



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



PERIOD ENDING: September 30, 2023

Investment Performance Review for



PERA

Public Employees
Retirement Association
of New Mexico

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

CHICAGO 312-815-5228

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

PITTSBURGH 412-784-6678

Market Environment **PAGE 1**

Real Assets **PAGE 33**

Scorecard **PAGE 7**

Multi-Risk **PAGE 37**

Total Fund **PAGE 10**

Peer Review **PAGE 40**

Global Equity **PAGE 18**

Manager Listing **PAGE 48**

Credit Oriented Fixed Income **PAGE 23**

Placement Agent Disclosure **PAGE 59**

Risk Reduction & Mitigation **PAGE 28**

3rd quarter summary

THE ECONOMIC CLIMATE

- Real GDP increased at a 2.9% pace from a year ago in Q3 (4.9% QoQ annualized rate). The large uptick was driven by consumption, which continues to show resiliency. A combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown.
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.

PORTFOLIO IMPACTS

- The U.S. consumer has shown resiliency, with ongoing moderate spending activity. However, personal savings rates are nearly the lowest on record. We believe depressed savings activity without a commensurate surge in spending, and very poor sentiment, suggests high inflation is squeezing household budgets.
- The Cboe VIX implied volatility index remained below-average for most of the third quarter, before rising to 17.5 to end September. Market risk has been falling fairly consistently throughout the year, which may be at least partly attributed to the perception that certain risks, such as regional bank contagion and near-term recession, have eased.

THE INVESTMENT CLIMATE

- The 10-year U.S. Treasury yield increased during the quarter to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations. This led to a flattening of the yield curve.
- U.S. headline inflation ticked up from 3.1% to 3.7% year-over-year. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September showing the largest rise since May, and along with rising energy prices have generated concerns of renewed inflation. A material weakening of the job market and U.S. economy will likely be needed to bring inflation down to a 2% level.

ASSET ALLOCATION ISSUES

- Nearly all asset classes produced materially negative performance during the quarter, including global equities (-3.4%), U.S. core fixed income (-3.2%) and U.S. Treasuries (-3.1%). Highly correlated markets created difficulties for investors, as diversification produced limited value.
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, outperforming growth stocks by 11.5%.

Nearly all asset classes produced materially negative performance during the quarter

A material weakening of the job market and/or U.S. economy will likely be needed to bring inflation down to a 2% level

U.S. economics summary

- Real GDP increased at a 2.9% pace from a year ago in the third quarter (4.9% quarter-over-quarter annualized rate). The large uptick was driven by consumption, which continues to show resiliency. While many investors have expected high inflation and weaker wage growth to impact spending, a combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown.
- U.S. headline inflation ticked up during the quarter, from 3.1% to 3.7% year-over-year in September. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September, which along with rising energy prices have generated fresh concerns of renewed inflation.
- The U.S. consumer has shown resiliency, with continued moderate spending levels. However, personal savings rates are nearly the lowest on record. We believe depressed savings activity, along with mild household spending and very poor sentiment, suggests high inflation is squeezing household budgets.
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.
- Consumer sentiment readings were mixed during Q3 but remain poor. According to the Conference Board survey, the future outlook for income, business, and labor conditions fell very sharply and are now at levels that historically have signaled recession within a year.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.9% 9/30/23	1.7% 9/30/22
Inflation (CPI YoY, Core)	4.1% 9/30/23	8.2% 9/30/22
Expected Inflation (5yr-5yr forward)	2.4% 9/30/23	2.1% 9/30/22
Fed Funds Target Range	5.25–5.50% 9/30/23	3.00–3.25% 9/30/22
10-Year Rate	4.58% 9/30/23	3.83% 9/30/22
U-3 Unemployment	3.8% 9/30/23	3.5% 9/30/22
U-6 Unemployment	7.0% 9/30/23	6.7% 9/30/22

International economics summary

- Countries struggling to control inflation—primarily advanced economies—face a challenging path. Many central banks are grappling with high prices and slow growth, and the balancing act of fighting inflation but also trying to avoid recession. In contrast, most emerging economies are exceeding growth expectations, outside of China. Some of this strength has come from trade rotation as tensions remain between the U.S. and China and businesses rethink their trade partners.
- The IMF's October World Economic Outlook was little changed from July Projections, as global growth is still expected to slow in 2024. Regional divergences remained an emphasis, as emerging economies are projected to drive global output. India is expected to outpace all other countries with growth forecasts above 6% for both 2023 and 2024.
- Inflation in the Eurozone and United Kingdom has remained sticky, with inflation in September coming in at 4.3% and 6.7% year-over-year, respectively. Monetary policy is expected to be tighter for both the ECB and BOE, although rate decisions diverged at their respective September meetings, as the ECB raised rates by another 25 bps, while the BOE voted 5-4 to maintain their bank rate at 5.25%.
- Japan was a bright spot amongst developed economies, driven by strong exports in the second quarter. While growth was positive, the potential for an early end to ultra loose Bank of Japan (BOJ) monetary policy presents a potential headwind. A weak Japanese Yen adds to this story, as the currency has been greatly devalued, largely due to the BOJ's contrarian monetary policy relative to other major central banks.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.9% 9/30/23	3.7% 9/30/23	3.8% 9/30/23
BRICS Nations	6.1% 6/30/23	1.7% 9/30/23	4.8% 12/31/22
Brazil	3.4% 6/30/23	5.2% 9/30/23	7.8% 8/31/23
Russia	4.9% 6/30/23	6.0% 9/30/23	3.0% 8/31/23
India	7.8% 6/30/23	5.0% 9/30/23	7.1% 9/30/23
China	4.9% 9/30/23	0.0% 9/30/23	5.0% 9/30/23

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

Equity environment

- Global equities delivered negative performance during the quarter (MSCI ACWI -3.4%). Weakness in markets was broad-based, with international developed (MSCI EAFE -4.1%) slightly underperforming domestic and emerging market equities (S&P 500 -3.3%, MSCI EM -2.9%).
- Over the quarter, the valuation gap between domestic and international equities grew even larger. An analysis of international developed Price/Earnings ratios shows that all sectors currently hold a valuation discount relative to U.S. shares, and that those discounts are generally much wider than the historical average.
- Currency movements dragged portfolio performance lower for investors with unhedged foreign currency exposure. Investors with unhedged international developed equity exposure saw losses of -3.6% due to currency volatility during the quarter.
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, with value stocks outperforming growth by 11.5%.
- The Cboe VIX implied volatility index remained below-average for most of the third quarter, before rising to 17.5% to end September. Market risk has been falling fairly consistently throughout the year.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	(3.3%)		21.6%	
U.S. Small Cap (Russell 2000)	(5.1%)		8.9%	
U.S. Equity (Russell 3000)	(3.3%)		20.5%	
U.S. Large Value (Russell 1000 Value)	(3.2%)		14.4%	
US Large Growth (Russell 1000 Growth)	(3.1%)		27.7%	
Global Equity (MSCI ACWI)	(3.4%)	(2.3%)	20.8%	20.4%
International Large (MSCI EAFE)	(4.1%)	(0.5%)	25.6%	24.1%
Eurozone (EURO STOXX 50)	(7.7%)	(4.3%)	39.4%	33.0%
U.K. (FTSE 100)	(1.9%)	2.2%	25.3%	16.0%
Japan (TOPIX)	(1.0%)	4.0%	25.7%	36.6%
Emerging Markets (MSCI Emerging Markets)	(2.9%)	(1.3%)	11.7%	11.1%

Source: Russell Investments, MSCI, STOXX, FTSE, JPX, as of 9/30/23

Fixed income environment

- The 10-year U.S. Treasury yield increased during the quarter from 3.81% to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations. This has led to a flattening of the yield curve, though the curve remains inverted at -0.5% (defined as the 10-year Treasury yield minus 2-year Treasury yield).
- Rising interest rates combined with lower inflation have brought real (inflation-adjusted, based on the U.S. TIPS Inflation Breakeven Rate) 10- and 30-year Treasury yields to the highest levels in over a decade. Real yields for 10- and 30-year Treasuries finished the month at 2.24% and 2.33%, respectively. In March of 2022 these rates were negative.
- The Federal Reserve hiked interest rates by 0.25% in July but held rates steady at the September meeting as inflation moderated. Importantly, Chairman Powell signaled that additional rate hikes may be warranted if the economy remains strong and inflation above target.
- During Q3, higher quality bonds and U.S. Treasuries saw mild losses due primarily to their longer duration profile. Riskier credit performed well, with larger coupons and shorter duration contributing to positive performance.
- Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) performed very poorly, falling by -7.3% during the quarter as rising interest rates acted as a headwind.
- With inflation moderating during the quarter, investors expressed optimism that the Federal Reserve would soon pause interest rate hikes. However, interest rate volatility increased during the period as concerns related to the U.S. government's budget deficit and the amount of expected issuance contributed to higher long-term bond yields.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(3.2%)	0.6%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(2.9%)	1.6%
U.S. Treasuries (Bloomberg U.S. Treasury)	(3.1%)	(0.8%)
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(13.0%)	(10.7%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.5%	10.3%
Bank Loans (S&P/LSTA Leveraged Loan)	3.4%	13.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(3.3%)	13.1%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(2.2%)	10.0%
Mortgage-Backed Securities (Bloomberg MBS)	(4.1%)	(0.2%)

Source: Bloomberg, as of 9/30/23

Recent Verus research

Visit: verusinvestments.com/research

Topics of interest

CREDIT, DISTRESS, DEFAULT & THE LONG TERM

As the environment for credit changes and the risks of defaults increase, investors would be well advised to assess their fixed income positioning. This includes considering other opportunities across the credit spectrum beyond traditional core vehicles.

THE RISING RATE ENVIRONMENT'S IMPACT ON REAL ESTATE CAP RATES

The quickly rising interest rate environment has changed the landscape for commercial real estate so much that investors are questioning how the appraised values of their private real estate assets might change in the future. Our latest whitepaper illuminates this question.

YIELD CURVE INVERSION: RECESSION SIGNAL, BUT WHY?

Predicting future market conditions is an incredibly difficult task. One signal that has been a historically accurate predictor preceding a U.S. recession is the yield curve inversion. We examine what drives curve inversion, allowing investors a framework regarding the implications of this type of event.

HEDGE FUNDS IN 2023: HOW HAS THE ENVIRONMENT CHANGED?

For those clients who are comfortable embracing the complexity of hedge funds, we continue to believe that these strategies can play an important role. We focus on the impact of a “higher rate for longer” scenario on the asset class. We also examine how the rising-rate environment has affected private markets so far.

Annual research

2023 PRIVATE EQUITY OUTLOOK

In the 2023 Private Equity Outlook, we focus on the impact of a “higher rate for longer” scenario on the asset class. We also examine how the rising-rate environment has affected private markets so far.

Scorecard

Total Fund

ScoreCard: Strategic Asset Allocation

New Mexico PERA
Period Ending: September 30, 2023

- As of the current quarter end, PERA is below the assumed rate of return for most time periods, but above the assumed rate of return since inception.
- The 20 year time period includes the Great recession and the Dotcom bust era.
- Set strategic Asset Allocation (Policy Portfolio) to meet the assumed rate of return and funding goals over the long term (10+ years)
- Prior to July 2016, Assumed rate of return was 7.75%

	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs	Inception	Inception Date
NM PERA Total Fund	-1.49	7.52	6.08	5.11	6.00	5.91	6.25	7.37	8.47	Jun-85
<i>Assumed Rate of Return - NMPERA</i>	1.77	7.25	7.25	7.25	7.25	7.39	7.57	7.63	7.66	
<i>Excess Return</i>	-3.26	0.27	-1.17	-2.14	-1.25	-1.48	-1.32	-0.26	0.81	
<i>Scorecard</i>	<i>R</i>	<i>✓</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>✓</i>	

- Produce returns that meet or exceed Board approved Total Fund Benchmarks

	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	20 Yrs	30 Yrs	Inception	Inception Date
NM PERA Total Fund	-1.49	7.52	6.08	5.11	6.00	5.91	6.25	7.37	8.47	Jun-85
<i>NM PERA Total Fund Policy</i>	-3.32	9.97	3.21	3.32	4.60	5.05	6.00	6.83	8.16	
<i>Excess Return</i>	1.83	-2.45	2.87	1.79	1.40	0.86	0.25	0.54	0.31	
<i>Scorecard</i>	<i>✓</i>	<i>R</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
Tracking Error	1.10	4.71	4.76	5.04	4.32	3.70	2.91	5.78		
Tracking Error Rank	85	84	75	84	83	80	57	68		
Sharpe Ratio	-0.68	0.47	0.57	0.44	0.63	0.70	0.56	0.56		
Sharpe Ratio Rank	81	87	29	32	33	34	63	51		

Performance shown is net of fees.

Total Fund Strategic Asset Allocation

New Mexico PERA
Period Ending: September 30, 2023

PERA's capital allocations are in line with SAA targets

Capital Allocation					
	Policy Allocation (%)	Current Allocation (%)	Excess Allocation (%)	Policy Range (%)	Within IPS Range?
Global Equity	38.00	39.17	1.17	33.00 - 43.00	Yes
Credit Oriented Fixed Income	19.00	19.09	0.09	15.00 - 23.00	Yes
Risk Reduction & Mitigation	17.00	16.46	-0.54	14.00 - 20.00	Yes
Real Assets	18.00	17.45	-0.55	14.00 - 22.00	Yes
Multi-Risk	8.00	7.83	-0.17	4.00 - 12.00	Yes
Total	100.00	100.00	0.00		

4-Year Risk Statistics										
	Annualized Standard Deviation	Annualized Alpha	Annualized Beta	R-Squared	Up Capture	Down Capture	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
NM PERA Total Fund	8.4	3.1	0.6	0.9	73.1	56.4	0.3	5.4	0.4	0.6
<i>NM PERA Total Fund Policy</i>	<i>13.1</i>	<i>0.0</i>	<i>1.0</i>	<i>1.0</i>					<i>0.2</i>	<i>0.2</i>

PERA's liquidity allocations are in line with liquidity guidelines (Tier 1 Assets >= 10% of Fund NAV)

Liquidity Allocation					
	Market Value	Tier 1 (1-5 Days)	Tier 2 (5-90 Days)	Tier 3 (90-365 Days)	Tier 4 (1+ Years)
Global Equity	6,375,177,076	35,062,797	3,917,467,408	816,318	2,421,830,553
Credit Oriented Fixed Income	3,106,428,209	196,754,511	1,545,250,192	839,852,657	524,570,849
Risk Reduction & Mitigation	2,679,093,657	1,980,301,980	-	-	698,791,677
Real Assets	2,839,699,863	107,199,701	50,544,249	639,712	2,681,316,200
Multi-Risk	1,273,913,844	-	1,273,913,844	-	-
NM PERA Total Fund	16,274,312,648	2,319,318,989	6,787,175,692	841,308,687	6,326,509,279
Total (%)	100.0	14.3	41.7	5.2	38.9

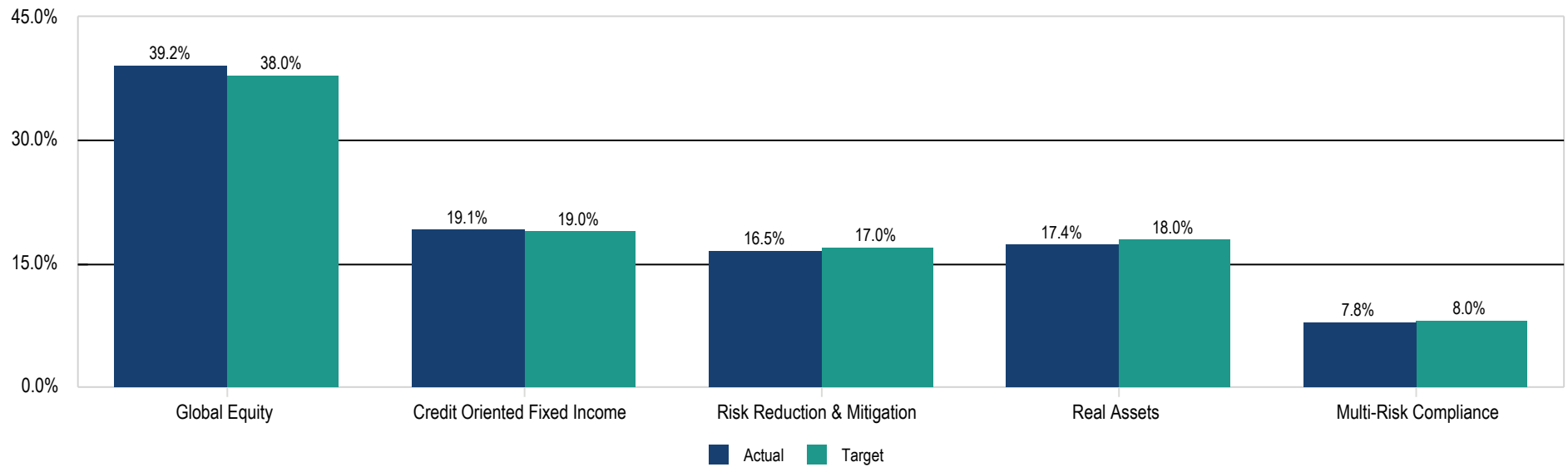
Performance shown is net of fees.

