

HEALTH WEALTH CAREER

# NORTH CAROLINA SUPPLEMENTAL RETIREMENT PLANS

## EXECUTIVE SUMMARY

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# NC CURRENT INVESTMENT STRUCTURE

Tier I Target Date Funds	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
Goal Maker		<b>Stable Value Fund</b> Galliard Stable Value	
	<b>Fixed Income</b> BlackRock Debt Index	<b>Fixed Income Fund</b> TCW Core Plus Prudential Core Plus	
	<b>Treasury Inflation Protected Securities (TIPS)</b> BlackRock TIPS Fund	<b>Inflation Responsive Fund</b> BlackRock Strategic Completion	
	<b>Large Cap Equity</b> BlackRock Equity Index	<b>Large Cap Core Fund</b> Hotchkis & Wiley Large Cap Value Macquarie Large Cap Value Sands Capital Large Cap Growth Loomis Large Cap Growth Russell 1000 Index	
	<b>Small/Mid Cap Equity</b> BlackRock Russell 2500 Index	<b>Small/Mid Cap Fund</b> Hotchkis & Wiley Mid Value Earnest Partners SMID Cap Value Wedge SMID Cap Value Brown Advisory SMID Growth Russell 2500 Index	
	<b>International Equity</b> BlackRock ACWI ex US Index	<b>International Equity Fund</b> Baillie Gifford ACWI ex US Growth Mondrian ACWI ex US Value	

# EXECUTIVE SUMMARY

## Mercer Manager Research and News Items

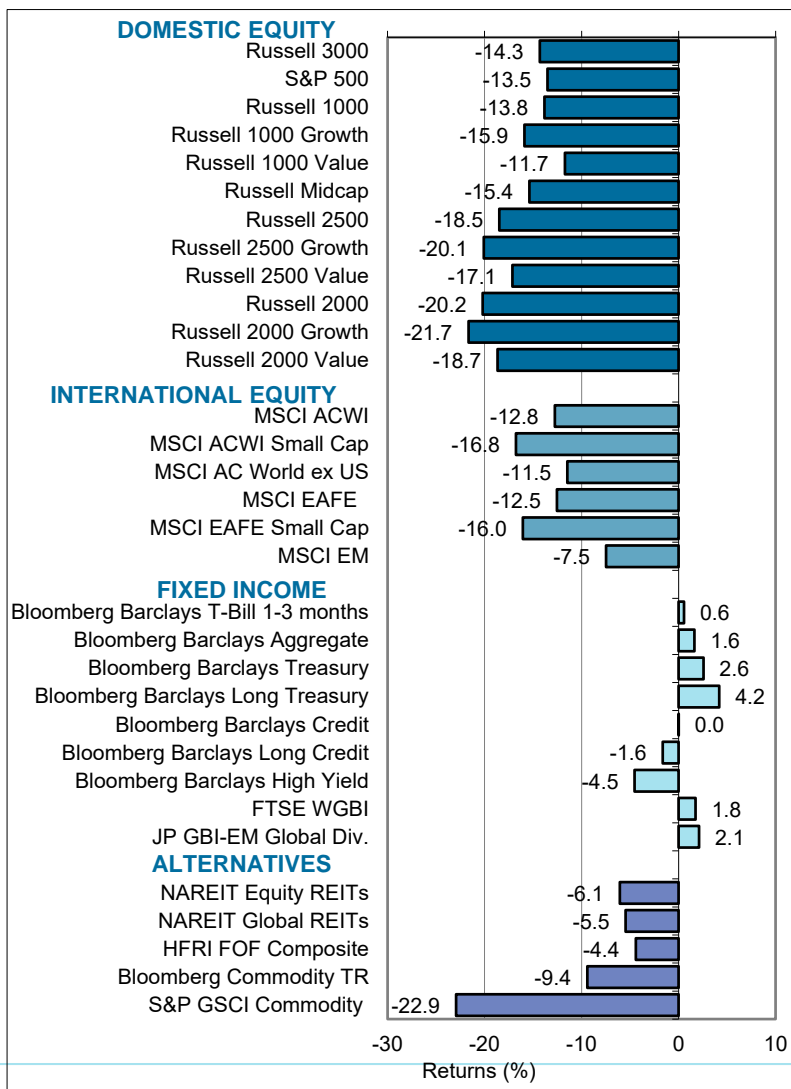
- Mercer held two on-site meetings with investment managers utilized in the NC Supplemental Retirement Plans over the quarter (Macquarie and Mondrian)
- Mercer was informed that **TCW's** Director of Credit Research, Jamie Farnham, departed the firm to pursue a career outside of the investment management business
  - Despite the loss, we continue to have a favorable view of the firm's credit research and believe they have adequate capacity to absorb the loss

## Performance Updates

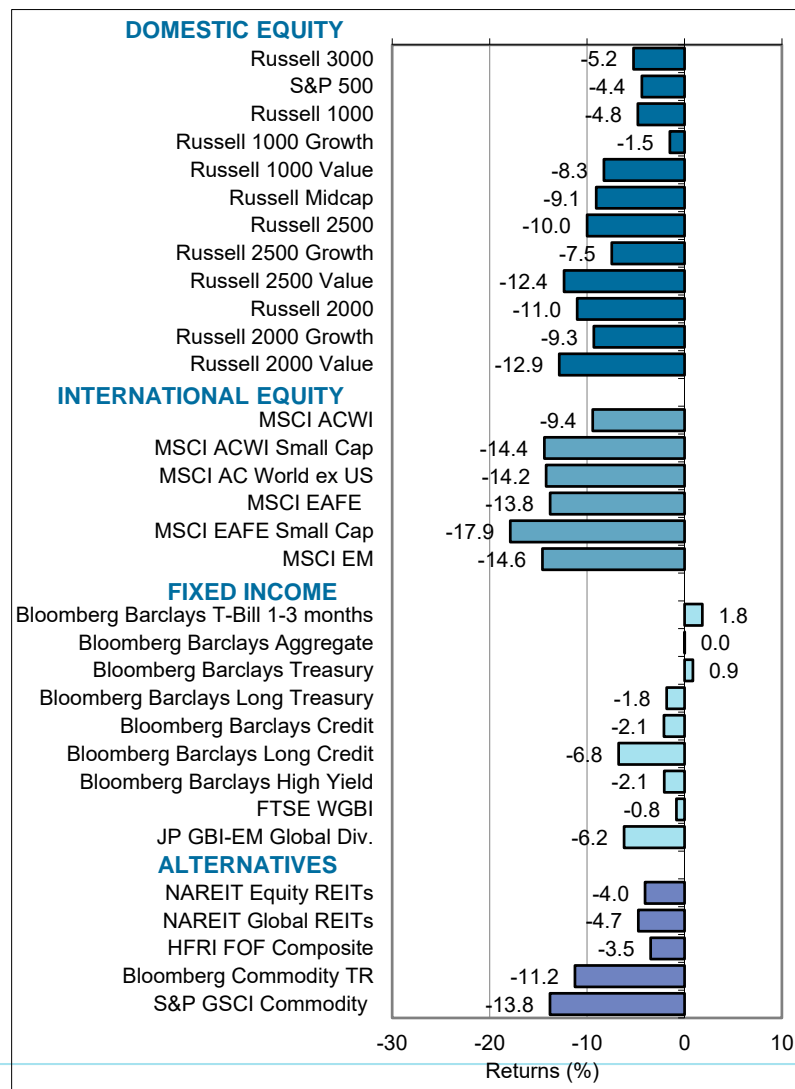
- As of 2/28/19, five of the six NC active Fund's outperformed their respective indices net of fees since inception
- Currently, the Hotchkis Mid Value, and Mondrian International Equity strategies are on the watch list for performance concerns
  - Hotchkis trailed its benchmark by 8.1% during the fourth quarter, largely attributed to their large overweight to the energy sector
  - Mondrian's outperformed its index by 340 basis points and ranked near the top of the peer group universe during the fourth quarter

