## PLAN INVESTMENT REVIEW | PERFORMANCE SUMMARY THE UNIVERSITY OF NORTH CAROLINA For the period ending 09.30.2020

For the period ending 09.30.2020 INVESTMENT NAME	PROVIDER	Q3′20	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MONEY MARKET	PROVIDER	Q3 20	TTEAR	STEAR	JTEAR	IU TEAR	Ехр канс
Fidelity Government Money Market	Fidelity	0.00%	0.61%	1.25%	0.82%	0.42%	0.42
CREF Money Market R3	TIAA-CREF	0.00%	0.79%	1.34%	0.89%	0.45%	0.23
Vanguard Federal Money Market	TIAA-CREF	0.02%	0.87%	1.54%	1.10%	0.55%	0.11
BofA Merrill Lynch 3-month U.S. T-Bill	Benchmark	0.04%	1.10%	1.69%	1.20%	0.64%	••••
STABLE VALUE		0.0470	1.1070	1.0070	1.2070	0.0470	
Fidelity Managed Income Portfolio	Fidelity	0.35%	1.70%	1.68%	1.51%	1.33%	0.77
Lincoln Fixed Account*	Fidelity	0.43%	1.96%	2.01%	2.07%	2.24%	0.35
TIAA Traditional Annuity - GRA	TIAA-CREF			rent Rate is 3.		,	0.00
TIAA Traditional Annuity - GSRA	TIAA-CREF	Current Rate is 3.00%					
Hueler Stable Value Index (gross)	Peer Group	0.55%	2.37%	2.34%	2.14%	2.13%	
ICE BofA ML US Treasury Bill 3-mon USD	Benchmark	0.04%	1.10%	1.69%	1.20%	0.64%	
SHORT TERM BOND							
Vanguard Short Term Bond Index In Pl	Fidelity/TIAA-CREF	0.34%	4.81%	3.44%	2.54%	2.03%	0.04
Short Term Bond Universe	Peer Group	1.06%	1.06%	3.09%	2.54%	2.12%	
Barclays Government/Credit 1-3 Yr	Benchmark	0.23%	3.73%	2.84%	2.09%	1.57%	
INTERMEDIATE TERM BOND							8
JPMorgan Core Bond R5	Fidelity	0.98%	6.75%	5.31%	4.17%	3.77%	0.45
Vanguard Total Bond Mkt Index Inst Pl	TIAA-CREF/Fidelity	0.62%	7.05%	5.33%	4.22%	3.62%	0.03
JPMorgan Core Bond R6	TIAA-CREF	1.00%	6.84%	5.40%	4.27%	3.86%	0.34
Intermediate Core Bond Universe	Peer Group	1.05%	6.83%	4.88%	3.95%	3.50%	
Barclays Aggregate Bond Index	Benchmark	0.62%	6.98%	5.24%	4.18%	3.64%	
INTERMEDIATE CORE-PLUS BOND	•						-
MetWest Total Return Bond	TIAA-CREF/Fidelity	1.24%	8.09%	5.83%	4.53%	4.59%	0.38
Intermediate Core Plus Bond Universe	Peer Group	1.66%	6.65%	4.88%	4.32%	3.97%	
Barclays Aggregate Bond Index	Benchmark	0.62%	6.98%	5.24%	4.18%	3.64%	
ALLOCATION50% TO 70% EQUITY							
Fidelity Balanced K	Fidelity	7.74%	17.91%	10.85%	11.37%	10.48%	0.46
Allocation-50% to 70% Equity Universe	Peer Group	4.92%	7.02%	5.92%	7.60%	7.66%	
60% S&P 500 40% BC Agg	Benchmark	5.61%	13.18%	10.06%	10.48%	9.95%	
WORLD ALLOCATION							-
CREF Social Choice Account R3	TIAA-CREF	4.90%	9.14%	7.48%	8.69%	-	0.26
World Allocation Universe	Peer Group	4.23%	1.57%	2.33%	5.26%	4.98%	
60% MSCI World 40% BC Agg Index	Benchmark	5.11%	10.02%	7.47%	8.57%	7.66%	
ALLOCATION85%+ EQUITY							
CREF Stock R3	TIAA-CREF	8.56%	11.31%	7.56%	10.74%	10.18%	0.33
