

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY
 THE UNIVERSITY OF NORTH CAROLINA
 FOR THE PERIOD ENDING 3.31.18

INVESTMENT NAME	PROVIDER	Q1 '18	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MONEY MARKET							
Fidelity Government Money Market	Fidelity	0.25%	0.71%	0.27%	0.17%	0.26%	0.42
CREF Money Market R3	TIAA-CREF	0.22%	0.65%	0.28%	0.17%	0.25%	0.24
Vanguard Federal Money Market	TIAA-CREF	0.33%	1.02%	0.49%	0.24%	0.35%	0.11
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.35%	1.11%	0.53%	0.34%	0.34%	
STABLE VALUE							
Fidelity Managed Income Portfolio	Fidelity	0.35%	1.34%	1.26%	1.14%	1.41%	0.78
Lincoln Fixed Account*	Fidelity	0.50%	2.00%	2.17%	2.19%	2.67%	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	0.52%	2.03%	1.87%	1.82%	2.41%	
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.35%	1.11%	0.53%	0.34%	0.34%	
SHORT TERM BOND							
Vanguard Short Term Bond Index I	Fidelity/TIAA-CREF	-0.51%	0.19%	0.71%	0.88%	2.01%	0.05
Short Term Bond Universe	Peer Group	-0.35%	0.62%	0.96%	0.94%	2.14%	
Barclays Government/Credit 1-3 Yr	Benchmark	-0.20%	0.24%	0.66%	0.76%	1.56%	
INTERMEDIATE TERM BOND							
JPMorgan Core Bond R5	Fidelity	-1.17%	1.57%	1.40%	1.85%	4.06%	0.45
Vanguard Total Bond Market Index Inst	TIAA-CREF/Fidelity	-1.47%	1.13%	1.13%	1.75%	3.59%	0.04
MetWest Total Return Bond	TIAA-CREF/Fidelity	-1.30%	1.18%	1.18%	2.07%	5.26%	0.38
JPMorgan Core Bond R6	TIAA-CREF	-1.15%	1.76%	1.50%	1.94%	4.13%	0.35
Intermediate Term Bond Universe	Peer Group	1.33%	1.35%	1.28%	1.78%	3.85%	
Barclays Aggregate Bond Index	Benchmark	-1.46%	1.20%	1.20%	1.82%	3.63%	
ALLOCATION--50% TO 70% EQUITY							
Fidelity Balanced K	Fidelity	0.17%	10.67%	7.14%	9.61%	7.65%	0.46
Allocation-50% to 70% Equity Universe	Peer Group	-1.14%	8.00%	5.13%	6.76%	6.11%	
60% S&P 500 40% BC Agg	Benchmark	-0.97%	8.81%	6.99%	8.72%	7.42%	
WORLD ALLOCATION							
CREF Social Choice Account R3	TIAA-CREF	-0.71%	9.30%	5.86%	7.15%	6.47%	0.27
World Allocation Universe	Peer Group	-0.86%	8.69%	4.17%	5.00%	4.64%	
60% MSCI World 40% BC Agg Index	Benchmark	-1.21%	8.92%	5.72%	6.98%	5.69%	
ALLOCATION--85%+ EQUITY							
CREF Stock R3	TIAA-CREF	-0.43%	15.14%	9.03%	10.82%	7.49%	0.32
Allocation--85%+ Equity Universe	Peer Group	-0.75%	12.00%	6.86%	9.38%	6.71%	
85% S&P 500, 15% BBgBarc Agg	Benchmark	-0.82%	12.04%	9.37%	11.59%	8.76%	
LARGE COMPANY VALUE							
JHancock Disciplined Value R6	TIAA-CREF/Fidelity	-1.78%	12.84%	8.44%	11.60%	9.67%	0.72
JHancock Disciplined Value R5	Fidelity	-1.78%	12.73%	8.38%	11.56%	9.65%	
Large Value Universe	Peer Group	-2.55%	8.92%	7.50%	10.27%	7.61%	
Russell 1000 Value	Benchmark	-2.83%	6.95%	7.88%	10.78%	7.78%	