Total Fund

Total Fund Asset Allocation Compliance

New Mexico PERA
Period Ending: September 30, 2023

Actual vs. Target



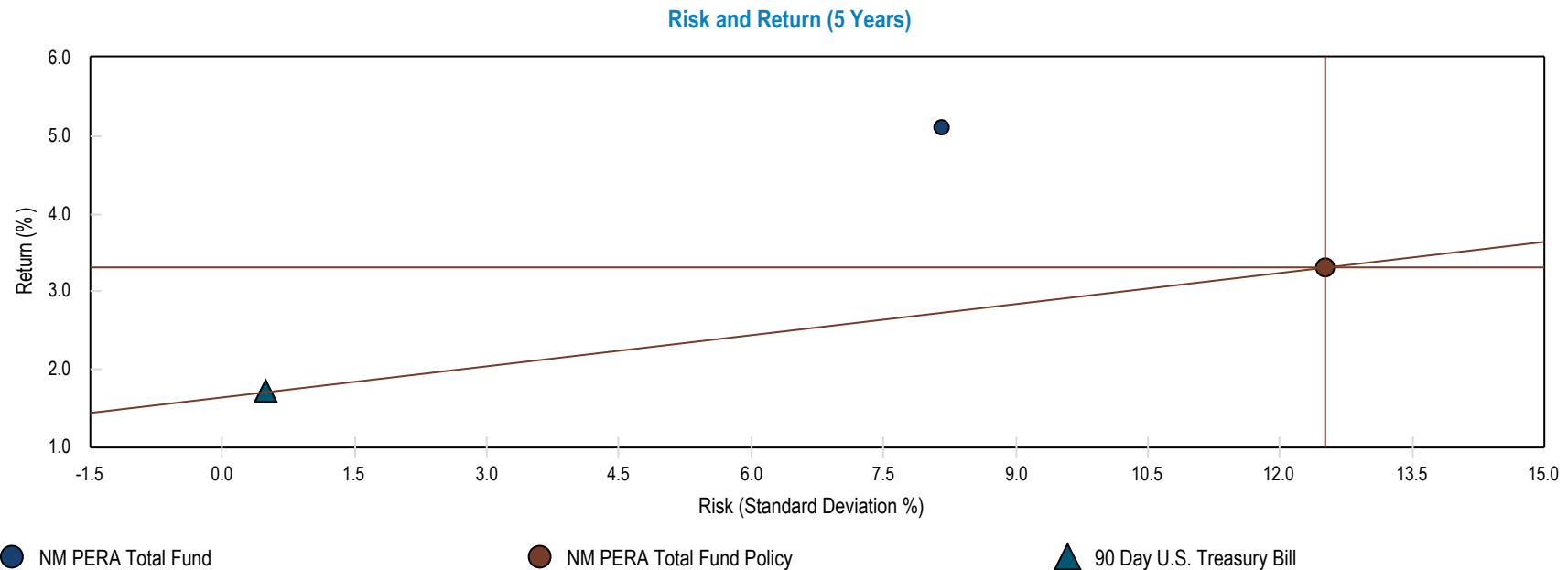
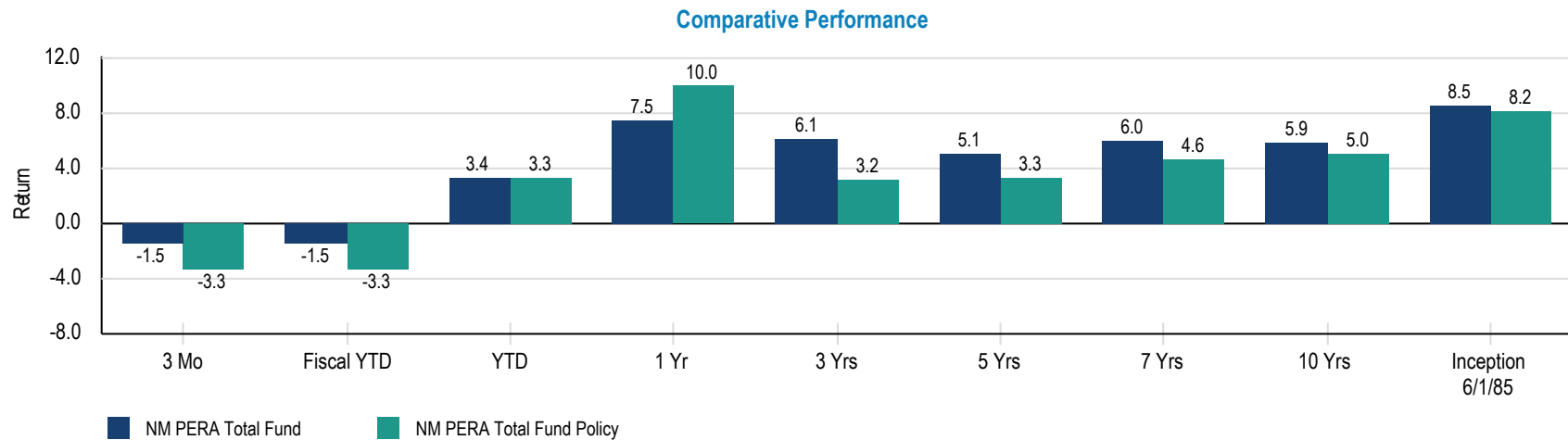
Allocation vs. Policy

	Current Balance (\$)	Current Allocation (%)	Policy Allocation (%)	Policy Allocation (\$)	Difference (\$)
Global Equity	6,375,177,076	39.17	38.00	6,184,238,806	190,938,270
Credit Oriented Fixed Income	3,106,428,209	19.09	19.00	3,092,119,403	14,308,806
Risk Reduction & Mitigation	2,679,093,657	16.46	17.00	2,766,633,150	-87,539,493
Real Assets	2,839,699,863	17.45	18.00	2,929,376,277	-89,676,414
Multi-Risk	1,273,913,844	7.83	8.00	1,301,945,012	-28,031,168
Total	16,274,312,648	100.00	100.00	16,274,312,648	

STO Balance as of 09/30/2023: \$31,366,970.33; Total Fund balance with STO: \$16,305,679,618.33.

Total Fund Risk/Return Analysis

New Mexico PERA
Period Ending: September 30, 2023



Performance shown is net of fees.

Total Fund Asset Allocation & Performance

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
NM PERA Total Fund Net	16,274,312,648	100.00	-1.49	3.40	-1.49	7.52	6.08	5.11	6.00	5.91	8.47	Jun-85
NM PERA Total Fund Policy			-3.32	3.34	-3.32	9.97	3.21	3.32	4.60	5.05	8.16	
Value Added			1.83	0.06	1.83	-2.45	2.87	1.79	1.40	0.86	0.31	
NM PERA Actuarial Return			1.77	5.39	1.77	7.25	7.25	7.25	7.25	7.36	7.82	
Value Added			-3.26	-1.99	-3.26	0.27	-1.17	-2.14	-1.25	-1.45	0.65	
Global Equity Net	6,375,177,076	39.17	-0.70	7.00	-0.70	13.64	9.87	8.23	9.99	8.73	9.13	Apr-13
Global Equity Policy			-3.28	8.31	-3.28	18.69	6.39	5.66	8.12	7.91	8.43	
Value Added			2.58	-1.31	2.58	-5.05	3.48	2.57	1.87	0.82	0.70	
Credit Oriented Fixed Income Net	3,106,428,209	19.09	1.24	5.29	1.24	7.22	5.09	3.72	4.23	3.85	4.28	Apr-13
Credit Oriented Fixed Income Policy			0.52	5.49	0.52	12.63	0.17	1.80	2.65	3.26	3.30	
Value Added			0.72	-0.20	0.72	-5.41	4.92	1.92	1.58	0.59	0.98	
Risk Reduction & Mitigation Net	2,679,093,657	16.46	-3.36	-1.19	-3.36	0.44	-4.12	0.52	0.32	1.54	1.26	Apr-13
Risk Reduction & Mitigation Policy			-3.23	-1.21	-3.23	0.53	-5.11	0.10	-0.05	1.17	0.95	
Value Added			-0.13	0.02	-0.13	-0.09	0.99	0.42	0.37	0.37	0.31	
Real Assets Net	2,839,699,863	17.45	-1.51	-0.92	-1.51	2.81	11.72	6.12	5.89	5.79	5.62	Apr-13
Real Assets Policy			-5.71	-4.40	-5.71	1.17	8.15	3.30	3.86	3.82	3.99	
Value Added			4.20	3.48	4.20	1.64	3.57	2.82	2.03	1.97	1.63	
Multi-Risk Net	1,273,913,844	7.83	-7.43	1.83	-7.43	6.85	0.34	-	-	-	1.12	May-19
Wilshire Risk Parity Index - 15% Target Volatility			-7.45	1.95	-7.45	6.69	0.23	-	-	-	1.31	
Value Added			0.02	-0.12	0.02	0.16	0.11	-	-	-	-0.19	

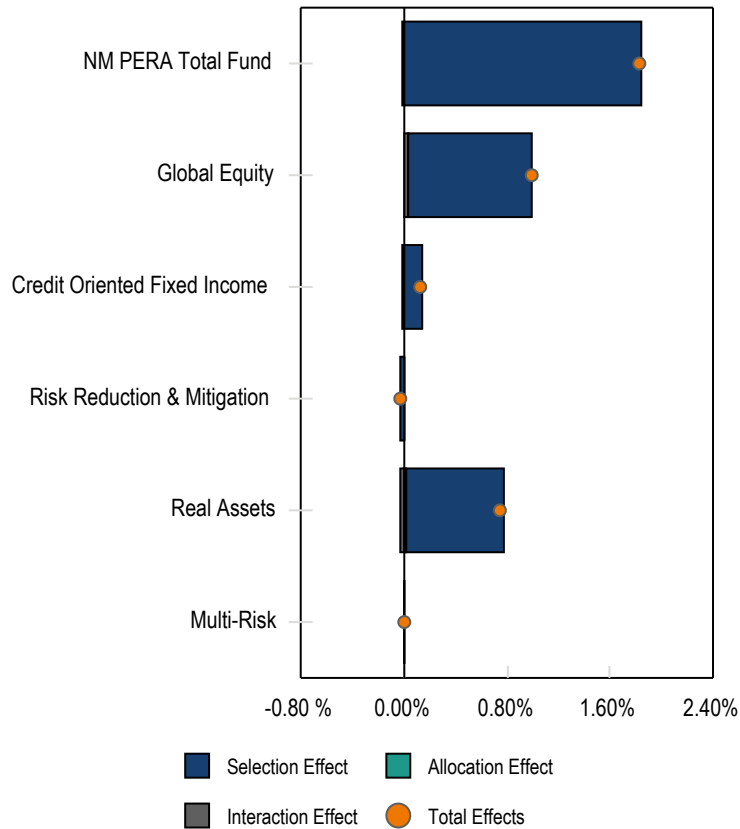
Fiscal year 06/30. Performance shown is net of fees.

Total Fund

Attribution Analysis - Asset Class Level (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023

Attribution Effects
Last Three Months



Performance Attribution

	Last 3 Mo.
Wtd. Actual Return	-1.49
Wtd. Index Return	-3.32
Excess Return	1.83
Selection Effect	1.85
Allocation Effect	0.00
Interaction Effect	-0.01

Attribution Summary
Last Three Months

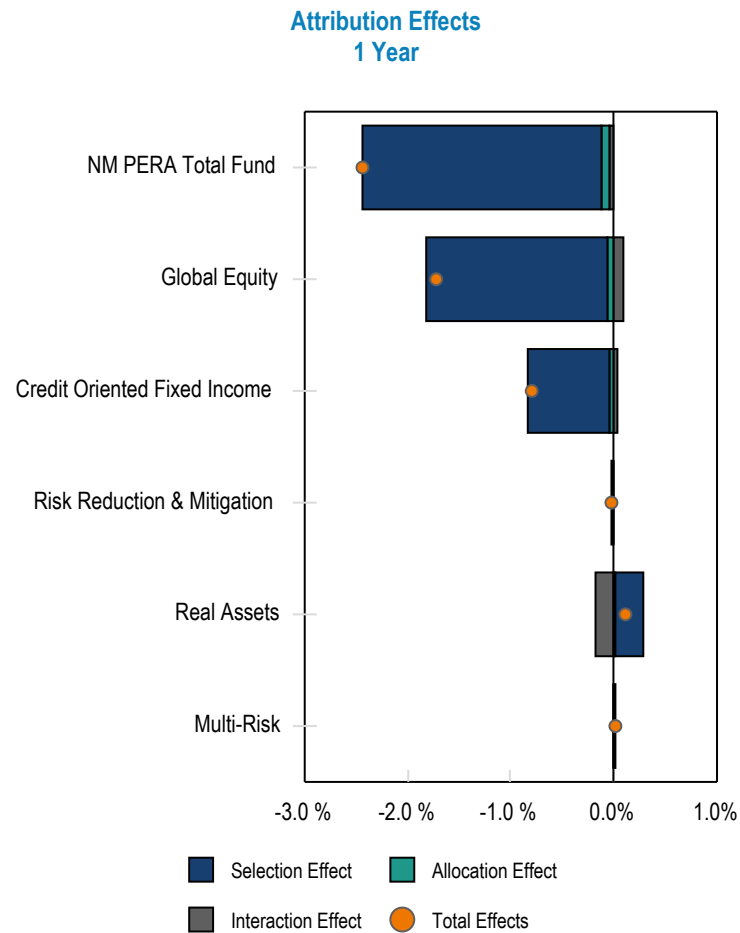
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Global Equity	-0.7	-3.3	2.6	1.0	0.0	0.0	1.0
Credit Oriented Fixed Income	1.2	0.5	0.7	0.1	0.0	0.0	0.1
Risk Reduction & Mitigation	-3.4	-3.2	-0.1	0.0	0.0	0.0	0.0
Real Assets	-1.5	-5.7	4.2	0.8	0.0	0.0	0.7
Multi-Risk	-7.4	-7.5	0.0	0.0	0.0	0.0	0.0
NM PERA Total Fund	-1.5	-3.3	1.8	1.8	0.0	0.0	1.8

Weighted returns shown in attribution analysis may differ from actual returns. Attribution analysis uses the Policy Target Asset Allocation Index. Fiscal year end 6/30. Attribution analysis excludes overlay impact. Performance shown is net of fees.

Total Fund

Attribution Analysis - Asset Class Level (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023



Performance Attribution

	1 Yr
Wtd. Actual Return	7.5
Wtd. Index Return	10.0
Excess Return	-2.4
Selection Effect	-2.3
Allocation Effect	-0.1
Interaction Effect	0.0

**Attribution Summary
1 Year**

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Global Equity	13.6	18.7	-5.0	-1.8	-0.1	0.1	-1.7
Credit Oriented Fixed Income	7.2	12.6	-5.4	-0.8	0.0	0.0	-0.8
Risk Reduction & Mitigation	0.4	0.5	-0.1	0.0	0.0	0.0	0.0
Real Assets	2.8	1.2	1.6	0.3	0.0	-0.2	0.1
Multi-Risk	6.9	6.7	0.2	0.0	0.0	0.0	0.0
NM PERA Total Fund	7.5	10.0	-2.4	-2.3	-0.1	0.0	-2.4

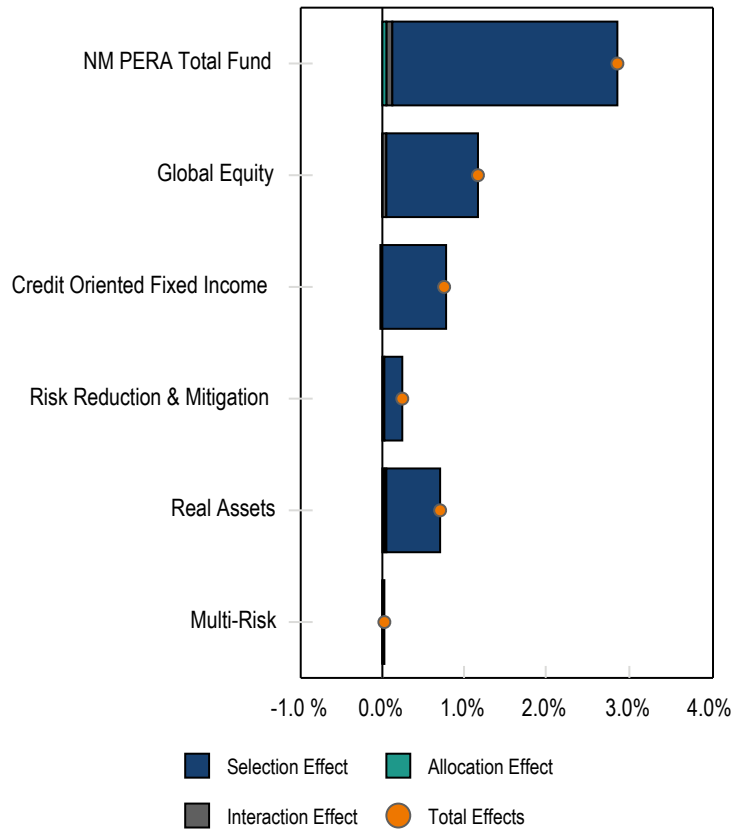
Weighted returns shown in attribution analysis may differ from actual returns. Attribution analysis uses the Policy Target Asset Allocation Index. Fiscal year end 6/30. Attribution analysis excludes overlay impact. Performance shown is net of fees.

