

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY
 THE UNIVERSITY OF NORTH CAROLINA
 FOR THE PERIOD ENDING 6.30.18

INVESTMENT NAME	PROVIDER	Q2 '18	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MONEY MARKET							
Fidelity Government Money Market	Fidelity	0.34%	0.95%	0.38%	0.23%	0.24%	0.42
CREF Money Market R3	TIAA-CREF	0.28%	0.82%	0.38%	0.23%	0.23%	0.32
Vanguard Federal Money Market	TIAA-CREF	0.42%	1.26%	0.63%	0.38%	0.34%	0.11
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.45%	1.36%	0.68%	0.42%	0.35%	
STABLE VALUE							
Fidelity Managed Income Portfolio	Fidelity	0.38%	1.41%	1.29%	1.17%	1.35%	0.77
Lincoln Fixed Account*	Fidelity	0.50%	2.00%	2.12%	2.17%	2.62%	0.35
TIAA Traditional Annuity - GRA	TIAA-CREF			Current Rate is 4.00%			
TIAA Traditional Annuity - GSRA	TIAA-CREF			Current Rate is 3.25%			
Hueler Stable Value Index (gross)	Peer Group	0.55%	2.11%	1.90%	1.83%	2.35%	
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.45%	1.36%	0.68%	0.42%	0.35%	
SHORT TERM BOND							
Vanguard Short Term Bond Index I	Fidelity/TIAA-CREF	0.20%	-0.21%	0.79%	1.07%	2.15%	0.05
Short Term Bond Universe	Peer Group	0.23%	0.32%	1.05%	1.18%	2.22%	
Barclays Government/Credit 1-3 Yr	Benchmark	0.28%	0.21%	0.71%	0.84%	1.65%	
INTERMEDIATE TERM BOND							
JPMorgan Core Bond R5	Fidelity	-0.23%	-0.26%	1.75%	2.24%	4.11%	0.45
Vanguard Total Bond Market Index Inst	TIAA-CREF/Fidelity	-0.17%	-0.52%	1.68%	2.21%	3.68%	0.04
MetWest Total Return Bond	TIAA-CREF/Fidelity	-0.01%	-0.19%	1.63%	2.54%	5.45%	0.38
JPMorgan Core Bond R6	TIAA-CREF	-0.21%	-0.07%	1.88%	2.33%	4.18%	0.35
Intermediate Term Bond Universe	Peer Group	-0.27%	-0.39%	1.70%	2.27%	3.94%	
Barclays Aggregate Bond Index	Benchmark	-0.16%	-0.40%	1.72%	2.27%	3.72%	
ALLOCATION--50% TO 70% EQUITY							
Fidelity Balanced K	Fidelity	3.14%	10.90%	8.20%	10.08%	7.89%	0.46
Allocation-50% to 70% Equity Universe	Peer Group	1.06%	6.55%	5.76%	7.08%	6.33%	
60% S&P 500 40% BC Agg	Benchmark	1.99%	8.34%	7.88%	8.97%	7.84%	
WORLD ALLOCATION							
CREF Social Choice Account R3	TIAA-CREF	0.79%	6.82%	6.53%	7.32%	6.70%	0.34
World Allocation Universe	Peer Group	-0.30%	5.39%	4.19%	5.07%	4.67%	
60% MSCI World 40% BC Agg Index	Benchmark	1.45%	8.74%	7.26%	8.34%	6.06%	
ALLOCATION--85%+ EQUITY							
CREF Stock R3	TIAA-CREF	1.37%	12.33%	9.25%	10.93%	7.79%	0.37
Allocation--85%+ Equity Universe	Peer Group	1.71%	10.17%	7.58%	9.46%	7.11%	
85% S&P 500, 15% BBgBarc Agg	Benchmark	2.89%	12.09%	10.42%	11.75%	9.34%	
LARGE COMPANY VALUE							
JHancock Disciplined Value R6	TIAA-CREF	-0.42%	9.54%	8.20%	10.29%	9.86%	0.70
JHancock Disciplined Value R5	Fidelity	-0.42%	9.48%	8.13%	10.23%	9.84%	0.75
Large Value Universe	Peer Group	1.41%	8.51%	8.10%	9.86%	8.18%	
Russell 1000 Value	Benchmark	1.18%	6.77%	8.26%	10.34%	8.49%	

