

PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY
 THE UNIVERSITY OF NORTH CAROLINA
 FOR THE PERIOD ENDING 09.30.19

INVESTMENT NAME	PROVIDER	Q3'19	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MONEY MARKET							
Fidelity Government Money Market	Fidelity	0.46%	1.96%	1.16%	0.70%	0.36%	0.42
CREF Money Market R3	TIAA-CREF	0.51%	2.14%	1.20%	0.74%	0.37%	0.23
Vanguard Federal Money Market	TIAA-CREF	0.54%	2.26%	1.46%	0.93%	0.47%	0.11
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.56%	2.38%	1.54%	0.98%	0.54%	
STABLE VALUE							
Fidelity Managed Income Portfolio	Fidelity	0.49%	1.86%	1.53%	1.39%	1.28%	0.77
Lincoln Fixed Account*	Fidelity	0.52%	2.07%	2.05%	2.13%	2.40%	0.35
TIAA Traditional Annuity - GRA	TIAA-CREF	Current Rate is 3.50%					
TIAA Traditional Annuity - GSRA	TIAA-CREF	Current Rate is 3.00%					
Hueler Stable Value Index (gross)	Peer Group	0.42%	2.46%	2.16%	2.00%	2.20%	
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.56%	2.38%	1.54%	0.98%	0.54%	
SHORT TERM BOND							
Vanguard Short Term Bond Index I	Fidelity/TIAA-CREF	0.95%	6.00%	1.96%	1.96%	2.02%	0.05
Short Term Bond Universe	Peer Group	0.71%	4.50%	2.04%	1.77%	2.20%	
Barclays Government/Credit 1-3 Yr	Benchmark	0.69%	4.64%	1.82%	1.59%	1.52%	
INTERMEDIATE TERM BOND							
JPMorgan Core Bond R5	Fidelity	2.50%	10.51%	3.10%	3.48%	4.01%	0.45
Vanguard Total Bond Mkt Index Inst	TIAA-CREF/Fidelity	2.43%	10.45%	2.91%	3.36%	3.71%	0.04
JPMorgan Core Bond R6	TIAA-CREF	2.52%	10.59%	3.20%	3.57%	4.09%	0.35
Intermediate Core Bond Universe	Peer Group	2.00%	9.35%	2.56%	2.92%	3.61%	
Barclays Aggregate Bond Index	Benchmark	2.27%	10.30%	2.92%	3.38%	3.75%	
INTERMEDIATE CORE-PLUS BOND							
MetWest Total Return Bond	TIAA-CREF/Fidelity	2.26%	10.55%	3.25%	3.37%	5.23%	0.37
Intermediate Core Plus Bond Universe	Peer Group	1.96%	9.27%	3.18%	3.28%	4.40%	
Barclays Aggregate Bond Index	Benchmark	2.27%	10.30%	2.92%	3.38%	3.75%	
ALLOCATION--50% TO 70% EQUITY							
Fidelity Balanced K	Fidelity	1.10%	3.73%	9.40%	7.62%	9.77%	0.46
Allocation-50% to 70% Equity Universe	Peer Group	0.94%	3.76%	7.07%	5.62%	7.83%	
60% S&P 500 40% BC Agg	Benchmark	1.96%	7.10%	9.32%	8.00%	9.59%	
WORLD ALLOCATION							
CREF Social Choice Account R3	TIAA-CREF	1.89%	6.39%	8.05%	6.42%	8.14%	0.24
World Allocation Universe	Peer Group	0.06%	2.14%	5.22%	3.41%	6.01%	
60% MSCI World 40% BC Agg Index	Benchmark	1.33%	5.90%	7.79%	6.20%	7.48%	
ALLOCATION--85%+ EQUITY							
CREF Stock R3	TIAA-CREF	-0.21%	-0.01%	10.04%	7.66%	10.04%	0.30
Allocation--85%+ Equity Universe	Peer Group	-0.04%	0.03%	8.55%	6.35%	9.26%	
85% S&P 500, 15% BBgBarc Agg	Benchmark	1.73%	4.55%	12.75%	10.37%	12.46%	
LARGE COMPANY VALUE							
JHancock Disciplined Value R6	TIAA-CREF	1.58%	-1.58%	10.12%	7.17%	11.12%	0.71
JHancock Disciplined Value R5	Fidelity	1.58%	-1.64%	10.05%	7.10%	11.09%	0.11
Large Value Universe	Peer Group	1.47%	1.91%	9.33%	7.15%	10.58%	
Russell 1000 Value	Benchmark	1.36%	4.00%	9.43%	7.79%	11.46%	
LARGE COMPANY BLEND							
Vanguard Instl Index PI Fund	TIAA-CREF/Fidelity	1.70%	4.24%	13.38%	10.83%	13.24%	0.02
Large Blend Universe	Peer Group	1.34%	2.60%	11.56%	8.93%	11.71%	
S&P 500 Index	Benchmark	1.70%	4.25%	13.39%	10.84%	13.24%	
LARGE COMPANY GROWTH							
Vanguard FTSE Social Index I	Fidelity	1.82%	5.28%	14.64%	11.67%	13.79%	0.12
Fidelity Contrafund K	Fidelity	-2.35%	-1.14%	15.01%	11.71%	13.78%	0.65
T Rowe Price Instl Large Cap Gr	TIAA-CREF/Fidelity	-1.11%	1.80%	19.56%	14.74%	15.87%	0.56
Large Growth Universe	Peer Group	-0.64%	1.96%	14.70%	11.16%	13.13%	
Russell 1000 Growth	Benchmark	1.49%	3.71%	16.89%	13.39%	14.94%	
MEDIUM COMPANY VALUE							
MFS Mid Cap Value R4	Fidelity	2.02%	4.23%	8.84%	8.02%	12.69%	0.86
MFS Mid Cap Value R6	TIAA-CREF	2.06%	4.39%	8.98%	8.18%	12.69%	0.69
Mid Value Universe	Peer Group	0.74%	-1.50%	7.14%	6.39%	10.66%	
Russell MidCap Value	Benchmark	1.22%	1.60%	7.82%	7.55%	12.29%	