Total Fund

Attribution Analysis - Asset Class Level (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023

Attribution Effects
Last Three Years



Performance Attribution

	3 Yrs
Wtd. Actual Return	6.1
Wtd. Index Return	3.2
Excess Return	2.9
Selection Effect	2.8
Allocation Effect	0.0
Interaction Effect	0.1

Attribution Summary
Last Three Years

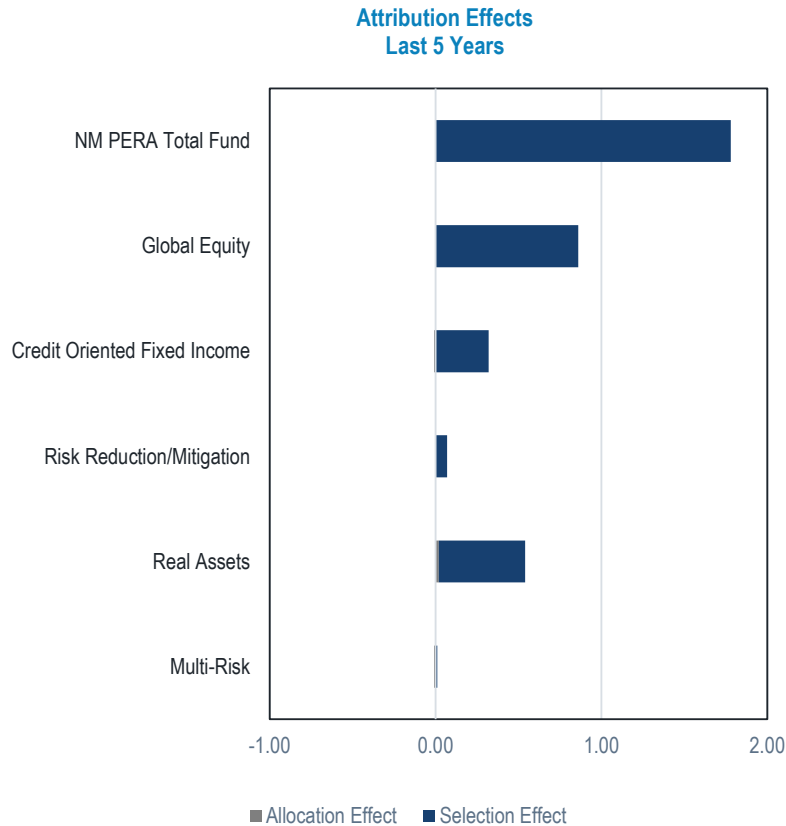
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Global Equity	9.9	6.4	3.5	1.1	0.0	0.0	1.2
Credit Oriented Fixed Income	5.1	0.2	4.9	0.8	0.0	0.0	0.8
Risk Reduction & Mitigation	-4.1	-5.1	1.0	0.2	0.0	0.0	0.2
Real Assets	11.7	8.2	3.6	0.6	0.0	0.0	0.7
Multi-Risk	0.3	0.2	0.1	0.0	0.0	0.0	0.0
NM PERA Total Fund	6.1	3.2	2.9	2.8	0.0	0.1	2.9

Weighted returns shown in attribution analysis may differ from actual returns. Attribution analysis uses the Policy Target Asset Allocation Index. Fiscal year end 6/30. Attribution analysis excludes overlay impact. Performance shown is net of fees.

Total Fund

Attribution Analysis - Asset Class Level (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023



Performance Attribution

	5 Yrs
Wtd. Actual Return	5.11
Wtd. Index Return	3.33
Excess Return	1.78
Selection Effect	1.78
Allocation Effect	0.00

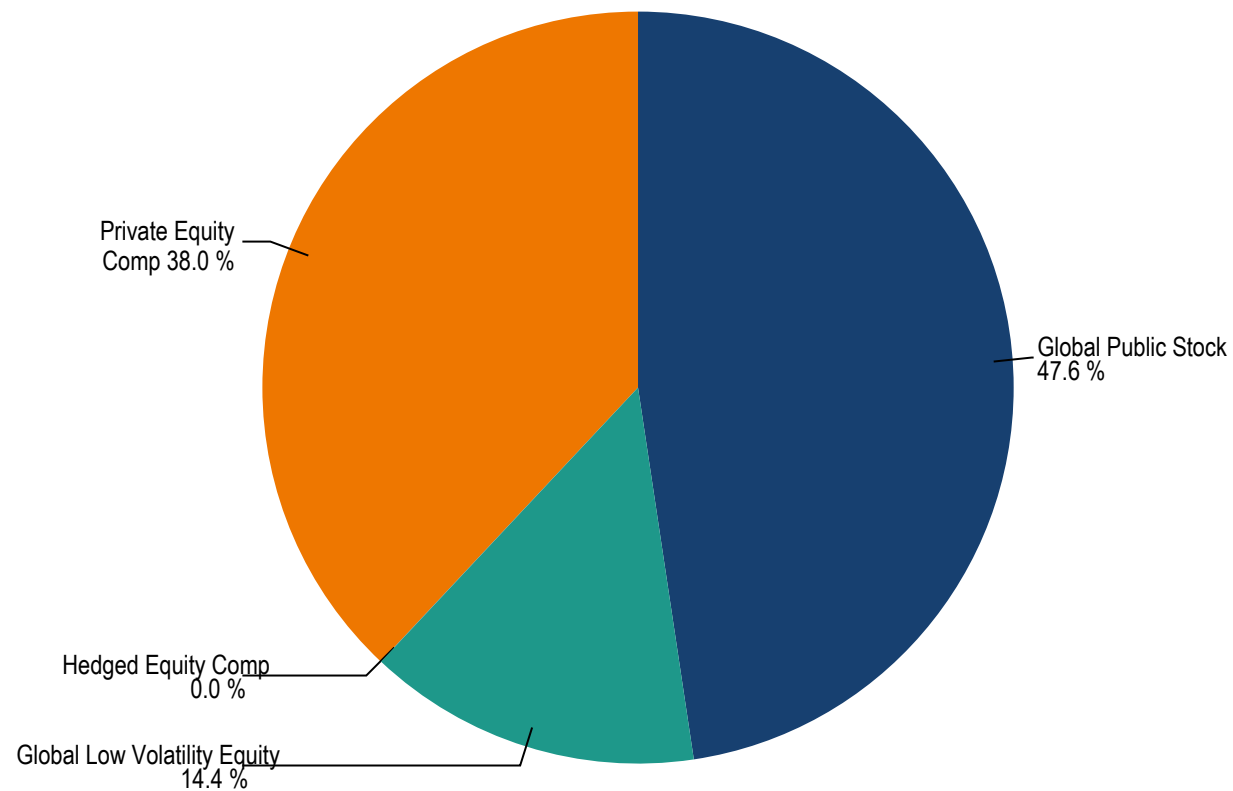
Attribution Summary Last Five Years

	Portfolio		Policy		Net Management Effects		
	Weight	Return	Weight	Return	Allocation	Selection	Total Effects
Global Equity	37.94	8.23	37.66	5.66	0.00	0.86	0.86
Risk Reduction/Mitigation	19.36	0.50	19.58	0.10	0.00	0.07	0.07
Credit Oriented Fixed Income	15.38	3.73	15.60	1.81	-0.01	0.32	0.31
Real Assets	20.02	6.11	19.70	3.33	0.02	0.52	0.54
Multi-Risk	7.30		7.46		-0.01	0.01	0.00
NM PERA Total Fund	100.00	5.11	100.00	3.33	0.00	1.78	1.78

Weighted returns shown in attribution analysis may differ from actual returns. Attribution analysis uses the Policy Target Asset Allocation Index. Fiscal year end 6/30. Attribution analysis excludes overlay impact. Performance shown is net of fees.

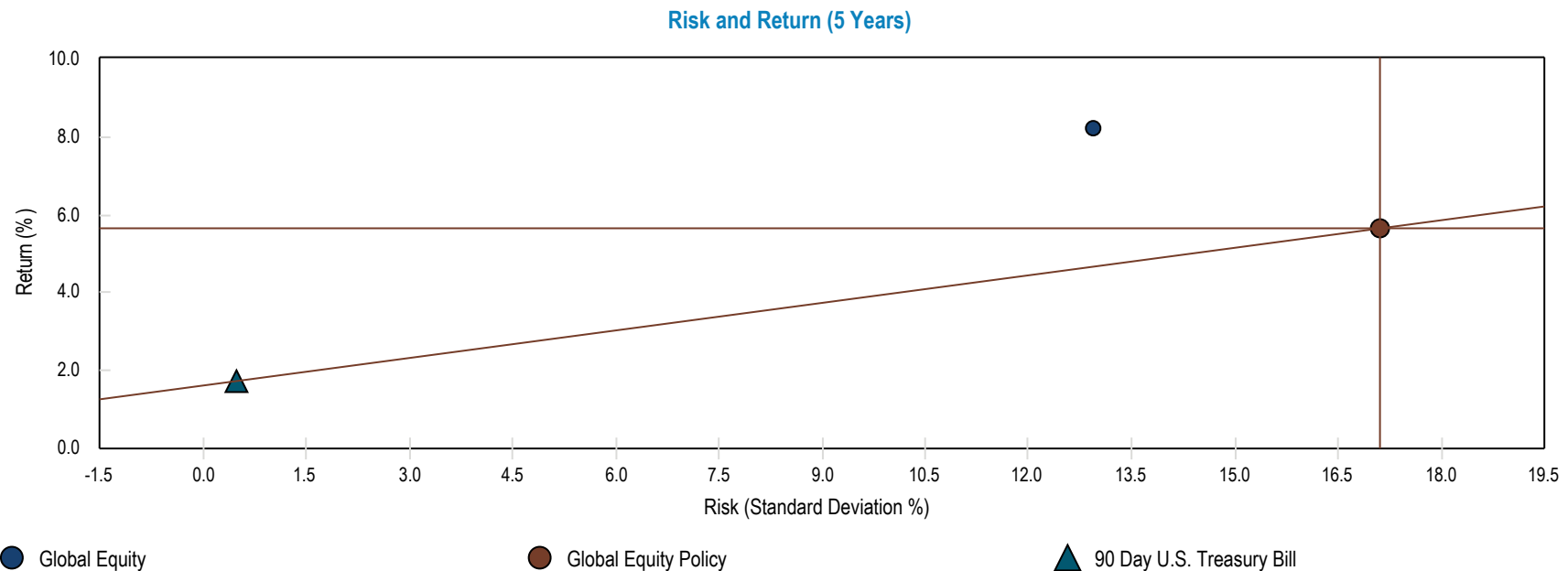
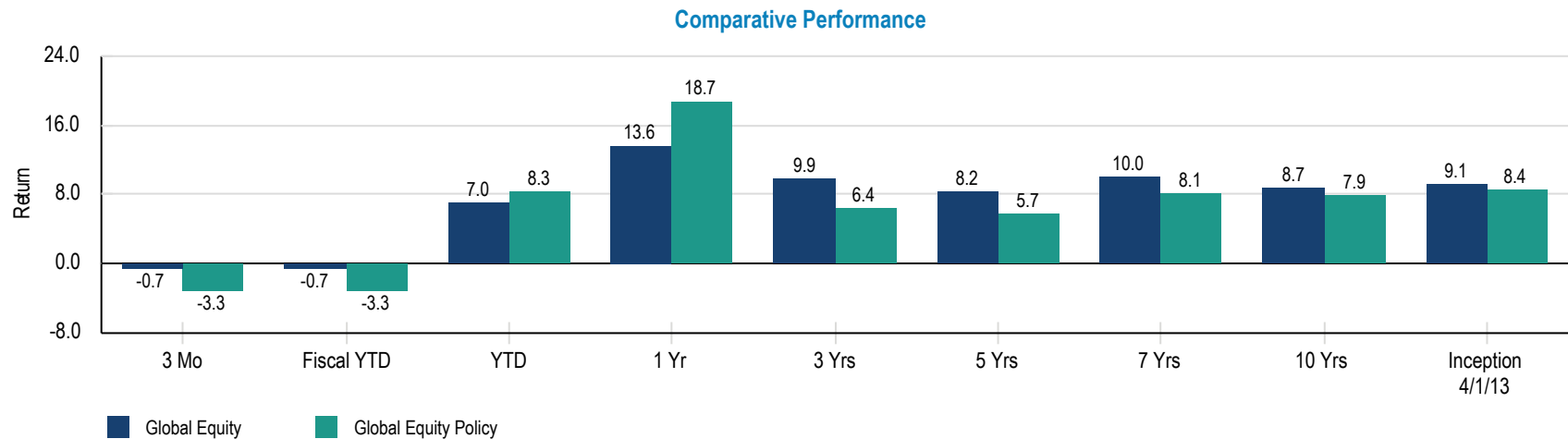
Global Equity

Current Quarter \$6,375,177,075.9



	Market Value \$	Allocation (%)
Global Public Stock	3,036,274,865	47.6
Global Low Volatility Equity	916,255,340	14.4
Hedged Equity Comp	816,318	0.0
Private Equity Comp	2,421,830,553	38.0

Performance shown is net of fees.



Performance shown is net of fees.

Global Equity Asset Allocation & Performance

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Global Equity Net	6,375,177,076	39.17	-0.70	7.00	-0.70	13.64	9.87	8.23	9.99	8.73	9.13	Apr-13
Global Equity Policy			-3.28	8.31	-3.28	18.69	6.39	5.66	8.12	7.91	8.43	
Value Added			2.58	-1.31	2.58	-5.05	3.48	2.57	1.87	0.82	0.70	
Global Public Stock Net	3,036,274,865	18.66	-3.18	9.93	-3.18	21.31	4.78	4.73	7.47	6.61	7.14	Oct-04
Global Public Stock Policy			-3.40	9.39	-3.40	20.16	6.88	6.09	8.32	7.66	7.55	
Value Added			0.22	0.54	0.22	1.15	-2.10	-1.36	-0.85	-1.05	-0.41	
Global Low Volatility Equity Net	916,255,340	5.63	-2.44	1.49	-2.44	10.14	3.50	4.03	-	-	6.39	Nov-16
MSCI AC World Minimum Volatility Index (Net)			-2.51	1.18	-2.51	9.76	3.24	3.71	-	-	5.97	
Value Added			0.07	0.31	0.07	0.38	0.26	0.32	-	-	0.42	
Hedged Equity Comp Net	816,318	0.01	-0.18	28.40	-0.18	25.71	5.85	2.49	5.06	4.14	4.40	Apr-13
Hedged Equity Policy			-2.51	1.18	-2.51	9.76	3.24	3.71	5.42	4.92	4.94	
Value Added			2.33	27.22	2.33	15.95	2.61	-1.22	-0.36	-0.78	-0.54	
Private Equity Comp Net	2,421,830,553	14.88	3.31	5.40	3.31	6.54	22.19	17.98	17.40	17.23	8.91	Dec-06
Private Equity Comp Policy			-3.40	9.39	-3.40	20.16	6.88	5.84	9.50	9.73	7.93	
Value Added			6.71	-3.99	6.71	-13.62	15.31	12.14	7.90	7.50	0.98	

Fiscal year 06/30. Performance shown is net of fees.

