



INVESTED IN TOMORROW.

**INVESTMENT COMMITTEE MEETING
VIRTUAL**

March 25, 2021

Following Rules & Administration Committee

COMMITTEE MEMBERS

Steve Neel, Chair
Paula Fisher, Vice-Chair
Lawrence Davis
Loretta Naranjo-Lopez
Diana Rosales-Ortiz

AGENDA

- 1. Roll Call**
- 2. Approval of Agenda**
- 3. Approval of Consent Agenda**
- 4. Current Business**

ITEM		PRESENTER
A	Performance & Risk Update 1. <u>Information Item</u> : January 2021 Preliminary Flash Performance	Thomas Toth Wilshire Dominic Garcia Chief Investment Officer
B	Education Session Part II 1. <u>Action Item</u> : Long Term Goals Affirmation 2. <u>Information Item</u> : Strategy & Asset Allocation Preview	Thomas Toth Wilshire Dominic Garcia Chief Investment Officer
C	Active Risk Budget Update 1. <u>Information Item</u> : Education Primer: Risk Budget Governance 2. <u>Information Item</u> : Active Risk Budget Review	Thomas Toth Wilshire Joaquin Lujan Co-Head Alpha Dominic Garcia Chief Investment Officer
D	Asset Class Review & Update 1. <u>Information Item</u> : Risk Reduction & Mitigation	Thomas Toth Wilshire Dominic Garcia Chief Investment Officer

5. Adjournment

Consent Agenda

Approval of minutes of February 23, 2021 Investments Committee meeting.

Any person with a disability who needs a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact Trish Winter at (505) 476-9305 at least one week prior to the meeting, or as soon as possible. Public documents, including the agenda and minutes, can be provided in various accessible formats. Please contact Trish Winter if a summary or other type of accessible format is needed.



PERA

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Retirement Association
of New Mexico

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Acting Board Chair, Retiree Member

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INVESTED IN TOMORROW.

THURSDAY, MARCH 25, 2021
8:00AM MT

RULES & ADMINISTRATION COMMITTEE
8:00AM MT

INVESTMENT COMMITTEE
FOLLOWING RULES & ADMINISTRATION COMMITTEE

BOARD MEETING
FOLLOWING INVESTMENT COMMITTEE

Please join the PERA Committee Meetings & PERA Board Meeting
When: Mar 25, 2021 08:00 AM Mountain Time (US and Canada)
Topic: PERA Committee Meetings & PERA Board Meeting

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/81709388468>

Or iPhone one-tap :

US: +12532158782,,81709388468# or +13462487799,,81709388468#

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Webinar ID: 817 0938 8468

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33 Plaza La Prensa, Santa Fe, NM 87507



Investment Committee Monthly Update

Reporting Period: January 30, 2021

Published: March 25, 2021

Market and Portfolio Updates

- **Market Update:** Markets for the 1st quarter have been mixed. At the beginning of the quarter markets saw small corrections as investors re-positioned their portfolios for 2021 and took gains from 2020. Subsequently, we have seen some bounce back across risk assets-stocks, credit, real assets; despite interest rate increases and some initial inflationary worries. Going forward, investors will process another substantive fiscal stimulus with the back drop of rising rates and inflation.
- **Preliminary flash reporting for January**, reflect a -0.29% return for the month and a 13.26% return for FYTD 2021, all net of fees. These are slightly behind the policy benchmark for the month and FYTD. Note: these returns do not include updated valuations for PERA's private assets
- **Asset movements, NAV & allocation:** In January, the fund's NAV was \$16.35 billion. The portfolio raised roughly \$45m (\$30m from Global Equity and \$15m from Real Assets) to pay for benefits and regular portfolio activity. Asset weights for end of December were within policy bands:

	<u>Actual</u>	<u>Target</u>
• Global Equity	35.2%	35.5%
• Risk Mitigation	19.2%	19.5%
• Credit	15.3%	15.0%
• Real Assets	20.1%	20.0%
• Multi risk	10.0%	10.0%

Key Strategic Goals

1. Sustain the Trust Fund for current and future retirees
 - A. Work towards 30-year funding period of unfunded actuarial accrued liability
2. Set Strategic asset allocation to meet the actuarial assumed return over the long-run
 - A. Meet assumed actuarial return within prudent risk parameters
 - B. Maintain sufficient liquidity to meet PERA's obligations
3. Produce returns that meet or exceed benchmarks
 - A. Meet or exceed the Policy Index over the long-term
 - B. Meet or exceed the Reference Portfolio over the long-term
4. Be cost-efficient
 - A. Achieve a total investment cost at or below the benchmark cost relative to peers adjusted for fund size, allocations, and strategy.

NOTE: Objectives are set in PERA's 5-Year Strategic Plan (2018-2023), PERA's performance measures reviewed and monitored by Legislative Finance Committee (LFC) and Department of Finance & Administration (DFA), and PERA's Investment Policy Statement

Investment Oversight: Key Measurements

Oversight	Measurement	Purpose
Goal #1 Sustainability	Negative Cash Flow	Measure ongoing progress toward pension sustainability goals
	Asset Exhaustion	
	Funded Ratio	
Goal #2 Strategic Asset Allocation	Capital Allocation	Monitor capital allocation relative to SAA targets
	Active Risk Allocation	Measure excess risk and incremental return
	Liquidity Allocation	Monitor prudent liquidity for required Fund obligations
	Performance vs Actuarial Assumed Return	Monitor the dispersion between market results and long-term strategic targets
Goal #3 Market Performance	Performance vs. Policy Index	Measure the effectiveness of Policy implementation over multiple time periods (implementation value)
	Performance vs. Reference Index	Measure the value of complexity and diversification in SAA over multiple time periods (diversification value)
	Performance vs. Peers Risk Adjusted	Compare total returns and total risk vs. peer group (Sharpe Ratio)
Goal #4 Investment Cost	Investment Cost vs. Benchmark Cost	Measure and monitor the expenses paid-out annually to implement PERA's investment strategy
Ongoing Oversight: Implementation	Cash and Rebalance Activity	Monitor ongoing cash & operational activities
	Manager Selection Delegation	Measurement of manager skill against appropriate market benchmarks and multiple time periods
	Ad-Hoc Report	Any ad-hoc reporting, as requested by the IC

Investment Oversight: Key Measurement Summary

Oversight	Measurement	Review	Appraisal
Goal #1 Sustainability	Negative Cash Flow	Meeting all Sustainability measures for all time periods	✓ Meets
	Asset Exhaustion		
	Funded Ratio		
Goal #2 Strategic Asset Allocation	Capital Allocation	Within re-balance bands	✓ Meets
	Active Risk Allocation	Outside bands for 4-years due to private asset measures	○ Outside Measure
	Liquidity Allocation	21% tier 1 liquidity > 10% threshold	✓ Meets
	Performance vs Actuarial Assumed Return	Near or exceed assumed return for all time periods except 20 year	✓ Meets most time periods ! Below for 20 years
Goal #3 Market Performance	Performance vs. Policy Index	Meet or exceed benchmarks for all relevant periods except 5 year	✓ Meets
	Performance vs. Reference Index	Exceeds for long time periods, below for short time periods.	✓ Meets long term goals ! Trend below in short term
	Performance vs. Peers Risk Adjusted	Meets measurement for 3 years and 5 years, behind for 1 year.	✓ Meets
Goal #4 Investment Cost	Investment Cost vs. Benchmark Cost	Cost effective vs. benchmark cost and LFC threshold	✓ Meets
Ongoing Oversight: Implementation	Cash and Rebalance Activity	Within policy guidelines	✓ Meets
	Manager Selection Delegation	Positive selection value add, at or above 60% expectation, portable alpha excess return	✓ Meets
	Ad-Hoc Report	NAV Growth of assets since Sept. 2017	+\$3.49 billion

Appendix: Scorecard

Investment Oversight: Key Measurements

Oversight	Measurement	Purpose
Goal #1 Sustainability	Negative Cash Flow	Measure ongoing progress toward sustainability goals
	Asset Exhaustion	
	Funded Ratio	
Goal #2 Strategic Asset Allocation	Capital Allocation	Monitor capital allocation relative to SAA targets
	Active Risk Allocation	Measure excess risk and incremental return
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	Performance vs. Reference Index	Measure the value of complexity and diversification in SAA over multiple time periods (diversification value)
Goal #4 Investment Cost	Investment Cost vs. Benchmark Cost	Measure and monitor the expenses paid-out annually to implement PERA's investment strategy
Ongoing Oversight: Implementation	Cash and Rebalance Activity	Monitor ongoing cash & operational activities
	Manager Activity	Measurement of manager skill against appropriate market benchmarks and multiple time periods
	Ad-Hoc Report	Any ad-hoc reporting, as requested by the IC

Goal #1: Sustainability

- PERA on track to stabilize cashflow in bottom 25th percentile outcome in all time periods
- Asset exhaustion less than 5% in all time periods (estimate)
- At median return, on path to near full funding (~97%) in 30 years
- Funding ratio stabilizes around 55%-60% in bottom 25th percentile outcome

PERA Strategic Sustainability Goal	Measurement	75 th Percentile @ 8.7%	50 th Percentile @ 7.25%	25 th Percentile @ 6.0%	Scorecard
Sustain the Trust Fund for Current and Future Retirees.	1. Stable Projected Negative Cashflow <7.25%				
	Current	-5%	-5.1%	-5.3%	Meets
	5 Years	-3.75%	-4.25%	-5%	Meets
Work towards 30-year funding period of unfunded actuarial accrued liability	10 years	-4%	-4.9%	-6%	Meets
	20 years	-3.5%	-4.5%	-6.1%	Meets
	30 years	-2.1%%	-3%	-4%	Meets
	2. Asset Exhaustion less than 5%*				
*Note: Asset exhaustion probability based on low, moderate, aggressive risk estimated portfolios.	10 years	0%	0%	0%	Meets
	20 years	>1.5%	0.5%	0.1%	Meets
	30 years	5.9%	3.2%	4.3%	Meets
	3. Forecasted Funded Ratio - path to 100% at Median				
	10 years	90%	74%	59%	Meets
	20 years	115%	82%	55%	Meets
	30 years	140%	97%	58%	Meets

Goal #2: Strategic Asset Allocation

- As of December 2020, PERA meets or is near the assumed rate of return for all reasonable intermediate and long-term periods, except for the 20-year period.
- The 20-year period includes the Great Recession and Dotcom era bust. Returns are at 5.92%
- 4-Year period equates to the actuarial smoothed investment return used for PERA's actuarial valuations.

PERA Investment Goal #2	Measurement	Total Fund Results	Assumed Return	Excess Return	Scorecard
Set Strategic Asset Allocation (Policy Portfolio) to meet the assumed return and funding goals over the long-term (10 years and longer)	FYTD	13.62%	3.56%	10.06%	Meets
	1 year	7.07%	7.25%	-0.18%	Below
	4 years	8.06%	7.25%	0.81%	Meets
	5 Years	7.90%	7.30%	0.60%	Meets
	10 years	7.16%	7.53%	-0.37%	Below
	20 years	5.92%	7.64%	-1.72%	Below
	30 years	8.35%	7.68%	0.67%	Meets
	ITD	8.86%	7.69%	1.17%	Meets
NOTE: 7.25 Annual (7.75 before July 2016)					

Goal #2: Strategic Asset Allocation (Cont'd)

- ✓ PERA's capital allocations were in line with SAA targets:

Capital Allocation				
Asset Class	Target %	Actuals %	Difference Δ	IPS Ranges %
Global Equity	35.5%	35.4%	-0.1%	+/- 5%
Credit	15.0%	15.1%	0.1%	+/- 4%
Risk Mitigation	19.5%	19.7%	0.2%	+/- 3%
Real Assets	20.0%	19.7%	-0.3%	+/- 4%
Multi-Risk	10.0%	10.0%	0.0%	+/- 4%
Total Fund	100.0%	100.0%		

- PERA's 4-year tracking error was outside of ranges, while excess return was within ranges:

Active Risk Allocation			
	4-Year Results	Target	Range
Ex-Post Tracking Error vs. Policy Index	4.04%	1.5%	1.0% - 2.0%
Ex-Post Excess Return vs. Policy Index	0.03%	1.0%	0.0% - 2.0%
Future Enhancement: Attribution (Liquid Tracking Error vs. Policy Index)			
Future Enhancement: Attribution (Illiquid Tracking Error vs. Lagged Policy Index)			
Note: Results include dispersion of benchmarking between liquid Policy indices and PERA's illiquid implementation			

- ✓ PERA's liquidity allocations were in line with liquidity guidelines:

Liquidity Allocation			
Tier	Actuals \$M	Actuals %	Guideline
Tier 1 (1-5 Days)	\$3,409	21%	Tier 1 Assets ≥ 10% Fund NAV
Tier 2 (5-90 Days)	\$7,691	47%	
Tier 3 (30-365 Days)	\$720	4%	
Tier 4 (1 Year +)	\$4,608	28%	
	\$16,428	100%	



Goal #3: Market Performance

- As of December 2020, PERA meets or exceeds its main Policy Portfolio benchmark over all intermediate and long-term time periods, except for the 5-year time period.
- Key measure of investment implementation

PERA Strategic Investment Goal #2	Measurement	Total Fund Results	Benchmark Return	Excess Return	Scorecard
Produce returns that meet or exceed Board approved Total Fund benchmarks: Meet or exceed the Policy Portfolio over the long-term	Policy Portfolio:				
	FYTD	13.62%	14.27%	-0.65%	Below
	1 Year	7.07%	6.86%	0.21%	Meets
	4 years	8.06%	7.94%	0.12%	Meets
	5 Years	7.90%	8.08%	-0.18%	Below
	10 years	7.16%	7.03%	0.13%	Meets
	20 years	5.92%	5.85%	0.07%	Meets
	30 years	8.35%	8.12%	0.23%	Meets
	ITD	8.86%	8.81%	0.05%	Meets

Goal #3: Market Performance Cont'd

- PERA lags the Reference Portfolio in short & intermediate time periods. This is primarily due to higher stock allocations in the Reference Portfolio vs. the Fund (58% vs. ~35%-40%).
- PERA is in the 83rd percentile, 54th percentile, and 38th percentile on a risk adjusted peer comparison for 1 year, 3 years and 5 years.

PERA Strategic Investment Goal #2	Measurement	Total Fund Results	Benchmark Return	Excess Return	Scorecard
Produce returns that meet or exceed Board approved Total Fund benchmarks:	Reference Portfolio:				
	FYTD	13.62%	14.77%	-1.15%	Below
	1 Year	7.07%	13.39%	-6.32%	Below
	4 years	8.06%	9.95%	-1.89%	Below
	5 Years	7.90%	9.17%	-1.27%	Below
	10 years	7.16%	7.13%	0.03%	Meets
	20 years	5.92%	6.17%	-0.25%	Below
	30 years	8.35%	7.55%	0.80%	Meets
	ITD	8.86%	8.28%	0.58%	Meets
	Risk Adjusted Peer Ranking (Sharpe Ratio):				
Meet or exceed the Reference Portfolio over the long-term	1 year	83 rd Percentile			
	3 years	54 th Percentile			
	5 years	38 th Percentile			
Median risk adjusted peer performance ranking over the long- term					

Goal #4: Investment Cost

- PERA continues to meet cost effectiveness goals. FY 2020 reported investment expense to the NM Legislature is 48 bps.
- In reviews by third-party cost evaluators, PERA continues to be cost effective and saves approximately \$27m vs. benchmark cost.

PERA Strategic Investment Goal #3	Measurement	Total Fund Results	Scorecard
Achieve a total investment cost at or below a benchmark cost relative to peers adjusted for fund size and asset mix	Annual Calendar Year	CEM Benchmarking 2020 Report: compared a custom benchmark cost of US pension peers, PERA is low cost and saves approximately 12.4 bps or \$20m in costs	Meets
Achieve a total investment cost ≤ 85 bps	Annual Fiscal Year	FY 2020 Investment expenses: 48bps (Local Peers: ERB 69bps & SIC 51bps)	Meets

On-Going Oversight: Staff Investment Implementation & Initiatives

Initiative	Board Approval	Purpose/ Goal	Measurement
Manager Selection Delegation	Fall 2017 & Risk Budget	<ul style="list-style-type: none"> Delegate complex manager selection process and monitoring to staff. Meet & exceed benchmarks 	Selection Value Add
			Managers meeting expectations
			Portable Alpha excess return
Multi-Risk (Risk parity allocation)	Summer 2018	<ul style="list-style-type: none"> Diversify risks at total fund Additive risk/return profile 	Absolute Return/Risk
			Meet Benchmark
Net Asset Value Growth	Ad hoc Board Request	<ul style="list-style-type: none"> Measure total \$ gain/loss of investment activities Since CIO beginning 	NAV growth including benefit payouts

Manager Selection Delegation Oversight:

- Manager Selection has produced Excess Value at the total fund in all measurable time periods
- Manager selection activity is on track and meeting expectations
- PERA has 188 manager accounts, including 177 active manager accounts (58% of total NAV)
- As of FY 2021, approximately 56% of manager accounts are meeting expectations
 - Target is 60%
- Over longer time horizons, the % of manager accounts exceeding expectations is well above selection targets
- Currently, no managers are on "Watch" for termination

As of December 31, 2020	NAV (%)	FYTD	1 Year	3 Years	4 Years	5 Years
Total Fund	100.0%	13.61	7.07	6.18	8.06	7.90
Selection Index		12.11	5.52	5.65	7.63	7.52
Excess Value (Total Fund Selection)		1.50	1.55	0.53	0.43	0.38
Number of Managers (#)		188	165	137	119	98
Managers Meeting Expectations (%)	60% Target	56%	73%	80%	74%	68%
Managers Below Expectations (%)		44%	27%	20%	26%	32%
>7.25% Absolute Return (%)		61%	47%	46%	52%	33%

Managers on Watch for Termination: 0

NOTE: Meeting Expectations = Excess Return (vs. Selection Index) >0%. % = % of 12.31.20 NAV

As of December 31, 2020	NAV (%)	FYTD	1 Year	3 Years	4 Years	5 Years
Global Equity	35.4%	21.61	13.98	9.52	12.93	12.13
Selection Index		20.43	11.32	8.80	12.14	11.49
Excess Value (GE Selection)		1.18	2.66	0.72	0.79	0.64
Credit Oriented Fixed Income	15.1%	13.08	5.93	4.49	5.31	5.90
Selection Index		8.93	1.94	3.12	4.77	5.84
Excess Value (CR Selection)		4.15	3.99	1.37	0.54	0.06
Risk Reduction & Mitigation	19.7%	2.95	6.81	5.21	4.80	4.64
Selection Index		1.31	7.37	5.43	4.91	4.48
Excess Value (CR Selection)		1.64	-0.56	-0.22	-0.11	0.16
Real Assets	19.7%	6.88	-3.71	1.95	3.06	3.63
Selection Index		6.21	-4.22	1.36	2.91	3.62
Excess Value (RA Selection)		0.67	0.51	0.59	0.15	0.01
Multi-Risk Allocation	10.0%	20.60	2.73			
Selection Index		20.64	2.68			
Excess Value (MR Selection)		-0.04	0.05			

Portable Alpha & Risk Parity Oversight

- Risk parity meeting absolute return objectives since implementation
- Risk party below benchmark since implementation due to ramp up initial cost allocation
- Portable alpha meeting excess return objectives since implementation

Implementation Oversight	Measurement	Total Results	Benchmark Return	Excess Return	Scorecard
Risk Parity: meet absolute return objectives (7.45%) and benchmark over the long term	Risk Parity:				
	FYTD	20.60%	20.64%	-0.04%	Meets
	1 Year	2.73%	2.68%	0.05%	Below
	ITD (4-2019)	9.82%	10.86%	-1.04%	Meets
Portable Alpha: exceed benchmark over the long term (as of Feb 2021 estimates)	Portable Alpha:				
	Quarter	4.21%	-2.02%	6.23%	Meets
	1 Year				
	ITD	7.88%	5.19%	2.69%	Meets

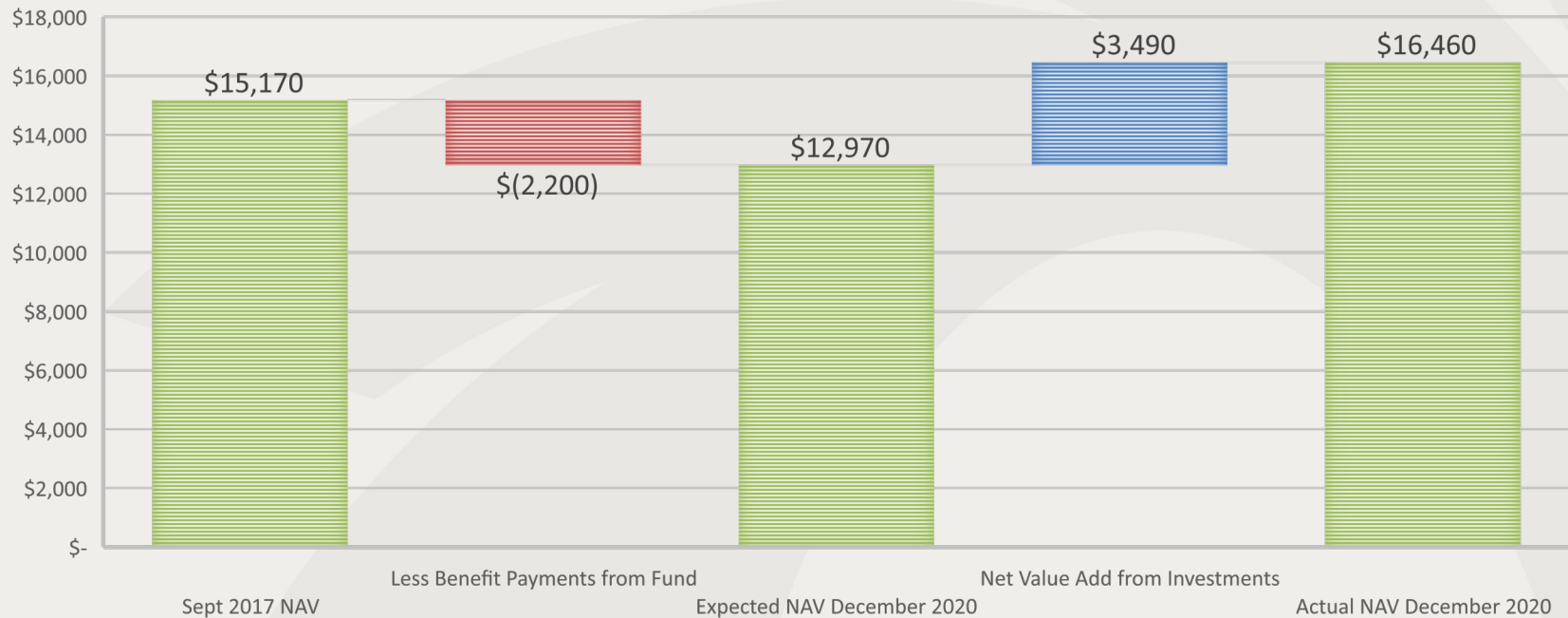
Ongoing Oversight: Net Value Add

September 2017 – December 2020

Net Value Add from Investment Activities = \$3,490,320,365

NAV GROWTH (\$MILLIONS)

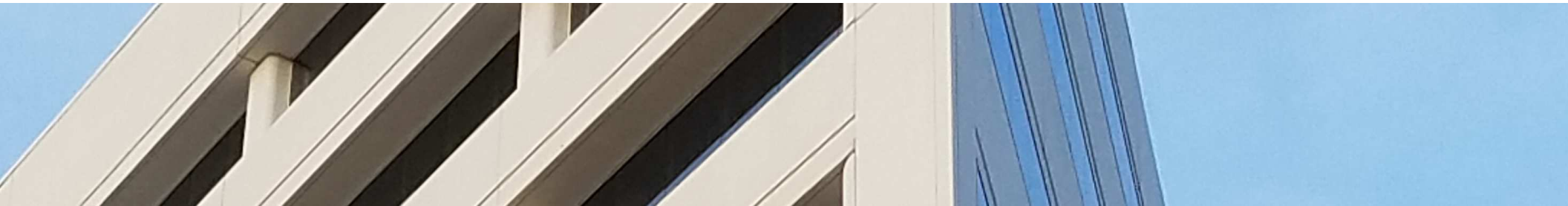
■ Increase ■ Decrease ■ Total





WILSHIRE ASSOCIATES

Wilshire Consulting



Public Employees Retirement Assoc of NM

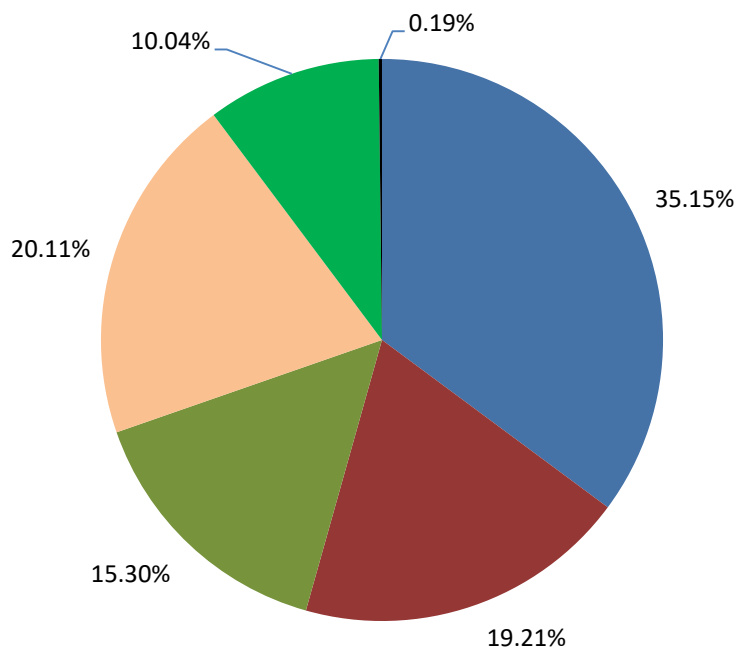
Monthly Performance Summary

January 31, 2021

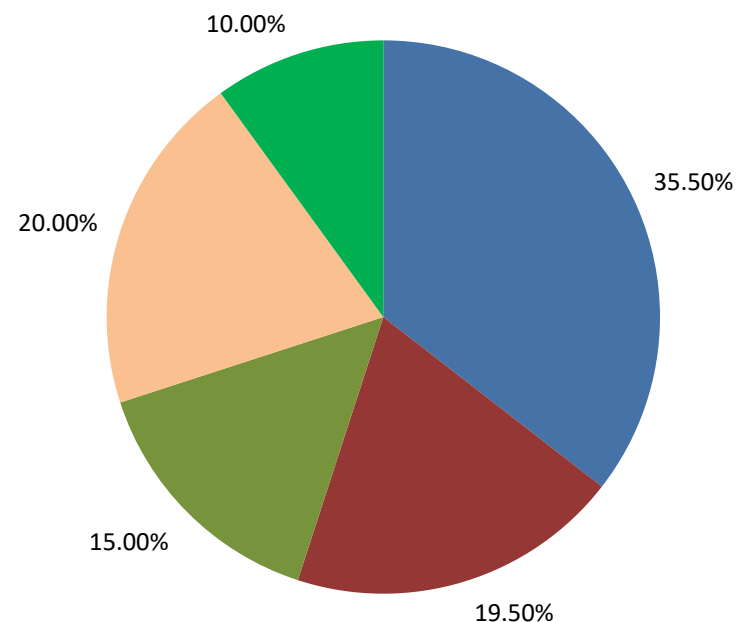
Asset Allocation by Composite



January, 2021: \$16,353,899,015



Policy Index



	Market Value (\$)	Allocation (%)
Global Equity	\$ 5,748,550,391	35.15%
Risk Reduction & Mitigation	\$ 3,142,125,877	19.21%
Credit Oriented Fixed Income	\$ 2,502,956,933	15.30%
Real Assets	\$ 3,288,078,211	20.11%
Multi-Risk Allocation	\$ 1,641,487,068	10.04%
STO Balance	\$ 30,700,535	0.19%

	Allocation (%)
Global Equity	35.50%
Risk Reduction & Mitigation	19.50%
Credit Oriented Fixed Income	15.00%
Real Assets	20.00%
Multi-Risk Allocation	10.00%

