

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY
 THE UNIVERSITY OF NORTH CAROLINA
 FOR THE PERIOD ENDING 9/30/2022

INVESTMENT NAME	PROVIDER	Q3'22	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MONEY MARKET							
Fidelity Government Money Market	Fidelity	0.42%	0.51%	0.37%	0.85%	0.47%	0.42
CREF Money Market R3	TIAA-CREF	0.34%	0.42%	0.40%	0.89%	0.49%	0.18
Vanguard Federal Money Market	TIAA-CREF	0.50%	0.67%	0.52%	1.06%	0.62%	0.11
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.46%	0.62%	0.59%	1.15%	0.68%	
STABLE VALUE							
Fidelity Managed Income Portfolio	Fidelity	0.33%	1.09%	1.09%	1.42%	1.62%	0.50
Lincoln Fixed Account*	Fidelity	0.43%	1.56%	1.70%	1.83%	2.02%	0.35
TIAA Traditional Annuity - GRA	TIAA-CREF	Current Rate is 6.25%					
TIAA Traditional Annuity - GSRA	TIAA-CREF	Current Rate is 5.50%					
Hueler Stable Value Index (gross)	Peer Group	0.43%	1.46%	1.64%	1.78%	1.59%	
ICE BofA ML US Treasury Bill 3-mon USD	Benchmark	0.46%	0.62%	0.59%	1.15%	0.68%	
SHORT TERM BOND							
Vanguard Short Term Bond Index In Pl	Fidelity/TIAA-CREF	-2.11%	-7.23%	-0.93%	0.53%	0.84%	0.04
Short Term Bond Universe	Peer Group	-1.40%	-6.46%	-0.65%	0.59%	0.88%	
Barclays Government/Credit 1-3 Yr	Benchmark	-1.48%	-5.07%	-0.41%	0.70%	0.81%	
INTERMEDIATE TERM BOND							
JPMorgan Core Bond R5	Fidelity	-4.23%	-13.35%	-2.53%	0.26%	1.18%	0.44
Vanguard Total Bond Mkt Index Inst Pl	TIAA-CREF/Fidelity	-4.65%	-14.64%	-3.25%	-0.23%	0.87%	0.03
JPMorgan Core Bond R6	TIAA-CREF	-4.19%	-13.30%	-2.42%	0.36%	1.28%	0.34
Intermediate Core Bond Universe	Peer Group	-4.72%	-15.05%	-3.25%	-0.36%	0.82%	
Barclays Aggregate Bond Index	Benchmark	-4.75%	-14.60%	-3.26%	-0.27%	0.89%	
INTERMEDIATE CORE-PLUS BOND							
MetWest Total Return Bond	TIAA-CREF/Fidelity	-5.22%	-16.28%	-3.19%	-0.10%	1.32%	0.36
Intermediate Core Plus Bond Universe	Peer Group	-4.50%	-15.52%	-3.04%	-0.25%	1.15%	
Barclays Aggregate Bond Index	Benchmark	-4.75%	-14.60%	-3.26%	-0.27%	0.89%	
ALLOCATION--50% TO 70% EQUITY							
Fidelity Balanced K	Fidelity	-4.92%	-16.86%	6.63%	6.97%	8.53%	0.43
Allocation-50% to 70% Equity Universe	Peer Group	-5.11%	-16.16%	2.43%	3.60%	5.96%	
60% S&P 500 40% BC Agg	Benchmark	-4.75%	-14.85%	3.85%	5.70%	7.50%	
WORLD ALLOCATION							
CREF Social Choice Account R3	TIAA-CREF	-5.52%	-17.70%	1.88%	3.76%	6.03%	0.19
World Allocation Universe	Peer Group	-6.51%	-17.36%	0.43%	1.57%	3.98%	
60% MSCI World 40% BC Agg Index	Benchmark	-5.94%	-18.08%	1.25%	2.85%	4.91%	
ALLOCATION--85%+ EQUITY							
CREF Stock R3	TIAA-CREF	-6.55%	-21.37%	4.16%	4.78%	8.30%	0.23
Allocation--85%+ Equity Universe	Peer Group	-6.05%	-20.89%	3.60%	4.25%	7.54%	
85% S&P 500, 15% BBgBarc Agg	Benchmark	-4.82%	-15.20%	6.59%	7.96%	10.15%	
LARGE COMPANY VALUE							
JHancock Disciplined Value R6	TIAA-CREF/ Fidelity	-5.00%	-7.17%	6.50%	5.99%	9.50%	0.65
Large Value Universe	Peer Group	-5.62%	-9.50%	5.13%	5.71%	8.99%	
Russell 1000 Value	Benchmark	-5.62%	-11.36%	4.36%	5.29%	9.17%	
LARGE COMPANY BLEND							
Vanguard Instl Index Pl Fund	TIAA-CREF/Fidelity	-4.89%	-15.49%	8.15%	9.23%	11.69%	0.02
Vanguard FTSE Social Index I	Fidelity	-5.16%	-20.09%	7.70%	9.33%	12.66%	0.12
Large Blend Universe	Peer Group	-4.97%	-16.19%	7.12%	8.06%	10.62%	
S&P 500 Index	Benchmark	-4.88%	-15.47%	8.16%	9.24%	11.70%	
LARGE COMPANY GROWTH							
Fidelity Contrafund K	Fidelity	-3.82%	-25.22%	7.95%	9.19%	11.89%	0.74
T Rowe Price Instl Large Cap Gr	TIAA-CREF/Fidelity	-2.89%	-31.08%	7.09%	9.93%	13.81%	0.55
Large Growth Universe	Peer Group	-4.25%	-27.34%	6.74%	9.07%	11.56%	
Russell 1000 Growth	Benchmark	-3.60%	-22.59%	10.67%	12.17%	13.70%	
MEDIUM COMPANY VALUE							
MFS Mid Cap Value R4	Fidelity	-4.55%	-10.26%	5.94%	6.14%	10.01%	0.77
MFS Mid Cap Value R6	TIAA-CREF	-4.51%	-10.14%	6.09%	6.28%	10.14%	0.64
Mid Value Universe	Peer Group	-4.79%	-10.97%	4.78%	4.50%	8.64%	
Russell MidCap Value	Benchmark	-4.93%	-13.56%	4.50%	4.76%	9.44%	