# MARKET ENVIRONMENT

**Market Performance**  
Fourth Quarter 2018

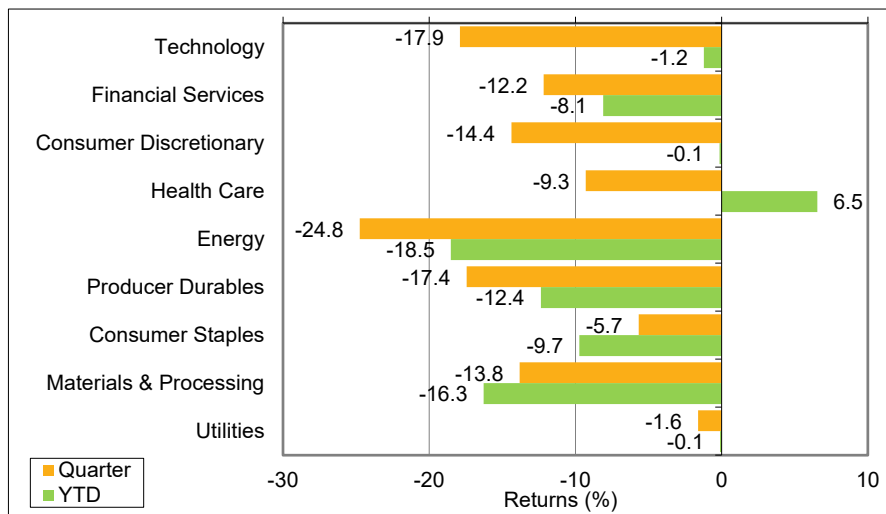


**Market Performance**  
2018

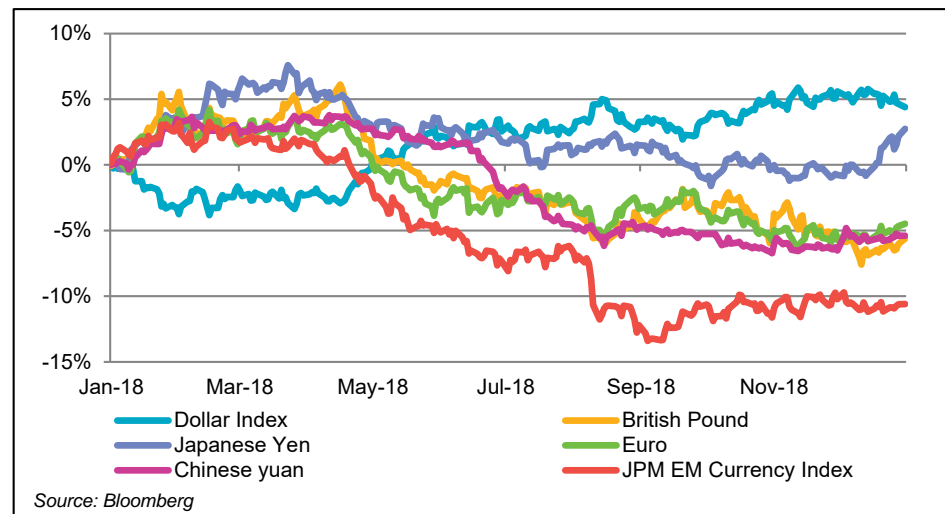


# MARKET ENVIRONMENT

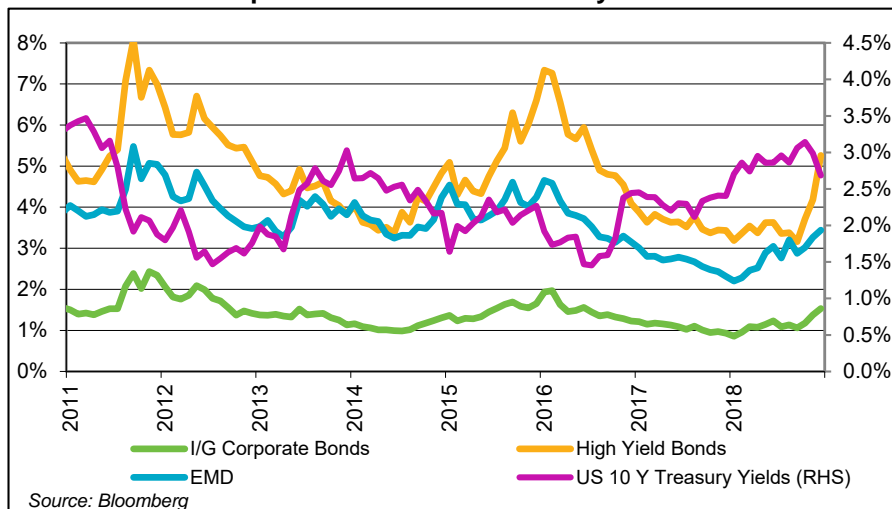
## US Russell Sector Breakdown



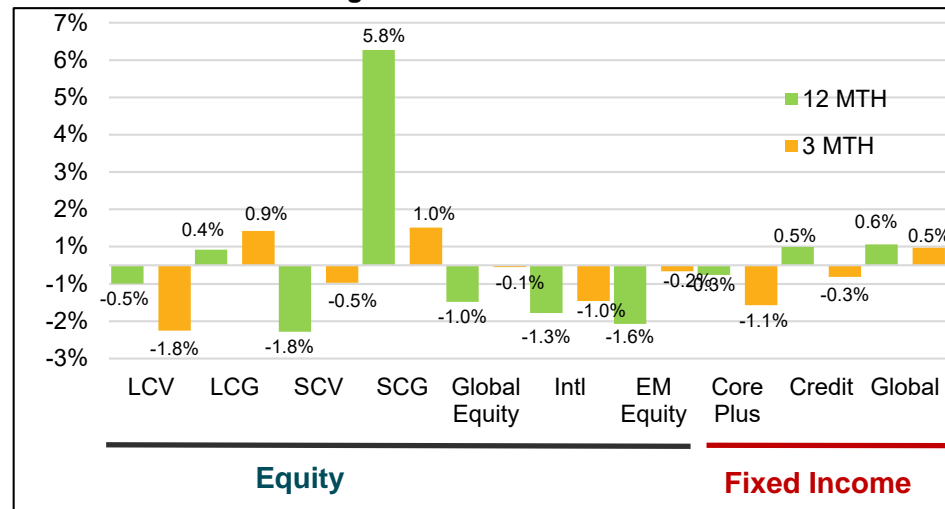
## Currencies



## Spreads and 10Y US Treasury



## Active Management Median Excess Returns



# MARKET ENVIRONMENT AS OF 3/13/19

US Market Snapshot as of Wednesday 13 March 2019

Returns in USD unless specified

	Cumulative Returns						Cumulative Returns				
	1 Week	Mth to Date	Qtr to Date	Yr to Date	1 Year		1 Week	Mth to Date	Qtr to Date	Yr to Date	1 Year
<b>US Equity Market</b>						<b>Bond Market</b>					
S&P 500	1.5%	1.0%	12.6%	12.6%	3.7%	Bloomberg Barclays T-Bill 1-3 months	0.6%	0.1%	0.5%	0.5%	2.1%
Russell 1000	1.5%	0.9%	13.0%	13.0%	3.7%	Bloomberg Barclays Aggregate	0.5%	0.7%	1.7%	1.7%	3.8%
Russell 1000 Growth	1.6%	1.2%	14.3%	14.3%	5.4%	Bloomberg Barclays Treasury	0.5%	0.6%	0.8%	0.8%	3.6%
Russell 1000 Value	1.3%	0.5%	11.8%	11.8%	1.8%	Bloomberg Barclays Credit	0.5%	0.7%	3.1%	3.1%	3.7%
Russell Midcap	1.3%	0.1%	15.7%	15.7%	2.4%	Bloomberg Barclays Long Credit	0.8%	1.1%	4.5%	4.5%	2.5%
Russell Mid Cap Growth	1.5%	-0.1%	18.0%	18.0%	5.8%	Bloomberg Barclays AGG Long Credit AA	1.0%	1.3%	3.2%	3.2%	4.2%
Russell Mid Cap Value	1.1%	0.2%	14.1%	14.1%	-0.1%	Bloomberg Barclays High Yield	0.2%	0.2%	6.4%	6.4%	4.6%
Russell 2000	1.3%	-1.2%	15.6%	15.6%	-0.9%	Citi WGBI	0.5%	0.4%	0.9%	0.9%	-1.8%
Russell 2000 Growth	1.8%	-0.8%	17.8%	17.8%	0.0%	JPM GBIEM GLOBAL DIVERS Composite - TR	-0.1%	-0.7%	3.6%	3.6%	-6.5%
Russell 2000 Value	0.7%	-1.6%	13.4%	13.4%	-1.9%	Bloomberg Barclays Long Treasury (USD)	1.3%	1.6%	1.1%	1.1%	5.1%
Russell 2500	1.3%	-0.5%	16.2%	16.2%	1.2%	<b>Others</b>					
Russell 2500 Growth	1.9%	-0.3%	18.9%	18.9%	3.1%	Pound vs. USD	1.3%	0.6%	4.5%	4.5%	-4.5%
Russell 2500 Value	0.8%	-0.7%	13.8%	13.8%	-0.4%	Euro vs. USD	0.2%	-0.4%	-1.3%	-1.3%	-8.6%
Russell 3000	1.5%	0.7%	13.2%	13.2%	3.3%	Yen vs. USD	0.5%	0.2%	-1.4%	-1.4%	-4.1%
Russell 1000 Consumer Discretionary	0.5%	0.6%	12.3%	12.3%	5.8%	CAD vs. USD	1.0%	-1.0%	2.5%	2.5%	-2.6%
Russell 1000 Consumer Staples	1.4%	0.7%	6.9%	6.9%	0.6%	60% MSCI ACWI / 40% Bbg Barclays Aggregate	0.6%	0.6%	7.5%	7.5%	0.8%
Russell 1000 Energy	0.9%	1.3%	15.3%	15.3%	-0.2%	S&P GSCI Commodity	1.7%	0.9%	14.1%	14.1%	-1.0%
Russell 1000 Financial Services	1.3%	0.5%	13.3%	13.3%	0.1%	FTSE NAREIT All Equity REITs Index	2.3%	2.4%	14.8%	14.8%	18.3%
Russell 1000 Health Care	2.0%	0.6%	7.9%	7.9%	9.6%	FTSE EPRA/NAREIT Developed Index	1.9%	1.8%	12.8%	12.8%	12.3%
Russell 1000 Materials & Processing	1.3%	1.2%	12.6%	12.6%	-6.1%						
Russell 1000 Producer Durables	0.2%	-1.6%	16.8%	16.8%	0.3%						
Russell 1000 Technology	2.5%	2.7%	17.5%	17.5%	4.7%	<b>Bond Yields</b>					
Russell 1000 Utilities	2.4%	1.3%	8.9%	8.9%	14.3%						
Russell 1000 Defensive - TR Index	1.5%	1.3%	12.0%	12.0%	9.7%	3-Month T-Bill	2.41	2.42	2.35	2.35	1.67
Russell 1000 Dynamic - TR Index	1.4%	0.4%	14.2%	14.2%	-2.1%	10-Year Treasury	2.61	2.71	2.69	2.69	2.85
Russell Fundamental US TR USD	1.3%	0.3%	12.2%	12.2%	2.8%	30-Year Treasury	3.01	3.08	3.02	3.02	3.10
MSCI USA Minimum Volatility Index	1.4%	0.9%	10.7%	10.7%	11.1%	10-Year TIPS	0.71	0.78	0.98	0.98	0.75
<b>Foreign Equity Markets</b>						30-Year TIPS	1.06	1.11	1.21	1.21	1.00
MSCI ACWI	0.7%	0.5%	11.4%	11.4%	-1.3%	Bloomberg Barclays US CORP High Yield	6.56	6.54	7.95	7.95	6.17
MSCI ACWI Small Cap	-0.4%	-0.8%	11.8%	11.8%	-4.3%	3-Month LIBOR	2.61	2.62	2.81	2.81	2.12
MSCI AC World ex US	-0.2%	0.0%	9.7%	9.7%	-6.8%	Bloomberg Barclays Aggregate	3.12	3.21	3.28	3.28	3.16
MSCI EAFE	-0.2%	0.0%	9.3%	9.3%	-5.8%	Bloomberg Barclays Long Treasury	2.96	3.05	2.99	2.99	3.07
MSCI EAFE Local Index	-0.4%	0.4%	9.6%	9.6%	0.8%	Bloomberg Barclays Long Corporate	4.62	4.69	4.91	4.91	4.47
MSCI EAFE Small Cap	-0.8%	-0.4%	10.1%	10.1%	-11.6%	Bloomberg Barclays Long Govt/Credit	3.91	3.99	4.06	4.06	3.91
MSCI EM	-0.5%	0.0%	9.0%	9.0%	-11.7%						
MSCI ACWI ESG	0.6%	0.4%	10.7%	10.7%	-3.0%						
MSCI ACWI ex Fossil Fuels	0.7%	0.4%	10.9%	10.9%	-4.1%						
MSCI ACWI Low Carbon Leaders	0.7%	0.4%	11.1%	11.1%	-3.7%						
Shanghai SE Composite Index (CNY)	-2.4%	2.9%	21.4%	21.4%	-8.6%						
Shanghai SE A Share (CNY)	-2.4%	2.9%	21.4%	21.4%	-8.6%						

# PERFORMANCE AS OF 2/28/19

As of February 28, 2019

	Allocation		Performance(%)						
	Market Value (\$)	%	Since Inception	5 Years	3 Years	1 Year	YTD	1 Month	Inception Date
<b>Total Fund excluding GM Funds</b>	<b>11,684,251,592</b>	<b>100.0</b>							
<b>Large Cap Passive</b>	<b>2,600,523,266</b>	<b>22.3</b>	<b>15.74</b>	<b>10.59</b>	<b>15.27</b>	<b>4.72</b>	<b>11.51</b>	<b>3.23</b>	<b>Apr-09</b>
S&P 500			15.84	10.67	15.28	4.68	11.48	3.21	
<b>Large Cap Core Fund</b>	<b>1,850,035,711</b>	<b>15.8</b>	<b>11.58</b>	<b>-</b>	<b>-</b>	<b>6.75</b>	<b>14.13</b>	<b>3.69</b>	<b>Oct-17</b>
Russell 1000 Index			9.50	10.39	15.43	4.99	12.05	3.39	
<b>Mid/Small Cap Passive</b>	<b>312,053,094</b>	<b>2.7</b>	<b>16.42</b>	<b>7.87</b>	<b>15.84</b>	<b>6.31</b>	<b>16.76</b>	<b>4.72</b>	<b>Apr-09</b>
Russell 2500 Index			16.47	7.89	15.92	6.36	16.78	4.72	
<b>SMID Cap Core Fund</b>	<b>846,756,981</b>	<b>7.2</b>	<b>6.98</b>	<b>-</b>	<b>-</b>	<b>5.47</b>	<b>18.68</b>	<b>5.60</b>	<b>Oct-17</b>
Russell 2500 Index			7.37	7.89	15.92	6.36	16.78	4.72	
<b>International Passive</b>	<b>73,973,113</b>	<b>0.6</b>	<b>8.90</b>	<b>2.67</b>	<b>11.00</b>	<b>-5.64</b>	<b>9.66</b>	<b>1.80</b>	<b>Apr-09</b>
MSCI AC World ex USA			9.36	2.97	11.25	-6.00	9.69	1.97	
<b>International Equity</b>	<b>1,740,711,508</b>	<b>14.9</b>	<b>9.71</b>	<b>3.84</b>	<b>10.90</b>	<b>-6.15</b>	<b>10.75</b>	<b>2.86</b>	<b>Apr-09</b>
MSCI AC World ex USA			9.36	2.97	11.25	-6.00	9.69	1.97	
<b>Inflation Responsive Fund</b>	<b>367,796,853</b>	<b>3.1</b>	<b>2.06</b>	<b>2.08</b>	<b>6.64</b>	<b>2.75</b>	<b>5.86</b>	<b>0.19</b>	<b>Oct-13</b>
Inflation Responsive Fund Custom Benchmark			0.29	-0.07	3.52	1.98	5.86	0.18	
<b>Fixed Income Passive Fund</b>	<b>74,098,564</b>	<b>0.6</b>	<b>2.52</b>	<b>2.25</b>	<b>1.65</b>	<b>3.09</b>	<b>1.01</b>	<b>-0.06</b>	<b>Oct-10</b>
Blmbg. Barc. U.S. Aggregate			2.62	2.32	1.69	3.17	1.00	-0.06	
<b>Fixed Income Fund</b>	<b>1,572,566,434</b>	<b>13.5</b>	<b>4.45</b>	<b>2.88</b>	<b>2.88</b>	<b>3.55</b>	<b>1.48</b>	<b>0.06</b>	<b>Apr-09</b>
Blmbg. Barc. U.S. Aggregate			3.60	2.32	1.69	3.17	1.00	-0.06	
<b>Treasury Inflation Protected Securities Fund</b>	<b>184,036,561</b>	<b>1.6</b>	<b>0.74</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.30</b>	<b>0.08</b>	<b>Jul-18</b>
Blmbg. Barc. U.S. TIPS 1-10 Year			0.75	1.10	1.57	2.20	1.22	0.10	
<b>Stable Value Fund</b>	<b>2,061,699,507</b>	<b>17.6</b>	<b>2.52</b>	<b>2.00</b>	<b>2.11</b>	<b>2.34</b>	<b>0.40</b>	<b>0.19</b>	<b>Jul-09</b>
3-Year Constant Maturity Yield			1.13	1.46	1.81	2.64	0.41	0.21	
T-BILLS + 1.5%			1.90	2.19	2.63	3.57	0.62	0.30	

