

# IAC Performance Review

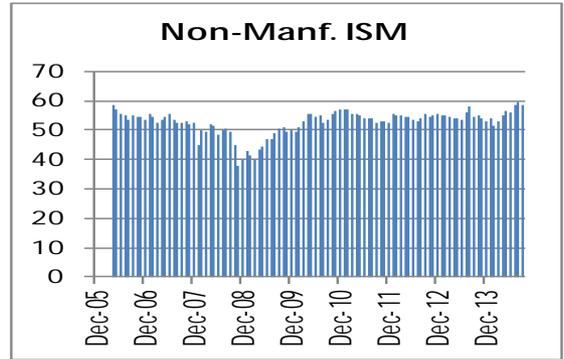
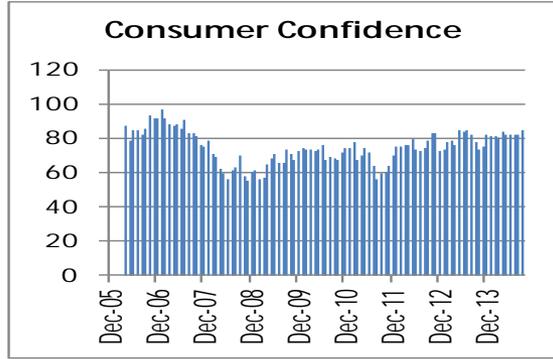
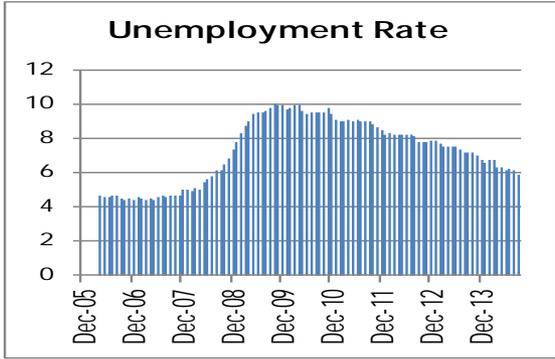
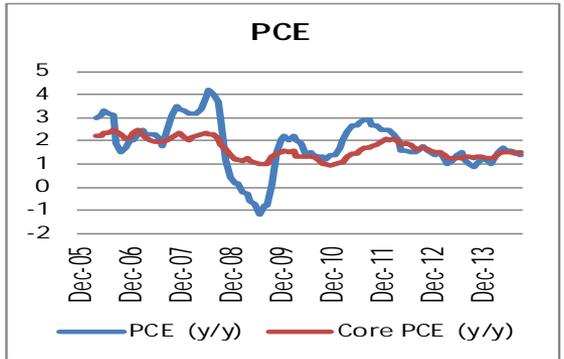
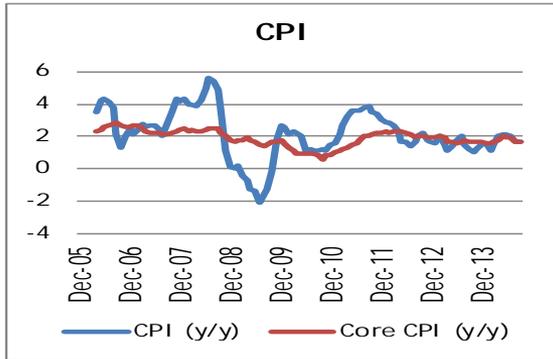
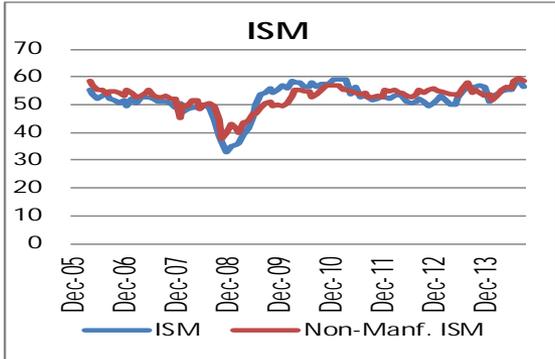
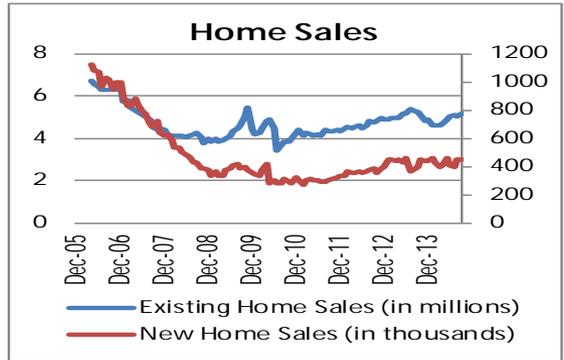
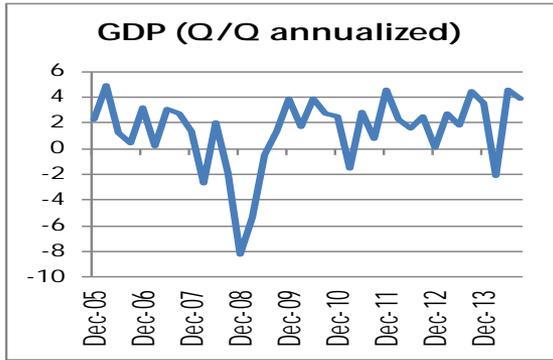
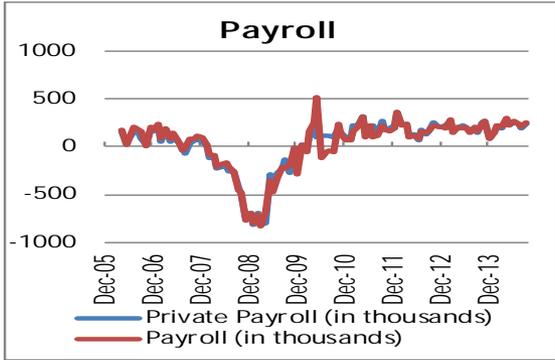
December 10, 2014



