# NORTH CAROLINA SUPPLEMENTAL RETIREMENT PLANS

SECOND QUARTER PERFORMANCE REVIEW



#### AGENDA

- Capital Markets Review
- Second Quarter Performance
- Appendix

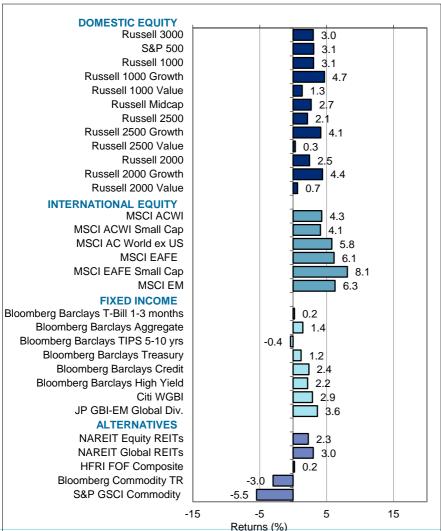
# CAPITAL MARKETS REVIEW



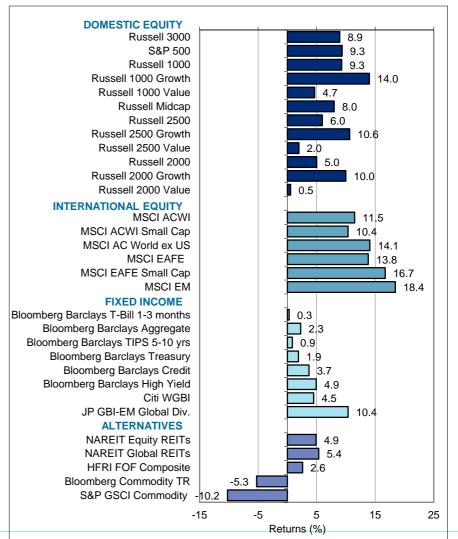
#### PERFORMANCE SUMMARY

#### QUARTER IN REVIEW





## Market Performance YTD



# SECOND QUARTER PERFORMANCE



# NORTH CAROLINA SUPPLEMENTAL RETIREMENT PLANS INVESTMENT STRUCTURE

Tier I Target Date Funds	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
		Stable Value Fund Galliard Stable Value	
	Fixed Income BlackRock Debt Index	Fixed Income Fund TCW Core Plus Prudential Core Plus	
		Inflation Responsive Fund PIMCO IRMAF	
	Large Cap Equity	Large Cap Value Fund Hotchkis & Wiley Large Cap Value Delaware Large Cap Value Boston Partners Large Cap Value	
Goal Maker	BlackRock Equity Index	Large Cap Growth Fund Sands Capital Large Cap Growth Wellington Opportunistic Growth Loomis Large Cap Growth	
	Small/Mid Cap Equity BlackRock Russell 2500 Index	Small/Mid Cap Value Fund Hotchkis & Wiley SMID Value Earnest Partners SMID Cap Value Wedge SMID Cap Value	
	Diackrock Russell 2000 Index	Small/Mid Cap Growth Fund TimesSquare SMID Growth Brown Advisory SMID Growth	
		Global Equity Fund Wellington Global Opportunities Arrowstreet Global Equity ACWI	
	International Equity BlackRock ACWI ex US Index	International Equity Fund Baillie Gifford ACWI ex US Growth Mondrian ACWI ex US Value	

# FUND REVIEW FUND PERFORMANCE AS OF JUNE 30, 2017

	Current Market Value	Current Allocation	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	Return	Since
Large Cap Passive	\$1,494,328,354	14.3%	3.1%	49	9.3%	39	17.9%	44	9.5%	17	14.5%	25	16.7%	Mar-09
S&P 500			3.1%	48	9.3%	38	17.9%	44	9.6%	16	14.6%	21	16.9%	Mar-09
Large Cap Value	\$994,138,045	9.5%	2.0%	53	6.0%	41	18.0%	50	7.5%	26	14.3%	19	15.4%	Mar-09
Russell 1000 Value			1.3%	72	4.7%	71	15.5%	77	7.4%	28	13.9%	24	16.3%	Mar-09
Large Cap Growth	\$1,004,944,427	9.6%	7.4%	13	19.3%	13	23.2%	25	10.6%	36	15.2%	32	19.0%	Mar-09
Russell 1000 Growth			4.7%	73	14.0%	64	20.4%	54	11.1%	22	15.3%	27	17.7%	Mar-09
Mid/Small Cap Passive	\$262,777,703	2.5%	2.1%	51	5.9%	47	19.7%	56	7.0%	38	14.0%	32	17.9%	Mar-09
Russell 2500			2.1%	50	6.0%	46	19.8%	56	6.9%	39	14.0%	32	18.0%	Mar-09
Mid/Small Cap Value	\$538,459,194	5.1%	0.8%	41	4.5%	19	22.1%	32	6.2%	38	14.7%	14	19.8%	Mar-09
Russell 2500 Value			0.3%	55	2.0%	47	18.4%	65	6.2%	39	13.7%	44	17.5%	Mar-09
Mid/Small Cap Growth	\$418,837,373	4.0%	4.8%	51	10.4%	63	17.5%	74	7.8%	36	13.6%	33	17.1%	Mar-09
Russell 2500 Growth			4.1%	60	10.6%	60	21.4%	49	7.7%	39	14.3%	25	18.5%	Mar-09
International Passive	\$57,037,794	0.5%	5.9%	60	14.4%	42	20.7%	30	0.9%	66	7.2%	84	10.1%	Mar-09
MSCI ACWI ex USA Gross			6.0%	55	14.5%	42	21.0%	25	1.3%	44	7.7%	73	10.6%	Mar-09
International Equity	\$648,267,683	6.2%	6.4%	57	15.6%	47	20.4%	46	2.7%	35	8.3%	56	11.1%	Mar-09
MSCI ACWI ex USA Gross			6.0%	69	14.5%	64	21.0%	40	1.3%	62	7.7%	69	10.6%	Mar-09
Global Equity	\$948,922,862	9.1%	5.3%	44	13.6%	38	20.3%	41	6.4%	25	13.1%	16	14.0%	Mar-09
MSCI ACWI Gross			4.5%	57	11.8%	52	19.4%	52	5.4%	47	11.1%	47	13.6%	Mar-09
Inflation Responsive Fund	\$438,307,108	4.2%	0.1%	63	2.3%	51	2.6%	76	-0.5%	35	-		1.1%	Sep-13
PIMCO Inflation Response Index			-0.4%	80	1.2%	69	-1.7%	99	-2.4%	81	-1.3%	95	-0.7%	Sep-13
Fixed Income Passive Fund	\$471,776,749	4.5%	1.5%	45	2.3%	54	-0.3%	92	2.4%	41	2.1%	66	2.8%	Sep-10
BBgBarc US Aggregate TR			1.4%	46	2.3%	55	-0.3%	92	2.5%	39	2.2%	63	2.9%	Sep-10
Fixed Income Fund	\$694,702,568	6.6%	1.8%	23	3.0%	25	1.1%	55	3.2%	15	3.0%	30	4.9%	Mar-09
BBgBarc US Aggregate TR			1.4%	46	2.3%	55	-0.3%	92	2.5%	39	2.2%	63	4.1%	Mar-09
Stable Value Fund	\$2,496,799,734	23.8%	0.5%	30	1.0%	29	2.0%	16	1.9%	32	2.0%	31	2.6%	Jun-09
3-Year Constant Maturity Yield			0.4%	97	0.7%	95	1.3%	88	1.1%	99	0.9%	99	0.9%	Jun-09
T-BILLS + 1.5%			0.6%	12	1.1%	13	2.0%	10	1.7%	37	1.7%	43	1.6%	Jun-09