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*403(b) Plan only

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LARGE COMPANY BLEND							
Vanguard Instl Index Pl Fund	TIAA-CREF/Fidelity	3.43%	14.36%	11.92%	13.41%	10.19%	0.02
Large Blend Universe	Peer Group	2.61%	12.45%	9.86%	11.74%	9.02%	
S&P 500 Index	Benchmark	3.43%	14.37%	11.93%	13.42%	10.17%	
LARGE COMPANY GROWTH							
Vanguard FTSE Social Index I	Fidelity	4.03%	15.57%	11.90%	14.21%	10.85%	0.12
Fidelity Contrafund K	Fidelity	6.30%	24.11%	15.00%	16.13%	11.02%	0.65
T Rowe Price Instl Large Cap Growth	TIAA-CREF/Fidelity	6.76%	29.10%	18.03%	19.39%	14.00%	0.56
Large Growth Universe	Peer Group	5.21%	21.04%	12.38%	14.53%	10.29%	
Russell 1000 Growth	Benchmark	5.76%	22.51%	14.98%	16.36%	11.83%	
MEDIUM COMPANY VALUE							
MFS Mid Cap Value R4	Fidelity	2.32%	7.52%	7.71%	10.68%	9.89%	0.86
MFS Mid Cap Value R6	TIAA-CREF	2.35%	7.67%	7.88%	10.84%	9.83%	0.71
Mid Value Universe	Peer Group	2.20%	7.76%	7.58%	9.93%	8.94%	
Russell MidCap Value	Benchmark	2.41%	7.60%	8.80%	11.27%	10.06%	
MEDIUM COMPANY BLEND							
Vanguard Ext Mkt Idx Instl Plus	TIAA-CREF/Fidelity	5.99%	16.81%	10.37%	12.67%	10.76%	0.05
Mid Blend Universe	Peer Group	2.87%	10.42%	7.61%	10.27%	8.83%	
Russell MidCap	Benchmark	2.82%	12.33%	9.58%	12.22%	10.23%	
MEDIUM COMPANY GROWTH							
MassMutual Select Mid Cap Gr Eq II	TIAA-CREF/Fidelity	1.08%	13.96%	10.65%	14.58%	11.53%	0.72
Mid Growth Universe	Peer Group	4.16%	18.51%	9.91%	12.54%	9.53%	
Russell MidCap Growth	Benchmark	3.16%	18.52%	10.73%	13.37%	10.45%	
FOREIGN LARGE VALUE							
MFS International Value R4	Fidelity	0.37%	8.96%	9.98%	10.17%	7.61%	0.76
MFS International Value R6	TIAA-CREF	0.42%	9.08%	10.09%	10.28%	7.65%	0.66
Foreign Large Value Universe	Peer Group	-3.37%	3.60%	3.34%	4.98%	2.03%	
MSCI EAFE	Benchmark	-0.97%	7.37%	5.41%	6.93%	3.33%	
FOREIGN LARGE BLEND							
Amer Funds EuroPac R6	TIAA-CREF	-2.82%	9.35%	6.51%	8.34%	4.82%	0.49
Amer Funds EuroPac R4	Fidelity	-2.92%	8.97%	6.14%	7.96%	4.49%	0.83
Vanguard Total Intl Stock Index Inst	TIAA-CREF/Fidelity	-3.17%	7.12%	5.35%	6.44%	2.75%	0.09
Foreign Large Blend Universe	Peer Group	-2.57%	5.70%	4.32%	5.86%	2.68%	
MSCI EAFE	Benchmark	-0.97%	7.37%	5.41%	6.93%	3.33%	
FOREIGN SMALL/MID GROWTH							
T Rowe Price International Discovery	Fidelity	-0.36%	18.21%	12.46%	13.04%	8.64%	1.19
T Rowe Price International Discovery I	TIAA-CREF	-0.33%	18.36%	12.58%	13.11%	8.67%	1.07
Foreign Small/Mid Growth Universe	Peer Group	-1.70%	14.60%	9.13%	9.78%	6.56%	
MSCI World ex USA Smid Cap USD	Benchmark	-0.45%	10.88%	8.67%	9.58%	5.47%	
SMALL COMPANY VALUE							
Goldman Sachs Small Value Inst	Fidelity	3.77%	12.09%	9.55%	11.60%	11.53%	0.95
Goldman Sachs Small Value R6	TIAA-CREF	3.77%	12.09%	9.56%	11.43%	11.21%	0.94
Small Value Universe	Peer Group	6.00%	12.01%	9.07%	10.07%	9.74%	
Russell 2000 Value	Benchmark	8.30%	13.10%	11.22%	11.18%	9.88%	