North Carolina Department of State Treasurer  
Investment Management

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# U.S. Economic Environment



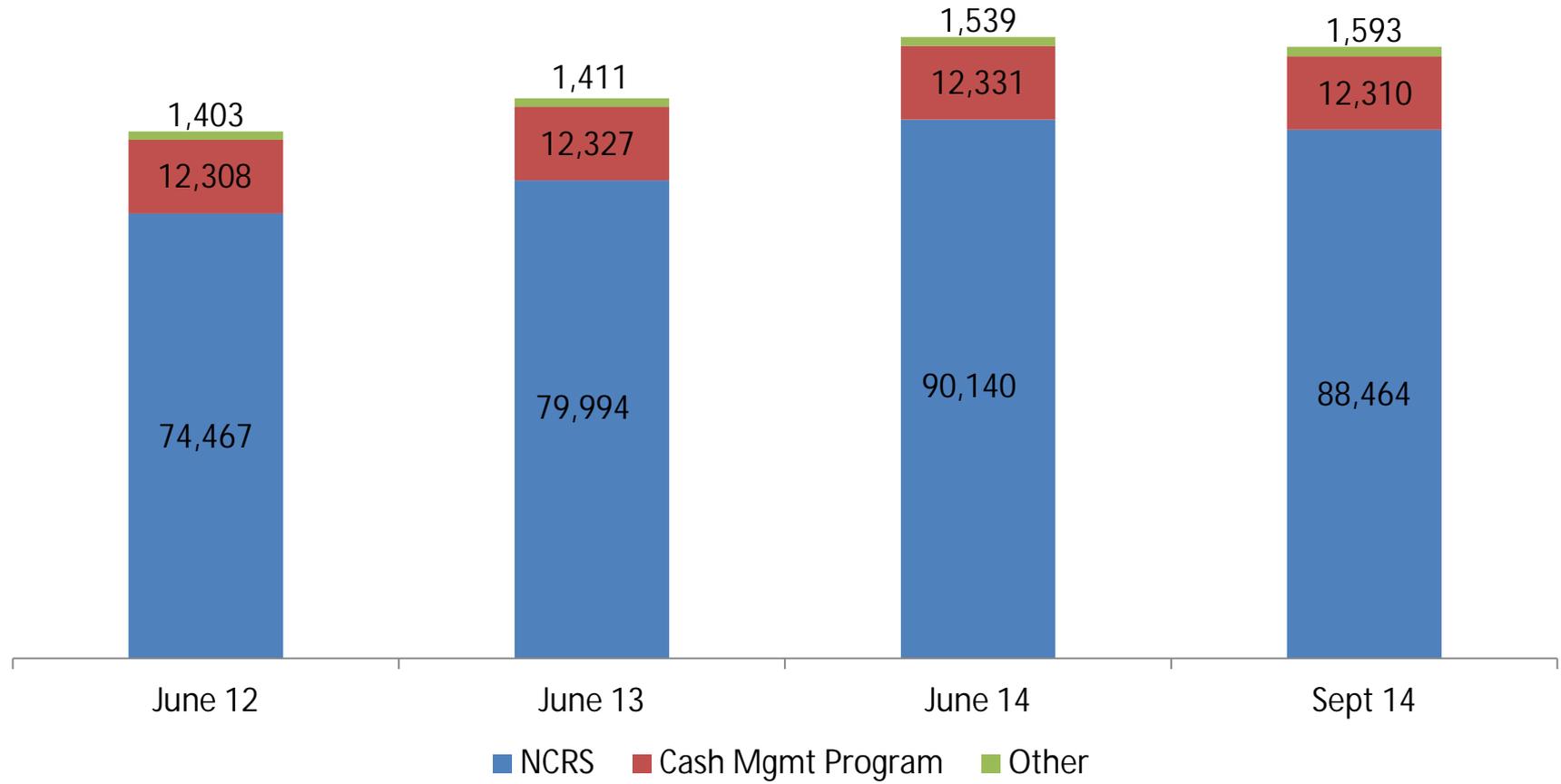
# Global Economic Environment

Countries	Real GDP YoY		Unemployment		CPI YoY		Countries	Real GDP YoY		Unemployment		CPI YoY	
	Date	Value	Date	Value	Date	Value		Date	Value	Date	Value	Date	Value
<b>U.S.</b>	09/14	2.4	09/14	5.9	09/14	1.7	<b>Asia/Pacific/Latam</b>						
<b>Europe</b>							China	09/14	7.3			09/14	1.6
Germany	09/14	1.2	09/14	6.7	09/14	0.8	India	09/14	5.3			09/14	6.3
France	09/14	0.4	09/14	10.5	09/14	0.3	Japan	09/14	-1.2	09/14	3.6	09/14	3.2
U.K	09/14	3	09/14	6	09/14	1.2	Indonesia	09/14	5.01			09/14	4.53
Italy	09/14	-0.5	09/14	12.9	09/14	-0.2	Brazil	09/14	-0.24			09/14	6.75
Spain	09/14	1.6	09/14	24.1	09/14	-0.2	Australia	06/14	3.1	09/14	6.2	09/14	2.3



# Assets Under Management (\$mil)

\$102.37 Billion as of September 30, 2014



# NCRS Asset Allocation

As of September 30, 2014

	Market Value (\$MM)	%	Policy Target	Policy Range		Relative %	Relative \$ (MM)
				Minimum	Maximum		
<b>Growth</b>	<b>\$52,000</b>	<b>58.78%</b>	<b>58.0%</b>	<b>37.0%</b>	<b>71.0%</b>	<b>0.78%</b>	<b>\$691</b>
Public Equity	38,954	44.03%	42.0%	37.0%	47.0%	2.03%	1,800
Non Core Real Estate	4,211	4.76%	3.0%	0.0%	8.0%	1.76%	1,557
Opportunistic Fixed Income	4,876	5.51%	7.0%	0.0%	7.5%	-1.49%	(1,317)
Private Equity	3,959	4.47%	6.0%	0.0%	8.75%	-1.53%	(1,349)
<b>Inflation Sensitive &amp; Diversifiers</b>	<b>6,749</b>	<b>7.63%</b>	<b>11.0%</b>	<b>4.0%</b>	<b>16.0%</b>	<b>-3.37%</b>	<b>(2,982)</b>
Core Real Estate	2,779	3.14%	5.0%	2.0%	10.0%	-1.86%	(1,644)
Inflation Sensitive	3,970	4.49%	6.0%	2.0%	7.5%	-1.51%	(1,338)
<b>Multi-Strategy</b>	<b>1,639</b>	<b>1.85%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>4.0%</b>	<b>-0.15%</b>	<b>(130)</b>
<b>Rates &amp; Liquidity</b>	<b>28,076</b>	<b>31.74%</b>	<b>29.0%</b>	<b>24.0%</b>	<b>42.0%</b>	<b>2.74%</b>	<b>2,421</b>
Cash	1,010	1.14%	1.0%	0.0%	10.0%	0.14%	126
Investment Grade Fixed Income	27,065	30.59%	28.0%	24.0%	32.0%	2.59%	2,296
<b>Grand Total</b>	<b>\$88,464</b>						



# NCRS Asset Allocation

As of December 2, 2014

	Market Value (\$MM)	%	Policy Target	Policy Range		Relative %	Relative \$ (MM)
				Minimum	Maximum		
<b>Growth</b>	<b>\$52,725</b>	<b>59.13%</b>	<b>58.0%</b>	<b>37.0%</b>	<b>71.0%</b>	<b>1.13%</b>	<b>\$1,006</b>
Public Equity	39,704	44.53%	42.0%	37.0%	47.0%	2.53%	2,253
Non Core Real Estate	3,962	4.44%	3.0%	0.0%	8.0%	1.44%	1,287
Opportunistic Fixed Income	5,176	5.80%	7.0%	0.0%	7.5%	-1.20%	(1,066)
Private Equity	3,882	4.35%	6.0%	0.0%	8.75%	-1.65%	(1,468)
<b>Inflation Sensitive &amp; Diversifiers</b>	<b>6,947</b>	<b>7.79%</b>	<b>11.0%</b>	<b>4.0%</b>	<b>16.0%</b>	<b>-3.21%</b>	<b>(2,861)</b>
Core Real Estate	2,861	3.21%	5.0%	2.0%	10.0%	-1.79%	(1,597)
Inflation Sensitive	4,086	4.58%	6.0%	2.0%	7.5%	-1.42%	(1,264)
<b>Multi-Strategy</b>	<b>1,649</b>	<b>1.85%</b>	<b>2.0%</b>	<b>0.0%</b>	<b>4.0%</b>	<b>-0.15%</b>	<b>(134)</b>
<b>Rates &amp; Liquidity</b>	<b>27,848</b>	<b>31.23%</b>	<b>29.0%</b>	<b>24.0%</b>	<b>42.0%</b>	<b>2.23%</b>	<b>1,989</b>
Cash	1,119	1.26%	1.0%	0.0%	10.0%	0.26%	227
Investment Grade Fixed Income	26,729	29.98%	28.0%	24.0%	32.0%	1.98%	1,762
<b>Grand Total</b>	<b>\$89,169</b>						



# Summary of NCRS Total Fund Performance Benchmarks

## July 1, 2014 Investment Policy Statement (IPS) Benchmarks:

- **Long Term Policy Benchmark:** Designed to have the equivalent projected volatility as the Strategic Asset Allocation according to the 2013 Asset Liability Study. It is comprised of 57% MSCI ACWI IMI Net Equity Index, 33% BOAML 5+ Years U.S. Treasury Index, 6% Bloomberg Commodities Index, and 4% BOAML 1-3 Years U.S. Inflation Linked Treasury Index.
- **Implementation Benchmark:** Blend of the “asset class” benchmarks at fixed IPS target weights. It is currently weighted as follows: 58% Growth Benchmark, 29% Rates & Liquidity Benchmark, 11% Inflation Sensitive and Diversifiers Benchmark, and 2% Multi-Strategy Benchmark.
- Both benchmarks reflect the current IPS for all time periods (see next slide). Individual benchmarks are described on slide 30 of this presentation.

## Legacy Benchmark:

- Maintains for all historical time periods the performance benchmark used for external reporting at that point in time.
- Incorporates the impact of all historical asset class definitions, policy target weights, asset class performance benchmarks, and methodologies that were in use for time periods prior to July 2014.
- Does not reflect the new investment structure, asset class definitions, asset class performance benchmarks, or methodologies for time periods prior to July 2014.