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*403(b) Plan only

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MEDIUM COMPANY BLEND							
Vanguard Ext Mkt Idx Instl Plus	TIAA-CREF/Fidelity	-1.60%	-3.77%	9.98%	8.55%	12.42%	0.05
Mid Blend Universe	Peer Group	0.22%	-1.38%	8.25%	6.44%	10.67%	
Russell MidCap	Benchmark	0.48%	3.19%	10.69%	9.10%	13.07%	
MEDIUM COMPANY GROWTH							
MassMutual Sel Mid Cap Gr Eq II	TIAA-CREF/Fidelity	-0.64%	6.66%	14.42%	12.69%	14.62%	0.71
Mid Growth Universe	Peer Group	-1.74%	2.47%	13.83%	10.35%	12.82%	
Russell MidCap Growth	Benchmark	-0.67%	5.20%	14.50%	11.12%	14.08%	
FOREIGN LARGE BLEND							
Amer Funds EuroPac R6	TIAA-CREF	-1.59%	1.14%	7.38%	5.02%	6.07%	0.49
Amer Funds EuroPac R4	Fidelity	-1.68%	0.80%	7.00%	4.65%	5.70%	0.83
Vanguard Total Intl Stock Index Inst	TIAA-CREF/Fidelity	-1.61%	-1.53%	6.09%	3.17%	4.55%	0.08
MFS International Intrinsic Value R4	Fidelity	0.09%	4.44%	8.52%	8.62%	9.40%	0.76
MFS International Intrinsic Value R6	TIAA-CREF	0.14%	4.56%	8.64%	8.73%	9.45%	0.63
Foreign Large Blend Universe	Peer Group	-1.38%	-2.30%	5.29%	2.74%	4.58%	
MSCI EAFE	Benchmark	-1.00%	-0.82%	7.01%	3.77%	5.39%	
FOREIGN SMALL/MID GROWTH							
T Rowe Price International Discovery	Fidelity	-2.61%	-5.02%	7.07%	7.24%	9.08%	1.19
T Rowe Price International Discovery I	TIAA-CREF	-2.59%	-4.89%	7.21%	7.34%	9.14%	1.07
Foreign Small/Mid Growth Universe	Peer Group	-2.30%	-5.63%	6.06%	5.49%	8.23%	
MSCI World ex USA Smid Cap USD	Benchmark	-0.46%	-4.18%	6.07%	5.21%	6.77%	
SMALL COMPANY VALUE							
Goldman Sachs Small Value Inst	Fidelity	-0.93%	-5.77%	7.27%	7.20%	11.85%	0.95
Goldman Sachs Small Value R6	TIAA-CREF	-0.93%	-5.77%	7.28%	7.14%	11.60%	0.96
Small Value Universe	Peer Group	-0.57%	-8.56%	5.32%	5.45%	9.56%	
Russell 2000 Value	Benchmark	-0.57%	-8.24%	6.54%	7.17%	10.06%	
SMALL COMPANY GROWTH							
Eagle Small Cap Growth R5	Fidelity	-6.41%	-11.63%	8.84%	8.12%	12.23%	0.77
Eagle Small Cap Growth R6	TIAA-CREF	-6.39%	-11.53%	8.97%	8.24%	12.24%	0.65
Small Growth Universe	Peer Group	-4.36%	-6.71%	11.95%	9.77%	12.50%	
Russell 2000 Growth	Benchmark	-4.17%	-9.63%	9.79%	9.08%	12.25%	
SPECIALTY-REAL ESTATE							
Cohen & Steers Realty Shares	Fidelity	9.39%	23.73%	9.46%	11.59%	13.17%	0.97
Cohen & Steers Instl Realty Shares	TIAA-CREF	9.34%	23.73%	9.67%	11.79%	13.38%	0.76
Specialty-Real Estate Universe	Peer Group	7.18%	17.89%	7.10%	9.37%	12.20%	
Dow Jones US Select REIT	Benchmark	6.83%	16.41%	6.48%	9.70%	12.69%	
SPECIALTY-REAL ESTATE							
TIAA Real Estate Account	TIAA-CREF	1.17%	5.26%	4.91%	6.12%	7.89%	0.83
Specialty-Real Estate Universe	Peer Group	7.18%	17.89%	7.10%	9.37%	12.20%	
NCREIF Property Index	Benchmark	1.41%	6.23%	6.76%	8.57%	9.77%	
TARGET DATE							
Vanguard Target Retire Inc Tr Plus	TIAA-CREF/Fidelity	1.53%	6.82%	5.16%	4.65%	-	0.06
Retirement Income Moderate	Peer Group	1.25%	5.63%	4.77%	4.09%	5.16%	
Morningstar Lifetime Moderate Income Index	Benchmark	0.87%	5.21%	4.99%	4.18%	5.61%	
Vanguard Target Retire 2015 Tr Plus	TIAA-CREF/Fidelity	1.42%	6.09%	6.24%	5.42%	-	0.06
2015 Moderate	Peer Group	1.00%	4.68%	6.33%	5.10%	7.22%	
Morningstar Lifetime Moderate 2015 Index	Benchmark	1.33%	6.53%	6.78%	5.57%	7.64%	
Vanguard Target Retire 2020 Tr Plus	TIAA-CREF/Fidelity	1.20%	5.38%	7.16%	6.07%	-	0.06
2020 Moderate	Peer Group	0.94%	4.68%	6.33%	5.10%	7.22%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	1.41%	6.53%	6.78%	5.57%	7.64%	
Vanguard Target Retire 2025 Tr Plus	TIAA-CREF/Fidelity	1.09%	4.98%	7.86%	6.49%	-	0.06
2025 Moderate	Peer Group	0.75%	4.13%	7.05%	5.61%	7.91%	
Morningstar Lifetime Conservative 2025 Index	Benchmark	1.38%	6.22%	7.51%	6.04%	8.31%	
Vanguard Target Retire 2030 Tr Plus	TIAA-CREF/Fidelity	0.90%	4.25%	8.39%	6.76%	-	0.06
2030 Moderate	Peer Group	0.59%	3.53%	7.89%	6.19%	8.48%	
Morningstar Lifetime Conservative 2030 Index	Benchmark	1.22%	5.40%	8.31%	6.50%	8.90%	

