

# City of Fresno

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## Asset Allocation Review

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## Overview

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- In June 2003, the City of Fresno adopted a new asset allocation plan which included an increase in the allocation to Private Equities.
- To date, the Private Equity portfolio has not been funded.
- Fresno has asked Wilshire to revisit whether Private Equities should still be included in the total portfolio, and a workshop was held on May 20 to determine the asset mix most suitable to the Board.



# Asset Class Functions

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**Fresno's assets are diversified across five asset classes and strategies, with the possibility of a sixth.**

- Domestic & International Equities
  - source of growth
  - high real returns, inflation hedge
  - high risk
- Fixed Income & Real Estate
  - diversify equity risk
  - source of income
- Private Equities (not yet funded)
  - source of growth
  - high real returns, inflation hedge
  - high risk



## Bases for Wilshire's 2003 Assumptions

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Expected cash and bond returns based upon yields as of December 31, 2002.

Inflation expectation derived from current implied inflation in inflation-linked bonds and historical trends

Expected domestic equity returns based upon:

- Prospective outlook for dividend growth discounted to present;
- Historical trends

International equities expected returns same as U.S. equities due to theories of interest rate and price parity which prevail in long run

Private equity returns based on historical premium over public equity investments

Real estate returns based on historical relationship with fixed income

Returns based on estimates for underlying asset classes

All risk and correlation assumptions based upon historical risk and returns



# Wilshire's 2003 Return and Risk Expectations

	<b>Domestic</b>	<b>Int'l</b>	<b>Fixed</b>	<b>High</b>	<b>Real</b>	<b>Private</b>	
	<b><u>Equities</u></b>	<b><u>Equities</u></b>	<b><u>Income</u></b>	<b><u>Yield</u></b>	<b><u>Estate</u></b>	<b><u>Equities</u></b>	<b><u>Cash</u></b>
<b>Return</b>	8.00%	8.00%	4.75%	7.00%	6.75%	11.00%	3.00%
<b>Risk</b>	17.0%	20.0%	5.0%	10.0%	16.0%	30.0%	1.0%
<b>Yield</b>	1.7%	2.8%	4.75%	7.00%	5.25%	0.00%	3.00%

## **Correlations**

<b>Domestic Equities</b>	1.00						
<b>Int'l Equities</b>	0.65	1.00					
<b>Fixed Income</b>	0.30	0.20	1.00				
<b>High Yield</b>	0.50	0.30	0.40	1.00			
<b>Real Estate</b>	0.45	0.35	0.30	0.50	1.00		
<b>Private Equities</b>	0.77	0.52	0.29	0.35	0.42	1.00	
<b>Cash</b>	0.00	-0.10	0.10	-0.10	0.00	0.00	1.00

For this analysis, we have revisited Wilshire's 2003 asset class return, risk, and correlation assumptions at the request of the Investment Board.



## 2003 Asset Allocation Review Results

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To achieve realistic results, constraints must be included as well as the asset class assumptions.

Constraints reflect the plan sponsor's risk tolerance and expectations over both the near and longer term with respect to asset class funding feasibility.

The following are the reasonable constraints Wilshire applied in the 2003 Asset-Liability Study. These constraints reflect typical investment policies for similar plans.

	<u>Min. - Max.</u>
Domestic Equities	25% - 70%
International Equities	10% - 30%
Domestic Fixed Income	20% - 75%
High Yield Fixed Income	0% - 5%
Real Estate	0% - 10%
Private Equities	0% - 5%
Cash	0% - 5%
Hedge Funds	0% - 0%