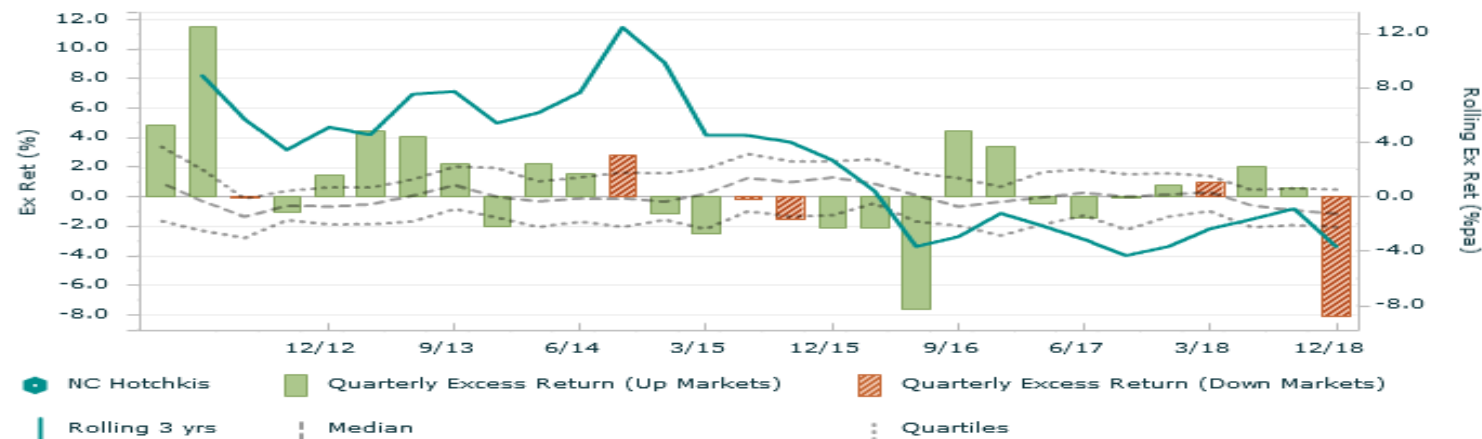
# HOTCHKIS MID CAP VALUE

Firm AUM (12/31/18)	\$27.2B
Strategy Inception	1997
Strategy Assets (12/31/18)	\$2.1B
Expected Tracking Error	5-7%
Typical Number of Stocks	50-80
NC Assets in Strategy	\$110M
Mercer Manager Rating	B+ (T)
Style Tilts	Deep Value

## NC Hotchkis

Quarterly Excess Return vs. Hotchkis Custom with rolling 3 yr line in \$US (before fees) over 7 yrs and 1 quarter ending December-18

Comparison with the US Equity SMID Value universe



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# FEE REVIEW

## Fee Review

A	B	C	D	E	F C+D+E	G B*F	H	I 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	
<b>North Carolina Stable Value Fund<sup>5</sup></b>	<b>\$2,062,791,479</b>	<b>0.305%</b>	<b>0.002%</b>	<b>0.025%</b>	<b>0.332%</b>	<b>\$6,840,217</b>	<b>0.42%</b>	<b>-0.08%</b>	F-H
Galliard	\$2,062,791,479	0.305%	0.000%			\$6,291,514	0.42%	-0.11%	
<b>North Carolina Fixed Income Passive Fund</b>	<b>\$69,662,133</b>	<b>0.020%</b>	<b>0.036%</b>	<b>0.025%</b>	<b>0.081%</b>	<b>\$56,635</b>	<b>0.18%</b>	<b>-0.10%</b>	
BlackRock	\$69,662,133	0.020%	0.010%			\$13,932	0.02%	0.00%	
<b>North Carolina Fixed Income Fund</b>	<b>\$1,545,156,177</b>	<b>0.131%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.167%</b>	<b>\$2,581,016</b>	<b>0.45%</b>	<b>-0.28%</b>	
50% TCW	\$774,018,505	0.152%	0.000%			\$1,174,019	0.22%	-0.07%	
50% Prudential	\$771,137,672	0.110%	0.010%			\$848,251	0.22%	-0.11%	
<b>North Carolina Inflation Sensitive Fund</b>	<b>\$345,371,555</b>	<b>0.090%</b>	<b>0.016%</b>	<b>0.025%</b>	<b>0.131%</b>	<b>\$452,437</b>	<b>0.83%</b>	<b>-0.70%</b>	
BlackRock	\$345,371,555	0.090%	0.010%			\$310,834	0.83%	-0.74%	
<b>North Carolina Large Cap Passive Fund</b>	<b>\$2,334,427,661</b>	<b>0.005%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.041%</b>	<b>\$961,784</b>	<b>0.20%</b>	<b>-0.16%</b>	
BlackRock	\$2,334,427,661	0.005%	0.010%			\$116,721	0.01%	-0.01%	
<b>North Carolina Large Cap Core Fund</b>	<b>\$1,644,097,790</b>	<b>0.288%</b>	<b>0.014%</b>	<b>0.025%</b>	<b>0.328%</b>	<b>\$5,388,093</b>	<b>0.65%</b>	<b>-0.32%</b>	
25.00% BlackRock Russell 1000 Index	\$403,966,975	0.005%	0.010%			\$20,198	0.01%	-0.01%	
18.75% Hotchkis & Wiley	\$307,835,251	0.400%	0.000%			\$1,231,341	0.43%	-0.03%	
18.75% Macquarie	\$312,192,227	0.288%	0.000%			\$899,384	0.43%	-0.14%	
18.75% Sands Capital Management	\$309,958,330	0.450%	0.000%			\$1,394,812	0.46%	-0.01%	
18.75% Loomis Sayles	\$310,145,007	0.394%	0.000%			\$1,220,435	0.46%	-0.07%	
<b>North Carolina SMID Cap Passive Fund</b>	<b>\$268,177,830</b>	<b>0.005%</b>	<b>0.016%</b>	<b>0.025%</b>	<b>0.046%</b>	<b>\$123,630</b>	<b>0.27%</b>	<b>-0.22%</b>	
BlackRock	\$268,177,830	0.005%	0.010%			\$13,409	0.02%	-0.02%	
<b>North Carolina SMID Core Fund</b>	<b>\$714,480,699</b>	<b>0.382%</b>	<b>0.012%</b>	<b>0.025%</b>	<b>0.419%</b>	<b>\$2,994,974</b>	<b>0.92%</b>	<b>-0.50%</b>	
28.75% BlackRock Russell 2500 Index	\$204,832,645	0.005%	0.010%			\$10,242	0.01%	-0.01%	
15.83% Hotchkis & Wiley	\$110,113,061	0.500%	0.000%			\$550,565	0.64%	-0.14%	
15.83% EARNEST Partners	\$114,085,824	0.470%	0.000%			\$536,203	0.76%	-0.29%	
15.83% WEDGE Capital Management	\$113,070,121	0.633%	0.000%			\$715,351	0.76%	-0.13%	
23.75% Brown Advisory	\$172,379,048	0.533%	0.000%			\$919,184	0.77%	-0.24%	
<b>North Carolina International Passive Fund</b>	<b>\$67,220,020</b>	<b>0.025%</b>	<b>0.042%</b>	<b>0.025%</b>	<b>0.091%</b>	<b>\$61,372</b>	<b>0.35%</b>	<b>-0.25%</b>	
BlackRock	\$67,220,020	0.025%	0.020%			\$16,469	0.06%	-0.04%	
<b>North Carolina International Equity Fund</b>	<b>\$1,563,867,710</b>	<b>0.338%</b>	<b>0.012%</b>	<b>0.025%</b>	<b>0.375%</b>	<b>\$5,862,850</b>	<b>0.87%</b>	<b>-0.50%</b>	
50% Baillie Gifford	\$773,126,681	0.287%	0.000%			\$2,220,960	0.52%	-0.23%	
50% Mondrian Investment Partners	\$790,741,029	0.388%	0.000%			\$3,070,594	0.52%	-0.13%	
<b>North Carolina TIPS Fund</b>	<b>\$180,084,337</b>	<b>0.025%</b>	<b>0.006%</b>	<b>0.025%</b>	<b>0.056%</b>	<b>\$100,127</b>	<b>0.37%</b>	<b>-0.31%</b>	
BlackRock	\$180,084,337	0.025%	0.000%			\$45,021	0.05%	-0.03%	
<b>Total</b>	<b>\$10,795,337,391</b>	<b>0.200%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.236%</b>	<b>\$25,423,134</b>	<b>0.516%</b>		

<sup>1</sup>Based on annualized monthly fee accruals as of 12/31/2018

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

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

# IMPORTANT NOTICES

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# North Carolina Supplemental Retirement Plans

## Performance Evaluation Report

Fourth Quarter 2018



# NC CURRENT INVESTMENT STRUCTURE

Tier I Target Date Funds	Tier II - A Passive Core Options	Tier II - B Active Core Options	Tier III Specialty Options
Goal Maker		<b>Stable Value Fund</b> Galliard Stable Value	
	<b>Fixed Income</b> BlackRock Debt Index	<b>Fixed Income Fund</b> TCW Core Plus Prudential Core Plus	
	<b>Treasury Inflation Protected Securities (TIPS)</b> BlackRock TIPS Fund	<b>Inflation Responsive Fund</b> BlackRock Strategic Completion	
	<b>Large Cap Equity</b> BlackRock Equity Index	<b>Large Cap Core Fund</b> BlackRock Russell 1000 Index Hotchkis & Wiley Large Cap Value Macquarie Large Cap Value Sands Capital Large Cap Growth Loomis Large Cap Growth	
	<b>Small/Mid Cap Equity</b> BlackRock Russell 2500 Index	<b>Small/Mid Cap Fund</b> BlackRock 2500 Index Hotchkis & Wiley Mid Value Earnest Partners SMID Cap Value Wedge SMID Cap Value Brown Advisory SMID Growth	
	<b>International Equity</b> BlackRock ACWI ex US Index	<b>International Equity Fund</b> Baillie Gifford ACWI ex US Growth Mondrian ACWI ex US Value	

# Fee Review

A	B	C	D	E	F	G	H	I	
					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	
<b>North Carolina Stable Value Fund<sup>5</sup></b>	<b>\$2,062,791,479</b>	<b>0.305%</b>	<b>0.002%</b>	<b>0.025%</b>	<b>0.332%</b>	<b>\$6,840,217</b>	0.42%	-0.08%	F-H
Galliard	\$2,062,791,479	0.305%	0.000%			\$6,291,514	0.42%	-0.11%	
<b>North Carolina Fixed Income Passive Fund</b>	<b>\$69,662,133</b>	<b>0.020%</b>	<b>0.036%</b>	<b>0.025%</b>	<b>0.081%</b>	<b>\$56,635</b>	0.18%	-0.10%	
BlackRock	\$69,662,133	0.020%	0.010%			\$13,932	0.02%	0.00%	
<b>North Carolina Fixed Income Fund</b>	<b>\$1,545,156,177</b>	<b>0.131%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.167%</b>	<b>\$2,581,016</b>	0.45%	-0.28%	
50% TCW	\$774,018,505	0.152%	0.000%			\$1,174,019	0.22%	-0.07%	
50% Prudential	\$771,137,672	0.110%	0.010%			\$848,251	0.22%	-0.11%	
<b>North Carolina Inflation Sensitive Fund</b>	<b>\$345,371,555</b>	<b>0.090%</b>	<b>0.016%</b>	<b>0.025%</b>	<b>0.131%</b>	<b>\$452,437</b>	0.83%	-0.70%	
BlackRock	\$345,371,555	0.090%	0.010%			\$310,834	0.83%	-0.74%	
<b>North Carolina Large Cap Passive Fund</b>	<b>\$2,334,427,661</b>	<b>0.005%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.041%</b>	<b>\$961,784</b>	0.20%	-0.16%	
BlackRock	\$2,334,427,661	0.005%	0.010%			\$116,721	0.01%	-0.01%	
<b>North Carolina Large Cap Core Fund</b>	<b>\$1,644,097,790</b>	<b>0.288%</b>	<b>0.014%</b>	<b>0.025%</b>	<b>0.328%</b>	<b>\$5,388,093</b>	0.65%	-0.32%	
25.00% BlackRock Russell 1000 Index	\$403,966,975	0.005%	0.010%			\$20,198	0.01%	-0.01%	
18.75% Hotchkis & Wiley	\$307,835,251	0.400%	0.000%			\$1,231,341	0.43%	-0.03%	
18.75% Macquarie	\$312,192,227	0.288%	0.000%			\$899,384	0.43%	-0.14%	
18.75% Sands Capital Management	\$309,958,330	0.450%	0.000%			\$1,394,812	0.46%	-0.01%	
18.75% Loomis Sayles	\$310,145,007	0.394%	0.000%			\$1,220,435	0.46%	-0.07%	
<b>North Carolina SMID Cap Passive Fund</b>	<b>\$268,177,830</b>	<b>0.005%</b>	<b>0.016%</b>	<b>0.025%</b>	<b>0.046%</b>	<b>\$123,630</b>	0.27%	-0.22%	
BlackRock	\$268,177,830	0.005%	0.010%			\$13,409	0.02%	-0.02%	
<b>North Carolina SMID Core Fund</b>	<b>\$714,480,699</b>	<b>0.382%</b>	<b>0.012%</b>	<b>0.025%</b>	<b>0.419%</b>	<b>\$2,994,974</b>	0.92%	-0.50%	
28.75% BlackRock Russell 2500 Index	\$204,832,645	0.005%	0.010%			\$10,242	0.01%	-0.01%	
15.83% Hotchkis & Wiley	\$110,113,061	0.500%	0.000%			\$550,565	0.64%	-0.14%	
15.83% EARNEST Partners	\$114,085,824	0.470%	0.000%			\$536,203	0.76%	-0.29%	
15.83% WEDGE Capital Management	\$113,070,121	0.633%	0.000%			\$715,351	0.76%	-0.13%	
23.75% Brown Advisory	\$172,379,048	0.533%	0.000%			\$919,184	0.77%	-0.24%	
<b>North Carolina International Passive Fund</b>	<b>\$67,220,020</b>	<b>0.025%</b>	<b>0.042%</b>	<b>0.025%</b>	<b>0.091%</b>	<b>\$61,372</b>	0.35%	-0.25%	
BlackRock	\$67,220,020	0.025%	0.020%			\$16,469	0.06%	-0.04%	
<b>North Carolina International Equity Fund</b>	<b>\$1,563,867,710</b>	<b>0.338%</b>	<b>0.012%</b>	<b>0.025%</b>	<b>0.375%</b>	<b>\$5,862,850</b>	0.87%	-0.50%	
50% Baillie Gifford	\$773,126,681	0.287%	0.000%			\$2,220,960	0.52%	-0.23%	
50% Mondrian Investment Partners	\$790,741,029	0.388%	0.000%			\$3,070,594	0.52%	-0.13%	
<b>North Carolina TIPS Fund</b>	<b>\$180,084,337</b>	<b>0.025%</b>	<b>0.006%</b>	<b>0.025%</b>	<b>0.056%</b>	<b>\$100,127</b>	0.37%	-0.31%	
BlackRock	\$180,084,337	0.025%	0.000%			\$45,021	0.05%	-0.03%	
<b>Total</b>	<b>\$10,795,337,391</b>	<b>0.200%</b>	<b>0.011%</b>	<b>0.025%</b>	<b>0.236%</b>	<b>\$25,423,134</b>	<b>0.516%</b>		