	Return									Risk <sup>1</sup>
	Mercer Rating	3 Yea 06/30		3 Yea 03/31	ars to /2017	3 Yea 12/31	ars to /2016	3 Yea 09/30	ars to /2016	5 Years to 06/30/2017
		1	U	1	U	1	U	1	U	I
Large Cap Passive Fund (tracked within 20bps)		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Equity Index Fund	А	✓	NA	✓	NA	✓	NA	✓	NA	NA
Large Cap Value Fund		✓	✓	×	✓	×	<b>✓</b>	×	✓	NA
Hotchkis & Wiley Large Cap Value	A (T)	✓	✓	✓	✓	✓	✓	×	×	✓
Macquarie Large Cap Value <sup>2</sup>	А	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boston Partners Large Cap Value	А	✓	✓	×	×	×	×	×	×	✓
Large Cap Growth Fund		×	✓	×	×	×	×	×	✓	NA
Sands Capital Large Cap Growth	A (T)	×	×	×	×	×	×	×	×	✓
Wellington Opportunistic Growth	А	×	×	×	×	×	×	×	×	✓
Loomis Large Cap Growth <sup>3</sup>	B+ (T)	✓	✓	✓	✓	✓	✓	✓	✓	✓

A check mark is given if the fund's/manager's standard deviation is within 150% of the benchmark's. For the International Equity Fund, the stated threshold is within 125%.

<sup>&</sup>lt;sup>2</sup> Represents the Macquarie Large Cap Growth Composite.

<sup>&</sup>lt;sup>3</sup> Represents the Loomis Large Cap Growth Composite.

<sup>\*</sup> A Mercer rating signifies our opinion of a strategy's prospects for outperforming a suitable benchmark over a timeframe appropriate for that particular strategy. Strategies rated A are those assessed as having "above average" prospects of outperformance, but which are qualified by at least one of the following: (1) There are other strategies that Mercer believes are more likely to achieve outperformance; (2) Mercer requires more evidence to support its assessment. Strategies rated B are those assessed as having "average" prospects of outperformance. Those rated C are those assessed as having "below average" prospects of outperformance. The R rating is applied in three situations: (1) Where Mercer has carried out some research, but has not completed its full investment strategy research process; (2) In product categories where Mercer does not maintain formal ratings, but where there are other strategies in which we have a higher degree of confidence; (3) Mercer has in the past carried out its full investment strategy research process, but we are no longer maintaining full research coverage on the strategy. If the rating shown is N, or if no rating is shown at all, this signifies that the strategy is not currently rated by Mercer. Some strategy ratings may carry a supplemental indicator, such as P (Provisional), Watch (W), or High Tracking Error (T). A Preferred Provider status is assigned to high-conviction strategies within product categories for which the primary goal is not outperformance of a benchmark (for example, passive strategies).

					Ret	urn				Risk¹
	Mercer Rating	3 Yea 06/30	ars to /2017		ars to /2017	3 Yea 12/31	rs to /2016	3 Yea 09/30	ars to /2016	5 Years to 06/30/2017
		1	U	1	U	1	U	1	U	1
Mid/Small Cap Passive Fund (tracked within 30 bps)		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Russell 2500 Index Fund	А	✓	NA	✓	NA	✓	NA	✓	NA	NA
Mid/Small Cap Value Fund		✓	✓	✓	✓	×	✓	×	✓	NA
Hotchkis & Wiley SMID Cap Value	B+ (T)	×	×	×	×	×	×	×	×	✓
EARNEST Partners SMID Cap Value	B+	✓	✓	✓	✓	✓	✓	✓	✓	✓
WEDGE SMID Cap Value	B+	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mid/Small Cap Growth Fund		✓	✓	×	✓	×	✓	×	✓	NA
TimesSquare SMID Cap Growth	А	×	×	×	×	×	×	×	×	✓
Brown Advisory	B+	✓	✓	✓	✓	✓	✓	✓	✓	✓

<sup>1</sup> A check mark is given if the fund's/manager's standard deviation is within 150% of the benchmark's. For the International Equity Fund, the stated threshold is within 125%.

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				Risk <sup>1</sup>							
	Mercer Rating		3 Years to 06/30/2017		3 Years to 03/31/2017		ars to /2016	3 Years to 09/30/2016		5 Years to 06/30/2017	
		ı	U	ı	U	ı	U	1	U	ı	
International Passive Fund (tracked within 60 bps)		<b>✓</b>	NA	✓	NA	✓	NA	✓	NA	NA	
BlackRock ACWI ex US Fund	А	✓	NA	✓	NA	✓	NA	✓	NA	NA	
International Equity Fund		✓	✓	✓	✓	✓	✓	✓	✓	NA	
Baillie Gifford ACWI ex US Growth	А	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mondrian ACWI ex US Value	B+	×	×	✓	×	✓	<b>✓</b>	<b>✓</b>	×	✓	
Global Equity Fund		✓	✓	✓	✓	✓	✓	✓	✓	NA	
Wellington Global Opportunities	B+	✓	✓	✓	✓	✓	<b>✓</b>	<b>✓</b>	✓	✓	
Arrowstreet Global Equity ACWI	А	✓	✓	✓	✓	✓	✓	✓	✓	✓	

<sup>1</sup> A check mark is given if the fund's/manager's standard deviation is within 150% of the benchmark's. For the International Equity Fund, the stated threshold is within 125%.

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				Risk <sup>1</sup>						
	Mercer Rating		ars to 0/2017		ars to /2017		ars to /2016	3 Yea 09/30	ars to /2016	5 Years to 06/30/2017
		1	U	1	U	ı	U	1	U	1
Inflation Responsive Fund		✓	✓	✓	✓	✓	✓	✓	✓	NA
PIMCO Inflation Response-Multi Asset	B+	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	✓	NA
Fixed Income Passive Fund (tracked within 25 bps)		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Debt Index Fund	А	✓	NA	✓	NA	✓	NA	✓	NA	NA
Fixed Income Fund		✓	✓	✓	✓	✓	✓	✓	✓	NA
TCW Core Plus <sup>2</sup>	А	✓	×	✓	×	✓	×	✓	×	✓
Prudential Core Plus <sup>3</sup>	А	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓
Stable Value Fund	А	✓	✓	✓	×	✓	<b>✓</b>	✓	×	NA

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<sup>&</sup>lt;sup>2</sup> Represents the TCW Core Plus Composite.

<sup>&</sup>lt;sup>3</sup> Represents the Prudential Core Plus Composite.

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Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
TimesSquare SMID Growth	3Q16	A	Maintain Watch Status	TSCM's investment process utilizes a fundamental growth equity approach. They place particular emphasis on management quality and how the management teams are aligned with shareholders, along with a detailed understanding of what constitutes a superior business model. The strategy's investable universe spans from \$300M to \$7 Billion. TSCM seeks companies that have experienced, properly motivated management teams with distinct sustainable competitive advantages. The team will focus on securities that have the potential to appreciate 25%-50% over the next 18-month period. The team is constantly reviewing security valuations and will re-examine securities when they near the target price set at purchase. The strategy will have close to 100 names so position sizes are relatively smaller. Mercer believes the key strength of the strategy is the quality of research and experienced portfolio managers, Grant Babyak and Tony Rosenthal.  The strategy has struggled more recently, as it underperformed over the last three calendar years. Historically, the fundamental approach has been beneficial during falling markets and that is where the strategy hadadded a significant portion of its alpha. TSCM outperformed the benchmark during the last 12 down markets, but struggled at certain points in extreme growth markets. Since 2013, there have only been three negative quarters by the Russell 2500 Growth Index, which has been a bit of a headwind for TSCM. During the second quarter, the strategy outperformed the benchmark by 130 basis points and ranked in the top half of the peer group universe. Growth oriented securities have continued to outperform in 2017, and this was beneficial for TimesSquare, who was roughly 5% overweight the information technology sector. TimesSquare, who was roughly 5% overweight the information technology sector. TimesSquare, who was roughly 5% overweight and an animal report, improved guidance and renewed investor optimism in 3D printing. TimesSquare did continue to struggle with selection in the health car

