



Q2 2021 INVESTMENT SUMMARY: BOARD REPORT

MODOT & PATROL EMPLOYEES'
RETIREMENT SYSTEM

AUGUST 2021

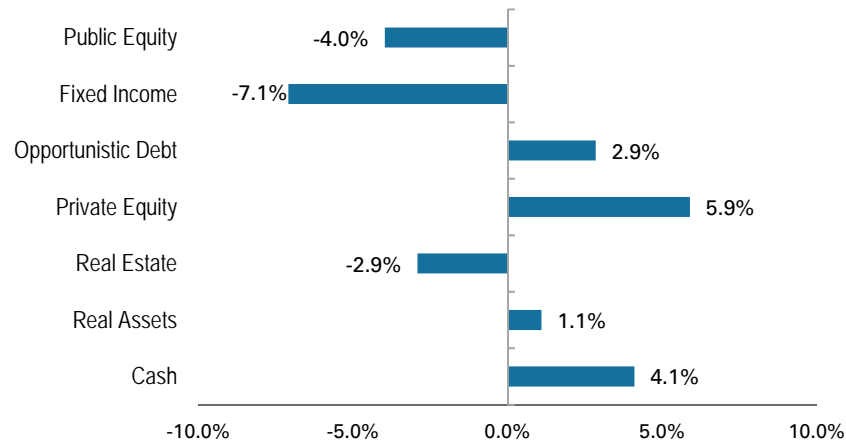
Kevin Leonard, Partner
Will Forde, CFA, CAIA, Principal
Kiley Fischer, Analyst



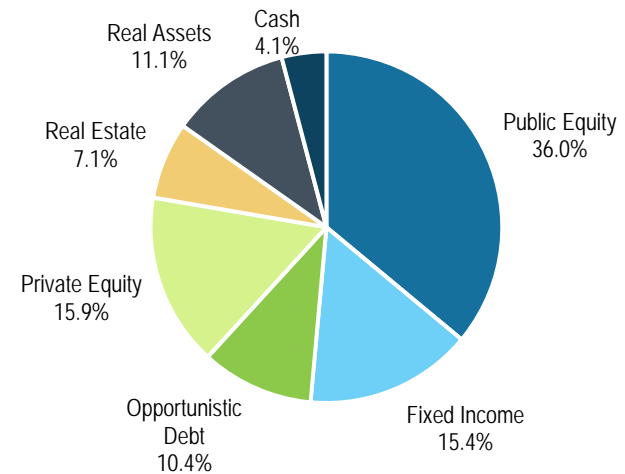
PROPRIETARY & CONFIDENTIAL

ASSET ALLOCATION – CURRENT vs. POLICY

Current Allocation vs. Policy Allocation



Current Asset Allocation

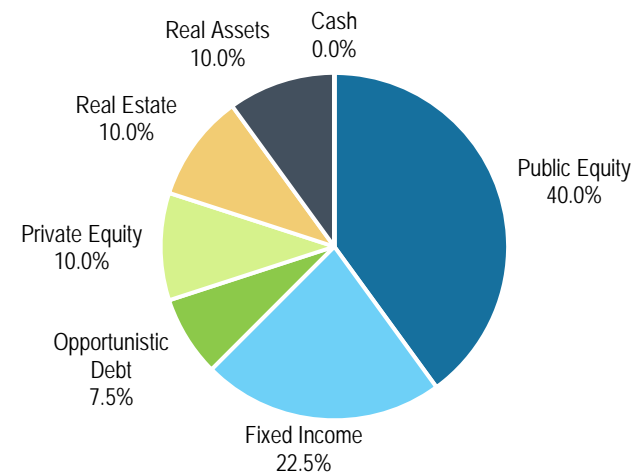


Current Allocation vs. Policy Allocation

	Current	Policy	Current	Difference*
Public Equity	\$1,081,977,296	40.0%	36.0%	-4.0%
Fixed Income	\$462,785,799	22.5%	15.4%	-7.1%
Opportunistic Debt	\$310,913,594	7.5%	10.4%	2.9%
Private Equity	\$477,536,803	10.0%	15.9%	5.9%
Real Estate	\$212,966,617	10.0%	7.1%	-2.9%
Real Assets	\$333,377,752	10.0%	11.1%	1.1%
Cash	\$123,275,859	--	4.1%	4.1%
Total	\$3,002,833,720	100.0%	100.0%	