<sup>1</sup> Based on annualized monthly fee accruals as of 12/31/2018

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

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

## Performance Scorecard

	Mercer Rating	Return								Risk <sup>1</sup>
		3 Years to 12/31/2018		3 Years to 09/30/2018		3 Years to 06/30/2018		3 Years to 03/31/2018		5 Years to 12/31/2018
		I	U	I	U	I	U	I	U	I
<b>Large Cap Passive Fund (tracked within 20bps)</b>		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Equity Index Fund	A	✓	NA	✓	NA	✓	NA	✓	NA	NA
<b>Large Cap Core Fund<sup>2</sup></b>		✓	✓	✓	✓	✓	✓	✓	✓	NA
Hotchkis & Wiley Large Cap Value	A (T)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Macquarie Large Cap Value	A	✓	✓	✓	✓	✗	✓	✓	✓	✓
Sands Capital Large Cap Growth	A (T)	✗	✓	✓	✓	✓	✓	✗	✓	✓
Loomis Large Cap Growth	B+ (T)	✓	✓	✓	✓	✓	✓	✓	✓	✓

<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%.

<sup>2</sup> Represents the Large Cap Core Composite.

\* 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).

## Performance Scorecard

	Mercer Rating	Return								Risk <sup>1</sup>
		3 Years to 12/31/2018		3 Years to 09/30/2018		3 Years to 06/30/2018		3 Years to 03/31/2018		5 Years to 12/31/2018
		I	U	I	U	I	U	I	U	I
<b>Small/Mid Cap Passive Fund (tracked within 30 bps)</b>		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Russell 2500 Index Fund	A	✓	NA	✓	NA	✓	NA	✓	NA	NA
<b>Small/Mid Cap Core Fund<sup>2</sup></b>		✓	✓	✓	✓	✓	✓	✓	✓	NA
Hotchkis & Wiley SMID Cap Value	B+ (T)	✗	✗	✗	✗	✗	✗	✗	✗	✓
EARNEST Partners SMID Cap Value	B+	✓	✓	✓	✓	✓	✓	✓	✓	✓
WEDGE SMID Cap Value	B+	✗	✓	✗	✗	✗	✗	✗	✗	✓
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%.

<sup>2</sup> Represents the gross of fee Mid/Small Cap Core Composite.

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## Performance Scorecard

	Mercer Rating	Return								Risk <sup>1</sup>
		3 Years to 12/31/2018		3 Years to 09/30/2018		3 Years to 06/30/2018		3 Years to 03/31/2018		5 Years to 12/31/2018
		I	U	I	U	I	U	I	U	I
<b>International Passive Fund (tracked within 60 bps)</b>		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock ACWI ex US Fund	A	✓	NA	✓	NA	✓	NA	✓	NA	NA
<b>International Equity Fund</b>		✓	✓	✓	✓	✓	✓	✓	✓	NA
Baillie Gifford ACWI ex US Growth	A	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mondrian ACWI ex US Value	B+	✗	✓	✗	✗	✗	✗	✗	✗	✓
<b>Inflation Responsive Fund</b>		✓	✓	✓	✓	✓	✓	✓	✓	NA
BlackRock Strategic Completion CIT <sup>2</sup>	B+	✓	✓	✓	✓	✓	✓	✗	✗	✓
<b>Fixed Income Passive Fund (tracked within 25 bps)</b>		✓	NA	✓	NA	✓	NA	✓	NA	NA
BlackRock Debt Index Fund	A	✓	NA	✓	NA	✓	NA	✓	NA	NA

<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%.

<sup>2</sup> Represents the BlackRock Strategic Completion Composite.

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## Performance Scorecard

	Mercer Rating	Return								Risk <sup>1</sup>	
		3 Years to 12/31/2018		3 Years to 09/30/2018		3 Years to 06/30/2018		3 Years to 03/31/2018		5 Years to 12/31/2018	
		I	U	I	U	I	U	I	U	I	
<b>Fixed Income Fund</b>		✓	✓	✓	✓	✓	✓	✓	✓	NA	
TCW Core Plus <sup>2</sup>	A	✓	✗	✓	✗	✓	✗	✓	✗	✓	
Prudential Core Plus	A	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Treasury Inflation Protected Securities Fund</b>		NA	NA	NA	NA	NA	NA	NA	NA	NA	
BlackRock TIPS Fund <sup>3</sup>	A	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Stable Value Fund</b>	A	✓	✓	✓	✓	✓	✓	✓	✓	NA	

<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%.

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

<sup>3</sup> The BlackRock TIPS Fund was created at the beginning of the third quarter of 2018. Longer history is not available.

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## Watch List Criteria

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- 1) **Performance:** The underlying manager strategy has trailed the benchmark and peer group universe over four consecutive 3 year periods, as highlighted on the Performance Scorecard. A candidate can also be added to the watch list if performance is not explained by the managers style or investment philosophy
- 2) **Philosophy Change:** Underlying manager strategy has had a material change to the investment process or philosophy, from what was originally established
- 3) **Organizational Instability:** Organizational or team turnover that could materially affect the investment process

## Watch List

Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Mondrian International Equity Manager	1Q18	B+	Maintain Watch Status	<p>Mondrian is a long-term, value oriented manager that utilizes a dividend discount model to generate a real return forecast for each stock that meets its investment criteria based on a screen for value factors. They construct a concentrated, low turnover portfolio that blends top down and bottom up security selection. The strategy typically displays tilts towards companies with higher dividend yields and lower debt on their balance sheets. This high quality approach has historically protected well on the downside but has lagged during strong growth markets. Mondrian believes that quantitative easing and low interest rates since the financial crisis have distorted discount rates and this has supported the extended period of outperformance of growth over value.</p> <p>Mondrian struggled with performance during 2017, as growth significantly outpaced value internationally (7.5%). Mondrian trailed the benchmark by 400 basis points during the year and struggled with security selection in the more growth oriented consumer discretionary and information technology sectors. We wouldn't expect Mondrian to outperform given the market leadership but we did add a provisional "P" rating on the strategy following a most recent meeting with the investment team.</p> <p>In 2018, Mondrian outperformed its benchmark by 220 basis points and ranked in the top quartile of the peer group universe, largely due to the outperformance in the fourth quarter of 2018. In the fourth quarter, Mondrian outperformed the benchmark by 340 basis points and benefited from the overweight to Brazil which continued to contribute to the relative returns after markets responded favorably to the October presidential election. From a sector perspective, an overweight to the higher dividend paying, defensive utilities sector bolstered performance amid a weak quarter for equity markets. Additionally, Mondrian's tilt towards lower beta names was beneficial amid the market volatility in the fourth quarter. Mercer's manager research team removed the provisional "P" rating on the strategy after another on-site meeting with the team in the fourth quarter.</p>

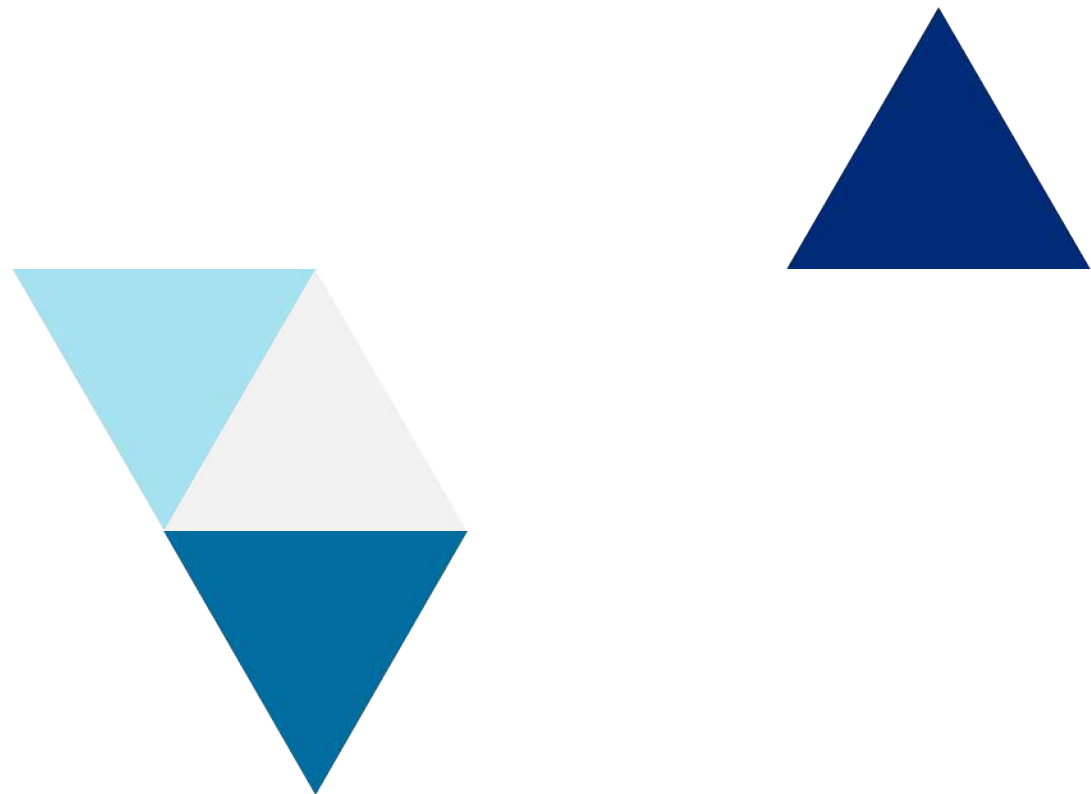
\* A Mercer rating signifies our opinion of a strategy's prospects for outperforming a suitable benchmark over a timeframe appropriate for that particular strategy. Strategies rated A are those assessed as having "above average" prospects of outperformance. Those rated B+ are those assessed as having "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).