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*403(b) Plan only

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MEDIUM COMPANY BLEND							
Vanguard Ext Mkt Idx Instl Plus	TIAA-CREF/Fidelity	-2.73%	-29.54%	4.26%	4.84%	9.45%	0.04
Mid Blend Universe	Peer Group	-4.12%	-16.02%	5.07%	5.33%	9.25%	
Russell MidCap	Benchmark	-3.44%	-19.39%	5.19%	6.48%	10.30%	
MEDIUM COMPANY GROWTH							
MassMutual Mid Cap Growth I	TIAA-CREF/Fidelity	-3.39%	-26.68%	3.05%	6.47%	11.15%	0.65
Mid Growth Universe	Peer Group	-1.88%	-29.52%	4.78%	7.61%	10.14%	
Russell MidCap Growth	Benchmark	-0.65%	-29.50%	4.26%	7.62%	10.85%	
FOREIGN LARGE BLEND							
Amer Funds EuroPac R6	TIAA-CREF	-9.33%	-32.85%	-1.24%	-0.23%	4.52%	0.46
Amer Funds EuroPac R4	Fidelity	-9.42%	-33.09%	-1.59%	-0.58%	4.16%	0.81
Vanguard Total Intl Stock Index Inst	TIAA-CREF/Fidelity	-10.52%	-25.20%	-1.14%	-0.67%	3.35%	0.07
MFS International Intrinsic Value R4	Fidelity	-7.16%	-26.79%	-0.66%	2.05%	6.99%	0.72
MFS International Intrinsic Value R6	TIAA-CREF	-1.72%	36.90%	11.05%	11.95%	10.82%	0.61
Foreign Large Blend Universe	Peer Group	-10.41%	-26.10%	-1.77%	-1.08%	3.30%	
MSCI EAFE	Benchmark	-9.29%	-24.75%	-1.38%	-0.36%	4.15%	
FOREIGN SMALL/MID GROWTH							
T Rowe Price International Discovery	Fidelity	-11.02%	-37.91%	0.89%	0.18%	6.71%	1.18
T Rowe Price International Discovery I	TIAA-CREF	-10.98%	-37.81%	1.03%	0.32%	6.80%	1.05
Foreign Small/Mid Growth Universe	Peer Group	-9.24%	-37.35%	-2.66%	-1.25%	4.73%	
MSCI World ex USA Smid Cap USD	Benchmark	-9.72%	-30.16%	-2.36%	-1.68%	4.16%	
SMALL COMPANY VALUE							
Goldman Sachs Small Value Inst	Fidelity	-5.28%	-16.84%	2.49%	2.06%	8.00%	0.96
Goldman Sachs Small Value R6	TIAA-CREF	-5.28%	-16.84%	2.50%	2.07%	7.88%	0.95
Small Value Universe	Peer Group	-5.04%	-15.32%	5.47%	3.16%	7.86%	
Russell 2000 Value	Benchmark	-4.61%	-17.69%	4.72%	2.87%	7.94%	
SMALL COMPANY GROWTH							
T Rowe Price QM US Small-Cap Gr Eq I	TIAA-CREF/Fidelity	-1.49%	-24.78%	2.82%	5.61%	10.40%	0.64
Small Growth Universe	Peer Group	-1.42%	-29.36%	4.44%	6.48%	9.57%	
Russell 2000 Growth	Benchmark	0.24%	-29.27%	2.94%	3.60%	8.81%	
SPECIALTY-REAL ESTATE							
Cohen & Steers Realty Shares L	Fidelity	-11.02%	-16.06%	0.14%	5.61%	7.57%	0.88
Cohen & Steers Instl Realty Shares	TIAA-CREF	-10.89%	-15.85%	0.36%	5.79%	7.79%	0.75
Specialty-Real Estate Universe	Peer Group	-10.73%	-17.72%	-1.09%	3.51%	6.07%	
Dow Jones US Select REIT	Benchmark	-10.37%	-17.15%	-3.29%	1.95%	5.49%	
SPECIALTY-REAL ESTATE							
TIAA Real Estate Account	TIAA-CREF	1.16%	18.78%	9.86%	7.97%	8.01%	0.77
Specialty-Real Estate Universe	Peer Group	0.52%	22.09%	12.37%	10.24%	10.91%	
NCREIF Property Index	Benchmark	0.57%	16.08%	9.91%	8.62%	9.48%	
TARGET DATE							
Vanguard Target Retire Inc Tr Select	TIAA-CREF/Fidelity	-4.73%	-14.20%	0.03%	2.02%	3.39%	0.05
Retirement Income Moderate	Peer Group	-4.53%	-14.65%	-0.21%	1.64%	2.97%	
Morningstar Lifetime Moderate Income Index	Benchmark	-4.73%	-14.27%	0.84%	2.40%	3.35%	
Vanguard Target Retire 2020 Tr Select	TIAA-CREF/Fidelity	-5.15%	-15.79%	1.23%	2.99%	5.56%	0.05
2020 Moderate	Peer Group	-4.87%	-15.29%	1.12%	2.66%	4.92%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	-6.01%	-18.89%	0.16%	2.46%	4.62%	
Vanguard Target Retire 2025 Tr Select	TIAA-CREF/Fidelity	-5.60%	-17.38%	1.54%	3.28%	6.09%	0.05
2025 Moderate	Peer Group	-5.16%	-16.58%	1.31%	2.90%	5.47%	
Morningstar Lifetime Conservative 2025 Index	Benchmark	-6.28%	-19.88%	0.25%	2.62%	5.21%	
Vanguard Target Retire 2030 Tr Select	TIAA-CREF/Fidelity	-5.90%	-18.24%	1.96%	3.55%	6.58%	0.05
2030 Moderate	Peer Group	-5.49%	-17.80%	1.90%	3.32%	6.07%	
Morningstar Lifetime Conservative 2030 Index	Benchmark	-6.42%	-20.52%	0.63%	2.91%	5.89%	