* Difference between Policy and Current Allocation

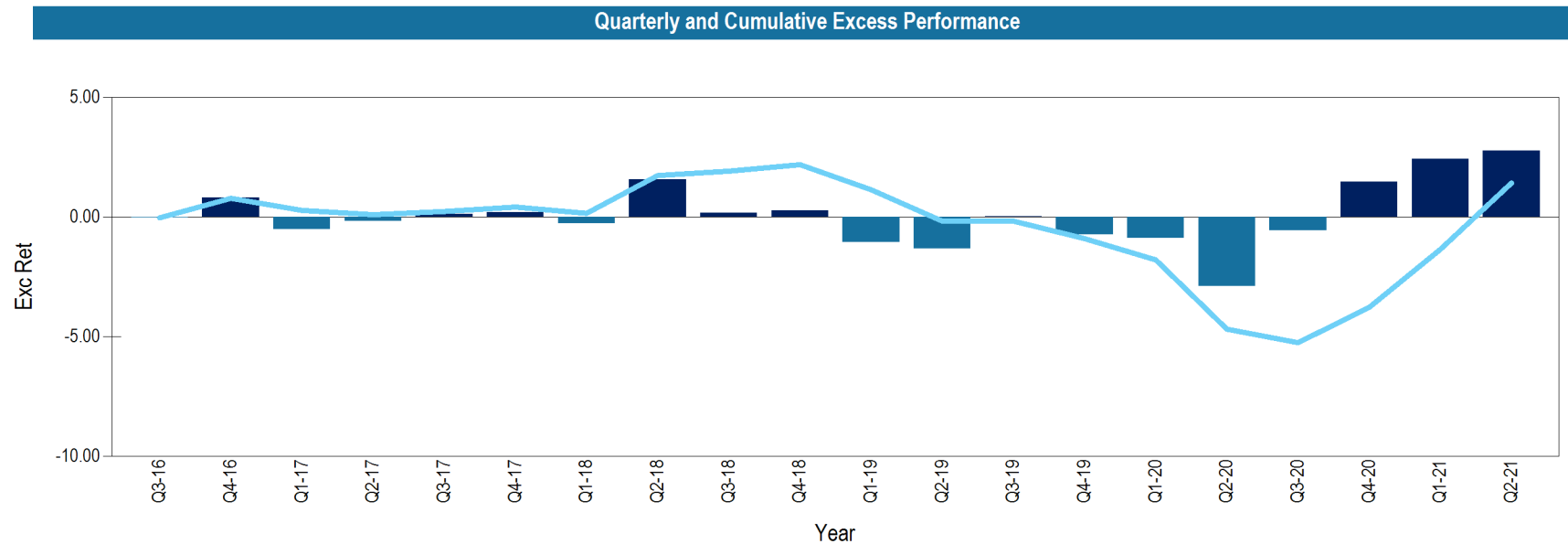
Policy Asset Allocation



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TOTAL FUND PERFORMANCE SUMMARY

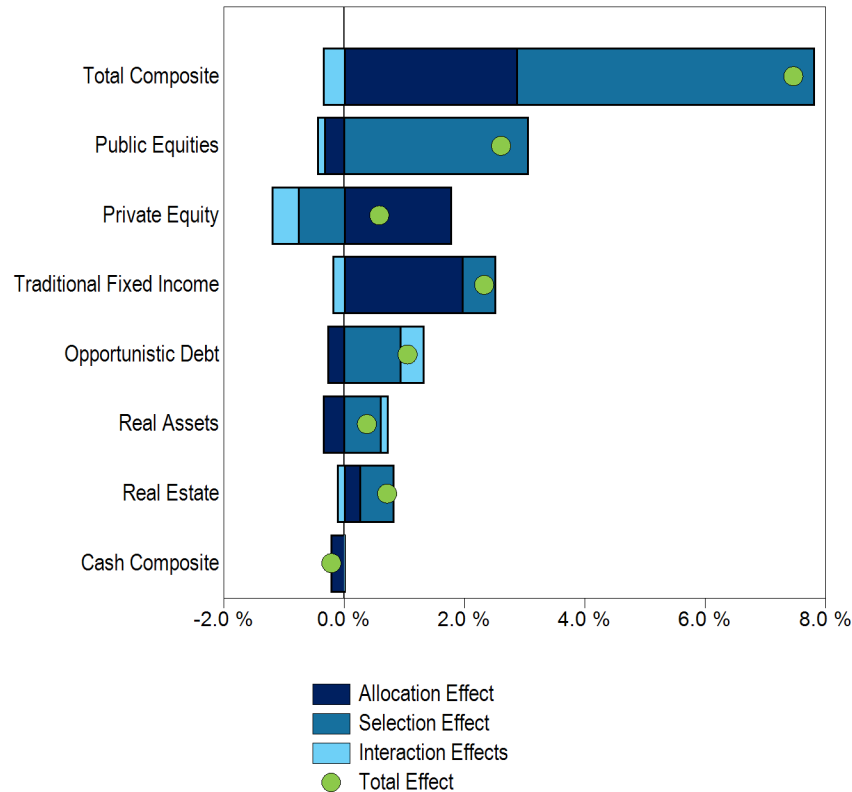
	Market Value	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Total Composite	\$3,002,833,720	13.46%	30.80%	11.63%	11.11%	9.59%
<i>Policy Index</i>		7.99%	23.47%	11.80%	10.83%	8.81%
<i>InvMetrics Public DB Net Median</i>		8.78%	26.72%	11.58%	11.00%	8.51%