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
NM PERA Total Fund										16,323,198	100.00
Gross of Fee Return	-0.25	9.13	13.82	-0.25	7.14	5.96	8.96	7.37	8.94		
Net of Fee Return	-0.29	8.85	13.26	-0.29	6.49	5.37	8.46	7.01	8.82		
NM Pera Total Fund Benchmark	-0.13	10.96	14.13	-0.13	6.86	5.39	8.48	6.92	8.79		
Value Added	-0.16	-2.11	-0.87	-0.16	-0.37	-0.02	-0.02	0.09	0.04		
NM PERA TF Dynamic Index	-0.49	8.63	12.91	-0.49	5.88	5.09	8.25				
Reference Portfolio	-0.40	10.47	14.30	-0.40	12.89	7.25	9.76	7.00			
Selection Value Add	0.20	0.22	0.35	0.20	0.61	0.28	0.22				
Allocation Value Add	-0.36	-2.33	-1.22	-0.36	-0.98	-0.30	-0.23				
Global Equity										5,748,550	35.22
Gross of Fee Return	-1.41	12.63	20.72	-1.41	14.02	8.00	13.49		10.25		
Net of Fee Return	-1.42	12.27	19.85	-1.42	13.04	7.43	13.04		9.86		
Policy Index	-0.46	15.93	21.75	-0.46	13.86	7.51	12.62		10.56		
Value Added	-0.96	-3.66	-1.90	-0.96	-0.82	-0.08	0.42		-0.70		
Dynamic Index	-1.21	14.86	22.23	-1.21	14.02	7.75	13.16		9.88		
Selection Value Add	-0.21	-2.59	-2.38	-0.21	-0.98	-0.32	-0.12		-0.02		
Allocation Value Add	-0.75	-1.07	0.48	-0.75	0.16	0.24	0.54		-0.68		
Risk Reduction & Mitigation										3,142,126	19.25
Gross of Fee Return	-0.18	1.69	2.79	-0.18	4.57	5.60	4.51		3.60		
Net of Fee Return	-0.18	1.67	2.75	-0.18	4.51	5.51	4.41		3.50		
Policy Index	-0.70	0.39	0.63	-0.70	4.52	5.46	4.00		3.33		
Value Added	0.51	1.28	2.12	0.51	-0.01	0.05	0.41		0.17		
Dynamic Index	-0.67	0.43	0.63	-0.67	4.70	5.55	4.08		3.42		
Selection Value Add	0.49	1.24	2.12	0.49	-0.19	-0.04	0.34		0.09		
Allocation Value Add	0.03	0.05	0.00	0.03	0.18	0.09	0.07		0.08		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Credit Oriented Fixed Income										2,502,957	15.33
Gross of Fee Return	1.09	8.36	14.79	1.09	6.63	5.06	6.70		5.27		
Net of Fee Return	0.88	7.93	14.07	0.88	5.95	4.42	6.20		4.87		
Policy Index	-0.24	6.53	10.08	-0.24	4.81	4.07	6.85		5.24		
Value Added	1.12	1.40	3.99	1.12	1.14	0.35	-0.65		-0.37		
Dynamic Index	0.18	4.42	8.83	0.18	2.46	3.01	6.20		5.28		
Selection Value Add	0.70	3.51	5.24	0.70	3.48	1.41	-0.00		-0.40		
Allocation Value Add	0.42	-2.11	-1.25	0.42	-2.34	-1.06	-0.65		0.04		
Real Assets										3,288,078	20.14
Gross of Fee Return	0.79	6.94	8.30	0.79	-1.40	3.21	5.53		4.97		
Net of Fee Return	0.74	6.50	7.64	0.74	-2.28	1.96	4.34		3.92		
Policy Index	1.18	13.40	14.33	1.18	-1.46	1.75	4.15		3.88		
Value Added	-0.44	-6.91	-6.69	-0.44	-0.82	0.20	0.19		0.05		
Dynamic Index	0.38	4.67	7.55	0.38	-3.99	1.05	3.81		3.02		
Selection Value Add	0.36	1.82	0.09	0.36	1.71	0.91	0.52		0.90		
Allocation Value Add	-0.80	-8.73	-6.78	-0.80	-2.53	-0.70	-0.34		-0.86		
Multi-Risk Allocation										1,641,487	10.06
Gross of Fee Return	-0.27	16.44	20.27	-0.27	0.99				9.20		
Net of Fee Return	-0.27	16.44	20.27	-0.27	0.99				9.20		
Wilshire Risk Parity 15% Target	-0.26	16.45	20.32	-0.26	0.93				10.19		
Value Added	-0.01	-0.01	-0.06	-0.01	0.05				-0.99		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Global Equity										5,748,550	100.00
Gross of Fee Return	-1.41	12.63	20.72	-1.41	14.02	8.00	13.49		10.25		
Net of Fee Return	-1.42	12.27	19.85	-1.42	13.04	7.43	13.04		9.86		
Policy Index	-0.46	15.93	21.75	-0.46	13.86	7.51	12.62		10.56		
Value Added	-0.96	-3.66	-1.90	-0.96	-0.82	-0.08	0.42		-0.70		
Dynamic Index	-1.21	14.86	22.23	-1.21	14.02	7.75	13.16		9.88		
Selection Value Add	-0.21	-2.59	-2.38	-0.21	-0.98	-0.32	-0.12		-0.02		
Allocation Value Add	-0.75	-1.07	0.48	-0.75	0.16	0.24	0.54		-0.68		
Global Public Stock										3,181,952	55.35
Gross of Fee Return	-0.04	16.70	24.37	-0.04	17.35	7.32	13.86	9.28	8.44		
Net of Fee Return	-0.04	16.64	24.24	-0.04	17.13	7.17	13.70	9.14	8.35		
Policy Index	-0.18	18.05	24.86	-0.18	17.60	7.75	13.62	9.77	8.47		
Value Added	0.14	-1.41	-0.62	0.14	-0.47	-0.58	0.09	-0.63	-0.12		
Dynamic Index	0.77	20.98	28.19	0.77	19.97	7.90	13.92				
Selection Value Add	-0.81	-4.34	-3.95	-0.81	-2.84	-0.73	-0.22				
Allocation Value Add	0.95	2.92	3.33	0.95	2.37	0.15	0.30				
Global Low Volatility Equity										1,136,017	19.76
Gross of Fee Return	-1.60	7.62	9.89	-1.60	0.15	5.72			9.22		
Net of Fee Return	-1.60	7.61	9.85	-1.60	0.08	5.66			9.16		
MSCI ACWI Min Vol (N)	-1.61	7.52	9.63	-1.61	-0.36	5.24			8.62		
Value Added	0.00	0.09	0.22	0.00	0.44	0.42			0.54		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Hedged Equity Comp										685	0.01
Gross of Fee Return	0.00	-0.30	1.53	0.00	-9.13	3.07	3.07		3.60		
Net of Fee Return	0.00	-0.30	1.53	0.00	-9.13	3.07	3.07		3.60		
Policy Index	-1.61	7.52	9.63	-1.61	-0.36	5.24	7.27		6.00		
Value Added	1.61	-7.82	-8.10	1.61	-8.77	-2.17	-4.20		-2.41		
Dynamic Index	5.73	14.79	24.82	5.73	17.62	7.68	8.06		6.03		
Selection Value Add	-5.73	-15.09	-23.29	-5.73	-26.75	-4.61	-4.98		-2.43		
Allocation Value Add	7.34	7.27	15.19	7.34	17.98	2.44	0.78		0.03		
Private Equity Comp										1,449,105	25.21
Gross of Fee Return	0.98	13.19	28.39	0.98	24.96	19.01	17.27	16.66	8.02		
Net of Fee Return	0.96	11.85	24.64	0.96	20.71	16.15	15.03	14.99	6.93		
Policy Index	-0.18	18.05	24.86	-0.18	17.60	9.69	13.10	12.71	8.98		
Value Added	1.14	-6.20	-0.21	1.14	3.11	6.45	1.93	2.28	-2.06		
Dynamic Index	0.00	11.87	23.39	0.00	20.69	17.52	14.95				
Selection Value Add	0.96	-0.02	1.25	0.96	0.02	-1.37	0.08				
Allocation Value Add	0.18	-6.18	-1.46	0.18	3.09	7.83	1.85				
LGIMA Global Equity Overlay										-19,208	-0.33
Gross of Fee Return	-48.77	0.38	0.37	-48.77	-59.36				-100.00		
Net of Fee Return	-48.77	0.38	0.37	-48.77	-59.36				-100.00		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Risk Reduction & Mitigation										3,142,126	100.00
Gross of Fee Return	-0.18	1.69	2.79	-0.18	4.57	5.60	4.51		3.60		
Net of Fee Return	-0.18	1.67	2.75	-0.18	4.51	5.51	4.41		3.50		
Policy Index	-0.70	0.39	0.63	-0.70	4.52	5.46	4.00		3.33		
Value Added	0.51	1.28	2.12	0.51	-0.01	0.05	0.41		0.17		
Dynamic Index	-0.67	0.43	0.63	-0.67	4.70	5.55	4.08		3.42		
Selection Value Add	0.49	1.24	2.12	0.49	-0.19	-0.04	0.34		0.09		
Allocation Value Add	0.03	0.05	0.00	0.03	0.18	0.09	0.07		0.08		
Domestic Core Fixed Income										2,048,432	65.19
Gross of Fee Return	-0.80	0.83	1.32	-0.80	5.40	5.94	4.42	4.39	7.04		
Net of Fee Return	-0.80	0.82	1.29	-0.80	5.33	5.85	4.32	4.25	7.00		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72	5.49	4.00	3.75	6.59		
Value Added	-0.08	0.43	0.73	-0.08	0.62	0.35	0.32	0.50	0.41		
Global Core Fixed Income										422,732	13.45
Gross of Fee Return	-0.60	0.24	1.08	-0.60	3.15	4.49	3.85		4.46		
Net of Fee Return	-0.60	0.22	1.05	-0.60	3.09	4.39	3.74		4.27		
Policy Index	-0.54	0.33	1.07	-0.54	3.15	5.21	4.07		2.48		
Value Added	-0.06	-0.11	-0.02	-0.06	-0.06	-0.83	-0.33		1.79		
Bonds Plus Composite										504,212	16.05
Gross of Fee Return	2.87	6.97	11.03	2.87	1.51				3.59		
Net of Fee Return	2.87	6.97	11.04	2.87	1.51				3.59		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72				6.20		
Value Added	3.59	6.58	10.48	3.59	-3.21				-2.60		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Cash Composite										52,221	1.66
Gross of Fee Return	0.38	2.35	4.83	0.38	7.15	5.73	4.54	3.53	4.84		
Net of Fee Return	0.38	2.35	4.83	0.38	7.15	5.73	4.54	3.52	4.83		
91-Day Treasury Bill	0.01	0.03	0.08	0.01	0.54	1.57	1.20	0.64	3.02		
Value Added	0.37	2.32	4.75	0.37	6.61	4.17	3.34	2.88	1.81		
LGIMA Overlay										34	0.00
Gross of Fee Return	0.00	0.04	8.92	0.00	191.83				2,470.88		
Net of Fee Return	0.00	0.04	8.92	0.00	-84.08				-85.22		
LGIMA TAA Overlay										114,495	3.64
Gross of Fee Return	-0.89	-0.35	-1.16	-0.89	-11.43				-5.20		
Net of Fee Return	-0.89	-0.55	-1.68	-0.89	-11.90				-5.54		
91-Day Treasury Bill	0.01	0.03	0.08	0.01	0.54				1.01		
Value Added	-0.90	-0.58	-1.76	-0.90	-12.45				-6.55		

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	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Credit Oriented Fixed Income										2,502,957	100.00
Gross of Fee Return	1.09	8.36	14.79	1.09	6.63	5.06	6.70		5.27		
Net of Fee Return	0.88	7.93	14.07	0.88	5.95	4.42	6.20		4.87		
Policy Index	-0.24	6.53	10.08	-0.24	4.81	4.07	6.85		5.24		
Value Added	1.12	1.40	3.99	1.12	1.14	0.35	-0.65		-0.37		
Dynamic Index	0.18	4.42	8.83	0.18	2.46	3.01	6.20		5.28		
Selection Value Add	0.70	3.51	5.24	0.70	3.48	1.41	-0.00		-0.40		
Allocation Value Add	0.42	-2.11	-1.25	0.42	-2.34	-1.06	-0.65		0.04		
Liquid Credit										483,315	19.31
Gross of Fee Return	-1.19	6.58	10.59	-1.19	4.75	4.06	6.16		3.35		
Net of Fee Return	-1.19	6.53	10.48	-1.19	4.58	3.92	6.00		3.26		
Policy Index	-0.03	6.58	10.58	-0.03	5.31	4.33	8.04		5.26		
Value Added	-1.16	-0.05	-0.09	-1.16	-0.73	-0.42	-2.04		-2.00		
Dynamic Index	-0.15	6.54	10.33	-0.15	4.98	4.68	7.55		5.87		
Selection Value Add	-1.04	-0.01	0.16	-1.04	-0.40	-0.77	-1.54		-2.62		
Allocation Value Add	-0.12	-0.03	-0.25	-0.12	-0.33	0.35	-0.50		0.61		
Alternative Liquid Credit										735,873	29.40
Gross of Fee Return	2.61	10.97	19.53	2.61					25.75		
Net of Fee Return	2.61	10.97	19.53	2.61					25.75		
Bloomberg Global High Yield Hdg	-0.03	6.58	10.58	-0.03					18.47		
Value Added	2.64	4.39	8.95	2.64					7.28		
Dynamic Index	1.88	5.03	10.94	1.88					19.17		
Selection Value Add	0.73	5.95	8.59	0.73					6.58		
Allocation Value Add	1.91	-1.55	0.36	1.91					0.70		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Emerging Markets Debt Composite										389,686	15.57
Gross of Fee Return	-1.05	7.83	8.77	-1.05	11.02	4.26	6.20		4.90		
Net of Fee Return	-1.05	7.83	8.77	-1.05	11.02	4.26	6.20		4.90		
Policy Index	-1.08	6.33	8.09	-1.08	2.78	2.96	6.30		5.49		
Value Added	0.03	1.50	0.67	0.03	8.24	1.31	-0.10		-0.59		
Illiquid Credit Comp										894,082	35.72
Gross of Fee Return	2.07	7.60	15.97	2.07	1.22	6.21	8.27	9.38	7.83		
Net of Fee Return	1.48	6.44	14.02	1.48	-0.50	4.14	6.60	8.21	7.02		
Policy Index	-0.03	6.58	10.58	-0.03	5.31	4.33	7.06	6.51	7.19		
Value Added	1.51	-0.13	3.44	1.51	-5.82	-0.20	-0.47	1.70	-0.18		
Dynamic Index	0.00	3.14	7.85	0.00	1.12	4.28	5.80				
Selection Value Add	1.48	3.30	6.17	1.48	-1.62	-0.14	0.79				
Allocation Value Add	0.03	-3.44	-2.72	0.03	-4.20	-0.06	-1.26				

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	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Real Assets										3,288,078	100.00
Gross of Fee Return	0.79	6.94	8.30	0.79	-1.40	3.21	5.53		4.97		
Net of Fee Return	0.74	6.50	7.64	0.74	-2.28	1.96	4.34		3.92		
Policy Index	1.18	13.40	14.33	1.18	-1.46	1.75	4.15		3.88		
Value Added	-0.44	-6.91	-6.69	-0.44	-0.82	0.20	0.19		0.05		
Dynamic Index	0.38	4.67	7.55	0.38	-3.99	1.05	3.81		3.02		
Selection Value Add	0.36	1.82	0.09	0.36	1.71	0.91	0.52		0.90		
Allocation Value Add	-0.80	-8.73	-6.78	-0.80	-2.53	-0.70	-0.34		-0.86		
Liquid Real Assets Comp										1,269,585	38.61
Gross of Fee Return	1.72	11.31	13.14	1.72	1.41	0.92	5.94	-2.37	-0.34		
Net of Fee Return	1.72	11.22	12.95	1.72	1.08	0.54	5.46	-2.63	-0.57		
Policy Index	1.88	13.00	11.98	1.88	2.56	1.21	5.53	1.96	6.62		
Value Added	-0.16	-1.78	0.97	-0.16	-1.49	-0.67	-0.07	-4.60	-7.18		
Dynamic Index	1.65	10.99	11.29	1.65	-0.10	-0.23	6.26				
Selection Value Add	0.07	0.23	1.66	0.07	1.18	0.77	-0.80				
Allocation Value Add	-0.23	-2.01	-0.69	-0.23	-2.66	-1.44	0.73				
Illiquid Real Assets Comp										861,723	26.21
Gross of Fee Return	0.85	3.25	7.06	0.85	-3.86	1.96	4.78	8.52	-9.13		
Net of Fee Return	0.64	2.15	5.63	0.64	-4.88	-0.01	2.90	6.63	-10.26		
Policy Index	1.52	10.54	17.63	1.52	2.57	-0.33	2.11				
Value Added	-0.88	-8.39	-12.01	-0.88	-7.45	0.33	0.79				
Dynamic Index	-0.91	-2.04	8.42	-0.91	-12.62	-1.51	1.72				
Selection Value Add	1.55	4.19	-2.80	1.55	7.75	1.50	1.18				
Allocation Value Add	-2.43	-12.58	-9.21	-2.43	-15.19	-1.17	-0.39				

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	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Liquid Real Estate Comp										301,685	9.18
Gross of Fee Return	-0.24	15.15	13.58	-0.24	-1.49	6.59	7.57	7.89	10.71		
Net of Fee Return	-0.24	15.12	13.50	-0.24	-1.68	6.29	7.32	7.72	10.56		
Policy Index	0.13	15.86	14.50	0.13	-9.30	3.40	5.47	5.61	10.09		
Value Added	-0.37	-0.74	-1.00	-0.37	7.62	2.89	1.84	2.11	0.46		
Dynamic Index	-0.17	15.94	14.59	-0.17	-10.44	3.20	4.65				
Selection Value Add	-0.07	-0.82	-1.09	-0.07	8.76	3.09	2.67				
Allocation Value Add	-0.30	0.08	0.09	-0.30	-1.15	-0.20	-0.82				
Illiquid Real Estate Comp										853,268	25.95
Gross of Fee Return	-0.27	1.91	1.27	-0.27	-1.00	10.31	9.99	14.26	7.50		
Net of Fee Return	-0.27	1.54	0.57	-0.27	-2.85	7.01	7.24	12.31	6.16		
Wilshire Global REIT	0.13	15.86	14.50	0.13	-9.30	3.40	5.09	7.20	3.25		
Value Added	-0.40	-14.32	-13.93	-0.40	6.45	3.61	2.15	5.11	2.91		
NCREIF ODCE (1Q Lag)	0.00	0.48	-0.93	0.00	1.80	5.76	7.26				
Value Added	-0.27	1.05	1.50	-0.27	-4.64	1.25	-0.02				
Market Neutral Hedge Fund Comp										1,818	0.06
Gross of Fee Return	0.02	0.24	0.88	0.02	-10.30	0.38	0.00		1.22		
Net of Fee Return	0.02	0.24	0.88	0.02	-10.30	0.38	0.00		1.22		
Libor +2% 1M Lag	0.19	0.56	1.31	0.19	2.62	3.78	3.49		3.05		
Value Added	-0.17	-0.32	-0.43	-0.17	-12.92	-3.40	-3.48		-1.83		

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	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Global Public Stock										3,181,952	
Gross of Fee Return	-0.04	16.70	24.37	-0.04	17.35	7.32	13.86	9.28	8.44		
Net of Fee Return	-0.04	16.64	24.24	-0.04	17.13	7.17	13.70	9.14	8.35		
Policy Index	-0.18	18.05	24.86	-0.18	17.60	7.75	13.62	9.77	8.47		
Value Added	0.14	-1.41	-0.62	0.14	-0.47	-0.58	0.09	-0.63	-0.12		
Dynamic Index	0.77	20.98	28.19	0.77	19.97	7.90	13.92				
Selection Value Add	-0.81	-4.34	-3.95	-0.81	-2.84	-0.73	-0.22				
Allocation Value Add	0.95	2.92	3.33	0.95	2.37	0.15	0.30				
SSgA ACWI IMI Index Fund										1,256,268	
Gross of Fee Return	-0.18	17.42	24.42	-0.18	17.31	8.05			12.68		
Net of Fee Return	-0.18	17.42	24.41	-0.18	17.29	8.03			12.66		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75			12.33		
Value Added	-0.00	-0.63	-0.45	-0.00	-0.32	0.28			0.34		
NT MSCI ACWI X US Index Fund										3,193	
Gross of Fee Return	-0.65	3.47	6.93	-0.65	8.14	-0.34	4.74	2.23	2.31		
Net of Fee Return	-0.65	3.47	6.93	-0.65	8.14	-0.34	4.62	2.16	2.24		
MSCI ACWI X US IMI Index (N)	0.16	20.08	25.39	0.16	14.44	3.04	10.59	4.99	5.03		
Value Added	-0.81	-16.61	-18.46	-0.81	-6.30	-3.38	-5.98	-2.83	-2.79		
Global Equity Overlay										225,781	
Gross of Fee Return	0.08	-11.24	-18.93	0.08	-44.17	-14.65			14.52		
Net of Fee Return	0.08	-11.26	-18.96	0.08	-44.20	-14.76			14.38		
BlackRock Equity Transition										96	
Gross of Fee Return	0.69	4.30	6.95	0.69	6.38	10.70			6.14		
Net of Fee Return	0.69	4.30	6.95	0.69	6.38	10.70			6.14		

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	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Active US Equity										569,125	100.00
Gross of Fee Return	-1.22	17.99	28.15	-1.22	27.76	12.02	17.03	12.33	10.66		
Net of Fee Return	-1.22	17.81	27.73	-1.22	26.95	11.60	16.67	12.08	10.51		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	9.84	7.97		
Value Added	-1.04	-0.24	2.87	-1.04	9.35	3.85	3.11	2.23	2.54		
Dynamic Index	4.05	31.97	43.23	4.05	35.31	15.24	18.84				
Selection Value Add	-5.27	-14.16	-15.50	-5.27	-8.36	-3.64	-2.17				
Allocation Value Add	4.23	13.92	18.37	4.23	17.71	7.49	5.28				
Kayne Anderson SCC										327,512	57.55
Gross of Fee Return	-1.43	15.50	23.68	-1.43	22.24				14.17		
Net of Fee Return	-1.43	15.27	23.18	-1.43	21.23				13.30		
Russell 2000	5.03	35.15	44.79	5.03	30.17				9.01		
Value Added	-6.46	-19.88	-21.61	-6.46	-8.94				4.30		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60				10.52		
Value Added	-1.25	-2.78	-1.68	-1.25	3.63				2.78		
TimesSquare Capital SMID Cap Growth										236,243	41.51
Gross of Fee Return	-0.96	21.93	35.64	-0.96	37.31	18.16	20.21	15.01	13.55		
Net of Fee Return	-0.96	21.85	35.39	-0.96	36.93	17.89	19.90	14.43	13.05		
Russell 2500 Growth	2.80	27.90	41.54	2.80	44.24	19.07	21.85	15.19	12.19		
Value Added	-3.75	-6.05	-6.14	-3.75	-7.30	-1.18	-1.95	-0.76	0.86		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	8.91	7.71		
Value Added	-0.78	3.80	10.54	-0.78	19.33	10.14	6.33	5.51	5.35		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
			FYTD						Inception		
	Month	3 Months	6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Return	\$(000)	Percent
Portable Alpha Composite										5,365	0.94
Gross of Fee Return	0.59	6.47	5.52	0.59	-1.18	6.65	10.94	11.98	6.27		
Net of Fee Return	0.59	5.63	3.79	0.59	-4.15	5.54	10.22	11.60	6.00		
Standard & Poor's 500 + 1%	-0.93	14.30	21.51	-0.93	18.25	12.70	17.16	14.50	10.16		
Value Added	1.51	-8.67	-17.72	1.51	-22.40	-7.16	-6.94	-2.90	-4.16		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	8.91	5.72		
Value Added	0.76	-12.42	-21.07	0.76	-21.75	-2.21	-3.34	2.69	0.28		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Active Non-US Developed Equity										764,865	100.00
Gross of Fee Return	-0.56	16.42	21.56	-0.56	14.18	4.00	10.76	7.70	4.10		
Net of Fee Return	-0.56	16.29	21.27	-0.56	13.68	3.62	10.28	7.32	3.82		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	7.91	4.82		
Value Added	-0.39	-1.76	-3.58	-0.39	-3.92	-4.13	-3.29	-0.59	-1.00		
Dynamic Index	-0.86	19.99	22.41	-0.86	10.47	2.27	9.79				
Selection Value Add	0.30	-3.70	-1.14	0.30	3.22	1.35	0.49				
Allocation Value Add	-0.68	1.94	-2.44	-0.68	-7.14	-5.48	-3.78				
Acadian International Equity										336,272	43.96
Gross of Fee Return	0.09	18.51	22.60	0.09	15.72				6.03		
Net of Fee Return	0.09	18.38	22.27	0.09	15.24				5.75		
MSCI EAFE Index (N)	-1.07	19.58	20.32	-1.07	8.94				4.01		
Value Added	1.16	-1.21	1.96	1.16	6.29				1.75		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60				10.56		
Value Added	0.27	0.32	-2.58	0.27	-2.36				-4.81		
MFS International Value Equity										236,918	30.98
Gross of Fee Return	-2.09	11.93	17.22	-2.09	16.98	8.64	12.16	10.71	10.83		
Net of Fee Return	-2.09	11.73	16.81	-2.09	16.15	8.06	11.50	10.05	10.20		
MSCI EAFE Index (N)	-1.07	19.58	20.32	-1.07	8.94	2.23	8.84	5.15	5.61		
Value Added	-1.02	-7.86	-3.51	-1.02	7.20	5.83	2.66	4.90	4.58		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	8.91	9.33		
Value Added	-1.91	-6.32	-8.05	-1.91	-1.45	0.31	-2.07	1.13	0.87		
Policy Index	-1.07	19.58	20.32	-1.07	8.94	1.94	9.18	4.74	5.18		
Value Added	-1.02	-7.86	-3.51	-1.02	7.20	6.12	2.31	5.30	5.02		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Active Emerging Markets Equity										362,623	100.00
Gross of Fee Return	3.47	19.26	40.35	3.47	39.04	9.19	16.63	6.34	6.86		
Net of Fee Return	3.47	19.26	40.35	3.47	39.04	9.05	16.37	5.90	6.53		
MSCI EM Index (N)	3.07	20.88	35.16	3.07	27.90	4.43	15.02	4.23	6.50		
Value Added	0.40	-1.61	5.19	0.40	11.14	4.63	1.34	1.67	0.03		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	8.91	7.07		
Value Added	3.64	1.21	15.49	3.64	21.43	1.30	2.80	-3.02	-0.54		
Axiom Investors										360,850	99.51
Gross of Fee Return	3.49	19.36	40.60	3.49	39.27				28.22		
Net of Fee Return	3.49	19.36	40.60	3.49	39.27				28.22		
MSCI EM Index (N)	3.07	20.88	35.16	3.07	27.90				19.29		
Value Added	0.42	-1.51	5.44	0.42	11.38				8.93		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60				20.17		
Value Added	3.66	1.31	15.74	3.66	21.67				8.05		
Russell Transition										1,773	0.49
Gross of Fee Return	-0.21	1.89	3.41	-0.21	3.24	0.35	10.65	3.42	2.31		
Net of Fee Return	-0.21	1.89	3.41	-0.21	3.24	0.23	10.41	3.05	1.98		
MSCI EM Index (N)	3.07	20.88	35.16	3.07	27.90	4.43	15.02	4.23	2.34		
Value Added	-3.27	-18.98	-31.75	-3.27	-24.65	-4.19	-4.61	-1.18	-0.36		
MSCI AC World IMI Index (N)	-0.18	18.05	24.86	-0.18	17.60	7.75	13.57	8.91	5.45		
Value Added	-0.03	-16.16	-21.45	-0.03	-14.36	-7.52	-3.16	-5.87	-3.47		
BlackRock MSCI ACWI Minimum Volatility										1,136,017	
Gross of Fee Return	-1.60	7.62	9.89	-1.60	0.15	5.72			9.22		
Net of Fee Return	-1.60	7.61	9.85	-1.60	0.08	5.66			9.16		
MSCI ACWI Min Vol (N)	-1.61	7.52	9.63	-1.61	-0.36	5.24			8.62		
Value Added	0.00	0.09	0.22	0.00	0.44	0.42			0.54		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Domestic Core Fixed Income										2,048,432	100.00
Gross of Fee Return	-0.80	0.83	1.32	-0.80	5.40	5.94	4.42	4.39	7.04		
Net of Fee Return	-0.80	0.82	1.29	-0.80	5.33	5.85	4.32	4.25	7.00		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72	5.49	4.00	3.75	6.59		
Value Added	-0.08	0.43	0.73	-0.08	0.62	0.35	0.32	0.50	0.41		
BlackRock Core Active										1,095,786	53.49
Gross of Fee Return	-0.60	1.32	2.34	-0.60	7.12	6.63	4.92	4.59	5.27		
Net of Fee Return	-0.60	1.30	2.31	-0.60	7.04	6.52	4.81	4.45	5.15		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72	5.49	4.00	3.75	4.43		
Value Added	0.12	0.91	1.75	0.12	2.32	1.03	0.81	0.70	0.72		
Prudential Core Conservative										656,702	32.06
Gross of Fee Return	-0.75	0.59	0.84	-0.75	4.78	5.58	4.10		4.07		
Net of Fee Return	-0.75	0.58	0.81	-0.75	4.72	5.51	4.02		3.96		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72	5.49	4.00		3.18		
Value Added	-0.03	0.19	0.25	-0.03	0.01	0.01	0.02		0.78		
Risk Mitigation Overlay										295,944	14.45
Gross of Fee Return	-1.56	-0.57	-2.07	-1.56	3.99	9.71	13.66		6.54		
Net of Fee Return	-1.56	-0.59	-2.11	-1.56	3.93	9.54	13.47		6.34		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Global Core Fixed Income										422,732	100.00
Gross of Fee Return	-0.60	0.24	1.08	-0.60	3.15	4.49	3.85		4.46		
Net of Fee Return	-0.60	0.22	1.05	-0.60	3.09	4.39	3.74		4.27		
Policy Index	-0.54	0.33	1.07	-0.54	3.15	5.21	4.07		2.48		
Value Added	-0.06	-0.11	-0.02	-0.06	-0.06	-0.83	-0.33		1.79		
BlackRock Global FI										422,732	100.00
Gross of Fee Return	-0.60	0.24	1.08	-0.60	3.15				5.30		
Net of Fee Return	-0.60	0.22	1.05	-0.60	3.09				5.24		
Bloomberg Global Aggregate Hdg	-0.54	0.33	1.07	-0.54	3.15				5.51		
Value Added	-0.06	-0.11	-0.02	-0.06	-0.06				-0.27		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Bonds Plus Composite										504,212	100.00
Gross of Fee Return	2.87	6.97	11.03	2.87	1.51				3.59		
Net of Fee Return	2.87	6.97	11.04	2.87	1.51				3.59		
Bloomberg Aggregate	-0.72	0.39	0.56	-0.72	4.72				6.20		
Value Added	3.59	6.58	10.48	3.59	-3.21				-2.60		
AQR SPF										2,851	0.57
Gross of Fee Return	0.00	0.00	-0.02	0.00	-52.52				-50.55		
Net of Fee Return	0.00	0.00	-0.02	0.00	-52.52				-50.55		
Elliott										58,403	11.58
Gross of Fee Return	0.00	3.24	6.93	0.00	9.62				8.85		
Net of Fee Return	0.00	3.24	6.93	0.00	9.62				8.85		
Parametric Bonds Plus										25,496	5.06
Gross of Fee Return	-14.02	5.54	4.09	-14.02	97.50				146.79		
Net of Fee Return	-14.02	5.54	4.09	-14.02	97.50				146.79		
Pharo Gaia Fund										45,599	9.04
Gross of Fee Return	4.58	10.64	14.00	4.58					14.00		
Net of Fee Return	4.58	10.64	14.00	4.58					14.00		
Dorsal										75,059	14.89
Gross of Fee Return	1.85	2.10	7.23	1.85					7.23		
Net of Fee Return	1.85	2.10	7.23	1.85					7.23		
Garda										53,787	10.67
Gross of Fee Return	0.32	2.84	7.57	0.32					7.57		
Net of Fee Return	0.32	2.84	7.57	0.32					7.57		
Glazer										56,155	11.14
Gross of Fee Return	12.21	22.34	40.39	12.21					40.39		
Net of Fee Return	12.21	22.34	40.39	12.21					40.39		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
			FYTD						Inception		
	Month	3 Months	6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Return	\$(000)	Percent
Pacific AA										74,674	14.81
Gross of Fee Return	2.01	3.62	6.68	2.01					6.68		
Net of Fee Return	2.01	3.62	6.68	2.01					6.68		
Systematica										45,858	9.09
Gross of Fee Return	9.20	9.73	1.91	9.20					1.91		
Net of Fee Return	9.20	9.73	1.91	9.20					1.91		
Marshall Wace Eureka										55,394	10.99
Gross of Fee Return	3.76	8.41		3.76					10.74		
Net of Fee Return	3.76	8.45	10.79	3.76					10.79		
Millenium										10,936	2.17
Gross of Fee Return	7.35	11.20		7.35					11.20		
Net of Fee Return	7.35	11.20		7.35					11.20		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Liquid Credit										483,315	100.00
Gross of Fee Return	-1.19	6.58	10.59	-1.19	4.75	4.06	6.16		3.35		
Net of Fee Return	-1.19	6.53	10.48	-1.19	4.58	3.92	6.00		3.26		
Policy Index	-0.03	6.58	10.58	-0.03	5.31	4.33	8.04		5.26		
Value Added	-1.16	-0.05	-0.09	-1.16	-0.73	-0.42	-2.04		-2.00		
Dynamic Index	-0.15	6.54	10.33	-0.15	4.98	4.68	7.55		5.87		
Selection Value Add	-1.04	-0.01	0.16	-1.04	-0.40	-0.77	-1.54		-2.62		
Allocation Value Add	-0.12	-0.03	-0.25	-0.12	-0.33	0.35	-0.50		0.61		
PineBridge High Yield										205,144	42.45
Gross of Fee Return	0.01	7.07	12.44	0.01	7.64				7.70		
Net of Fee Return	0.01	6.99	12.26	0.01	7.30				7.37		
Bloomberg Global High Yield Hdg	-0.03	6.58	10.58	-0.03	5.31				6.61		
Value Added	0.04	0.41	1.68	0.04	1.98				0.76		
Parametric Credit Cash Overlay										278,171	57.55
Gross of Fee Return	-2.06	6.53	9.10	-2.06	9.13				9.07		
Net of Fee Return	-2.06	6.51	9.06	-2.06	9.06				9.01		
Lazard Emerging Markets Debt										389,686	
Gross of Fee Return	-1.05	7.83	8.77	-1.05	11.02	4.26	6.20		4.90		
Net of Fee Return	-1.05	7.83	8.77	-1.05	11.02	4.26	6.20		4.90		
Policy Index	-1.08	6.33	8.09	-1.08	2.78	2.96	6.30		5.49		
Value Added	0.03	1.50	0.67	0.03	8.24	1.31	-0.10		-0.59		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Alternative Liquid Credit										735,873	100.00
Gross of Fee Return	2.61	10.97	19.53	2.61					25.75		
Net of Fee Return	2.61	10.97	19.53	2.61					25.75		
Bloomberg Global High Yield Hdg	-0.03	6.58	10.58	-0.03					18.47		
Value Added	2.64	4.39	8.95	2.64					7.28		
Dynamic Index	1.88	5.03	10.94	1.88					19.17		
Selection Value Add	0.73	5.95	8.59	0.73					6.58		
Allocation Value Add	1.91	-1.55	0.36	1.91					0.70		
CVC Global Credit Opportunities										166,933	22.69
Gross of Fee Return	3.88	10.55	20.21	3.88	4.82	0.69	4.04		3.08		
Net of Fee Return	3.88	10.55	20.21	3.88	4.82	0.69	4.04		3.08		
Bloomberg Global High Yield Hdg	-0.03	6.58	10.58	-0.03	5.31	5.05	8.15		7.30		
Value Added	3.91	3.98	9.64	3.91	-0.50	-4.36	-4.11		-4.22		
Ellington HF										199,586	27.12
Gross of Fee Return	2.36	8.30	18.09	2.36	1.78	3.77			3.80		
Net of Fee Return	2.36	8.30	18.09	2.36	1.78	3.77			3.80		
Bloomberg Global High Yield Hdg	-0.03	6.58	10.58	-0.03	5.31	5.05			5.89		
Value Added	2.39	1.72	7.51	2.39	-3.54	-1.28			-2.09		
Credit Oriented Hedge Funds										366,553	49.81
Gross of Fee Return	2.66	8.34	12.93	2.66	-0.21	3.00	4.28	4.60	4.99		
Net of Fee Return	2.66	8.34	12.93	2.66	-0.21	3.00	4.28	4.60	4.99		
Policy Index	-0.03	6.58	10.58	-0.03	5.31	4.33	8.04	6.23	6.95		
Value Added	2.69	1.76	2.35	2.69	-5.52	-1.33	-3.76	-1.62	-1.96		
LGIMA Credit Overlay										2,800	0.38
Gross of Fee Return	-36.91	667.78	1,989.97	-36.91					13,156.94		
Net of Fee Return	-36.91	667.78	1,989.97	-36.91					13,156.94		

