

IAC Performance Review

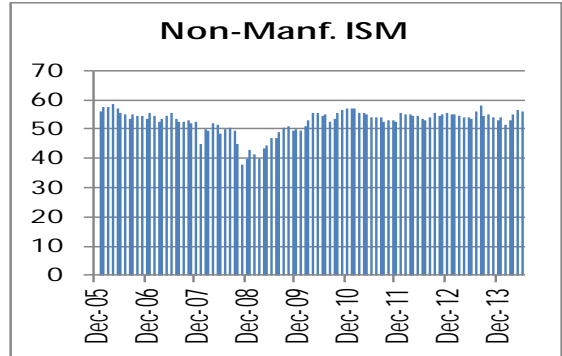
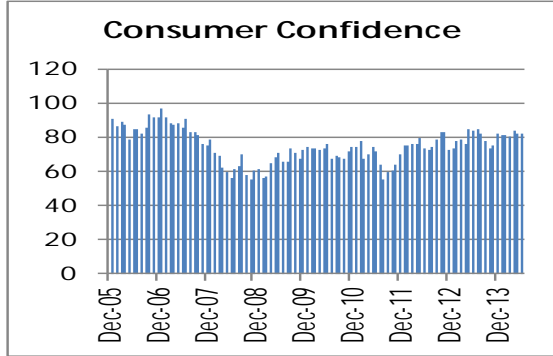
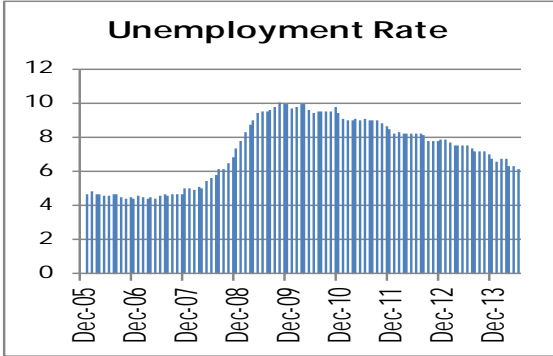
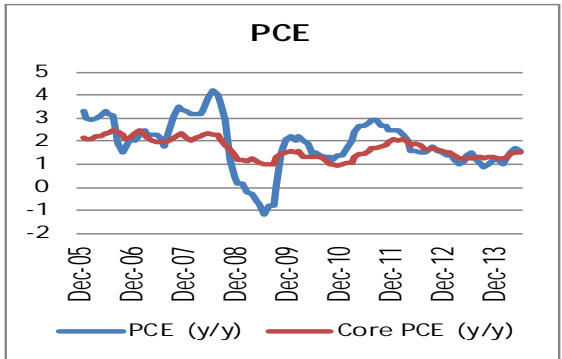
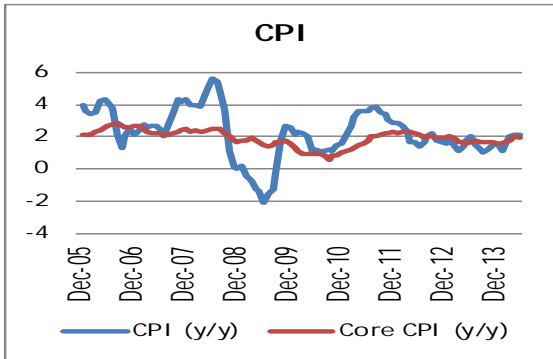
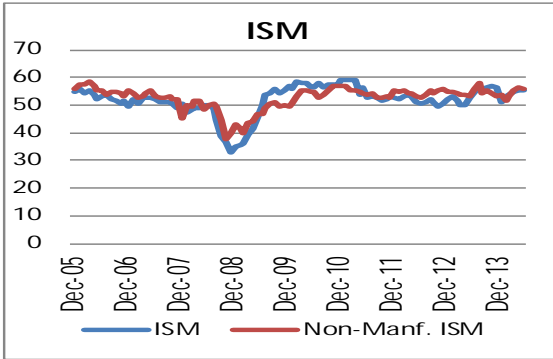
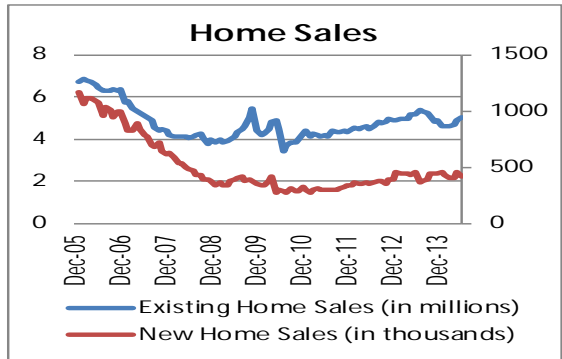
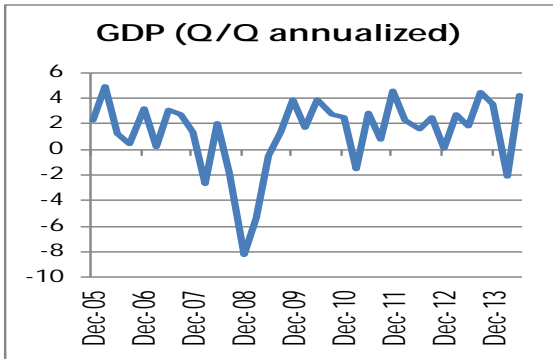
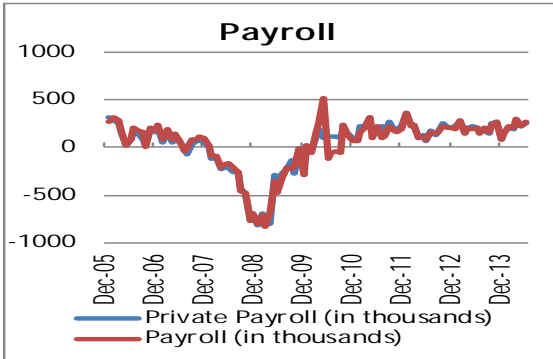
September 24, 2014



North Carolina Department of State Treasurer
Investment Management

Learn. Invest. Grow. Prosper.

