

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY  
 THE UNIVERSITY OF NORTH CAROLINA  
 FOR THE PERIOD ENDING 3/31/2022

INVESTMENT NAME	PROVIDER	Q1'22	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio	
<b>MONEY MARKET</b>								
Fidelity Government Money Market	Fidelity	0.00%	0.01%	0.53%	0.53%	0.42%	0.42	
CREF Money Market R3	TIAA-CREF	-0.02%	-0.02%	0.61%	0.85%	-	0.18	
Vanguard Federal Money Market	TIAA-CREF	0.01%	0.02%	0.67%	1.01%	0.56%	0.11	
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.04%	0.06%	0.81%	1.13%	0.63%		
<b>STABLE VALUE</b>								
Fidelity Managed Income Portfolio	Fidelity	0.25%	1.04%	1.55%	1.62%	1.45%	0.5	
Lincoln Fixed Account*	Fidelity	0.37%	1.50%	1.77%	1.87%	2.05%	0.35	
TIAA Traditional Annuity - GRA	TIAA-CREF	Current Rate is 5.00%						
TIAA Traditional Annuity - GSRA	TIAA-CREF	Current Rate is 4.25%						
Hueler Stable Value Index (gross)	Peer Group	0.41%	1.69%	2.11%	2.14%	1.99%		
ICE BofA ML US Treasury Bill 3-mon USD	Benchmark	0.04%	0.06%	0.81%	1.13%	0.63%		
<b>SHORT TERM BOND</b>								
Vanguard Short Term Bond Index In Pl	Fidelity/TIAA-CREF	-3.39%	-3.84%	1.09%	1.40%	1.31%	0.04	
Short Term Bond Universe	Peer Group	-2.88%	-2.76%	1.30%	1.53%	1.46%		
Barclays Government/Credit 1-3 Yr	Benchmark	-2.49%	-2.91%	1.02%	1.26%	1.09%		
<b>INTERMEDIATE TERM BOND</b>								
JPMorgan Core Bond R5	Fidelity	-5.39%	-3.65%	2.21%	2.51%	2.47%	0.44	
Vanguard Total Bond Mkt Index Inst Pl	TIAA-CREF/Fidelity	-5.35%	-3.54%	2.31%	2.63%	2.55%	0.03	
JPMorgan Core Bond R6	TIAA-CREF	-5.98%	-4.07%	1.71%	2.14%	2.22%	0.34	
Intermediate Core Bond Universe	Peer Group	-5.92%	-4.48%	1.75%	2.07%	2.22%		
Barclays Aggregate Bond Index	Benchmark	-5.93%	-4.15%	1.69%	2.14%	2.24%		
<b>INTERMEDIATE CORE-PLUS BOND</b>								
MetWest Total Return Bond	TIAA-CREF/Fidelity	-6.24%	-4.49%	2.34%	2.59%	3.17%	0.38	
Intermediate Core Plus Bond Universe	Peer Group	-5.78%	-4.03%	2.25%	2.46%	2.73%		
Barclays Aggregate Bond Index	Benchmark	-5.93%	-4.15%	1.69%	2.14%	2.24%		
<b>ALLOCATION--50% TO 70% EQUITY</b>								
Fidelity Balanced K	Fidelity	-4.91%	7.73%	15.75%	12.75%	11.07%	0.45	
Allocation-50% to 70% Equity Universe	Peer Group	-4.79%	4.28%	9.90%	8.44%	7.93%		
60% S&P 500 40% BC Agg	Benchmark	-5.13%	7.47%	12.32%	10.73%	9.82%		
<b>WORLD ALLOCATION</b>								
CREF Social Choice Account R3	TIAA-CREF	-6.14%	3.25%	10.06%	8.84%	-	0.19	
World Allocation Universe	Peer Group	-3.13%	4.34%	7.56%	6.40%	5.73%		
60% MSCI World 40% BC Agg Index	Benchmark	-5.35%	4.62%	10.21%	8.85%	7.94%		
<b>ALLOCATION--85%+ EQUITY</b>								
CREF Stock R3	TIAA-CREF	-6.13%	5.77%	14.00%	11.87%	-	0.23	
Allocation--85%+ Equity Universe	Peer Group	-7.05%	4.01%	12.78%	10.67%	9.83%		
85% S&P 500, 15% BBgBarc Agg	Benchmark	-4.77%	12.56%	16.41%	13.99%	12.83%		
<b>LARGE COMPANY VALUE</b>								
JHancock Disciplined Value R6	TIAA-CREF/ Fidelity	0.55%	13.82%	14.39%	11.22%	11.78%	0.70	
Large Value Universe	Peer Group	-0.29%	12.88%	13.45%	10.67%	11.19%		
Russell 1000 Value	Benchmark	-0.74%	11.67%	13.02%	10.29%	11.70%		
<b>LARGE COMPANY BLEND</b>								
Vanguard Instl Index Pl Fund	TIAA-CREF/Fidelity	-4.61%	15.61%	18.92%	15.98%	14.63%	0.02	
Vanguard FTSE Social Index I	Fidelity	-7.47%	12.94%	19.53%	16.82%	15.69%	0.12	
Large Blend Universe	Peer Group	-5.11%	12.04%	16.79%	14.03%	13.02%		
S&P 500 Index	Benchmark	-4.60%	15.65%	18.92%	15.99%	14.64%		
<b>LARGE COMPANY GROWTH</b>								
Fidelity Contrafund K	Fidelity	-9.80%	9.50%	19.16%	17.93%	15.23%	0.74	
T Rowe Price Instl Large Cap Gr	TIAA-CREF/Fidelity	-13.25%	3.09%	18.67%	20.00%	17.03%	0.56	
Large Growth Universe	Peer Group	-11.15%	5.26%	18.81%	17.84%	14.76%		
Russell 1000 Growth	Benchmark	-9.04%	14.98%	23.60%	20.88%	17.04%		
<b>MEDIUM COMPANY VALUE</b>								
MFS Mid Cap Value R4	Fidelity	-2.56%	12.41%	14.93%	11.08%	12.22%	0.77	
MFS Mid Cap Value R6	TIAA-CREF	-2.53%	12.56%	15.10%	11.23%	12.34%	0.64	
Mid Value Universe	Peer Group	-0.85%	10.83%	13.36%	9.40%	10.80%		
Russell MidCap Value	Benchmark	-1.82%	11.45%	13.69%	9.99%	12.01%		