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*403(b) Plan only

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LARGE COMPANY BLEND							
Vanguard Instl Index Fund	TIAA-CREF/Fidelity	-0.77%	13.97%	10.77%	13.30%	9.52%	0.02
Large Blend Universe	Peer Group	-1.04%	12.86%	8.89%	11.75%	8.55%	
S&P 500 Index	Benchmark	-0.76%	13.99%	10.78%	13.31%	9.49%	
LARGE COMPANY GROWTH							
Vanguard FTSE Social Index Inv	Fidelity	-0.74%	15.08%	10.62%	14.33%	10.04%	0.12
Fidelity Contrafund K	Fidelity	3.07%	23.90%	13.06%	15.20%	10.72%	0.65
T Rowe Price Instl Large Cap Growth	TIAA-CREF/Fidelity	4.96%	30.67%	15.79%	18.87%	13.49%	0.56
Large Growth Universe	Peer Group	2.58%	21.05%	10.84%	13.97%	9.94%	
Russell 1000 Growth	Benchmark	1.42%	21.25%	12.90%	15.53%	11.34%	
MEDIUM COMPANY VALUE							
MFS Mid Cap Value R4	Fidelity	-1.93%	7.67%	6.76%	10.88%	9.82%	0.86
MFS Mid Cap Value R6	TIAA-CREF	-1.89%	7.81%	6.93%	11.04%	9.75%	0.71
Mid Value Universe	Peer Group	-2.26%	6.76%	6.49%	10.04%	8.80%	
Russell MidCap Value	Benchmark	-2.50%	6.50%	7.23%	11.11%	9.81%	
MEDIUM COMPANY BLEND							
Vanguard Ext Mkt Idx Instl Plus	TIAA-CREF/Fidelity	0.16%	13.15%	8.10%	11.90%	10.39%	0.05
Mid Blend Universe	Peer Group	-1.26%	9.43%	6.29%	10.21%	8.84%	
Russell MidCap	Benchmark	-0.46%	12.20%	8.01%	12.09%	10.21%	
MEDIUM COMPANY GROWTH							
MassMutual Select Mid Cap Gr Eq II	TIAA-CREF/Fidelity	3.54%	19.39%	10.78%	14.86%	11.96%	0.72
Mid Growth Universe	Peer Group	2.48%	18.98%	8.50%	12.10%	9.48%	
Russell MidCap Growth	Benchmark	2.17%	19.74%	9.17%	13.31%	10.61%	
FOREIGN LARGE VALUE							
MFS International Value R4	Fidelity	-0.72%	17.67%	9.59%	10.98%	7.35%	0.86
MFS International Value R6	TIAA-CREF	-0.69%	17.76%	9.70%	11.08%	7.40%	0.66
Foreign Large Value Universe	Peer Group	-1.45%	12.88%	4.85%	5.56%	2.10%	
MSCI EAFE	Benchmark	-1.41%	15.32%	6.05%	6.98%	3.23%	
FOREIGN LARGE BLEND							
Amer Funds EuroPac R6	TIAA-CREF	1.03%	21.18%	7.93%	8.80%	4.87%	0.49
Amer Funds EuroPac R4	Fidelity	0.94%	20.74%	7.55%	8.43%	4.55%	0.83
Vanguard Total Intl Stock Index Inst	TIAA-CREF/Fidelity	-0.45%	17.08%	6.95%	6.43%	2.85%	0.09
Foreign Large Blend Universe	Peer Group	-0.80%	15.45%	5.66%	6.24%	2.71%	
MSCI EAFE	Benchmark	-1.41%	15.32%	6.05%	6.98%	3.23%	
FOREIGN SMALL/MID GROWTH							
T Rowe Price International Discovery	Fidelity	2.35%	28.79%	14.86%	13.08%	8.24%	1.19
T Rowe Price International Discovery I	TIAA-CREF	2.39%	28.95%	14.97%	13.08%	8.27%	1.07
Foreign Small/Mid Growth Universe	Peer Group	2.07%	27.36%	11.15%	10.13%	6.65%	
MSCI World ex USA Smid Cap USD	Benchmark	-1.09%	19.37%	9.82%	9.25%	5.20%	
SMALL COMPANY VALUE							
Goldman Sachs Small Value Inst	Fidelity	-2.04%	8.35%	8.03%	11.41%	10.79%	0.95
Goldman Sachs Small Value R6	TIAA-CREF	-2.04%	8.38%	7.99%	11.21%	10.47%	0.94
Small Value Universe	Peer Group	-2.59%	5.95%	6.81%	9.36%	8.88%	
Russell 2000 Value	Benchmark	-2.64%	5.13%	7.87%	9.96%	8.61%	