U.S. Economic Environment



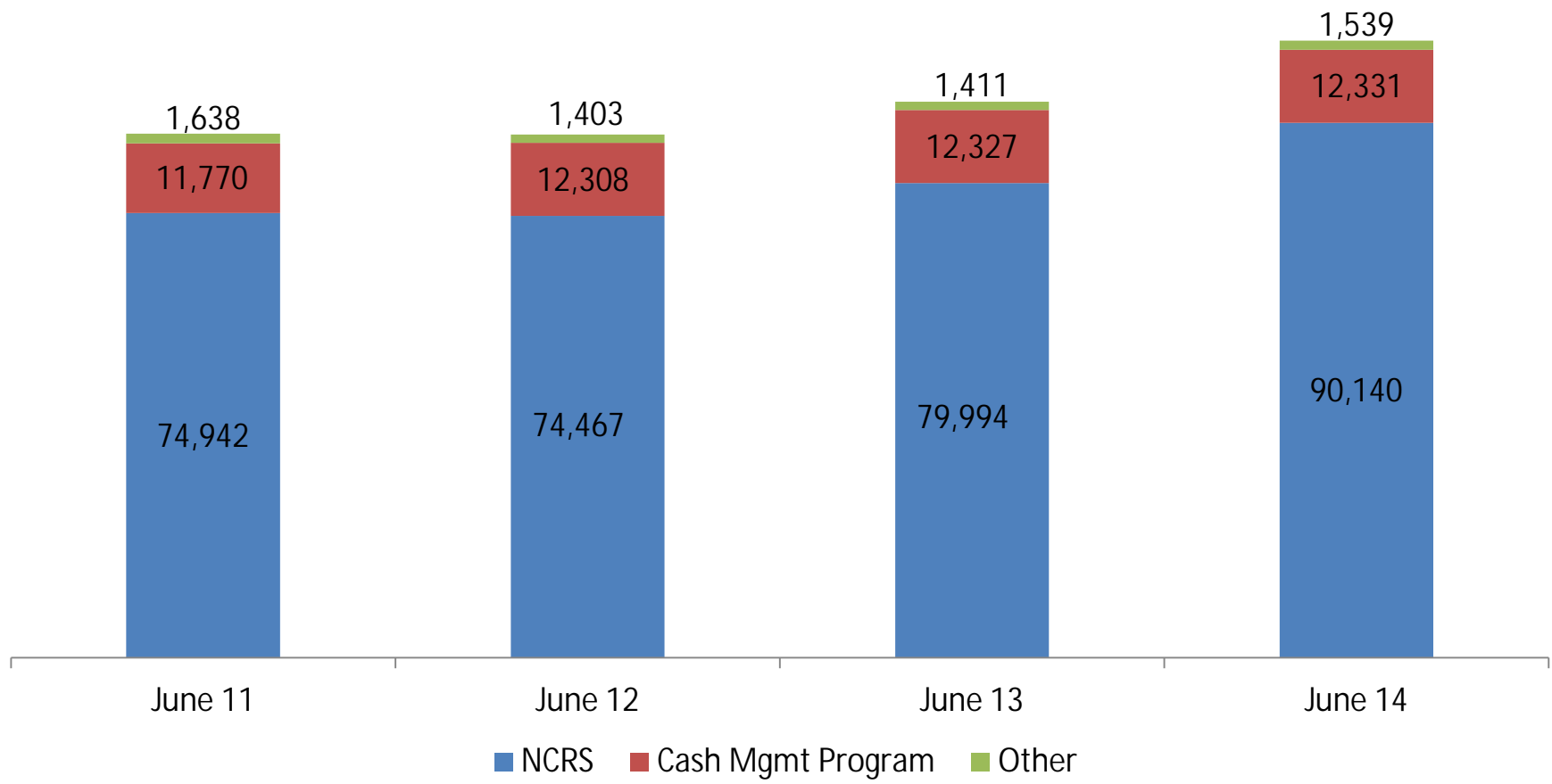
Global Economic Environment

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
<i>U.S.</i>	06/14	2.5	06/14	6.1	06/14	2.1	<i>Asia/Pacific/Latam</i>						
<i>Europe</i>							China	06/14	7.5			06/14	2.3
Germany	06/14	1.2	06/14	6.7	06/14	1	India	06/14	5.7			06/14	6.49
France	06/14	0.1	06/14	10.2	06/14	0.5	Japan	06/14	-0.1	06/14	3.7	06/14	3.6
U.K.	06/14	3.2	06/14	6.4	06/14	1.9	Indonesia	06/14	5.12			06/14	6.7
Italy	06/14	-0.2	06/14	12.3	06/14	0.3	Brazil	06/14	-0.87			06/14	6.52
Spain	06/14	1.2	06/14	24.6	06/14	0.1	Australia	06/14	3.1	06/14	6.1	06/14	3



Assets Under Management (\$mil)

\$104.01 Billion as of June 30, 2014



NCRS Asset Allocation – Old Investment Policy Statement Asset Classes

As of June 30, 2014

	Market Value	Current	Legacy Target	New Target
Global Equity	\$42,221,069,866	46.84%	40.50%	42.00%
Total Fixed Income	\$27,410,932,668	30.41%	36.00%	28.00%
LTIF	\$26,577,702,442	29.48%		
Real Estate	\$7,558,972,373	8.39%	8.00%	8.00%
Alternatives	\$4,288,492,958	4.76%	6.50%	8.00%
Private Equity	\$4,004,166,743	4.44%		
Hedge Funds	\$284,326,215	0.32%		
Credit	\$4,768,746,712	5.29%	4.50%	7.00%
Inflation	\$3,050,735,902	3.38%	4.50%	6.00%
Cash	<u>\$841,360,514</u>	<u>0.93%</u>	<u>0.00%</u>	<u>1.00%</u>
Total Fund	\$90,140,310,993	100.00%	100.00%	100.00%