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TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects Relative to Policy Index
1 Year Ending June 30, 2021



Attribution Summary
1 Year Ending June 30, 2021

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Public Equities	47.7%	39.3%	8.4%	3.0%	-0.4%	-0.1%	2.5%
Private Equity	52.2%	60.9%	-8.7%	-0.8%	1.7%	-0.4%	0.5%
Traditional Fixed Income	1.5%	-0.4%	1.9%	0.5%	1.9%	-0.2%	2.3%
Opportunistic Debt	27.4%	15.4%	12.0%	0.9%	-0.3%	0.4%	1.1%
Real Assets	14.9%	9.6%	5.3%	0.6%	-0.3%	0.1%	0.4%
Real Estate	12.8%	8.0%	4.8%	0.5%	0.3%	-0.1%	0.7%
Cash Composite	0.1%	0.1%	0.0%	0.0%	-0.2%	0.0%	-0.2%
Total	30.8%	23.5%	7.3%	4.9%	2.7%	-0.4%	7.3%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated return shown on the performance summary.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark return.

The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite.

May not add due to rounding

Allocation Effect - The return attributable to the asset allocation of the portfolio

Selection Effect - The return attributable to the managers' security selection

Interaction Effect - The return attributable to the interaction between the Allocation and Selection Effects

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TOTAL COMPOSITE

	Policy %	% of Portfolio	Market Value (\$)	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Composite	100.0	100.0	3,002,833,720	13.5	1	30.8	9	11.6	50	11.1	47	9.6	14
Policy Index				8.0	72	23.5	83	11.8	45	10.8	57	8.8	40
Equity Beta	50.0	51.9	1,559,514,099	19.0		49.0							
Public Equities*	40.0	36.0	1,081,977,296	15.6	21	47.7	25	12.6	67	13.3	62	9.8	56
MSCI ACWI				12.3	48	39.3	61	14.6	55	14.6	53	9.9	55
Private Equity	10.0	15.9	477,536,803	28.0		52.2		22.3		18.7		15.5	
MO Hwy Priv. Equ. Index - Lagged				20.8		60.9		20.2		19.7		17.3	
Rates and Credit Beta	30.0	25.8	773,699,393	5.3		11.4							
Traditional Fixed Income	22.5	15.4	462,785,799	-0.6	56	1.5	92	6.9	24	5.3	35	6.3	8
Fixed Income Custom Benchmark				-2.0	74	-0.4	97	5.9	46	3.6	67	3.8	48
Opportunistic Debt	7.5	10.4	310,913,594	14.3	1	27.4	2	9.1	4				
BBgBarc US High Yield TR				3.6	48	15.4	37	7.4	29	7.5	26	6.7	19
Real Assets Beta	20.0	18.2	546,344,369	10.1		14.1							
Real Assets	10.0	11.1	333,377,752	11.2		14.9		2.7		5.5			
CPI + 4% (Unadjusted)				6.4		10.0		6.8		6.6		6.0	
Real Estate	10.0	7.1	212,966,617	8.4		12.8		9.0		8.8		10.6	
MODOT Real Estate Blend				6.3		8.0		5.2		6.1		8.9	
Cash Composite	0.0	4.1	123,275,859	0.0		0.1		1.2		1.0		0.6	
91 Day T-Bills				0.0		0.1		1.2		1.1		0.6	