# Asset Class Benchmark Changes

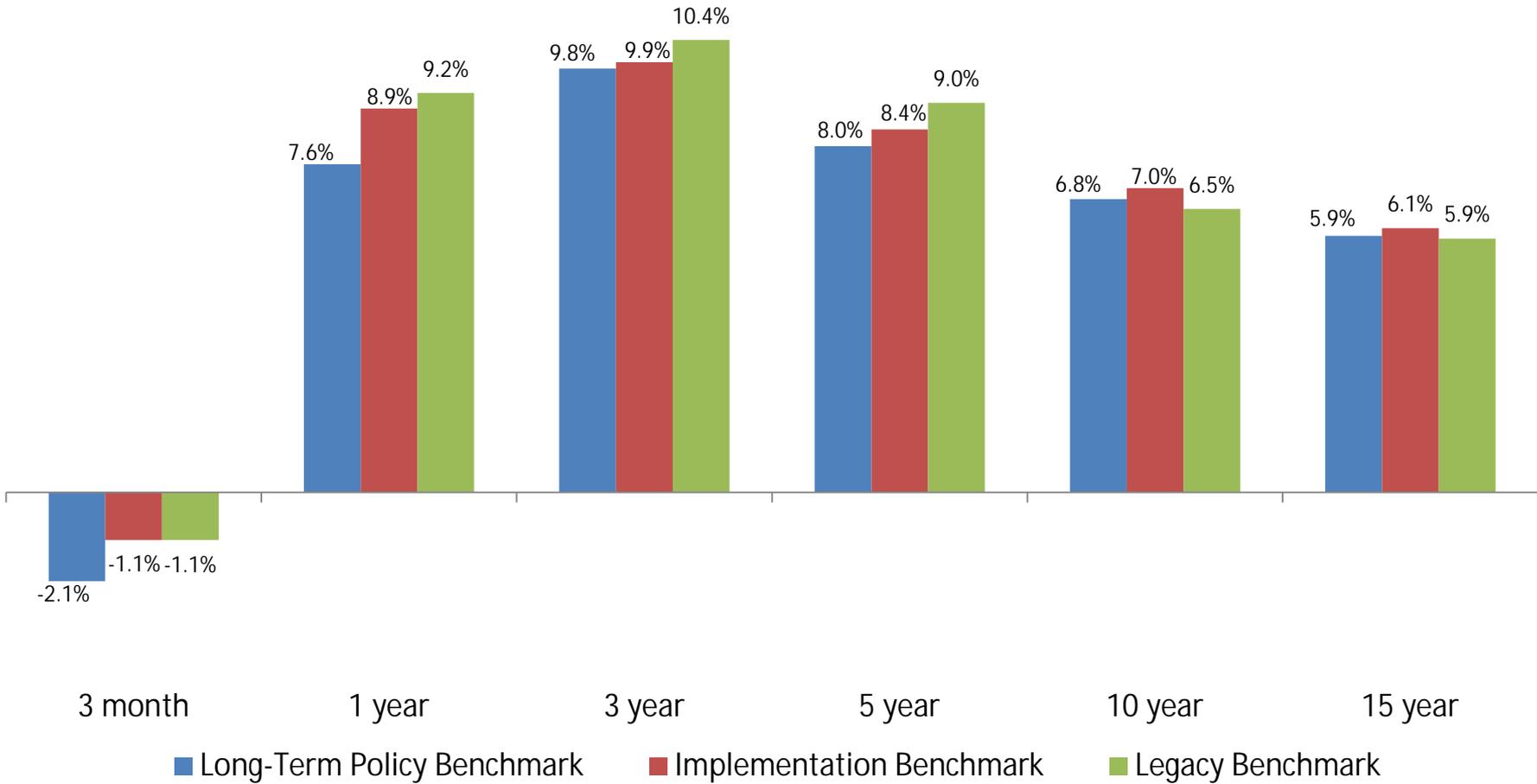
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- Asset class performance benchmarks reflect those approved in the July 1, 2014 Investment Policy Statement.
- Performance benchmarks for newly created “asset classes” and lower-level performance composites reflect style or current strategy for all time periods. For example:
  - Non-Core Real Estate is consistently compared against a non-core benchmark as opposed to being compared against a core benchmark for some periods and non-core benchmark for others.
  - Core Real Estate uses an 80%/20% blend of ODCE and EPRA NAREIT.
  - Timberland uses the NCREIF Timberland Index.
- Performance benchmarks for legacy “asset classes” and lower-level performance composites were historically recast based on staff’s judgment. For example:
  - Private Equity and Inflation Sensitive benchmarks were historically recast
  - The Fixed Income benchmark was not historically recast



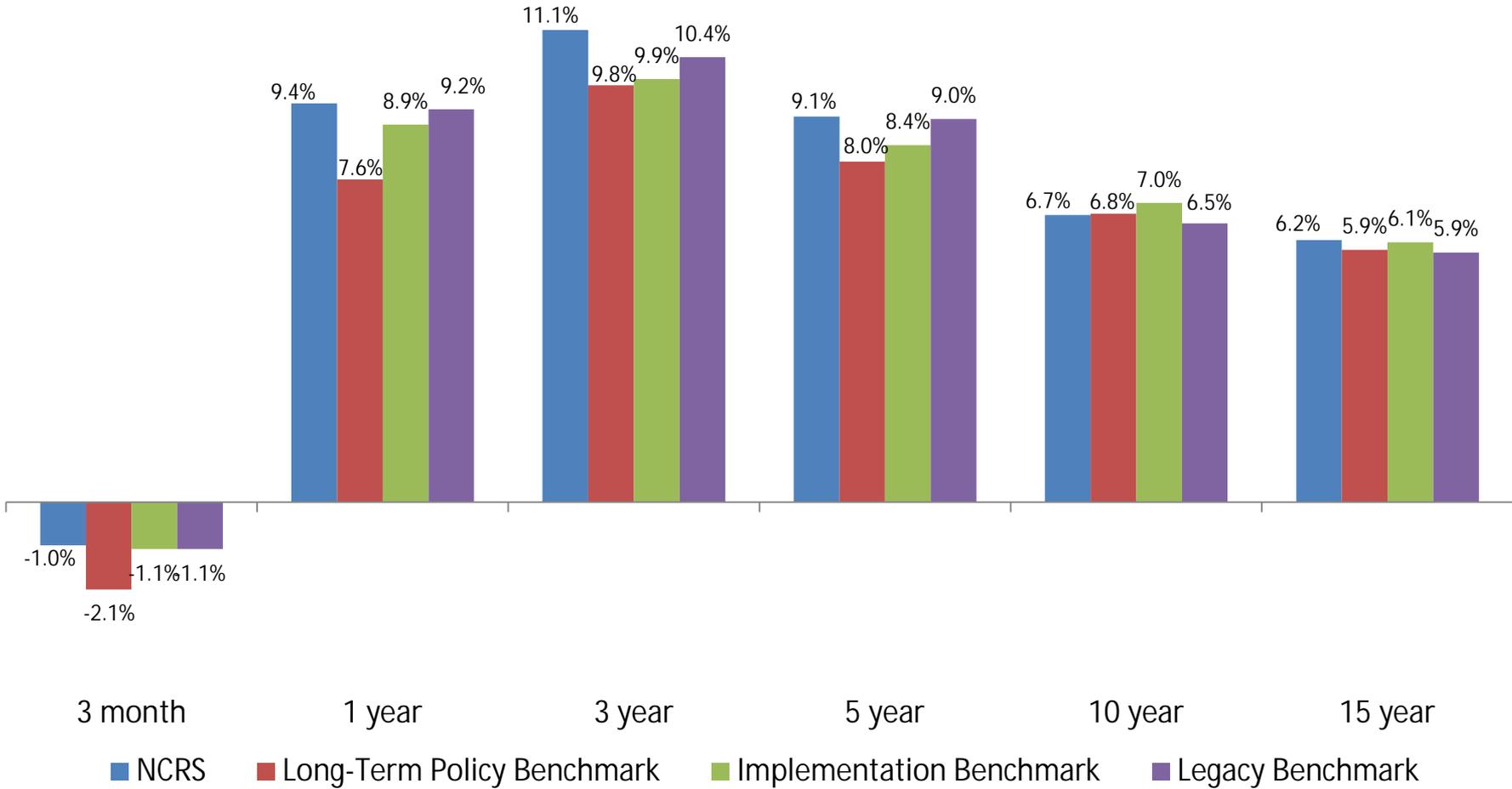
# Benchmark Return Summary

As of September 30, 2014

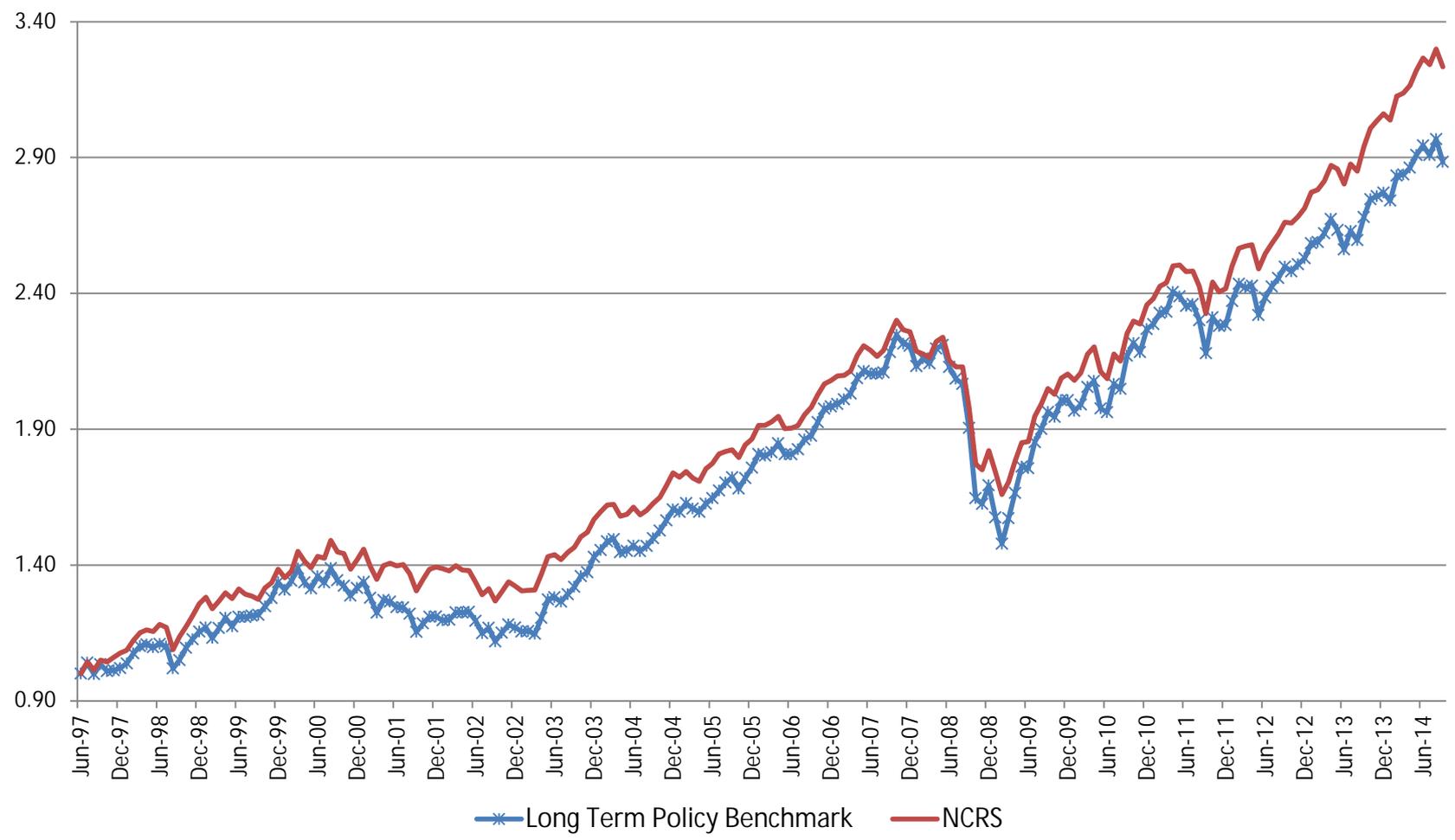


# NCRS Total Net Portfolio Return vs. Benchmarks

As of September 30, 2014



# Growth of a Dollar as of September 30, 2014



**NCRS Net Return Attribution**  
**Contribution to Total Fund Performance vs. Implementation Benchmark**  
 As of September 30, 2014