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Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Liquid Real Assets Comp										1,269,585	100.00
Gross of Fee Return	1.72	11.31	13.14	1.72	1.41	0.92	5.94	-2.37	-0.34		
Net of Fee Return	1.72	11.22	12.95	1.72	1.08	0.54	5.46	-2.63	-0.57		
Policy Index	1.88	13.00	11.98	1.88	2.56	1.21	5.53	1.96	6.62		
Value Added	-0.16	-1.78	0.97	-0.16	-1.49	-0.67	-0.07	-4.60	-7.18		
Dynamic Index	1.65	10.99	11.29	1.65	-0.10	-0.23	6.26				
Selection Value Add	0.07	0.23	1.66	0.07	1.18	0.77	-0.80				
Allocation Value Add	-0.23	-2.01	-0.69	-0.23	-2.66	-1.44	0.73				
Deutsche Listed Infrastructure										94,603	7.45
Gross of Fee Return	-1.92	6.23	4.95	-1.92	-4.56	5.76			6.40		
Net of Fee Return	-1.92	6.07	4.61	-1.92	-5.17	5.08			5.81		
DJ Brookfield Global Infrastruct	-1.05	8.05	4.81	-1.05	-8.53	3.86			5.73		
Value Added	-0.87	-1.98	-0.20	-0.87	3.35	1.22			0.08		
Harvest MLP Alpha										220,922	17.40
Gross of Fee Return	5.77	26.60	17.45	5.77	-16.68	-9.54	0.51		-6.36		
Net of Fee Return	5.77	26.39	17.03	5.77	-17.30	-10.17	-0.15		-6.96		
Alerian MLP Index	5.84	34.31	17.40	5.84	-20.04	-12.67	-2.61		-9.84		
Value Added	-0.07	-7.92	-0.37	-0.07	2.73	2.50	2.45		2.89		
PIMCO TIPS										530,480	41.78
Gross of Fee Return	0.46	2.99	6.13	0.46	10.69	6.95			6.35		
Net of Fee Return	0.46	2.94	6.02	0.46	10.46	6.73			6.15		
Bloomberg U.S. TIPS	0.33	2.62	5.05	0.33	9.07	6.34			5.90		
Value Added	0.13	0.32	0.97	0.13	1.39	0.39			0.25		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
PIMCO Commodities										206,389	16.26
Gross of Fee Return	3.82	21.80	32.50	3.82	6.12	-2.26			-1.16		
Net of Fee Return	3.82	21.67	32.22	3.82	5.69	-2.61			-1.50		
Bloomberg Commodity Index	2.63	11.51	23.35	2.63	7.31	-2.33			-1.64		
Value Added	1.20	10.15	8.87	1.20	-1.63	-0.28			0.14		
Real Assets Cash Overlay										217,190	17.11
Gross of Fee Return	0.63	13.06	15.60	0.63	2.26				4.50		
Net of Fee Return	0.63	13.05	15.58	0.63	2.22				4.45		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Liquid Real Estate Comp										301,685	100.00
Gross of Fee Return	-0.24	15.15	13.58	-0.24	-1.49	6.59	7.57	7.89	10.71		
Net of Fee Return	-0.24	15.12	13.50	-0.24	-1.68	6.29	7.32	7.72	10.56		
Policy Index	0.13	15.86	14.50	0.13	-9.30	3.40	5.47	5.61	10.09		
Value Added	-0.37	-0.74	-1.00	-0.37	7.62	2.89	1.84	2.11	0.46		
Dynamic Index	-0.17	15.94	14.59	-0.17	-10.44	3.20	4.65				
Selection Value Add	-0.07	-0.82	-1.09	-0.07	8.76	3.09	2.67				
Allocation Value Add	-0.30	0.08	0.09	-0.30	-1.15	-0.20	-0.82				
DFA Real Estate Securities										144,940	48.04
Gross of Fee Return	-0.13	14.48	12.63	-0.13	-7.42	4.62			5.38		
Net of Fee Return	-0.13	14.44	12.53	-0.13	-7.59	4.47			5.24		
Wilshire Global REIT	0.13	15.86	14.50	0.13	-9.30	3.40			3.72		
Value Added	-0.26	-1.42	-1.97	-0.26	1.70	1.06			1.52		
S&P Global REIT Index	-0.15	16.21	15.62	-0.15	-9.01	3.38			3.89		
Value Added	0.02	-1.77	-3.09	0.02	1.42	1.08			1.35		
Security Capital Alpha										39,636	13.14
Gross of Fee Return	-0.26	21.98	22.43	-0.26					42.73		
Net of Fee Return	-0.26	21.98	22.43	-0.26					42.73		
Wilshire REIT Index	0.53	14.01	12.59	0.53					24.49		
Value Added	-0.78	7.97	9.84	-0.78					18.24		
Security Capital Beta										117,109	38.82
Gross of Fee Return	-0.39	11.94	9.18	-0.39					15.36		
Net of Fee Return	-0.39	11.91	9.06	-0.39					15.22		
Wilshire Global REIT	0.13	15.86	14.50	0.13					25.74		
Value Added	-0.52	-3.95	-5.44	-0.52					-10.52		

MONTHLY SUMMARY

Investment Performance and Market Values

For Periods Ending January 31, 2021

	Returns									Market Value	
	Month	3 Months	FYTD 6/30/20	CYTD	1 Year	3 Years	5 Years	10 Years	Inception Return	\$(000)	Percent
Cash Composite										52,221	100.00
Gross of Fee Return	0.38	2.35	4.83	0.38	7.15	5.73	4.54	3.53	4.84		
Net of Fee Return	0.38	2.35	4.83	0.38	7.15	5.73	4.54	3.52	4.83		
Cash Account										51,020	97.70
Gross of Fee Return	0.17	0.19	0.37	0.17	0.58	1.87	1.48	2.06	2.59		
Net of Fee Return	0.17	0.19	0.37	0.17	0.58	1.87	1.48	2.05	2.57		
91-Day Treasury Bill	0.01	0.03	0.08	0.01	0.54	1.57	1.20	0.64	1.13		
Value Added	0.16	0.16	0.29	0.16	0.04	0.30	0.28	1.41	1.44		
Cash-Corporate Action										1,201	2.30

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Atalaya SOF VI		0.0		0.0		0.0		0.0		0.0		0.0		0.0	24,259	0.1	24,259	0.1
Athyrium Opportunities Fund II, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	29,570	0.2	29,570	0.2
CVC Global Credit Opportunities		0.0		0.0		0.0		0.0		0.0		0.0		0.0	166,933	1.0	166,933	1.0
Canyon Value Realization Fund, L.P.		0.0		0.0		0.0		0.0		0.0		0.0	38,424	0.2		0.0	38,424	0.2
Cerberus Inst. Partners L.P.- Series 4		0.0		0.0		0.0		0.0		0.0		0.0		0.0	636	0.0	636	0.0
European Real Estate Debt Fund II		0.0		0.0		0.0		0.0		0.0	6,156	0.0		0.0		0.0	6,156	0.0
Garrison Opportunity Fund IV A LLC		0.0		0.0		0.0		0.0		0.0		0.0		0.0	30,624	0.2	30,624	0.2
Guggenheim Global High Yield		0.0		0.0		0.0		0.0	1	0.0		0.0		0.0		0.0	1	0.0
HIG Bayside Loan Opportunity Fund II		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,115	0.0	1,115	0.0
King Street Capital, L.P.		0.0		0.0		0.0		0.0		0.0		0.0	4,525	0.0		0.0	4,525	0.0
Lazard Emerging Markets Debt		0.0		0.0		0.0		0.0	389,686	2.4		0.0		0.0		0.0	389,686	2.4
Madison Real Estate Debt		0.0		0.0		0.0		0.0		0.0	41,610	0.3		0.0		0.0	41,610	0.3
OCM Opportunities Fund VII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	105	0.0	105	0.0
OCM Opportunities Fund VIII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	554	0.0	554	0.0
OCM Opportunities Fund VIIb, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	57	0.0	57	0.0
Oaktree Eur. Prin. Fund III(US), LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	15,808	0.1	15,808	0.1
Selene Res. Mortgage Opp. Fund II LP		0.0		0.0		0.0		0.0		0.0	3,961	0.0		0.0		0.0	3,961	0.0
Silver Point Capital Fund, L.P.		0.0		0.0		0.0		0.0		0.0		0.0	41,094	0.3		0.0	41,094	0.3
TPG Opportunities Partners III LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	16,756	0.1	16,756	0.1
Wayzata Opportunities Fund II, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	578	0.0	578	0.0
Wayzata Opportunities Fund III, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	6,045	0.0	6,045	0.0
European Real Estate Debt Fund III		0.0		0.0		0.0		0.0		0.0	73,816	0.5		0.0		0.0	73,816	0.5
Ellington HF		0.0		0.0		0.0		0.0		0.0		0.0		0.0	199,586	1.2	199,586	1.2
Tennenbaum		0.0		0.0		0.0		0.0		0.0	0	0.0		0.0		0.0	0	0.0
Cheyne V		0.0		0.0		0.0		0.0		0.0		0.0		0.0	102,208	0.6	102,208	0.6
Cerberus Global RPL		0.0		0.0		0.0		0.0		0.0		0.0		0.0	107,821	0.7	107,821	0.7
Eagle Point		0.0		0.0		0.0		0.0		0.0		0.0		0.0	87,059	0.5	87,059	0.5
PineBridge High Yield		0.0	205,144	1.3		0.0		0.0		0.0		0.0		0.0		0.0	205,144	1.3
Parametric Credit Cash Overlay		0.0		0.0	278,171	1.7		0.0		0.0		0.0		0.0		0.0	278,171	1.7
Napier Park Class B		0.0		0.0		0.0		0.0		0.0		0.0		0.0	215,928	1.3	215,928	1.3
LGIMA Credit Overlay		0.0		0.0	2,800	0.0		0.0		0.0		0.0		0.0		0.0	2,800	0.0
Wheeler Peak Rotational Credit		0.0		0.0		0.0		0.0		0.0		0.0		0.0	129,416	0.8	129,416	0.8
Anchorage		0.0	144,814	0.9		0.0		0.0		0.0		0.0		0.0		0.0	144,814	0.9

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Napier Park Class A		0.0	137,697	0.8		0.0		0.0		0.0		0.0		0.0	2,804	0.0	2,804	0.0
Credit Oriented Fixed Income	0	0.0	487,654	3.0	280,971	1.7	0	0.0	389,687	2.4	125,544	0.8	84,043	0.5	1,135,058	7.0	2,502,957	15.3
Carlyle Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	2,804	0.0	2,804	0.0
Carlyle Partners VI LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	40,320	0.2	40,320	0.2
Charterhouse Capital Partners IX		0.0		0.0		0.0		0.0		0.0		0.0		0.0	3,717	0.0	3,717	0.0
CVC European Equity Partners V		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,078	0.0	1,078	0.0
Century Focused Fund IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	19,756	0.1	19,756	0.1
Collier International Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	906	0.0	906	0.0
DFA US Target Value	5	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	5	0.0
Draper Fisher Jurveston X, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	16,823	0.1	16,823	0.1
GTCR X, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,849	0.0	1,849	0.0
GTCR XI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	30,580	0.2	30,580	0.2
Glide Buy-Out Fund IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	4,978	0.0	4,978	0.0
Hellman & Friedman Cap. Part. VI		0.0		0.0		0.0		0.0		0.0		0.0		0.0	381	0.0	381	0.0
Hellman & Friedman Cap. Partners VII		0.0		0.0		0.0		0.0		0.0		0.0		0.0	27,046	0.2	27,046	0.2
Institutional Venture Partners XIII		0.0		0.0		0.0		0.0		0.0		0.0		0.0	9,058	0.1	9,058	0.1
Institutional Venture Partners XIV LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	31,264	0.2	31,264	0.2
JMI Equity Fund VI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	475	0.0	475	0.0
JMI Equity Fund VII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	0.0	0	0.0
KRG Capital Fund IV, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,477	0.0	1,477	0.0
Kelso Investment Advisors IX		0.0		0.0		0.0		0.0		0.0		0.0		0.0	38,234	0.2	38,234	0.2
Kelso Investments Assoc. VIII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	5,300	0.0	5,300	0.0
KBI Global Investors EAFE Developed		0.0		0.0		0.0	1,365	0.0		0.0		0.0		0.0		0.0	1,365	0.0
Lincolnshire Equity Fund IV, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	7,170	0.0	7,170	0.0
Linsalata Capital Partners Fund VI, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	7,397	0.0	7,397	0.0
Madison Dearburn Cap. Partners VI, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	13,106	0.1	13,106	0.1
MFS International Value Equity		0.0		0.0		0.0	236,918	1.5		0.0		0.0		0.0		0.0	236,918	1.5
NT MSCI ACWI X US Index Fund		0.0		0.0		0.0	3,193	0.0		0.0		0.0		0.0		0.0	3,193	0.0
New Enterprise Associates 13		0.0		0.0		0.0		0.0		0.0		0.0		0.0	14,485	0.1	14,485	0.1
New Enterprise Associates 14		0.0		0.0		0.0		0.0		0.0		0.0		0.0	35,394	0.2	35,394	0.2
Nordic Capital Fund VII		0.0		0.0		0.0		0.0		0.0		0.0		0.0	115	0.0	115	0.0
Onex Partners III, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	6,683	0.0	6,683	0.0
Onex Partners IV L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	28,623	0.2	28,623	0.2

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Russell Transition		0.0		0.0		0.0	1,773	0.0		0.0		0.0		0.0		0.0	1,773	0.0
Portable Alpha	5,365	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	5,365	0.0
Principal Intl Small Cap Equity		0.0		0.0		0.0	189,536	1.2		0.0		0.0		0.0		0.0	189,536	1.2
Providence Equity Partners VI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		7,659	0.0		7,659	0.0
RRJ Capital Master Fund III LP		0.0		0.0		0.0		0.0		0.0		0.0		19,851	0.1		19,851	0.1
Schroder Intl Small Composite		0.0		0.0		0.0	775	0.0		0.0		0.0		0.0		0.0	775	0.0
The Resolute Fund II, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		8,737	0.1		8,737	0.1
The Resolute Fund III, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		19,927	0.1		19,927	0.1
Sun Capital Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		3,278	0.0		3,278	0.0
TPG Asia V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		4,384	0.0		4,384	0.0
TPG Partners VI, LP		0.0		0.0		0.0		0.0		0.0		0.0		4,780	0.0		4,780	0.0
Technology Crossover Ventures VII, L.P		0.0		0.0		0.0		0.0		0.0		0.0		14,011	0.1		14,011	0.1
TimesSquare Capital SMID Cap Growth	236,243	1.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0	236,243	1.4
TPG-Axon Partners, LP		0.0		0.0		0.0		0.0		0.0		685	0.0		0.0		685	0.0
Trinity Ventures XII		0.0		0.0		0.0		0.0		0.0		0.0		44,877	0.3		44,877	0.3
Warburg Pincus PE XII		0.0		0.0		0.0		0.0		0.0		0.0		98,292	0.6		98,292	0.6
Pine Bridge Passport I		0.0		0.0		0.0		0.0		0.0		0.0		100,357	0.6		100,357	0.6
BlackRock Equity Transition	96	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	96	0.0
Global Equity Overlay		0.0		0.0	225,781	1.4		0.0		0.0		0.0		0.0		0.0	225,781	1.4
DFJ Fund XII LP		0.0		0.0		0.0		0.0		0.0		0.0		30,569	0.2		30,569	0.2
SSgA ACWI IMI Index Fund		0.0		0.0		0.0	1,256,268	7.7		0.0		0.0		0.0		0.0	1,256,268	7.7
BlackRock MSCI ACWI Minimum Volatility	1,136,017	7.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,136,017	7.0
Charterhouse Capital Partners X		0.0		0.0		0.0		0.0		0.0		0.0		87,007	0.5		87,007	0.5
Technology Crossover Ventures IX, LP		0.0		0.0		0.0		0.0		0.0		0.0		76,972	0.5		76,972	0.5
FountainVest Fund II		0.0		0.0		0.0		0.0		0.0		59,999	0.4		0.0		59,999	0.4
RCP Fund of One		0.0		0.0		0.0		0.0		0.0		54,922	0.3		0.0		54,922	0.3
Petershill		0.0		0.0		0.0		0.0		0.0		0.0		54,511	0.3		54,511	0.3
Acadian International Equity		0.0		0.0		0.0	336,272	2.1		0.0		0.0		0.0		0.0	336,272	2.1
Helm & Frid Spock 1		0.0		0.0		0.0		0.0		0.0		0.0		7,858	0.0		7,858	0.0
Altaris Con Partners IV		0.0		0.0		0.0		0.0		0.0		0.0		18,645	0.1		18,645	0.1
Altaris Health Partners IV		0.0		0.0		0.0		0.0		0.0		0.0		39,270	0.2		39,270	0.2
CVC VII		0.0		0.0		0.0		0.0		0.0		0.0		82,463	0.5		82,463	0.5
The Resolute Fund IV, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		65,294	0.4		65,294	0.4
Kayne Anderson SCC		0.0		0.0		0.0		0.0		0.0		327,512	2.0		0.0		327,512	2.0

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Onex Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	28,949	0.2	28,949	0.2
Axiom Investors		0.0		0.0		0.0	360,850	2.2		0.0		0.0		0.0		0.0	360,850	2.2
Patria PE Fund VI		0.0		0.0		0.0		0.0		0.0		0.0		0.0	10,404	0.1	10,404	0.1
Kelso Investment Advisors X		0.0		0.0		0.0		0.0		0.0		0.0		0.0	22,512	0.1	22,512	0.1
Technology Crossover Ventures X, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	52,684	0.3	52,684	0.3
Warburg Pincus PE GG		0.0		0.0		0.0		0.0		0.0		0.0		0.0	51,570	0.3	51,570	0.3
LGIMA Global Equity Overlay		0.0		0.0	-19,208	-0.1		0.0		0.0		0.0		0.0		0.0	-19,208	-0.1
Petershill IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	3,516	0.0	3,516	0.0
Enchantment PH Co-Invest		0.0		0.0		0.0		0.0		0.0		0.0		0.0	13,998	0.1	13,998	0.1
Hellman Arrow 1		0.0		0.0		0.0		0.0		0.0		0.0		0.0	3,497	0.0	3,497	0.0
ON Dearborn VIII		0.0		0.0		0.0		0.0		0.0		0.0		0.0	9,284	0.1	9,284	0.1
HELLMAN SAMSN HCKY 1		0.0		0.0		0.0		0.0		0.0		0.0		0.0	5	0.0	5	0.0
HELLMAN SAMSN SHIELD		0.0		0.0		0.0		0.0		0.0		0.0		0.0	4	0.0	4	0.0
Global Equity	1,377,726	8.4	0	0.0	206,573	1.3	2,386,949	14.6	0	0.0	0	0.0	443,119	2.7	1,334,183	8.2	5,748,550	35.2
AG Super Fund L.P.		0.0		0.0		0.0		0.0		0.0		0.0	1,008	0.0		0.0	1,008	0.0
Ardian Infrastructure IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	45,356	0.3	45,356	0.3
BPG Investment Partnership VIII		0.0		0.0		0.0		0.0		0.0	2	0.0		0.0		0.0	2	0.0
Blackstone Real Estat Part Euro III LP		0.0		0.0		0.0		0.0		0.0	3,017	0.0		0.0		0.0	3,017	0.0
Blackstone Real Estate Partners VII		0.0		0.0		0.0		0.0		0.0	14,710	0.1		0.0		0.0	14,710	0.1
Brookfield Infrastructure Fund II LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	43,136	0.3	43,136	0.3
Brookfield Infrastructure Fund III		0.0		0.0		0.0		0.0		0.0		0.0	57,330	0.4		0.0	57,330	0.4
Carlyle Power Partners II		0.0		0.0		0.0		0.0		0.0		0.0	52,518	0.3		0.0	52,518	0.3
Carlyle Realty Partners V L.P.		0.0		0.0		0.0		0.0		0.0	5,693	0.0		0.0		0.0	5,693	0.0
Carlyle Realty Partners VI, L.P.		0.0		0.0		0.0		0.0		0.0	1,529	0.0		0.0		0.0	1,529	0.0
Denham Cap. Part. VI Coinvestment		0.0		0.0		0.0		0.0		0.0		0.0		0.0	821	0.0	821	0.0
Denham Commodity Partners Fund VI, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	10,069	0.1	10,069	0.1
EnCap Flatrock Midstream Fund III		0.0		0.0		0.0		0.0		0.0		0.0		0.0	23,362	0.1	23,362	0.1
Encap Energy Capital Fund IX, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	6,804	0.0	6,804	0.0
Encap Energy Capital VII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	678	0.0	678	0.0
Encap Energy Capital VIII, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	4,851	0.0	4,851	0.0
Farallon Capital Inst. Partners, LP		0.0		0.0		0.0		0.0		0.0		0.0	308	0.0		0.0	308	0.0
First Reserve Fund XII, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	2,100	0.0	2,100	0.0
Harrison Street Real Estate Partners V		0.0		0.0		0.0		0.0		0.0	31,814	0.2		0.0		0.0	31,814	0.2

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Harvest MLP Alpha		0.0		0.0		0.0		0.0		0.0		0.0		0.0	220,922	1.4	220,922	1.4
IFM Global Infrastructure Fund, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	163,691	1.0	163,691	1.0
KKR Global Infrastructure Investors II		0.0		0.0		0.0		0.0		0.0		0.0		0.0	36,339	0.2	36,339	0.2
KSL Capital Partners IV		0.0		0.0		0.0		0.0		0.0	47,942	0.3		0.0		0.0	47,942	0.3
Kayne Anderson Energy Fund V, LP		0.0		0.0		0.0		0.0		0.0		0.0		0.0	3,291	0.0	3,291	0.0
Lime Rock Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,637	0.0	1,637	0.0
Lime Rock Partners VI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	4,569	0.0	4,569	0.0
Lime Rock Resources III		0.0		0.0		0.0		0.0		0.0		0.0		0.0	15,776	0.1	15,776	0.1
North Haven VII		0.0		0.0		0.0		0.0		0.0	1,442	0.0		0.0		0.0	1,442	0.0
NGP Natural Resources XI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	33,025	0.2	33,025	0.2
Natural Gas Partners Fund IX		0.0		0.0		0.0		0.0		0.0		0.0		0.0	858	0.0	858	0.0
Natural Gas Partners X		0.0		0.0		0.0		0.0		0.0		0.0		0.0	3,545	0.0	3,545	0.0
OZ Domestic Partners II, L.P.		0.0		0.0		0.0		0.0		0.0		0.0	1	0.0		0.0	1	0.0
Paine and Partners Capital Fund IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	29,177	0.2	29,177	0.2
Quantum Energy Partners IV, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	612	0.0	612	0.0
Quantum Energy Partners V, L.P.		0.0		0.0		0.0		0.0		0.0		0.0		0.0	8,585	0.1	8,585	0.1
R/C Global Energy & Power Fund IV		0.0		0.0		0.0		0.0		0.0		0.0		0.0	2,296	0.0	2,296	0.0
R/C Renewable and Alt. Energy II		0.0		0.0		0.0		0.0		0.0		0.0		0.0	1,224	0.0	1,224	0.0
Riverstone Global Energy & Power Fd V		0.0		0.0		0.0		0.0		0.0		0.0		0.0	9,658	0.1	9,658	0.1
Rockwood Cap. Real Estate Part. IX, LP		0.0		0.0		0.0		0.0		0.0	6,418	0.0		0.0		0.0	6,418	0.0
Rockwood Real Estate Partners VIII		0.0		0.0		0.0		0.0		0.0	4	0.0		0.0		0.0	4	0.0
Stark Investments		0.0		0.0		0.0		0.0		0.0		0.0	500	0.0		0.0	500	0.0
Starwood Distressed Opportunity IX, LP		0.0		0.0		0.0		0.0		0.0	7,190	0.0		0.0		0.0	7,190	0.0
Starwood Global Opportunity VIII, LP		0.0		0.0		0.0		0.0		0.0	1,919	0.0		0.0		0.0	1,919	0.0
Starwood Opportunity Fund X		0.0		0.0		0.0		0.0		0.0	17,105	0.1		0.0		0.0	17,105	0.1
Walton Street Real Estate Fund VI		0.0		0.0		0.0		0.0		0.0	9,495	0.1		0.0		0.0	9,495	0.1
Wheelock Street Real Estate Fund II		0.0		0.0		0.0		0.0		0.0	12,472	0.1		0.0		0.0	12,472	0.1
Praedium Fund VII		0.0		0.0		0.0		0.0		0.0	0	0.0		0.0		0.0	0	0.0
ACM II		0.0		0.0		0.0		0.0		0.0		0.0		0.0	27,885	0.2	27,885	0.2
Deutsche Listed Infrastructure		0.0		0.0		0.0		0.0		0.0		0.0	94,603	0.6		0.0	94,603	0.6
Rockwood Cap. Real Estate Part. X, LP		0.0		0.0		0.0		0.0		0.0	42,615	0.3		0.0		0.0	42,615	0.3
Aermont III PW		0.0		0.0		0.0		0.0		0.0	70,307	0.4		0.0		0.0	70,307	0.4
Harrison Street Real Estate Partners VI		0.0		0.0		0.0		0.0		0.0	68,695	0.4		0.0		0.0	68,695	0.4
Antin III		0.0		0.0		0.0		0.0		0.0		0.0		0.0	75,882	0.5	75,882	0.5

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
Tillridge		0.0		0.0		0.0		0.0		0.0		0.0		0.0	13,683	0.1	13,683	0.1
DFA Real Estate Securities		0.0		0.0		0.0		0.0		0.0	144,940	0.9		0.0		0.0	144,940	0.9
EnCap Energy Capital XI, L.P.		0.0		0.0		0.0		0.0		0.0		0.0	21,345	0.1		0.0	21,345	0.1
Rockpoint Fund II		0.0		0.0		0.0		0.0		0.0	80,744	0.5		0.0		0.0	80,744	0.5
Starwood Global Opportunity XI		0.0		0.0		0.0		0.0		0.0	30,423	0.2		0.0		0.0	30,423	0.2
Sarofim		0.0		0.0		0.0		0.0		0.0	87,248	0.5		0.0		0.0	87,248	0.5
MINA III		0.0		0.0		0.0		0.0		0.0		0.0	3,959	0.0		0.0	3,959	0.0
PIMCO TIPS		0.0		0.0		0.0		0.0		0.0		0.0		0.0	530,480	3.2	530,480	3.2
NGP XII		0.0		0.0		0.0		0.0		0.0		0.0	40,183	0.2		0.0	40,183	0.2
PIMCO Commodities		0.0		0.0		0.0		0.0		0.0		0.0		0.0	206,389	1.3	206,389	1.3
BEP Legacy A LP		0.0		0.0		0.0		0.0		0.0		0.0	91	0.0		0.0	91	0.0
NEW ROCK CORE FUND		0.0		0.0		0.0		0.0		0.0	139,465	0.9		0.0		0.0	139,465	0.9
GEM RLTY EVERGREEN		0.0		0.0		0.0		0.0		0.0	95,118	0.6		0.0		0.0	95,118	0.6
Ardian V		0.0		0.0		0.0		0.0		0.0		0.0	9,519	0.1		0.0	9,519	0.1
Harrison Street Real Estate Partners VII		0.0		0.0		0.0		0.0		0.0	47,052	0.3		0.0		0.0	47,052	0.3
Aermont Cap RE Fund IV		0.0		0.0		0.0		0.0		0.0	5,313	0.0		0.0		0.0	5,313	0.0
Real Assets Cash Overlay		0.0		0.0	217,190	1.3		0.0		0.0		0.0		0.0		0.0	217,190	1.3
Rockwood Cap. Real Estate XI		0.0		0.0		0.0		0.0		0.0	12,769	0.1		0.0		0.0	12,769	0.1
Security Capital Alpha		0.0		0.0		0.0		0.0		0.0	39,636	0.2		0.0		0.0	39,636	0.2
Security Capital Beta		0.0		0.0		0.0		0.0		0.0	117,109	0.7		0.0		0.0	117,109	0.7
Rockpoint Fund III		0.0		0.0		0.0		0.0		0.0	7,353	0.0		0.0		0.0	7,353	0.0
Mass Ascension Co-Invest		0.0		0.0		0.0		0.0		0.0		0.0	48,601	0.3		0.0	48,601	0.3
Four Corners FF		0.0		0.0		0.0		0.0		0.0		0.0		0.0	59,268	0.4	59,268	0.4
Stockbridge NLF		0.0		0.0		0.0		0.0		0.0	5,415	0.0		0.0		0.0	5,415	0.0
Real Assets	0	0.0	0	0.0	217,190	1.3	0	0.0	0	0.0	1,154,953	7.1	329,966	2.0	1,585,969	9.7	3,288,078	20.1
BlackRock Core Active		0.0	1,095,786	6.7		0.0		0.0		0.0		0.0		0.0		0.0	1,095,786	6.7
Cash Account		0.0		0.0	51,020	0.3		0.0		0.0		0.0		0.0		0.0	51,020	0.3
Cash-Corporate Action		0.0		0.0	1,201	0.0		0.0		0.0		0.0		0.0		0.0	1,201	0.0
MacKay Shields Core Investment Grade		0.0	0	-0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	-0.0
Manulife Core Global Agg. Fixed Income		0.0	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	0.0
Risk Mitigation Overlay		0.0		0.0	295,944	1.8		0.0		0.0		0.0		0.0		0.0	295,944	1.8
Prudential Core Conservative		0.0	656,702	4.0		0.0		0.0		0.0		0.0		0.0		0.0	656,702	4.0
BlackRock Global FI		0.0	422,732	2.6		0.0		0.0		0.0		0.0		0.0		0.0	422,732	2.6

PUBLIC EMPLOYEES RETIREMENT ASSOC OF NM

Asset Allocation by Composite

Month Ended 1/31/21

	Equity		Bonds		Cash		Intl Equity		Intl Bonds		Real Estate		Special Invest		Other		As Allocated To Manager	
	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%	\$(000)	%
LGIMA Overlay		0.0		0.0	34	0.0		0.0		0.0		0.0		0.0		0.0	34	0.0
LGIMA TAA Overlay		0.0		0.0	114,495	0.7		0.0		0.0		0.0		0.0		0.0	114,495	0.7
AQR SPF		0.0	2,851	0.0		0.0		0.0		0.0		0.0		0.0		0.0	2,851	0.0
Elliott		0.0	58,403	0.4		0.0		0.0		0.0		0.0		0.0		0.0	58,403	0.4
Parametric Bonds Plus		0.0	25,496	0.2		0.0		0.0		0.0		0.0		0.0		0.0	25,496	0.2
Pharo Gaia Fund		0.0	45,599	0.3		0.0		0.0		0.0		0.0		0.0		0.0	45,599	0.3
Dorsal		0.0	75,059	0.5		0.0		0.0		0.0		0.0		0.0		0.0	75,059	0.5
Garda		0.0	53,787	0.3		0.0		0.0		0.0		0.0		0.0		0.0	53,787	0.3
Glazer		0.0	56,155	0.3		0.0		0.0		0.0		0.0		0.0		0.0	56,155	0.3
Pacific AA		0.0	74,674	0.5		0.0		0.0		0.0		0.0		0.0		0.0	74,674	0.5
Systematica		0.0	45,858	0.3		0.0		0.0		0.0		0.0		0.0		0.0	45,858	0.3
Marshall Wace Eureka		0.0	55,394	0.3		0.0		0.0		0.0		0.0		0.0		0.0	55,394	0.3
Millenium		0.0	10,936	0.1		0.0		0.0		0.0		0.0		0.0		0.0	10,936	0.1
Risk Reduction & Mitigation	0	0.0	2,679,433	16.4	462,693	2.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,142,126	19.2
Zia Risk Parity Fund		0.0		0.0	1,641,487	10.1		0.0		0.0		0.0		0.0		0.0	1,641,487	10.1
Multi-Risk Allocation	0	0.0	0	0.0	1,641,487	10.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,641,487	10.1
As Invested by Managers	1,377,726	8.4	3,167,086	19.4	2,808,915	17.2	2,386,949	14.6	389,687	2.4	1,280,497	7.8	857,128	5.3	4,055,211	24.8	16,323,198	100.0