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Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Sands Large Cap Growth	4Q16	A (T)	Maintain Watch Status	Sands constructs a concentrated, aggressive growth portfolio with low turnover and adheres to a strict buy and hold philosophy. Due to the funds loose constraints and concentrated nature, it can be common for the strategy to exhibit significant tracking error relative to the benchmark. The conviction-weighted, concentrated structure of this portfolio places a heavy emphasis on top holdings and these can have a significant impact on the strategy's performance. The top five holdings represented just over 33% of the portfolio at the end of the second quarter. Sands continued its strong run in the second quarter, as the strategy outperformed the Russell 1000 Growth Index by 270 basis points and ranked in the 13th percentile of the peer group universe. Year-to date, Sands has outperformed the benchmark by 850 basis points and ranked in the 4th percentile of the peer group universe. Sands continued to benefit from the outperformance of growth oriented equities with higher earnings and sales growth. Sands large overweight (11.7%) to the information technology sector aided results, along with strong security selection, which added 230 basis points of relative outperformance. Sands out of benchmark exposure to Alibaba was the key contributor during the second quarter. Alibaba benefited from strong revenue growth, and provided revenue guidance of 45-49% growth in 2018, which was well above expectations. Alibaba returned over 30% during the quarter and was the top absolute and relative performer during the quarter.  2016 was a difficult year for Sands. The first and fourth quarters were the top two worst quarters in the strategy's lengthy history. In 2016, the strategy trailed the benchmark by 1,390 basis points and ranked in the 99th percentile of the peer group universe. Sands active sector exposures proved unfavorable, as investors preferred higher yielding stocks in the more defensive sectors like utilities and telecommunications. The markets preference for yield subsided slightly in the second half of 2016, but the t

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Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Wellington Opportunistic Growth	4Q16	A	Maintain Watch Status	Over the long term, Wellington believes companies that can sustain above average earnings growth will outperform the growth indices and the market overall. The investment objective of the Opportunistic Growth portfolio is to provide long-term, total returns above the growth indexes by investing in the stocks of successful, growing companies. Wellington seeks companies that either have a cost advantage, a customer advantage, or competitive advantage before conducting a further in-depth, fundamental review of the business model. The final Opportunistic Growth portfolio is composed of roughly 100 to 150 stocks and is constructed in three different sleeves: large cap, mid cap, and small cap. Allocation to each sleeve is determined by the market weights of large, mid and small cap stocks in the Russell 3000 Growth Index.  Wellington flagged the watch list for performance reason during the fourth quarter of 2016, as relative performance struggled over the prior to two and a half year period. Over 2016, Wellington trailed the benchmark by 450 basis points and ranked in the bottom half of the peer group universe. 2016 was a very difficult market environment for active large cap growth managers, as investors preferred higher yielding stocks in more defensive sectors like utilities and telecommunications. The markets preference for yield subsided slightly in the second half of 2016, but the top third highest yielding stocks in the Russell 1000 Growth Index outperformed the bottom third lowest yielding stocks by over 1500 basis points. Wellington continued its strong performance during the second quarter, as it outpaced the Russell 1000 Index by 180 basis points. Investors continued to prefer faster growing companies and this was a tailwind for Wellington's growth oriented investment approach. A majority of the outperformance during the quarter was a result of strong security selection in the information technology sector. Wellington had an out-of-benchmark position in Alibaba which was up over 30% during the quarter, alo

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Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Boston Partners Large Cap ∀alue	1Q17	A	Maintain Watch Status	Boston Partners attempt to identify securities that exhibit quality, attractive valuations and improving business momentum. The strategy is typically more conservative and generally performs best in periods of heightened volatility. The process is defined by the team's unwavering focus on stocks exhibiting quality, valuation, and improving business momentum. The strategy's front-end quantitative screen is simple yet effective in its role of providing structure and focus to the fundamental research effort. This is a well-diversified, fundamentally-driven strategy that benefits from the experience, insights, and close collaboration of portfolio managers Mark Donovan and David Pyle. The strategy is expected to exhibit a relative value approach and has a focus on principal protection.  Boston Partners flagged the watch list for underperformance during the first quarter of 2017 and this was mainly attributed to the relative underperformance in 2016. Boston Partners trailed the benchmark by 230 basis points in 2016, as higher dividend paying companies led the market. Boston Partners's investment process results in a strong negative tilt towards dividend factors, which would explain the calendar year underperformance. Despite the style headwinds, Boston Partners ranked in the 51 <sup>st</sup> percentile of the peer group universe, and fared better in the fourth quarter when cyclical securities came back in favor. Growth oriented securities have come back in favor in 2017, and this has been beneficial for Boston Partner's relative value style. The strategy was largely overweight the information technology sector and benefited from strong security selection. Additionally, the strategy was underweight the energy sector, which continued to struggle as oil prices declined. Boston Partners avoided the oil services industry completely due to concerns over capital spending budgets. Year-to-date, the strategy has outperformed the index by 220 basis points and ranked in the top third of the peer group universe. The strategy's positions i

<sup>\*</sup> A Mercer rating signifies our opinion of a strategy's prospects for outperforming a suitable benchmark over a timeframe appropriate for that particular strategy. Strategies rated A are those assessed as having "above average" prospects of outperformance. Those rated B+ are those assessed as having "above average" prospects of outperformance, but which are qualified by at least one of the following: (1) There are other strategies that Mercer believes are more likely to achieve outperformance; (2) Mercer requires more evidence to support its assessment. Strategies rated B are those assessed as having "average" prospects of outperformance. Those rated C are those assessed as having "below average" prospects of outperformance. The R rating is applied in three situations: (1) Where Mercer has carried out some research, but has not completed its full investment strategy research process; (2) In product categories where Mercer does not maintain formal ratings, but where there are other strategies in which we have a higher degree of confidence; (3) Mercer has in the past carried out its full investment strategy research process, but we are no longer maintaining full research coverage on the strategy. If the rating shown is N, or if no rating is shown at all, this signifies that the strategy is not currently rated by Mercer. Some strategy ratings may carry a supplemental indicator, such as P (Provisional), Watch (W), or High Tracking Error (T). A Preferred Provider status is assigned to high-conviction strategies within product categories for which the primary goal is not outperformance of a benchmark (for example, passive strategies).

Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Hotchkis and Wiley	1Q17	B+ (T)	Maintain Watch Status	Hotchkis & Wiley utilizes a fundamental, bottom-up approach to value investing. The firm seeks to exploit mispriced securities by investing in undiscovered or out of favor companies where the intrinsic value of the companies future cash flows exceeds the market price. The team does not consider benchmark characteristics in portfolio construction, as they view permanent loss of capital the primary source of risk. Hotchkis believes that the low valuations and lower leverage provides them a margin of safety.  Hotchkis, like other value managers, struggled in 2016 when more defensive names were in favor. Hotchkis avoided the non-cyclical securities with higher payout ratios that investors preferred during the first half of 2016, as Hotchkis believed these companies had excessive valuations resulting from the low interest rate environment. During the second half of 2016, cyclical securities rebounded and outperformed the securities with higher payout ratios. In 2016, Hotchkis underperformed the benchmark by 320 basis points but ranked in the top half of the peer group universe. Growth continued to outperform value in the mid cap space during the second quarter and the spread has been over 600 basis points year-to-date. Investors have preferred equities that have exhibited above average growth, mainly coming from the information technology and health care sectors. During the second quarter, Hotchkis and Wiley underperformed the index by 140 basis points and ranked in the bottom decile of the peer group universe. A majority of the underperformance came from Hotchkis's large overweight to the energy sector (13.3%), which was the worst performer as oil prices continued to decline. Three of Hotchkis's energy holdings were down over 40% during the quarter and Whiting Petroleum was the largest dectractor (2.6% of the portfolio). Security selction in the consumer discretionary sector was also a detractor and the sector allocation represented a significant portion of the portfolio (19.4%).