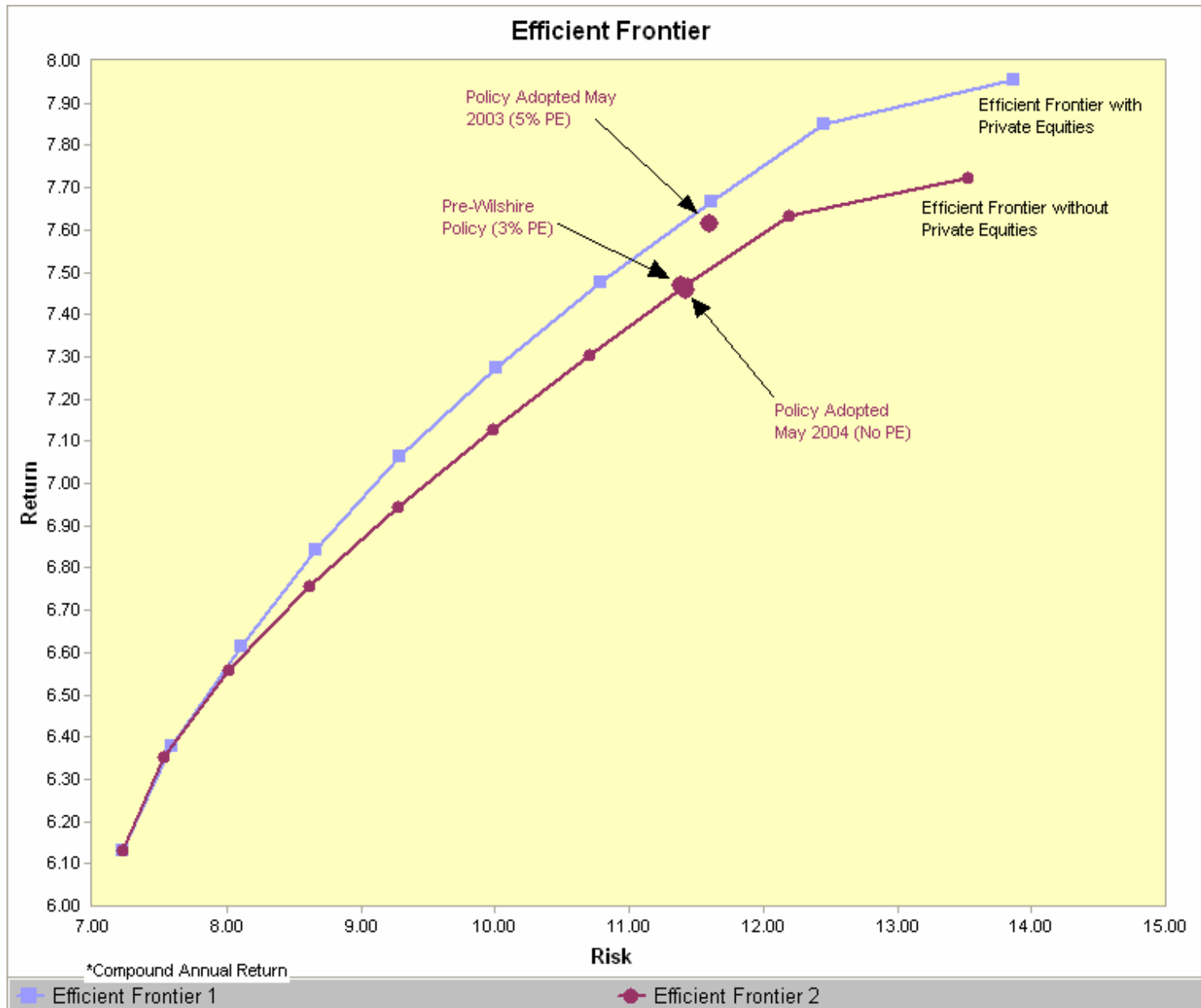


# Alternative Asset Allocation Mixes

<u>Asset</u>	<u>Current Portfolio</u>	<u>Pre-2003 Portfolio</u>	<u>Board Alternative</u>
Domestic Equities	37.0	41.0	40.0
Int'l Equities	18.0	16.0	20.0
Fixed Income	28.0	30.0	25.0
High Yield	4.0	2.0	5.0
Real Estate	8.0	8.0	10.0
Private Equities	5.0	3.0	0.0
Hedge Funds	0.0	0.0	0.0
Cash	0.0	0.0	0.0
Return	7.63%	7.47%	7.46%
Risk	11.65%	11.38%	11.42%
Return/Risk Ratio	0.65	0.66	0.65

The “Board Alternative” portfolio was selected by the Investment Board at the May meeting.

# Efficient Frontier Analysis





## Active Management Value Added

<u>Asset Class</u>	<u>Target</u>	<u>Value-Added</u>	<u>Contribution</u>
Domestic Equities	40%	0.85%	0.34%
International Equities	17%	1.00%	0.17%
Emerging Markets	3%	1.50%	0.05%
Fixed Income	25%	0.50%	0.13%
TIPS Fixed Income	0%	0.25%	0.00%
High Yield	5%	1.50%	0.08%
Real Estate	10%	1.50%	0.15%
Private Equities	0%	3.00%	0.00%
Hedge Funds	0%	0.00%	0.00%
Cash	0%	0.00%	0.00%
<b>Total Value Added from Active Management</b>			<b>0.91%</b>
Median Return Expectation			7.46%
<b>Total Return Expectation</b>			<b>8.37%</b>

With reasonable value-added expectations for each asset class, the Board-selected asset allocation mix has an expected return in excess of Fresno's 8.25% return requirement.

## Summary & Conclusion

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- Including an allocation to private equities adds a small amount of extra return, but with a corresponding increase in risk.
- The City of Fresno has decided that the return private equities will add is not worth the extra risk and effort, and adopted a new asset allocation which excludes this asset class.
- Assuming that the active managers can add a reasonable amount of value above their respective benchmarks, the new asset allocation mix has an expected total return in excess of the City's 8.25% return requirement.