Global Equity

Asset Allocation & Performance - Managers

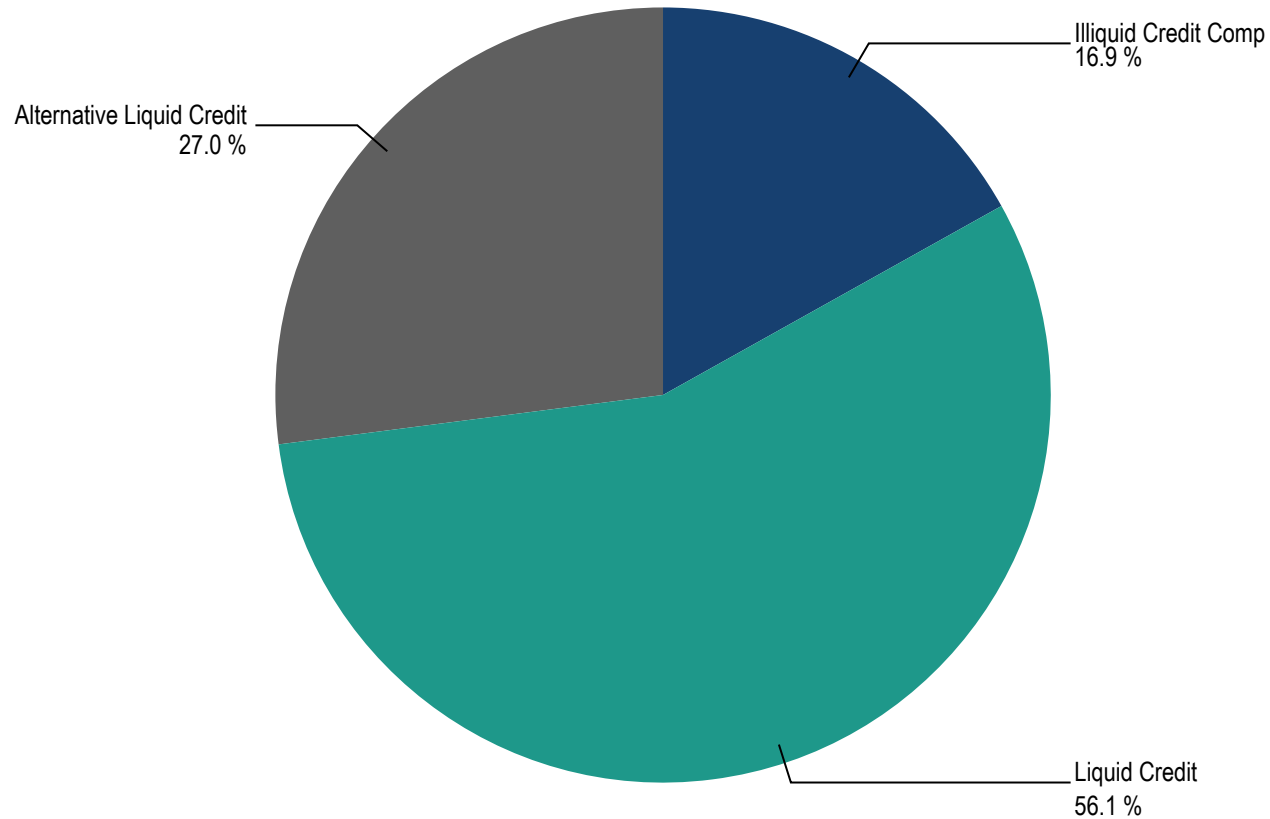
New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
SSGA ACWI IMI Net	667,394,590	4.10	-3.25	10.04	-3.25	21.09	7.63	6.73	8.91	-	8.91	Oct-16
MSCI AC World IMI (Net)			-3.40	9.39	-3.40	20.16	6.88	6.09	8.32	-	8.32	
Value Added			0.15	0.65	0.15	0.93	0.75	0.64	0.59	-	0.59	
SSGA R1000 Index Net	1,057,719,287	6.50	-3.13	12.99	-3.13	21.48	-	-	-	-	-2.56	Dec-21
Russell 1000 Index			-3.15	13.01	-3.15	21.19	-	-	-	-	-2.71	
Value Added			0.02	-0.02	0.02	0.29	-	-	-	-	0.15	
Kayne Andrsn Rdnick SmCap Core Net	282,817,418	1.74	-0.89	15.87	-0.89	25.39	11.92	10.98	-	-	10.30	Sep-18
Russell 2000 Index			-5.13	2.54	-5.13	8.93	7.16	2.40	-	-	1.87	
Value Added			4.24	13.33	4.24	16.46	4.76	8.58	-	-	8.43	
Acadian Intl Equity Net	264,371,733	1.62	-2.37	2.99	-2.37	18.28	3.88	2.70	-	-	2.59	May-18
MSCI EAFE (Net)			-4.11	7.08	-4.11	25.65	5.75	3.24	-	-	2.57	
Value Added			1.74	-4.09	1.74	-7.37	-1.87	-0.54	-	-	0.02	
MFS Intl Intrinsic Val Eq exUS Net	215,567,113	1.32	-4.35	7.79	-4.35	20.57	-1.26	2.96	4.73	5.38	7.28	Apr-10
MSCI EAFE (Net)			-4.11	7.08	-4.11	25.65	5.75	3.24	5.29	3.82	4.71	
Value Added			-0.24	0.71	-0.24	-5.08	-7.01	-0.28	-0.56	1.56	2.57	
Axiom Emerging Mkts Eqty Net	241,395,157	1.48	-3.98	-1.25	-3.98	5.11	-7.57	-	-	-	1.37	Jan-19
MSCI Emerging Markets (Net)			-2.93	1.82	-2.93	11.70	-1.73	-	-	-	2.24	
Value Added			-1.05	-3.07	-1.05	-6.59	-5.84	-	-	-	-0.87	
Alliance Bernstein Gbl Core Eq Net	268,033,555	1.65	-3.38	9.77	-3.38	23.31	-	-	-	-	3.35	Jun-22
MSCI AC World IMI (Net)			-3.40	9.39	-3.40	20.16	-	-	-	-	1.88	
Value Added			0.02	0.38	0.02	3.15	-	-	-	-	1.47	
Parametric Gbl Eqty Ovly	35,062,797	0.22	-14.79	4.36	-14.79	49.69	-5.09	-11.44	2.48	-	6.55	Jul-16
MSCI AC World IMI (Net)			-3.40	9.39	-3.40	20.16	6.88	6.09	8.32	-	8.83	
Value Added			-11.39	-5.03	-11.39	29.53	-11.97	-17.53	-5.84	-	-2.28	
Portable Alpha	2,393,606	0.01	-2.23	-7.00	-2.23	-8.87	-0.67	0.25	2.46	2.20	-29.47	Oct-07
Portable Alpha Custom Benchmark			-3.03	13.92	-3.03	22.83	11.25	11.02	13.36	13.03	9.92	
Value Added			0.80	-20.92	0.80	-31.70	-11.92	-10.77	-10.90	-10.83	-39.39	

Fiscal year 06/30. Performance shown is net of fees.

Credit Oriented Fixed Income

Current Quarter \$3,106,428,208.8

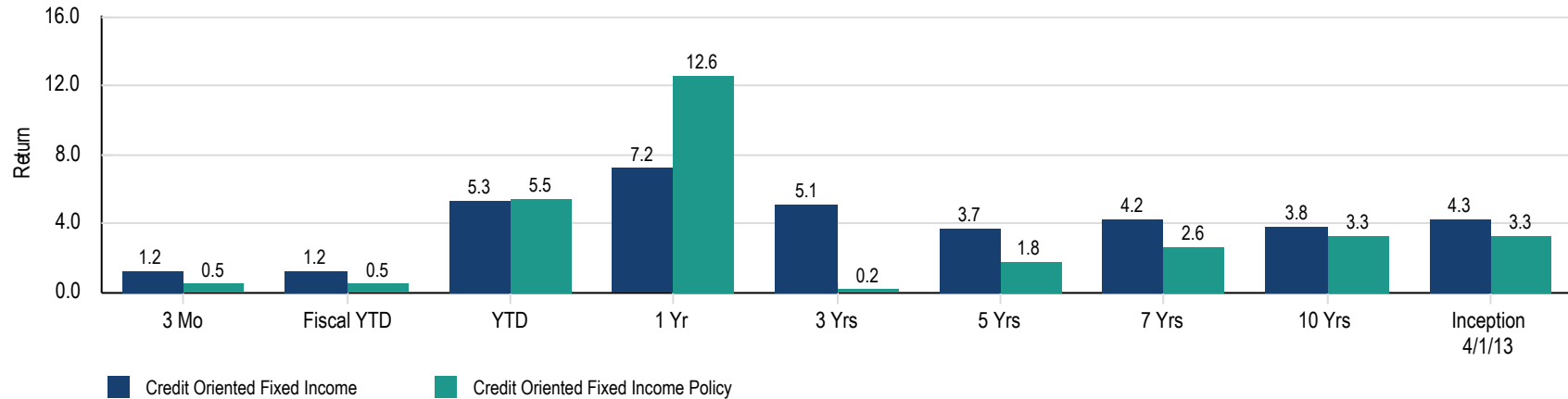


	Market Value \$	Allocation (%)
■ Illiquid Credit Comp	524,570,849	16.9
■ Liquid Credit	1,742,004,703	56.1
■ Alternative Liquid Credit	839,852,657	27.0

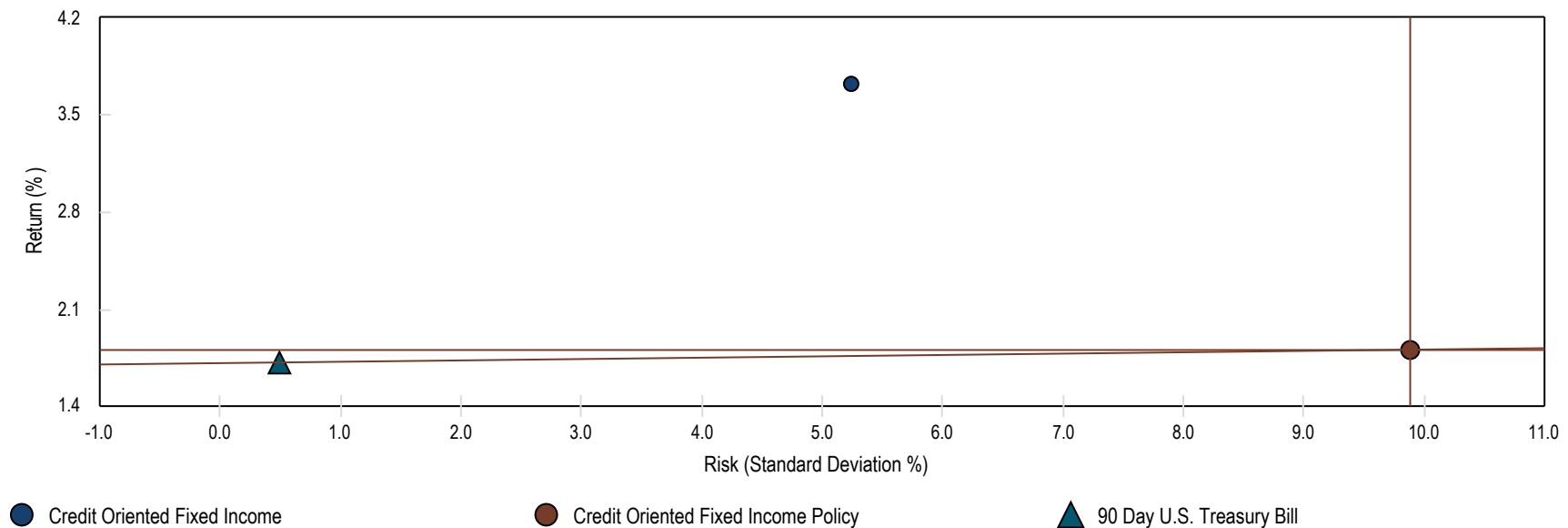
Credit Oriented Fixed Income Risk/Return Analysis

New Mexico PERA
Period Ending: September 30, 2023

Comparative Performance



Risk and Return (5 Years)



Performance shown is net of fees.

Credit Oriented Fixed Income
Asset Allocation & Performance - Composites

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Credit Oriented Fixed Income Net	3,106,428,209	19.09	1.24	5.29	1.24	7.22	5.09	3.72	4.23	3.85	4.28	Apr-13
<i>Credit Oriented Fixed Income Policy</i>			0.52	5.49	0.52	12.63	0.17	1.80	2.65	3.26	3.30	
<i>Value Added</i>			0.72	-0.20	0.72	-5.41	4.92	1.92	1.58	0.59	0.98	
Liquid Credit Net	1,742,004,703	10.70	0.13	4.61	0.13	13.39	0.34	0.51	2.12	2.30	1.92	Apr-13
<i>Liquid Credit Policy</i>			0.52	5.49	0.52	12.21	0.91	2.16	2.87	3.49	3.52	
<i>Value Added</i>			-0.39	-0.88	-0.39	1.18	-0.57	-1.65	-0.75	-1.19	-1.60	
Alternative Liquid Credit Net	839,852,657	5.16	4.04	8.91	4.04	8.20	11.13	-	-	-	13.31	May-20
<i>Bloomberg Global High Yield Indx (Hedged)</i>			0.52	5.49	0.52	12.21	0.91	-	-	-	3.91	
<i>Value Added</i>			3.52	3.42	3.52	-4.01	10.22	-	-	-	9.40	
Illiquid Credit Comp Net	524,570,849	3.22	-0.08	0.10	-0.08	2.77	9.54	5.74	7.08	6.75	7.18	Dec-06
<i>Illiquid Credit Comp Policy</i>			0.52	5.49	0.52	12.21	0.91	2.16	3.69	3.79	5.80	
<i>Value Added</i>			-0.60	-5.39	-0.60	-9.44	8.63	3.58	3.39	2.96	1.38	

Fiscal year 06/30. Performance shown is net of fees.

Credit Oriented Fixed Income
Asset Allocation & Performance - Managers

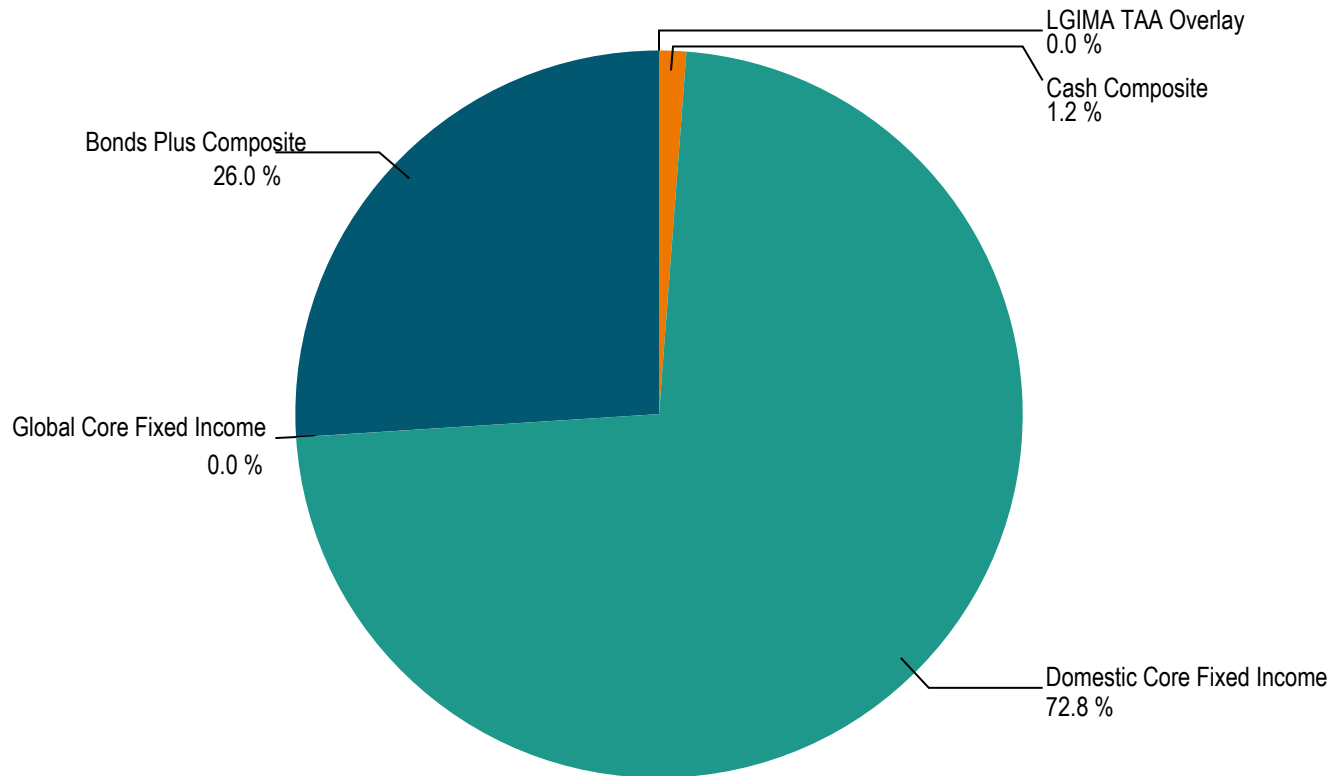
New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
PineBridge High Yield Net	1,545,252,677	9.50	0.36	4.75	0.36	12.14	-0.06	1.86	-	-	1.86	Oct-18
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	2.24	-	-	2.24	
Value Added			-0.16	-0.74	-0.16	-0.07	-0.97	-0.38	-	-	-0.38	
Eagle Point CLO Eqty I LLC	8,236,633	0.05	-1.01	4.51	-1.01	4.51	15.09	3.87	-	-	4.16	Feb-18
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	2.24	-	-	1.95	
Value Added			-1.53	-0.98	-1.53	-7.70	14.18	1.63	-	-	2.21	
Eagle Point Credit Onshore LP	82,439,738	0.51	11.18	13.58	11.18	5.37	-	-	-	-	2.43	Jun-22
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	-	-	-	-	2.21	
Value Added			10.66	8.09	10.66	-6.84	-	-	-	-	0.22	
Ellington Enh Income A LLC	172,258,330	1.06	5.11	10.64	5.11	11.26	6.83	3.90	-	-	4.03	Jan-17
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	2.24	-	-	2.94	
Value Added			4.59	5.15	4.59	-0.95	5.92	1.66	-	-	1.09	
Mudrick Stressed Cr A LP	166,359,635	1.02	2.11	2.59	2.11	0.95	11.05	2.84	5.20	-	4.71	Nov-15
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	2.24	2.97	-	3.95	
Value Added			1.59	-2.90	1.59	-11.26	10.14	0.60	2.23	-	0.76	
Napier Park C	38,374,753	0.24	-1.03	-0.09	-1.03	2.63	7.07	-	-	-	8.29	Aug-20
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	-	-	-	0.84	
Value Added			-1.55	-5.58	-1.55	-9.58	6.16	-	-	-	7.45	
SixthSt Wheeler Pk Cr I LLC	159,968,675	0.98	3.29	14.79	3.29	14.78	6.89	-	-	-	8.33	Apr-20
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	-	-	-	5.10	
Value Added			2.77	9.30	2.77	2.57	5.98	-	-	-	3.23	
Parametric Credit Ovly Net	196,754,511	1.21	-0.99	4.23	-0.99	18.70	2.92	-	-	-	4.28	May-19
Bloomberg Global High Yield Indx (Hedged)			0.52	5.49	0.52	12.21	0.91	-	-	-	1.56	
Value Added			-1.51	-1.26	-1.51	6.49	2.01	-	-	-	2.72	

Fiscal year 06/30. Performance shown is net of fees.