	3 months	1 Year	3 Years	5 Years
Growth	0.02	0.58	0.91	0.55
Rates & Liquidity	0.02	-0.03	0.18	0.10
Inflation Sensitive & Diversifiers	0.05	0.08	0.03	-0.03
Multi-Strategy	0.01	0.02	0.03	0.05
<b>Total NCRS</b>	<b>0.09</b>	<b>0.50</b>	<b>1.15</b>	<b>0.67</b>

# NCRS Net Return Attribution

## Contribution to Total Fund Performance vs. Implementation Benchmark

As of September 30, 2014

	3 months	1 Year	3 Years	5 Years
Public Equity	-0.10	0.20	0.65	0.42
Private Equity	-0.13	-0.17	-0.13	-0.19
Non-Core Real Estate	0.14	0.25	0.08	0.04
Opportunistic Fixed Income	0.11	0.30	0.32	0.27
IG Fixed Income	0.02	0.03	0.21	0.12
Cash	0.00	-0.06	-0.03	-0.02
Inflation Sensitive	0.13	0.08	0.08	0.00
Core Real Estate	-0.08	-0.14	-0.05	-0.03
Multi-Strategy	0.01	0.02	0.03	0.05
<b>Total NCRS</b>	<b>0.09</b>	<b>0.50</b>	<b>1.15</b>	<b>0.67</b>



NCRS Gross of Fees Return and Risk  
 BNY Mellon Universe: Public Funds > \$1B  
 As of September 30, 2014

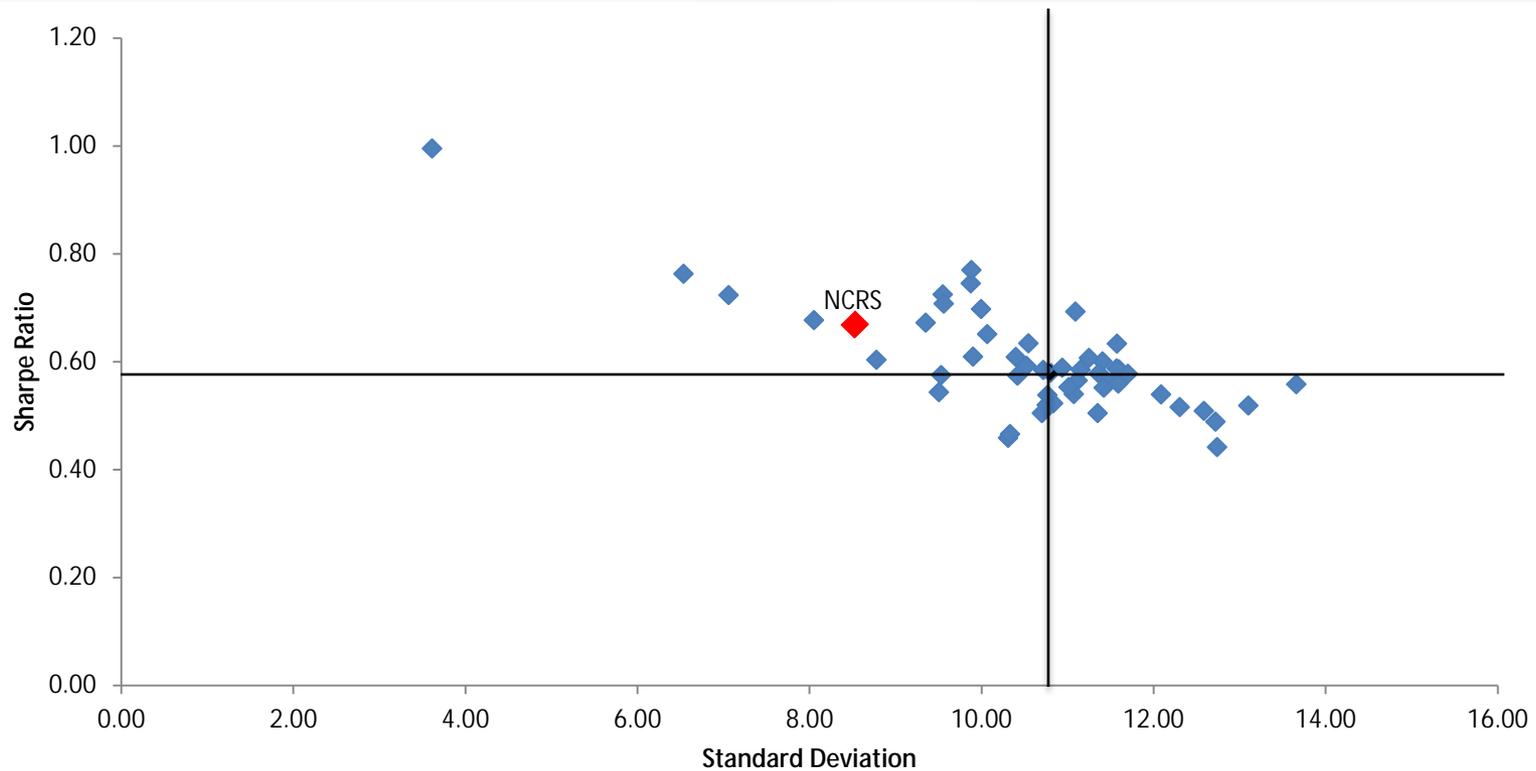
<u>Returns</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Year</u>
25th percentile	13.98	10.90	7.91	6.96
<b>Median</b>	<b>12.79</b>	<b>10.37</b>	<b>7.46</b>	<b>6.65</b>
75th percentile	11.49	9.60	6.84	6.30
<b>NCRS</b>	<b>11.62</b>	<b>9.56</b>	<b>7.11</b>	<b>6.41</b>
Percentile Rank	74	76	69	66
<u>Risk</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Year</u>
25th percentile	6.20	9.13	11.54	11.70
<b>Median</b>	<b>5.60</b>	<b>8.07</b>	<b>10.80</b>	<b>10.96</b>
75th percentile	4.73	7.04	9.89	10.00
<b>NCRS</b>	<b>4.72</b>	<b>6.71</b>	<b>8.52</b>	<b>8.80</b>
Percentile Rank	76	79	90	91



# NCRS Gross of Fees Sharpe Ratio

## BNY Mellon Universe: Public Funds > \$1B

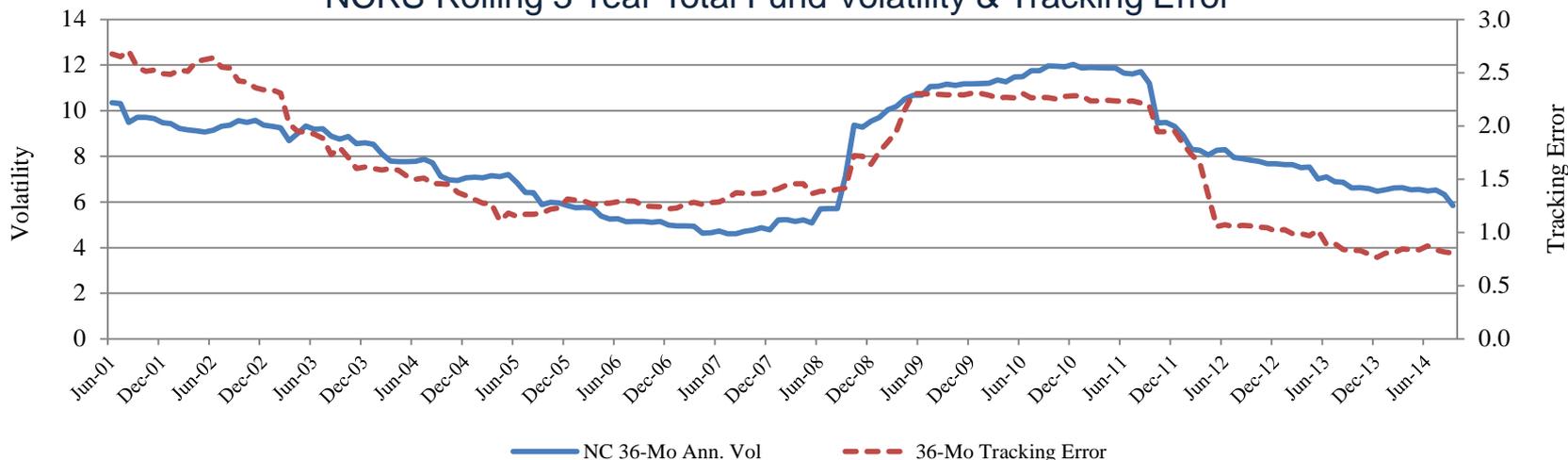
As of September 30, 2014



<u>Sharpe Ratio</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Year</u>
25th percentile	2.40	1.41	0.65	0.52
<b>Median</b>	<b>2.19</b>	<b>1.23</b>	<b>0.58</b>	<b>0.45</b>
75th percentile	2.00	1.13	0.54	0.43
<b>NCRS</b>	<b>2.37</b>	<b>1.39</b>	<b>0.67</b>	<b>0.52</b>
Percentile Rank	30	30	23	26