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
Atalaya SOF VI	24,259,048	24,259,048	0.00
Athyrium Opportunities Fund II, L.P.	29,569,552	29,569,552	0.00
CVC Global Credit Opportunities	160,699,166	166,933,184	3.88
Canyon Value Realization Fund, L.P.	37,644,536	38,423,688	2.07
Cerberus Inst. Partners L.P- Series 4	1,147,807	635,829	-44.60
European Real Estate Debt Fund II	6,128,014	6,156,032	0.46
Garrison Opportunity Fund IV A LLC	30,624,186	30,624,186	0.00
Guggenheim Global High Yield	385	642	66.72
HIG Bayside Loan Opportunity Fund II	1,397,219	1,114,632	-20.22
King Street Capital, L.P.	4,595,606	4,525,222	-1.53
Lazard Emerging Markets Debt	393,831,550	389,686,447	-1.05
Madison Real Estate Debt	41,610,154	41,610,154	0.00
OCM Opportunities Fund VII, L.P.	94,253	104,633	11.01
OCM Opportunities Fund VIII, L.P.	479,553	553,965	15.52
OCM Opportunities Fund VIIb, L.P.	57,439	57,205	-0.41
Oaktree Eur. Prin. Fund III(US), LP	15,094,319	15,807,896	4.73
Selene Res. Mortgage Opp. Fund II LP	3,961,268	3,961,268	0.00
Silver Point Capital Fund, L.P.	39,748,363	41,094,186	3.39
TPG Opportunities Partners III LP	16,755,543	16,755,543	0.00
Wayzata Opportunities Fund II, L.P.	577,714	577,714	0.00
Wayzata Opportunities Fund III, L.P.	6,045,472	6,045,472	0.00
European Real Estate Debt Fund III	73,480,423	73,816,392	0.46
Ellington HF	194,978,243	199,586,460	2.36
Tennenbaum	1	1	0.00
Cheyne V	103,687,087	102,208,070	-1.43
Cerberus Global RPL	106,001,935	107,821,487	1.72
Eagle Point	87,059,486	87,059,486	0.00
PineBridge High Yield	205,129,295	205,143,585	0.01
Parametric Credit Cash Overlay	284,014,469	278,171,006	-2.06
Napier Park Class B	208,497,494	215,927,507	3.56

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
LGIMA Credit Overlay	4,438,307	2,799,966	-36.91
Wheeler Peak Rotational Credit	129,416,378	129,416,378	0.00
Anchorage	141,484,449	144,813,518	2.35
Napier Park Class A	133,652,952	137,696,580	3.03
Credit Oriented Fixed Income	2,486,161,666	2,502,956,933	0.68
Carlyle Partners V, L.P.	2,842,388	2,803,926	-1.35
Carlyle Partners VI LP	41,436,546	40,320,050	-2.69
Charterhouse Capital Partners IX	3,743,381	3,716,916	-0.71
CVC European Equity Partners V	1,085,887	1,078,210	-0.71
Century Focused Fund IV	19,756,148	19,756,148	0.00
Coller International Partners V, L.P.	906,486	906,486	0.00
DFA US Target Value	4,828	5,158	6.83
Draper Fisher Jurveston X, LP	16,822,620	16,822,620	0.00
GTCR X, L.P.	1,849,102	1,849,102	0.00
GTCR XI, L.P.	30,579,814	30,579,814	0.00
Glide Buy-Out Fund IV	4,365,855	4,977,694	14.01
Hellman & Friedman Cap. Part. VI	381,266	381,266	0.00
Hellman & Friedman Cap. Partners VII	27,040,900	27,046,052	0.02
Institutional Venture Partners XIII	9,057,580	9,057,580	0.00
Institutional Venture Partners XIV LP	31,263,508	31,263,508	0.00
JMI Equity Fund VI, L.P.	475,111	475,111	0.00
JMI Equity Fund VII, L.P.	2,305,452	1	-100.00
KRG Capital Fund IV, L.P.	1,476,828	1,476,828	0.00
Kelso Investment Advisors IX	48,563,740	38,234,223	-21.27
Kelso Investments Assoc. VIII, L.P.	5,299,789	5,299,789	0.00
KBI Global Investors EAFE Developed	1,375,617	1,364,716	-0.79
Lincolnshire Equity Fund IV, L.P.	7,142,140	7,169,675	0.39
Linsalata Capital Partners Fund VI, LP	7,397,123	7,397,123	0.00
Madison Dearburn Cap. Partners VI, LP	13,106,467	13,106,467	0.00

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
MFS International Value Equity	241,970,280	236,917,535	-2.09
NT MSCI ACWI X US Index Fund	3,214,175	3,193,417	-0.65
New Enterprise Associates 13	8,020,488	14,484,553	80.59
New Enterprise Associates 14	28,848,622	35,394,011	22.69
Nordic Capital Fund VII	115,346	114,531	-0.71
Onex Partners III, L.P.	6,682,735	6,682,735	0.00
Onex Partners IV L.P.	28,622,671	28,622,671	0.00
Russell Transition	1,776,917	1,773,232	-0.21
Portable Alpha	5,420,057	5,365,202	-1.01
Principal Intl Small Cap Equity	189,106,173	189,535,694	0.23
Providence Equity Partners VI, L.P.	7,728,564	7,659,437	-0.89
RRJ Capital Master Fund III LP	19,643,700	19,850,597	1.05
Schroder Intl Small Composite	781,933	774,917	-0.90
The Resolute Fund II, L.P.	8,744,503	8,737,182	-0.08
The Resolute Fund III, L.P.	20,049,322	19,927,304	-0.61
Sun Capital Partners V, L.P.	3,277,660	3,277,660	0.00
TPG Asia V, L.P.	4,384,210	4,384,210	0.00
TPG Partners VI, LP	4,861,424	4,780,367	-1.67
Technology Crossover Ventures VII, L.P	14,010,990	14,010,990	0.00
TimesSquare Capital SMID Cap Growth	238,525,787	236,242,933	-0.96
TPG-Axon Partners, LP	685,322	685,322	0.00
Trinity Ventures XII	44,876,817	44,876,817	0.00
Warburg Pincus PE XII	98,291,886	98,291,886	0.00
Pine Bridge Passport I	100,356,880	100,356,880	0.00
BlackRock Equity Transition	95,171	95,823	0.69
Global Equity Overlay	255,586,489	225,781,385	-11.66
DFJ Fund XII LP	30,248,682	30,568,682	1.06
SSgA ACWI IMI Index Fund	1,258,544,206	1,256,268,137	-0.18
BlackRock MSCI ACWI Minimum Volatility	1,154,535,283	1,136,016,596	-1.60
Charterhouse Capital Partners X	87,626,862	87,007,376	-0.71

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
Technology Crossover Ventures IX, LP	79,869,184	76,971,896	-3.63
FountainVest Fund II	58,030,830	59,999,473	3.39
RCP Fund of One	54,172,168	54,922,168	1.38
Petershill	54,511,299	54,511,299	0.00
Acadian International Equity	335,961,710	336,271,810	0.09
Helm & Frid Spock 1	7,858,262	7,858,262	0.00
Altaris Con Partners IV	18,644,809	18,644,809	0.00
Altaris Health Partners IV	39,270,120	39,270,120	0.00
CVC VII	83,050,232	82,463,100	-0.71
The Resolute Fund IV, L.P.	65,311,354	65,293,904	-0.03
Kayne Anderson SCC	332,265,958	327,512,188	-1.43
Onex Partners V, L.P.	28,949,060	28,949,060	0.00
Axiom Investors	348,691,688	360,849,507	3.49
Patria PE Fund VI	10,404,179	10,404,179	0.00
Kelso Investment Advisors X	23,932,405	22,512,244	-5.93
Technology Crossover Ventures X, LP	52,683,561	52,683,561	0.00
Warburg Pincus PE GG	51,569,821	51,569,821	0.00
LGIMA Global Equity Overlay	-870,804	-19,208,044	100.00
Petershill IV	54,921	3,516,374	100.00
Enchantment PH Co-Invest	12,885,937	13,998,494	8.63
Hellman Arrow 1	3,496,688	3,497,111	0.01
ON Dearborn VIII	9,002,322	9,283,572	3.12
HELLMAN SAMSN HCKY 1	0	5,322	100.00
HELLMAN SAMSN SHIELD	0	3,614	100.00
Global Equity	5,814,657,435	5,748,550,391	-1.14
AG Super Fund L.P.	1,004,386	1,008,068	0.37
Ardian Infrastructure IV	45,678,659	45,355,730	-0.71
BPG Investment Partnership VIII	2,375	2,375	0.00
Blackstone Real Estat Part Euro III LP	3,016,717	3,016,717	0.00

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
Blackstone Real Estate Partners VII	14,709,675	14,709,675	0.00
Brookfield Infrastructure Fund II LP	43,135,859	43,135,859	0.00
Brookfield Infrastructure Fund III	57,330,237	57,330,237	0.00
Carlyle Power Partners II	46,419,203	52,517,648	13.14
Carlyle Realty Partners V L.P.	5,692,883	5,692,883	0.00
Carlyle Realty Partners VI, L.P.	1,529,231	1,529,231	0.00
Denham Cap. Part. VI Coinvestment	821,060	821,060	0.00
Denham Commodity Partners Fund VI, LP	10,069,428	10,069,428	0.00
EnCap Flatrock Midstream Fund III	23,170,450	23,361,550	0.82
Encap Energy Capital Fund IX, L.P.	6,971,904	6,803,813	-2.41
Encap Energy Capital VII, L.P.	677,780	677,780	0.00
Encap Energy Capital VIII, L.P.	4,851,078	4,851,078	0.00
Farallon Capital Inst. Partners, LP	311,354	308,247	-1.00
First Reserve Fund XII, LP	2,100,405	2,100,405	0.00
Harrison Street Real Estate Partners V	31,813,730	31,813,730	0.00
Harvest MLP Alpha	208,867,719	220,922,388	5.77
IFM Global Infrastructure Fund, L.P.	160,155,564	163,690,969	2.21
KKR Global Infrastructure Investors II	37,756,042	36,338,917	-3.75
KSL Capital Partners IV	47,375,984	47,941,637	1.19
Kayne Anderson Energy Fund V, LP	3,290,754	3,290,754	0.00
Lime Rock Partners V, L.P.	1,637,494	1,637,494	0.00
Lime Rock Partners VI, L.P.	4,569,444	4,569,444	0.00
Lime Rock Resources III	15,775,629	15,775,629	0.00
North Haven VII	1,441,540	1,441,540	0.00
NGP Natural Resources XI, L.P.	32,130,927	33,024,645	2.78
Natural Gas Partners Fund IX	528,340	857,623	62.32
Natural Gas Partners X	3,885,652	3,544,785	-8.77
OZ Domestic Partners II, L.P.	1,681	1,490	-11.39
Paine and Partners Capital Fund IV	29,177,332	29,177,332	0.00
Quantum Energy Partners IV, L.P.	611,793	611,793	0.00

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
Quantum Energy Partners V, L.P.	8,584,942	8,584,942	0.00
R/C Global Energy & Power Fund IV	2,028,664	2,295,863	13.17
R/C Renewable and Alt. Energy II	1,306,257	1,224,335	-6.27
Riverstone Global Energy & Power Fd V	8,031,644	9,657,674	20.25
Rockwood Cap. Real Estate Part. IX, LP	6,418,095	6,418,095	0.00
Rockwood Real Estate Partners VIII	4,397	4,397	0.00
Stark Investments	500,021	500,021	0.00
Starwood Distressed Opportunity IX, LP	7,189,513	7,189,513	0.00
Starwood Global Opportunity VIII, LP	2,128,245	1,918,848	-9.84
Starwood Opportunity Fund X	18,723,526	17,105,019	-8.64
Walton Street Real Estate Fund VI	9,494,984	9,494,984	0.00
Wheelock Street Real Estate Fund II	12,472,068	12,472,068	0.00
Praedium Fund VII	0	0	NA
ACM II	27,885,276	27,885,276	0.00
Deutsche Listed Infrastructure	96,451,988	94,602,840	-1.92
Rockwood Cap. Real Estate Part. X, LP	42,614,734	42,614,734	0.00
Aermont III PW	70,807,934	70,307,408	-0.71
Harrison Street Real Estate Partners VI	68,694,508	68,694,508	0.00
Antin III	76,421,949	75,881,946	-0.71
Tillridge	14,396,358	13,683,482	-4.95
DFA Real Estate Securities	145,133,958	144,939,566	-0.13
EnCap Energy Capital XI, L.P.	21,345,016	21,345,016	0.00
Rockpoint Fund II	80,908,830	80,743,955	-0.20
Starwood Global Opportunity XI	30,423,252	30,423,252	0.00
Sarofim	87,055,047	87,247,778	0.22
MINA III	3,759,647	3,958,743	5.30
PIMCO TIPS	528,025,836	530,480,335	0.46
NGP XII	37,736,571	40,183,289	6.48
PIMCO Commodities	198,788,485	206,388,883	3.82
BEP Legacy A LP	90,741	90,741	0.00

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
NEW ROCK CORE FUND	139,464,837	139,464,837	0.00
GEM RLTY EVERGREEN	95,117,743	95,117,743	0.00
Ardian V	8,192,204	9,519,274	16.20
Harrison Street Real Estate Partners VII	47,052,436	47,052,436	0.00
Aermont Cap RE Fund IV	7,160,202	5,313,366	-25.79
Real Assets Cash Overlay	230,743,985	217,190,186	-5.87
Rockwood Cap. Real Estate XI	12,769,331	12,769,331	0.00
Security Capital Alpha	66,783,924	39,636,427	-40.65
Security Capital Beta	90,495,610	117,108,637	29.41
Rockpoint Fund III	7,353,422	7,353,422	0.00
Mass Ascension Co-Invest	48,600,612	48,600,612	0.00
Four Corners FF	32,392,349	59,267,876	82.97
Stockbridge NLF	0	5,414,600	100.00
Real Assets	3,240,061,449	3,288,078,211	1.48
BlackRock Core Active	1,102,394,532	1,095,786,130	-0.60
Cash Account	83,885,737	51,019,989	-39.18
Cash-Corporate Action	1,695,612	1,200,672	-29.19
MacKay Shields Core Investment Grade	-1	-1	-0.00
Manulife Core Global Agg. Fixed Income	0	0	0.00
Risk Mitigation Overlay	365,123,156	295,943,877	-18.95
Prudential Core Conservative	661,678,367	656,702,144	-0.75
BlackRock Global FI	425,266,614	422,732,383	-0.60
LGIMA Overlay	34,197	34,197	0.00
LGIMA TAA Overlay	114,105,223	114,494,572	0.34
AQR SPF	2,851,188	2,851,188	0.00
Elliott	58,402,547	58,402,547	0.00
Parametric Bonds Plus	25,202,287	25,495,737	1.16
Pharo Gaia Fund	43,602,239	45,598,652	4.58
Dorsal	73,698,927	75,058,843	1.85

MONTHLY CHANGE IN MARKET VALUE

NM PERA Total Fund

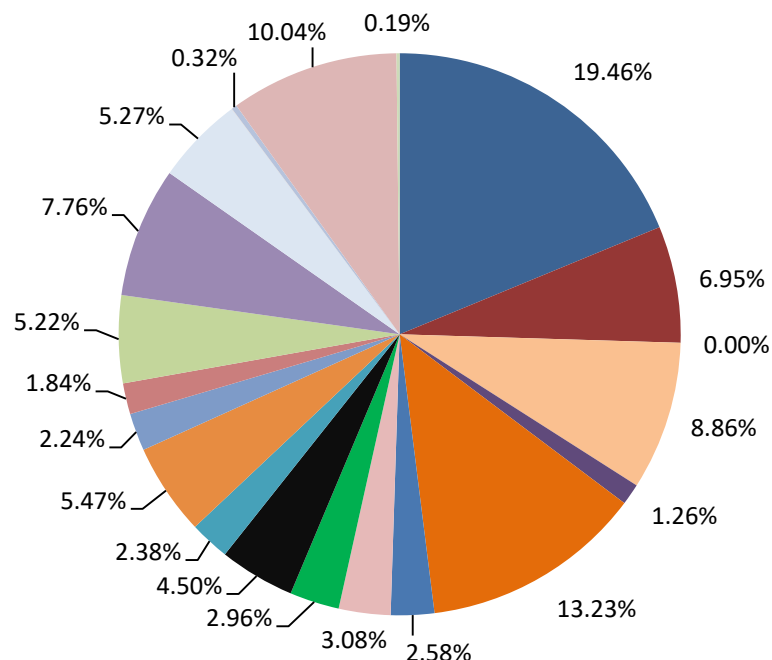
Periods Ended January 31, 2021

	Start Period Market Value (1/01/21)	Ending Period Market Value (1/31/21)	% Change
Garda	53,615,659	53,787,390	0.32
Glazer	50,045,737	56,155,417	12.21
Pacific AA	73,203,477	74,674,414	2.01
Systematica	41,995,240	45,857,703	9.20
Marshall Wace Eureka	53,387,252	55,393,735	3.76
Millenium	10,187,065	10,936,289	7.35
Risk Reduction & Mitigation	3,240,375,054	3,142,125,877	-3.03
Zia Risk Parity Fund	1,645,985,447	1,641,487,068	-0.27
Multi-Risk Allocation	1,645,985,447	1,641,487,068	-0.27
NM PERA Total Fund	16,427,241,050	16,323,198,479	-0.63

Asset Allocation by Composite

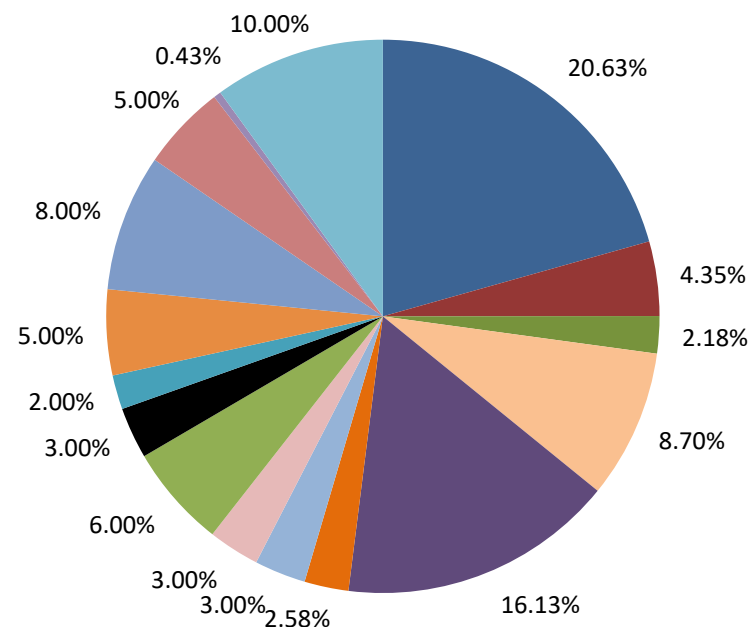


Total Fund



	Market Value (\$)	Allocation (%)
Global Public Stock	\$ 3,181,951,655	19.46%
Global Low Vol	\$ 1,136,016,596	6.95%
Hedged Equity	\$ 685,322	0.00%
Private Equity	\$ 1,449,104,861	8.86%
Equity Overlay	\$ 206,573,341	1.26%
Domestic Core FI	\$ 2,162,960,918	13.23%
Global Core FI	\$ 422,732,384	2.58%
Bonds Plus	\$ 504,211,914	3.08%
Liquid Credit	\$ 483,315,233	2.96%
Alt. Liquid Credit	\$ 735,872,804	4.50%
Emerging Mkt. Debt	\$ 389,686,447	2.38%
Illiquid Credit	\$ 894,082,449	5.47%
Credit Orient HF	\$ 366,553,195	2.24%
Liquid Real Estate	\$ 301,684,629	1.84%
Illiquid Real Estate	\$ 853,268,082	5.22%
Liquid Real Assets	\$ 1,269,584,631	7.76%
Illiquid Real Assets	\$ 861,723,042	5.27%
Market Neutral HF	\$ 1,817,826	0.01%
Cash	\$ 52,220,662	0.32%
Zia Risk Parity	\$ 1,641,487,068	10.04%
STO Cash Balance	\$ 30,700,535	0.19%

Policy Index



	Allocation (%)
Global Public Stock	20.63%
Global Low Volatility Equity	4.35%
Hedged Equity	2.18%
Private Equity	8.70%
Domestic Core FI	16.13%
Global Core FI	2.58%
Liquid Credit	3.00%
Emerging Mkt. Debt	3.00%
Illiquid Credit	6.00%
Credit Orient Hedge Funds	3.00%
Liquid Real Estate	2.00%
Illiquid Real Estate	5.00%
Liquid Real Assets	8.00%
Illiquid Real Assets	5.00%
Market Neutral Hedge Funds	0.00%
Cash	0.43%
Zia Risk Parity	10.00%

Since Inception Dates

COMPOSITES

- **NM PERA Total Fund** 6/30/1985
- **Global Equity** 3/31/2013
- **Risk Reduction & Mitig** 3/31/2013
- **Credit Oriented Fixed Inc** 3/31/2013
- **Real Assets** 3/31/2013
- **Multi-Risk** 4/30/2019

GLOBAL EQUITY

- **Global Public Stock** 5/31/1998
- **Global Low Vol** 10/31/2016
- **BlackRock MSCI ACWI LV** 10/31/2016
- **SSgA ACWI IMI Index** 9/30/2016
- **Portable Alpha** 9/30/2006
- **Active U.S. Equity** 9/30/2004
- **AQR Alphaport** 7/31/2015
- **Kayne Anderson SC** 8/31/2018
- **TimesSquare SMID Grow** 3/31/2005
- **NT MSCI ACWI xUS** 12/31/2010
- **Active Non-US Equity** 11/30/2007
- **Acadian Int'l Equity** 4/30/2018
- **MFS International Value** 3/31/2010
- **Principal Int'l Small Cap** 12/31/2007
- **Schroder Int'l Small Cap** 6/30/2012
- **Active Emerging Markets** 6/30/2006
- **Axiom EME** 12/31/2018
- **Hedged Equity** 6/30/2015
- **Private Equity** 6/30/2015

RISK REDUCTION & MITIGATION

- **Domestic Core Fixed Inc** 6/30/1995
- **BlackRock Core Active** 6/30/1995
- **MacKay Shields Core IG** 6/30/2012

- **Prudential Core Cons** 6/30/2012
- **Global Core Fixed Income** 6/30/2011
- **Manulife Core Global Agg** 3/31/2011
- **BlackRock Global Fixed Inc** 4/30/2019
- **Cash** 3/31/1989
- **Bonds Plus** 12/1/2019

CREDIT ORIENTED FIXED INCOME

- **Liquid Credit** 6/30/2015
- **PineBridge Global HY** 9/30/2018
- **CVC Global Credit Opp** 10/31/2015
- **Ellington HF** 12/31/2016
- **HIG Bayside Loan Opp II** 6/30/2010
- **Emerging Markets Debt** 7/31/2015
- **Lazard EMD** 7/31/2015
- **Illiquid Credit** 6/30/2015
- **Napier Park** 11/30/2016
- **Credit Oriented HF** 1/31/2007

REAL ASSETS

- **Liquid Real Estate** 11/30/2008
- **Security Capital REIT** 4/30/2017
- **DFA Global REIT** 4/30/2017
- **Illiquid Real Estate** 6/30/2015
- **Liquid Real Assets** 8/31/2009
- **Deutsche Infrastructure** 8/31/2016
- **Harvest MLP** 5/31/2014
- **PIMCO TIPS** 10/31/2017
- **PIMCO Commodities** 12/31/2017
- **Illiquid Real Assets** 6/30/2015
- **Market Neutral HF** 6/30/201

Performance Related Comments

Performance shown is gross of fees unless otherwise noted. Fiscal year ends on June 30th. Performance is preliminary and subject to change.

"Inception Date" refers to the first full month following initial funding. "Inception Date" for Alternatives is as of the first funding of the asset class.

Indices show N/A for since inception returns when the fund contains more history than the corresponding index.

The Cash Equivalent Composite return includes tax reclaims on two bond issues which were received by the Corporate Action Clearing Account. This accounts for the additional return over the JP Morgan STIF account in the longer-term periods.

Updated returns for the NCREIF Property Index are currently unavailable for use in calculating the Long-Term Target Allocation Index and the Real Estate Custom Index. As such, a 0.00% return is assumed for the NCREIF Property Index. Therefore, returns for these custom indices are preliminary and subject to change.

Custom Index Comments

Long-Term Target Allocation Index consists of:

- 40% S&P 500 Index (Cap Wtd), 60% LB Aggregate Bond Index until 08/31/1992
- 55% S&P 500 Index (Cap Wtd), 45% LB Aggregate Bond Index until 08/31/1995
- 52.5% S&P 500 Index (Cap Wtd), 2.5% MSCI EAFE Blend, 45% LB Aggregate Bond Index until 11/30/1995
- 50% S&P 500 Index (Cap Wtd), 5% MSCI EAFE Blend, 45% LB Aggregate Bond Index until 02/29/1996
- 45% S&P 500 Index (Cap Wtd), 10% MSCI EAFE Blend, 45% LB Aggregate Bond Index until 11/30/1997
- 45% S&P 500 Index (Cap Wtd), 15% MSCI EAFE Blend, 40% LB Aggregate Bond Index until 02/28/1999
- 42% Russell 3000 Index, 18% MSCI EAFE Blend, 40% LB Aggregate Bond Index until 05/31/1999
- 45% Russell 3000 Index, 15% MSCI EAFE Index (Gross), 40% LB Aggregate Bond Index until 06/30/2000
- 42% Russell 3000 Index, 18% MSCI EAFE Index (Gross), 40% LB Aggregate Bond Index until 06/30/2005
- 40% Russell 3000 Index, 25% MSCI EAFE Index (Gross), 35% LB Aggregate Bond Index until 06/30/2007
- 35% Russell 3000 Index, 25% MSCI ACW Ex US Blended Index (Gross), 25% LB Aggregate Bond Index, 5% 3 Mo LIBOR Index + 4%, 5% Venture Economics All Private Equity Index (lagged one quarter), 2.5% NCREIF Property Index, and 2.5% CPI + 5% until 10/31/2009
- 35% Russell 3000 Index, 25% MSCI ACW Ex US Blended Index (Gross), 25% Barclays Global Agg Blended Index, 5% 3 Mo LIBOR Index + 4%, 5% Venture Economics All Private Equity Index (lagged one quarter), 2.5% NCREIF Property Index, 1% Barclays US TIPS Index, 1% S&P GSCI Light Energy Index, and 0.5% CPI + 5% until 06/30/2010
- 27% Russell 3000 Index, 27% MSCI ACW Ex US Blended Index (Gross), 26% Barclays Global Agg Blended Index, 9% HFRI Fund of Funds Composite Index, 5% Private Equity Custom Index, 3% Real Estate Custom Index, and 3% Real Assets Custom Index until 11/30/2012
- 29% Russell 3000 Index, 20% Int'l Equity Custom Index, 26% Fixed Income Custom Index, 5% Liquid Alpha Index, 7% HFRI Fund of Funds Composite Index, 5% Private Equity Custom Index, 3% Real Estate Custom Index, and 5% Real Assets Custom Index until 12/31/2012.
- 21.1% Russell 3000 Index, 24.8% Int'l Equity Custom Index, 26.1% Core and Global Fixed Income Custom Index, 5% Fixed Income Plus Sectors Custom Index, 4% HFRI Fund of Funds Composite Index, 7% Private Equity Custom Index, 5% Real Estate Custom Index, and 7% Real Assets Custom Index until 04/30/2016.
- 43.5% Global Equity, 21.5% Risk Reduction & Mitigation, 20% Real Assets, 15% Credit Oriented Fixed Income until 4/30/20

	Policy Index 1/1 - 4/30/19	Policy Index 5/1 - 5/31/19	Policy Index 6/1 - 6/30/19	Policy Index 7/1 - 7/31/19	Policy Index 8/1 - 8/31/19	Policy Index 9/1 - 9/30/19	Policy Index 10/1 - 10/31/19	Policy Index 11/1 - 11/30/19	Policy Index 12/1 - 12/31/19	Policy Index 1/1 - 1/31/20	Policy Index 2/1 - 2/28/20	Policy Index 3/1 - 3/31/20	Policy Index 4/1/2020
Global Equity	43.50%	42.85%	42.33%	41.81%	41.29%	40.77%	40.38%	39.74%	39.02%	38.22%	37.70%	37.22%	35.50%
MSCI ACWI IMI (\$net)	36.50%	35.85%	35.33%	34.81%	34.29%	33.77%	33.38%	32.74%	32.02%	31.22%	30.70%	30.22%	28.50%
MSCI ACWI Min Vol (\$net)	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Credit	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Barclays Global HY (Hedged)	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
50% JPM EMBI(\$) / 50% JMP GBI (\$)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Risk Mitigation	21.50%	21.50%	21.37%	21.24%	21.11%	20.98%	20.72%	20.56%	20.38%	20.18%	20.05%	19.93%	19.50%
Barclays U.S. Agg	19.00%	19.00%	18.87%	18.74%	18.61%	18.48%	18.22%	18.06%	17.88%	17.68%	17.55%	17.43%	17.00%
Barclays Global Agg (Hedged)	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Real Assets	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Wilshire Global REIT	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Alerian MLP Index	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
DJB Global Infra Index	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Barclays U.S. TIPS	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Bloomberg Commodity Index (TR)	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Multi Risk	0.00%	0.65%	1.30%	1.95%	2.60%	3.25%	3.90%	4.70%	5.60%	6.60%	7.25%	7.85%	10.00%
Wilshire Risk Parity - 15%	0.00%	0.65%	1.30%	1.95%	2.60%	3.25%	3.90%	4.70%	5.60%	6.60%	7.25%	7.85%	10.00%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Manager Transition Comments

During January 2021 Stockbridge NLF, Hellman Samsn Hcky 1, and Hellman Samsn Shield were funded. JMI Equity Fund VII and Manulife were defunded.

During November 2020 ON Dearborn VIII was funded.

During September 2020 Agis Farmland, Millenium, and Hellman Arrow 1 were funded.

During July 2020 Marshall Wace Eureka was funded and Mackay Shields Core FI was defunded.

During June 2020 Petershill Co-Invest, Ardian Co-Invest, Dorsal, Garda, Glazer, Pacific AA, and Systematica were funded. Rockwood RE Partners VIII and Rockwood Cap RE XI were defunded.

During May 2020 Rockpoint Fund III and Pharo Gaia Fund were funded. Eton Park and Security Capital REIT were defunded.

During April 2020 TSSP Contingent Capital, Security Capital Alpha, Security Capital Beta, and LGIMA Credit Overlay were funded.

During March 2020 Petershill IV was funded.

During February 2020 Marathon Special Opp Fund was defunded.

During December 2019 Rockwood Capital RE XI, Parametric Bonds Plus, Elliott, AQR SPF, Anchorage, Napier Park A, Napier Park B were funded. BPG VIII was defunded.

During November 2019 Tennenbaum was defunded.

During August 2019 LGIMA Equity Overlay was funded.

During July 2019 LGIMA Overlay and LGIMA TAA Overlay were funded.

During April 2019 Parametric Credit Cash Overlay, Aermont Cap RE Fund IV, Real Assets Cash Overlay, BlackRock Global FI and Zia Risk Parity were funded.

During March 2019 Warburg Pincus PE GG and Harrison Street Real Estate Partners VII were funded. Mason Capital LP was defunded.

During February 2019 TCV X and Kelso X were funded.

During December 2018 Axiom EM, Patria PE Fund VI and Ardian V were funded. Aberdeen EM was defunded

During November 2018 Onex V was funded.

During October 2018 GoldenTree Offshore was defunded. GEM RLTY EVERGREEN was funded.

During September 2018 PineBridge High Yield, Resolute Fund VI, and Kayne Anderson SCC were funded. Guggenheim Global High Yield and DFA US Target Value were defunded.