<sup>\*</sup> A Mercer rating signifies our opinion of a strategy's prospects for outperforming a suitable benchmark over a timeframe appropriate for that particular strategy. Strategies rated A are those assessed as having "above average" prospects of outperformance, but which are qualified by at least one of the following: (1) There are other strategies that Mercer believes are more likely to achieve outperformance; (2) Mercer requires more evidence to support its assessment. Strategies rated B are those assessed as having "average" prospects of outperformance. Those rated C are those assessed as having "below average" prospects of outperformance. The R rating is applied in three situations: (1) Where Mercer has carried out some research, but has not completed its full investment strategy research process; (2) In product categories where Mercer does not maintain formal ratings, but where there are other strategies in which we have a higher degree of confidence; (3) Mercer has in the past carried out its full investment strategy research process, but we are no longer maintaining full research coverage on the strategy. If the rating shown is N, or if no rating is shown at all, this signifies that the strategy is not currently rated by Mercer. Some strategy ratings may carry a supplemental indicator, such as P (Provisional), Watch (W), or High Tracking Error (T). A Preferred Provider status is assigned to high-conviction strategies within product categories for which the primary goal is not outperformance of a benchmark (for example, passive strategies).

#### FEE REVIEW

Α

A	В	C	D	E	F	G	п	1
					C+D+E	B*F		F-H
Funds and Sub-Advisors	Assets	Inv. Mgmt. Fee	Custodial Expenses <sup>1</sup>	NC Budget <sup>2</sup>	Total Estimated Expense (%)	Total Estimated Expense (\$) <sup>3</sup>	Mercer Median Expense <sup>4</sup>	Difference
North Carolina Stable Value Fund⁵ Galliard	\$2,496,799,734 \$2,496,799,734	<b>0.333%</b> 0.333%	0.001% 0.000%	0.025%	0.359%	<b>\$8,964,781</b> \$8,314,343	0.42% 0.42%	-0.06% -0.09%
North Carolina Fixed Income Passive Fund BlackRock	<b>\$471,776,749</b> \$471,776,749	<b>0.020%</b> 0.020%	0.002% 0.000%	0.025%	0.047%	<b>\$221,741</b> \$94,355	0.20% 0.02%	-0.15% 0.00%
North Carolina Fixed Income Fund 50% TCW <sup>6</sup> 50% Prudential	\$694,702,567 \$347,077,035 \$347,625,532	<b>0.158%</b> 0.166% 0.150%	0.006% 0.000% 0.000%	0.025%	0.189%	\$1,316,212 \$576,866 \$521,438	0.49% 0.25% 0.25%	-0.30% -0.08% -0.10%
North Carolina Inflation Sensitive Fund PIMCO	\$438,307,108 \$438,307,108	<b>0.700</b> % 0.700%	0.002% 0.000%	0.025%	0.727%	\$3,186,239 \$3,068,150	0.82% 0.82%	-0.09% -0.12%
North Carolina Large Cap Passive Fund BlackRock	<b>\$1,494,328,354</b> \$1,494,328,354	<b>0.005</b> % 0.005%	0.000% 0.000%	0.025%	0.030%	<b>\$444,403</b> \$74,716	0.20% 0.01%	-0.17% -0.01%
North Carolina Large Cap Value Fund 33.3% Hotchkis & Wiley 33.3% Macquarie 33.3% Boston Partners	\$994,138,045 \$333,307,264 \$328,212,922 \$332,617,859	0.340% 0.400% 0.284% 0.338%	0.008% 0.000% 0.000% 0.000%	0.025%	0.373%	\$3,711,353 \$1,333,229 \$931,426 \$1,122,854	0.70% 0.43% 0.43% 0.43%	-0.33% -0.03% -0.14% -0.09%
North Carolina Large Cap Growth Fund 33.3% Sands Capital Management 33.3% Wellington Management Company 33.3% Loomis Sayles	\$1,004,944,427 \$333,777,678 \$334,717,146 \$336,449,603	0.395% 0.450% 0.350% 0.386%	0.008% 0.000% 0.000% 0.000%	0.025%	0.428%	\$4,303,739 \$1,502,000 \$1,171,510 \$1,299,349	0.75% 0.46% 0.57% 0.46%	-0.32% -0.01% -0.22% -0.07%
North Carolina SMID Cap Passive Fund BlackRock	\$262,777,703 \$262,777,703	<b>0.005</b> % 0.005%	0.005% 0.000%	0.025%	0.035%	<b>\$91,389</b> \$13,139	0.25% 0.02%	-0.22% -0.02%
North Carolina SMID Value Fund 33.3% Hotchkis & Wiley 33.3% EARNEST Partners 33.3% WEDGE Capital Management	\$538,459,194 \$179,411,704 \$177,909,316 \$181,138,174	0.536% 0.500% 0.470% 0.638%	0.015% 0.000% 0.000% 0.000%	0.025%	0.576%	\$3,099,550 \$897,059 \$836,174 \$1,155,691	0.93% 0.60% 0.71% 0.71%	-0.35% -0.10% -0.24% -0.07%
North Carolina SMID Growth Fund 50% TimesSquare Capital Management 50% Brown Advisory	\$418,837,373 \$210,100,698 \$208,736,675	0.590% 0.649% 0.531%	0.013% 0.000% 0.000%	0.025%	0.628%	\$2,629,223 \$1,363,043 \$1,107,458	0.94% 0.75% 0.77%	-0.31% -0.10% -0.24%
North Carolina International Passive Fund BlackRock	<b>\$57,037,794</b> \$57,037,794	<b>0.025</b> % 0.025%	0.028% 0.000%	0.025%	0.077%	<b>\$44,165</b> \$14,088	0.35% 0.06%	-0.27% -0.04%
North Carolina International Equity Fund 50% Baillie Gifford 50% Mondrian Investment Partners	\$648,267,683 \$326,793,643 \$321,474,040	0.442% 0.438% 0.447%	0.008% 0.000% 0.000%	0.025%	0.476%	\$3,082,749 \$1,432,175 \$1,435,896	0.91% 0.57% 0.57%	-0.43% -0.13% -0.13%
North Carolina Global Equity Fund 50% Wellington Management Company 50% Arrowstreet	\$948,922,862 \$477,354,192 \$471,568,670	0.544% 0.500% 0.587%	0.004% 0.000% 0.000%	0.025%	0.573%	\$5,437,059 \$2,386,771 \$2,768,628	0.94% 0.55% 0.55%	-0.37% -0.05% 0.04%
Total	\$10,469,299,593	0.319%	0.005%	0.025%	0.349%	\$36,532,603	0.577%	

B C D E F G H

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<sup>&</sup>lt;sup>1</sup>Quarterly custodian expenses paid to BNY Mellon - (Annualized)

<sup>&</sup>lt;sup>2</sup>The cost of the budget associated with the management of the Supplemental Retirement Plans, borne by each investment option in proportion to the pro-rate share of the applicable assets in that fund.

<sup>&</sup>lt;sup>3</sup>Manager fee estimates reflect investment management fee only, does not include \$31 per participant record-keeping fee.

<sup>&</sup>lt;sup>4</sup>Total Fund median expenses are compared against their respective Mercer Mutual Fund Institutional Universe, while the individual managers are compared to peers with the same vehicle and strategy assets.