## NCRS Rolling 3 Year Total Fund Volatility & Tracking Error\*



## NCRS Risk and Return Metrics\*

Program	POSITION		36-MONTH					60-MONTH				
	\$ Bil	% Wgt	Return	St. Dev	Active Return	TE	IR	Return	St. Dev	Active Return	TE	IR
<b>Growth</b>	52.0	58.8	16.3	9.4	1.5	0.9	1.7	11.2	11.9	0.9	1.4	0.7
Public Equity	39.0	44.0	18.0	12.1	1.3	0.8	1.7	11.4	14.6	1.1	1.4	0.8
Private Equity	4.0	4.5	10.0	2.9	-1.7	5.2	-0.3	11.0	3.6	-4.3	5.1	-0.9
Non-Core Real Estate	4.2	4.8	11.7	3.3	1.1	2.6	0.4	8.7	5.4	0.5	2.7	0.2
Opportunistic Fixed Income	4.9	5.5	11.4	2.6	6.8	3.4	2.0	12.9	5.1	8.5	6.0	1.4
<b>Rates &amp; Liquidity</b>	28.1	31.7	3.8	4.0	0.5	0.6	0.8	5.9	4.1	0.2	0.8	0.3
IG Fixed Income	27.1	30.6	3.8	4.0	0.5	0.6	0.7	5.9	4.1	0.2	0.8	0.2
Cash	1.0	1.1	--	--	--	--	--	--	--	--	--	--
<b>Inflation Sensitive &amp; Diversifiers</b>	6.7	7.6	4.9	4.7	-0.5	2.2	-0.2	2.0	6.3	-1.3	4.6	-0.3
Inflation Sensitive	4.0	4.5	0.9	6.1	0.3	2.3	0.1	-3.1	9.9	-2.1	7.4	-0.3
Core Real Estate	2.8	3.1	11.5	4.9	-0.8	3.1	-0.3	9.2	5.8	-0.3	3.1	-0.1
<b>Multi-Strategy</b>	1.6	1.9	16.7	10.0	1.9	1.5	1.3	10.9	8.6	2.1	3.8	0.6
<b>Total NCRS</b>	<b>88.5</b>	<b>100.0</b>	<b>11.1</b>	<b>5.8</b>	<b>1.2</b>	<b>0.8</b>	<b>1.4</b>	<b>9.1</b>	<b>6.8</b>	<b>0.7</b>	<b>0.9</b>	<b>0.7</b>

Note: Active Return= Net Managed less benchmark returns; TE=Tracking Error; IR = Information Ratio

\*As of September 30, 2014



# NCRS Liquidity Profile

As of September 30, 2014

## Invested Assets (\$MM)

	Public Equity	Opportunistic FI	Inflation Sensitive	Multi Strategy	Private Equity	Non-Core RE	Core Real Estate	IG Fixed Income	Cash	TOTAL	Allocation
<b>Level 1</b>	\$37,873	\$373	\$1,006	\$1,355	\$12	-	\$456	\$27,065	\$1,010	\$69,150	78.2%
<b>Level 2</b>	\$1,082	\$1,988	\$611	-	-	-	\$703	-	-	\$4,383	5.0%
<b>Level 3</b>	-	\$1,150	-	\$272	\$48	-	\$996	-	-	\$2,465	2.8%
<b>Level 4</b>	-	\$1,366	\$2,352	\$13	\$3,899	\$4,211	\$625	-	-	\$12,466	14.1%
<b>TOTAL</b>	<b>\$38,954</b>	<b>\$4,876</b>	<b>\$3,970</b>	<b>\$1,639</b>	<b>\$3,959</b>	<b>\$4,211</b>	<b>\$2,779</b>	<b>\$27,065</b>	<b>\$1,010</b>	<b>\$88,464</b>	

## Invested Assets plus Unfunded Commitments (\$MM)

	Public Equity	Opportunistic FI	Inflation Sensitive	Multi Strategy	Private Equity	Non-Core RE	Core Real Estate	IG Fixed Income	Cash	TOTAL	Allocation
<b>Level 1</b>	\$34,375	\$373	\$1,006	\$1,355	\$12	-	\$456	\$26,691	\$1,010	\$65,277	73.8%
<b>Level 2</b>	\$1,082	\$1,988	\$611	-	-	-	\$703	-	-	\$4,383	5.0%
<b>Level 3</b>	-	\$1,150	-	\$272	\$48	-	\$996	-	-	\$2,465	2.8%
<b>Level 4</b>	-	\$1,959	\$5,258	\$13	\$3,899	\$4,211	\$1,000	-	-	\$16,339	18.5%
<b>TOTAL</b>	<b>\$35,456</b>	<b>\$5,468</b>	<b>\$6,875</b>	<b>\$1,639</b>	<b>\$3,959</b>	<b>\$4,211</b>	<b>\$3,154</b>	<b>\$26,691</b>	<b>\$1,010</b>	<b>\$88,464</b>	

The Liquidity Level defines the level of liquidity for each investment.

Level 1: Highly liquid (T+3 or less)

Level 2: Separate or Commingled Funds with Monthly, Quarterly or Semi-Annual redemption period

Level 3: Annual to 24 month redemption period

Level 4: Illiquid (> 24 month redemption period)



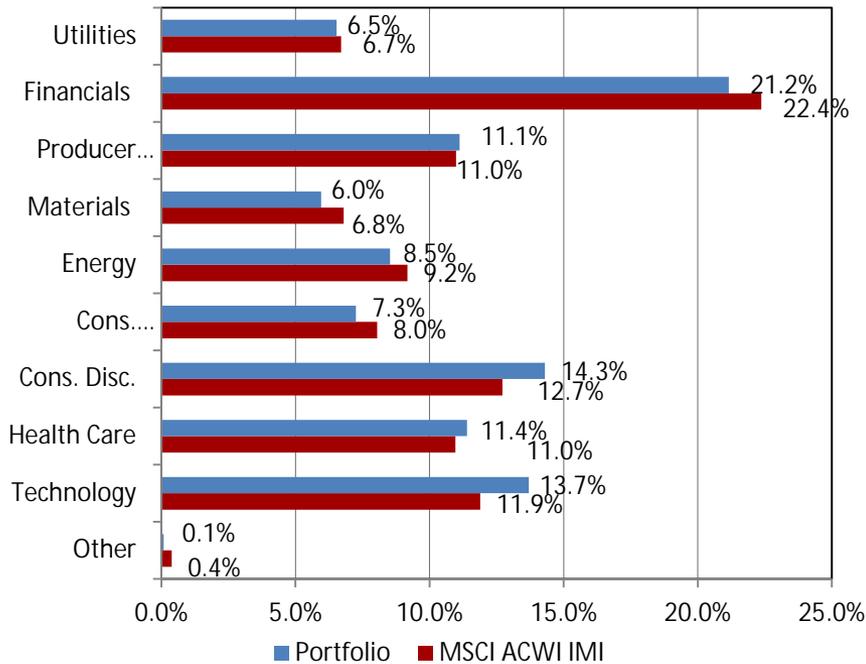
# NCRS Public Equity Net Performance

As of September 30, 2014

	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
<b>Public Equity</b>	<b>\$38,954</b>	<b>(2.93)</b>	<b>10.88</b>	<b>17.99</b>	<b>11.39</b>	<b>6.96</b>
Benchmark <sup>2</sup>		(2.82)	10.67	16.71	10.31	7.56
<b>Domestic Portfolio</b>	<b>\$17,904</b>	<b>(0.30)</b>	<b>17.60</b>	<b>23.42</b>	<b>15.91</b>	<b>8.58</b>
Russell 3000		0.01	17.76	23.08	15.78	8.44
<b>Non-US Portfolio</b>	<b>\$18,236</b>	<b>(5.53)</b>	<b>4.98</b>	<b>12.62</b>	<b>6.20</b>	<b>7.00</b>
Custom Benchmark		(5.47)	4.74	11.88	5.59	5.91
<b>Global Portfolio</b>	<b>\$2,585</b>	<b>(2.22)</b>	<b>13.49</b>	<b>21.78</b>	<b>13.57</b>	<b>-</b>
MSCI ACWI		(2.31)	11.32	16.61	10.07	-
<b>Equity Hedge</b>	<b>\$145</b>	<b>(0.70)</b>	<b>1.55</b>	<b>-</b>	<b>-</b>	<b>-</b>
MSCI ACWI (beta adjusted)		(0.53)	3.00	-	-	-



