style Strategies	95.00%		70.00%		-25.00%		95.20%	
Developed Markets		87.50%		60.00%		-27.50%		84.27%
Large Cap		80.00%		50.00%		-30.00%		76.78%
Small Cap		7.50%		10.00%		+2.50%		7.49%
Emerging Markets		7.50%		10.0%		+2.50%		10.93%
Market Factors / Capitalization	100.00%		100.00%		0.00%		100.00%	
Developed Markets / Large Cap		85.00%		80.00%		-5.00%		81.58%
Developed Markets / Small Cap		7.50%		10.00%		+2.50%		7.49%
Emerging Markets		7.50%		10.00%		+2.50%		10.93%

<sup>\*</sup> As of January 31, 2006



#### **Fixed Income**

- Maintain Nominal Fixed Income Exposure at 17%
  - US Fixed Income: 13.7%
  - Global Fixed Income: 3.3%
- Maintain TIPS Exposure at 5%
- Continue to Search for Opportunistic Segments of the Fixed Income Market
  - High Yield / Emerging Market Debt
- Continue to Utilize the Current Fixed Income Composite Benchmarks
  - US Fixed Income: Lehman Aggregate Index
  - Global Fixed Income: Lehman Global Aggregate Index
  - TIPS: Lehman US TIPS Index



# **Investment Structure**

### **Fixed Income**

Philosophy	Current Policy	Recommended Policy	Policy Variance	Current Exposure *	
Core Strategies	0.00%	0.00%	0.00%	0.00%	
Passive / Index	0.00%	0.00%	0.00%	0.00%	
Active / Style Strategies	100.00%	100.00%	0.00%	100.00%	
Core-Oriented	57.25%	57.25%	0.00%	52.25%	
Specialty / High Yield	5.00%	5.00%	0.00%	4.82%	
TIPS	22.75%	22.75%	0.00%	24.11%	
Global	15.00%	15.00%	0.00%	18.82%	



<sup>\*</sup> As of January 31, 2006

#### **Commodities**

- Establish a Strategic Exposure to Commodities as an Asset Class
  - As a Diversification Tool to Reduce Total Portfolio Risk
- Target a 5% Exposure
  - Utilize as Overlay to TIPS Exposure to Create a "Real Return" Basket
  - Establish Position Through the Use of Leverage
    - Total Fund Will be Invested at 105%
- Implement Passively Using Commodity Futures and / or Swap Agreements and Explore Actively-Managed Opportunities for Commodity Exposure on an Ongoing Basis
- Average Into the Exposure Over a 12-Month Period
  - Reduce "Point of Entry" Risk
- Utilize the DJ / AIG Commodity Index as the Commodities Composite Benchmark