<sup>&</sup>lt;sup>5</sup> Mercer Stable Value Median for Funds with over \$500M in assets

<sup>&</sup>lt;sup>6</sup> IM Fee includes 3 Month Fee Holiday

#### FEE REVIEW

North Carolina Stable Value Fund Operating Expenses	Expense Ratio	Per \$1000
Investment Management fee paid to Galliard	0.067%	\$0.67
Investment Management fees paid to Non-Affiliated Investment Advisors	0.062%	\$0.62
Investment Contract Fees*	0.170%	\$1.70
Acquired Fund Fees**	0.033%	\$0.33
Investment Contract Fees	0.014%	\$0.14
Other Acquired Fund Fees and Non-Affiliated Investment Management Fees paid to Non-Affiliated Investment Advisors***	0.019%	\$0.19
12b-1 Distribution Fee	None	None
Other Expenses	0.027%	\$0.27
Total Annual Fund Operating Expenses****	0.359%	\$3.59

Mercer Investment Consulting, Inc.

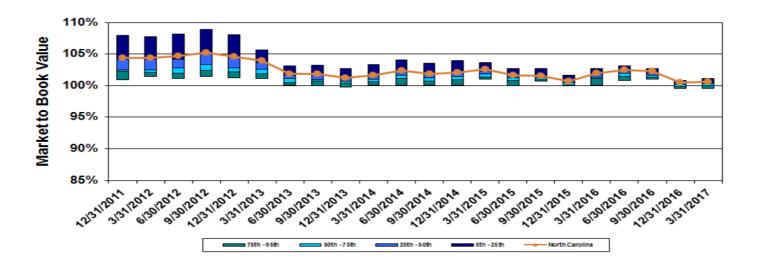
<sup>\*</sup> Fees paid to create and maintain the investments used by a stable value fund

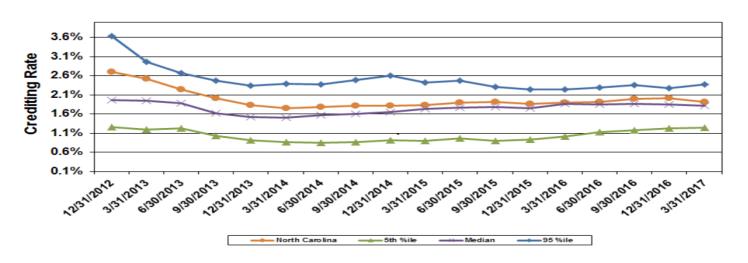
<sup>\*\*</sup> Fees borne indirectly by the Fund when it acquires an interest in another fund which pays its own separate fees

<sup>\*\*\*</sup> Includes audit fees for the cost of producing a report by a qualified auditor

<sup>\*\*\*\*</sup> Total Annual Fund Operating Expenses are reflected daily in the Fund's net asset value

#### STABLE VALUE REVIEW





#### **FUND REVIEW**

## GOALMAKER PERFORMANCE AS OF JUNE 30, 2017

Name	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Conservative 0-5 Yrs	1.8%	94	3.9%	99	5.5%	99	3.4%	71	4.7%	99
Conservative 0-5 Yrs Benchmark	1.6%	96	3.5%	99	5.0%	99	2.9%	84	4.2%	99
Conservative 6-10 Yrs	2.1%	79	4.9%	83	7.4%	82	3.8%	56	5.7%	84
Conservative 6-10 Yrs Benchmark	1.9%	86	4.4%	85	6.9%	86	3.3%	68	5.2%	87
Conservative 11-15 Yrs	2.7%	69	6.6%	79	10.4%	72	4.6%	47	7.5%	80
Conservative 11-15 Yrs Benchmark	2.4%	84	5.9%	86	9.9%	78	4.2%	62	7.1%	86
Conservative 16+ Yrs	3.4%	42	8.4%	53	14.0%	29	5.3%	27	9.4%	36
Conservative +16 Yrs Benchmark	3.0%	72	7.7%	73	13.6%	40	5.0%	42	9.1%	49

Name	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Moderate 0-5 Yrs	2.3%	53	5.4%	83	8.5%	73	4.0%	59	6.3%	77
Moderate 0-5 Yrs Benchmark	2.1%	84	4.9%	90	8.0%	76	3.6%	67	5.8%	87
Moderate 6-10 Yrs	2.7%	34	6.6%	40	10.4%	32	4.6%	21	7.5%	47
Moderate 6-10 Yrs Benchmark	2.4%	66	5.9%	73	9.9%	40	4.2%	43	7.1%	50
Moderate 11-15 Yrs	3.2%	22	8.0%	28	13.1%	25	5.1%	14	8.9%	25
Moderate 11-15 Yrs Benchmark	2.9%	54	7.3%	63	12.6%	29	4.7%	34	8.5%	44
Moderate 16+ Yrs	3.9%	7	9.9%	8	17.0%	2	5.7%	10	10.8%	3
Moderate +16 Yrs Benchmark	3.5%	28	9.1%	21	16.6%	6	5.4%	18	10.5%	4

Name	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Aggressive 0-5 Yrs	2.8%	15	6.9%	19	11.0%	20	4.7%	11	7.8%	6
Aggressive 0-5 Yrs Benchmark	2.5%	32	6.2%	32	10.5%	24	4.4%	36	7.4%	21
Aggressive 6-10 Yrs	3.2%	3	8.0%	4	13.1%	1	5.1%	5	8.9%	2
Aggressive 6-10 Yrs Benchmark	2.9%	22	7.3%	24	12.6%	7	4.7%	13	8.5%	4
Aggressive 11-15 Yrs	3.7%	2	9.4%	1	16.0%	1	5.6%	1	10.4%	1
Aggressive 11-15 Yrs Benchmark	3.3%	18	8.5%	18	15.6%	1	5.3%	7	10.1%	3
Aggressive 16+ Yrs	4.3%	1	11.3%	1	20.0%	1	6.2%	1	12.2%	1
Aggressive +16 Yrs Benchmark	3.9%	7	10.3%	1	19.7%	1	5.9%	8	12.1%	1

• The GoalMaker Portfolios had competitive performance versus their benchmarks over the time periods evaluated ended June 30, 2017.

## FUND REVIEW

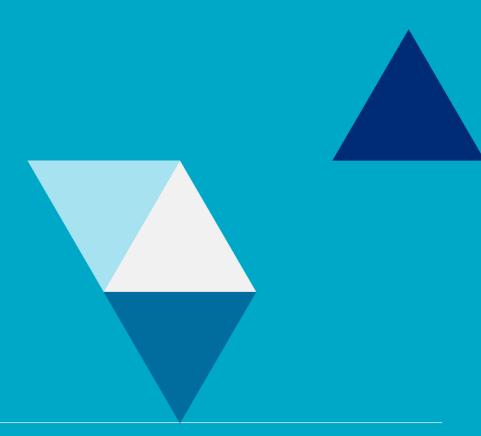
# MANAGER PERFORMANCE AS OF JUNE 30, 2017