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SMALL COMPANY GROWTH							
Eagle Small Cap Growth R5	Fidelity	5.70%	18.38%	10.10%	12.96%	11.53%	0.77
Eagle Small Cap Growth R6	TIAA-CREF	5.71%	18.50%	10.22%	13.09%	11.46%	0.66
Small Growth Universe	Peer Group	8.28%	22.93%	11.01%	12.87%	10.91%	
Russell 2000 Growth	Benchmark	7.23%	21.86%	10.60%	13.65%	11.24%	
SPECIALTY-REAL ESTATE							
Cohen & Steers Realty Shares	Fidelity	8.59%	4.36%	8.25%	8.80%	8.46%	0.97
Cohen & Steers Instl Realty Shares	TIAA-CREF	8.60%	4.65%	8.55%	9.07%	8.65%	0.75
Specialty-Real Estate Universe	Peer Group	7.64%	3.17%	6.84%	7.59%	7.29%	
Dow Jones US Select REIT	Benchmark	9.99%	4.23%	7.71%	8.29%	7.63%	
SPECIALTY-REAL ESTATE							
TIAA Real Estate Account	TIAA-CREF	1.63%	5.05%	5.30%	7.49%	2.66%	0.89
Specialty-Real Estate Universe	Peer Group	7.64%	3.17%	6.84%	7.59%	7.29%	
NCREIF Property Index	Benchmark	1.81%	7.20%	8.26%	9.77%	6.22%	
TARGET DATE							
Vanguard Target Retirement Income Tr Plus	TIAA-CREF/Fidelity	0.45%	4.02%	4.23%	4.88%	-	0.06
Retirement Income Moderate	Peer Group	0.26%	3.96%	3.85%	4.66%	4.66%	
Morningstar Lifetime Moderate Income Index	Benchmark	0.75%	4.97%	4.14%	4.55%	-	
Vanguard Target Retirement 2015 Tr Plus	TIAA-CREF/Fidelity	0.54%	5.47%	5.24%	6.53%	-	0.06
2015 Moderate	Peer Group	0.46%	4.76%	4.65%	5.74%	5.06%	
Morningstar Lifetime Moderate 2015 Index	Benchmark	0.73%	5.91%	5.15%	5.87%	-	
Vanguard Target Retirement 2020 Tr Plus	TIAA-CREF/Fidelity	0.64%	6.79%	6.18%	7.56%	-	0.06
2020 Moderate	Peer Group	0.43%	5.87%	5.22%	6.64%	5.63%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	0.77%	6.54%	5.65%	6.51%	-	
Vanguard Target Retirement 2025 Tr Plus	TIAA-CREF/Fidelity	0.69%	7.69%	6.79%	8.23%	-	0.06
2025 Moderate	Peer Group	0.53%	6.95%	6.01%	7.26%	6.10%	
Morningstar Lifetime Conservative 2025 Index	Benchmark	0.87%	7.45%	6.28%	7.33%	-	
Vanguard Target Retirement 2030 Tr Plus	TIAA-CREF/Fidelity	0.77%	8.52%	7.28%	8.82%	-	0.06
2030 Moderate	Peer Group	0.72%	8.35%	6.87%	8.51%	6.60%	
Morningstar Lifetime Conservative 2030 Index	Benchmark	1.01%	8.64%	7.02%	8.20%	-	
Vanguard Target Retirement 2035 Tr Plus	TIAA-CREF/Fidelity	0.87%	9.40%	7.80%	9.42%	-	0.06
2035 Moderate	Peer Group	0.85%	9.44%	7.67%	8.94%	7.22%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	1.16%	9.81%	7.70%	8.91%	-	
Vanguard Target Retirement 2040 Tr Plus	TIAA-CREF/Fidelity	0.93%	10.23%	8.25%	9.91%	-	0.06
2040 Moderate	Peer Group	0.94%	9.86%	7.60%	9.19%	6.85%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	1.23%	10.62%	8.14%	9.30%	-	
Vanguard Target Retirement 2045 Tr Plus	TIAA-CREF/Fidelity	0.96%	10.60%	8.51%	10.07%	-	0.06
2045 Moderate	Peer Group	0.91%	9.97%	7.69%	8.94%	6.73%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	1.22%	10.96%	8.31%	9.39%	-	
Vanguard Target Retirement 2050 Tr Plus	TIAA-CREF/Fidelity	0.96%	10.62%	8.49%	10.06%	-	0.06
2050 Moderate	Peer Group	1.04%	10.14%	7.79%	9.23%	6.97%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	1.15%	11.00%	8.30%	9.35%	-	

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Vanguard Target Retirement 2055 Tr Plus	TIAA-CREF/Fidelity	0.96%	10.61%	8.48%	10.04%	-	0.06
2055 Moderate	Peer Group	0.86%	10.13%	8.03%	9.49%	8.03%	
Morningstar Lifetime Moderate 2055 Index	Benchmark	1.08%	10.98%	8.26%	9.27%	-	
Vanguard Target Retirement 2060 Tr Plus	TIAA-CREF/Fidelity	0.96%	10.64%	8.49%	10.04%	-	0.06
Vanguard Target Retirement 2065 Tr Plus	TIAA-CREF/Fidelity	0.98%	8.08%	-	-	-	
2060+ Moderate	Peer Group	1.22%	10.65%	8.43%	9.85%	-	
Morningstar Lifetime Moderate 2060 Index	Benchmark	1.00%	10.93%	8.19%	-	-	

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