Allocation85%+ Equity Universe	Peer Group	7.10%	7.37%	5.70%	8.76%	8.96%	
85% S&P 500, 15% BBgBarc Agg	Benchmark	7.70%	14.26%	11.43%	12.77%	12.31%	
LARGE COMPANY VALUE							0.70
JHancock Disciplined Value R6	TIAA-CREF/ Fidelity	3.80%	-8.11%	0.58%	6.25%	9.46%	0.70
Large Value Universe	Peer Group	4.80%	-4.85%	2.33%	7.11%	9.10%	
Russell 1000 Value	Benchmark	5.59%	-5.03%	2.63%	7.66%	9.95%	
LARGE COMPANY BLEND	TIAA-CREF/Fidelity	0.00%	45 450/	40.070/	4 4 4 4 9 /	40 740/	0.02
Vanguard Instl Index PI Fund Vanguard FTSE Social Index I	Fidelity	8.93%	15.15%	12.27%	14.14%	13.74%	0.02 0.12
Large Blend Universe	Peer Group	10.59%	20.76%	14.73%	15.55%	14.98%	0.12
S&P 500 Index	Benchmark	8.26%	10.98%	9.48%	11.76% 14.15%	11.92%	
LARGE COMPANY GROWTH	Benchinark	8.93%	15.15%	12.28%	14.15%	13.74%	
Fidelity Contrafund K	Fidelity	44 770/	25 4 20/	10 500/	47 969/	15 649/	0.65
T Rowe Price Instl Large Cap Gr	TIAA-CREF/Fidelity	11.77% 11.46%	35.13% 35.80%	18.58% 21.09%	17.86% 20.61%	15.64%	0.56
Large Growth Universe	Peer Group	11. <b>46%</b> 11.53%	35.80% 33.37%	<b>21.09%</b> 18.61%	<b>20.61%</b> 17.26%	<b>18.09%</b> 15.17%	0.00
Russell 1000 Growth	Benchmark	13.22%	33.37% 37.53%	21.67%		15.17%	
MEDIUM COMPANY VALUE	Deneminark	13.22%	31.33%	21.07%	20.10%	17.20%	I
MFS Mid Cap Value R4	Fidelity	5.34%	-6.64%	1 80%	6.45%	9.96%	0.86
MFS Mid Cap Value R6	TIAA-CREF	5.34% 5.36%	-6.52%	1.89% 2.02%	6.60%	9.96% 10.00%	0.86 0.68
Mid Value Universe	Peer Group	<b>5.36%</b> 4.31%	- <b>6.52%</b> -10.24%	<b>2.02%</b> -1.28%	<b>6.60%</b> 4.80%	10.00% 8.10%	0.00
Russell MidCap Value	Benchmark						
	Dencilliark	6.40%	-7.30%	0.82%	6.38%	9.71%	

Shading highlights performance at or above median for peer group if available, otherwise at or above benchmark. \*403(b) Plan only

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	PROVIDER	Q3′20	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
MEDIUM COMPANY BLEND Vanguard Ext Mkt Idx Insti Plus	TIAA-CREF/Fidelity	0.07%	40.00%	0.00%	44.07%	40.40%	0.04
Mid Blend Universe	Peer Group	9.87%	13.00%	8.09%	11.27%	12.13%	0.04
Russell MidCap	Benchmark	6.69%	0.28%	3.50%	7.20%	9.47%	
MEDIUM COMPANY GROWTH	Benchinark	7.46%	4.55%	7.13%	10.13%	11.76%	
MassMutual Sel Mid Cap Gr Eq II	TIAA-CREF/Fidelity	0.74%	45.00%	40.04%	40.04%	44.000/	0.71
Mid Growth Universe	Peer Group	8.74%	15.23%	12.94%	13.84%	14.36%	0.71
Russell MidCap Growth	Benchmark	10.20%	26.37%	16.08%	15.01%	13.69%	
FOREIGN LARGE BLEND	Benchinark	9.37%	23.23%	16.23%	15.53%	14.55%	
Amer Funds EuroPac R6	TIAA-CREF	9.66%	14.97%	5.67%	9.08%	6.79%	0.46