Risk Reduction & Mitigation

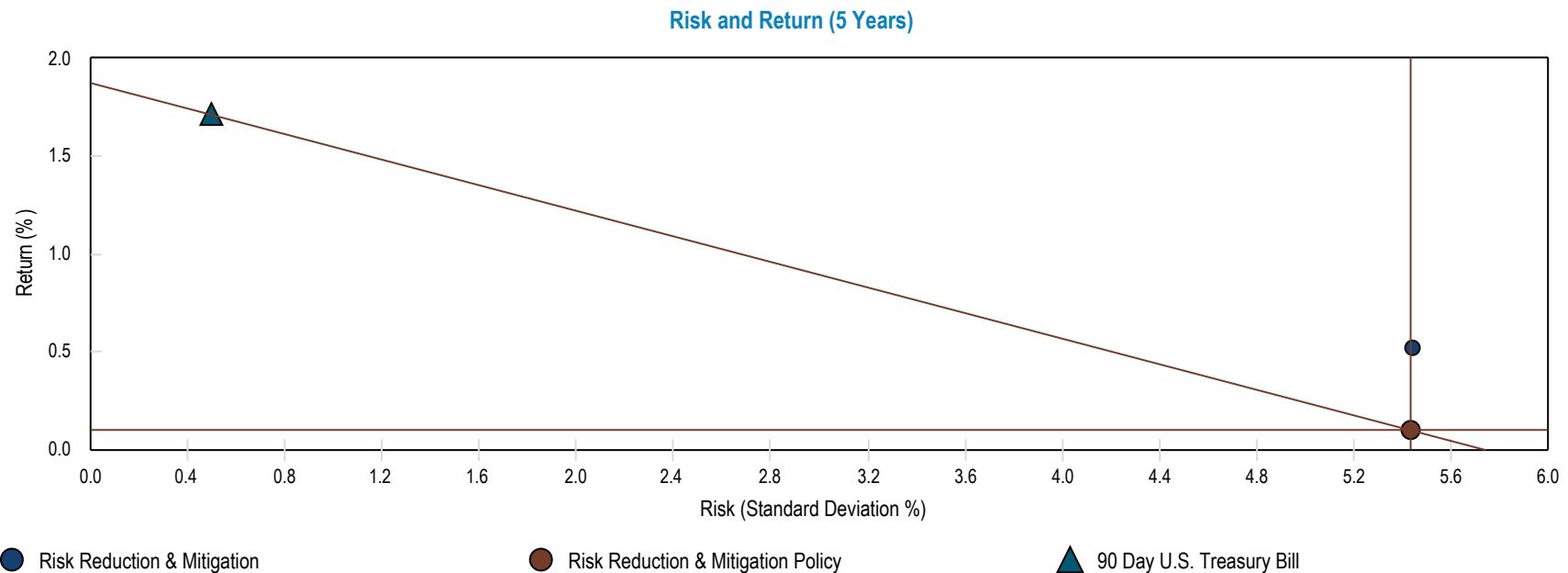
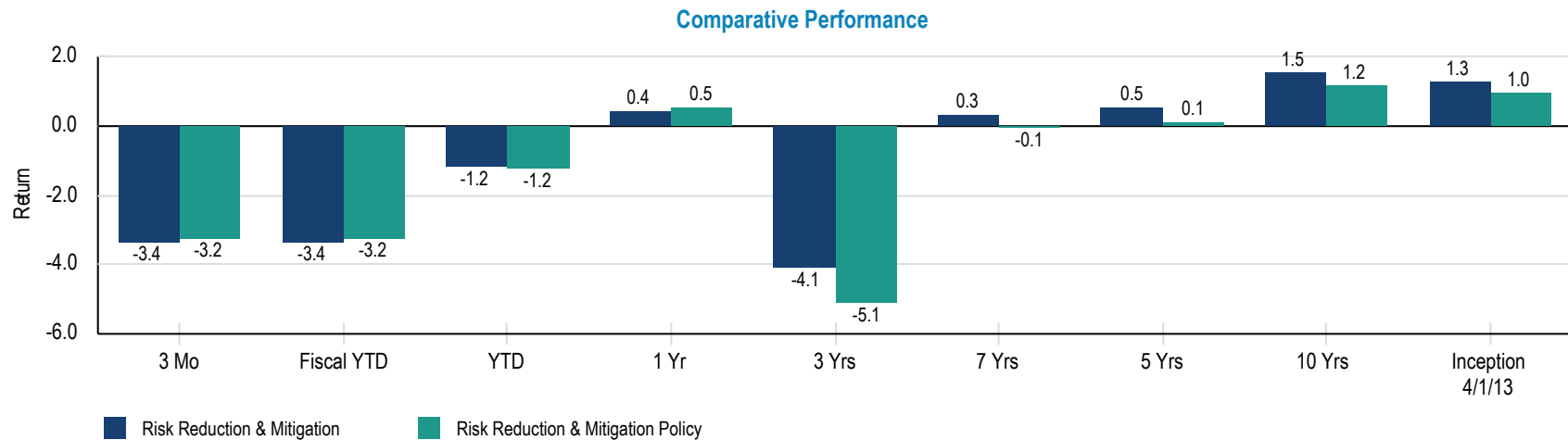
Current Quarter \$2,679,093,656.8



	Market Value \$	Allocation (%)
■ LGIMA TAA Overlay	11	0.0
■ Cash Composite	32,180,054	1.2
■ Domestic Core Fixed Income	1,949,736,819	72.8
■ Global Core Fixed Income	151,061	0.0
■ Bonds Plus Composite	697,025,712	26.0

Risk Reduction & Mitigation Risk/Return Analysis

New Mexico PERA
Period Ending: September 30, 2023



Performance shown is net of fees.

Risk Reduction & Mitigation Asset Allocation & Performance - Composites

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Risk Reduction & Mitigation Net	2,679,093,657	16.46	-3.36	-1.19	-3.36	0.44	-4.12	0.52	0.32	1.54	1.26	Apr-13
<i>Risk Reduction & Mitigation Policy</i>			-3.23	-1.21	-3.23	0.53	-5.11	0.10	-0.05	1.17	0.95	
<i>Value Added</i>			-0.13	0.02	-0.13	-0.09	0.99	0.42	0.37	0.37	0.31	
Domestic Core Fixed Income Net	1,949,736,819	11.98	-2.88	-0.76	-2.88	0.57	-5.35	0.14	-0.02	1.28	6.03	Jun-85
<i>Blmbg. U.S. Aggregate Index</i>			-3.23	-1.21	-3.23	0.64	-5.21	0.10	-0.09	1.13	5.67	
<i>Value Added</i>			0.35	0.45	0.35	-0.07	-0.14	0.04	0.07	0.15	0.36	
Bonds Plus Composite Net	697,025,712	4.28	-3.54	-2.19	-3.54	-0.50	-0.45	-	-	-	-1.01	Dec-19
<i>Blmbg. U.S. Aggregate Index</i>			-3.23	-1.21	-3.23	0.64	-5.21	-	-	-	-2.46	
<i>Value Added</i>			-0.31	-0.98	-0.31	-1.14	4.76	-	-	-	1.45	
Cash Composite Net	32,180,054	0.20	-13.05	1.10	-13.05	4.99	4.45	4.89	4.32	3.19	4.75	Mar-89
<i>ICE BofA 3 Month U.S. T-Bill</i>			1.31	3.60	1.31	4.47	1.70	1.72	1.55	1.11	2.92	
<i>Value Added</i>			-14.36	-2.50	-14.36	0.52	2.75	3.17	2.77	2.08	1.83	
Global Core Fixed Income	151,061	0.00										

Fiscal year 06/30. Performance shown is net of fees.

Risk Reduction & Mitigation

Asset Allocation & Performance - Managers

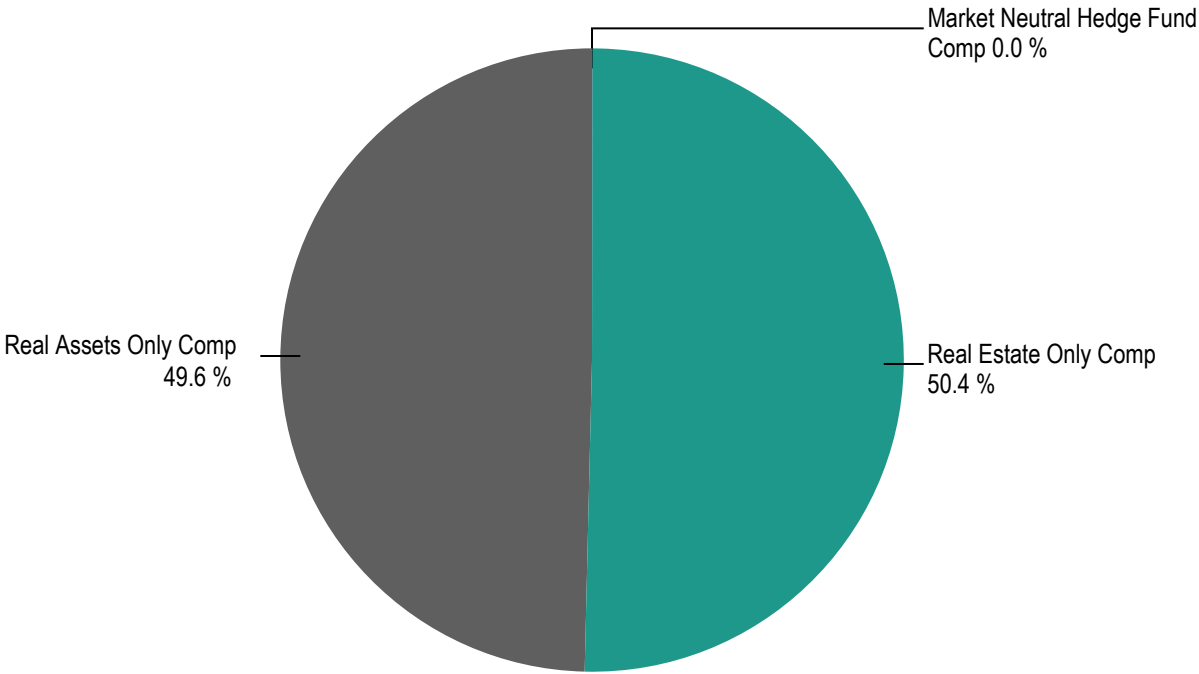
New Mexico PERA
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Blackrock US Agg Bond Index Net	1,779,701,463	10.94	-3.15	-	-3.15	-	-	-	-	-	-3.92	Apr-23
Blmbg. U.S. Aggregate Index			-3.23	-	-3.23	-	-	-	-	-	-4.05	
Value Added			0.08	-	0.08	-	-	-	-	-	0.13	
Dorsal Capital Partners LP	99,094,301	0.61	1.88	11.15	1.88	11.20	4.41	-	-	-	5.20	Jun-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.22	
Value Added			0.42	6.99	0.42	5.85	2.01	-	-	-	2.98	
Elliott Associates LP	114,558,891	0.70	1.10	2.14	1.10	3.28	9.18	-	-	-	8.81	Dec-19
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.16	
Value Added			-0.36	-2.02	-0.36	-2.07	6.78	-	-	-	6.65	
Garda FI Rel Val Oppty Ltd	67,999,522	0.42	3.22	10.72	3.22	14.35	9.62	-	-	-	9.66	Jun-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.22	
Value Added			1.76	6.56	1.76	9.00	7.22	-	-	-	7.44	
Glazer Enhanced LP	60,386,800	0.37	2.28	5.92	2.28	9.25	14.65	-	-	-	16.75	Jun-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.22	
Value Added			0.82	1.76	0.82	3.90	12.25	-	-	-	14.53	
Millennium USA LP	122,807,525	0.75	4.08	8.02	4.08	9.81	12.23	-	-	-	11.88	Sep-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.35	
Value Added			2.62	3.86	2.62	4.46	9.83	-	-	-	9.53	
Pac Allnce Asia Opp IV LP	28,907,952	0.18	-2.62	-8.04	-2.62	-8.67	-1.17	-	-	-	-0.37	Jun-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.22	
Value Added			-4.08	-12.20	-4.08	-14.02	-3.57	-	-	-	-2.59	
Pharo Gaia Ltd	1,626,319	0.01	0.00	-0.07	0.00	-4.18	-8.33	-	-	-	-5.90	May-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.18	
Value Added			-1.46	-4.23	-1.46	-9.53	-10.73	-	-	-	-8.08	
Systematica Alt Mkts LP CIB	86,241,194	0.53	3.57	-3.37	3.57	-3.26	14.56	-	-	-	11.88	Jun-20
SOFR + Libor Blend			1.46	4.16	1.46	5.35	2.40	-	-	-	2.22	
Value Added			2.11	-7.53	2.11	-8.61	12.16	-	-	-	9.66	
Two Sigma Abs Return LP	69,346,951	0.43	-0.30	4.22	-0.30	5.04	-	-	-	-	8.09	May-21
SOFR + Libor Blend			1.46	4.16	1.46	5.35	-	-	-	-	2.86	
Value Added			-1.76	0.06	-1.76	-0.31	-	-	-	-	5.23	
Parametric Bonds Plus	46,056,258	0.28	-4.54	-4.92	-4.54	-4.08	-7.23	-	-	-	-4.32	Jan-20
BlackRock Core	288	0.00										
BlackRock Glb Fixed Income	151,061	0.00										

Fiscal year 06/30. Performance shown is net of fees.

Real Assets

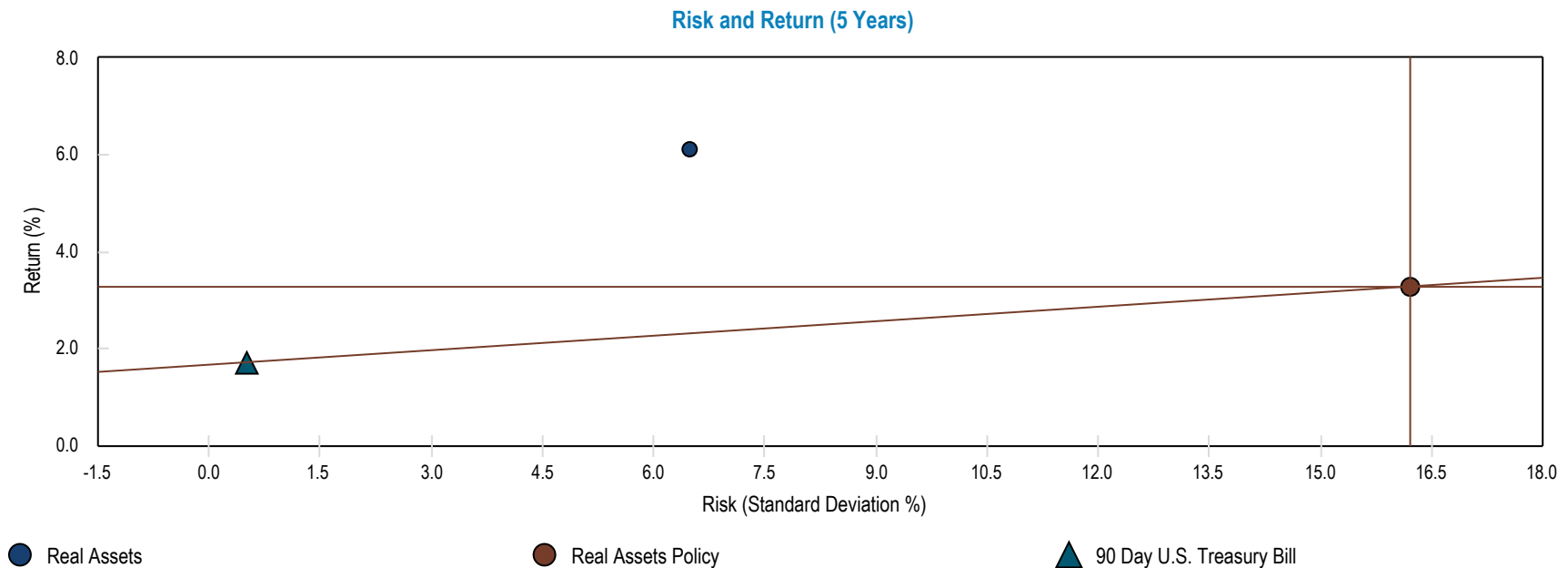
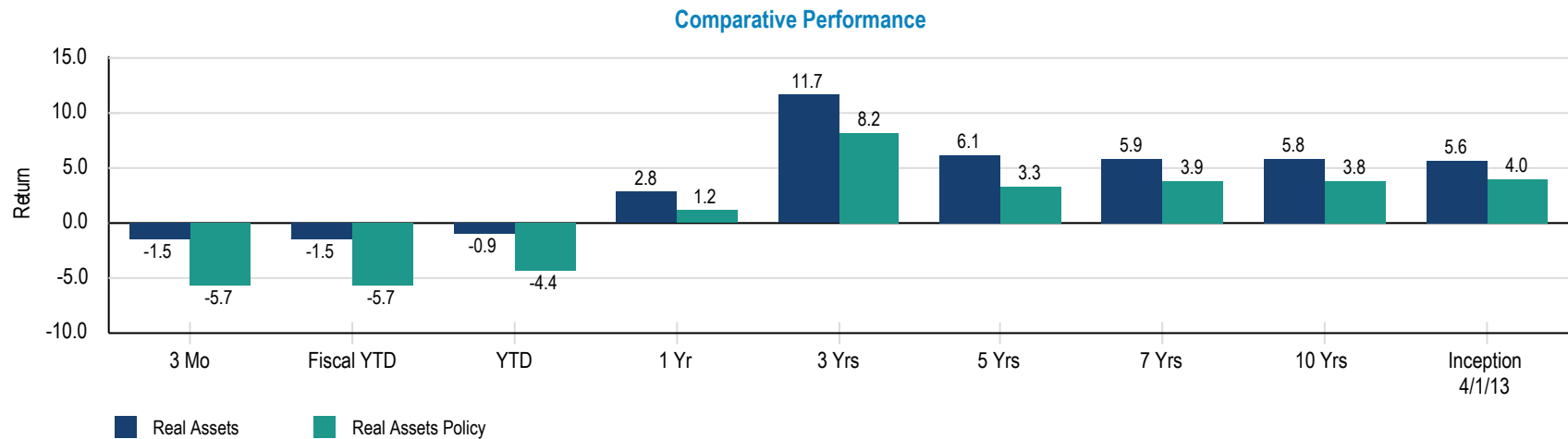
Current Quarter \$2,839,699,862.8



	Market Value \$	Allocation (%)
■ Market Neutral Hedge Fund Comp	639,712	0.0
■ Real Estate Only Comp	1,430,032,280	50.4
■ Real Assets Only Comp	1,409,027,870	49.6

Real Assets Risk/Return Analysis

New Mexico PERA
Period Ending: September 30, 2023



Performance shown is net of fees.