During August 2018 CVC VII was funded.

During July 2018 NEW ROCK CORE FUND was funded. BPG Investment Partnership VIII was defunded.

During June 2018 Altaris Con Partners IV and Altaris Health Partners IV were funded.

During May 2018 BEP Legacy A was funded and EnerVest Energy XII was defunded.

During April 2018 Acadian International Equity and Helm & Frid Spock 1 were funded. RBC, KBI and Brevan Howard LP were defunded.

During March 2018 Samlyn Onshore Fund was defunded.

During February 2018 Highline Capital Partners and KRG Capital Fund IV were defunded.

During December 2017 PIMCO Commodities was funded. Selene I, Taconic Opportunity Fund and Pradium Fund VII were defunded.

During November 2017 PIMCO TIPS and NGP XII were funded.

During October 2017 Eagle Point and Cerberus Global RPL were funded.

During September 2017 Sarofim and MINA III were funded.

During August 2017 Cheyne V, Rockpoint Fund II and Starwood Global Opportunity Fund XI were funded; Fountainvest Fund II, Tillridge and Capula were defunded.

During July 2017 Petershill and EnCap XI were funded; Davidson Kempner, Graham Global and LIM Asia Multi-Strategy were defunded.

During June 2017 BlackRock Real Estate Transition was defunded.

During May 2017 JCAM Global Fund, Pershing Square L.P. and Lynx (Bermuda) Ltd. were defunded.

During April 2017 DFA REIT, Security Capital REIT and BlackRock REIT Transition were funded. BlackRock REIT, LaSalle REIT, Morgan Stanley REIT and SSGA Russell 1000 were defunded.

During March 2017 Tennenbaum and RCP Fund of One were funded.

During February 2017 FountainVest Fund II was funded.

During January 2017 Tillridge and Antin III were funded.

During December 2016 Harrison Street VI, Ellington HF, Charterhouse Capital Partners X and TCV IX LP were funded.

During November 2016 Napier Park L.P. was funded.

During October 2016 BlackRock MSCI ACWI Minimum Volatility and Perella Weinberg III Fund were funded. Pelican Value Equity was defunded.

During September 2016 SSGA ACWI IMI Index Fund, European Real Estate Debt III, and Rockwood Capital Real Estate Partners X were funded.

During August 2016 ACM II & Deutsche Listed Infrastructure were funded.

During July 2016 DFJ Fund XII, L.P. was funded

During June 2016 Pine Bridge Passport I was funded.

During May 2016 Brookfield Infrastructure Fund III was funded.

During March 2016 KSL Capital Partners Fund IV was funded.

During February 2016 Century Focused Fund IV was funded.

During January 2016 Carlyle Power Partners IO was funded.

During December 2015 RRJ Capital Master Fund III L.P. and Warburg Pincus PE XII were funded.

During November 2015 Madison RE Debt Fund III was funded.

During October 2015 CVC Global Credit Opportunities and Guggenheim Global High Yield were funded.

During September 2015 Atalaya SOF VI and Kelso Investment Advisors IX were funded

During July 2015 Lazard Emerging Market Debt, Ardian Infrastructure IV, AQR Alphaport was funded.

During June 2015 Athyrium Opportunities Fund II, L.P. was funded.

During May 2015 IFM Global Infrastructure Fund, L.P. was funded.

During March 2015 Harrison Street Real Estate Partners V was funded.

During January 2015 Paine & Partners was funded.

During January 2015 Kleinwort Benson Dividend Plus strategy changed its product name to “Kleinwort Benson EAFE Developed Equity” strategy.

During December 2014 Garrison Opportunity Fund IV A LLC and KKR Global Infrastructure Investors II L.P. was funded.

During November 2014 Onex Partners IV L.P. and NGP Natural Resources XI, L.P. was funded

During September 2014 GTCR Fund XI L.P. was funded.

During August 2014 The Resolute Fund III L.P., Wheelock Street Real Estate Fund II LLC, Parametric Clifton were funded.

During July 2014 EnCap Flatrock Midstream Fund III L.P. was funded.

During June 2014 Harvest MLP – Alpha was funded.

During February 2014 TPG Opp Fund III was funded.

During January 2014 Lime Rock III was funded.

During December 2013 Denham Coinvestment IX was funded.

During November 2013 Brookfield Infrastructure II and Carlyle Partners VI was funded.

During February 2013, Wayzata Opportunities III and IVP XIV were funded.

During January 2013, Encap Energy Capital Fund IX was funded. During December 2012, Linsalata Capital Partners VI and Rockwood Capital RE IX were funded. During November 2012, Lime Rock Partners VI was funded.

During September 2012, State Street International Alpha Select was liquidated. The account was fully liquidated in December 2012, but received tax reclaims in the amount of 1,232 in January 2013. Blackstone RE Partners VII, Highline Capital Partners, LP, and Saba Capital Partners, LP were funded along with the Market Neutral Composite.

During August 2012, Graham Global Investment Fund was funded.

During June 2012, MacKay Shields Core Investment Grade and New Enterprise Associates LP XIV were funded.

During May 2012, Prudential Core Plus was funded with proceeds from the liquidation of Western Asset Management US Core Full, which was fully liquidated in November 2012. Riverstone Global Energy & Power Fund V, LP was also funded.

During April 2012, Schroder International Small Companies and Denham Commodity Partners Fund VI were funded

During January 2012, NGP X, LP was funded.

During November 2011, OCM European Principal Opp Fund III, LP was funded.

During September 2011, Carlyle Realty Partners VI (CF) was funded

During August 2011, JP Morgan US Small Cap Growth and Hellman & Friedman Cap Ptnr VIII were funded.

During July 2011, GTCR Fund X was funded

During April 2011, Manulife Strategic Fixed Income and F. Templeton Global Multi-Sector Plus were funded.

During March 2011, PIMCO Total Return Full Authority was funded and F. Templeton Opp Core Plus (Fiduciary Trust) was liquidated.

During December 2010, Northern Trust EAFE Index and State Street Emerging Markets Index were liquidated and Northern Trust ACW Ex US Index was funded. Additionally, assets were transitioned through Credit Suisse ACWI Ex US Transition Account. This account was subsequently used to manage the liquidation of Artio International II, which took place in April 2011. Artio International Equity II was fully liquidated in February 2012, but it received tax reclaims in the amount of 1,697 in January 2013. During September 2010, BlackRock EAFE Transition Account was incepted to manage the transition from Domestic Equity to EAFE. This account was subsequently used to manage the liquidation of Loomis Sayles High Yield Conservative, which took place in March 2011. Accordingly, the transition account has been reclassified as fixed income and renamed to BlackRock Manulife Transition Account. During June 2012, the transition account was used to manage the funding of MacKay Shields Core Investment Grade. During September 2012, the transition account was used to manage the liquidation of State Street International Alpha Select and has since been reclassified as international equity and renamed to BlackRock Transition Account. During October 2013, Wellington Emerging Markets was terminated and the assets were moved to the BlackRock Transition Account and then Aberdeen Emerging Markets. During March 2014, CS McKee and Russell 1000 Growth was defunded and the assets were moved to the BlackRock Transition Account. There is currently \$0 in the transition account.



Investment Committee Education Session: Long-Term Goals Affirmation

March 25, 2021

Dominic Garcia, Chief Investment Officer

Key Strategic Goals

1. Sustain the Trust Fund for current and future retirees
 - A. Work towards 30-year funding period of unfunded actuarial accrued liability
2. Set Strategic asset allocation to meet the actuarial assumed return over the long-run
 - A. Meet assumed actuarial return within prudent risk parameters
 - B. Maintain sufficient liquidity to meet PERA's obligations
3. Produce returns that meet or exceed benchmarks
 - A. Meet or exceed the Policy Index over the long-term
 - B. Meet or exceed the Reference Portfolio over the long-term
4. Be cost-efficient
 - A. Achieve a total investment cost at or below the benchmark cost relative to peers adjusted for fund size, allocations, and strategy.

NOTE: Objectives are set in PERA's 5-Year Strategic Plan (2018-2023), PERA's performance measures reviewed and monitored by Legislative Finance Committee (LFC) and Department of Finance & Administration (DFA), and PERA's Investment Policy Statement

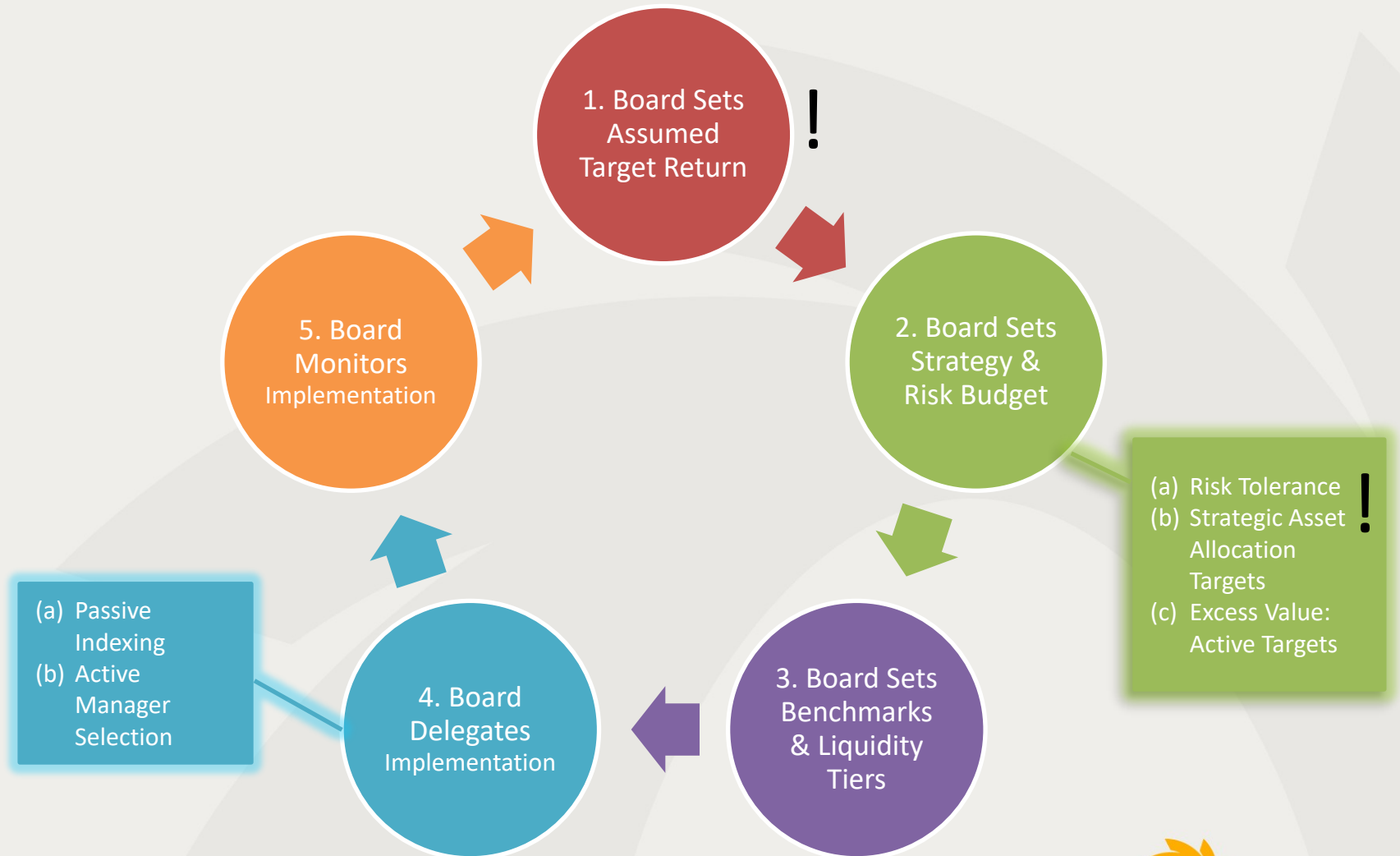
Investment Oversight: Key Measurements

Oversight	Measurement	Purpose
Goal #1 Sustainability	Negative Cash Flow	Measure ongoing progress toward pension sustainability goals
	Asset Exhaustion	
	Funded Ratio	
Goal #2 Strategic Asset Allocation	Capital Allocation	Monitor capital allocation relative to SAA targets
	Active Risk Allocation	Measure excess risk and incremental return
	Liquidity Allocation	Monitor prudent liquidity for required Fund obligations
	Performance vs Actuarial Assumed Return	Monitor the dispersion between market results and long-term strategic targets
Goal #3 Market Performance	Performance vs. Policy Index	Measure the effectiveness of Policy implementation over multiple time periods (implementation value)
	Performance vs. Reference Index	Measure the value of complexity and diversification in SAA over multiple time periods (diversification value)
	Performance vs. Peers Risk Adjusted	Compare total returns and total risk vs. peer group (Sharpe Ratio)
Goal #4 Investment Cost	Investment Cost vs. Benchmark Cost	Measure and monitor the expenses paid-out annually to implement PERA's investment strategy
Ongoing Oversight: Implementation	Cash and Rebalance Activity	Monitor ongoing cash & operational activities
	Manager Selection Delegation	Measurement of manager skill against appropriate market benchmarks and multiple time periods
	Ad-Hoc Report	Any ad-hoc reporting, as requested by the IC

Investment Strategy: Key Tenets

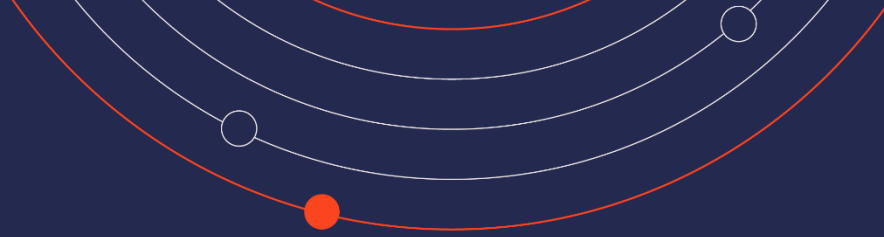
Key Tenets	What This Means	Implications	Appraisal
Low Risk Tolerance	<ul style="list-style-type: none"> Since Great Recession PERA/Board has had a low risk tolerance. This is intended to have more predictability, reduce volatility around returns and, importantly, reduce big drawdowns 	<ul style="list-style-type: none"> In low return environment, harder to meet 7.25% Limited upside in returns 	<p>!</p> <p>Not Aligned with Goals</p>
Diversification	<ul style="list-style-type: none"> A portfolio diversified by asset type and risk helps smooth performance across multiple economic regimes: high/low growth, high/low inflation, deflationary. Minimizes impact of bad outcomes. 	<ul style="list-style-type: none"> In stock market boom times, PERA will lag the market significantly. In stock market boom times, PERA will lag most Peers with higher stock portfolios 	<p>✓ Aligns with Goals</p>
Active Management	<ul style="list-style-type: none"> Adds incremental return of approximately 0.50% to 1.0% with minimal and diversified risk to the total fund. 	<ul style="list-style-type: none"> Incremental active return more valuable in low return environment 	<p>✓ Aligns with Goals</p>
Liquidity Management	<ul style="list-style-type: none"> A structural hierarchy which will classify asset classes according to liquidity availability and pricing sensitivity during market stress 	<ul style="list-style-type: none"> Ensures that the Fund maintains an easily accessible balance of liquid assets for the purposes of meeting financial obligations 	<p>✓ Aligns with Goals</p>

Process: Investment Governance & Oversight



Investment Actions: Key Decision Points for the Board

Key Decisions	What This Means	Implications	Appraisal
Set Actuarial Assumed Return	The absolute return the Board seeks to generate over the long term. This is used to discount the growth of liabilities over time.	<ul style="list-style-type: none"> In low return environment, generating 7.25% will be more difficult Cannot be generated every year 	<p>!</p> <p>Not Aligned with Strategy</p>
Set Strategic Asset Allocation	Targeted set of asset-types and capital allocation that is designed to meet strategy objectives and generate targeted absolute return over time.	<ul style="list-style-type: none"> Less than 50% chance current SAA will meet 7.25% 	<p>!</p> <p>Not Aligned with Goals</p>
Set Active Risk Budget	Annual budget of incremental risk and return PERA will target through active management	<ul style="list-style-type: none"> Incremental return more valuable to offset lower expected return from Strategic Asset Allocation 	<p>✓ Aligns with Goals & Strategy</p>
Set Liquidity Guidelines	Targeted liquidity tiers designed to maintain sufficient liquidity to meet the anticipated cash flow requirements of the Fund	<ul style="list-style-type: none"> In stressed market environments liquidity will be less accessible Sufficient liquidity required to meet obligations 	<p>✓ Aligns with Goals & Strategy</p>
Set Benchmarks	Annual review & approval to evaluate ability to implement Strategic Asset Allocation	<ul style="list-style-type: none"> May need to be updated if changes to Strategic Asset Allocation Policy are made 	<p>✓ Aligns with Goals & Strategy</p>



Asset Allocation Paths

Thomas Toth, CFA
Managing Director

Prepared for



PERA

Public Employees
Retirement Association
of New Mexico

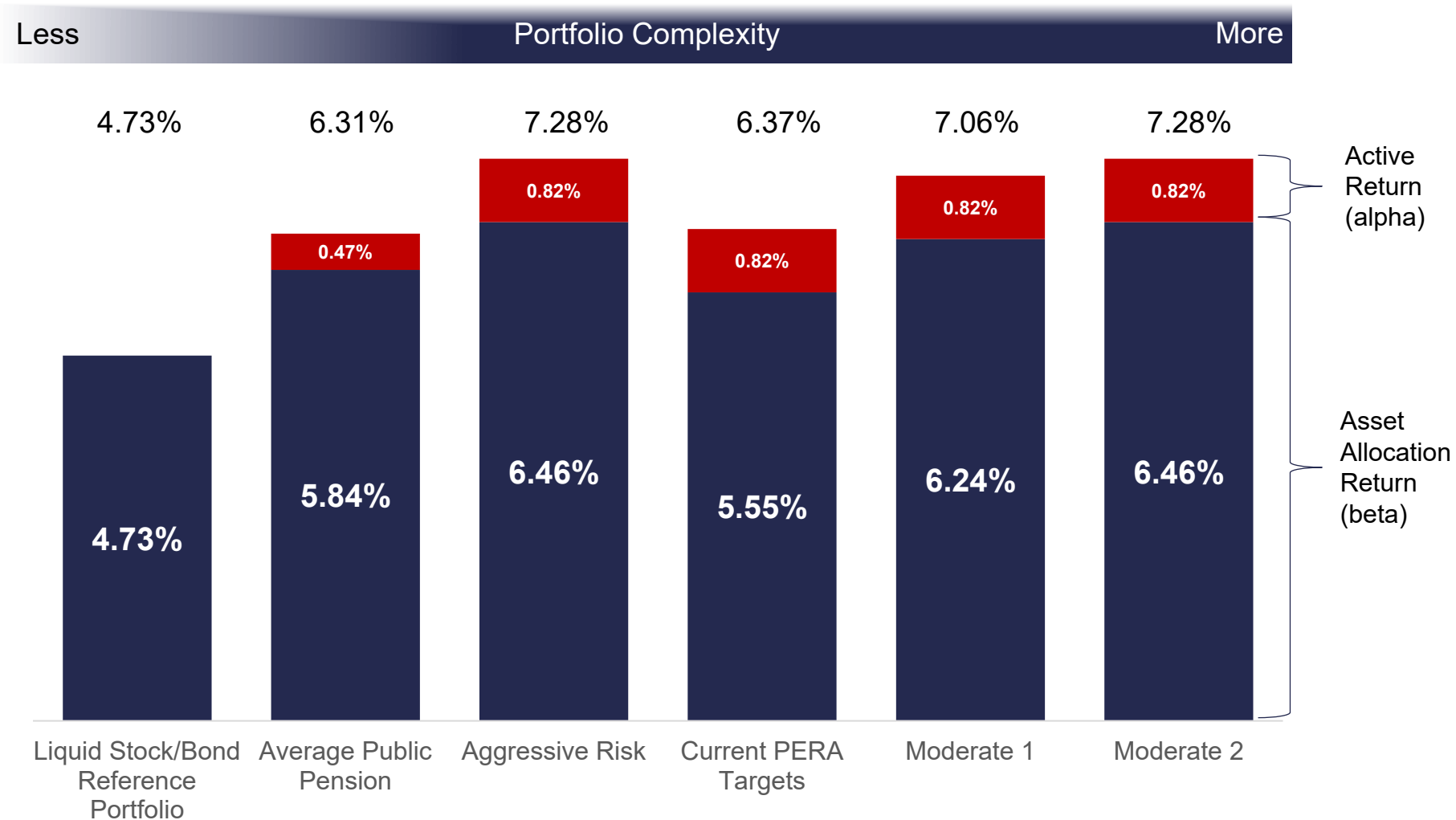
March 2021

Wilshire

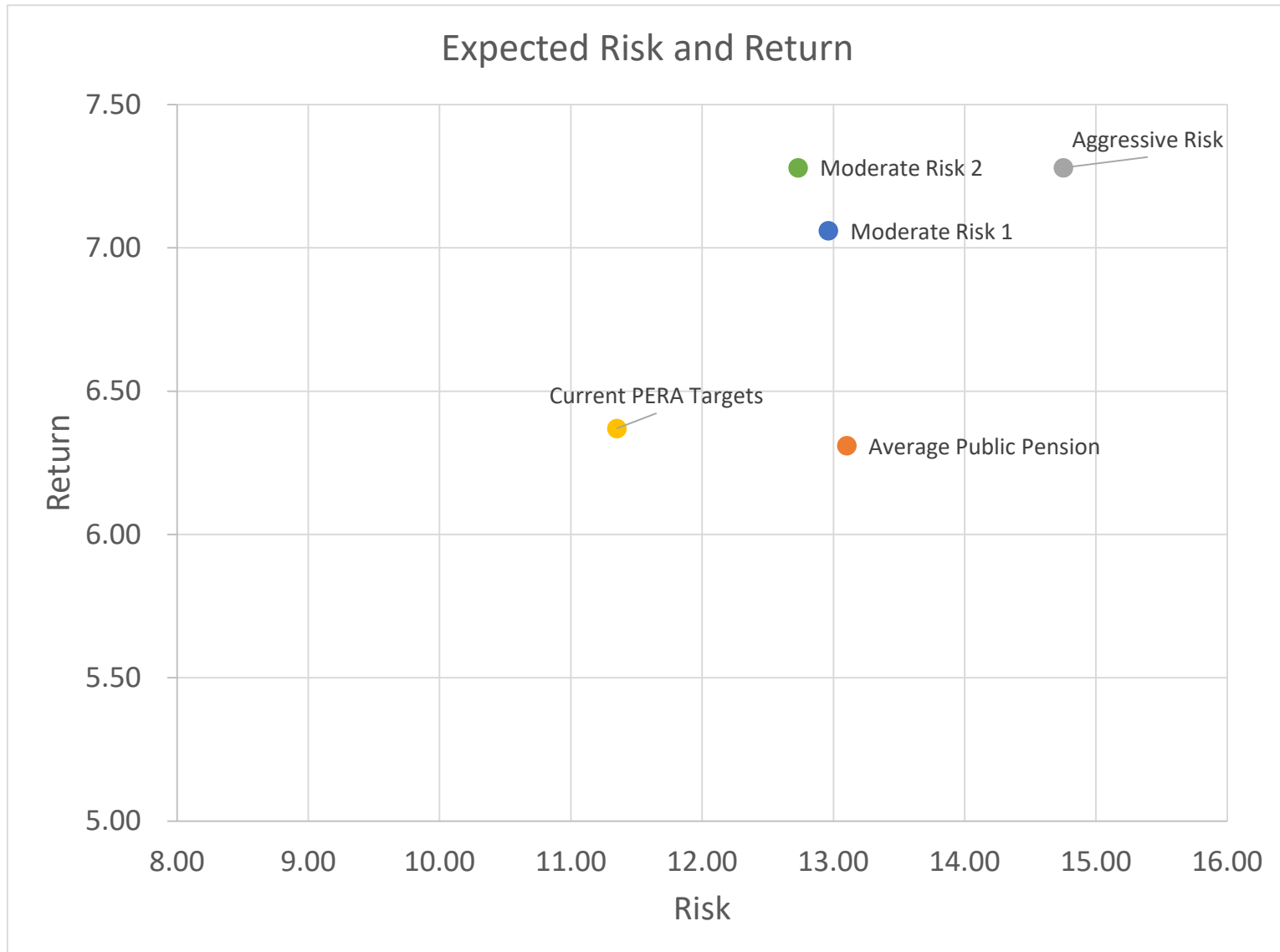
Asset Allocation Paths

- **Liquid stocks and bonds**
 - Simplify the portfolio
 - Significantly behind total return targets
 - No active management
- **Average Public Pension**
 - Concentrated in equities
 - Moderate risk profile = 13% volatility
 - Below total return targets
 - Average risk/reward (Sharpe) ratio
- **Aggressive Risk**
 - Higher equity risk allocation, less diversification will largely follow ups and downs of market
 - Higher end of risk spectrum vs. peers
 - Meets total return targets
- **Moderate 1**
 - Increases private asset exposure, particularly private equity
 - Maintains diversification and good risk/reward (Sharpe) ratio
 - Short of total return goals
 - Risk in-line with peers
- **Moderate 2**
 - Improves diversification, best risk/reward ratio
 - Meets total return goals
 - Risk mitigating portfolio construction, add dedicated exposure to Gold, increase targets to private assets & risk parity
 - Utilize explicit Total Fund leverage
 - Risk in-line with peers

Asset Allocation Paths – Total Expected Return



Expected Return and Risk



Policy Table

Asset Class	Liquid Stock/Bond Reference Portfolio	Average Public Pension	Aggressive Risk	Current PERA Targets	Moderate 1	Moderate 2
Public Equity - Global	70.00%	50.00%	38.50%	19.50%	22.75%	19.50%
Public Equity - Global Low Volatility				7.00%	7.50%	3.75%
Private Equity (Blend)		10.60%	18.00%	9.00%	14.75%	11.50%
Core US Bond	30.00%	17.70%	10.00%	17.00%	10.00%	
Core US Bond (Risk Balanced 2x)						15.25%
Gold						3.00%
Core Global Bond (Hedged)				2.50%		
Global High Yield (Hedged)		3.70%		2.00%	1.00%	2.00%
Emerging Market Debt				3.00%		
Alternative Credit (Blend)		3.00%	2.50%	4.00%	9.75%	12.50%
Private Credit (Blend)			1.00%	6.00%	4.25%	7.50%
Global Real Estate Securities			2.00%	2.00%	2.00%	2.00%
Global Listed Infrastructure			2.00%	5.00%	2.00%	2.00%
Private Real Estate (Blend)		9.70%	8.00%	5.00%	8.00%	8.00%
Private Real Assets (Blend)		5.30%	8.00%	8.00%	8.00%	8.00%
Risk Parity (15% Volatility)			10.00%	10.00%	10.00%	15.00%
Cash Borrowing @0.8% (cash assumption plus 25 bps spread)						-10.00%
Total Assets	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Expected Beta Return - 10 Years (%)	4.73	5.84	6.46	5.55	6.24	6.46
+ Portable Alpha at 10% target			0.35	0.35	0.35	0.35
+ Traditional Active Return		0.47	0.47	0.47	0.47	0.47
= Total Expected Return - 10 Years (%)	4.73	6.31	7.28	6.37	7.06	7.28
Total Standard Deviation of Return (%)	12.29	13.10	14.75	11.35	12.96	12.73
+ /(-) in Expected Return - 10 Years (bps) vs. Beta + Illiquids	(164)	(6)	91	0	69	91
+ /(-) in SD of Return (bps)	94	175	340	0	161	138
Sharpe Ratio (Beta + Illiquidity + Alpha) Geometric	0.34	0.44	0.46	0.51	0.50	0.53
Sharpe Ratio (Beta+Illiquidity+Alpha) Arithmetic	0.40	0.50	0.52	0.57	0.56	0.59
Factor Exposure_Growth	5.33	6.11	6.54	4.64	5.65	5.06
Factor Exposure_Inflation	-1.52	-0.98	-0.50	-0.28	-0.31	0.15
Diversification Ratio (Weighted Avg. Vol of Portfolio / Portfolio Vol)	1.078	1.175	1.181	1.242	1.211	1.267
Total Illiquid	0.00%	25.60%	35.00%	28.00%	35.00%	35.00%



Active Risk Budget Review

Thomas Toth, CFA
Managing Director

March 2021

Prepared for



PERA

Public Employees
Retirement Association
of New Mexico

Wilshire

What is an Active Risk Budget?