Shading highlights performance at or above median for peer group if available, otherwise at or above benchmark.

\*403(b) Plan only

CONTINUED

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY

INVESTMENT NAME	PROVIDER	Q1'22	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
<b>MEDIUM COMPANY BLEND</b>							
<b>Vanguard Ext Mkt Idx Instl Plus</b>	<b>TIAA-CREF/Fidelity</b>	<b>-9.33%</b>	<b>-5.39%</b>	<b>14.19%</b>	<b>12.08%</b>	<b>12.36%</b>	0.04
Mid Blend Universe	Peer Group	-5.11%	5.66%	13.78%	10.76%	11.22%	
Russell MidCap	Benchmark	-5.68%	6.92%	14.89%	12.62%	12.85%	
<b>MEDIUM COMPANY GROWTH</b>							
<b>MassMutual Mid Cap Gr I</b>	<b>TIAA-CREF/Fidelity</b>	<b>-11.39%</b>	<b>-0.76%</b>	<b>13.17%</b>	<b>13.70%</b>	<b>13.66%</b>	0.7
Mid Growth Universe	Peer Group	-12.92%	-4.71%	15.25%	15.15%	12.79%	
Russell MidCap Growth	Benchmark	-12.58%	-0.89%	14.81%	15.10%	13.52%	
<b>FOREIGN LARGE BLEND</b>							
<b>Amer Funds EuroPac R6</b>	<b>TIAA-CREF</b>	<b>-12.24%</b>	<b>-9.35%</b>	<b>8.36%</b>	<b>8.01%</b>	<b>7.32%</b>	0.46
<b>Amer Funds EuroPac R4</b>	<b>Fidelity</b>	<b>-12.32%</b>	<b>-9.67%</b>	<b>7.98%</b>	<b>7.63%</b>	<b>6.95%</b>	0.81
<b>Vanguard Total Intl Stock Index Inst</b>	<b>TIAA-CREF/Fidelity</b>	<b>-6.07%</b>	<b>-1.80%</b>	<b>7.80%</b>	<b>6.82%</b>	<b>5.84%</b>	0.07
<b>MFS International Intrinsic Value R4</b>	<b>Fidelity</b>	<b>-13.09%</b>	<b>-2.18%</b>	<b>9.11%</b>	<b>9.46%</b>	<b>9.98%</b>	0.72
<b>MFS International Intrinsic Value R6</b>	<b>TIAA-CREF</b>	<b>-13.07%</b>	<b>-2.07%</b>	<b>9.23%</b>	<b>9.57%</b>	<b>10.09%</b>	0.62
Foreign Large Blend Universe	Peer Group	-7.38%	-2.30%	7.62%	6.32%	5.85%	
MSCI EAFE	Benchmark	-5.79%	1.64%	8.29%	7.23%	6.77%	
<b>FOREIGN SMALL/MID GROWTH</b>							
<b>T Rowe Price International Discovery</b>	<b>Fidelity</b>	<b>-18.04%</b>	<b>-14.96%</b>	<b>10.75%</b>	<b>9.59%</b>	<b>9.93%</b>	1.18
<b>T Rowe Price International Discovery I</b>	<b>TIAA-CREF</b>	<b>-18.00%</b>	<b>-14.84%</b>	<b>10.89%</b>	<b>9.73%</b>	<b>10.02%</b>	1.05
Foreign Small/Mid Growth Universe	Peer Group	-15.88%	-8.07%	9.03%	8.48%	8.36%	
MSCI World ex USA Smid Cap USD	Benchmark	-7.24%	-1.90%	8.75%	7.43%	7.54%	
<b>SMALL COMPANY VALUE</b>							
<b>Goldman Sachs Small Value Inst</b>	<b>Fidelity</b>	<b>-3.19%</b>	<b>4.96%</b>	<b>11.07%</b>	<b>7.95%</b>	<b>10.58%</b>	0.96
<b>Goldman Sachs Small Value R6</b>	<b>TIAA-CREF</b>	<b>-3.18%</b>	<b>4.97%</b>	<b>11.09%</b>	<b>7.96%</b>	<b>10.44%</b>	0.95
Small Value Universe	Peer Group	-2.24%	6.14%	13.10%	8.42%	9.94%	