NCRS Asset Allocation – New Investment Policy Statement Asset Classes

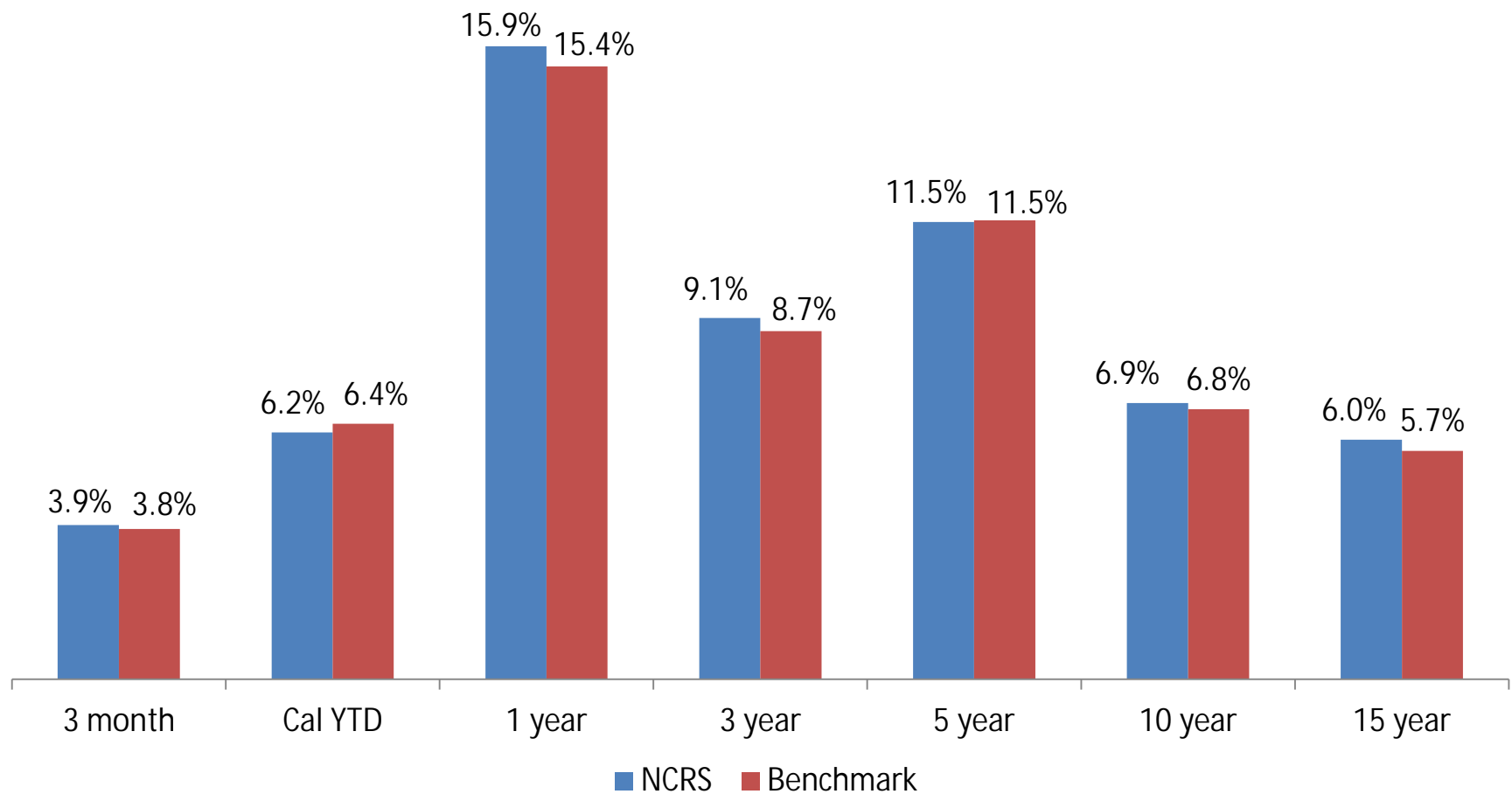
As of June 30, 2014

	Market Value (\$MM)	%	Target	Range		Relative %	Relative \$ (MM)
				Minimum	Maximum		
Growth	\$53,853	59.74%	58.0%	37.0%	71.0%	1.74%	\$1,571
Public Equity	40,833	45.30%	42.0%	37.0%	47.0%	3.30%	2,974
Non Core Real Estate	4,247	4.71%	3.0%	0.0%	8.0%	1.71%	1,542
Opportunistic Fixed Income	4,769	5.29%	7.0%	0.0%	7.5%	-1.71%	(\$1,541)
Private Equity	4,004	4.44%	6.0%	0.0%	8.75%	-1.56%	(\$1,404)
Inflation Sensitive & Diversifiers	6,363	7.06%	11.0%	4.0%	16.0%	-3.94%	(\$3,552)
Core Real Estate	2,663	2.95%	5.0%	2.0%	10.0%	-2.05%	(\$1,844)
Inflation Sensitive	3,700	4.10%	6.0%	2.0%	7.5%	-1.90%	(\$1,708)
Multi-Strategy	1,672	1.85%	2.0%	0.0%	4.0%	-0.15%	(\$131)
Rates & Liquidity	28,252	31.34%	29.0%	24.0%	42.0%	2.34%	2,112
Cash	841	0.93%	1.0%	0.0%	10.0%	-0.07%	(\$60)
Investment Grade Fixed Income	27,411	30.41%	28.0%	24.0%	32.0%	2.41%	2,172
Grand Total	\$90,140						



NCRS Total Net Portfolio Return vs. Benchmark

As of June 30, 2014



NCRS Net Return Attribution

Contribution to Total Fund Performance vs. Benchmark

As of June 30, 2014

	3 months	1 Year	3 Years	5 Years
Global Equity	-0.07	0.56	0.37	0.22
Fixed Income	-0.14	-0.06	-0.03	0.02
Real Estate	0.09	-0.14	-0.19	-0.12
Private Equity	0.15	-0.08	-0.11	-0.37
Hedge Funds	-0.01	0.00	-0.01	0.03
Credit Strategies	0.01	0.24	0.30	0.23
Inflation Portfolio	0.07	0.03	0.01	-0.04
Cash	-0.02	-0.04	-0.01	-0.01
Total NCRS	0.10	0.51	0.33	-0.05