													Ince	ption
Name	Market Value (\$m)	(%)	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	Return	Since
NCSRP BlackRock Equity Index	\$1,494.3	14.3%	3.1%		9.3%		17.9%		9.6%		14.6%		16.9%	Mar-09
S&P 500	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		3.1%		9.3%		17.9%		9.6%		14.6%		16.9%	Mar-09
NCSRP Hotchkis & Wiley Large Cap Value	\$333.3	3.2%	3.8%	9	8.7%	16	28.1%	5	8.7%	23	16.7%	4	19.5%	Mar-09
Russell 1000 Value			1.3%	76	4.7%	75	15.5%	80	7.4%	53	13.9%	52	16.3%	Mar-09
NCSRP Macquarie Large Cap Value	\$328.2	3.1%	-0.2%	96	3.1%	93	6.9%	99					6.4%	Jun-15
Delaware Large Cap Value Strategy			-0.1%	96	3.2%	93	7.2%	99	7.9%	39	14.4%	40	6.7%	Jun-15
Russell 1000 Value .			1.3%	76	4.7%	75	15.5%	80	7.4%	53	13.9%	52	7.6%	Jun-15
NCSRP Boston Partners Large Cap Value	\$332.6	3.2%	2.7%	29	6.9%	32	21.3%	26	7.8%	41	14.8%	35	15.6%	Nov-11
Russell 1000 Value			1.3%	76	4.7%	75	15.5%	80	7.4%	53	13.9%	52	14.5%	Nov-11
NCSRP Sands Capital Large Cap Growth	\$333.8	3.2%	7.4%	13	22.5%	4	26.5%	10	8.3%	83	14.8%	53	21.5%	Mar-09
Russell 1000 Growth			4.7%	61	14.0%	57	20.4%	54	11.1%	32	15.3%	39	17.7%	Mar-09
NCSRP Wellington Opportunistic Growth	\$334.7	3.2%	6.5%	25	17.8%	21	21.6%	41	10.2%	49	16.2%	23	17.5%	Mar-09
Russell 1000 Growth			4.7%	61	14.0%	57	20.4%	54	11.1%	32	15.3%	39	17.7%	Mar-09
Russell 3000 Growth			4.7%	61	13.7%	60	20.7%	50	10.8%	37	15.2%	43	17.7%	Mar-09
NCSRP Loomis Large Cap Growth	\$336.4	3.2%	8.7%	7	18.5%	16	23.2%	22					16.0%	Aug-14
Loomis Large Cap Growth Strategy			8.8%	5	18.3%	17	22.8%	28	14.3%	4	18.8%	3	15.6%	Aug-14
Russell 1000 Growth			4.7%	61	14.0%	57	20.4%	54	11.1%	32	15.3%	39	12.0%	Aug-14
NCSRP BlackRock Russell 2500 Index Fund	\$262.8	2.5%	2.1%		5.9%		19.7%		7.0%		14.1%		18.1%	Mar-09
Russell 2500			2.1%		6.0%		19.8%		6.9%		14.0%		18.0%	Mar-09
NCSRP Hotchkis & Wiley	\$179.4	1.7%	-1.1%	92	0.0%	85	24.7%	21	3.1%	89	14.4%	46	21.4%	Mar-09
Hotchkis Custom SMID Value Index			0.3%	64	2.0%	76	18.4%	62	6.2%	47	13.7%	68	18.0%	Mar-09
NCSRP EARNEST Partners	\$177.9	1.7%	2.0%	34	8.8%	9	23.3%	31	8.6%	16	16.0%	11	18.1%	Mar-09
EARNEST Custom SMID Value Index			0.3%	64	2.0%	76	18.4%	62	6.2%	47	13.7%	68	16.9%	Mar-09
NCSRP WEDGE SMID Cap Value	\$181.1	1.7%	1.8%	37	5.7%	26	21.2%	44	9.3%	10	16.0%	11	16.4%	Dec-11
Russell 2500 Value			0.3%	64	2.0%	76	18.4%	62	6.2%	47	13.7%	68	14.0%	Dec-11
NCSRP TimesSquare Composite	\$210.1	2.0%	5.4%	37	11.5%	56	18.1%	75	5.8%	82	13.5%	64	12.1%	Mar-09
TimesSquare Custom SMID Growth Index			4.1%	62	10.6%	64	21.4%	57	7.7%	57	14.3%	33	11.2%	Mar-09

# FUND REVIEW MANAGER PERFORMANCE AS OF JUNE 30, 2017

													Ince	ption
	Market Value												<b>.</b> .	
Name	(\$m)	(%)	3 Mo	Rank	YTD	Rank	1 Yr		3 Yrs		5 Yrs	Rank	Return	Since
NCSRP Brown Advisory	\$208.7	2.0%	4.6%	58	10.1%	75	18.6%	72	11.5%	10	15.5%	22	19.1%	Mar-09
Brown Custom SMID Growth Index			4.1%	62	10.6%	64	21.4%	57	7.7%	57	14.3%	33	18.1%	Mar-09
NCSRP BlackRock ACWI ex US Fund	\$57.0	0.5%	5.9%		14.5%		20.8%		1.0%		7.4%		10.3%	Mar-09
MSCI ACWI ex USA Gross			6.0%		14.5%		21.0%		1.3%		7.7%		10.6%	Mar-09
NCSRP Baillie Gifford ACWI ex US Growth	\$326.8	3.1%	9.2%	9	19.8%	11	27.5%	10	5.9%	7	10.6%	33	14.1%	Mar-09
MSCI ACWI ex USA Gross .			6.0%	72	14.5%	64	21.0%	48	1.3%	80	7.7%	91	10.6%	Mar-09
MSCI AC Wld ex US Growth Gross			7.7%	28	17.7%	22	17.8%	73	2.9%	50	8.4%	83	10.9%	Mar-09
NCSRP Mondrian ACWI ex US Value	\$321.5	3.1%	4.0%	96	12.0%	91	14.8%	88	0.9%	88	7.6%	93	9.7%	Mar-09
MSCI ACWI ex USA Gross			6.0%	72	14.5%	64	21.0%	48	1.3%	80	7.7%	91	10.6%	Mar-09
MSCI AC Wld Ex US Value Gross			4.3%	94	11.4%	95	24.3%	23	-0.4%	97	6.9%	97	10.3%	Mar-09
NCSRP Wellington Global Opportunities	\$477.4	4.6%	6.0%	31	14.6%	27	22.1%	30	7.7%	19	14.4%	14	12.7%	Mar-09
MSCI ACWI Gross			4.5%	66	11.8%	55	19.4%	55	5.4%	61	11.1%	74	10.0%	Mar-09
NCSRP Arrowstreet Global Equity ACWI	\$471.6	4.5%	4.9%	53	13.2%	40	20.2%	47	6.5%	39	13.4%	26	11.4%	Mar-12
MSCI ACWI Gross			4.5%	66	11.8%	55	19.4%	55	5.4%	61	11.1%	74	9.4%	Mar-12
NCSRP PIMCO Inflation Response Multi-Asset	\$438.3	4.2%	0.2%	60	2.8%	42	3.3%	66	0.3%	24			1.9%	Sep-13
PIMCO Inflation Response Multi-Asset Strategy			0.1%	63	2.4%	50	2.6%	75	-0.7%	38	0.2%	79	1.3%	Sep-13
PIMCO Inflation Response Index			-0.4%	80	1.2%	69	-1.7%	99	-2.4%	81	-1.3%	95	-0.7%	Sep-13
NCSRP BlackRock Debt Index Fund	\$471.8	4.5%	1.5%		2.3%		-0.3%		2.6%		2.3%		3.0%	Sep-10
Barclays Aggregate .			1.4%		2.3%		-0.3%		2.5%		2.2%		2.9%	Sep-10
NCSRP TCW	\$347.1	3.3%	1.4%	84	2.1%	93							2.1%	Mar-09
Barclays Aggregate			1.4%	80	2.4%	75	0.7%	58	2.7%	70	3.8%	22	2.4%	Mar-09
NCSRP Prudential Core Plus	\$347.6	3.3%	2.3%	8	4.1%	7	2.9%	19					4.2%	Dec-14
Prudential Core Plus Strategy			2.3%	8	4.3%	6	3.0%	17	4.1%	5	4.5%	7	4.1%	Dec-14
Barclays Aggregate .			1.4%	78	2.3%	86	-0.3%	93	2.5%	86	2.2%	95	2.2%	Dec-14