* May include the use of derivatives

Total Composite is ranked in the IFx Public DB (peer) Net+ Universe

Public Equities Composite is ranked in the eV Global All Cap Equity Net Universe Fixed Income Composite is ranked in the eV All Global

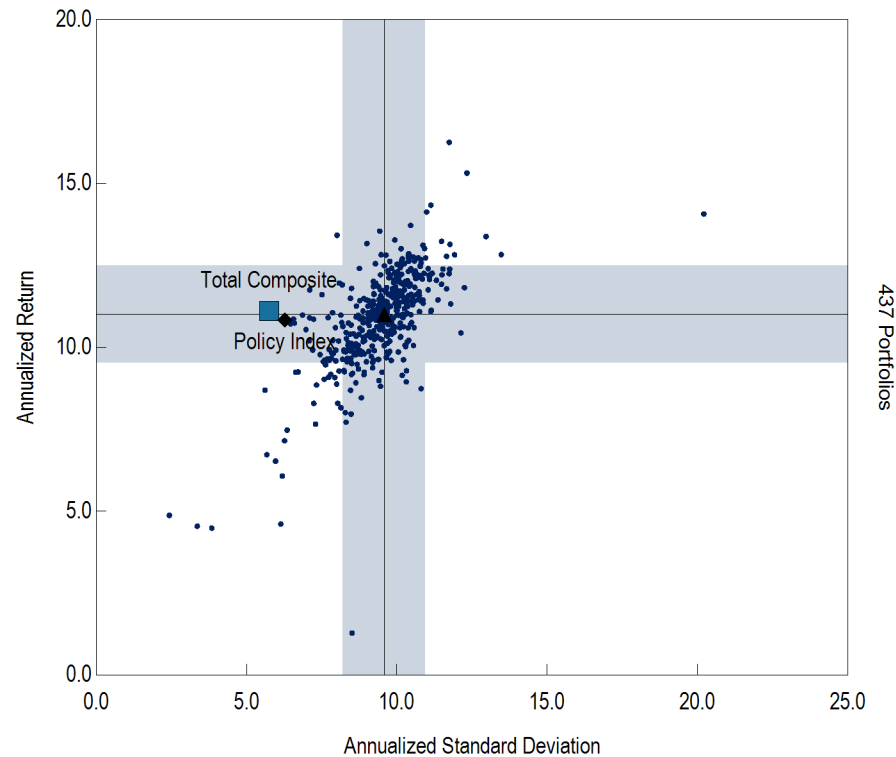
Fixed Inc Net Universe Opportunistic Debt Composite is ranked in the eV US High Yield Fixed Inc Net Universe



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TOTAL FUND RISK/RETURN - 5 YEARS

5 Years Ending June 30, 2021



Statistics Summary

5 Years Ending June 30, 2021

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Composite	11.11%	47	5.75%	1
Policy Index	10.83%	57	6.27%	2