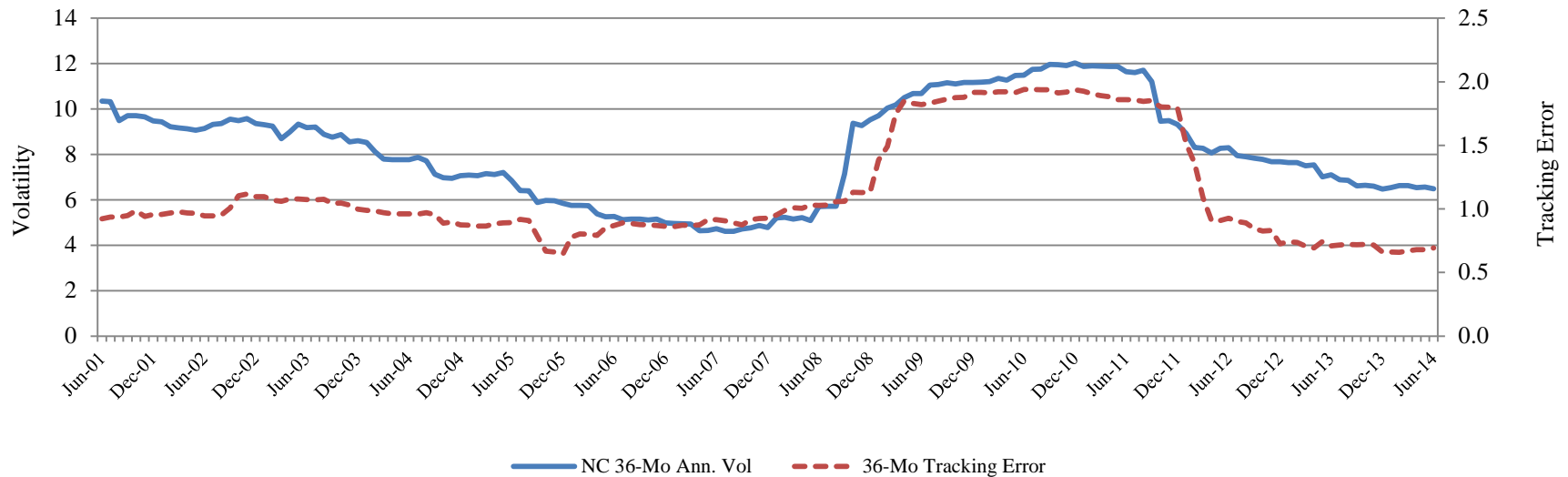
NCRS Gross of Fees Return and Risk
 BNY Mellon Universe - Public Funds > \$1B

As of June 30, 2014

<u>Returns</u>	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Year</u>
25th percentile	18.02	10.64	13.84	8.04	6.83
Median	17.13	10.12	13.12	7.65	6.54
75th percentile	15.52	9.13	12.12	7.16	6.10
NCRS	16.55	9.60	11.98	7.31	6.27
Percentile Rank	56	65	81	73	67
<u>Risk</u>	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>10 Years</u>	<u>15 Year</u>
25th percentile	5.98	8.56	8.98	10.38	10.26
Median	5.36	7.72	8.15	9.75	9.64
75th percentile	4.49	6.78	7.36	8.95	8.66
NCRS	4.43	6.48	6.97	8.13	8.30
Percentile Rank	77	83	83	91	89



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
Global Equity	42.2	46.8	11.7	14.3	0.8	0.7	1.0	15.8	14.9	0.6	0.8	0.8
Fixed Income	27.4	30.4	5.5	4.2	0.0	0.8	0.0	7.0	4.2	0.3	0.8	0.3
Real Estate	7.6	8.4	10.3	2.7	-2.6	2.8	-0.9	5.7	4.8	-2.8	6.2	-0.4
Private Equity	4.0	4.4	10.0	3.0	-2.4	5.3	-0.4	11.6	3.6	-9.8	10.7	-0.9
Hedged Strategies	0.3	0.3	2.0	3.7	-0.9	3.7	-0.2	4.6	3.6	1.1	3.5	0.3
Credit Strategies	4.8	5.3	10.0	3.4	7.0	3.7	1.9	--	--	--	--	--
Inflation Portfolio	3.1	3.4	-2.1	10.8	0.2	2.8	0.1	--	--	--	--	--
Cash	0.8	0.9	--	--	--	--	--	--	--	--	--	--
Total NCRS	90.1	100.0	9.1	6.5	0.3	0.7	0.5	11.5	7.0	0.0	0.6	-0.1

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

*As of June 30, 2014



NCRS Liquidity Profile

As of June 30, 2014

Invested Assets

	Global Equity	Credit Portfolio	Inflation Portfolio	Hedge Fund	Private Equity	Real Estate	Fixed Income	Cash	TOTAL	Allocation
Level 1	\$41,124,752,321	\$367,481,563	\$1,126,684,120	-	\$5,402,267	\$491,572,535	\$27,410,932,668	\$841,360,514	\$71,368,185,989	79.2%
Level 2	\$1,096,317,544	\$1,700,412,048	\$456,479,493	-	-	\$1,162,240,649	-	-	\$4,415,449,734	4.9%
Level 3	-	\$1,156,741,863	-	\$270,450,033	\$48,514,060	\$967,057,207	-	-	\$2,442,763,162	2.7%
Level 4	-	\$1,544,111,239	\$1,467,572,289	\$13,876,182	\$3,950,250,416	\$4,938,101,982	-	-	\$11,913,912,108	13.2%
TOTAL	\$42,221,069,866	\$4,768,746,712	\$3,050,735,902	\$284,326,215	\$4,004,166,743	\$7,558,972,373	\$27,410,932,668	\$841,360,514	\$90,140,310,993	