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SMALL COMPANY GROWTH							
Eagle Small Cap Growth R5	Fidelity	1.59%	13.87%	9.03%	12.03%	11.25%	0.77
Eagle Small Cap Growth R6	TIAA-CREF	1.64%	14.02%	9.16%	12.16%	11.17%	0.66
Small Growth Universe	Peer Group	2.56%	18.69%	8.80%	12.00%	10.40%	
Russell 2000 Growth	Benchmark	2.30%	18.63%	8.77%	12.90%	10.95%	
SPECIALTY-REAL ESTATE							
Cohen & Steers Realty Shares	Fidelity	-6.64%	-1.47%	1.79%	6.69%	7.00%	0.97
Cohen & Steers Instl Realty Shares	TIAA-CREF	-6.56%	-1.13%	2.09%	6.69%	7.16%	0.75
Specialty-Real Estate Universe	Peer Group	-6.93%	-2.42%	0.91%	5.60%	5.93%	
Dow Jones US Select REIT	Benchmark	-7.43%	-3.68%	0.74%	5.97%	6.02%	
SPECIALTY-REAL ESTATE							
TIAA Real Estate Account	TIAA-CREF	0.95%	4.19%	5.20%	7.69%	2.52%	0.85
Specialty-Real Estate Universe	Peer Group	-6.93%	-2.42%	0.91%	5.60%	5.93%	
NCREIF Property Index	Benchmark	1.70%	7.13%	8.73%	10.00%	6.09%	
TARGET DATE							
Vanguard Instl Target Retirement Income Instl	TIAA-CREF/Fidelity	-0.52%	5.38%	-	-	-	0.09
Retirement Income Moderate	Peer Group	-0.96%	5.82%	3.42%	4.22%	4.50%	
Morningstar Lifetime Moderate Income Index	Benchmark	-0.35%	5.64%	3.84%	4.00%	-	
Vanguard Instl Target Retirement 2015 Instl	TIAA-CREF/Fidelity	-0.50%	7.32%	-	-	-	0.09
2015 Moderate	Peer Group	-0.83%	6.64%	4.30%	5.48%	4.91%	
Morningstar Lifetime Moderate 2015 Index	Benchmark	-0.74%	7.31%	4.71%	5.42%	-	
Vanguard Instl Target Retirement 2020 Instl	TIAA-CREF/Fidelity	-0.58%	8.98%	-	-	-	0.09
2020 Moderate	Peer Group	-0.72%	8.20%	4.92%	6.46%	5.43%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	-0.83%	8.19%	5.20%	6.12%	-	
Vanguard Instl Target Retirement 2025 Instl	TIAA-CREF/Fidelity	-0.57%	10.18%	-	-	-	0.09
2025 Conservative	Peer Group	-0.96%	8.11%	4.81%	6.09%	5.37%	
Morningstar Lifetime Conservative 2025 Index	Benchmark	-0.92%	7.27%	4.60%	5.24%	-	
Vanguard Instl Target Retirement 2030 Instl	TIAA-CREF/Fidelity	-0.56%	11.25%	-	-	-	0.09
2030 Conservative	Peer Group	-1.02%	9.66%	5.60%	6.86%	5.49%	
Morningstar Lifetime Conservative 2030 Index	Benchmark	-0.94%	8.34%	5.22%	6.10%	-	
Vanguard Instl Target Retirement 2035 Instl	TIAA-CREF/Fidelity	-0.56%	12.24%	-	-	-	0.09
2035 Conservative	Peer Group	-0.79%	11.16%	6.17%	7.78%	6.06%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	-0.91%	9.68%	5.99%	7.05%	-	
Vanguard Instl Target Retirement 2040 Instl	TIAA-CREF/Fidelity	-0.55%	13.25%	-	-	-	0.09
2040 Moderate	Peer Group	-0.44%	12.95%	7.27%	9.05%	6.63%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	-0.79%	12.86%	7.78%	9.03%	-	
Vanguard Instl Target Retirement 2045 Instl	TIAA-CREF/Fidelity	-0.55%	13.74%	-	-	-	0.09
2045 Moderate	Peer Group	-0.53%	13.14%	7.33%	8.74%	6.55%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	-0.78%	13.31%	7.96%	9.11%	-	
Vanguard Instl Target Retirement 2050 Instl	TIAA-CREF/Fidelity	-0.55%	13.74%	-	-	-	0.09
2050 Moderate	Peer Group	-0.52%	13.22%	7.40%	9.04%	6.80%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	-0.78%	13.47%	7.98%	9.05%	-	

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Vanguard Instl Target Retirement 2055 Instl 2055 Moderate	TIAA-CREF/Fidelity	-0.54%	13.71%	-	-	-	0.09
Morningstar Lifetime Moderate 2055 Index	Peer Group	-0.64%	13.29%	7.66%	9.38%	7.88%	
	Benchmark	-0.79%	13.57%	7.97%	8.96%	-	
Vanguard Instl Target Retirement 2060 Instl Vanguard Instl Target Retirement 2065 Instl 2060+ Moderate	TIAA-CREF/Fidelity	-0.54%	13.70%	-	-	-	0.09
Morningstar Lifetime Moderate 2060 Index	Peer Group	-0.42%	13.48%	8.22%	9.93%	-	
	Benchmark	-0.79%	13.63%	7.94%	-	-	

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