## Watch List

Manager	Date Placed on Watch	Mercer Rating*	Recommendation	Comments
Hotchkis and Wiley Mid Cap	1Q17	B+ (T)	Maintain Watch Status	<p>Hotchkis &amp; Wiley's Mid Cap Value strategy 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 current 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.</p> <p>Hotchkis was added to the Watch List in 2017, after a difficult period in 2016 when more defensive, higher dividend paying securities with higher valuations led the market. Hotchkis, like many other value managers, did not hold these names and this negatively impacted relative performance. During 2017, Hotchkis again trailed the benchmark by 140 basis points and ranked in the bottom quartile of the peer group universe. Growth continued to outperform value within mid cap equities during the fourth quarter and the spread was 12% over the year.</p> <p>Hotchkis has historically been largely overweight the energy sector and this was a significant headwind for the strategy throughout 2017. In 2018, Hotchkis outperformed in both the first and second quarters, beating their benchmark over the six month period by 310 basis points and ranked in the top quartile for their peer group universe, largely due to their overweight to the top performing energy sector. In the third quarter of 2018, Hotchkis's energy holdings detracted 90 basis points from relative returns due to stock selection, but the strategy continued to outperform due to health care holdings. A poor fourth quarter wiped out these gains as the strategy underperformed by 810 basis points to end the year trailing its benchmark by 540 basis points. The underperformance was largely due to Hotchkis's energy overweight, as WTI crude prices fell more than 40% from their early October high of \$76/barrel to \$40/ barrel at year end. Hotchkis &amp; Wiley continues to follow the same investment process and we would expect them to struggle during a risk-off environment.</p>

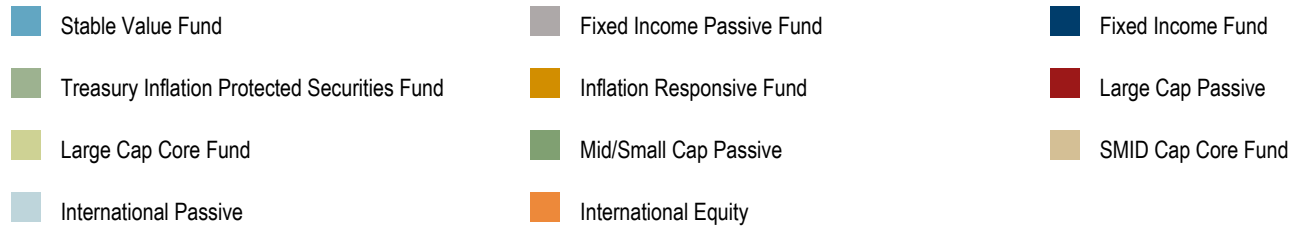
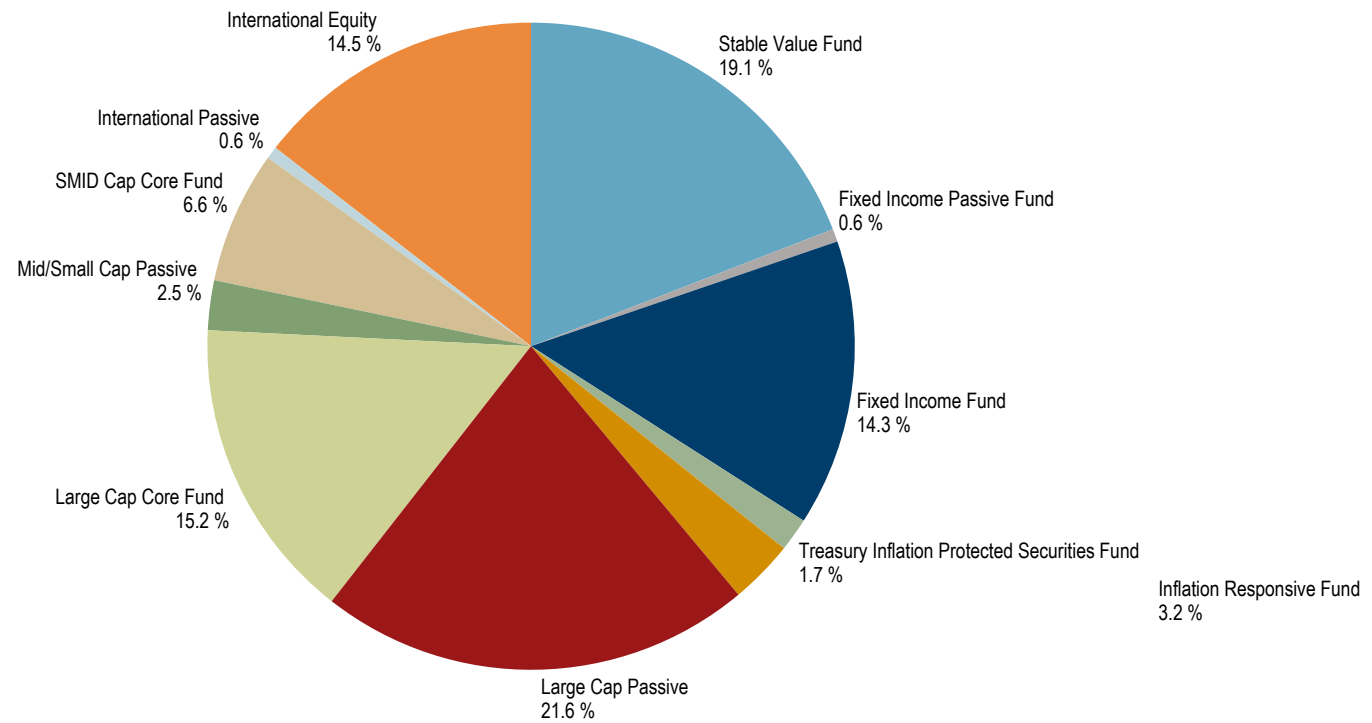
\* A Mercer rating signifies our opinion of a strategy's prospects for outperforming a suitable benchmark over a timeframe appropriate for that particular strategy. Strategies rated A are those assessed as having "above average" prospects of outperformance. Those rated B+ are those assessed as having "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).