Invested Assets plus Unfunded Commitments

	Global Equity	Credit Portfolio	Inflation Portfolio	Hedge Funds	Private Equity	Real Estate	Fixed Income	Cash	TOTAL	Allocation
Level 1	\$36,284,242,062	\$367,481,563	\$1,126,684,120	-	\$5,402,267	\$491,572,535	\$25,345,587,821	\$841,360,514	\$64,462,330,883	71.5%
Level 2	\$1,096,317,544	\$1,700,412,048	\$456,479,493	-	-	\$1,162,240,649	-	-	\$4,415,449,734	4.9%
Level 3	-	\$1,156,741,863	-	\$270,450,033	\$48,514,060	\$967,057,207	-	-	\$2,442,763,162	2.7%
Level 4	-	\$2,123,278,684	\$3,354,780,842	\$13,876,182	\$6,324,384,677	\$7,003,446,829	-	-	\$18,819,767,214	20.9%
TOTAL	\$36,637,297,584	\$5,347,914,157	\$4,937,944,455	\$284,326,215	\$6,378,301,004	\$9,624,317,220	\$25,345,587,821	\$841,360,514	\$90,140,310,993	

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)



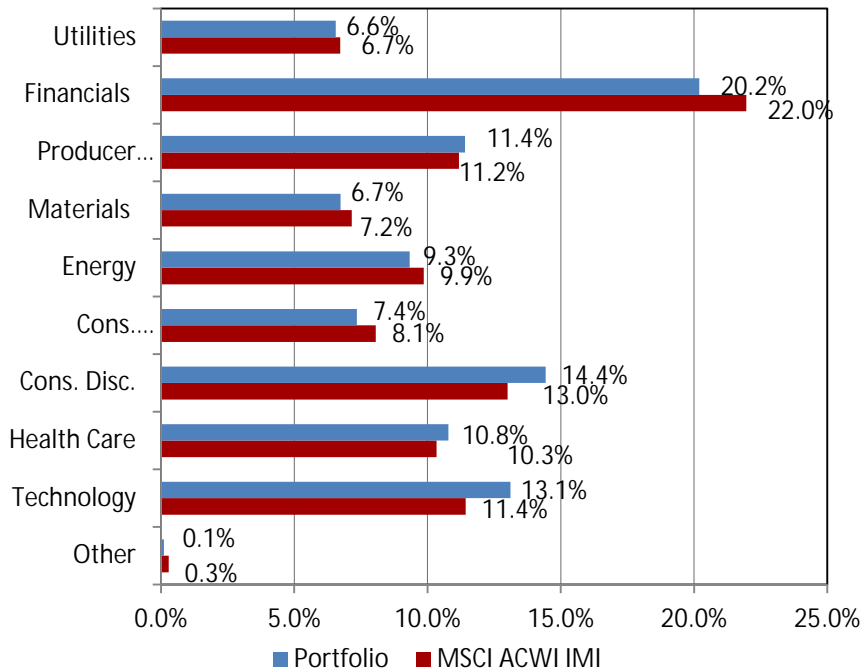
NCRS Global Equity Net Performance

As of June 30, 2014

	3 Month	1 Year	3 Years	5 Years	10 Years
Global Equity	4.67	24.66	11.66	15.79	7.13
Custom Equity Benchmark ¹	4.81	23.41	10.88	15.18	6.67
Domestic Portfolio	4.47	26.58	16.57	19.65	8.40
Russell 3000	4.87	25.22	16.46	19.33	8.23
Non-US Portfolio	4.96	23.52	6.61	11.32	7.65
Custom Non-US Benchmark ²	4.85	22.28	5.88	10.68	6.47
Global Portfolio	4.72	27.61	15.83	17.27	-
MSCI ACWI	5.04	22.95	10.25	14.28	7.46
Equity Rebalance	3.81	21.42	-	-	-
Rebalance Custom Benchmark ³	3.50	21.16	-	-	-
Equity Hedge	(1.31)	3.10	-	-	-
Equity Hedge Custom Benchmark ⁴	1.20	5.66	-	-	-



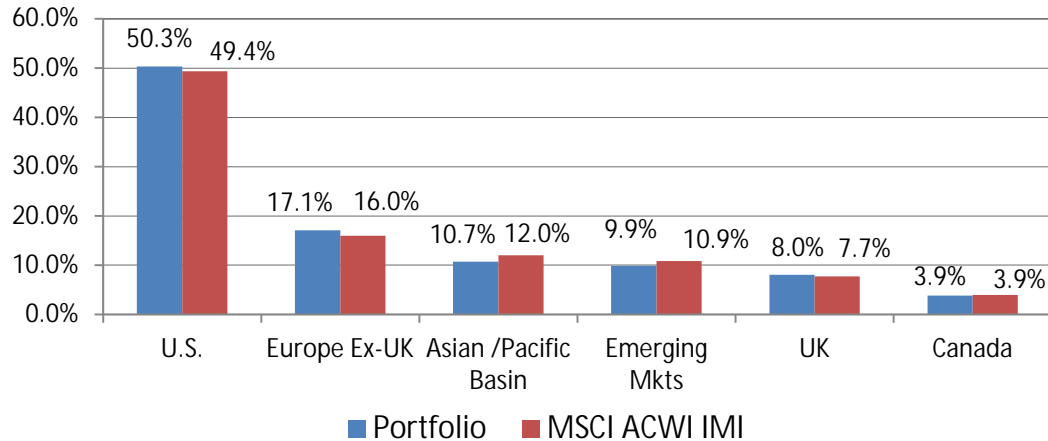
Total Equity Sector Allocation



Portfolio Characteristics

	Portfolio	MSCI ACWI IMI
Price/Earnings	20.0	19.2
Dividend Yield	2.14	2.33
Price/Book	2.13	2.08
Debt/Equity	0.85	0.87
Market Cap (\$ Weighted Median)	32,285	25,052
Return on Equity - 1 Year	15.6	15.5

Total Equity Regional Allocation



Fixed Income
As of June 30, 2014

Net Performance					
	3 Month	1 Year	3 Years	5 Years	10 Years
Total Fixed Income	2.69	6.04	5.53	6.98	6.42
ML Custom Benchmark ⁵	3.11	6.23	5.54	6.72	6.07
Core Fixed Income	2.72	6.05	5.55	6.99	6.45
Non-Core Fixed Income	(0.04)	5.37	7.41	8.60	-
IG Fixed Income Cash	-	-	-	-	-
ML Custom Benchmark ⁵	3.11	6.23	5.54	6.72	6.07