Amer Funds EuroPac R4	Fidelity	9.66% 9.57%	14.97%		9.08% 8.70%	6.42%	0.40
Vanguard Total Intl Stock Index Inst	TIAA-CREF/Fidelity	9.57% 6.48%	3.83%	5.30% 1.29%	6.35%	6.42% 4.25%	0.03
MFS International Intrinsic Value R4	Fidelity						0.76
MFS International Intrinsic Value R4	TIAA-CREF	8.52%	17.71%	9.94%	11.88%	10.89%	0.63
Foreign Large Blend Universe	Peer Group	8.55%	17.82%	<b>10.06%</b>	12.00%	10.97%	0.05
MSCI EAFE	Benchmark	6.16%	3.42%	0.63%	5.22%	4.45%	
FOREIGN SMALL/MID GROWTH	Dencimark	4.88%	0.93%	1.11%	5.77%	5.11%	
T Rowe Price International Discovery	Fidelity	13.85%	31.24%	8.85%	12.84%	10.59%	1.19
T Rowe Price International Discovery	TIAA-CREF	13.85% 13.90%	31.24% 31.42%	8.85% 8.99%	12.84%	10.59%	1.19
Foreign Small/Mid Growth Universe	Peer Group						1.07
MSCI World ex USA Smid Cap USD	Benchmark	11.88%	18.70%	6.29%	10.02%	8.55%	
SMALL COMPANY VALUE	Benchinark	8.89%	5.30%	1.58%	7.16%	6.35%	
Goldman Sachs Small Value Inst	Fidelity	2.029/	-16.97%	-5.12%	2 4 2 9/	0 4 4 9/	0.95
Goldman Sachs Small Value R6	TIAA-CREF	3.03% 3.04%			3.42%	8.14% 7.04%	0.94
Small Value Universe	Peer Group		-16.95%	-5.11%	<b>3.44%</b>	7.94%	0.94
Russell 2000 Value	Benchmark	2.50% 2.56%	-15.14% -14.88%	-5.60% -5.13%	2.59% 4.11%	6.45% 7.09%	
SMALL COMPANY GROWTH	Deneminark	2.30%	-14.00%	-5.15%	4.1170	7.09%	
T Rowe Price QM US Small-Cap Gr Eq I	TIAA-CREF/Fidelity	7.18%	10.05%	9.98%	12.33%	14.02%	0.65
Small Growth Universe	Peer Group	8.53%	20.56%	12.11%	13.40%	12.92%	0.00
Russell 2000 Growth	Benchmark	7.16%	15.71%	8.18%	11.42%	12.32%	
SPECIALTY-REAL ESTATE	Denemian	7.1070	10.7170	0.1070	11.4270	12.0470	
Cohen & Steers Realty Shares L	Fidelity	2.82%	-10.34%	5.46%	6.80%	9.22%	0.97
Cohen & Steers Insti Realty Shares	TIAA-CREF	2.95%	-9.99%	5.67%	7.05%	9.44%	0.75
Specialty-Real Estate Universe	Peer Group	2.39%	-11.87%	2.36%	4.78%	7.98%	0.10
Dow Jones US Select REIT	Benchmark	0.83%	-22.33%	-1.85%	1.99%	7.03%	
SPECIALTY-REAL ESTATE	2010011	0.0070	-22.0070	-1.0070	1.0070	1.0070	
TIAA Real Estate Account	TIAA-CREF	-0.06%	-0.24%	3.35%	3.99%	7.67%	0.78
Specialty-Real Estate Universe	Peer Group	2.39%	-11.87%	2.36%	4.78%	7.98%	
NCREIF Property Index	Benchmark	0.74%	2.01%	5.11%	6.28%	9.37%	
TARGET DATE		0	2.0170	0	0.2070	0.01.70	
Vanguard Target Retire Inc Tr Select	TIAA-CREF/Fidelity	3.14%	7.47%	5.87%	6.12%	-	0.05
Retirement Income Moderate	Peer Group	3.37%	6.50%	5.09%	5.60%	4.92%	
Morningstar Lifetime Moderate Income Index	Benchmark	3.63%	7.20%	5.59%	5.94%	5.49%	
Vanguard Target Retire 2015 Tr Select	TIAA-CREF/Fidelity	3.54%	7.79%	6.17%	7.14%	-	0.05
2015 Moderate	Peer Group	3.67%	6.94%	5.26%	6.51%	6.28%	