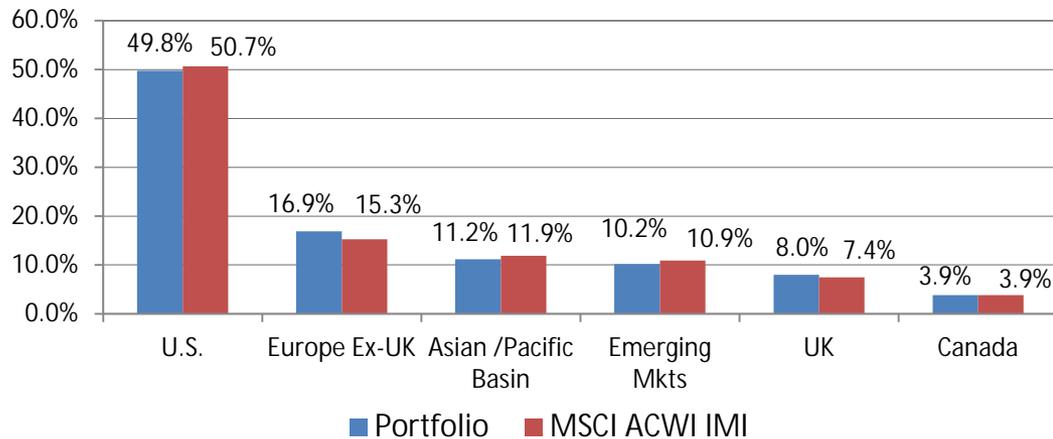
## Total Equity Sector Allocation



## Portfolio Characteristics

	Portfolio	MSCI ACWI IMI
Price/Earnings	19.2	18.6
Dividend Yield	2.18	2.36
Price/Book	2.08	2.06
Debt/Equity	0.86	0.88
Market Cap (\$ Weighted Median)	32,759	34,831
Return on Equity - 1 Year	15.7	15.6

## Total Equity Regional Allocation



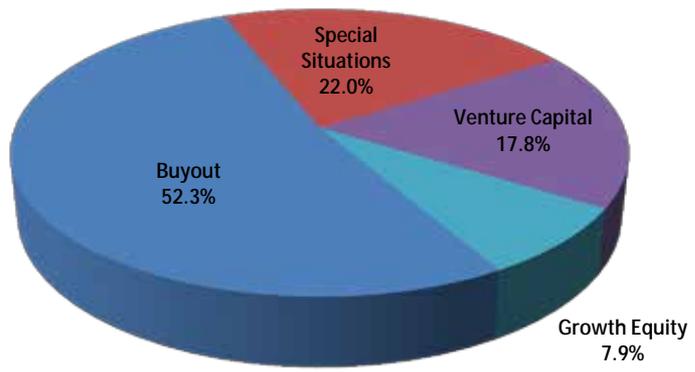
# Private Equity

As of September 30, 2014

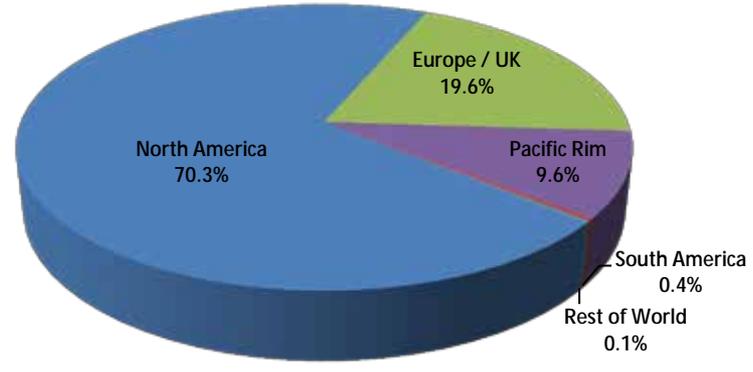
Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
Private Equity	\$3,959	1.81	17.51	10.02	10.95	8.60
Benchmark <sup>3</sup>		3.26	19.13	11.75	15.30	12.85
Buyout	\$1,620	1.19	13.48	8.26	9.53	9.98
Growth	\$733	0.06	27.57	12.60	12.91	-
Special Situations	\$514	0.14	8.93	7.13	9.51	13.78
Fund of Funds	\$1,079	4.92	22.16	12.73	12.65	4.44

IRR by Vintage Year													
	Pre-2004	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
NCRS	12.68	8.39	5.63	3.57	7.82	11.31	15.36	19.16	7.14	9.98	-12.6	-26.08	7.54
# of Funds	28	3	11	21	13	17	3	1	6	6	9	3	121

Strategy Allocation (based on commitments)



Geographic Allocation (based on valuation)



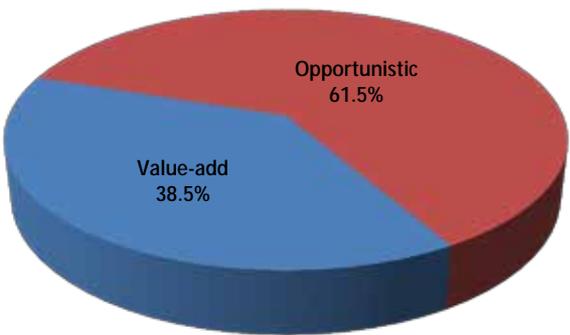
# Non-Core Real Estate

As of September 30, 2014

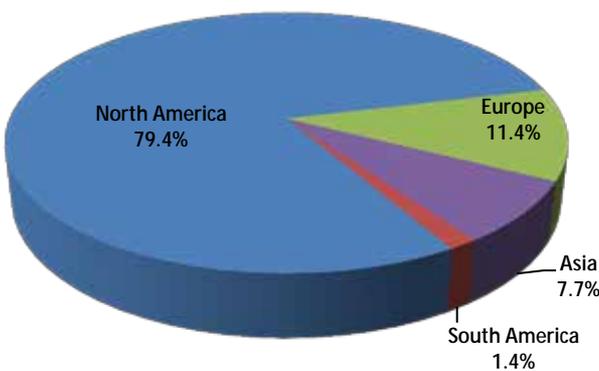
Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
Non-Core Real Estate	\$4,211	4.74	17.91	11.77	8.69	4.72
Benchmark <sup>4</sup>		3.03	13.69	10.57	8.19	6.64
Opportunistic	\$2,590	3.88	18.58	10.77	9.14	4.55
Value Add	\$1,622	6.16	16.69	13.35	8.20	5.40

IRR by Vintage Year												
	Pre-2005	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
NCRS	9.92	-1.90	1.22	-0.32	16.33	5.71	15.40	17.33	12.96	14.76	1.41	4.01
# of Funds	19	15	13	8	6	1	6	7	5	6	3	89

Strategy Allocation (based on valuation)



Geographic Allocation (based on valuation)



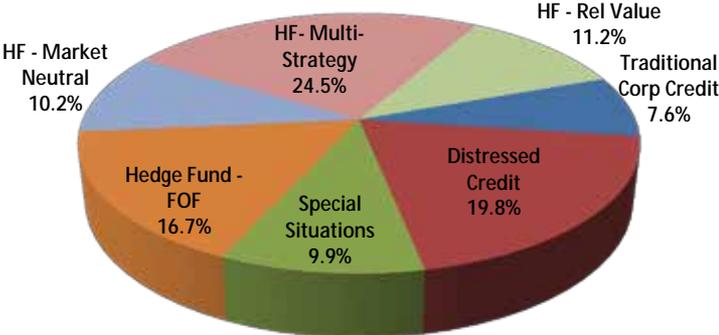
# Opportunistic Fixed Income

As of September 30, 2014

Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
Opportunistic Fixed Income	\$4,876	(0.58)	9.71	11.40	12.94	-
Benchmark <sup>5</sup>		(2.27)	3.93	4.65	4.45	-
Traditional Corporate Credit	\$372	1.39	12.12	12.48	13.61	-
Distressed Credit	\$965	0.62	12.29	14.50	14.41	-
Special Situations	\$482	3.16	8.64	23.18	23.02	-
Hedge Fixed Income	\$3,056	(1.69)	8.56	8.85	-	-

IRR by Vintage Year										
	<u>2005</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total</u>
NCRS	4.10	16.70	11.07	22.42	13.53	6.82	5.23	10.06	2.90	10.14
# of Funds	1	1	3	1	4	9	2	7	2	30

Strategy Allocation (based on valuation)



# Rates & Liquidity

As of September 30, 2014

Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
<b>Rates &amp; Liquidity</b>	<b>\$28,076</b>	<b>0.41</b>	<b>5.79</b>	<b>3.75</b>	<b>5.87</b>	<b>6.01</b>
Benchmark <sup>6</sup>		0.45	6.18	3.27	5.65	5.61
<b>IG Fixed Income</b>	<b>\$27,065</b>	<b>0.42</b>	<b>5.89</b>	<b>3.78</b>	<b>5.89</b>	<b>6.02</b>
Core Fixed Income	\$24,026	0.41	5.90	3.65	5.87	6.03
Non-Core Fixed Income	\$269	1.47	5.90	8.45	8.05	-
IG Fixed Income Cash	\$2,770	0.11	-	-	-	-
<b>Cash</b>	<b>\$1,010</b>	<b>0.10</b>	<b>0.46</b>	<b>-</b>	<b>-</b>	<b>-</b>