Total Fund



# Asset Allocation

As of December 31, 2018



## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Large Cap Passive</b>	<b>2,334,427,661</b>	<b>14.8</b>	<b>14.7 (19)</b>	<b>8.4 (16)</b>	<b>9.2 (20)</b>	<b>-4.4 (31)</b>	<b>-13.5 (46)</b>	<b>Apr-09</b>
S&P 500			14.8 (16)	8.5 (14)	9.3 (20)	-4.4 (31)	-13.5 (46)	
Mercer Mutual Fund US Equity Large Cap Core Median			13.6	7.3	8.0	-5.4	-13.7	
NCSRP BlackRock Equity Index	2,334,427,661	14.8	14.9 (53)	8.5 (34)	9.3 (36)	-4.4 (48)	-13.5 (49)	Apr-09
S&P 500			14.8 (57)	8.5 (32)	9.3 (36)	-4.4 (38)	-13.5 (39)	
Mercer Instl US Equity Large Cap Index Median			14.9	8.3	9.2	-4.5	-13.5	
<b>Large Cap Core Fund</b>	<b>1,644,097,789</b>	<b>10.4</b>	<b>1.9 (41)</b>	<b>-</b>	<b>-</b>	<b>-3.3 (39)</b>	<b>-14.4 (56)</b>	<b>Oct-17</b>
Russell 1000 Index			1.2 (48)	8.2 (34)	9.1 (35)	-4.8 (50)	-13.8 (45)	
Mercer Mutual Fund US Equity Large Cap Median			1.0	7.4	8.2	-4.8	-14.1	
NCSRP Russell 1000 Index	403,966,975	2.6	-0.8 (47)	-	-	-4.9 (46)	-13.9 (47)	Nov-17
Russell 1000 Index			-0.7 (45)	8.2 (43)	9.1 (38)	-4.8 (45)	-13.8 (46)	
Mercer Instl US Equity Large Cap Median			-1.1	7.9	8.5	-5.3	-14.0	
NCSRP Macquarie Large Cap Value	312,192,227	2.0	6.1 (18)	-	8.9 (15)	-1.9 (4)	-11.1 (16)	Jun-15
Macquarie Large Cap Value Strategy			6.2 (16)	8.2 (9)	8.8 (16)	-2.2 (5)	-11.3 (19)	
Russell 1000 Value Index			4.2 (51)	5.9 (54)	7.0 (54)	-8.3 (43)	-11.7 (25)	
Mercer Instl US Equity Large Cap Value Median			4.3	6.1	7.1	-8.8	-13.5	
NCSRP Hotchkis & Wiley Large Cap Value	307,835,251	2.0	15.7 (6)	6.1 (53)	8.0 (34)	-13.6 (90)	-18.0 (97)	Apr-09
Russell 1000 Value Index			13.6 (57)	5.9 (54)	7.0 (54)	-8.3 (43)	-11.7 (25)	
Mercer Instl US Equity Large Cap Value Median			13.8	6.1	7.1	-8.8	-13.5	
NCSRP Loomis Large Cap Growth	310,145,007	2.0	13.0 (6)	-	12.1 (14)	-1.6 (56)	-11.6 (12)	Aug-14
Loomis Large Cap Growth Strategy			12.7 (7)	11.7 (10)	11.9 (16)	-1.7 (56)	-11.6 (11)	
Russell 1000 Growth Index			10.7 (30)	10.4 (25)	11.1 (25)	-1.5 (56)	-15.9 (64)	
Mercer Instl US Equity Large Cap Growth Median			9.8	9.6	10.1	-1.0	-15.2	
NCSRP Sands Capital Large Cap Growth	309,958,330	2.0	20.0 (1)	9.1 (62)	10.8 (34)	7.2 (4)	-17.4 (88)	Apr-09
Russell 1000 Growth Index			16.2 (30)	10.4 (25)	11.1 (25)	-1.5 (56)	-15.9 (64)	
Mercer Instl US Equity Large Cap Growth Median			15.5	9.6	10.1	-1.0	-15.2	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Mid/Small Cap Passive</b>	<b>268,177,830</b>	<b>1.7</b>	<b>14.9 (27)</b>	<b>5.1 (32)</b>	<b>7.3 (37)</b>	<b>-10.0 (42)</b>	<b>-18.5 (45)</b>	<b>Apr-09</b>
Russell 2500 Index			14.9 (27)	5.1 (32)	7.3 (37)	-10.0 (42)	-18.5 (45)	
Mercer Mutual Fund US Equity Small+Mid Median			14.0	4.0	6.2	-11.4	-18.9	
NCSRP BlackRock Russell 2500 Index Fund	268,177,830	1.7	15.0 (64)	5.2 (58)	7.3 (50)	-10.1 (48)	-18.5 (44)	Apr-09
Russell 2500 Index			14.9 (66)	5.1 (58)	7.3 (50)	-10.0 (48)	-18.5 (43)	
Mercer Instl US Equity Small + Mid Cap Median			15.5	5.5	7.3	-10.6	-19.1	
<b>SMID Cap Core Fund</b>	<b>714,480,699</b>	<b>4.5</b>	<b>-5.9 (49)</b>	<b>-</b>	<b>-</b>	<b>-11.3 (50)</b>	<b>-19.3 (54)</b>	<b>Oct-17</b>
Russell 2500 Index			-4.3 (41)	5.1 (32)	7.3 (37)	-10.0 (42)	-18.5 (45)	
Mercer Mutual Fund US Equity Small+Mid Median			-6.1	4.0	6.2	-11.4	-18.9	
NCSRP Russell 2500 Index	204,832,645	1.3	-5.8 (44)	-	-	-9.9 (47)	-18.5 (44)	Nov-17
Russell 2500 Index			-5.8 (44)	5.1 (58)	7.3 (50)	-10.0 (48)	-18.5 (43)	
Mercer Instl US Equity Small + Mid Cap Median			-6.9	5.5	7.3	-10.6	-19.1	
NCSRP Hotchkis & Wiley	110,113,061	0.7	16.4 (8)	1.8 (84)	2.9 (91)	-18.0 (88)	-25.2 (100)	Apr-09
Hotchkis Custom SMID Value Index			14.4 (50)	4.2 (44)	6.6 (32)	-12.4 (34)	-17.1 (26)	
Mercer Instl US Equity SMID Value Median			14.3	4.0	5.3	-14.2	-18.1	
NCSRP EARNEST Partners	114,085,824	0.7	14.7 (41)	6.2 (7)	8.2 (14)	-14.9 (58)	-16.5 (20)	Apr-09
EARNEST Custom SMID Value Index			13.5 (74)	4.2 (44)	6.6 (32)	-12.4 (34)	-17.1 (26)	
Mercer Instl US Equity SMID Value Median			14.3	4.0	5.3	-14.2	-18.1	
NCSRP WEDGE SMID Cap Value	113,070,121	0.7	11.1 (18)	5.0 (24)	5.4 (49)	-14.9 (58)	-18.3 (55)	Jan-12
Russell 2500 Value Index			10.0 (55)	4.2 (44)	6.6 (32)	-12.4 (34)	-17.1 (26)	
Mercer Instl US Equity SMID Value Median			10.1	4.0	5.3	-14.2	-18.1	
NCSRP Brown Advisory	172,379,048	1.1	16.5 (38)	7.2 (36)	8.8 (53)	-3.0 (39)	-18.4 (21)	Apr-09
Brown Custom SMID Growth Index			15.6 (64)	6.2 (53)	8.1 (62)	-7.5 (74)	-20.1 (51)	
Mercer Instl US Equity SMID Growth Median			16.0	6.3	9.5	-4.4	-20.0	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>International Passive</b>	<b>67,220,020</b>	<b>0.4</b>	<b>8.0 (53)</b>	<b>0.8 (39)</b>	<b>4.9 (10)</b>	<b>-13.9 (55)</b>	<b>-11.5 (21)</b>	<b>Apr-09</b>
MSCI AC World ex USA			8.5 (23)	1.1 (21)	5.0 (10)	-13.8 (47)	-11.4 (20)	
Mercer Mutual Fund World ex US/EAFE Equity Index Median			8.1	0.6	3.5	-13.9	-12.5	
NCSRP BlackRock ACWI ex US Fund	67,220,020	0.4	8.2 (100)	0.9 (53)	4.9 (1)	-14.0 (78)	-11.5 (26)	Apr-09
MSCI AC World ex USA			8.5 (45)	1.1 (1)	5.0 (1)	-13.8 (60)	-11.4 (16)	
Mercer Instl World ex US/EAFE Equity Passive Median			8.4	0.9	3.8	-13.7	-12.4	
<b>International Equity</b>	<b>1,563,867,709</b>	<b>9.9</b>	<b>8.7 (43)</b>	<b>1.8 (22)</b>	<b>5.1 (13)</b>	<b>-14.7 (34)</b>	<b>-11.1 (14)</b>	<b>Apr-09</b>
MSCI AC World ex USA			8.5 (47)	1.1 (30)	5.0 (13)	-13.8 (28)	-11.4 (17)	
Mercer Mutual Fund World ex US/EAFE Equity Median			8.4	0.4	2.6	-16.0	-13.7	
NCSRP Baillie Gifford ACWI ex US Growth	773,126,681	4.9	11.2 (11)	3.2 (16)	6.8 (8)	-16.0 (68)	-14.0 (62)	Apr-09
MSCI AC World ex USA			8.5 (75)	1.1 (60)	5.0 (24)	-13.8 (40)	-11.4 (20)	
MSCI AC World ex USA Growth			8.8 (67)	2.1 (36)	4.6 (28)	-14.1 (44)	-12.2 (30)	
Mercer Instl World ex US/EAFE Equity Median			9.3	1.5	3.6	-14.8	-13.4	
NCSRP Mondrian ACWI ex US Value	790,741,029	5.0	7.8 (88)	1.7 (43)	4.6 (28)	-11.8 (17)	-8.0 (2)	Apr-09
MSCI AC World ex USA			8.5 (75)	1.1 (60)	5.0 (24)	-13.8 (40)	-11.4 (20)	
MSCI AC World ex USA Value			8.1 (84)	0.2 (85)	5.4 (21)	-13.4 (35)	-10.6 (13)	
Mercer Instl World ex US/EAFE Equity Median			9.3	1.5	3.6	-14.8	-13.4	
<b>Inflation Responsive Fund</b>	<b>345,371,555</b>	<b>2.2</b>	<b>1.0 (23)</b>	<b>1.5 (13)</b>	<b>4.6 (26)</b>	<b>-4.5 (33)</b>	<b>-3.5 (11)</b>	<b>Oct-13</b>
Inflation Responsive Fund Custom Benchmark			-0.8 (76)	-0.4 (53)	2.1 (80)	-5.2 (35)	-3.2 (6)	
Mercer Mutual Fund Diversified Inflation Hedge Median			-0.2	-0.3	2.7	-7.6	-7.4	
NCSRP BlackRock Strategic Completion CIT	345,371,555	2.2	-1.8 (26)	-	-	-	-	Nov-18
BlackRock Strategic Completion Custom Benchmark			-1.9 (27)	-	-	-	-	
Mercer Mutual Fund Diversified Inflation Hedge Median			-3.4	-0.3	2.7	-7.6	-7.4	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Fixed Income Passive Fund</b>	<b>69,662,133</b>	<b>0.4</b>	<b>2.4 (61)</b>	<b>2.5 (41)</b>	<b>2.0 (60)</b>	<b>-0.1 (45)</b>	<b>1.5 (8)</b>	<b>Oct-10</b>
Blmbg. Barc. U.S. Aggregate			2.6 (57)	2.5 (38)	2.1 (57)	0.0 (43)	1.6 (6)	
Mercer Mutual Fund US Fixed Core Median			2.6	2.3	2.2	-0.3	0.6	
NCSRP BlackRock Debt Index Fund	69,662,133	0.4	2.6 (54)	2.6 (33)	2.1 (55)	0.0 (42)	1.6 (7)	Oct-10
Blmbg. Barc. U.S. Aggregate			2.6 (57)	2.5 (38)	2.1 (57)	0.0 (43)	1.6 (6)	
Mercer Mutual Fund US Fixed Core Median			2.6	2.3	2.2	-0.3	0.6	
<b>Fixed Income Fund</b>	<b>1,545,156,177</b>	<b>9.8</b>	<b>4.4 (49)</b>	<b>3.0 (18)</b>	<b>3.0 (23)</b>	<b>0.0 (42)</b>	<b>1.4 (13)</b>	<b>Apr-09</b>
Blmbg. Barc. U.S. Aggregate			3.6 (67)	2.5 (38)	2.1 (57)	0.0 (43)	1.6 (6)	
Mercer Mutual Fund US Fixed Core Median			4.2	2.3	2.2	-0.3	0.6	
NCSRP TCW Core Plus	774,018,505	4.9	2.0 (56)	-	-	0.6 (16)	1.7 (13)	Jan-17
TCW Core Plus Bond Strategy			2.2 (39)	2.9 (58)	2.5 (66)	0.6 (15)	1.6 (17)	
Blmbg. Barc. U.S. Aggregate			1.8 (85)	2.5 (87)	2.1 (94)	0.0 (45)	1.6 (15)	
Mercer Instl US Fixed Core Median			2.1	2.9	2.7	0.0	1.2	
NCSRP Prudential Core Plus	771,137,672	4.9	3.2 (5)	-	4.2 (7)	0.0 (48)	1.2 (46)	Jan-15
Prudential Core Plus Strategy			3.2 (5)	4.0 (3)	4.1 (9)	-0.2 (61)	1.4 (35)	
Blmbg. Barc. U.S. Aggregate			1.7 (92)	2.5 (87)	2.1 (94)	0.0 (45)	1.6 (15)	
Mercer Instl US Fixed Core Median			2.2	2.9	2.7	0.0	1.2	
<b>Treasury Inflation Protected Securities Fund</b>	<b>180,084,337</b>	<b>1.1</b>	<b>-0.5 (16)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-0.1 (4)</b>	<b>Jul-18</b>
Blmbg. Barc. U.S. TIPS 1-10 Year			-0.5 (12)	1.2 (50)	1.9 (50)	-0.3 (18)	-0.1 (3)	
Mercer Mutual Fund US Inflation Protected Median			-1.5	1.2	1.9	-1.5	-0.8	
NCSRP BlackRock TIPS Fund	180,084,337	1.1	-0.5 (16)	-	-	-	-0.1 (4)	Jul-18
Blmbg. Barc. U.S. TIPS 1-10 Year			-0.5 (12)	1.2 (50)	1.9 (50)	-0.3 (18)	-0.1 (3)	
Mercer Mutual Fund US Inflation Protected Median			-1.5	1.2	1.9	-1.5	-0.8	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Stable Value Fund</b>	<b>2,062,791,479</b>	<b>13.1</b>	<b>2.5 (29)</b>	<b>2.0 (46)</b>	<b>2.1 (49)</b>	<b>2.3 (47)</b>	<b>0.6 (58)</b>	<b>Jul-09</b>
3-Year Constant Maturity Yield			1.1 (100)	1.4 (100)	1.7 (100)	2.6 (1)	0.7 (10)	
T-BILLS + 1.5%			1.9 (100)	2.1 (18)	2.5 (1)	3.4 (1)	0.9 (7)	
Mercer Instl Stable Value Median			2.2	1.9	2.1	2.3	0.6	
<b>GoalMaker Funds</b>	<b>4,972,059,057</b>	<b>31.5</b>						
Pre Retirement Conservative 0-5 Yrs	220,980,804	1.4	5.3 (100)	3.0 (78)	3.4 (96)	-1.7 (1)	-3.4 (3)	Jul-09
Pre Retirement Conservative 0-5 Yrs Benchmark			4.4 (100)	2.7 (90)	3.2 (98)	-1.5 (1)	-3.2 (2)	
Mercer Mutual Fund Target Date 2020 Median			7.9	3.6	4.9	-4.3	-6.3	
Pre Retirement Conservative 6-10 Yrs	135,408,874	0.9	6.3 (100)	3.3 (80)	4.0 (96)	-2.3 (4)	-4.4 (4)	Jul-09
Pre Retirement Conservative 6-10 Yrs Benchmark			5.2 (100)	3.1 (88)	3.8 (96)	-2.3 (4)	-4.2 (4)	
Mercer Mutual Fund Target Date 2025 Median			8.7	3.9	5.3	-5.3	-7.6	
Pre Retirement Conservative 11-15 Yrs	94,144,825	0.6	7.6 (91)	4.2 (53)	5.4 (67)	-2.9 (2)	-5.5 (3)	Jul-09
Pre Retirement Conservative 11-15 Yrs Benchmark			7.1 (97)	4.0 (61)	5.2 (73)	-3.0 (2)	-5.3 (2)	
Mercer Mutual Fund Target Date 2030 Median			9.1	4.2	5.7	-6.2	-8.9	
Pre Retirement Conservative 16-20 Yrs	72,981,320	0.5	9.1 (78)	4.9 (19)	6.7 (8)	-3.7 (1)	-6.8 (1)	Jul-09
Pre Retirement Conservative 16-20 Yrs Benchmark			8.7 (96)	4.8 (24)	6.6 (15)	-3.9 (1)	-6.6 (1)	
Mercer Mutual Fund Target Date 2035 Median			9.4	4.3	6.1	-6.9	-10.0	
Pre Retirement Conservative 21-25 Yrs	53,206,948	0.3	-6.0 (3)	-	-	-	-8.2 (2)	Jul-18
Pre Retirement Conservative 21-25 Yrs Benchmark			-5.8 (2)	-	-	-	-8.0 (2)	
Mercer Mutual Fund Target Date 2040 Median			-8.0	4.5	6.2	-7.6	-11.0	
Pre Retirement Conservative 26+ Yrs	72,667,841	0.5	-7.1 (8)	-	-	-	-9.6 (2)	Jul-18
Pre Retirement Conservative 26+ Yrs Benchmark			-6.9 (5)	-	-	-	-9.4 (1)	
Mercer Mutual Fund Target Date 2045 Median			-8.4	4.6	6.5	-7.9	-11.8	
Post Retirement Conservative 0-5 Yrs	253,358,947	1.6	-1.7 (1)	-	-	-	-2.8 (1)	Jul-18
Post Retirement Conservative 0-5 Yrs Benchmark			-1.5 (1)	-	-	-	-2.7 (1)	
Mercer Mutual Fund Target Date 2015 Median			-3.5	3.6	4.6	-3.7	-5.6	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
Post Retirement Conservative 6-10 Yrs	57,829,373	0.4	-1.3 (4)	-	-	-	-2.3 (10)	Jul-18
Post Retirement Conservative 6-10 Yrs Benchmark			-1.2 (4)	-	-	-	-2.2 (10)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	
Post Retirement Conservative 11+ Yrs	8,241,567	0.1	-1.2 (4)	-	-	-	-2.1 (9)	Jul-18
Post Retirement Conservative 11+ Yrs Benchmark			-1.1 (3)	-	-	-	-2.0 (4)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	
Pre Retirement Moderate 0-5 Yrs	442,838,734	2.8	6.6 (88)	3.5 (62)	4.3 (74)	-3.0 (8)	-5.6 (26)	Jul-09
Pre Retirement Moderate 0-5 Yrs Benchmark			5.8 (94)	3.3 (72)	4.1 (82)	-3.0 (7)	-5.4 (21)	
Mercer Mutual Fund Target Date 2020 Median			7.9	3.6	4.9	-4.3	-6.3	
Pre Retirement Moderate 6-10 Yrs	458,737,388	2.9	7.4 (96)	3.9 (49)	5.0 (66)	-4.0 (16)	-6.9 (27)	Jul-09
Pre Retirement Moderate 6-10 Yrs Benchmark			6.9 (100)	3.8 (57)	4.8 (68)	-4.1 (17)	-6.7 (24)	
Mercer Mutual Fund Target Date 2025 Median			8.7	3.9	5.3	-5.3	-7.6	
Pre Retirement Moderate 11-15 Yrs	362,416,477	2.3	8.6 (69)	4.4 (34)	5.8 (43)	-4.9 (15)	-8.2 (27)	Jul-09
Pre Retirement Moderate 11-15 Yrs Benchmark			8.1 (86)	4.3 (41)	5.7 (47)	-5.1 (19)	-8.0 (23)	
Mercer Mutual Fund Target Date 2030 Median			9.1	4.2	5.7	-6.2	-8.9	
Pre Retirement Moderate 16-20 Yrs	278,044,021	1.8	10.0 (16)	5.1 (13)	7.2 (2)	-5.8 (11)	-9.6 (25)	Jul-09
Pre Retirement Moderate 16-20 Yrs Benchmark			9.8 (35)	5.0 (15)	7.2 (2)	-6.0 (20)	-9.4 (19)	
Mercer Mutual Fund Target Date 2035 Median			9.4	4.3	6.1	-6.9	-10.0	
Pre Retirement Moderate 21-25 Yrs	201,536,970	1.3	-7.9 (49)	-	-	-	-10.6 (29)	Jul-18
Pre Retirement Moderate 21-25 Yrs Benchmark			-7.7 (41)	-	-	-	-10.4 (19)	
Mercer Mutual Fund Target Date 2040 Median			-8.0	4.5	6.2	-7.6	-11.0	
Pre Retirement Moderate 26+ Yrs	216,085,334	1.4	-8.7 (62)	-	-	-	-11.7 (49)	Jul-18
Pre Retirement Moderate 26+ Yrs Benchmark			-8.5 (52)	-	-	-	-11.5 (43)	
Mercer Mutual Fund Target Date 2045 Median			-8.4	4.6	6.5	-7.9	-11.8	
Post Retirement Moderate 0-5 Yrs	278,883,576	1.8	-3.3 (34)	-	-	-	-5.0 (34)	Jul-18
Post Retirement Moderate 0-5 Yrs Benchmark			-3.1 (28)	-	-	-	-4.8 (32)	
Mercer Mutual Fund Target Date 2015 Median			-3.5	3.6	4.6	-3.7	-5.6	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
Post Retirement Moderate 6-10 Yrs	57,640,450	0.4	-2.8 (40)	-	-	-	-4.3 (45)	Jul-18
Post Retirement Moderate 6-10 Yrs Benchmark			-2.6 (35)	-	-	-	-4.1 (43)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	
Post Retirement Moderate 11+ Yrs	9,292,299	0.1	-2.5 (33)	-	-	-	-3.8 (40)	Jul-18
Post Retirement Moderate 11+ Yrs Benchmark			-2.3 (30)	-	-	-	-3.6 (37)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	
Pre Retirement Aggressive 0-5 Yrs	217,165,966	1.4	7.8 (62)	3.9 (29)	4.9 (45)	-4.8 (63)	-8.2 (97)	Jul-09
Pre Retirement Aggressive 0-5 Yrs Benchmark			7.1 (75)	3.8 (43)	4.8 (53)	-5.0 (71)	-8.0 (96)	
Mercer Mutual Fund Target Date 2020 Median			7.9	3.6	4.9	-4.3	-6.3	
Pre Retirement Aggressive 6-10 Yrs	316,161,506	2.0	8.6 (62)	4.2 (27)	5.5 (37)	-5.8 (74)	-9.3 (97)	Jul-09
Pre Retirement Aggressive 6-10 Yrs Benchmark			8.0 (81)	4.1 (40)	5.4 (40)	-6.0 (78)	-9.2 (97)	
Mercer Mutual Fund Target Date 2025 Median			8.7	3.9	5.3	-5.3	-7.6	
Pre Retirement Aggressive 11-15 Yrs	312,185,448	2.0	9.5 (22)	4.7 (20)	6.5 (6)	-6.5 (62)	-10.6 (96)	Jul-09
Pre Retirement Aggressive 11-15 Yrs Benchmark			9.3 (31)	4.7 (21)	6.5 (7)	-6.8 (69)	-10.4 (95)	
Mercer Mutual Fund Target Date 2030 Median			9.1	4.2	5.7	-6.2	-8.9	
Pre Retirement Aggressive 16-20 Yrs	315,598,523	2.0	11.0 (1)	5.5 (3)	8.1 (1)	-7.0 (55)	-11.5 (88)	Jul-09
Pre Retirement Aggressive 16-20 Yrs Benchmark			11.0 (1)	5.5 (3)	8.1 (1)	-7.3 (62)	-11.4 (85)	
Mercer Mutual Fund Target Date 2035 Median			9.4	4.3	6.1	-6.9	-10.0	
Pre Retirement Aggressive 21-25 Yrs	205,986,849	1.3	-9.1 (83)	-	-	-	-12.1 (80)	Jul-18
Pre Retirement Aggressive 21-25 Yrs Benchmark			-8.9 (80)	-	-	-	-11.9 (78)	
Mercer Mutual Fund Target Date 2040 Median			-8.0	4.5	6.2	-7.6	-11.0	
Pre Retirement Aggressive 26+ Yrs	197,275,020	1.3	-9.1 (72)	-	-	-	-12.1 (69)	Jul-18
Pre Retirement Aggressive 26+ Yrs Benchmark			-8.9 (67)	-	-	-	-11.9 (62)	
Mercer Mutual Fund Target Date 2045 Median			-8.4	4.6	6.5	-7.9	-11.8	
Post Retirement Aggressive 0-5 Yrs	108,070,372	0.7	-4.9 (93)	-	-	-	-7.1 (96)	Jul-18
Post Retirement Aggressive 0-5 Yrs Benchmark			-4.7 (91)	-	-	-	-7.0 (95)	
Mercer Mutual Fund Target Date 2015 Median			-3.5	3.6	4.6	-3.7	-5.6	