Real Assets

Asset Allocation & Performance - Preliminary

New Mexico PERA

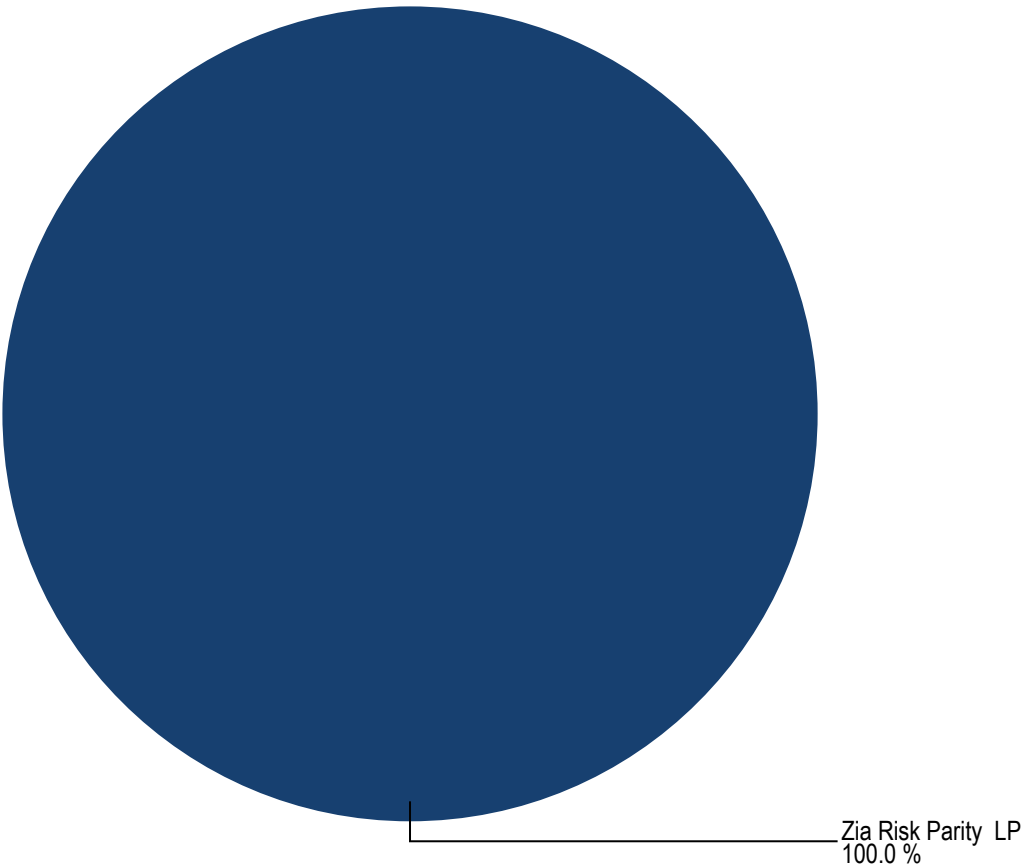
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Real Assets Net	2,839,699,863	17.45	-1.51	-0.92	-1.51	2.81	11.72	6.12	5.89	5.79	5.62	Apr-13
Real Assets Policy			-5.71	-4.40	-5.71	1.17	8.15	3.30	3.86	3.82	3.99	
Value Added			4.20	3.48	4.20	1.64	3.57	2.82	2.03	1.97	1.63	
Illiquid Real Estate Comp Net	1,429,745,345	8.79	-2.96	-5.54	-2.96	-2.85	11.11	8.14	8.75	10.82	7.16	Jul-07
Wilshire Global REIT Total Return Index			-5.73	-1.14	-5.73	4.60	4.30	1.42	1.74	4.61	3.28	
Value Added			2.77	-4.40	2.77	-7.45	6.81	6.72	7.01	6.21	3.88	
Liquid Real Assets Comp Net	157,457,015	0.97	-6.54	-2.57	-6.54	0.58	7.13	2.42	1.16	-1.14	0.28	Sep-09
Liquid Real Assets Policy			-7.94	-6.22	-7.94	-1.15	9.73	3.84	2.15	0.01	6.43	
Value Added			1.40	3.65	1.40	1.73	-2.60	-1.42	-0.99	-1.15	-6.15	
Illiquid Real Assets Comp Net	1,251,570,856	7.69	0.82	4.89	0.82	9.61	14.53	6.61	7.39	5.89	-6.60	Jan-07
Illiquid Real Assets Policy			-4.88	-6.74	-4.88	-1.13	9.79	3.99	4.66	1.81	-	
Value Added			5.70	11.63	5.70	10.74	4.74	2.62	2.73	4.08	-	
Market Neutral Hedge Fund Comp	639,712	0.00	-1.60	-1.36	-1.60	-0.71	1.99	1.15	0.68	1.61	1.49	Apr-13
LIBOR +2% 1M Lag			1.88	5.48	1.88	7.13	4.13	4.03	3.90	3.44	3.38	
Value Added			-3.48	-6.84	-3.48	-7.84	-2.14	-2.88	-3.22	-1.83	-1.89	
Liquid Real Estate Comp	286,935	0.00										

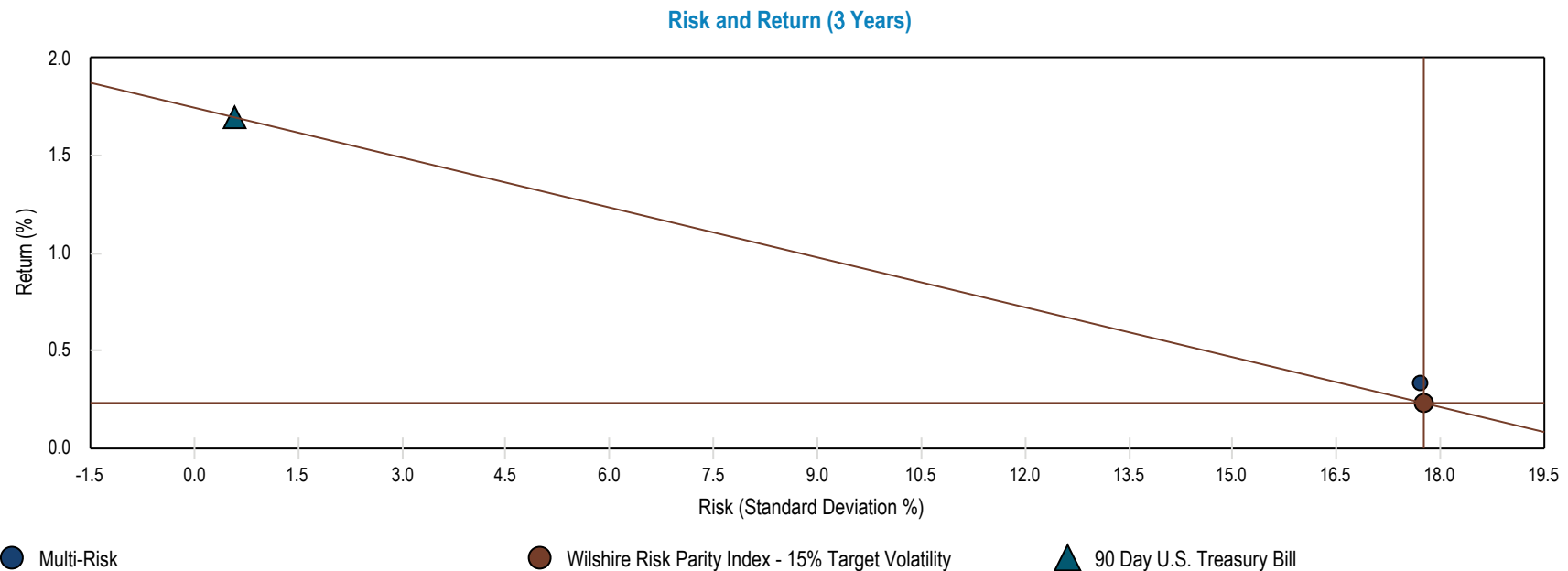
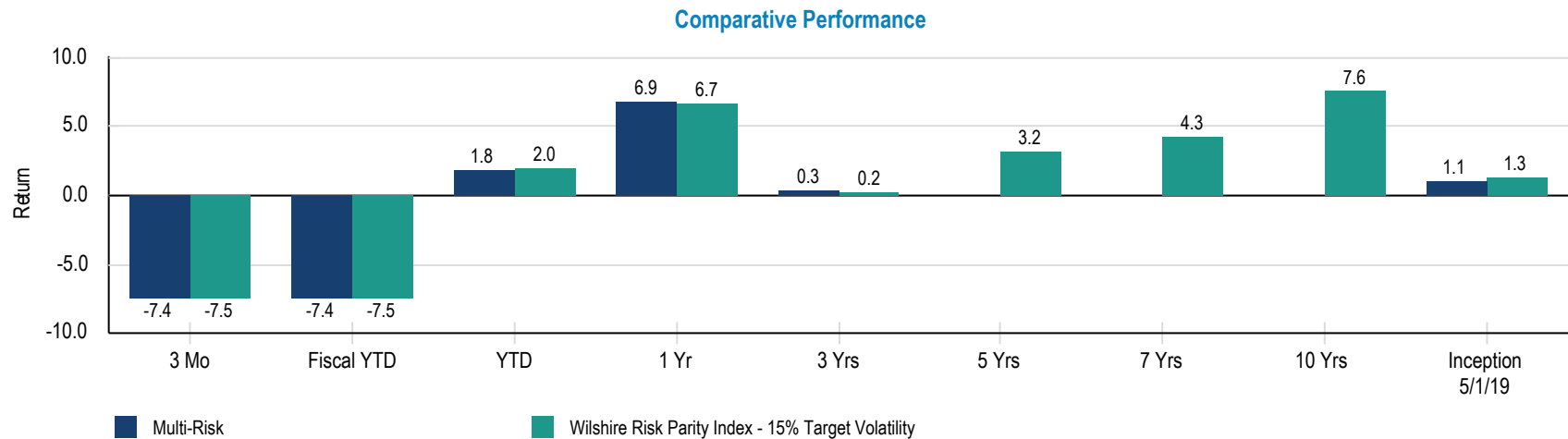
Fiscal year 06/30. Performance shown is net of fees.

Multi-Risk

Current Quarter \$1,273,913,843.6



	Market Value	Allocation
	\$	(%)
■ Zia Risk Parity LP	1,273,913,844	100.0



Performance shown is net of fees.

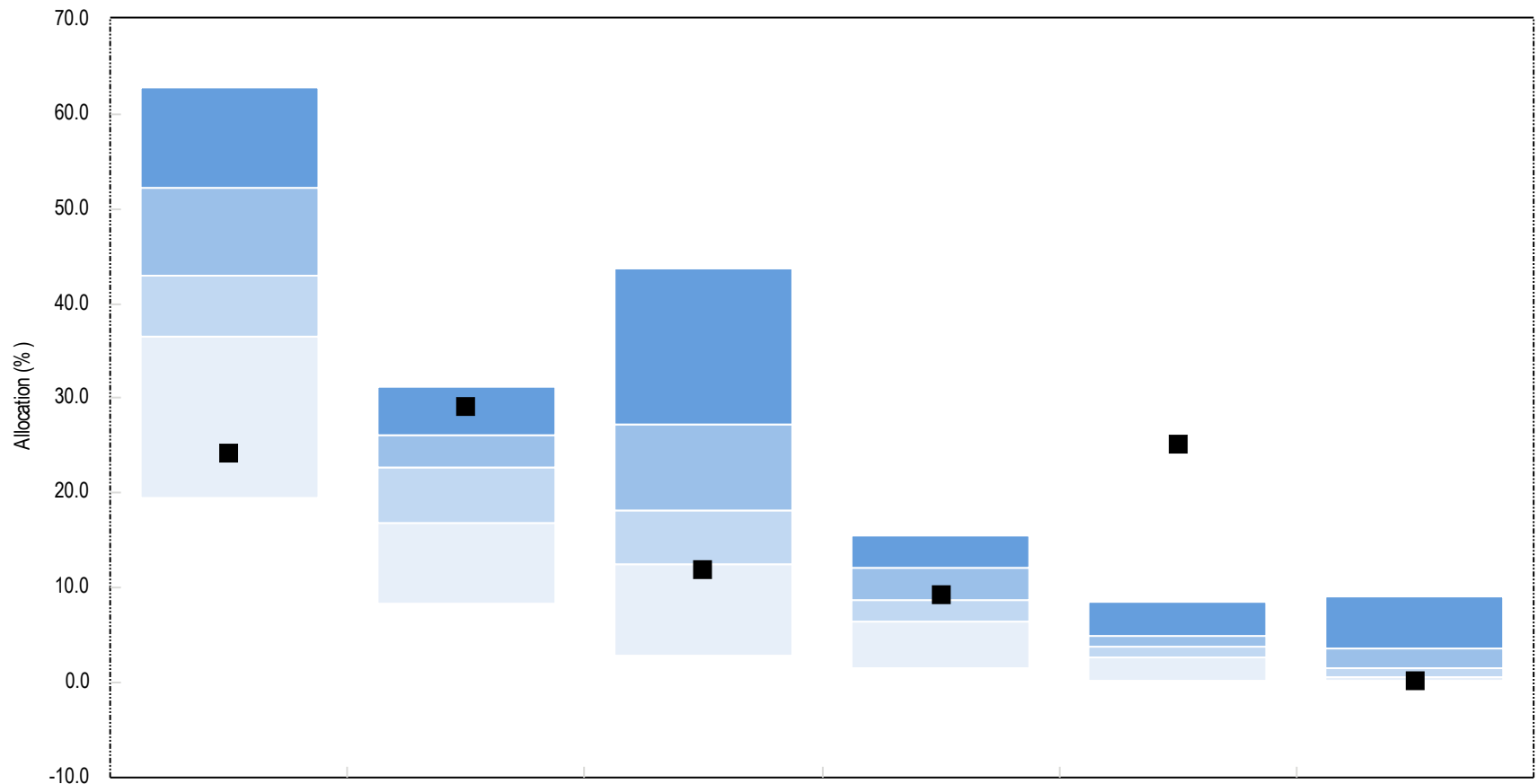
Peer Review

Total Fund

Peer Universe Comparison: Asset Allocation

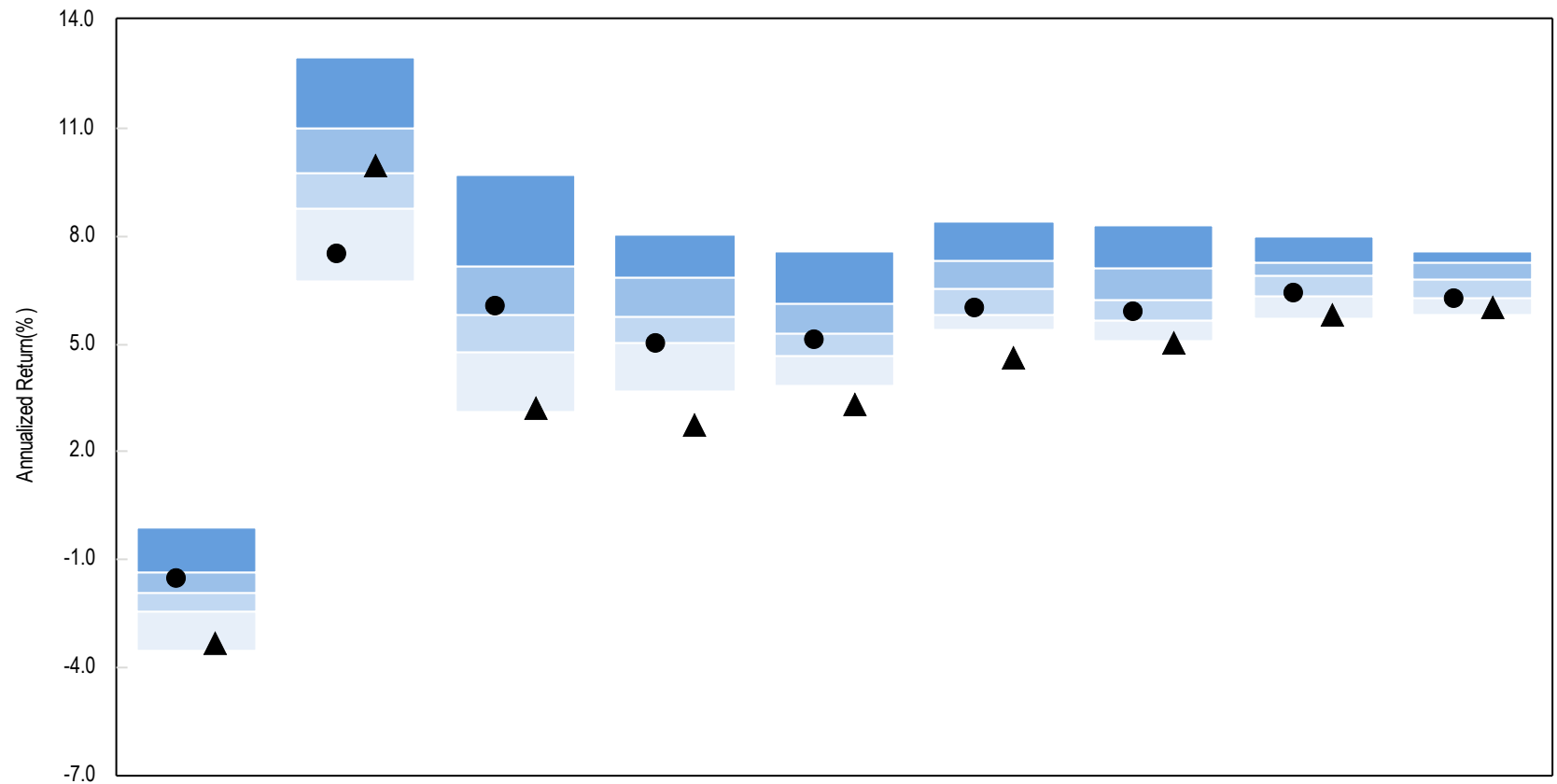
New Mexico PERA
Period Ending: September 30, 2023