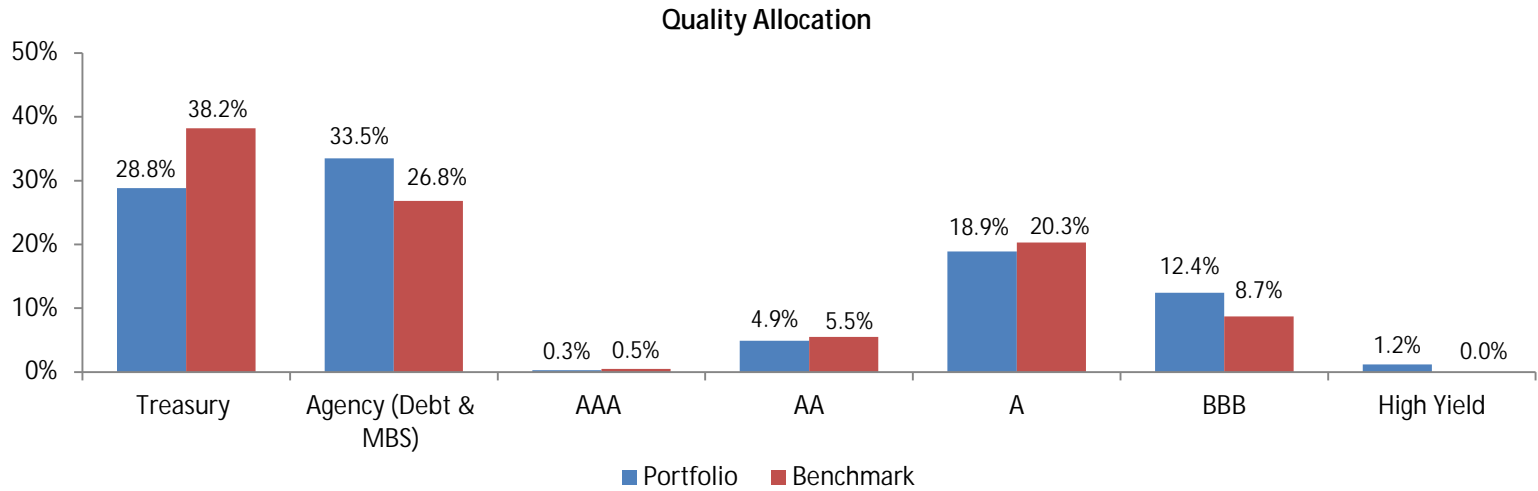
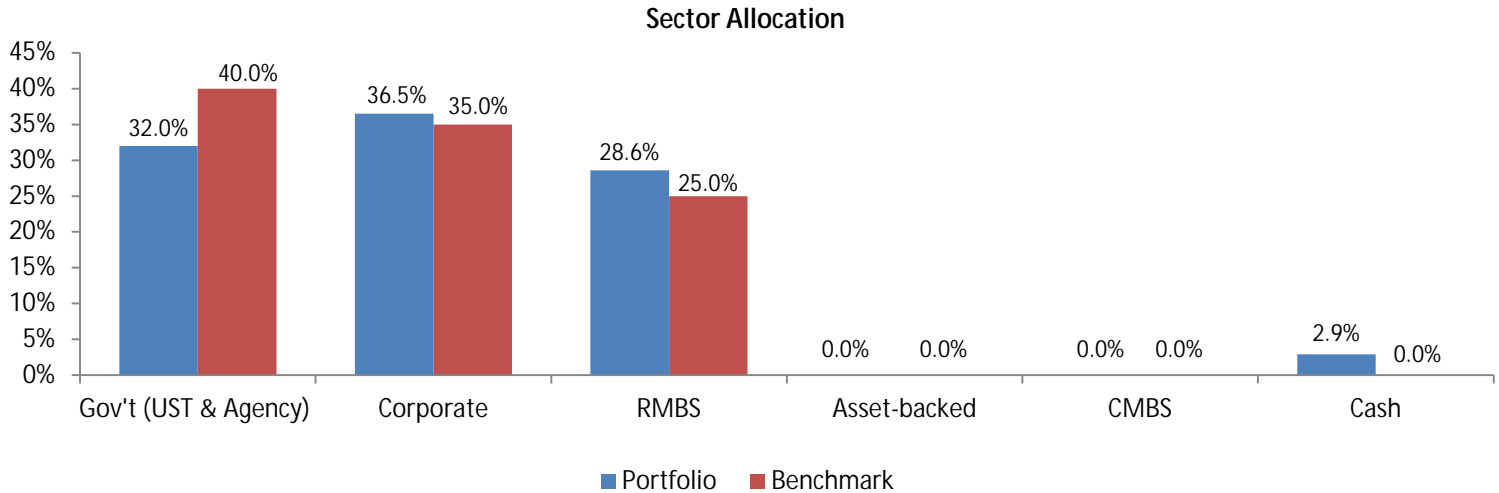
Internal Core Fixed Income Portfolio Characteristics

	<u>Avg. Coupon</u>	<u>Yield to Maturity</u>	<u>Duration</u>
Government (Treasury & Agency)	5.69%	2.38%	8.5
Corporate	5.45%	3.57%	8.7
Mortgage	4.11%	2.63%	4.5
Total	5.13%	2.90%	7.4