## Total Fund Performance Measurement

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
Post Retirement Aggressive 6-10 Yrs	18,558,356	0.1	-4.4 (96)	-	-	-	-6.5 (96)	Jul-18
Post Retirement Aggressive 6-10 Yrs Benchmark			-4.3 (94)	-	-	-	-6.4 (95)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	
Post Retirement Aggressive 11+ Yrs	6,761,273	0.0	-3.9 (83)	-	-	-	-5.8 (83)	Jul-18
Post Retirement Aggressive 11+ Yrs Benchmark			-3.7 (73)	-	-	-	-5.6 (81)	
Mercer Mutual Fund Target Date Income Median			-3.4	2.7	3.7	-3.4	-4.8	

## Total Fund Performance Measurement - Net of Fees

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Large Cap Passive</b>	<b>2,334,427,661</b>	<b>14.8</b>	<b>14.7</b>	<b>8.4</b>	<b>9.2</b>	<b>-4.4</b>	<b>-13.5</b>	<b>Apr-09</b>
S&P 500			14.8	8.5	9.3	-4.4	-13.5	
NCSRP BlackRock Equity Index	2,334,427,661	14.8	14.9	8.5	9.2	-4.4	-13.5	Apr-09
S&P 500			14.8	8.5	9.3	-4.4	-13.5	
<b>Large Cap Core Fund</b>	<b>1,644,097,789</b>	<b>10.4</b>	<b>1.9</b>	<b>-</b>	<b>-</b>	<b>-3.3</b>	<b>-14.4</b>	<b>Oct-17</b>
Russell 1000 Index			1.2	8.2	9.1	-4.8	-13.8	
NCSRP Russell 1000 Index	403,966,975	2.6	-0.8	-	-	-4.9	-13.9	Nov-17
Russell 1000 Index			-0.7	8.2	9.1	-4.8	-13.8	
NCSRP Macquarie Large Cap Value	312,192,227	2.0	5.8	-	8.6	-2.2	-11.2	Jun-15
Russell 1000 Value Index			4.2	5.9	7.0	-8.3	-11.7	
NCSRP Hotchkis & Wiley Large Cap Value	307,835,251	2.0	15.2	5.6	7.5	-13.9	-18.1	Apr-09
Russell 1000 Value Index			13.6	5.9	7.0	-8.3	-11.7	
NCSRP Loomis Large Cap Growth	310,145,007	2.0	12.6	-	11.7	-2.0	-11.7	Aug-14
Russell 1000 Growth Index			10.7	10.4	11.1	-1.5	-15.9	
NCSRP Sands Capital Large Cap Growth	309,958,330	2.0	19.4	8.5	10.3	6.8	-17.5	Apr-09
Russell 1000 Growth Index			16.2	10.4	11.1	-1.5	-15.9	
<b>Mid/Small Cap Passive</b>	<b>268,177,830</b>	<b>1.7</b>	<b>14.9</b>	<b>5.1</b>	<b>7.3</b>	<b>-10.0</b>	<b>-18.5</b>	<b>Apr-09</b>
Russell 2500 Index			14.9	5.1	7.3	-10.0	-18.5	
NCSRP BlackRock Russell 2500 Index Fund	268,177,830	1.7	15.0	5.2	7.3	-10.1	-18.5	Apr-09
Russell 2500 Index			14.9	5.1	7.3	-10.0	-18.5	

## Total Fund Performance Measurement - Net of Fees

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>SMID Cap Core Fund</b>	<b>714,480,699</b>	<b>4.5</b>	<b>-5.9</b>	<b>-</b>	<b>-</b>	<b>-11.3</b>	<b>-19.3</b>	<b>Oct-17</b>
<i>Russell 2500 Index</i>			-4.3	5.1	7.3	-10.0	-18.5	
NCSRP Russell 2500 Index	204,832,645	1.3	-5.8	-	-	-9.9	-18.5	Nov-17
<i>Russell 2500 Index</i>			-5.8	5.1	7.3	-10.0	-18.5	
NCSRP Hotchkis & Wiley	110,113,061	0.7	15.8	1.3	2.4	-18.4	-25.3	Apr-09
<i>Hotchkis Custom SMID Value Index</i>			14.4	4.2	6.6	-12.4	-17.1	
NCSRP EARNEST Partners	114,085,824	0.7	14.1	5.7	7.7	-15.3	-16.6	Apr-09
<i>EARNEST Custom SMID Value Index</i>			13.5	4.2	6.6	-12.4	-17.1	
NCSRP WEDGE SMID Cap Value	113,070,121	0.7	10.4	4.3	4.7	-15.4	-18.4	Jan-12
<i>Russell 2500 Value Index</i>			10.0	4.2	6.6	-12.4	-17.1	
NCSRP Brown Advisory	172,379,048	1.1	15.9	6.6	8.2	-3.5	-18.5	Apr-09
<i>Brown Custom SMID Growth Index</i>			15.6	6.2	8.1	-7.5	-20.1	
<b>International Passive</b>	<b>67,220,020</b>	<b>0.4</b>	<b>8.0</b>	<b>0.8</b>	<b>4.9</b>	<b>-13.9</b>	<b>-11.5</b>	<b>Apr-09</b>
<i>MSCI AC World ex USA</i>			8.5	1.1	5.0	-13.8	-11.4	
NCSRP BlackRock ACWI ex US Fund	67,220,020	0.4	8.1	0.8	4.9	-14.1	-11.5	Apr-09
<i>MSCI AC World ex USA</i>			8.5	1.1	5.0	-13.8	-11.4	
<b>International Equity</b>	<b>1,563,867,709</b>	<b>9.9</b>	<b>8.7</b>	<b>1.8</b>	<b>5.1</b>	<b>-14.7</b>	<b>-11.1</b>	<b>Apr-09</b>
<i>MSCI AC World ex USA</i>			8.5	1.1	5.0	-13.8	-11.4	
NCSRP Baillie Gifford ACWI ex US Growth	773,126,681	4.9	10.7	2.8	6.4	-16.3	-14.0	Apr-09
<i>MSCI AC World ex USA</i>			8.5	1.1	5.0	-13.8	-11.4	
<i>MSCI AC World ex USA Growth</i>			8.8	2.1	4.6	-14.1	-12.2	
NCSRP Mondrian ACWI ex US Value	790,741,029	5.0	7.3	1.3	4.2	-12.1	-8.1	Apr-09
<i>MSCI AC World ex USA</i>			8.5	1.1	5.0	-13.8	-11.4	
<i>MSCI AC World ex USA Value</i>			8.1	0.2	5.4	-13.4	-10.6	