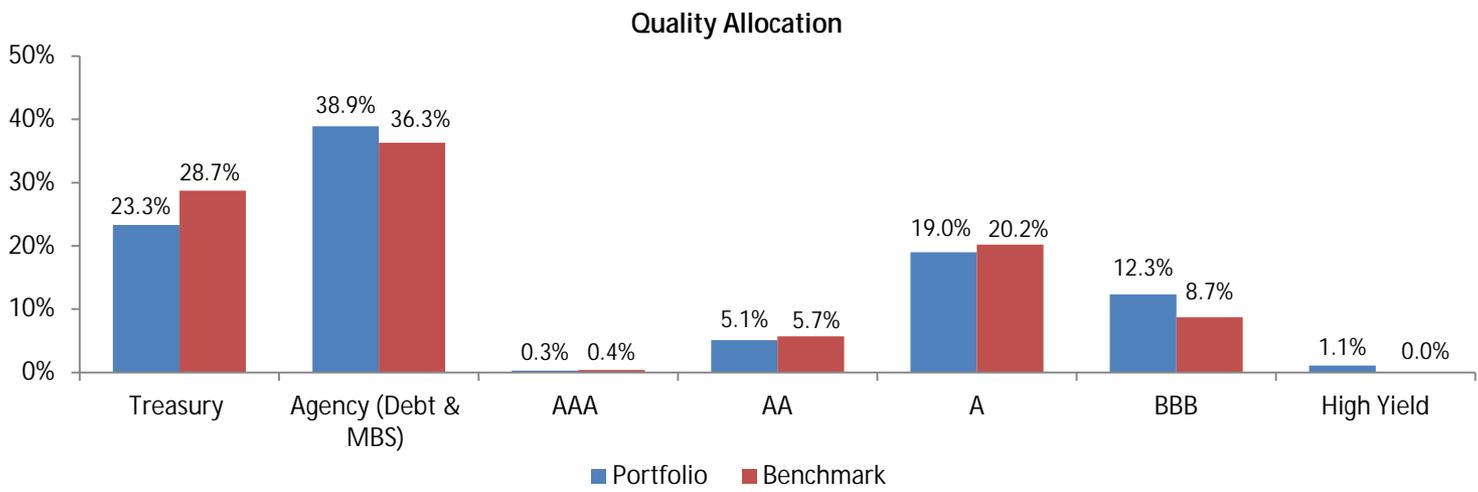
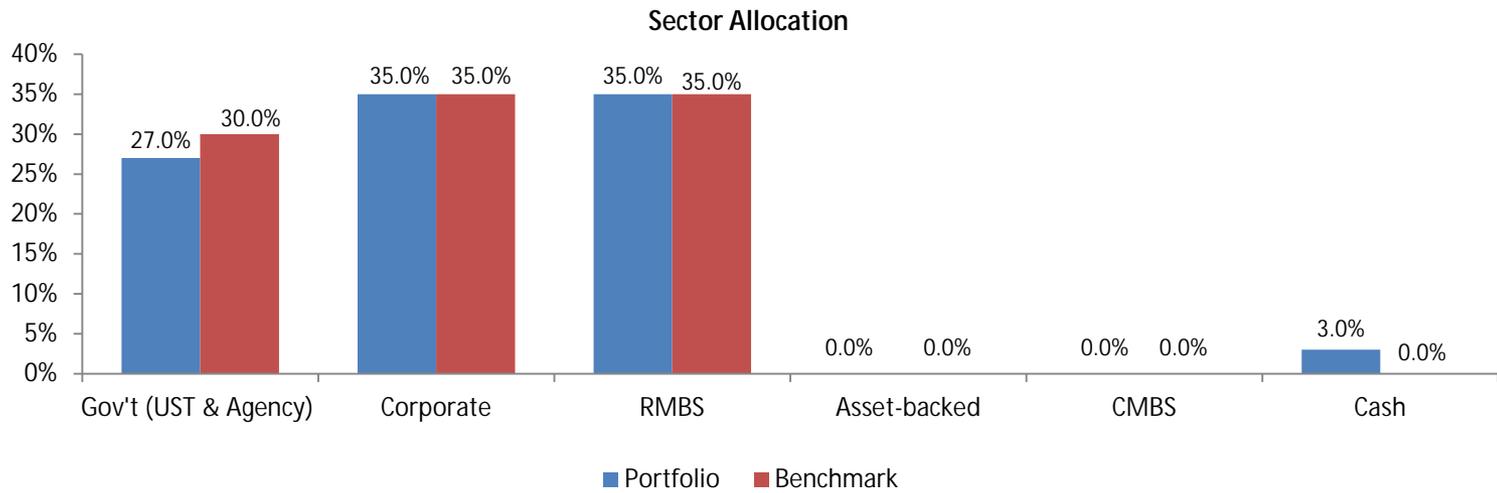
## Core Fixed Income Portfolio Characteristics

	<u>Avg. Coupon</u>	<u>Yield to Maturity</u>	<u>Duration</u>
Government (Treasury & Agency)	5.79%	2.57%	9.4
Corporate	5.36%	3.77%	8.8
Mortgage	4.14%	2.62%	4.3
<b>Total</b>	<b>5.05%</b>	<b>3.07%</b>	<b>7.4</b>



# Core Fixed Income

As of September 30, 2014



# Inflation Sensitive

As of September 30, 2014

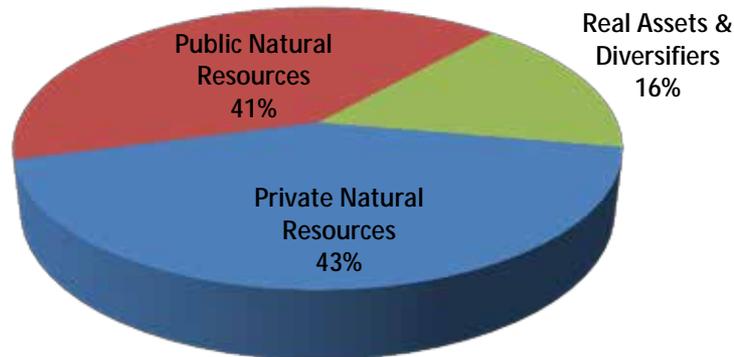
## Net Performance

	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
<b>Inflation Sensitive</b>	<b>\$3,970</b>	<b>(1.29)</b>	<b>3.07</b>	<b>0.93</b>	<b>(3.14)</b>	<b>3.71</b>
Benchmark <sup>10</sup>		(3.32)	2.97	0.62	(1.04)	5.98
<b>Private Natural Resources</b>	<b>\$1,709</b>	<b>6.34</b>	<b>8.93</b>	<b>5.59</b>	<b>1.87</b>	<b>6.12</b>
<b>Public Natural Resources</b>	<b>\$1,617</b>	<b>(9.85)</b>	<b>(4.56)</b>	<b>(3.63)</b>	-	-
<b>Real Assets &amp; Other Diversifiers</b>	<b>\$643</b>	<b>2.22</b>	<b>10.36</b>	-	-	-

## IRR by Vintage Year

	<u>Pre-2006</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total</u>
NCRS	9.38	-0.64	13.98	8.80	N/A	-5.37	-4.89	15.67	6.98	2.31	-1.28
# of Funds	1	3	2	2	0	3	9	7	11	9	47

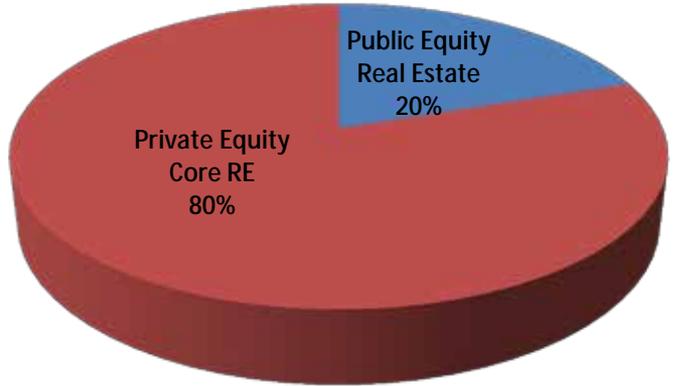
Strategy Allocation  
(based on valuation)



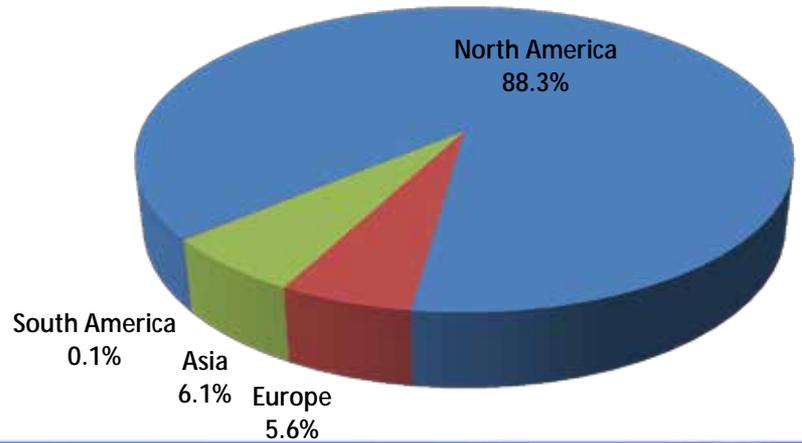
Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
Core Real Estate	\$2,779	0.53	7.53	11.45	9.15	5.85
Benchmark <sup>11</sup>		1.41	10.68	12.25	9.46	6.23
Public Equity Real Estate	\$551	(3.45)	9.55	17.30	11.77	-
Private Equity Core Real Estate	\$2,228	1.55	7.07	10.39	8.52	7.01