Total Plan Allocation vs. InvMetrics Public DB > \$1B



	Total Equity 24.3 (93)	Total Fixed Income 29.1 (15)	Alternatives 11.9 (77)	Total Real Estate 9.3 (44)	Multi-Asset 25.2 (1)	Cash & Equivalents 0.2 (91)
■ NM PERA Total Fund						
5th Percentile	62.8	31.3	43.7	15.6	8.5	9.2
1st Quartile	52.1	26.2	27.3	12.2	4.9	3.6
Median	43.0	22.8	18.2	8.7	3.9	1.5
3rd Quartile	36.4	16.9	12.4	6.4	2.7	0.5
95th Percentile	19.6	8.3	2.8	1.6	0.2	0.1
Population	80	84	73	65	28	69

Total Fund Cumulative Performance vs. InvMetrics Public DB > \$1B

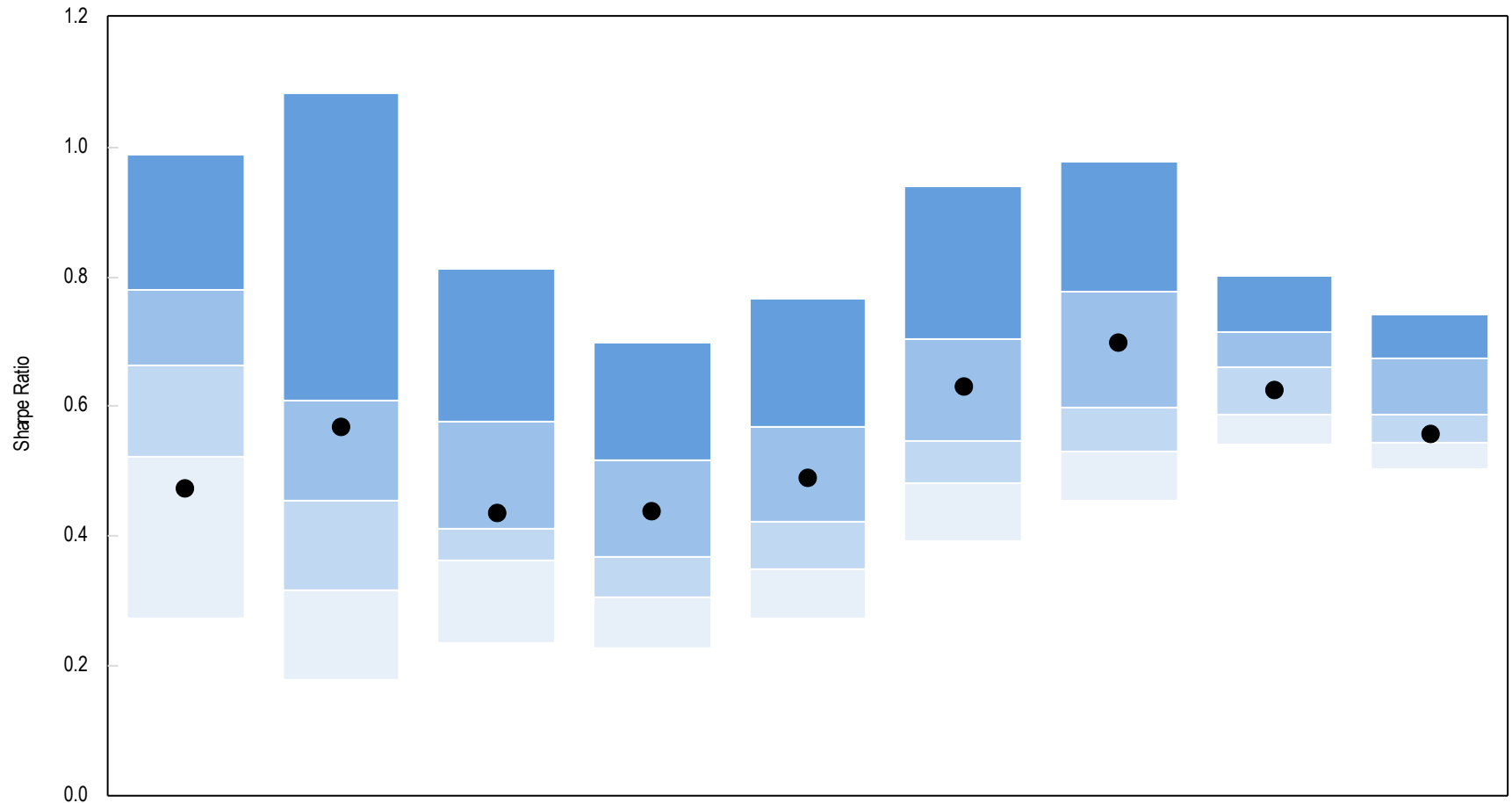


	Quarter	1 Year	3 Years	4 Years	5 Years	7 Years	10 Years	15 Years	20 Years
● NM PERA Total Fund	-1.49 (27)	7.52 (93)	6.08 (43)	5.04 (76)	5.11 (59)	6.00 (69)	5.91 (64)	6.41 (72)	6.25 (77)
▲ NM PERA Total Fund Policy	-3.32 (94)	9.97 (48)	3.21 (95)	2.72 (99)	3.32 (98)	4.60 (99)	5.05 (97)	5.81 (93)	6.00 (90)
5th Percentile	-0.11	12.98	9.69	8.03	7.57	8.38	8.29	7.98	7.55
1st Quartile	-1.36	11.00	7.17	6.85	6.13	7.32	7.08	7.27	7.27
Median	-1.92	9.76	5.79	5.76	5.27	6.53	6.22	6.91	6.78
3rd Quartile	-2.46	8.77	4.76	5.05	4.68	5.81	5.66	6.33	6.27
95th Percentile	-3.50	6.72	3.10	3.69	3.83	5.38	5.07	5.69	5.80
Population	80	73	63	63	61	60	54	47	42

Performance shown is net of fees.

Total Fund
Peer Universe Comparison - Sharpe Ratio

New Mexico PERA
Period Ending: September 30, 2023



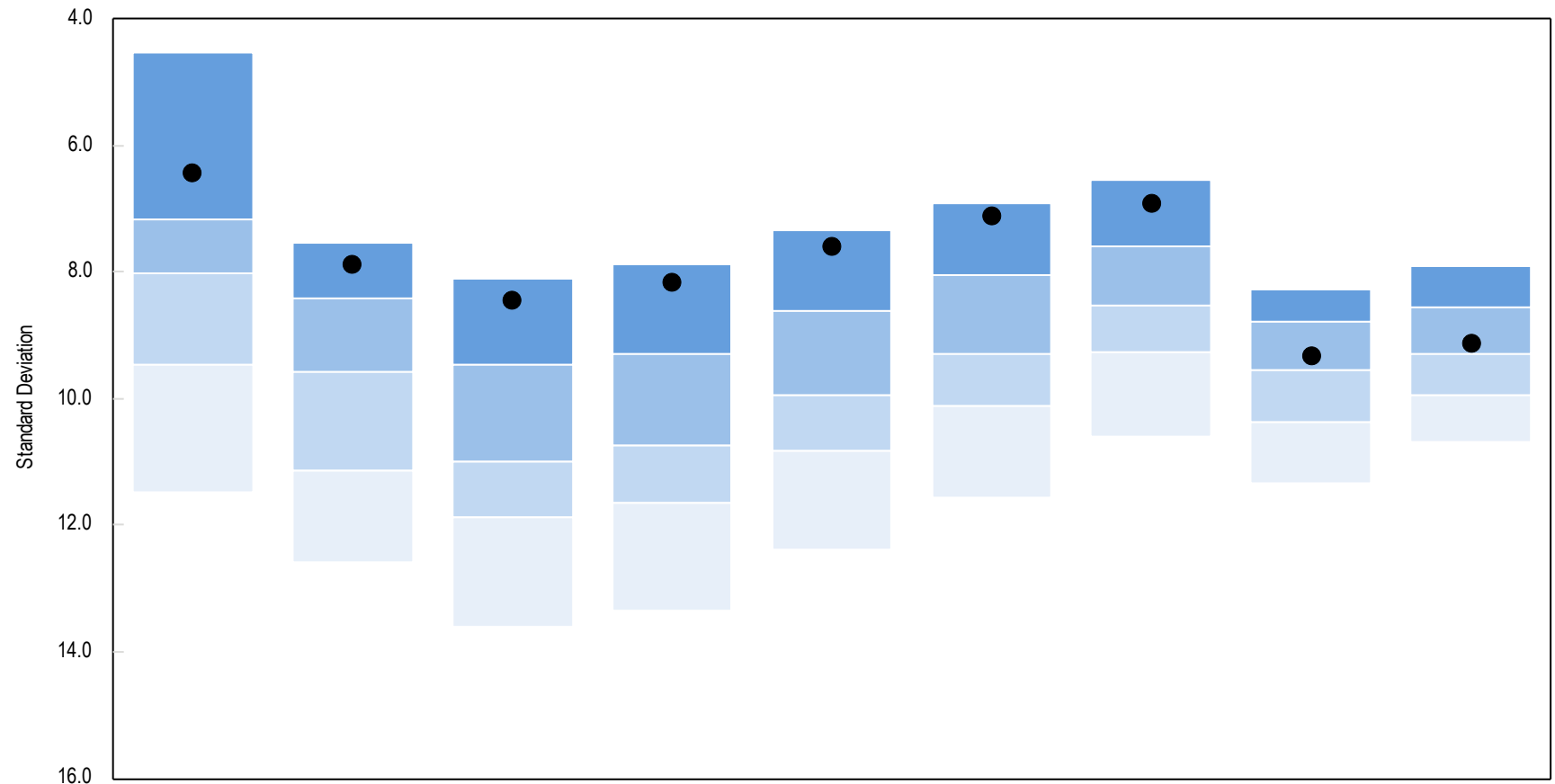
	1 Yr	3 Yrs	4 Years	5 Yrs	6 Years	7 Years	10 Years	15 Years	20 Years
● NM PERA Total Fund	0.47 (87)	0.57 (29)	0.44 (43)	0.44 (32)	0.49 (32)	0.63 (33)	0.70 (34)	0.63 (58)	0.56 (63)
5th Percentile	0.99	1.08	0.81	0.70	0.77	0.94	0.98	0.80	0.74
1st Quartile	0.78	0.61	0.58	0.52	0.57	0.71	0.78	0.72	0.68
Median	0.66	0.45	0.41	0.37	0.42	0.55	0.60	0.66	0.59
3rd Quartile	0.52	0.32	0.36	0.31	0.35	0.48	0.53	0.59	0.54
95th Percentile	0.27	0.18	0.24	0.23	0.27	0.39	0.46	0.54	0.50
Population	73	63	63	61	60	60	54	47	42

Total Fund

Peer Universe - Standard Deviation

New Mexico PERA
Period Ending: September 30, 2023

NM PERA Total Fund vs. InvMetrics Public DB > \$1B

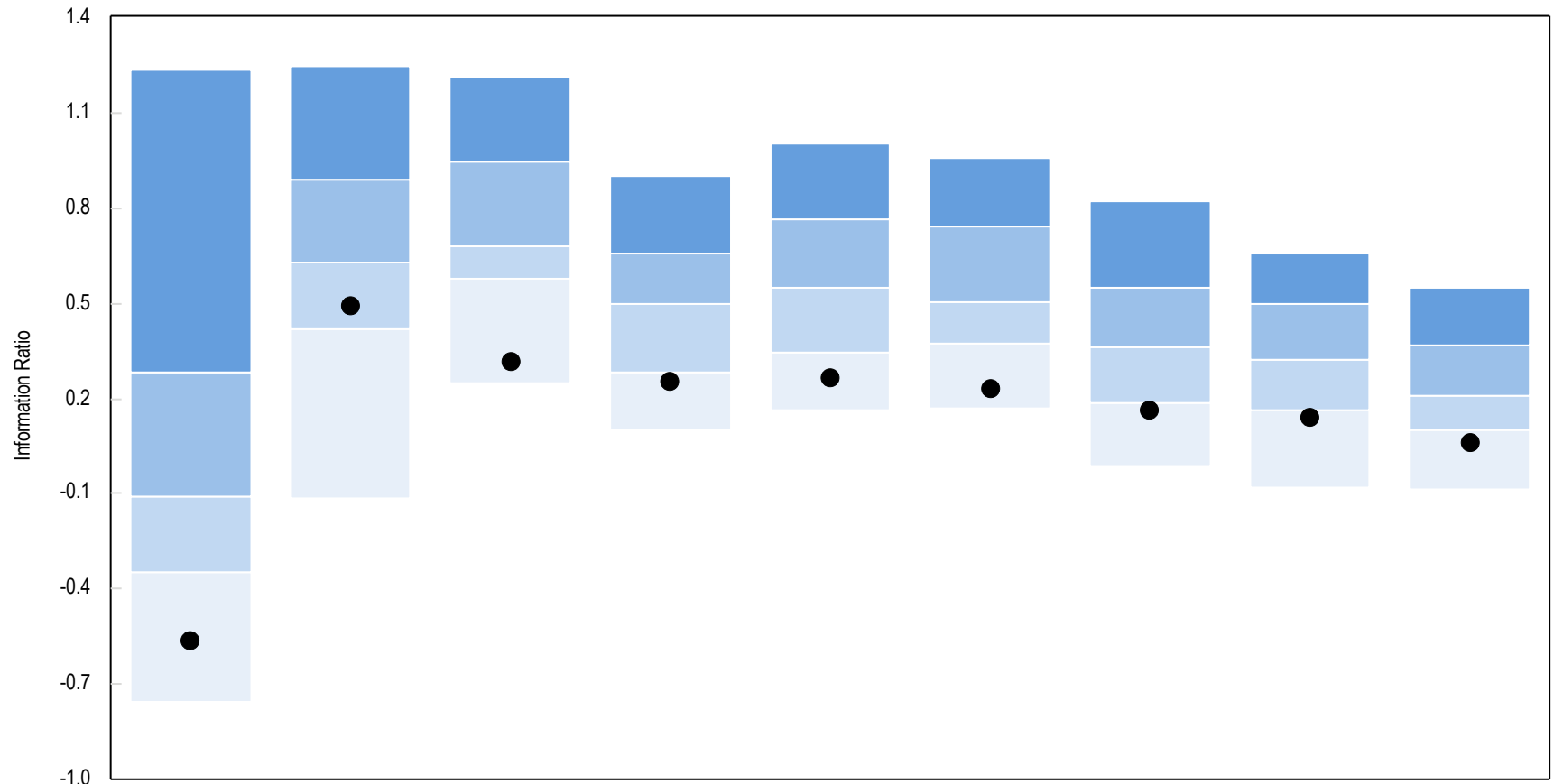


	1 Year	3 Years	4 Years	5 Years	6 Years	7 Years	10 Years	15 Years	20 Years
● NM PERA Total Fund	6.44 (13)	7.89 (16)	8.44 (14)	8.16 (9)	7.59 (9)	7.13 (8)	6.93 (10)	9.34 (40)	9.14 (46)
5th Percentile	4.53	7.55	8.11	7.87	7.35	6.92	6.54	8.29	7.92
1st Quartile	7.18	8.44	9.47	9.32	8.62	8.06	7.61	8.80	8.57
Median	8.03	9.58	11.00	10.74	9.97	9.30	8.55	9.57	9.31
3rd Quartile	9.48	11.15	11.89	11.66	10.83	10.11	9.28	10.39	9.97
95th Percentile	11.50	12.61	13.63	13.36	12.39	11.57	10.61	11.35	10.68
Population	73	63	63	61	60	60	54	47	42