Russell 2000 Value	Benchmark	-2.40%	3.32%	12.73%	8.57%	10.54%	
<b>SMALL COMPANY GROWTH</b>							
<b>T Rowe Price QM US Small-Cap Gr Eq I</b>	<b>TIAA-CREF/Fidelity</b>	<b>-11.59%</b>	<b>-5.45%</b>	<b>11.48%</b>	<b>11.67%</b>	<b>12.64%</b>	0.65
Small Growth Universe	Peer Group	-13.22%	-9.61%	13.38%	13.73%	12.21%	
Russell 2000 Growth	Benchmark	-12.63%	-14.33%	9.88%	10.33%	11.21%	
<b>SPECIALTY-REAL ESTATE</b>							
<b>Cohen &amp; Steers Realty Shares L</b>	<b>Fidelity</b>	<b>-5.97%</b>	<b>23.51%</b>	<b>13.88%</b>	<b>11.84%</b>	<b>10.73%</b>	0.88
<b>Cohen &amp; Steers Instl Realty Shares</b>	<b>TIAA-CREF</b>	<b>-5.95%</b>	<b>23.42%</b>	<b>14.02%</b>	<b>12.02%</b>	<b>10.94%</b>	0.75
Specialty-Real Estate Universe	Peer Group	-5.53%	22.61%	11.84%	9.89%	9.44%	
Dow Jones US Select REIT	Benchmark	-3.71%	27.72%	9.90%	8.89%	9.17%	
<b>SPECIALTY-REAL ESTATE</b>							
<b>TIAA Real Estate Account</b>	<b>TIAA-CREF</b>	<b>5.44%</b>	<b>21.57%</b>	<b>8.53%</b>	<b>7.06%</b>	<b>7.82%</b>	0.77
Specialty-Real Estate Universe	Peer Group	7.37%	28.47%	11.30%	9.88%	10.92%	
NCREIF Property Index	Benchmark	5.33%	21.88%	9.61%	8.55%	9.61%	
<b>TARGET DATE</b>							
<b>Vanguard Target Retire Inc Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-4.74%</b>	<b>0.24%</b>	<b>5.82%</b>	<b>5.39%</b>	-	0.05
Retirement Income Moderate	Peer Group	-5.32%	-0.20%	5.73%	5.19%	4.63%	
Morningstar Lifetime Moderate Income Index	Benchmark	-4.14%	2.32%	6.81%	6.02%	5.10%	
<b>Vanguard Target Retire 2015 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-4.75%</b>	<b>0.49%</b>	<b>6.32%</b>	<b>6.03%</b>	-	0.05
2015 Moderate	Peer Group	-4.71%	1.42%	6.90%	6.12%	5.98%	
Morningstar Lifetime Moderate 2015 Index	Benchmark	-5.26%	2.56%	7.76%	7.00%	6.30%	
<b>Vanguard Target Retire 2020 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.08%</b>	<b>1.47%</b>	<b>7.94%</b>	<b>7.36%</b>	-	0.05
2020 Moderate	Peer Group	-5.14%	1.74%	7.58%	6.80%	6.76%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	-5.67%	2.69%	8.26%	7.48%	6.89%	
<b>Vanguard Target Retire 2025 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.47%</b>	<b>2.03%</b>	<b>9.06%</b>	<b>8.26%</b>	-	0.05
2025 Moderate	Peer Group	-5.51%	1.98%	8.49%	7.64%	7.51%	
Morningstar Lifetime Conservative 2025 Index	Benchmark	-5.93%	2.92%	8.85%	8.06%	7.60%	
<b>Vanguard Target Retire 2030 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.64%</b>	<b>2.69%</b>	<b>9.96%</b>	<b>8.97%</b>	-	0.05
2030 Moderate	Peer Group	-5.82%	2.69%	9.58%	8.58%	8.27%	
Morningstar Lifetime Conservative 2030 Index	Benchmark	-5.98%	3.33%	9.60%	8.76%	8.38%	