Internal Core Fixed Income

As of June 30, 2014



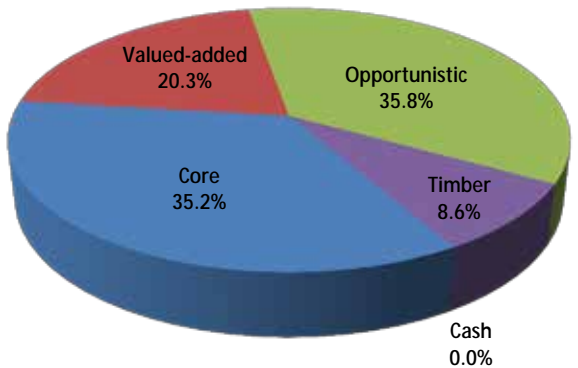
Real Estate

As of June 30, 2014

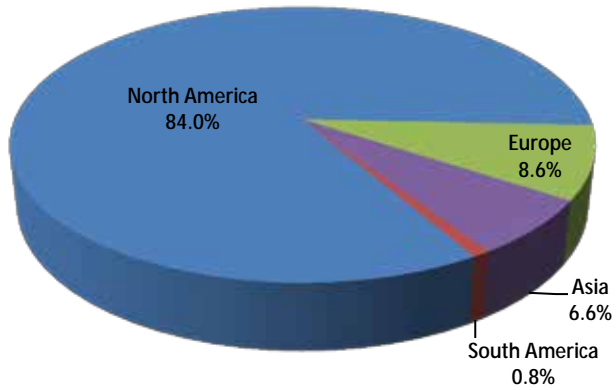
Net Performance					
	3 Month	1 Year	3 Years	5 Years	10 Years
Total Real Estate	4.08	12.03	10.26	5.69	4.79
Custom Real Estate Benchmark ⁶	3.05	13.82	12.89	8.46	7.34
Core Private Real Estate (w/o Timber)	2.89	9.10	11.07	7.32	6.92
Value Add Private Real Estate	4.62	12.10	13.73	3.66	4.80
Opportunistic Private Real Estate	5.06	17.19	10.94	5.86	5.35
Timber	(0.04)	(0.86)	1.42	(4.78)	3.27
REITS	7.57	16.53	10.47	17.29	-

IRR by Vintage Year											
	<u>Pre-2005</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>Total</u>
NCRS	7.95	-2.39	-1.39	3.23	10.88	11.02	17.47	9.47	3.87	-15.00	4.77
# of Funds	24	15	19	13	6	5	8	8	7	3	108

Strategy Allocation (based on valuation)



Geographic Allocation (based on valuation)



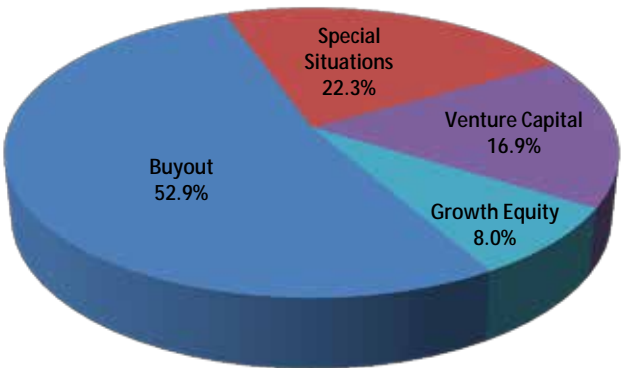
Alternatives

As of June 30, 2014

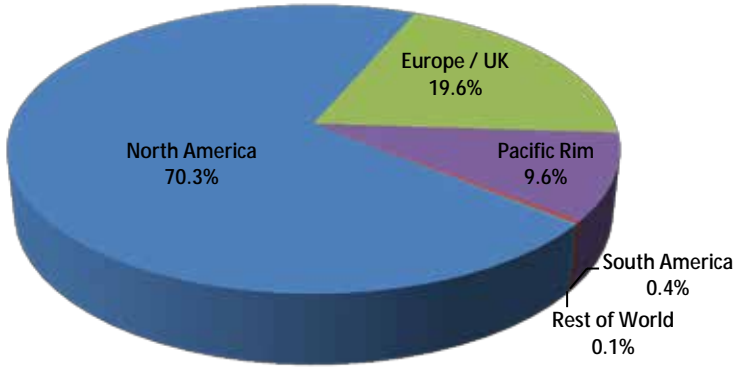
Net Performance					
	3 Month	1 Year	3 Years	5 Years	10 Years
Alternatives	6.40	17.41	9.40	10.95	6.71
Custom Alternatives Benchmark ⁷	3.20	19.07	11.66	17.81	8.68
Private Equity	6.93	18.27	10.05	11.63	8.66
Custom Private Equity Benchmark ⁸	3.36	20.15	12.39	21.41	9.07
Hedge Funds	(0.56)	6.58	2.00	4.56	2.73
Custom Hedge Fund Benchmark ⁹	1.24	5.98	2.91	3.41	5.28

Private Equity IRR by Vintage Year													
	<u>Pre-2004</u>	<u>2004</u>	<u>2005</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	12.68	7.81	6.04	3.85	7.61	10.45	17.73	18.06	6.28	7.34	-10.56	-12.83	7.56
# of Funds	28	3	11	21	13	17	3	1	6	5	10	3	121

Private Equity Strategy Allocation
(based on commitments)



Private Equity Geographic Allocation
(based on valuation)



Credit Strategies & Inflation Portfolio

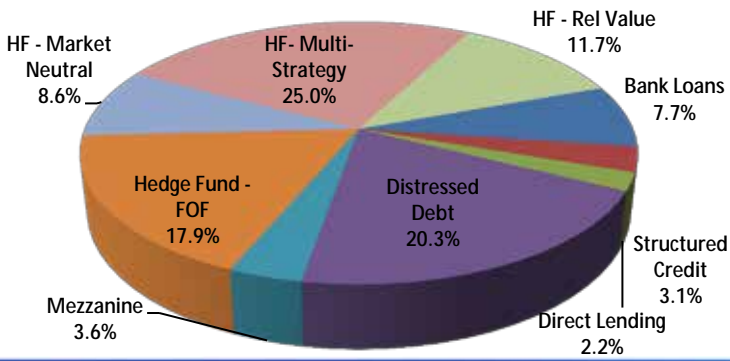
As of June 30, 2014

Net Performance					
	3 Month	1 Year	3 Years	5 Years	10 Years
Total Credit Strategies	2.56	12.90	10.00	-	-
Custom Credit Benchmark ¹⁰	2.35	8.11	3.00	-	-
Total Inflation Portfolio	2.54	8.21	(2.11)	-	-
Custom Inflation Benchmark ¹¹	0.41	7.47	(2.27)	-	-