# **APPENDIX**



## NET PERFORMANCE AS OF JUNE 30, 2017

	En	ding Ju	ne 30, 20	017	Incep	tion
	3 Мо	1 Yr	3 Yrs	5 Yrs	Return	Since
Large Cap Passive	3.1%	17.9%	9.5%	14.5%	16.7%	Mar-09
S&P 500	3.1%	17.9%	9.6%	14.6%	16.9%	Mar-09
NCSRP BlackRock Equity Index	3.1%	17.9%	9.6%	14.6%	16.9%	Mar-09
S&P 500	3.1%	17.9%	9.6%	14.6%	16.9%	Mar-09
Large Cap Value	2.0%		7.5%	14.3%	15.4%	
Russell 1000 Value	1.3%	15.5%	7.4%	13.9%	16.3%	Mar-09
NCSRP Hotchkis & Wiley Large Cap Value	3.7%	27.4%	8.1%	16.1%		Mar-09
Russell 1000 Value ,	1.3%	15.5%	7.4%	13.9%	16.3%	Mar-09
NCSRP Delaware Large Cap Value	-0.3%	6.6%			6.1%	
Russell 1000 Value ,	1.3%	15.5%	7.4%	13.9%	7.6%	Jun-15
NCSRP Boston Partners Large Cap Value	2.6%	20.9%	7.4%	14.4%		Nov-11
Russell 1000 Value .	1.3%	15.5%	7.4%	13.9%	14.5%	Nov-11
Large Cap Growth	7.4%	23.2%	10.6%	15.2%	19.0%	Mar-09
Russell 1000 Growth	4.7%	20.4%	11.1%	15.3%	17.7%	Mar-09
NCSRP Sands Capital Large Cap Growth	7.2%	25.8%	7.8%	14.2%		Mar-09
Russell 1000 Growth	4.7%	20.4%	11.1%	15.3%	17.7%	Mar-09
NCSRP Wellington Opportunistic Growth	6.4%	21.1%	9.9%	15.8%		Mar-09
Russell 1000 Growth	4.7%		11.1%	15.3%		Mar-09
Russell 3000 Growth	4.7%	20.7%	10.8%	15.2%	17.7%	Mar-09
NCSRP Loomis Large Cap Growth	8.6%				15.5%	
Russell 1000 Growth .	4.7%	20.4%	11.1%	15.3%	12.0%	Aug-14
Mid/Small Cap Passive	2.1%	19.7%	7.0%	14.0%	17.9%	Mar-09
Russell 2500	2.1%	19.8%	6.9%	14.0%	18.0%	Mar-09
NCSRP BlackRock Russell 2500 Index Fund	2.1%	19.7%	7.0%	14.1%	18.1%	Mar-09
Russell 2500	2.1%	19.8%	6.9%	14.0%	18.0%	Mar-09
Mid/Small Cap Value	0.8%	22.1%	6.2%	14.7%	19.8%	Mar-09
Russell 2500 Value	0.3%	18.4%	6.2%	13.7%	17.5%	Mar-09
NCSRP Hotchkis & Wiley	-1.2%	24.0%	2.5%	13.7%	20.6%	Mar-09
Hotchkis Custom SMID Value Index	0.3%	18.4%	6.2%	13.7%	18.0%	Mar-09
NCSRP EARNEST Partners	1.8%	22.7%	8.0%	15.4%	17.5%	Mar-09
EARNEST Custom SMID Value Index	0.3%	18.4%	6.2%	13.7%	16.9%	Mar-09
NCSRP WEDGE SMID Cap Value	1.7%	20.3%	8.5%	15.1%		Dec-11
Russell 2500 Value .	0.3%	18.4%	6.2%	13.7%	14.0%	Dec-11
Mid/Small Cap Growth	_	17.5%		13.6%	17.1%	
Russell 2500 Growth	4.1%	21.4%	7.7%	14.3%	18.5%	Mar-09

	Er	iding Ju	ne 30, 20	017	Incep	tion
	3 Mo	1 Yr	3 Yrs	5 Yrs	Return	Since
NCSRP TimesSquare	5.2%	17.2%	4.9%	12.6%	11.2%	Mar-09
TimesSquare Custom SMID Growth Index	4.1%	21.4%	7.7%	14.3%	11.2%	Mar-09
NCSRP Brown Advisory	4.5%	17.9%	10.9%	14.8%	18.5%	Mar-09
Brown Custom SMID Growth Index	4.1%	21.4%	7.7%	14.3%	18.1%	Mar-09
International Passive	5.9%	20.7%	0.9%	7.2%	10.1%	Mar-09
MSCI ACWI ex USA Gross	6.0%	21.0%	1.3%	7.7%	10.6%	Mar-09
NCSRP BlackRock ACWI ex US Fund	5.9%	20.7%	0.9%	7.3%	10.2%	Mar-09
MSCI ACWI ex USA Gross	6.0%	21.0%	1.3%	7.7%	10.6%	Mar-09
International Equity	6.4%	20.4%	2.7%	8.3%	11.1%	Mar-09
MSCI ACWI ex USA Gross .	6.0%	21.0%	1.3%	7.7%	10.6%	Mar-09
NCSRP Baillie Gifford ACWI ex US Growth	9.1%	26.9%	5.4%	10.1%		Mar-09
MSCI ACWI ex USA Gross .	6.0%	21.0%	1.3%	7.7%		Mar-09
MSCI AC Wid ex US Growth Gross	7.7%	17.8%	2.9%	8.4%	10.9%	Mar-09
NCSRP Mondrian ACWI ex US Value	3.9%	14.3%	0.4%	7.1%	9.2%	Mar-09
MSCI ACWI ex USA Gross	6.0%	21.0%	1.3%	7.7%	10.6%	Mar-09
MSCI AC Wid Ex US Value Gross	4.3%	24.3%	-0.4%	6.9%	10.3%	Mar-09
Global Equity	5.3%	20.3%	6.4%	13.1%	14.0%	Mar-09
MSCI ACWI Gross	4.5%	19.4%	5.4%	11.1%	13.6%	Mar-09
NCSRP Wellington Global Opportunities	5.9%	21.5%	7.2%	13.8%	12.2%	Mar-09
MSCI ACWI Gross	4.5%	19.4%	5.4%	11.1%	10.0%	Mar-09
NCSRP Arrowstreet Global Equity ACWI	4.8%	19.4%	5.8%	12.7%	10.7%	Mar-12
MSCI ACWI Gross .	4.5%	19.4%	5.4%	11.1%	9.4%	Mar-12
Inflation Responsive Fund	0.1%	2.6%	-0.5%		1.1%	Sep-13
PIMCO Inflation Response Index	-0.4%	-1.7%	-2.4%	-1.3%	-0.7%	Sep-13
NCSRP PIMCO Inflation Response Multi-Asset	0.1%	2.7%	-0.4%		1.3%	Sep-13
PIMCO Inflation Response Index	-0.4%	-1.7%	-2.4%	-1.3%	-0.7%	Sep-13
Fixed Income Passive Fund	1.5%	-0.3%	2.4%	2.1%	2.8%	Sep-10
Barclays Aggregate	1.4%	-0.3%	2.5%	2.2%	2.9%	Sep-10
NCSRP BlackRock Debt Index Fund	1.5%	-0.3%	2.5%	2.2%	2.9%	Sep-10
Barclays Aggregate	1.4%	-0.3%	2.5%	2.2%	2.9%	
Fixed Income Fund	1.8%	1.1%	3.2%	3.0%	4.9%	Mar-09
Barclays Aggregate .	1.4%	-0.3%	2.5%	2.2%	4.1%	Mar-09
NCSRP TCW	1.3%					Mar-09
Barclays Aggregate .	1.4%	-0.3%	2.5%	2.2%	2.3%	Mar-09
NCSRP Prudential Core Plus	2.2%	2.6%				Dec-14
Barclays Aggregate .	1.4%	-0.3%	2.5%	2.2%	2.2%	Dec-14
Stable Value Fund	0.5%	2.0%	1.9%	2.0%		Jun-09
3-Year Constant Maturity Yield	0.4%	1.3%	1.1%	0.9%	0.9%	
T-BILLS + 1.5%	0.6%	2.0%	1.7%	1.7%	1.6%	Jun-09

