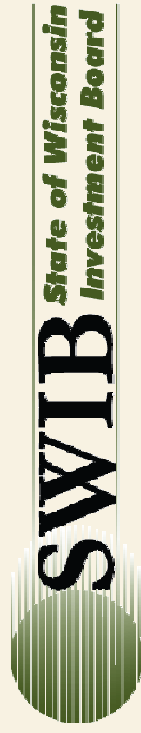


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# SWIB Update

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Keith Bozarth  
State of Wisconsin Investment Board  
May 14, 2012



# 2012 Year-to-Date

As of April 30, 2012\*

	Calendar YTD	Five Years	Ten Years
Core Fund	7.5	2.7	6.9
Benchmark	7.2	2.6	6.7
Variable Fund	11.7	0.4	5.2
Benchmark	11.4	0.2	5.3

\*Preliminary



# Comparison to Other Pensions

## Core Trust Fund vs. Public Funds > \$10 Billion

Tiles	One Year (35)		Three Years (34)		Five Years (34)		Ten Years (32)	
	TUCS Rtns	CTF Rtn	TUCS Rtns	CTF Rtn	TUCS Rtns	CTF Rtn	TUCS Rtns	CTF Rtn
5th	8.11%		12.14%		6.07%		6.83%	
25th	2.65%	1.44%	11.73%	11.72%	2.18%	2.27%	6.03%	6.03%
50th	0.84%		10.35%		1.89%		5.56%	
75th	0.26%	41.7%	9.61%	25.2%	1.24%		5.28%	
95th	-1.07%		8.40%		0.62%		4.76%	

\*Note: Numbers in parentheses are the number of funds in each universe

Comparisons as of December 31, 2011



# Portfolio Return Equation

<b>T</b>	<b>=</b>	<b>C</b>	<b>R</b>	<b>A</b>
<b>Total Return =</b>		<b>Cash Rate</b>	<b>Risk Premium</b>	<b>Active Management</b>



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# Mathematically Correct Version

$$1 + T = (1 + C) \times (1 + R) \times (1 + A)$$

# WRS Actual Total Return

<b>Core Fund Total Return*</b>	<b>C</b>	<b>R</b>	<b>A</b>
Since 1982			
<b>10.41%</b>	=	<b>4.55%</b>	X
		<b>5.20%</b>	X
		<b>0.43%</b>	
20 Years			
<b>8.46%</b>	=	<b>3.08%</b>	X
		<b>4.75%</b>	X
		<b>0.49%</b>	
10 Years			
<b>6.75%</b>	=	<b>1.74%</b>	X
		<b>4.72%</b>	X
		<b>0.21%</b>	

\* Through 3/31/2012



# Current Environment

Core Fund Total Return Today	=	C	X	R	X	A
<input type="text" value="?%"/>		<input type="text" value="0%"/>		<input type="text" value="?%"/>		<input type="text" value="?%"/>



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# Economic Recovery

- Global recovery appears ongoing, BUT:
  - Oil price spike?
  - Euro area debt crisis?
  - Further U.S. home price decline?
  - Emerging Market inflation?
  - China?
  - U.S. monetary and fiscal policies?

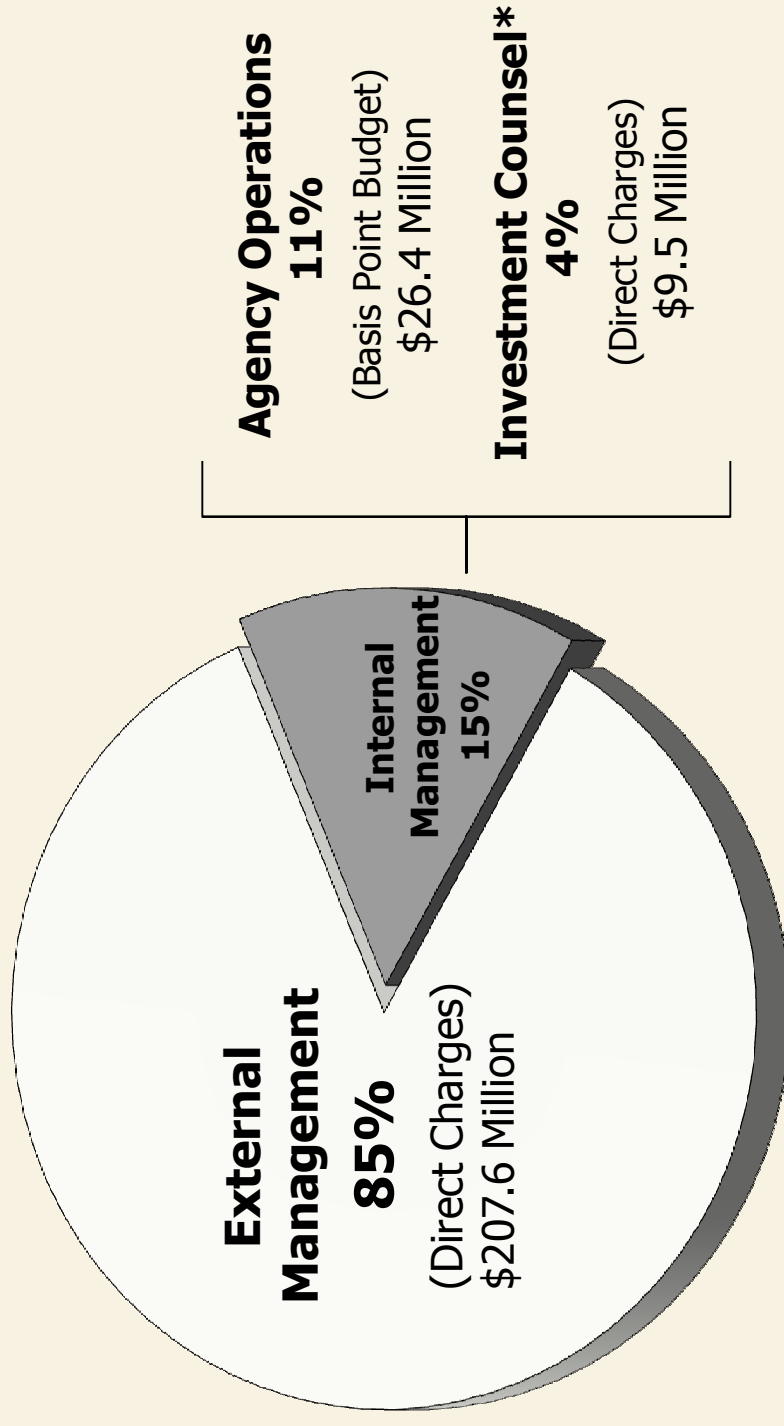


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# Managing “R” and “A” Variables

- Avoid reaching for risk
- Discretionary rebalancing
- Opportunistic portfolios
- Slight increase in Private Markets
- Reduce overall volatility
- Global stock portfolios
- Cost Management

# WRS 2010 Investment Costs



**Total CY 2010 Expenses:**  
**\$243.5 Million**  
*All expenses paid from trust funds*

\* Investment research and data services, investment consultants, legal counsel and banking fees