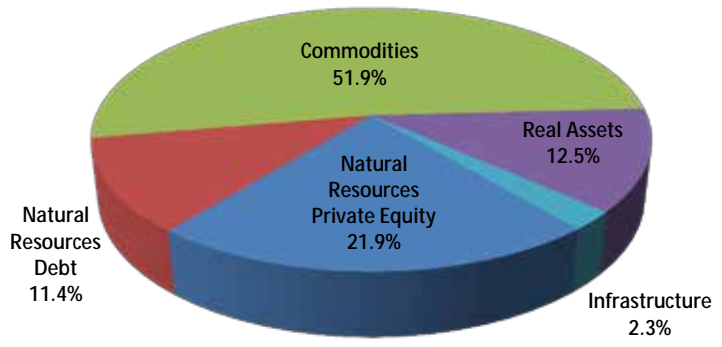
Credit Strategies IRR by Vintage Year										
	2005	2007	2008	2009	2010	2011	2012	2013	2014	Total
NCRS	4.00	16.94	11.33	22.42	15.12	7.75	6.50	13.54	1.86	11.20
# of Funds	1	1	3	1	4	9	2	7	1	29

Inflation Portfolio IRR by Vintage Year										
	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
NCRS	6.79	12.54	10.42	N/A	-3.96	-3.13	17.91	8.94	-6.03	-0.36
# of Funds	1	2	2	0	3	9	7	11	5	40

Credit Strategies Strategy Allocation (based on valuation)



Inflation Portfolio Strategy Allocation (based on valuation)



New Investments

Since May IAC Meeting

<u>Fund Name</u>	<u>Firm Name</u>	<u>Commitment</u>	<u>Closing Date</u>
<u>Global Equity</u>			
	None		
<u>Private Equity</u>			
Lexington Middle Market Investors III	Lexington Partners	\$150,000,000	6/30/2014
ARCH Venture Fund VIII	ARCH Venture Partners	\$80,000,000	8/18/2014
<u>Real Estate</u>			
Meadow Real Estate Fund III	Meadow Partners	\$100,000,000	6/9/2014
Meadow London Core-Plus Fund	Meadow Partners	£100,000,000	6/19/2014
Rockpoint Core Plus Real Estate I	Rockpoint Group	\$200,000,000	7/31/2014
Frogmore Real Estate Fund III	Frogmore Real Estate Partners	Up to £50,000,000	8/21/2014
<u>Credit Strategies</u>			
MCP Private Capital Fund II	MCP Private Capital	€60,000,000	7/10/2014
<u>Inflation Portfolio</u>			
Varde Fund XI	Varde Partners	\$350,000,000	6/16/2014
Blackstone Granite Fund – Class B	Blackstone Alternative Asset Management	\$200,000,000	8/29/2014
Blackstone Granite Fund – Class C	Blackstone Alternative Asset Management	\$100,000,000	8/29/2014
<u>Hedge Funds</u>			
	None		



Appendix: NCRS Asset Class Net Performance

As of June 30, 2014

	1 Year	3 Years	5 Years	10 Years	15 Years
Global Equity	24.66	11.66	15.79	7.13	5.03
Benchmark	23.41	10.88	15.18	6.67	4.10
Fixed Income	6.04	5.53	6.98	6.42	6.93
Benchmark	6.23	5.54	6.72	6.07	6.62
Real Estate	12.03	10.26	5.69	4.79	5.42
Benchmark	13.82	12.89	8.46	7.34	8.02
Private Equity	18.27	10.05	11.63	8.66	5.45
Benchmark	20.15	12.39	21.41	9.07	6.91
Hedge Funds	6.58	2.00	4.56	2.73	-
Benchmark	5.98	2.91	3.41	5.28	-
Credit Strategies	12.90	10.00	-	-	-
Benchmark	8.11	3.00	-	-	-
Inflation Portfolio	8.21	(2.11)	-	-	-
Benchmark	7.47	(2.27)	-	-	-
Cash	0.46	-	-	-	-
Benchmark	0.02	-	-	-	-



NOTES:

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

1. As of 5/1/12, the Global Equity Benchmark is the dynamically weighted return of the Domestic Benchmark, the Non-US Benchmark, the Global Benchmark, the Rebalance Benchmark, and the Equity Hedge Benchmark
2. As of 10/1/10, the Custom Non-US Benchmark is the MSCI ACWI ex US IMI Index
3. The Equity Rebalance (Gladius) Custom Benchmark is a combination of the return of the underlying benchmarks within share class A, and share class B's performance minus the accrued premium of share class B.
4. The Equity Hedge Custom Benchmark is the return of the MSCI World Index beta adjusted to the target beta of the Equity Hedge portfolio.
5. The ML Custom Benchmark consists of 40% Gov't 5+yr / 35% Corp. (Inv. Grade - BBB Max 25%) 5+yr / 25% Mtg. Master
6. As of 7/1/07, the Custom Real Estate Benchmark consists of 90% NCREIF ODCE Index / 10% FTSE EPRA/NAREIT Global Securities Index
7. As of 7/1/11, the Custom Alternatives Benchmark is the dynamically weighted return of the Custom Private Equity Benchmark and the Custom Hedge Fund Benchmark
8. As of 7/1/11, The Custom Private Equity Benchmark is the custom Cambridge Associates benchmark
9. As of 7/1/11, The Custom Hedge Fund Benchmark is the HFRI FOF Conservative Index
10. As of 7/1/11, The Custom Credit Benchmark consists of 50% HFRX Distressed / 20% HFRX Relative Value / 15% CS Leveraged Loan / 15% BOA High Yield
11. As of 7/1/11, The Custom Inflation Benchmark is the dynamically weighted return of the Private Energy benchmark (Cambridge Energy) and the Commodities benchmark (DJ-UBS Commodities Index)
12. As of 7/1/11, the Total Pension Custom Benchmark consists of the dynamically weighted return of the Fixed Income Benchmark, Custom Equity Benchmark, Custom Real Estate Benchmark, Custom Alternatives Benchmark, Custom Credit Benchmark, & Custom Inflation Benchmark





Thank You!

Together we can build and maintain a fiscally strong and prosperous North Carolina.

www.NCTreasurer.com



North Carolina Department of State Treasurer
Investment Management

Learn. Invest. Grow. Prosper.