- **Process of setting and allocating active risk to produce returns over those available from market exposure (Beta)**
- **Formalizes expectations for active management, manager selection, and the uncertainty around those expectations**
- **Certain active risks can be managed more directly than others**
 - “Actionable” vs. “Non-actionable” active risks

Risk Overview

- **Total Fund risk is composed of two broad types of risk, both of which are governed by the Board**
- **Market** risk, also called Beta risk
 - Equity volatility
 - Interest rate sensitivity
 - Credit spread risk
 - Inflation risk
 - Dominant determinant of the level of volatility for the Total Fund and is
 - **Set by the Board during the asset allocation process**
- **Active** risk, also called Alpha risk
 - Driven by any differences between the actual portfolio and the target benchmarks
 - Stock and issuer selection
 - Active duration positioning
 - Utilization of private assets
 - Manager selection
 - Secondary determinant of Total Fund risk
 - **Set by the Board as part of the active risk budget**

Risk Budgeting Roles

- **Board Roles and Responsibilities**

- Establish governance guidelines
 - Articulate Board philosophy with respect to ability to achieve positive active returns (alpha) across the Total Fund
 - Establish Board tolerance for deviations away from the target benchmark portfolio
 - Active returns have meaningful variability due to manager value-add and the challenges of private markets implementation timing

- **Staff Roles and Responsibilities**

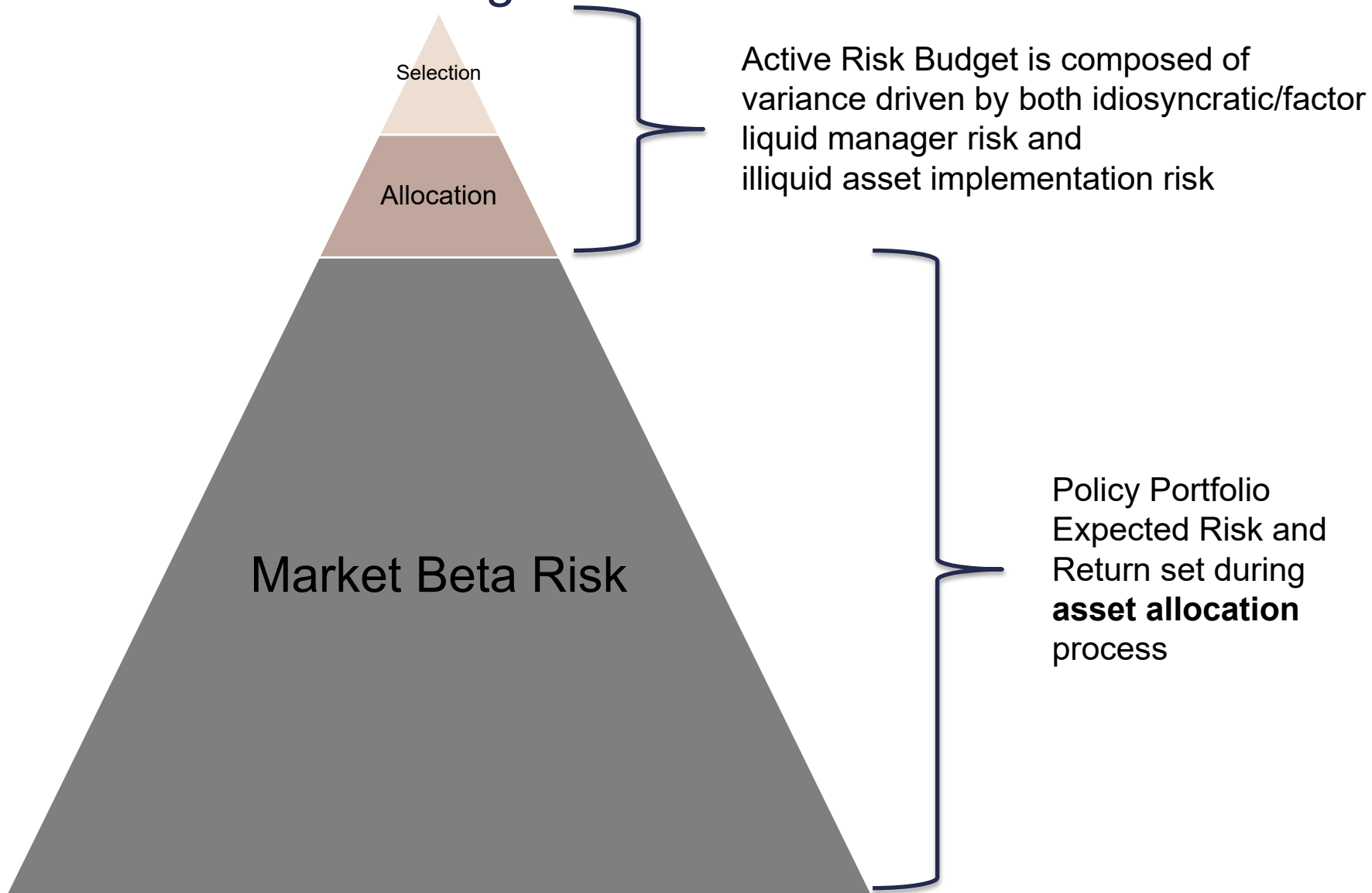
- Mechanism for evaluating changes to asset class structure and specific manager strategies
- Manager selection and optimization
 - Balance prospects for active return with risk budget “spend”
 - Optimize active strategies to improve risk-adjusted active returns

Risk Budget Framework

For 2021, the risk framework continues to include three components – Beta, Allocation, Active Manager Selection

- **Beta** captures the return and risk impact of the policy portfolio composed only of liquid markets
- **Allocation** captures the impact of utilizing both illiquid investments and strategy weights that differ from policy beta targets
- **Active Manager Selection** uses active risk and return estimates to capture idiosyncratic sources of return and risk within strategies

Total Fund Risk Budget



Active Risk Budget Contributions

- **Where is the risk budget being spent?**

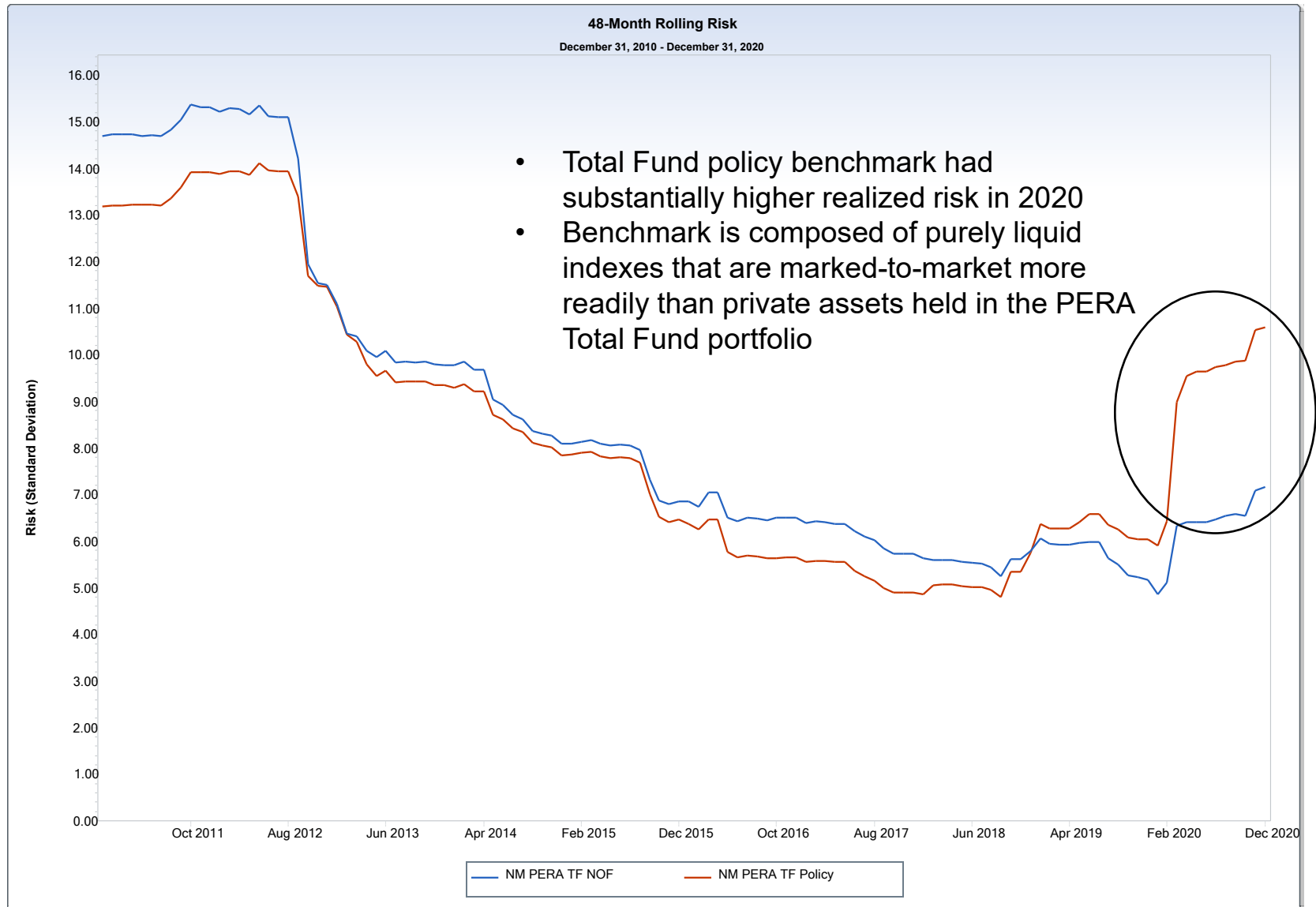
Active Component	Active Weight	Active Return Contribution	2021 Active Risk Contribution	2020 Active Risk Budget
Global Equity Public Equity	9.00%	0.15%	0.08%	0.05%
Risk Mitigation	13.50%	0.11%	0.02%	0.03%
Liquid Credit and Alternative Liquid Credit	9.00%	0.12%	0.05%	0.07%
Liquid Real Assets	5.00%	0.08%	0.01%	0.03%
Liquid Real Estate	2.00%	0.04%	0.01%	0.01%
Portable Alpha Program	6.00%	0.22%	0.04%	0.02%
Risk Parity (15% Volatility)	3.33%	0.05%	0.02%	0.00%
Liquid Active Risk Contribution	47.83%	0.76%	0.22%	0.21%
Private Equity	9.00%	0.37%	0.71%	0.72%
Private Credit	6.00%	0.16%	0.09%	0.09%
Private Real Estate	5.00%	0.07%	0.22%	0.22%
Private Real Assets	8.00%	0.31%	0.39%	0.39%
Illiquid Active Risk Contribution	28.00%	0.92%	1.42%	1.42%
Total Portfolio	75.83%	1.68%	1.64%	1.63%

- Liquid active strategies are expected to contribute about 22 bps of active risk, focused on less efficient markets or less constrained strategy implementation
 - Small Cap
 - International
 - Emerging Markets
 - Portable Alpha
- Illiquid private assets contribute 142 bps of active risk
- **Active risk budget is expected to generate 1.7% in active return**
 - Importantly, the realized active return will vary over time

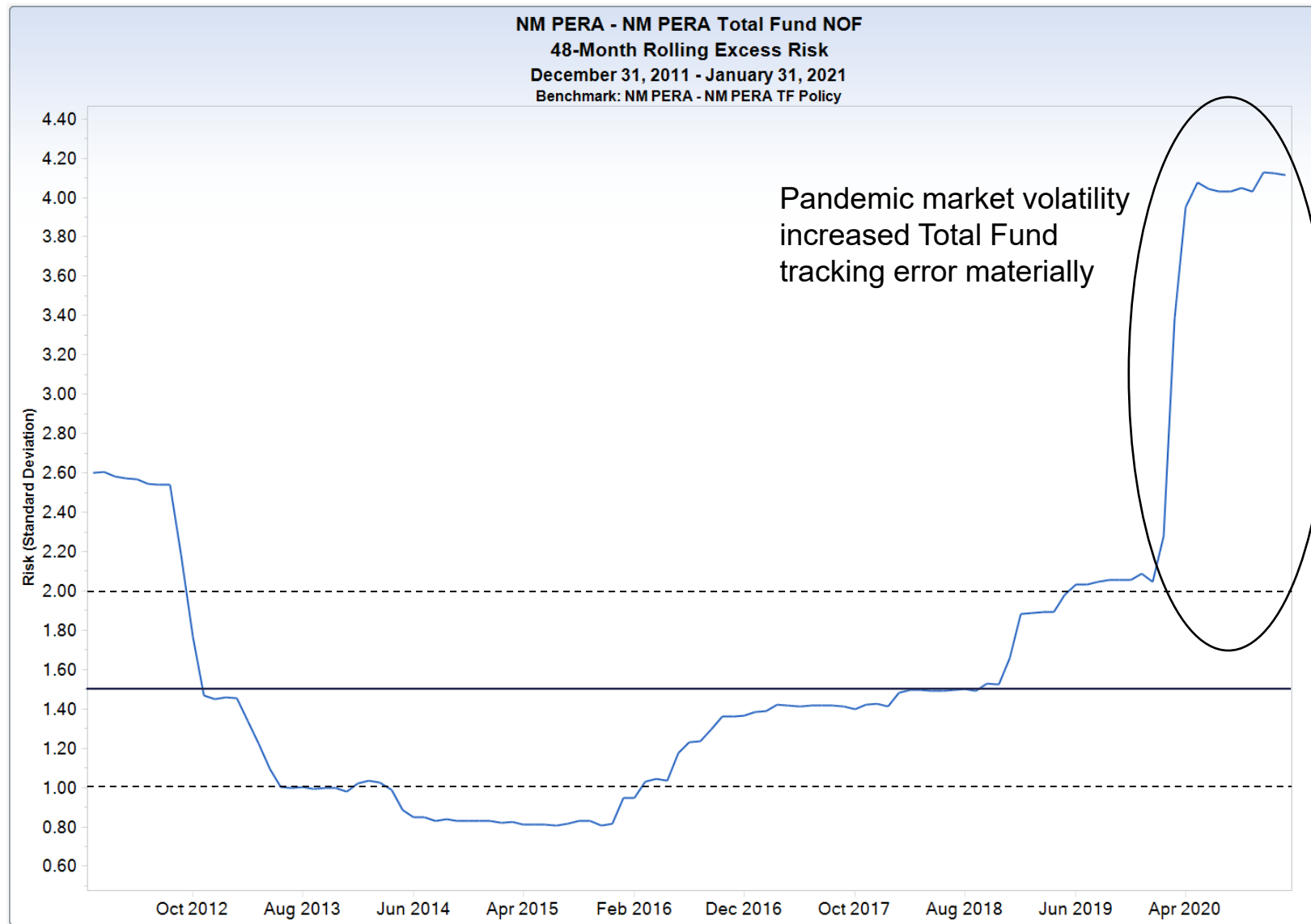
Active Risk Budget Observations

- **Maintaining the same active risk budget target for 2021**
 - Target of 1.5% tracking error with a range of 1.0% - 2.0%
 - Selection impacts are expected to account for approximately 20-30% of the active risk
 - Allocation impacts from illiquid asset implementation are expected to account for approximately 70-80% of the active risk
- **As pandemic volatility recedes active risk levels should start to normalize**
- **Measurement issue with less frequent illiquid asset valuation should attenuate over time**

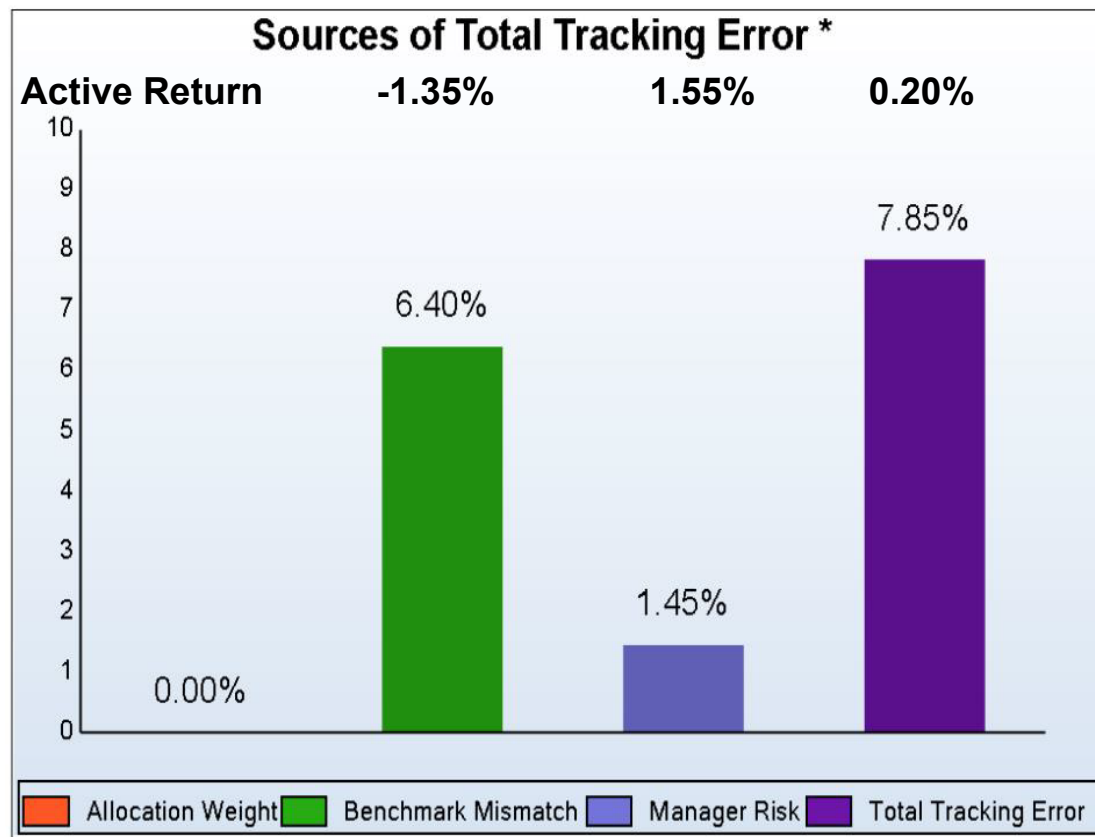
Focus on 2020 - Realized Total Risk



Realized Tracking Error – Rolling 4 Year Periods



2020 Attribution of Realized Tracking Error

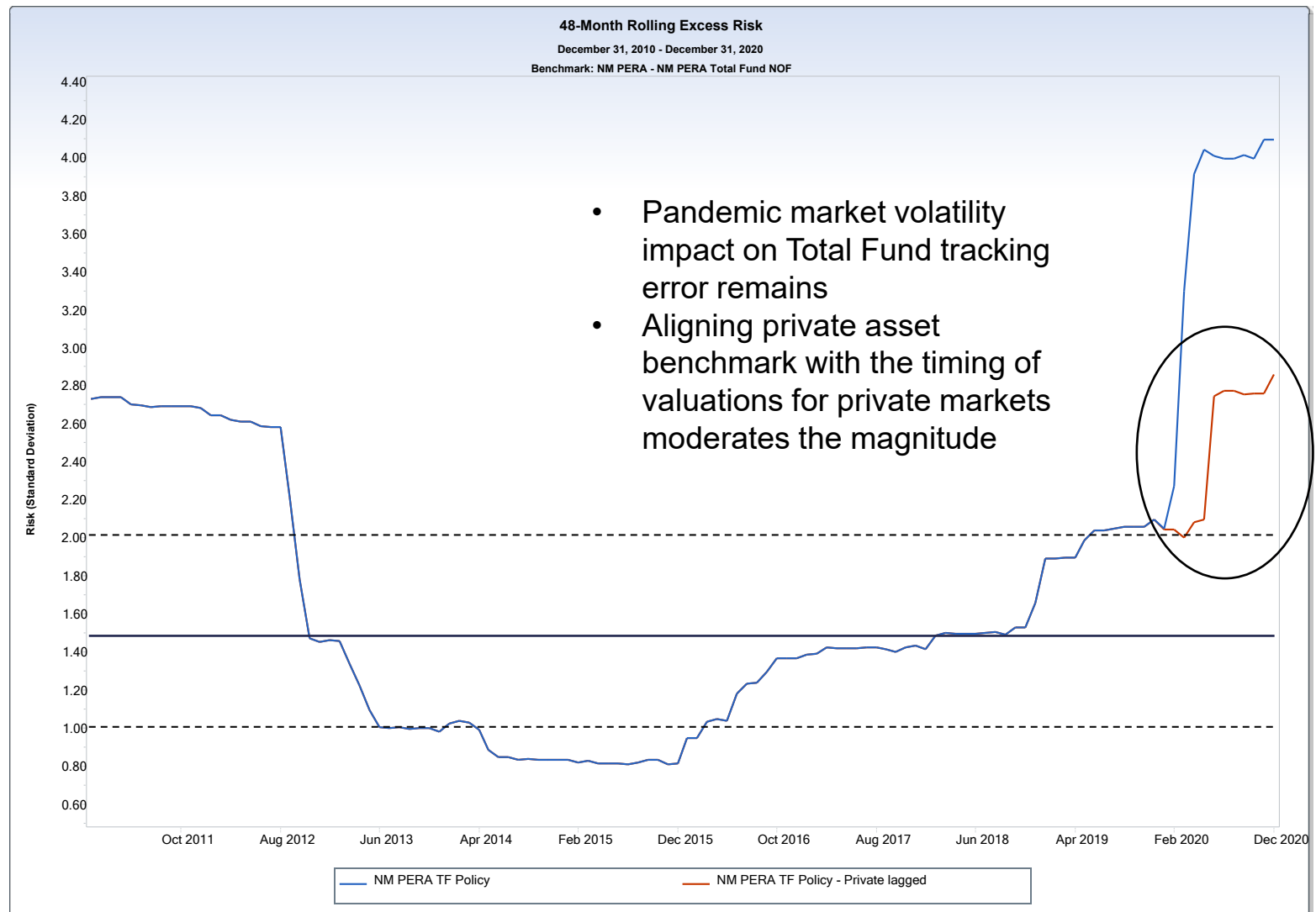


- **Allocation** captures the risk impact of asset class weights that differ from policy targets
- **Benchmark Mismatch** captures the impact of utilizing illiquid investments that do not move in concert with the policy benchmarks
- **Manager Risk** capture idiosyncratic sources of risk and manager selection impacts
 - Captures overlay impacts as this is calculated versus the manager's selection benchmark

*Wilshire Compass – tracking error results represent standard deviation adjusted for correlation

- More than 80% of the active risk in 2020 was driven by illiquid investment benchmark mismatch
 - Private assets that are valued on a lagged basis and less frequently than the public benchmark materially increased realized tracking error

Pro-Forma Tracking Error with Lagged Private Asset Benchmarks – Rolling 4 Year Periods



Risk Budget Going Forward

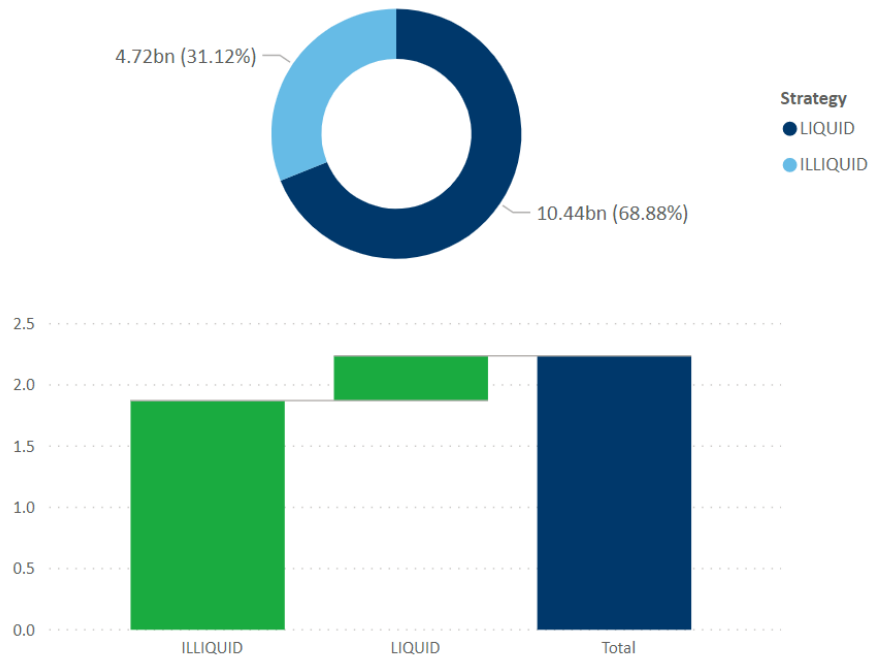
- **Consider adjusting the timing of public market benchmarks to align with the valuation of the less liquid assets**
 - Valuation and pricing of private assets occurs quarterly vs. daily for public assets
 - Valuation availability lags that of public assets, typically by one to three months, due to the time it takes to compile and translate financial statement information into an estimate of fair market value
 - See appendix for tracking error comparisons of unlagged vs. lagged benchmarks
- **Set index policy weights for private assets to the actual weight of each composite at the beginning of each quarter**
 - Private asset weights, unlike public markets, cannot be precisely managed over monthly or quarterly time horizons
- **Available private asset “benchmarks” from multiple providers are actually universe comparisons, either of private market funds or other plan sponsor private programs**
 - Not investable in the same manner as public indexes
 - Underlying constituents can shift depending data availability
 - Quarterly availability lacks granularity

Risk Budget Going Forward

- Risk modeling of the PERA portfolio continues to advance
 - Dashboards allow for analysis of Total Fund and composite level risk positioning
 - Alternative horizon analysis

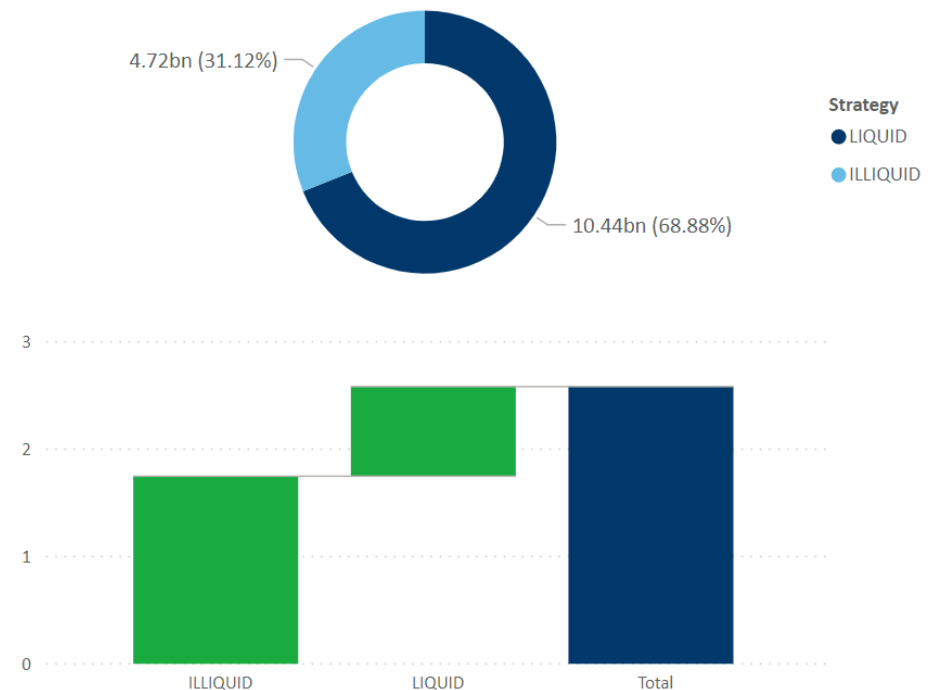
Short Term – Monthly Matrix

Allocation vs Tracking Error Contribution



Medium Term – 2 Year Matrix

Allocation vs Tracking Error Contribution



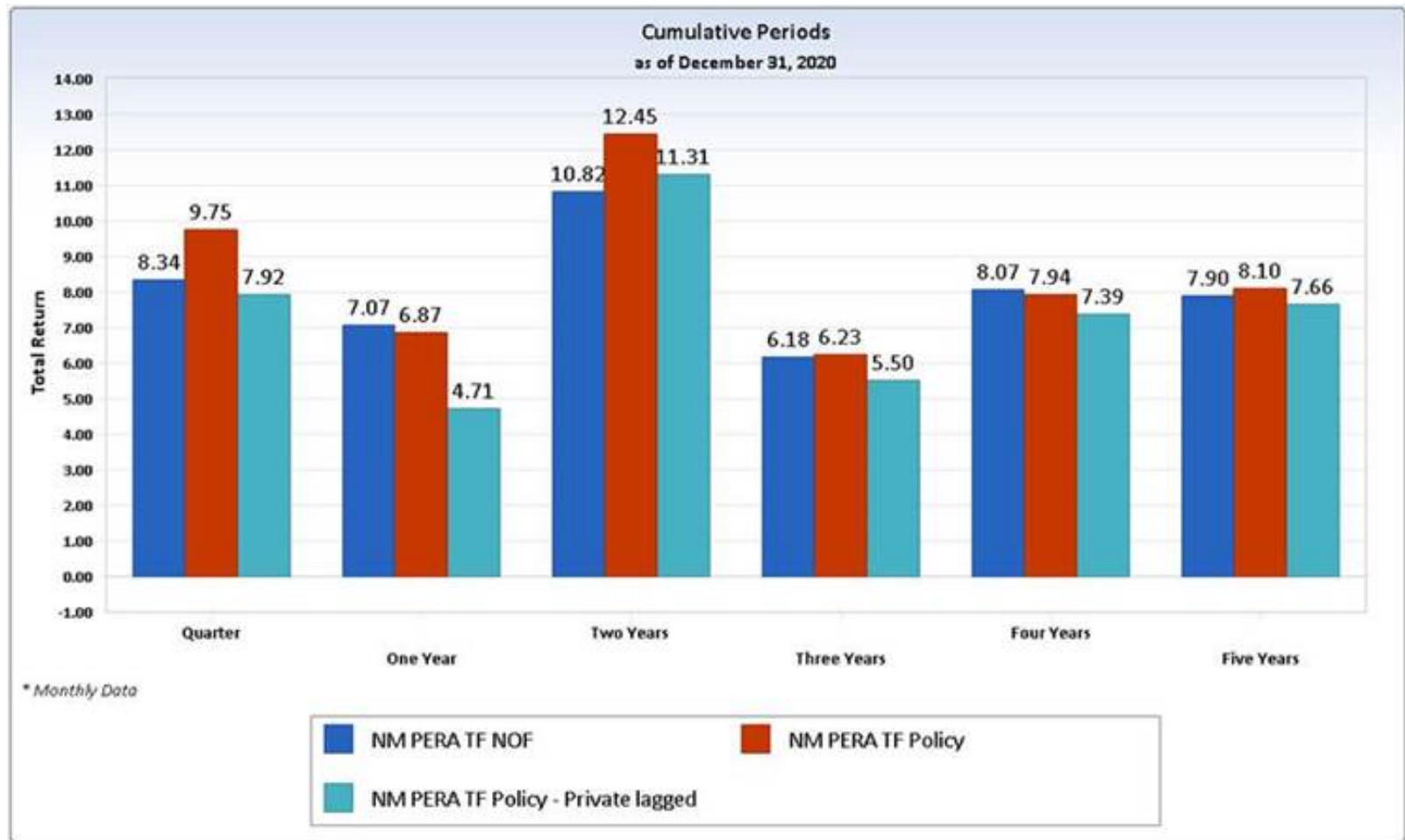
Appendix

Private Asset Benchmarking Impacts

Wilshire

Active Impact of Benchmarking

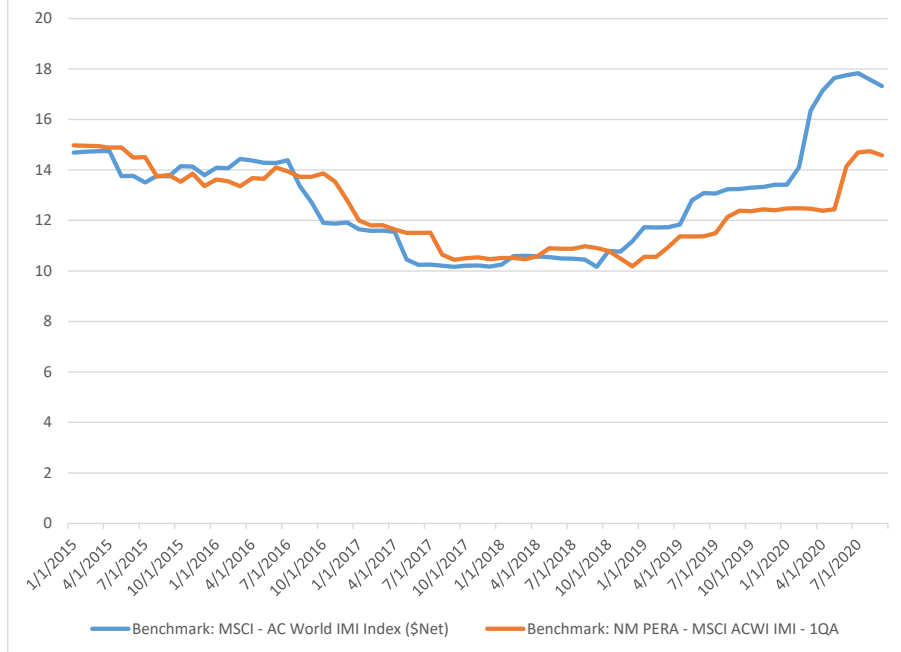
- Lagging private asset benchmarks in policy aligns private market valuations and public benchmarks mark-to-market timing for comparable evaluation of active management.