Shading highlights performance at or above median for peer group if available, otherwise at or above benchmark.

CONTINUED

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY

INVESTMENT NAME	PROVIDER	Q1'22	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
<b>Vanguard Target Retire 2035 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.62%</b>	<b>3.49%</b>	<b>10.90%</b>	<b>9.70%</b>	-	0.05
2035 Moderate	Peer Group	-6.01%	3.56%	10.92%	9.60%	9.04%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	-5.83%	3.89%	10.42%	9.44%	9.03%	
<b>Vanguard Target Retire 2040 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.65%</b>	<b>4.26%</b>	<b>11.81%</b>	<b>10.39%</b>	-	0.05
2040 Moderate	Peer Group	-6.19%	3.96%	11.64%	10.15%	9.48%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	-5.60%	4.46%	11.13%	9.98%	9.43%	
<b>Vanguard Target Retire 2045 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.66%</b>	<b>5.06%</b>	<b>12.72%</b>	<b>10.99%</b>	-	0.05
2045 Moderate	Peer Group	-6.26%	4.31%	12.07%	10.41%	9.48%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	-5.44%	4.80%	11.54%	10.25%	9.56%	
<b>Vanguard Target Retire 2050 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.67%</b>	<b>5.23%</b>	<b>12.86%</b>	<b>11.07%</b>	-	0.05
2050 Moderate	Peer Group	-6.29%	4.62%	12.15%	10.50%	9.64%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	-5.38%	4.81%	11.64%	10.29%	9.53%	
<b>Vanguard Target Retire 2055 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.64%</b>	<b>5.25%</b>	<b>12.86%</b>	<b>11.08%</b>	-	0.05
2055 Moderate	Peer Group	-6.21%	4.25%	12.16%	10.29%	9.50%	
Morningstar Lifetime Moderate 2055 Index	Benchmark	-5.39%	4.69%	11.59%	10.25%	9.45%	
<b>Vanguard Target Retire 2060 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.64%</b>	<b>5.24%</b>	<b>12.88%</b>	<b>11.10%</b>	-	0.05
<b>Vanguard Target Retire 2065 Tr Select</b>	<b>TIAA-CREF/Fidelity</b>	<b>-5.61%</b>	<b>5.21%</b>	<b>12.87%</b>	-	-	0.05
2060+ Moderate	Peer Group	-6.45%	4.22%	12.07%	-	-	
Morningstar Lifetime Moderate 2060 Index	Benchmark	5.27%	53.51%	10.98%	12.41%	-	

Shading highlights performance at or above median for peer group if available, otherwise at or above benchmark.