Morningstar Lifetime Moderate 2015 Index	Benchmark	4.15%	8.44%	6.61%	7.27%	6.90%	
Vanguard Target Retire 2020 Tr Select	TIAA-CREF/Fidelity	4.49%	8.60%	6.65%	8.06%	-	0.05
2020 Moderate	Peer Group	4.19%	7.29%	5.55%	7.01%	7.00%	
Morningstar Lifetime Moderate 2020 Index	Benchmark	4.44%	8.59%	6.87%	7.81%	7.47%	
Vanguard Target Retire 2025 Tr Select	TIAA-CREF/Fidelity	5.14%	9.16%	7.01%	8.71%	-	0.05
2025 Moderate	Peer Group	4.84%	8.16%	6.14%	7.87%	- 7.70%	0.00
Morningstar Lifetime Conservative 2025 Index	Benchmark	4.79%	8.40%	6.98%	8.37%	8.08%	
Vanguard Target Retire 2030 Tr Select	TIAA-CREF/Fidelity	5.70%	9.52%	7.15%	9.18%	0.00 /0	0.05
2030 Moderate	Peer Group	5.49%	<b>9.52</b> % 8.50%	6.42%	8.51%	- 8.25%	0.00
Morningstar Lifetime Conservative 2030 Index	Benchmark	5.25%	8.50% 7.79%	6.89%	8.88%	8.60%	
morningstar Litetime Conservative 2030 Index	Dencilliark	0.2070	1.1970	0.09%	0.00%	0.00%	L

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	PROVIDER	07/20					Eve Datia
INVESTMENT NAME		Q3′20	1 YEAR*	3 YEAR*	5 YEAR*	10 YEAR*	Exp Ratio
Vanguard Target Retire 2035 Tr Select	TIAA-CREF/Fidelity	6.25%	9.82%	7.28%	9.65%	-	0.05
2035 Moderate	Peer Group	6.25%	9.22%	6.75%	9.16%	8.74%	
Morningstar Lifetime Conservative 2035 Index	Benchmark	5.76%	6.79%	6.55%	9.20%	8.87%	
Vanguard Target Retire 2040 Tr Select	TIAA-CREF/Fidelity	6.81%	10.14%	7.39%	10.09%	-	0.05
2040 Moderate	Peer Group	6.78%	9.20%	6.76%	9.32%	8.98%	
Morningstar Lifetime Moderate 2040 Index	Benchmark	6.23%	5.87%	6.14%	9.29%	8.90%	
Vanguard Target Retire 2045 Tr Select	TIAA-CREF/Fidelity	7.34%	10.32%	7.40%	10.22%	-	0.05
2045 Moderate	Peer Group	7.07%	8.66%	6.51%	9.26%	8.78%	
Morningstar Lifetime Moderate 2045 Index	Benchmark	6.51%	5.28%	5.83%	9.24%	8.79%	
Vanguard Target Retire 2050 Tr Select	TIAA-CREF/Fidelity	7.39%	10.40%	7.44%	10.24%	-	0.05
2050 Moderate	Peer Group	7.06%	8.47%	6.54%	9.31%	8.94%	
Morningstar Lifetime Moderate 2050 Index	Benchmark	6.60%	5.01%	5.63%	9.16%	8.67%	
Vanguard Target Retire 2055 Tr Select	TIAA-CREF/Fidelity	7.37%	10.38%	7.42%	10.24%	-	0.05
2055 Moderate	Peer Group	7.19%	8.30%	6.13%	9.17%	8.66%	
Morningstar Lifetime Moderate 2055 Index	Benchmark	6.61%	4.88%	5.51%	9.10%	8.54%	
Vanguard Target Retire 2060 Tr Select	TIAA-CREF/Fidelity	7.39%	10.48%	7.46%	10.26%	-	0.05
Vanguard Target Retire 2065 Tr Select	TIAA-CREF/Fidelity	7.40%	10.40%	7.49%	-	-	0.05
2060+ Moderate	Peer Group	7.35%	9.25%	6.68%	9.55%	-	
Morningstar Lifetime Moderate 2060 Index	Benchmark	6.61%	4.78%	5.39%	9.03%	-	

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