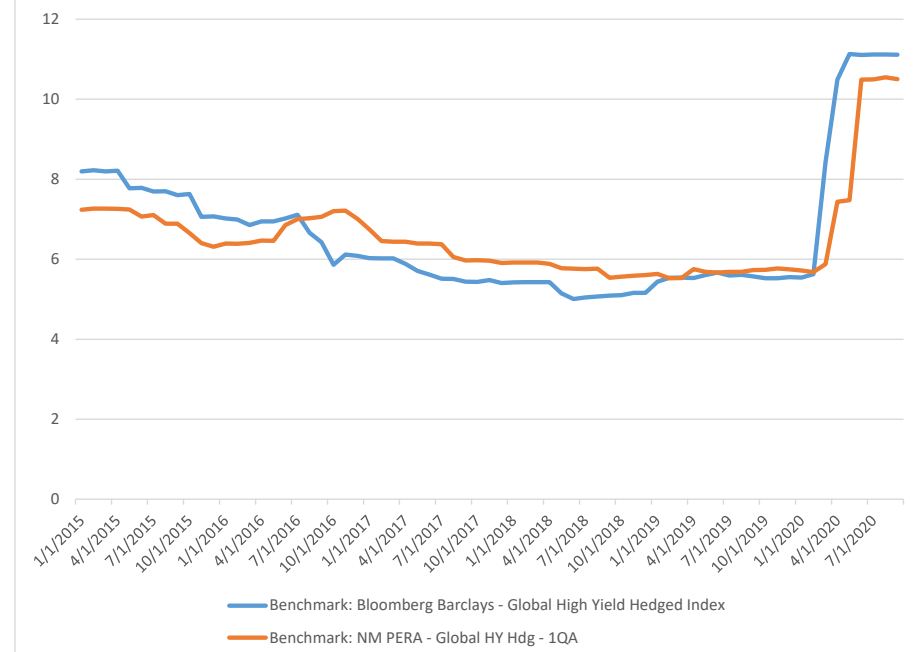
Active Risk Impact of Benchmarking

- Lagging private asset benchmarks can reduced measured tracking error by 15% for private equity and 5% for private credit

Private Equity Tracking Error (Rolling 5 Year)

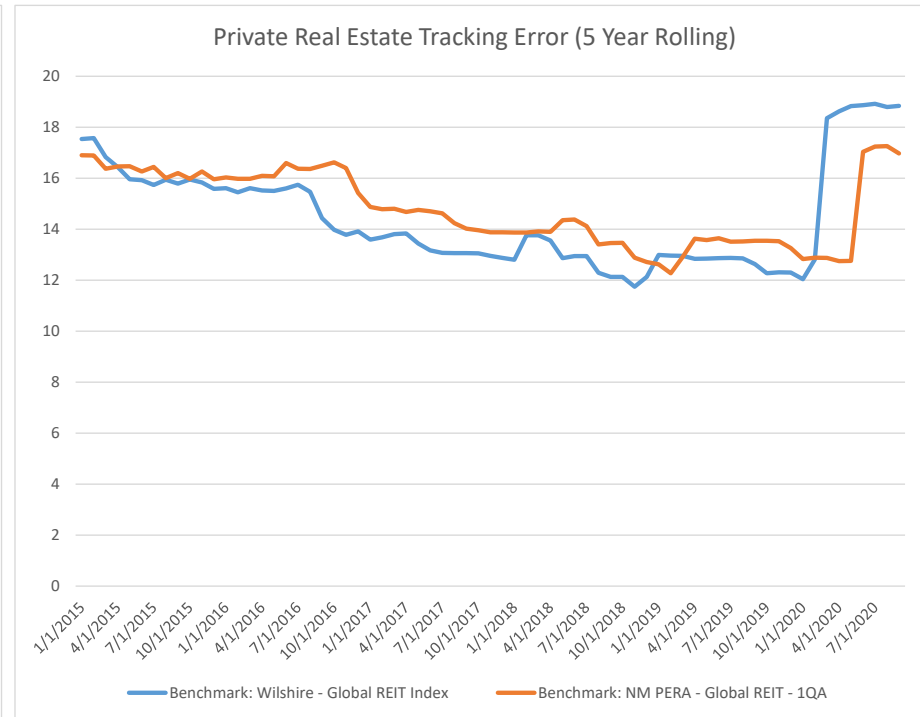
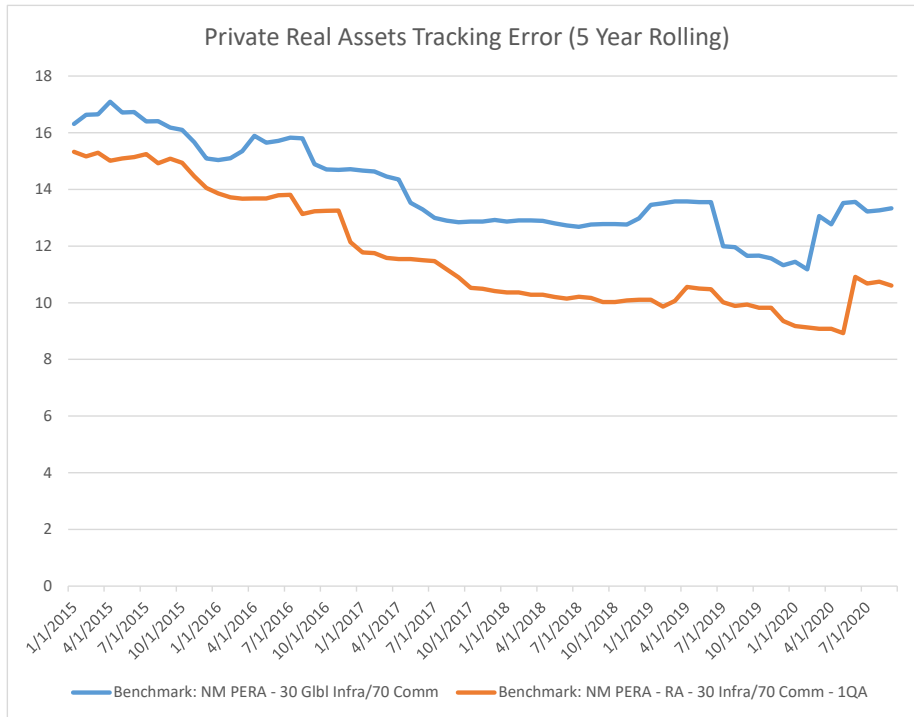


Private Credit Tracking Error (5 Year Rolling)



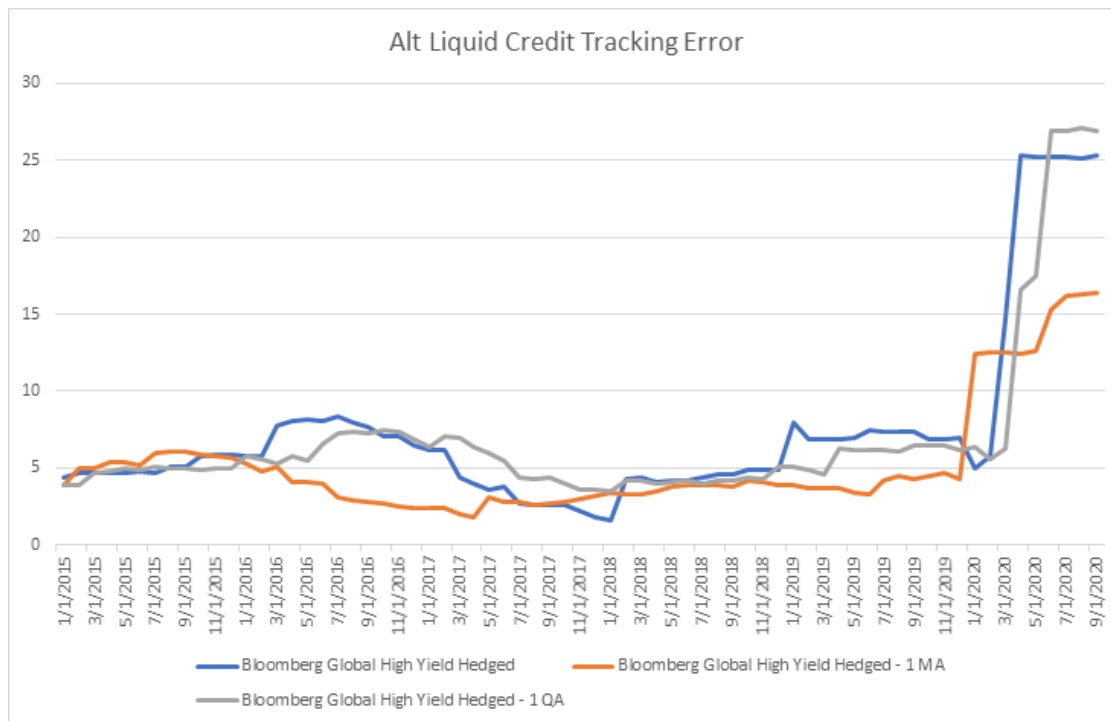
Active Risk Impact of Benchmarking

- Lagging private asset benchmarks can reduced measured tracking error by 20% for private real assets and 10% for private real estate



Active Risk Impact of Benchmarking

- Reduces measured tracking error by 30%+ for alternative credit

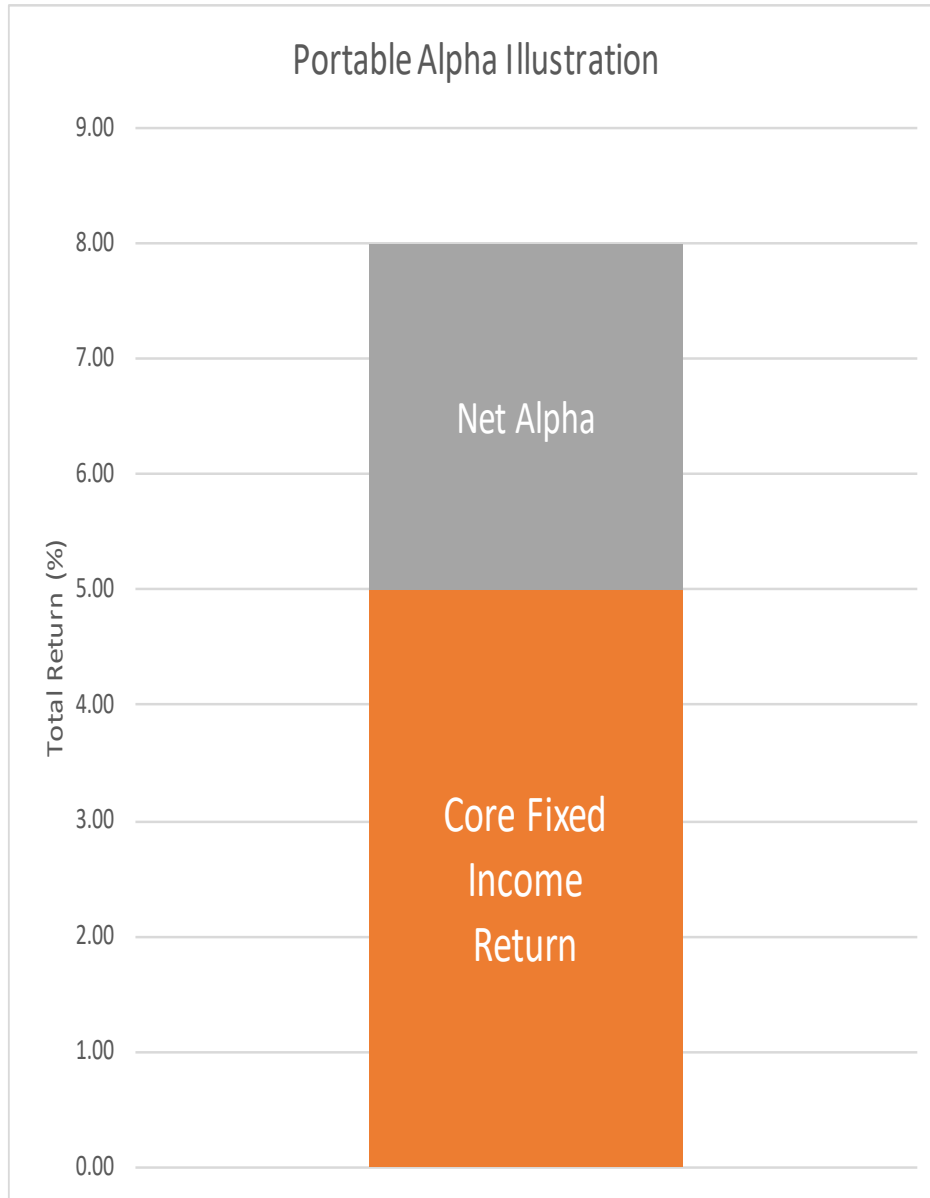


Appendix

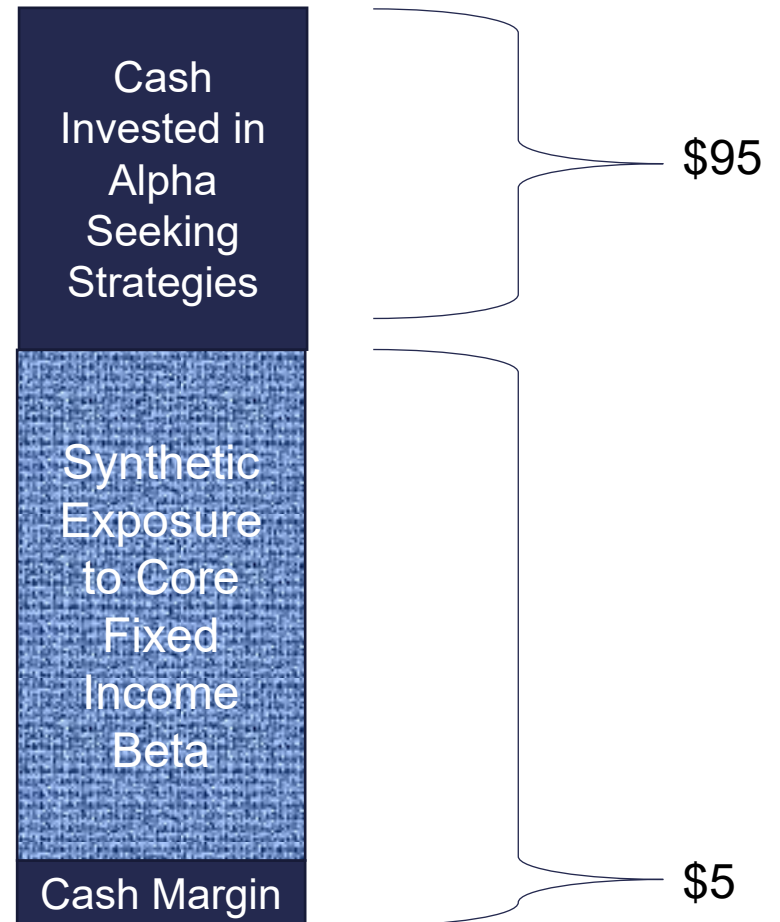
Portable Alpha

Wilshire

Portable Alpha Illustrated



\$100 to invest



Portable Alpha Strategy Characteristics

- Quantitative criteria
 - Stable, non-cyclical (i.e., repeatable)
 - No concentrated risks
 - Low or no correlation to beta or liabilities
 - High information ratio (i.e., statistically significant)
 - High diversification benefit
- Operational criteria
 - Product is investable (AUM, Transparent, etc.)
 - Beta of strategy can be replicated and the exposure can be managed efficiently

Portable Alpha Strategies

- **Global Long/Short equity**
 - Attempts to minimize market exposure while profiting from stock gains in the long positions, along with price declines in the short positions
 - Can be general or sector specific
- **Fixed Income Relative Value**
 - Capturing value from price convergence of similar types of bonds, which may diverge due to technical or liquidity issues
- **Risk Arbitrage/Event Driven**
 - Exploiting pricing inefficiencies caused by corporate events such as mergers or acquisitions
- **Macro**
 - Capitalize on market movements around political or economic events
 - Utilize a broad set of investments such as cash instruments, options, swaps, futures, and forwards, on long and short basis, to profit from perceived mispricing or trends in asset prices
- **Multi Strategy/Portfolio Manager Platform**
 - Access to a broad number of strategies or portfolio teams, which can be adjusted as markets move, and can benefit from centralized risk management and allocation infrastructure

Portable Alpha Performance Estimate

Performance Summary ¹	1-month	3-month	Covid Recovery	1-year	ITD ²
Alpha Engine	1.68%	6.82%	15.96%	4.23%	4.67%
Beta (US AGG)	-1.44%	-2.02%	1.98%	1.38%	5.19%
Bond + Composite (combined)	0.10%	4.21%	16.22%	4.44%	7.88%

(1) Non-lagged manager estimates, as of February 28, 2021

(2) Inception date January 1, 2020

Important Information

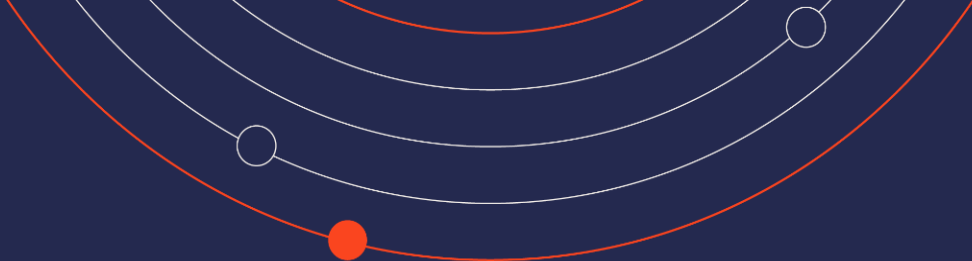
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Public Employees Retirement Association of New Mexico

RISK REDUCTION & MITIGATION REVIEW

March 2021

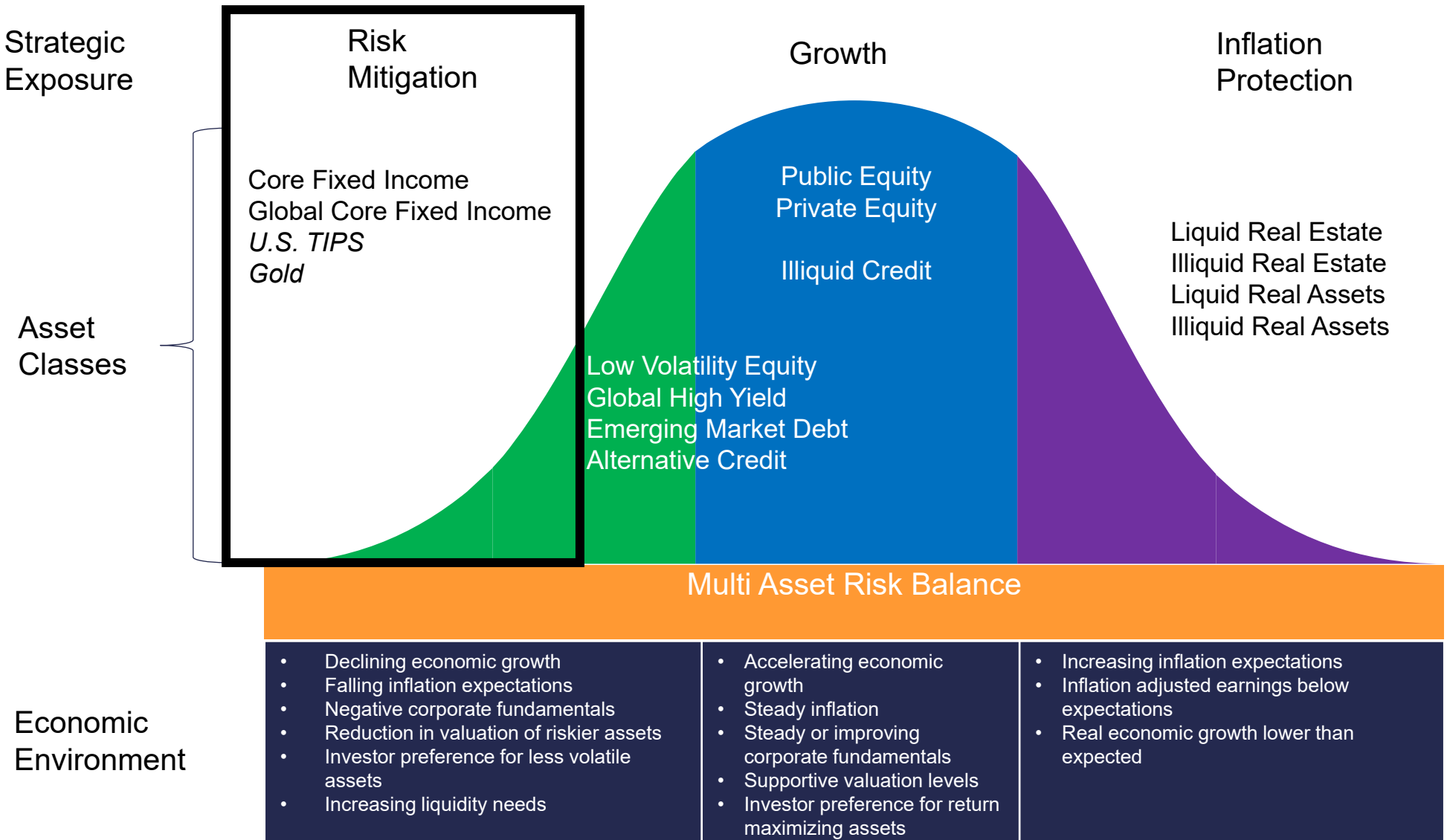
Thomas Toth, CFA – Managing Director

Prepared for



Wilshire

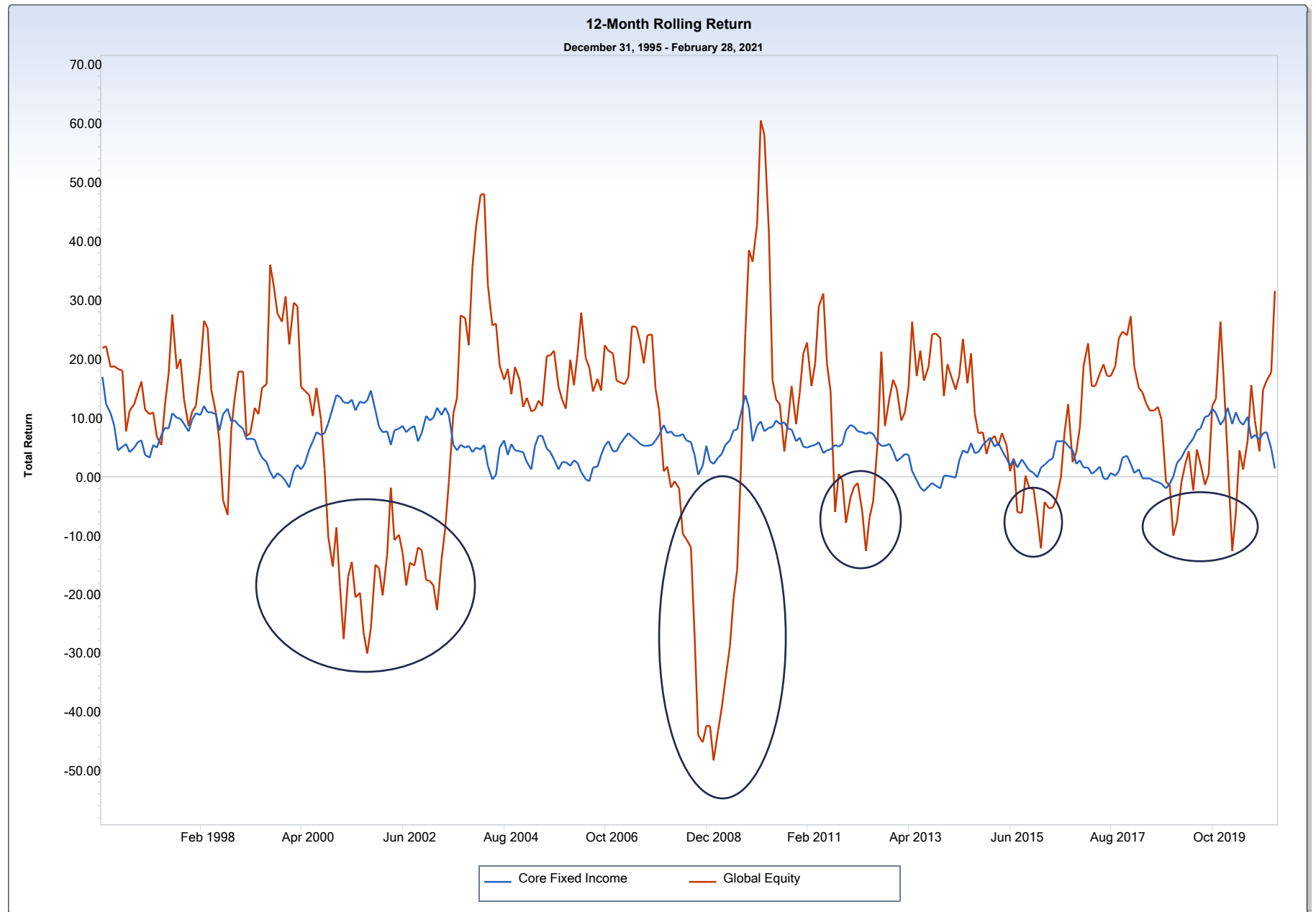
Asset Allocation Exposure



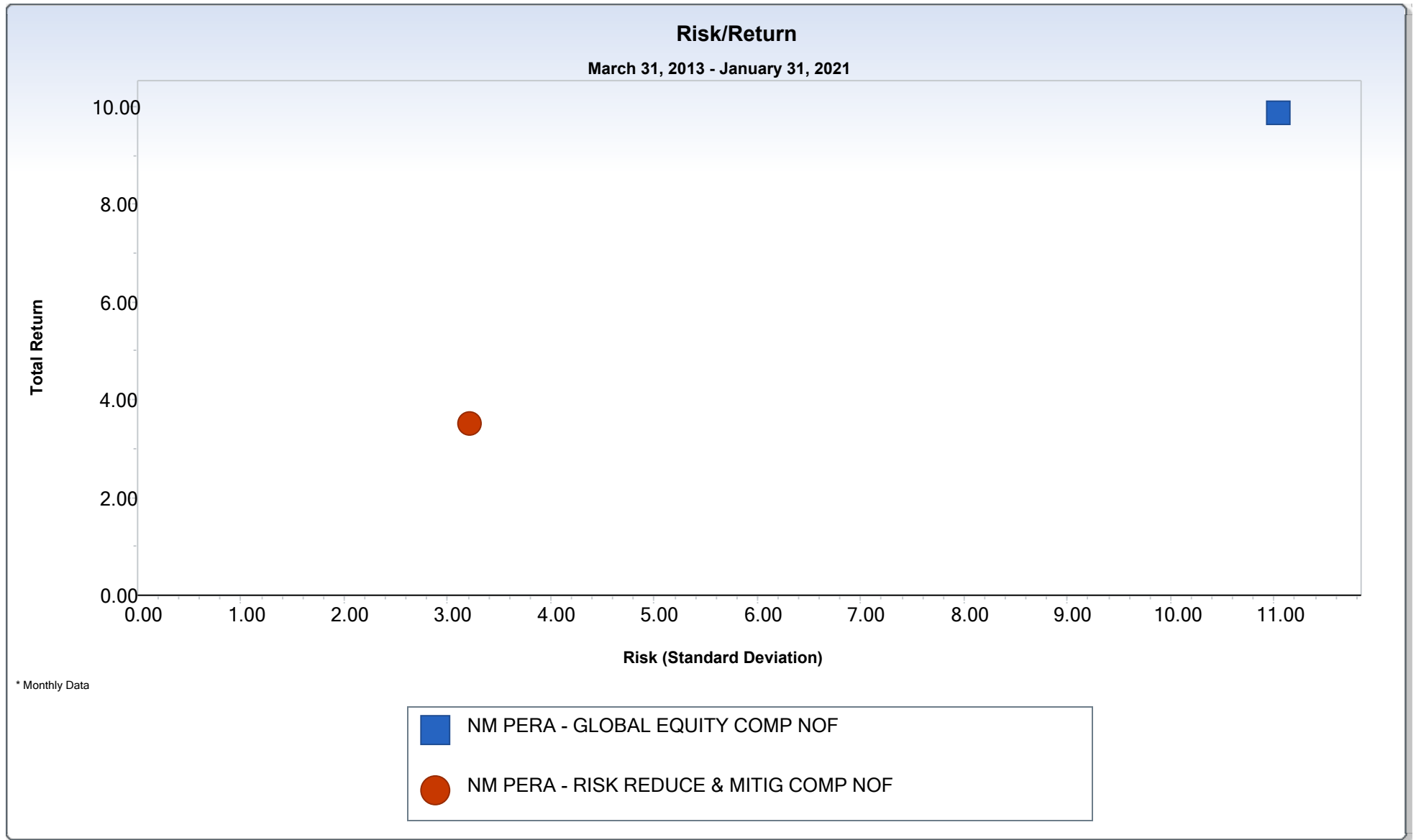
Strategic Role

- **Risk Reduction & Mitigation investments play three essential roles in the Total Fund**
 - Serve as an economic diversifier to equity risk, particularly during periods of equity market turbulence
 - Source of income
 - Ready source of liquidity