#### MANAGER UPDATES

- Mercer met with Baillie Gifford to review their ACWI ex US Alpha strategy. We like the fact that Baillie Gifford has a consistent philosophy across the firm and the firm's research effort is devoted to this, there is no distraction of having to find ideas that meet the needs of different philosophies. The stability of the investment teams at senior level helps preserve the Baillie Gifford culture, notably the focus on the long-term and the apparent collaborative approach. The ACWI ex-US Alpha strategy relies on the generation of ideas from the regional and global sector research analysts, whom we regard highly and who are generally long-term veterans of Baillie Gifford. The Portfolio Construction Group (PCG) takes the best of the ideas from these teams and places them in a holistic international context. We maintained the "A" rating on the strategy as a result of the meeting.
- Mercer met with EARNEST Partners at their Atlanta headquarters to review their Small Cap Value strategy. We recommend maintaining the
  B+ rating for EARNEST Partners' Small Cap Value strategy. The uniqueness of the firm's front-end quantitative screen, the depth and quality
  of the fundamental analysts, and the attention to risk management are key strengths of the strategy. While the firm employs a deep bench of
  investment professionals, we feel its team-based structure designed to serve multiple strategies, along with its risk management controls, may
  inhibit analysts' best ideas from being fully embraced when constructing portfolios.
- We were informed by **Macquarie Investment Management** (MIM) that after a lengthy search process (15 months and 360 original applicants), the Large Cap Value Focus team hired Erin Ksenak as an equity analyst, replacing Anthony Lombardi who left in February 2016. Ksenak has seven years of industry experience and joined most recently from Affinity Investment Advisors where she was a portfolio manager. This news has no immediate impact on our views or "A (T)" rating for the strategy. We are pleased to learn that the Large Cap Value Focus team has completed their search. We are also pleased to observe that Ksenak fits the basic parameters of experience (five to ten years) and perceived cultural fit the team shared with us earlier in the search process. We look forward to meeting Ksenak at our onsite visit later this year.
- Jay Jacobs, President and Managing Director of **PIMCO**, has decided to retire from the firm at the end of September. Jacobs' role as President was to oversee the internal facing aspects of the firm, a role he took on in the wake of the departure of former CEO Mohamed El-Erian in January 2014. He had previously been responsible for Talent Management. While this is a headline departure from the firm, we are comfortable that this will not impact the investment capabilities that we rate. At the same time it must be noted that Jacobs' departure adds to a growing concern that staff at PIMCO may be overcompensated given the observed pattern of senior personnel retiring at a relatively young age. In CEO Manny Roman, we believe PIMCO have an individual experienced at running the business on both investment and operational fronts. The fact that two veteran PIMCO operations personnel are stepping into co-COO roles appears to us to be a sensible move, and should serve to minimize disruption further down the hierarchy. We propose no rating changes on the back of this news.

## MANAGER UPDATES (CONTINUED)

- Mercer met with **Sands** to discuss their Large Cap Growth strategy. The Select Growth Equity strategy benefits from the skill and leadership of its portfolio managers and the experience and depth of the research analysts. Sands Capital Management (Sands) follows a well-defined process to identify leading growth companies that have staying power to grow faster than the benchmark for a sustained period of time. The thoroughness of their fundamental research is a competitive advantage, as it helps validate the firm's views on the long-term durability of businesses. It also gives Sands the confidence to manage concentrated strategies. Given the strategy's loose constraints and concentrated nature, tracking error can be high at times; thus, a Tracking Error designation (T) is assigned to this strategy's "A" rating. Short-term deviations relative to the benchmark can be quite significant and clients invested in this strategy should be willing to embrace a long-term investment horizon.
- Mercer met with **TCW** to review their Core Plus fixed income strategy. We continue to be impressed with the strength of the investment team and the analytical tools employed by TCW. The team employs a top-down investment process that is opportunistic, with greater emphasis on low absolute return volatility, rather than low tracking error. While recent performance of the associated strategies has been underwhelming, we have not lost our faith in the team's philosophy and process. As a more defensive manager, TCW promises its investors superior draw down protection during economic downturn, and tends to underperform in markets where riskier issues rally. Because 2016 was marked by riskier issues rallying, we did not anticipate TCW's strategies to thrive. As the team continues to anticipate the coming of a debt driven economic recession, it continues to maintain defensive credit positioning across all strategies. However, TCW has positioned itself for this event for some time now, which may continue to lead to underwhelming performance. If such is the case, we will reevaluate our opinions at the appropriate time. We maintained the "A" rating as a result of the meeting.
- We were recently informed by **TimesSquare Capital Management** (TSCM) of their decision to part ways with domestic Energy analyst Matt D'Alto (who joined TSCM in 2011). TSCM currently has no intention of hiring a direct replacement for D'Alto. As a result, oversight for U.S. Energy stocks has been assumed by Small Cap and All Cap co-portfolio manager Ken Duca, who covered the sector for TSCM from 2000 2011. Note that in addition to his co-portfolio management responsibilities, Duca also covers the Business Services and Transaction Processing groups. We are not recommending rating changes to TSCM's domestic strategies at this time. In response to this news from TSCM, we held a call with portfolio manager Tony Rosenthal. Although staff turnover often raises questions regarding a firm's cultural health and stability, we believe TSCM's decision to part ways with D'Alto was done for the future benefit of the strategies (stock selection across domestic strategies has been challenged in the Energy sector over the past five years

### MANAGER UPDATES (CONTINUED)

- Mercer met with **TimesSquare** Capital Management to review their SMID Cap Growth strategy. Our favorable opinion of TSCM's SMID Cap Growth strategy is based on a tenured, cohesive and stable portfolio management team, a proven and repeatable investment process, the strength of a deep, sector/industry specialized fundamental research effort, and the backing of a well-managed and properly incentivized investment organization. The quality of the research coupled with the stability and experience of portfolio managers Grant Babyak and Tony Rosenthal executing on a tenured philosophy and process are key strengths. As a result of the meeting, Mercer maintained the "A" rating on the strategy.
- **Wellington** informed Mercer that as of May 12, 2017, the US Securities and Exchange Commission (SEC) notified the firm that it was opening an investigation into some aspects of its private company investment activities. The investigation appears to be focused on private equity investments and associated valuation practices. Wellington believes that its procedures and practices are robust and meet regulatory obligations in all the markets in which it does business. It intends to cooperate fully with the SEC in this inquiry. We do not regard this news as directly impacting the investment capabilities of Wellington and do not propose any rating changes on Wellington's strategies. We will keep the field abreast of any further developments related to this issue as they occur.
- Wellington announced that Stephen Klar will join Brendan Swords (Chaiman & CEO) and Jean Hynes (portfolio manager and research analyst) as one of three Managing Partners (MP) of the firm. Klar will replace Phil Perelmuter, who has served in the role as Managing Partner for 11 years and will be stepping down to focus his time on other responsibilities. Klar leads the firm's Fixed Income Portfolio Management and Research group and will continue in that capacity. This news does not impact Wellington's investment capabilities, and we are not proposing any changes to the firm's rated strategies. Our understanding is that MPs typically rotate every 10 years and are elected to oversee management of the firm's partnership, functions of which include partner reviews and the distribution of partner-level profits. The MPs are not involved with the strategic direction or business management aspects of the firm.

#### APPENDIX - DISCLOSURES

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