Statistics Summary

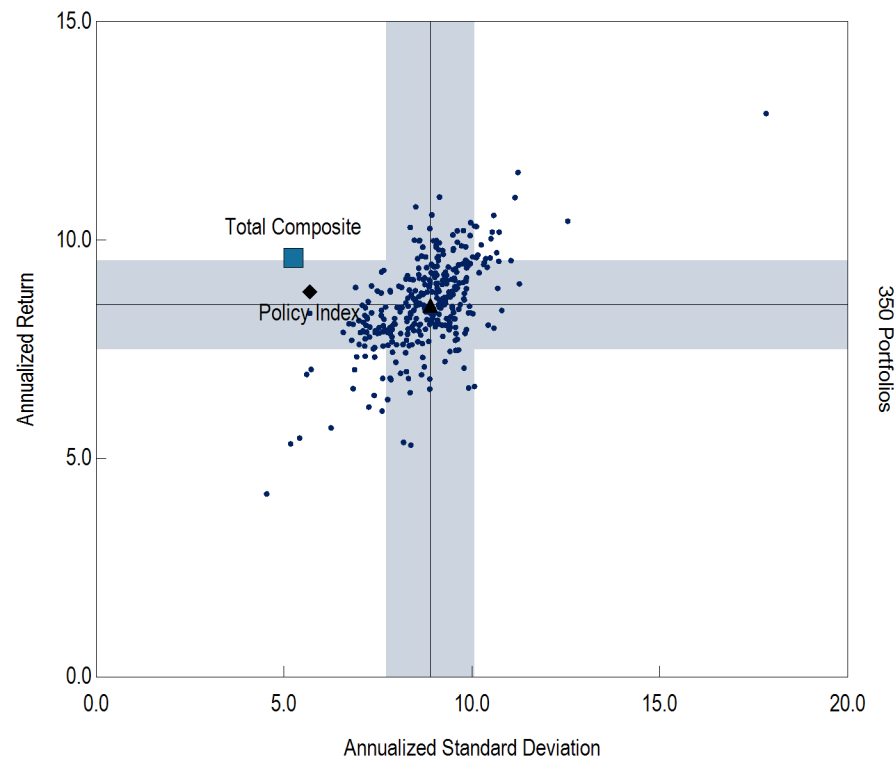
5 Years Ending June 30, 2021

	Sharpe Ratio	Rank
Total Composite	1.74	1
Policy Index	1.55	1

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TOTAL FUND RISK/RETURN - 10 YEARS

10 Years Ending June 30, 2021



Statistics Summary 10 Years Ending June 30, 2021

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Composite	9.59%	14	5.24%	1
Policy Index	8.81%	40	5.68%	2

Statistics Summary 10 Years Ending June 30, 2021

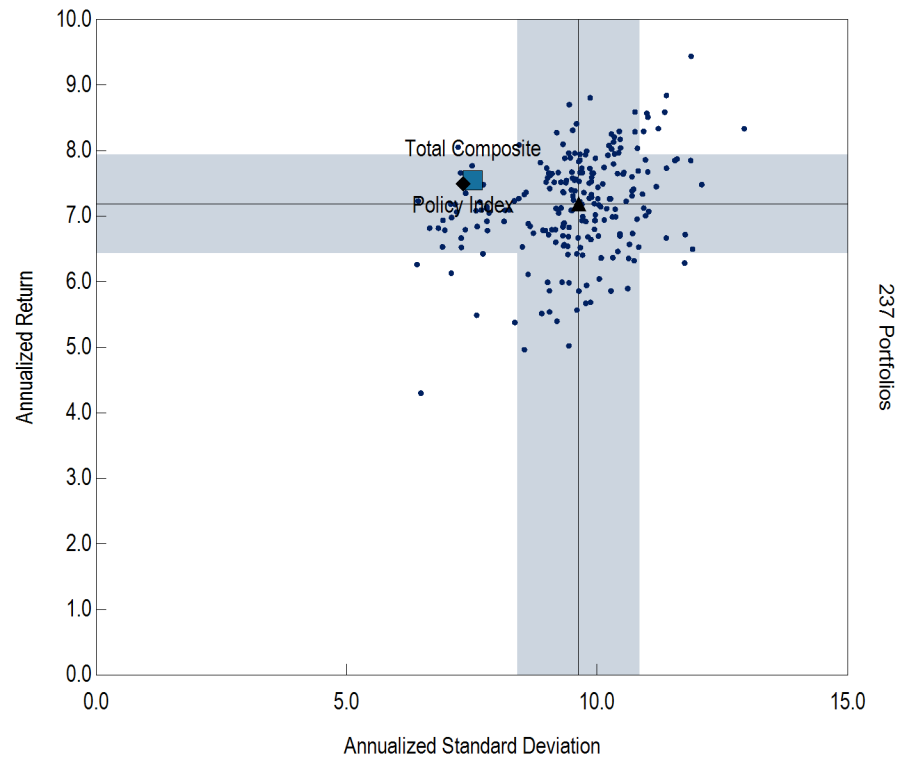
	Sharpe Ratio	Rank
Total Composite	1.72	1
Policy Index	1.45	1



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TOTAL FUND RISK/RETURN - 15 YEARS

15 Years Ending June 30, 2021



- Total Composite
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB Net

Statistics Summary 15 Years Ending June 30, 2021

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Composite	7.55%	32	7.52%	10
Policy Index	7.49%	36	7.33%	8

Statistics Summary 15 Years Ending June 30, 2021

	Sharpe Ratio	Rank
Total Composite	0.88	4
Policy Index	0.89	3



DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