IRR by Vintage Year											
	Pre-2005	2005	2006	2007	2008	2010	2011	2012	2013	2014	Total
NCRS	7.62	-0.47	5.46	1.22	10.61	23.62	n/a	n/a	0.43	-1.46	6.91
# of Funds	6	1	2	3	1	1	0	0	2	4	20

Strategy Allocation (based on valuation)



Geographic Allocation (based on valuation)

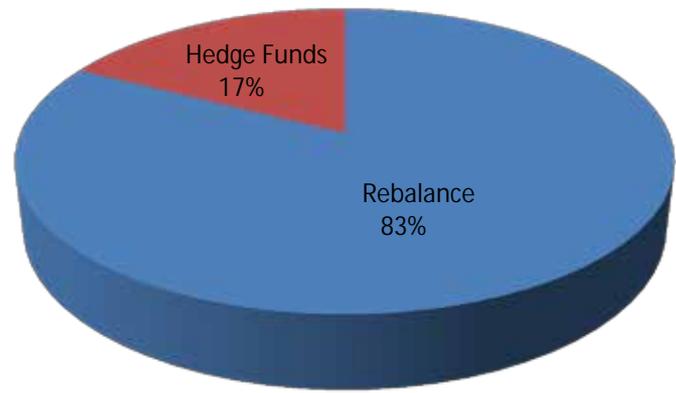


# Multi-Strategy

As of September 30, 2014

Net Performance						
	Market Value (\$MM)	3 Month	1 Year	3 Years	5 Years	10 Years
Multi-Strategy	\$1,639	(1.88)	9.06	16.71	10.88	6.18
Benchmark <sup>12</sup>		(2.32)	8.19	14.82	8.75	8.87
Rebalance Strategy	\$1,355	(2.39)	9.70	19.96	-	-
Hedge Funds	\$285	0.59	5.82	3.76	3.90	2.79

Strategy Allocation (based on valuation)



# New and Incremental Investment Commitments Since September IAC Meeting

<u>Fund Name</u>	<u>Firm Name</u>	<u>Commitment</u>	<u>Closing Date</u>
<b><u>Public Equity</u></b>			
	None		
<b><u>Private Equity</u></b>			
Tenaya Capital Fund VII	Tenaya Capital Partners	\$90,000,000	10/10/2014
<b><u>Non-Core Real Estate</u></b>			
Blackstone Real Estate Partners Europe IV	The Blackstone Group	\$100,000,000	9/25/2014
Harrison Street Real Estate Partners V	Harrison Street Real Estate Partners	\$100,000,000	10/22/2014
Harrison Street Real Estate Partners V Co-Inv	Harrison Street Real Estate Partners	\$50,000,000	10/22/2014
<b><u>Core Real Estate</u></b>			
Blackstone Property Partners	The Blackstone Group	\$300,000,000	11/20/2014
<b><u>Opportunistic Fixed Income</u></b>			
Angelo Gordon Global Debt Strategy Partners	Angelo Gordon	\$100,000,000	12/1/2014
Marathon Currituck Fund	Marathon Asset Management	\$100,000,000	12/1/2014
Monarch Debt Recovery Fund	Monarch Alternative Capital	\$50,000,000	12/1/2014
PAAMCO – Newport Burgundy	PAAMCO	\$150,000,000	12/1/2014
<b><u>Inflation Sensitive</u></b>			
Blackstone Granite Fund – Class D	Blackstone Alternative Asset Management	\$400,000,000	9/30/2014
Strategic Partners NC Real Asset SMA	Strategic Partners Fund Solutions	\$400,000,000	9/26/2014
MTP Energy Fund	Magnetar Financial	\$75,000,000	12/1/2014
<b><u>Multi Strategy</u></b>			
	None		



# Appendix: NCRS Asset Class Net Performance

As of September 30, 2014

	Market Value (\$MM)	1 Year	3 Years	5 Years	10 Years	15 Years
<b>Growth</b>	\$52,000.04	11.85	16.34	11.24	6.80	-
Benchmark <sup>1</sup>		11.06	14.83	10.30	7.68	-
<b>Public Equity</b>	\$38,954.43	10.88	17.99	11.39	6.96	5.20
Benchmark <sup>2</sup>		10.67	16.71	10.31	7.56	4.83
<b>Private Equity</b>	\$3,958.66	17.51	10.02	10.95	8.60	4.99
Benchmark <sup>3</sup>		19.13	11.75	15.30	12.85	11.28
<b>Non-Core Real Estate</b>	\$4,211.33	17.91	11.77	8.69	4.72	-
Benchmark <sup>4</sup>		13.69	10.57	8.19	6.64	-
<b>Opportunistic Fixed Income</b>	\$4,875.62	9.71	11.40	12.94	-	-
Benchmark <sup>5</sup>		3.93	4.65	4.45	-	-
<b>Rates &amp; Liquidity</b>	\$28,075.62	5.79	3.75	5.87	6.01	6.96
Benchmark <sup>6</sup>		6.18	3.27	5.65	5.61	6.63
<b>IG Fixed Income</b>	\$27,065.45	5.89	3.78	5.89	6.02	6.97
Benchmark <sup>7</sup>		6.40	3.35	5.69	5.63	6.65
<b>Cash</b>	\$1,010.17	0.45	-	-	-	-
Benchmark <sup>8</sup>		0.02	-	-	-	-
<b>Inflation Sensitive &amp; Diversifiers</b>	\$6,749.02	4.92	4.94	2.00	3.68	-
Benchmark <sup>9</sup>		6.35	5.45	3.27	3.18	-
<b>Inflation Sensitive</b>	\$3,969.60	3.07	0.93	-3.14	3.71	-
Benchmark <sup>10</sup>		2.97	0.62	-1.04	5.98	-
<b>Core Real Estate</b>	\$2,779.42	7.53	11.45	9.15	5.85	-
Benchmark <sup>11</sup>		10.68	12.25	9.46	6.23	-
<b>Multi-Strategy</b>	\$1,639.17	9.06	16.71	10.88	6.18	-
Benchmark <sup>12</sup>		8.19	14.82	8.75	8.87	-

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# NOTES:

All data presented are based on currently available information at time of publication and may be revised subsequently

1. The Growth Benchmark is a blend of the Public Equity Benchmark, Private Equity Benchmark, Non-Core Real Estate Benchmark, & Opportunistic FI Benchmark at policy weights.
2. The Public Equity Benchmark is the dynamically weighted combination of the MSCI ACWI IMI Net (Long-Only) and a beta adjusted MSCI ACWI IMI Net (Hedged Equity).
3. The Private Equity Benchmark is comprised of the following Burgiss Group Private iQ indices: 50% Buyout, 20% Venture Capital, and 30% Special Situations and Distressed Securities.
4. The Non-Core Real Estate Benchmark is comprised of the following Burgiss Group Private iQ indices: 80% U.S. Non-Core Real Estate (Opportunistic and Value-Added) and 20% Non-U.S. Non-Core Real Estate (Opportunistic and Value-Added).
5. The Opportunistic Fixed Income Benchmark is a comprised of 50% HFRX Distressed Securities Index, 20% HFRX Relative Value Index, 15% Credit Suisse Leveraged Loan Index, and 15% BOAML High Yield Index.
6. The Rates & Liquidity Benchmark is a blend of the IG Fixed Income Benchmark and the Cash Benchmark at policy weights.
7. The IG Fixed Income Benchmark is comprised 10% iMoneyNet First Tier Institutional Money Market Funds Net Index and 90% custom BOAML Core Investment Grade Index. The custom BOAML core index comprised of the following weightings: 30% BOAML 5+ Years Governments, 35% BOAML 5+ Years Investment Grade Corporates, and 35% BOAML Mortgage Master.
8. The Cash Benchmark is the iMoneyNet First Tier Institutional Money Market Funds Net Index.
9. The Inflation Sensitive & Diversifiers Benchmark is a blend of the Inflation Sensitive Benchmark and the Core Real Estate Benchmark at policy weights.
10. The Inflation Sensitive Benchmark is the dynamically weighted combination of the Bank of America Merrill Lynch 1-3 Years U.S. Inflation-Linked Treasury Index (TIPS), the Bloomberg Commodities Index (Commodities), and a combination of the benchmarks of investments classified within Private Natural Resources or Other Real Assets and Diversifiers.
11. The Core Real Estate Benchmark is comprised of 80% NCREIF ODCE Net and 20% FTSE EPRA NAREiT Global Index.
12. The Multi-Strategy Benchmark is comprised of a dynamically weighted combination of the HFRX ED: Multi-Strategy Index, net of fees, and the market value weighted benchmarks for any other total fund strategies within the Portfolio.





**Thank You!**

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