## Total Fund Performance Measurement - Net of Fees

As of December 31, 2018

	Market Value (\$)	%	Ending December 31, 2018					Inception Date
			Since Inception	5 Years	3 Years	1 Year	1 Quarter	
<b>Inflation Responsive Fund</b>	<b>345,371,555</b>	<b>2.2</b>	<b>1.0</b>	<b>1.5</b>	<b>4.6</b>	<b>-4.5</b>	<b>-3.5</b>	<b>Oct-13</b>
<i>Inflation Responsive Fund Custom Benchmark</i>			-0.8	-0.4	2.1	-5.2	-3.2	
NCSRP BlackRock Strategic Completion CIT	345,371,555	2.2	-1.8	-	-	-	-	Nov-18
<i>BlackRock Strategic Completion Custom Benchmark</i>			-1.9	-	-	-	-	
<b>Fixed Income Passive Fund</b>	<b>69,662,133</b>	<b>0.4</b>	<b>2.4</b>	<b>2.5</b>	<b>2.0</b>	<b>-0.1</b>	<b>1.5</b>	<b>Oct-10</b>
<i>Blmbg. Barc. U.S. Aggregate</i>			2.6	2.5	2.1	0.0	1.6	
NCSRP BlackRock Debt Index Fund	69,662,133	0.4	2.5	2.6	2.1	0.0	1.5	Oct-10
<i>Blmbg. Barc. U.S. Aggregate</i>			2.6	2.5	2.1	0.0	1.6	
<b>Fixed Income Fund</b>	<b>1,545,156,177</b>	<b>9.8</b>	<b>4.4</b>	<b>3.0</b>	<b>3.0</b>	<b>0.0</b>	<b>1.4</b>	<b>Apr-09</b>
<i>Blmbg. Barc. U.S. Aggregate</i>			3.6	2.5	2.1	0.0	1.6	
NCSRP TCW Core Plus	774,018,505	4.9	1.9	-	-	0.4	1.7	Jan-17
<i>Blmbg. Barc. U.S. Aggregate</i>			1.8	2.5	2.1	0.0	1.6	
NCSRP Prudential Core Plus	771,137,672	4.9	3.0	-	3.9	-0.3	1.1	Jan-15
<i>Blmbg. Barc. U.S. Aggregate</i>			1.7	2.5	2.1	0.0	1.6	
<b>Treasury Inflation Protected Securities Fund</b>	<b>180,084,337</b>	<b>1.1</b>	<b>-0.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-0.1</b>	<b>Jul-18</b>
<i>Blmbg. Barc. U.S. TIPS 1-10 Year</i>			-0.5	1.2	1.9	-0.3	-0.1	
NCSRP BlackRock TIPS Fund	180,084,337	1.1	-0.5	-	-	-	-0.1	Jul-18
<i>Blmbg. Barc. U.S. TIPS 1-10 Year</i>			-0.5	1.2	1.9	-0.3	-0.1	
<b>Stable Value Fund</b>	<b>2,062,791,479</b>	<b>13.1</b>	<b>2.5</b>	<b>2.0</b>	<b>2.1</b>	<b>2.3</b>	<b>0.6</b>	<b>Jul-09</b>
<i>3-Year Constant Maturity Yield</i>			1.1	1.4	1.7	2.6	0.7	
<i>T-BILLS + 1.5%</i>			1.9	2.1	2.5	3.4	0.9	

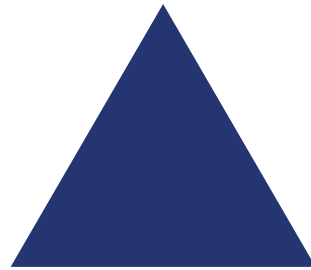
Manager & Strategy	Mercer Rating	Philosophy	Key Strategy Observations
Baillie Gifford	A	The investment approach is bottom-up, based on fundamental research, with a focus on identifying quality, growth stocks that have an identifiable competitive advantage. Portfolios will consist of stocks that can sustain above average growth in earnings and cash flow. The time horizon is genuinely long-term with low turnover.	The strategy is expected to display persistent factor bias to profitability. The bias towards growth and quality stocks may make it more difficult for this strategy to outperform during periods when these market characteristics are out of favour.
BlackRock Indices	A	Through its predecessor firm BGI, BlackRock utilizes a three-pronged philosophy across all of its index strategies. The investment philosophy of passive products at BlackRock is to replicate the index returns while minimizing transaction costs and tracking error of the product.	
Brown Small-Cap Growth Equity	B+	Brown seeks to achieve superior risk-adjusted returns through a concentrated portfolio of diversified, small-capitalization equity securities. With this in mind, Brown looks to invest in companies with durable growth, sound governance, and a scalable go-to-market strategy.	The strategy is not expected to display a persistent factor bias relative to a core benchmark. It is managed in a GARP fashion and will consistently skew larger than its Russell 2000 Growth benchmark in terms of weighted average market cap; as such, it may underperform when the smallest cap stocks are in favor. Similarly, it has tended to perform better in up-market environments owing to its growth orientation and focus on the strength and durability of a business's long-term cash flow potential. An important attribute toward the strategy's long-term relative success has been its stock selection decisions within the Technology sector.
Macquarie Large Cap Value Focus	A (P)	The core philosophy underlying the strategy is that the market can inefficiently price securities and that these inefficiencies can be exploited. The team utilizes a concentrated, bottom-up, fundamental approach to manage the strategy, seeking companies that are trading at a discount to their estimated intrinsic values (in the form of earnings power and net assets) with the belief that mean reversion and lower volatility can lead these companies back to fair value.	The team utilizes the S&P 500 Index for portfolio construction purposes, so while the strategy is concentrated, it tends to be diversified across all sectors. The strategy should outperform its peers and the benchmark when investors focus on company fundamentals and lag in speculative markets that favor lower quality names. In addition, it is suitable for assignments requiring a best-ideas approach and a traditional to relative value orientation.

Manager & Strategy	Mercer Rating	Philosophy	Key Strategy Observations
<b>Earnest SMID Cap Value</b>	<b>B+</b>	Earnest employs a disciplined investment philosophy that is rooted in the premise that stock price returns follow identifiable patterns. Its approach seeks to identify what factors drive each stock's returns by focusing on industry clusters. Given the typical characteristics of the firm's portfolios, such as lower P/E's than the market, EARNEST Partners is typically categorized as a value manager. It is important to point out that the firm does not subscribe to a deep value dogma, but rather ends up with a value based portfolio as an outgrowth of the process.	The strategy will tend to fall between value and core over time (relative value). The portfolio is likely to benefit when growth investing is in favor compared to a value oriented benchmark. Given that the process seeks companies with relatively strong profitability measures and higher quality characteristics, the strategy may lag in market environments that reward lower quality companies.
<b>Galliard Stable Value</b>	<b>A</b>	Galliard seeks income generation with the goal of actively managing risk while emphasizing downside risk protection and low tracking error. Galliard believes the role of fixed income is to control risk and deliver a competitive total return over a longer time horizon. Value added is primarily derived from sector emphasis and individual security selection utilizing a fundamental valuation process. Galliard focuses on an above average yield, not positioning the portfolio based on anticipated interest rate movements. Galliard also avoids sector rotation, leverage, non-dollar positions, derivatives, convexity risk and excessive credit risks. Galliard avoids both market timing and being the prognosticator of interest rate direction because of the inherent risk; as such, the firm will make only modest variations from the benchmark in duration segments across the curve. The investment philosophy seeks to add value through strategic diversification of spread sectors, bottom-up value driven fundamental research, broad issuer/issue diversification and client customization to meet unique liquidity needs.	
<b>Hotchkis and Wiley Large Cap Fundamental Value</b>	<b>A (T)</b>	HWCM takes a fundamental, bottom-up approach to value investing. The firm seeks to exploit mispriced securities by investing in undiscovered or out of favor companies. The firm focuses on stocks where its estimate of the intrinsic value of future cash flows exceeds the market price.	The Large Cap Fundamental Value strategy has a deep value bias and should be expected to trail relative and traditional value managers when markets pull back or in "risk off" environments when investors are particularly risk averse. In addition, because of this bias, returns may not track the relevant index closely and may exhibit stretches of volatility.

Manager & Strategy	Mercer Rating	Philosophy	Key Strategy Observations
Hotchkis and Wiley Mid-Cap Value	B+ (T)	HWCM takes a fundamental, bottom-up approach to value investing. The firm seeks to exploit mispriced securities by investing in undiscovered or out of favor companies. The firm focuses on stocks where its estimate of the intrinsic value of future cash flows exceeds the market price.	HWCM's strategies have a deeper value bias and should be expected to trail more traditional value managers when markets pull back or when investors are particularly risk averse. In addition, because of this bias, returns may not track the relevant index closely and may exhibit stretches of volatility.
TCW Core Plus Fixed Income	A	TCW employs a value-oriented approach to fixed income management. Through its bottom-up process, the fixed income team identifies inefficiently priced securities. Yield curve management, with an emphasis on evaluating relative risk/reward relationships along the yield curve, is another important element of the firm's approach.	The firm fuses macro themes, bottom-up fundamental research, and robust quantitative analysis into a single well-integrated investment process. TCW has consistently improved its proprietary risk management systems and trading analytic tools to meet the demands of the market.
Loomis Large Cap Growth	B+ (T)	The Large Cap Growth team believes successful growth investing is the result of identifying a limited number of high quality companies capable of sustaining above average, long-term cash flow growth and purchasing them at discounted prices to their intrinsic value. The result is a concentrated, low-turnover portfolio of the team's highest conviction ideas.	Due to the strategy's loose portfolio construction guidelines, name concentration, and long-term investment horizon, clients should expect short-term performance fluctuations in both absolute terms and relative to the Russell 1000 Growth Index. Given the team's focus on financially strong companies and emphasis on valuation and downside risk, the strategy usually performs better in flat to down markets, and may lag when investor appetite for risk is high. Although the inception date of the strategy under Hamzaogullari's team and process at Loomis is July 1, 2010, he was able to take with him the composite track record which dates back to mid-2006 from Evergreen. However, the track record for the mutual fund (the Natixis Loomis Sayles Growth Fund) includes performance of a different team and process prior to July 1, 2010.
Mondrian Focused All Countries World Ex-US Equity	B+	Mondrian is a long-term, value-oriented manager. Mondrian aims to add value through both top-down country allocation and bottom-up stock selection decisions. Over the long term, the manager expects stock selection to account for most of the excess return relative to the index. Mondrian favours countries, and securities within countries, offering the most attractive forecast real returns. These estimates are based on long-term forecasts of dividend payments discounted to present value (i.e. a dividend discount model approach).	The strategy is expected to display persistent factor bias to value and low volatility. A bias towards high dividend yielding stocks is expected to be a persistent feature of this strategy. The strategy will tend to outperform during periods of falling markets, although performance during rising markets is generally mixed. Absolute volatility is expected to be lower than that of the market.

Manager & Strategy	Mercer Rating	Philosophy	Key Strategy Observations
BlackRock Strategic Completion CIT	B+	The Strategic Completion Fund uses BlackRock's target-date methodology to determine strategic asset allocation, with underlying asset classes comprised of other BlackRock index fund-type products. For the sake of simplicity and cost, tactical asset allocation is omitted. In designing the strategy, BlackRock sought a real asset mix that would complement the DC plan portfolio of an average participant. Various inflation hedging assets were vetted for suitability. Ultimately Commodities, Real Estate, and TIPS were chosen. These categories were selected in part due to their usage in LifePath programs and the availability of existing BlackRock underlying component vehicles.	The assets are understandable and transparent, giving participants access to inflation sensitive real return asset classes. Since the portfolios are implemented with passive strategies, we do not expect value added through portfolio components. Offsetting this is lower cost. For certain asset classes, (e.g., REITs), BlackRock may gain exposure to less liquid assets via optimization and stratified sampling portfolio construction techniques. While arguably less expensive, these techniques may lead to sampling error, higher tracking error, and may not be fully representative of the index.
Prudential Core Plus Fixed Income	A	Prudential's Core Plus fixed income strategy is designed to generate excess return from fairly equal increments of both sector allocation and subsector/security selection, and from duration and yield curve on a secondary basis. The active philosophy blends top down and bottom up research to drive sector allocation and issue selection. Duration and yield curve positioning is generally de-emphasized but will be considered when market opportunities dictate. The Core Plus strategy will allocate to non-benchmark sectors, including non-agency mortgage, high yield, and emerging markets.	
Sands Select Growth Equity	A (T)	Sands is a bottom-up, quality growth manager. The firm builds concentrated portfolios of leading companies, which are broadly diversified across a number of business lines. Sands follows a buy and hold philosophy with low turnover. The long-term investment horizon allows the companies in the portfolio to realize long-term business opportunities that lead to shareholder wealth creation.	The strategy is expected to have a persistent factor bias to size. Given the strategy's loose constraints and concentrated nature, tracking error can be high at times. Short-term deviations relative to the benchmark can be quite significant and clients invested with Sands should be willing to take a long-term perspective. The strategy is best classified as aggressive growth.
WEDGE Small/Mid Cap Value	B+	The firm's philosophy is based on the premise that value investing produces superior investment returns over time and that quantitative analysis can increase the probability of investment success. Through fundamental and quantitative processes, the team seeks stocks that meet its value and quality criteria.	Given the strategy's focus on higher quality companies and tendency to overweight lower beta names; it may struggle in market environments that reward lower quality and higher beta stocks. Nonetheless, WEDGE has experienced few periods of significant underperformance and generally helps protect capital in difficult market environments.

# Appendix



# IMPORTANT NOTICES

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