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Vanguard Target Retire 2035 Tr Plus	TIAA-CREF/Fidelity	0.70%	3.51%	8.88%	7.03%	-	0.06
2035 Moderate	Peer Group	0.34%	2.67%	8.36%	6.49%	8.84%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	0.93%	4.24%	8.96%	6.84%	9.29%	
Vanguard Target Retire 2040 Tr Plus	TIAA-CREF/Fidelity	0.48%	2.71%	9.36%	7.25%	-	0.06
2040 Moderate	Peer Group	0.32%	2.36%	8.78%	6.75%	9.09%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	0.66%	3.23%	9.30%	6.98%	9.42%	
Vanguard Target Retire 2045 Tr Plus	TIAA-CREF/Fidelity	0.31%	2.17%	9.49%	7.33%	-	0.06
2045 Moderate	Peer Group	0.15%	1.79%	8.83%	6.69%	9.01%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	0.46%	2.62%	9.37%	6.97%	9.38%	
Vanguard Target Retire 2050 Tr Plus	TIAA-CREF/Fidelity	0.29%	2.17%	9.50%	7.32%	-	0.06
2050 Moderate	Peer Group	0.26%	2.09%	9.01%	6.85%	9.15%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	0.37%	2.39%	9.32%	6.89%	9.28%	
Vanguard Target Retire 2055 Tr Plus	TIAA-CREF/Fidelity	0.29%	2.15%	9.50%	7.30%	-	0.06
2055 Moderate	Peer Group	0.16%	1.35%	8.76%	6.73%	9.40%	
Morningstar Lifetime Moderate 2055 Index	Benchmark	0.31%	2.29%	9.26%	6.81%	9.17%	
Vanguard Target Retire 2060 Tr Plus	TIAA-CREF/Fidelity	0.31%	2.14%	9.49%	7.32%	-	0.06
Vanguard Target Retire 2065 Tr Plus	TIAA-CREF/Fidelity	0.33%	2.28%	-	-	-	
2060+ Moderate	Peer Group	0.15%	1.49%	9.01%	7.16%	-	
Morningstar Lifetime Moderate 2060 Index	Benchmark	0.26%	2.22%	9.18%	6.71%	-	

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