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Vanguard Target Retire 2035 Tr Select	TIAA-CREF/Fidelity	-6.12%	-18.77%	2.51%	3.91%	7.11%	0.05

2035 Moderate	Peer Group	-5.81%	-18.72%	2.48%	3.72%	6.63%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	-6.42%	-20.74%	1.21%	3.27%	6.46%	
Vanguard Target Retire 2040 Tr Select	TIAA-CREF/Fidelity	-6.32%	-19.32%	3.03%	4.23%	7.52%	0.05
2040 Moderate	Peer Group	-6.10%	-19.52%	2.88%	3.93%	6.97%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	-6.38%	-20.78%	1.78%	3.56%	6.79%	
Vanguard Target Retire 2045 Tr Select	TIAA-CREF/Fidelity	-6.48%	-19.82%	3.55%	4.51%	7.72%	0.05
2045 Moderate	Peer Group	-6.42%	-20.04%	3.14%	4.14%	7.14%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	-6.39%	-20.83%	2.10%	3.68%	6.89%	
Vanguard Target Retire 2050 Tr Select	TIAA-CREF/Fidelity	-6.61%	-20.10%	3.52%	4.50%	7.72%	0.05
2050 Moderate	Peer Group	-6.44%	-20.26%	3.22%	4.21%	7.22%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	-6.43%	-20.91%	2.17%	3.66%	6.85%	
Vanguard Target Retire 2055 Tr Select	TIAA-CREF/Fidelity	-6.61%	-20.10%	3.51%	4.49%	7.68%	0.05
2055 Moderate	Peer Group	-6.51%	-20.50%	3.33%	4.20%	7.32%	
Morningstar Lifetime Moderate 2055 Index	Benchmark	-6.51%	-21.04%	2.12%	3.59%	6.77%	
Vanguard Target Retire 2060 Tr Select	TIAA-CREF/Fidelity	-6.63%	-20.09%	3.54%	4.51%	7.69%	0.05
Vanguard Target Retire 2065 Tr Select	TIAA-CREF/Fidelity	-6.62%	-20.07%	3.52%	4.53%	-	0.05
2060+ Moderate	Peer Group	-6.41%	-20.47%	3.28%	4.25%	7.62%	
Morningstar Lifetime Moderate 2060 Index	Benchmark	-6.59%	-21.18%	2.03%	3.49%	6.65%	

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