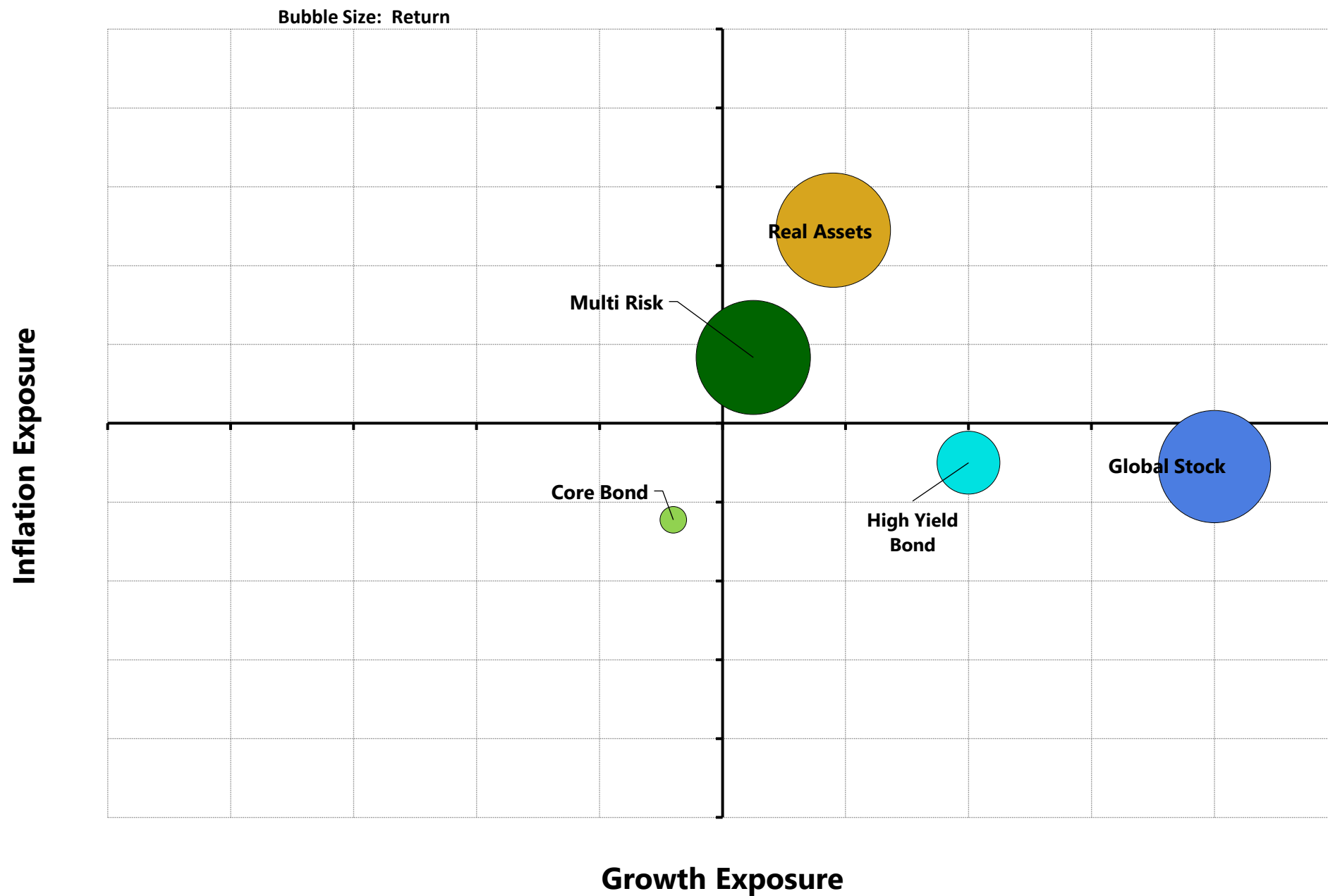
Strategic Role - Diversification



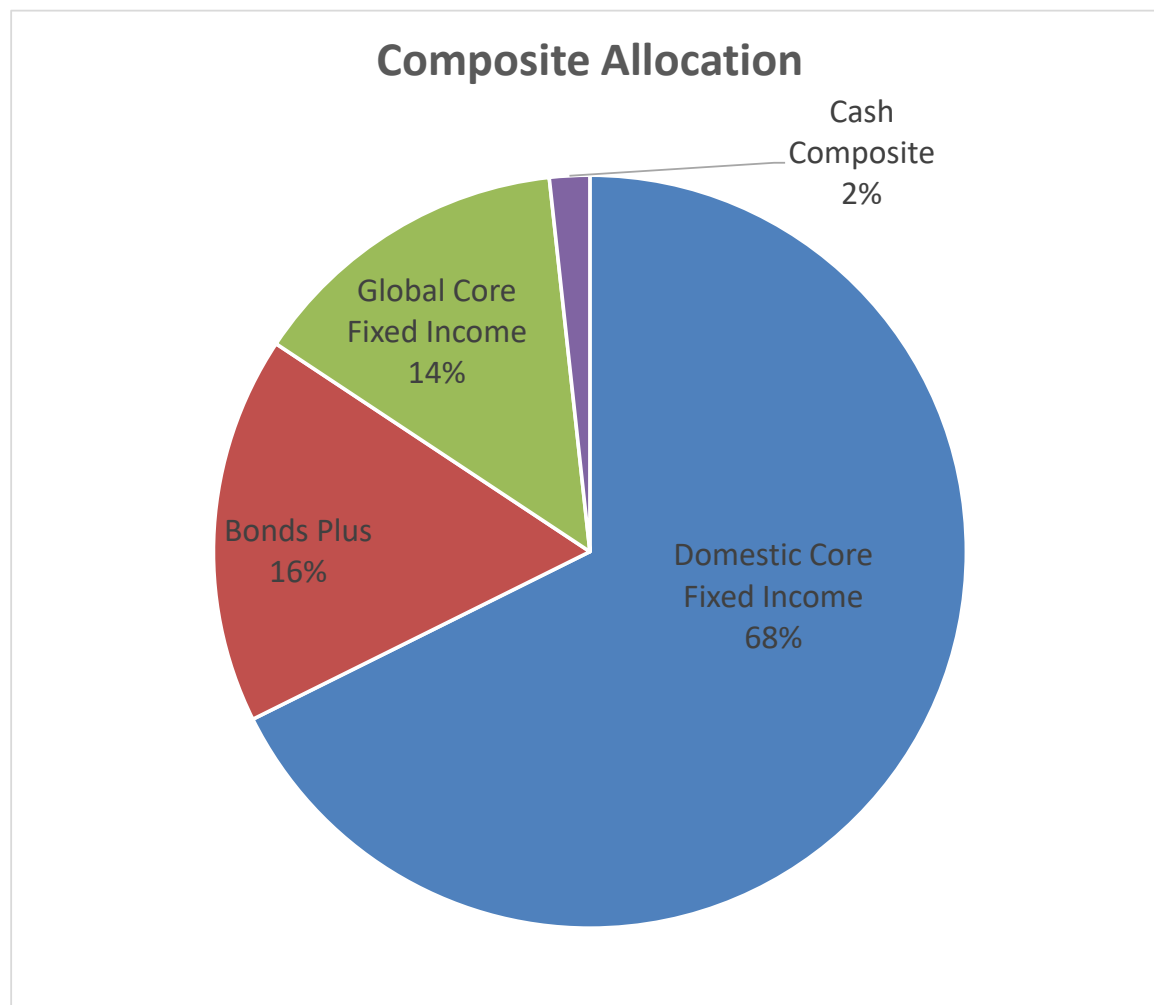
Strategic Role – Risk Control



Strategic Role – Factor Exposure

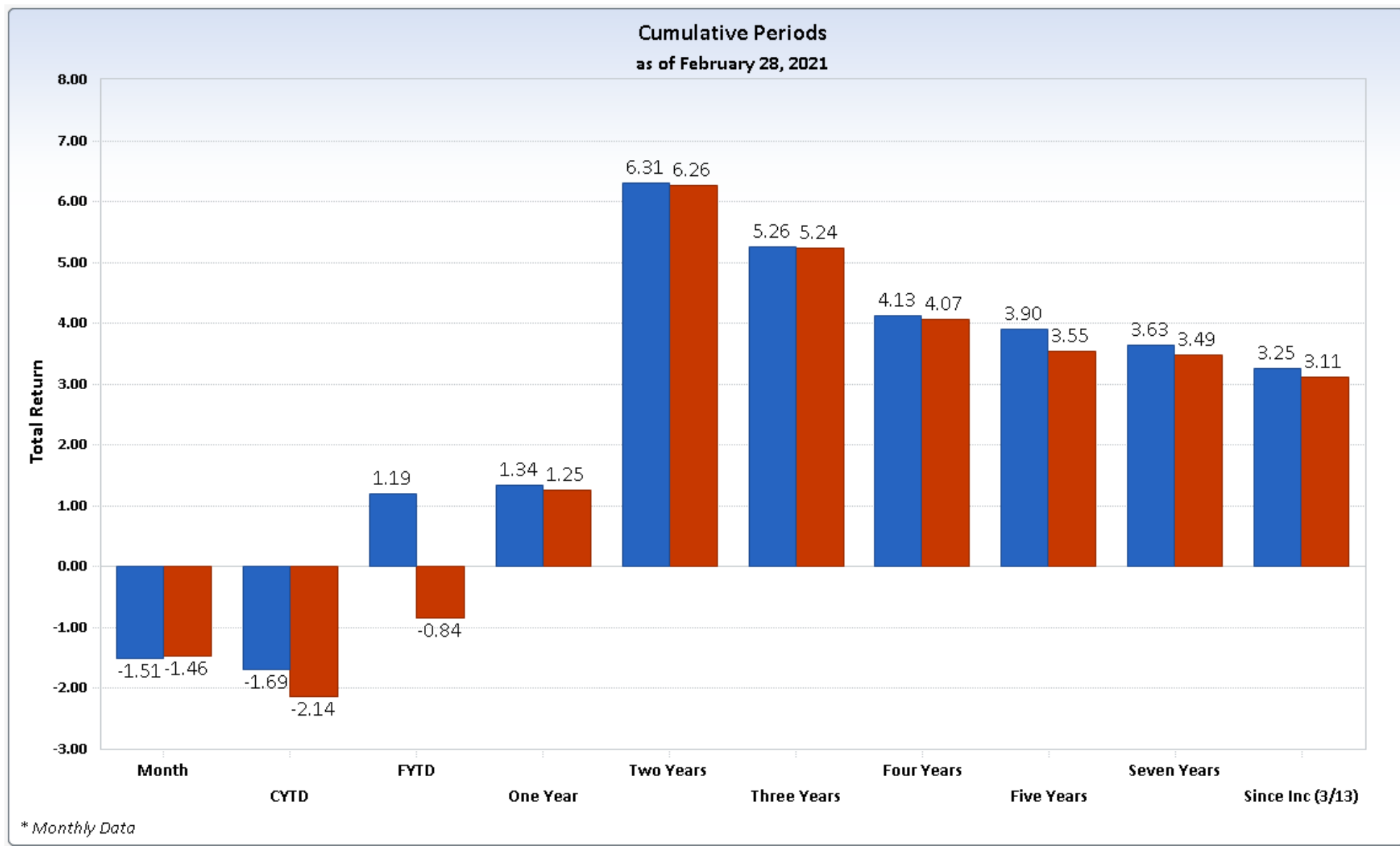


Portfolio Structure

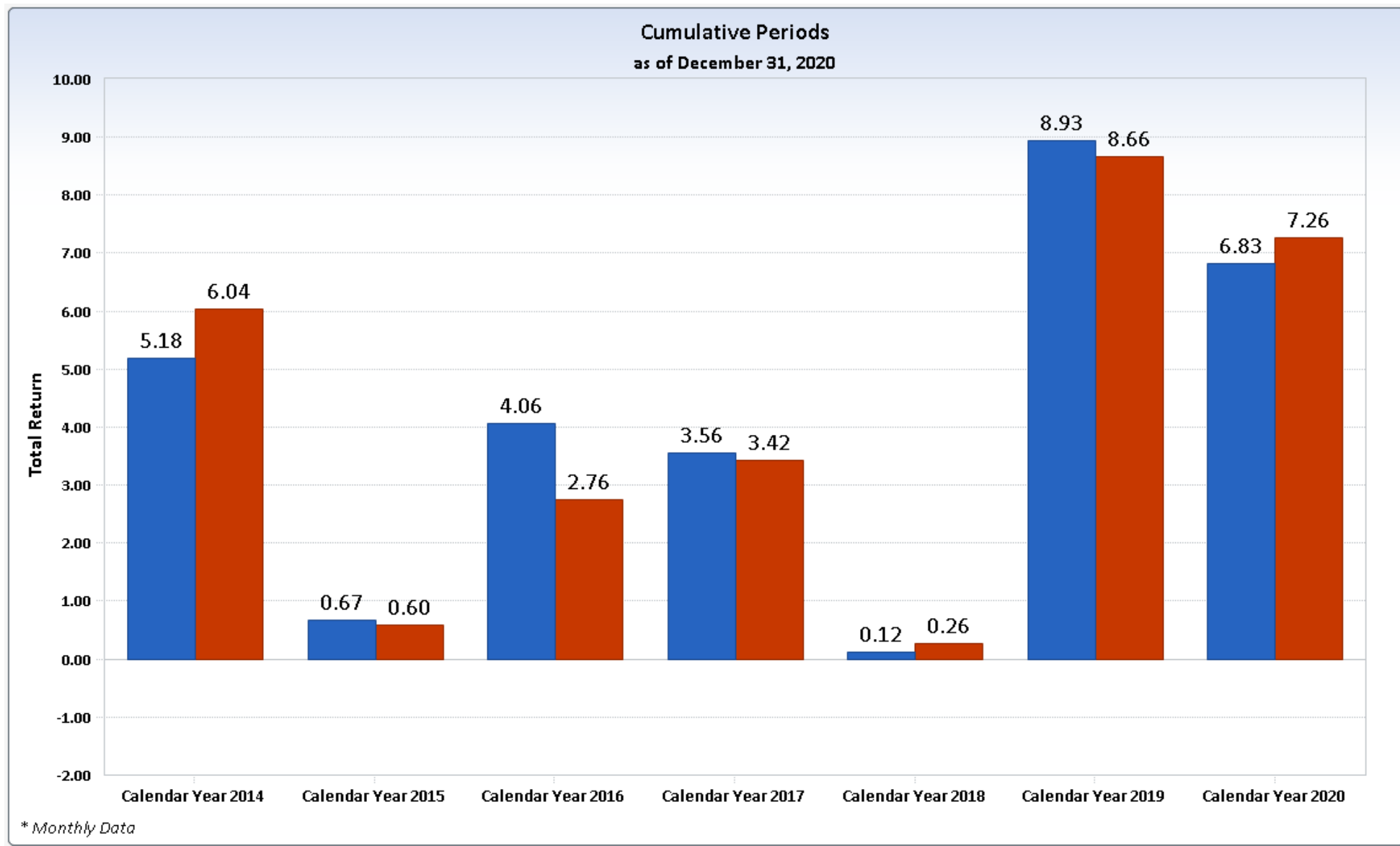


- **U.S. fixed income exposure accounts for 84% of the allocation**
 - Domestic and Bond Plus composites are both benchmarked to the Bloomberg U.S. Aggregate
- **Bonds Plus results include the portable alpha program**
 - Active return volatility during early 2020 increased the tracking error of the Risk Mitigation portfolio
 - Recovered meaningfully to finish the year
 - FYTD active return +2%

Cumulative Returns

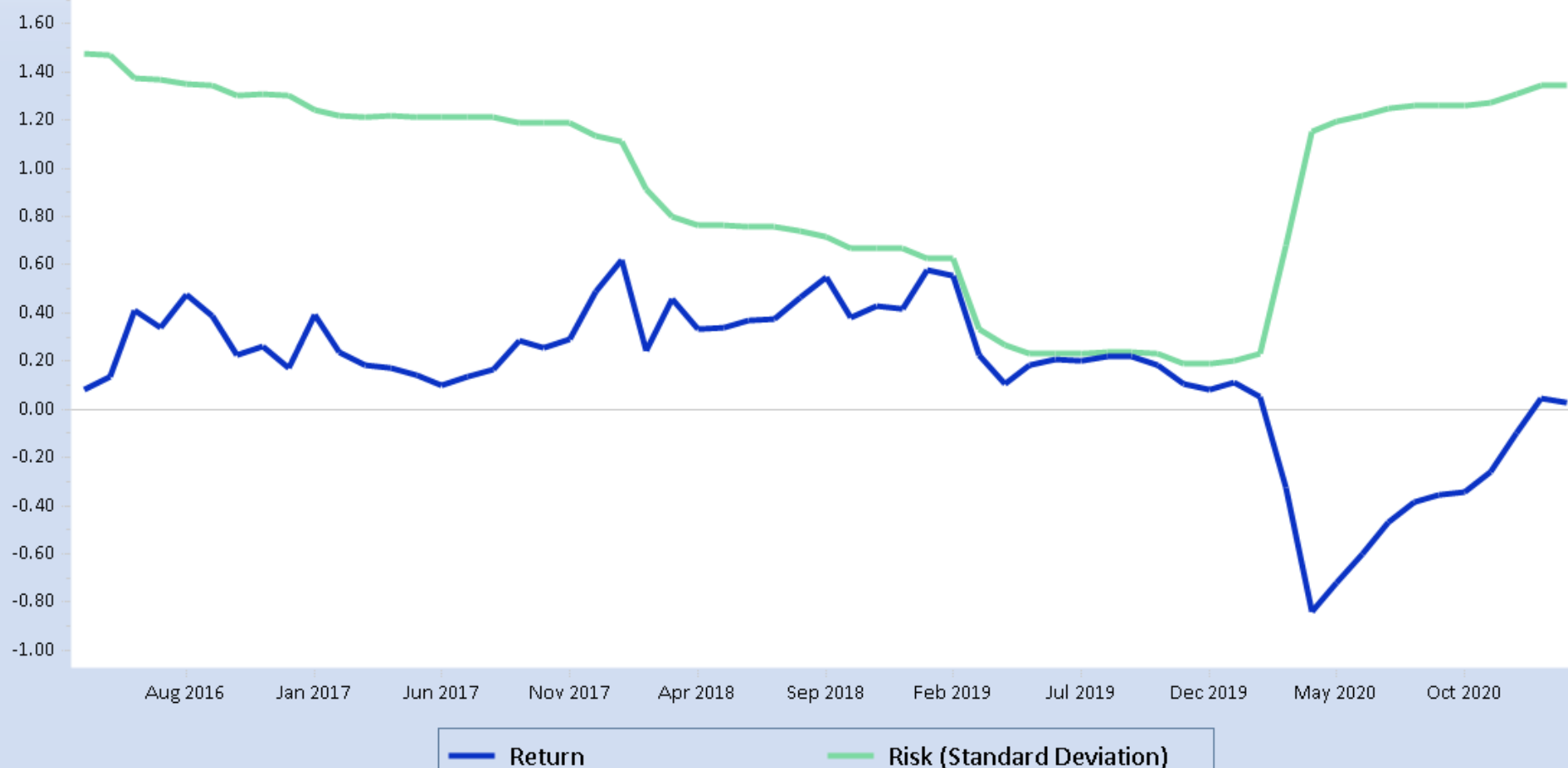


Annual Returns



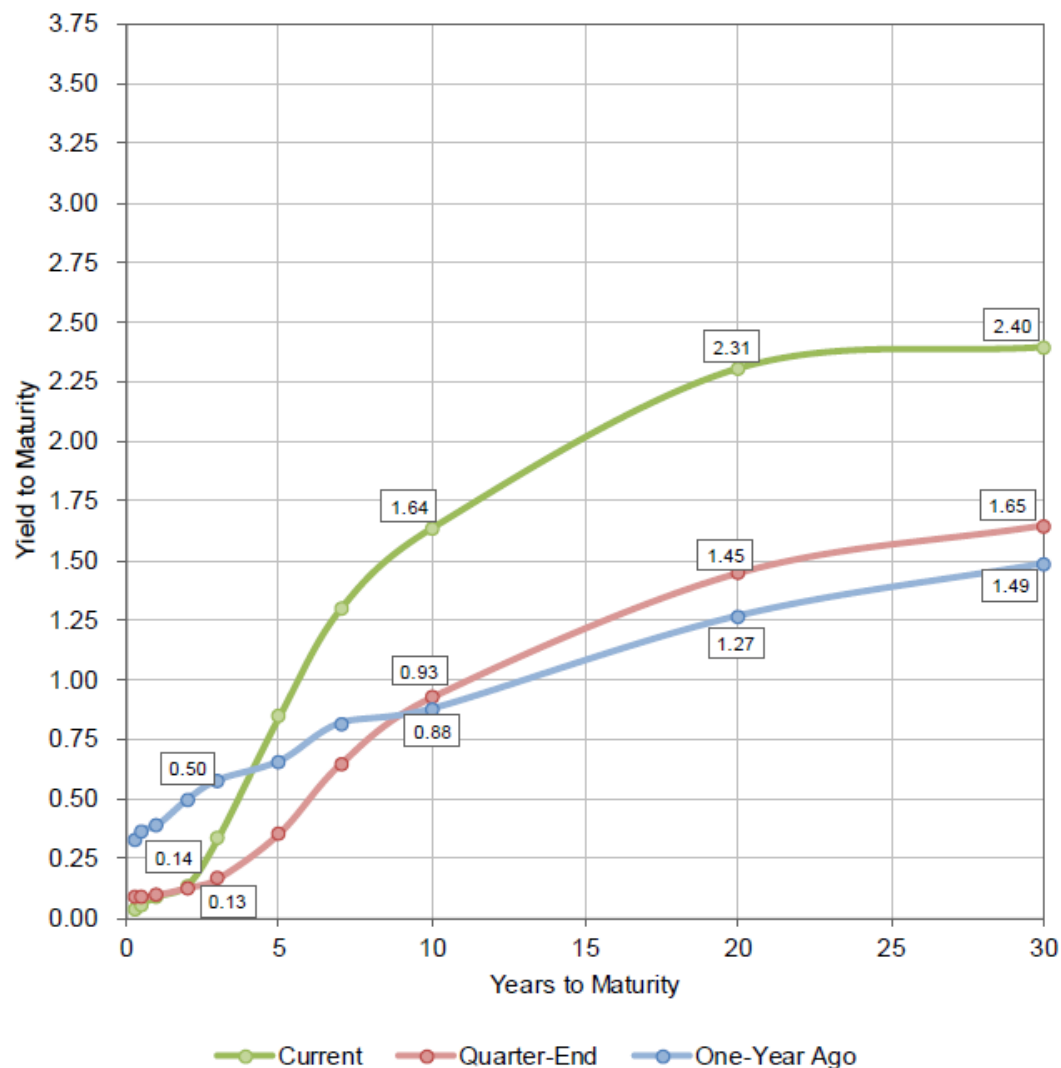
Rolling 3-year Excess Return and Risk

NM PERA - RISK REDUCE & MITIG COMP NOF
36-Month Rolling Excess Periods
March 31, 2016 - February 28, 2021
Benchmark: NM PERA - RISK REDUCE & MITIG INDEX

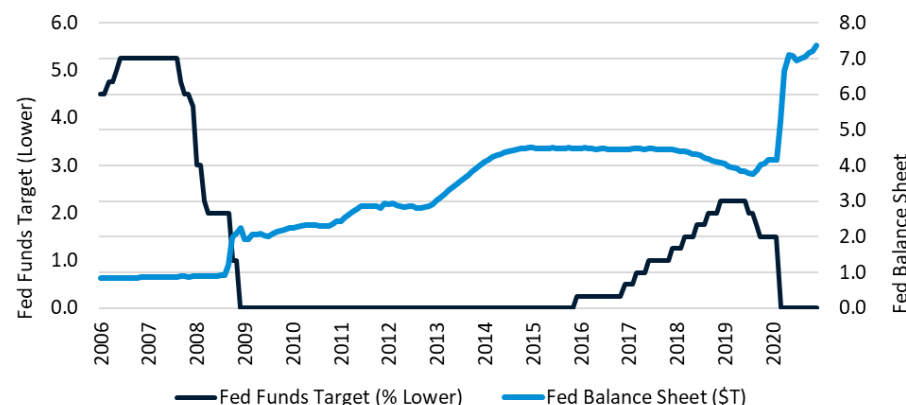


Fixed Income Return Expectations

U.S. Treasury Yield Curve



FED FUNDS TARGET RATE & BALANCE SHEET



- Federal Reserve has pledged to remain accommodative to support employment market
- As of 12/31/20, U.S. Core Fixed Income expected to return 1.3% and Global Core Fixed Income (Hedged) expected to return 0.75%
 - Updated expectations likely to move higher given increased interest rate environment
- Expected returns for fixed income anchor on the starting yield, which are close to historical low levels (albeit rising over recent weeks)

Optimizing Portfolio Construction of Risk Mitigation Assets

Wilshire

Portfolio Construction in Risk Mitigation

- **In order to reach target Total Fund return of 7.25%, all aspects of the portfolio need to be optimized**
- **Examine the impact of utilizing a more granular approach to building the Risk Mitigation portfolio**
 - Treasuries for safety and liquidity
 - Mortgage Backed Securities for return pickup plus liquidity
 - Corporate spreads for return pickup
- **Examine using leverage to increase return impact of the fixed income portfolio**

AND

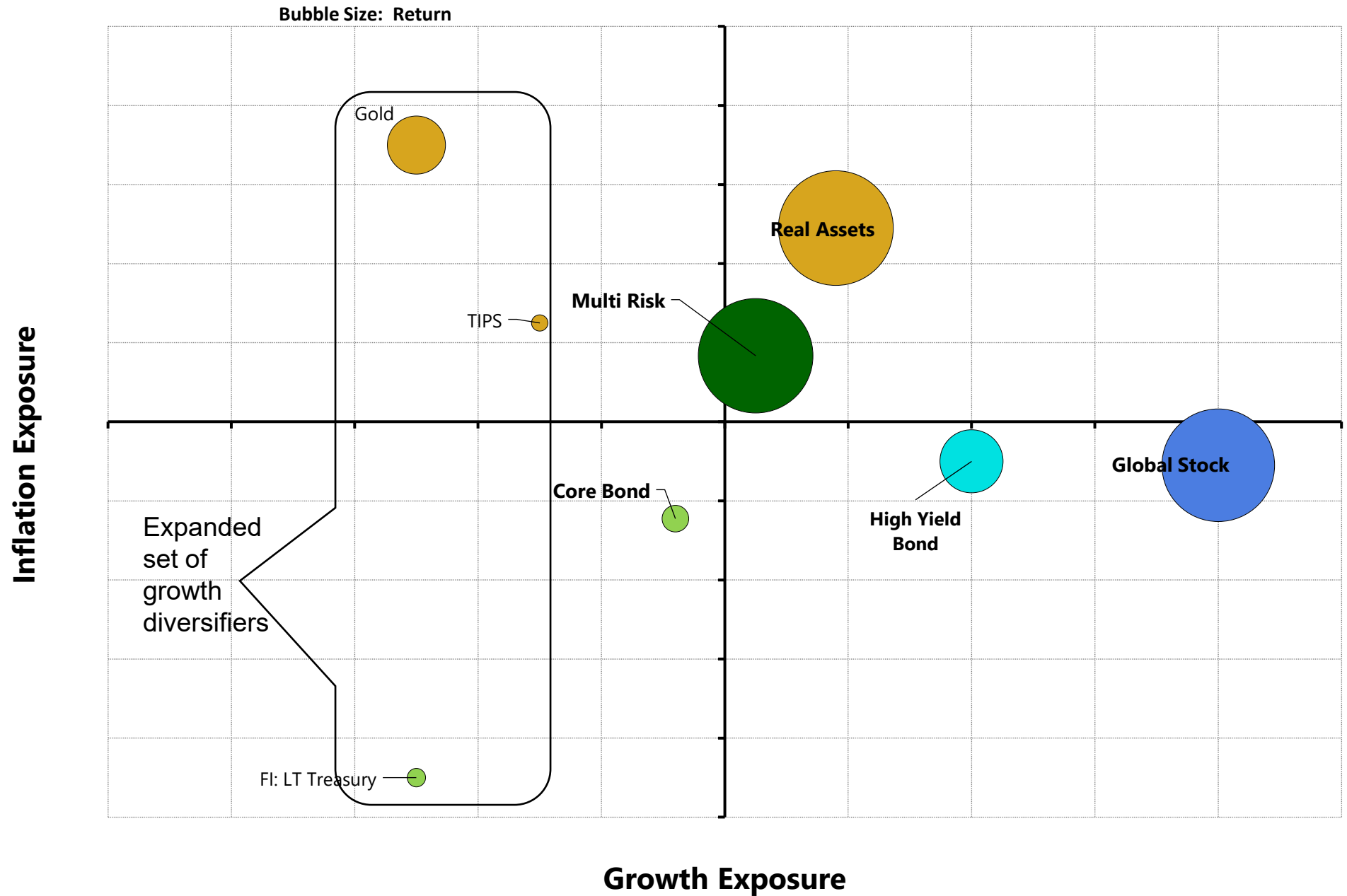
- **Balance risk exposure from interest rates, securitization, and corporate credit, but increases implementation complexity**

Portfolio Construction in Risk Mitigation

	Core Bond (No Leverage)		Risk Mitigation 2.0 (1.26x)	Risk Mitigation 2.0 (2x)	Risk Mitigation 2.0 (3x)
Core Treasuries	38.00	Interest Rate Exposure	16.00	25.00	40.00
Core Corporate	25.00	Corporate Credit Spread	60.00	95.00	140.00
Core Securitized	37.00	Securitized	50.00	80.00	120.00
		Cash Borrowing	-26.00	-100.00	-200.00
Expected Return	1.30		2.04	2.61	3.28
Expected Risk	4.30		4.01	6.27	9.50
Return vs. Risk	0.30		0.51	0.42	0.35

- **Interest rate exposure = Long Treasuries**
- **Corporate credit spread = Corporate Bonds – Treasuries + Cash**
- **Securitized = Core Securitized**
- **Cash Borrowing = LIBOR estimate = Cash + 25 bps**
- **Risk Mitigation 2.0 portfolios have approximately equal risk contribution from each of the three fixed income risks**

Expanded Opportunity Set – Factor Exposure



Appendix

Portfolio Detail

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Underlying Structure

RISK REDUCTION & MITIGATION				
Manager	Benchmark		Market Value	Actual %
BlackRock Core Active	Bloomberg U.S. Aggregate	\$	1,077,565,375	53.7%
Prudential Core Conservative	Bloomberg U.S. Aggregate	\$	645,472,832	32.2%
Risk Reduction Cash Overlay	Bloomberg U.S. Aggregate	\$	282,882,649	14.1%
Domestic Core Fixed Income Comp		\$	2,005,920,854	65.2%
BlackRock Global Fixed Income	Bloomberg Global Aggregate Hdg	\$	415,940,113	
Global Core Fixed Income Comp		\$	415,940,114	13.5%
AQR SPF	Bloomberg U.S. Aggregate	\$	2,851,188	0.6%
Dorsal	Bloomberg U.S. Aggregate	\$	73,964,288	14.6%
Elliott	Bloomberg U.S. Aggregate	\$	60,545,520	12.0%
Garda	Bloomberg U.S. Aggregate	\$	55,558,276	11.0%
Glazer	Bloomberg U.S. Aggregate	\$	61,640,210	12.2%
Marshall Wace Eureka	Bloomberg U.S. Aggregate	\$	54,617,153	10.8%
Millennium	Bloomberg U.S. Aggregate	\$	10,531,665	2.1%
Pacific AA	Bloomberg U.S. Aggregate	\$	75,531,386	14.9%
Pharo Gaia Fund	Bloomberg U.S. Aggregate	\$	45,598,652	9.0%
Systematica	Bloomberg U.S. Aggregate	\$	44,107,277	8.7%
Parametric Bonds Plus	Bloomberg U.S. Aggregate	\$	20,765,005	4.1%
Bonds Plus Comp		\$	505,710,619	16.4%
Cash Composite		\$	44,180,168	1.4%
LGIMA Overlay Collateral		\$	34,197	0.0%
LGIMA TAA Overlay		\$	102,677,381	3.3%
RISK REDUCTION & MITIGATION COMPOSITE		\$	3,074,463,333	

Performance Detail

Composite/Manager	Month	3 Months	Fiscal YTD	CYTD	1 Year	3 Years	4 Years	5 Years	10 Years	20 Years	30 Years	ITD	Inception Date
Risk Reduction & Mitigation	-1.51	-1.06	1.19	-1.69	1.34	5.26	4.13	3.90				3.25	4/1/2013
Risk Reduction & Mitigation BM	-1.46	-1.99	-0.84	-2.14	1.25	5.24	4.07	3.55				3.11	4/1/2013
Excess Return VS Risk Reduction & Mitigation BM	-0.05	0.93	2.03	0.45	0.09	0.01	0.06	0.35				0.14	4/1/2013
Risk Red & Mitigation Dyn BM	-1.35	-1.88	-0.74	-2.02	1.47	5.35	4.17	3.64				3.20	4/1/2013
Excess Return VS Risk Red & Mitigation Dyn BM	-0.15	0.82	1.93	0.33	-0.13	-0.09	-0.04	0.26				0.05	4/1/2013
Domestic Core Fixed Income	-1.94	-2.37	-0.66	-2.72	1.50	5.49	4.29	3.77	4.06	5.07	6.15	6.96	6/1/1985
BBG US Agg Bond Index	-1.44	-2.02	-0.89	-2.15	1.38	5.32	4.09	3.55	3.58	4.59	5.71	6.53	6/1/1985
Excess Return VS BBG US Agg Bond Index	-0.49	-0.36	0.22	-0.57	0.12	0.17	0.20	0.22	0.48	0.48	0.43	0.43	6/1/1985
Black Rock Core	-1.66	-1.71	0.59	-2.25	3.24	6.13	4.81	4.25	4.24	5.17		5.61	7/1/1995
BBG US Agg Bond Index	-1.44	-2.02	-0.89	-2.15	1.38	5.32	4.09	3.55	3.58	4.59		5.18	7/1/1995
Excess Return VS BBG US Agg Bond Index	-0.22	0.30	1.47	-0.10	1.85	0.81	0.72	0.69	0.66	0.58		0.43	7/1/1995
Prudential	-1.71	-2.27	-0.91	-2.45	1.13	5.22	4.02	3.50				3.72	6/1/2012
BBG US Agg Bond Index	-1.44	-2.02	-0.89	-2.15	1.38	5.32	4.09	3.55				2.97	6/1/2012
Excess Return VS BBG US Agg Bond Index	-0.27	-0.26	-0.03	-0.30	-0.26	-0.10	-0.07	-0.05				0.75	6/1/2012
Parametric Risk Mitigation O/L	-3.45	-5.15	-5.46	-4.97	-2.98	9.34	3.24	10.47				5.57	9/1/2014
Global Core Fixed Income	-1.61	-1.98	-0.57	-2.19	0.31	3.85	3.37	3.14				4.08	5/1/2011
BBG Global Agg Hdg	-1.56	-1.78	-0.50	-2.08	0.32	4.75	3.94	3.55				3.95	5/1/2011
Excess Return VS BBG Global Agg Hdg	-0.05	-0.20	-0.07	-0.11	-0.01	-0.90	-0.58	-0.40				0.12	5/1/2011
Blackrock Glb Fixed Income	-1.61	-1.98	-0.57	-2.19	0.31							4.40	5/1/2019
BBG Global Agg Hdg	-1.56	-1.78	-0.50	-2.08	0.32							4.58	5/1/2019
Excess Return VS BBG Global Agg Hdg	-0.05	-0.20	-0.07	-0.11	-0.01							-0.18	5/1/2019
Bonds Plus	-0.28	4.93	10.71	2.58	-0.27							3.05	1/1/2020
BBG US Agg Bond Index	-1.44	-2.02	-0.89	-2.15	1.38							4.44	1/1/2020
Excess Return VS BBG US Agg Bond Index	1.17	6.95	11.60	4.73	-1.65							-1.38	1/1/2020
Cash	1.12	1.84	6.00	1.51	7.06	6.07	5.16	4.82	3.58	4.32	4.57	4.80	3/1/1989
ICE BofA US 3 Month Treasury Bill Index G001	0.01	0.03	0.09	0.02	0.40	1.54	1.40	1.20	0.63	1.45	2.64	3.00	3/1/1989
Excess Return VS ICE BofA US 3 Month Treasury Bill Inc	1.11	1.81	5.91	1.49	6.66	4.53	3.76	3.62	2.94	2.87	1.93	1.80	3/1/1989
Cash Dynamic Benchmark	1.13	1.68	5.71	1.35	7.00	5.80	4.85	4.52					3/1/1989
Excess Return VS Cash Dynamic Benchmark	-0.01	0.16	0.29	0.16	0.06	0.27	0.32	0.30					3/1/1989
CASH ACCOUNT	0.00	0.19	0.37	0.17	0.47	1.82	1.72	1.50	2.06	3.55	4.05	4.31	3/1/1989
ICE BofA US 3 Month Treasury Bill Index G001	0.01	0.03	0.09	0.02	0.40	1.54	1.40	1.20	0.63	1.45	2.64	3.00	3/1/1989
Excess Return VS ICE BofA US 3 Month Treasury Bi	-0.01	0.16	0.28	0.16	0.06	0.28	0.32	0.30	1.43	2.09	1.41	1.31	3/1/1989
SUSPENSE ACCOUNT	19.20	47.04	182.24	35.20	225.27	165.33	147.35	170.12	130.18			135.31	7/1/2010
LGIMA OVRLY COLL	0.00	0.00	3.54	0.00	34.62							1,446.41	8/1/2019
LGIMA TAA OVERLAY	0.08	-0.46	-1.59	-0.81	0.28							-4.55	8/1/2019

Portable Alpha Performance Estimate

Performance Summary ¹	1-month	3-month	Covid Recovery	1-year	ITD ²
Alpha Engine	1.68%	6.82%	15.96%	4.23%	4.67%
Beta (US AGG)	-1.44%	-2.02%	1.98%	1.38%	5.19%
Bond + Composite (combined)	0.10%	4.21%	16.22%	4.44%	7.88%

(1) Non-lagged manager estimates, as of February 28, 2021

(2) Inception date January 1, 2020

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