Total Fund
Peer Universe Comparison - Information Ratio

New Mexico PERA
Period Ending: September 30, 2023

NM PERA Total Fund vs. InvMetrics Public DB > \$1B

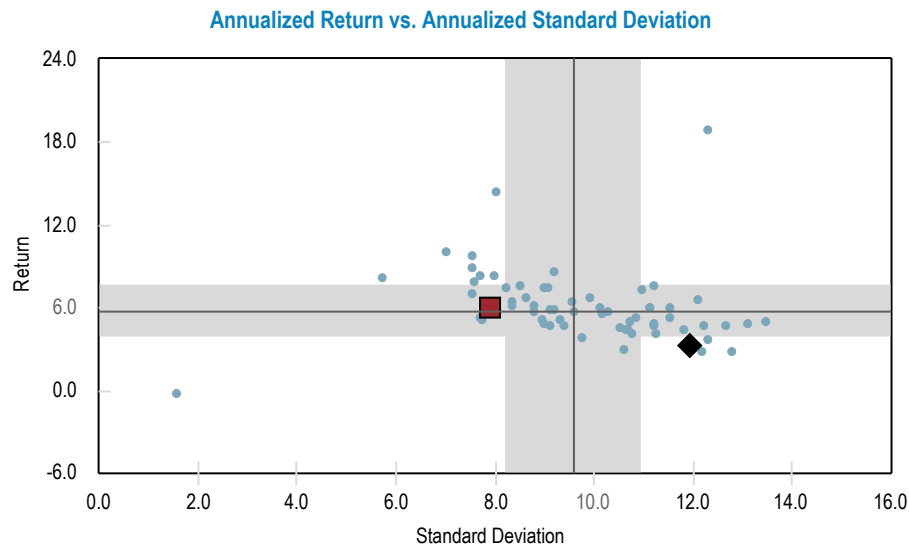


	1 Year	3 Years	4 Years	5 Years	6 Years	7 Years	10 Years	15 Years	20 Years
● NM PERA Total Fund	-0.56 (90)	0.49 (72)	0.32 (92)	0.25 (83)	0.27 (87)	0.23 (94)	0.16 (80)	0.14 (77)	0.06 (80)
5th Percentile	1.24	1.25	1.21	0.90	1.00	0.96	0.82	0.66	0.55
1st Quartile	0.28	0.89	0.95	0.66	0.77	0.74	0.55	0.50	0.37
Median	-0.11	0.63	0.68	0.50	0.55	0.51	0.36	0.32	0.21
3rd Quartile	-0.35	0.42	0.57	0.28	0.34	0.37	0.18	0.16	0.10
95th Percentile	-0.75	-0.12	0.25	0.10	0.17	0.17	-0.01	-0.08	-0.09
Population	73	63	63	61	60	60	54	47	42

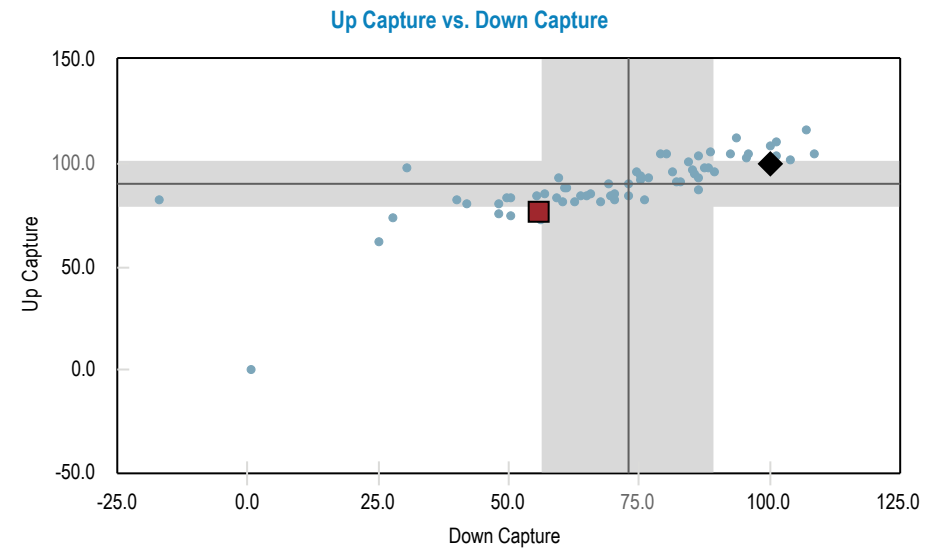
Total Fund Risk Analysis - 3 Years (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023

	Annualized Standard Deviation	Annualized Alpha	Annualized Beta	R-Squared	Up Capture	Down Capture	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
NM PERA Total Fund	7.9	3.8	0.6	0.9	77.0	55.7	0.5	4.8	0.6	0.9
NM PERA Total Fund Policy	11.9	0.0	1.0	1.0	100.0	100.0	-	0.0	0.2	0.3



	Return	Standard Deviation
■ NM PERA Total Fund	6.08	7.89
◆ NM PERA Total Fund Policy	3.21	11.94
— Median	5.79	9.58
Population	63	63



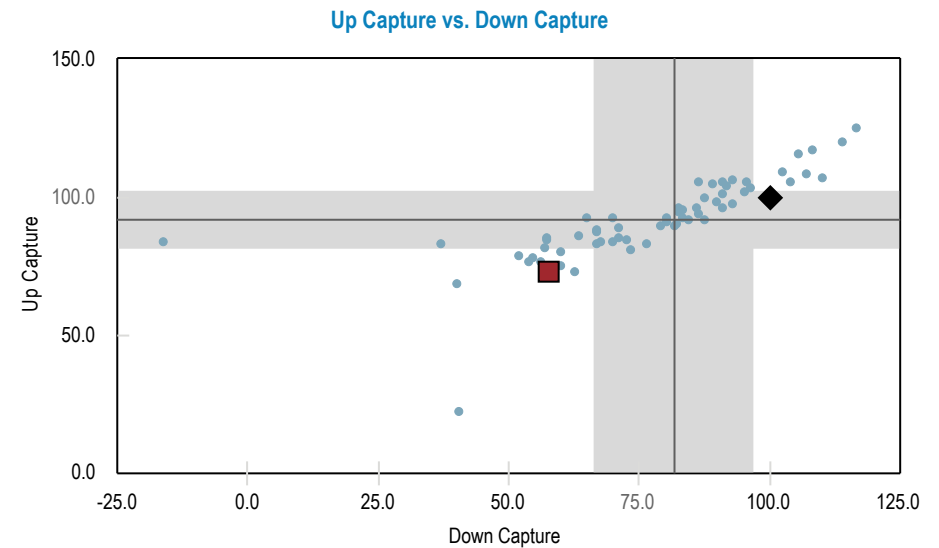
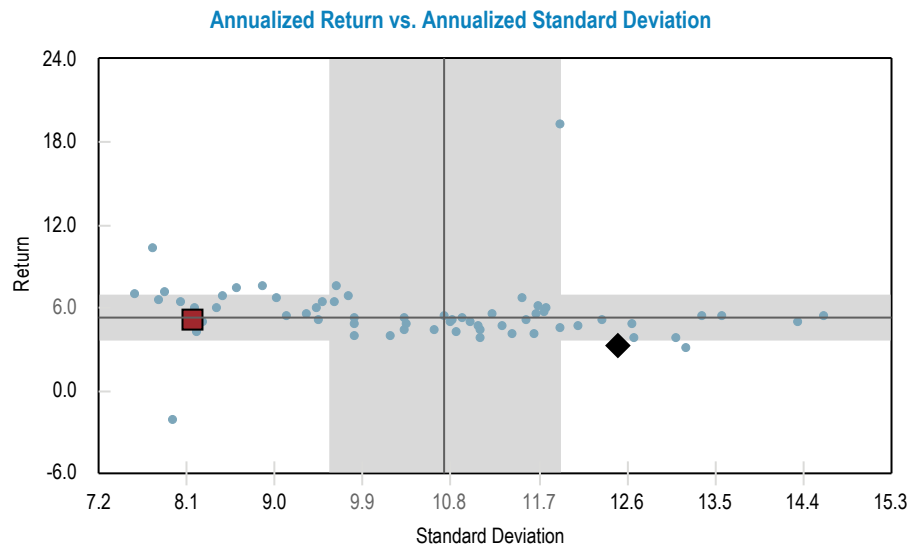
	Up Capture	Down Capture
■ NM PERA Total Fund	77.04	55.66
◆ NM PERA Total Fund Policy	100.00	100.00
— Median	90.04	72.86
Population	63	63

Performance shown is net of fees.

Total Fund Risk Analysis - 5 Years (Net of Fees)

New Mexico PERA
Period Ending: September 30, 2023

	Annualized Standard Deviation	Annualized Alpha	Annualized Beta	R-Squared	Up Capture	Down Capture	Information Ratio	Tracking Error	Sharpe Ratio	Sortino Ratio
NM PERA Total Fund	8.2	2.8	0.6	0.9	73.3	57.6	0.3	5.0	0.4	0.6
NM PERA Total Fund Policy	12.5	0.0	1.0	1.0	100.0	100.0	-	0.0	0.2	0.3



Performance shown is net of fees.

Manager Listing

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
NM PERA Total Fund	\$16,274,312,648	100.0
Global Equity	\$6,375,177,076	39.2
Global Public Stock	\$3,036,274,865	18.7
BlackRock Equity Transition	\$12,791	0.0
NT MSCI ACWI X US Index Fund	\$333,030	0.0
SSGA ACWI IMI	\$667,394,590	4.1
Active US Equity	\$285,211,024	1.8
Kayne Andrsn Rdnick SmCap Core	\$282,817,418	1.7
Portable Alpha Composite	\$2,393,606	0.0
Portable Alpha	\$2,393,606	0.0
Active Non-US Developed Equity	\$480,894,141	3.0
Acadian Intl Equity	\$264,371,733	1.6
KBI Global Investors EAFE Developed	\$371,820	0.0
MFS Intl Intrinsic Val Eq exUS	\$215,567,113	1.3
Principal Intl Small Cap Equity	\$417,093	0.0
Schroder Intl Small Composite	\$166,382	0.0
Active Emerging Markets Equity	\$241,613,650	1.5
Axiom Emerging Mkts Eqty	\$241,395,157	1.5
Russell Transition	\$218,493	0.0
Parametric Eqty Ovly	\$35,062,797	0.2
SSGA R1000 Index	\$1,057,719,287	6.5
Active Global Equity	\$268,033,555	1.6
Alliance Bernstein Gbl Core Eq	\$268,033,555	1.6
Global Low Volatility Equity	\$916,255,340	5.6
BlackRock Low Vol Intl Equity	\$916,255,340	5.6
Hedged Equity Comp	\$816,318	0.0
TPG Axon Ptnrs LP	\$816,318	0.0

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Private Equity Comp	\$2,421,830,553	14.9
Altaris Const Ptnrs IV LP	\$31,226,485	0.2
Altaris Health Ptnrs IV LP	\$45,262,996	0.3
CVC European Eqty Ptnrs V	\$560,142	0.0
CVC Cptl Ptnrs VII A LP	\$175,382,116	1.1
Carlyle Partners VI	\$17,500,190	0.1
Carlyle Partners V	\$1,432,653	0.0
Century Focused IV LP	\$36,810,563	0.2
Charterhouse Cap Ptnrs IX	\$198,321	0.0
Charterhouse Capital Ptnrs X	\$49,105,776	0.3
Coller Intl Ptnrs V-A LP	\$7,131	0.0
Threshold Ventures II LP	\$61,751,468	0.4
Draper Fisher Jurvetson X LP	\$12,515,182	0.1
FountainVest CP III LP	\$82,848,466	0.5
GTCR XI A & B	\$34,268,143	0.2
H&F VII LP	\$2,095,641	0.0
Gilde Buy-Out IV	\$1,573,249	0.0
Instl Venture Ptnrs XIV LP	\$14,457,322	0.1
Instl Venture Ptnrs XIII LP	\$1,881,745	0.0
JMI Equity VII LP	\$2,644,564	0.0
KRG Cptl IV LP	\$1,252,827	0.0
Kelso Inv Assoc XI LP	\$16,600,200	0.1
Kelso Inv Assoc IX LP	\$33,131,485	0.2
Kelso Inv Assoc VIII LP	\$1,232,196	0.0
Kelso Inv Assoc X LP	\$95,208,056	0.6
H&F Spock I SPV	\$11,407,889	0.1

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Lincolnshire Eqty IV A LP	\$6,806,745	0.0
Madison Dearborn VI	\$421,437	0.0
New Enterprise Assoc 13 LP	\$4,214,253	0.0
New Enterprise Assoc 14 LP	\$36,100,483	0.2
Onex Ptnrs IV	\$29,101,581	0.2
Onex Ptnrs V	\$78,502,293	0.5
Onex Ptnrs III	\$4,214,307	0.0
Patria PE VI LP	\$46,454,925	0.3
Petershill PE LP	\$90,720,858	0.6
Pine Bridge Passport I LLC	\$128,879,539	0.8
Providence Eqty Ptnrs VI	\$368,264	0.0
RCP Small & Emg Parallel LP	\$99,030,746	0.6
RRJ Cptl Master III LP	\$18,712,133	0.1
Madison Dearborn Ristra Colnv	\$18,029,913	0.1
Sun Cptl Ptnrs V LP	\$1,137,574	0.0
TPG Asia V LP	\$1,807,397	0.0
TPG Ptnrs VI LP	\$432,090	0.0
TCV VII LP	\$1,025,040	0.0
TCV IX LP	\$56,503,584	0.3
TCV X LP	\$88,157,460	0.5
Resolute III LP	\$21,908,592	0.1
Resolute IV LP	\$113,740,534	0.7
Trident IX LP	\$22,564,285	0.1
Trinity Ventures XII LP	\$49,553,176	0.3
Warburg Pincus PE XII	\$73,768,161	0.5
Warburg Pincus Global Gwth XIV	\$24,655,893	0.2

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Warburg Pincus Global Gwth	\$136,865,621	0.8
Petershill IV LLC	\$18,085,114	0.1
Petershill Enchmnt Colnv LLC	\$24,274,857	0.1
H&F Arrow 1 SPV	\$6,913,360	0.0
Madison Dearborn VIII	\$51,242,104	0.3
H&F Samson Hockey 1 SPV	\$6,446,940	0.0
H&F Samson Shield 1 SPV	\$12,378,593	0.1
Montagu VI	\$54,995,773	0.3
Altaris Health Ptnrs V LP	\$54,781,640	0.3
H&F Samson Brunello 1 SPV	\$7,355,060	0.0
Madison Dearborn Patriot SPV	\$7,005,208	0.0
Tenex Cptl Ptnrs III LP	\$35,574,859	0.2
Tenex White Sands Colnv LP	\$20,185,926	0.1
Gen Ctlyst Grp XI Endurance LP	\$38,176,117	0.2
Gen Ctlyst Grp XI Ignition LP	\$12,191,752	0.1
Resolute V LP	\$100,700,249	0.6
H&F X LP	\$38,354,332	0.2
Orchid Asia VIII LP	\$12,707,486	0.1
Orchid Asia 1912 Colnv LP	\$2,908,986	0.0
Montagu Petroglyph Colnv LP	\$18,634,679	0.1
Gen Ctlyst Grp XI Creation LP	\$7,405,707	0.0
JMI Equity XI LP	\$7,480,120	0.0
Credit Oriented Fixed Income	\$3,106,428,209	19.1
Liquid Credit	\$1,742,004,703	10.7
High Yield Debt Composite	\$1,545,250,192	9.5
Guggenheim Global High Yield	-\$2,485	0.0
PineBridge High Yield	\$1,545,252,677	9.5
Parametric Credit Ovly	\$196,754,511	1.2

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Alternative Liquid Credit	\$839,852,657	5.2
Leveraged Loans/Structured Credit	\$589,263,011	3.6
Mudrick Stressed Cr A LP	\$166,359,635	1.0
Ellington Enh Incme A LLC	\$172,258,330	1.1
Eagle Point CLO Eqty I LLC	\$8,236,633	0.1
Eagle Point Credit Onshore LP	\$82,439,738	0.5
SixthSt Wheeler Pk Cr I LLC	\$159,968,675	1.0
Credit Oriented Hedge Funds	\$250,589,646	1.5
King Street Capital LP	\$2,432,604	0.0
Silver Point Cptl LP	\$54,662,028	0.3
Anchorage Cptl Ptnrs LP	\$60,686,596	0.4
Napier Park C	\$38,374,753	0.2
Ellington Alt Credit	\$94,433,665	0.6
Illiquid Credit Comp	\$524,570,849	3.2
APOLLO DEFINED RT FD	\$200,922,127	1.2
Atalaya Spcl Oppty VI LP B	\$3,129,984	0.0
Athyrium Oppty II LP	\$12,273,454	0.1
Cerberus Res Opp - Ext	\$155,475,090	1.0
Cerberus Inst Ptnrs IV	\$340,247	0.0
Cheyne RE Credit V LP	\$38,787,514	0.2
DRC Eur RE Debt III LP	\$38,935,528	0.2
DRC Eur RE Debt II LP	\$499,641	0.0
Garrison Opp IV A	\$10,965,719	0.1
Madison Rlty Cap Dbt III LP	\$44,248,655	0.3

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Oaktree Opptys VII LP	\$119,135	0.0
Oaktree Opptys VIIb LP	\$11,857	0.0
Oaktree Opptys VIII LP	\$52,869	0.0
Oaktree Eur Pncpl III LP	\$6,381,271	0.0
Sixth Street Oppty Ptrns III	\$8,111,520	0.0
Wyzata Opptys III LP	\$4,098,872	0.0
HIG Bayside Ln Oppty II LP	\$217,368	0.0
Risk Reduction & Mitigation	\$2,679,093,657	16.5
Domestic Core Fixed Income	\$1,949,736,819	12.0
BlackRock Core	\$288	0.0
Prudential Core Cons FI	\$11,353	0.0
Parametric Risk Mit Ovly	\$170,023,715	1.0
Blackrock US Agg Bond Index	\$1,779,701,463	10.9
Global Core Fixed Income	\$151,061	0.0
BlackRock Glb Fixed Income	\$151,061	0.0
Cash Composite	\$32,180,054	0.2
Cash Account	\$30,414,089	0.2
Cash-Corporate Action	\$1,765,965	0.0
LGIMA TAA Overlay	\$11	0.0
Bonds Plus Composite	\$697,025,712	4.3
Elliott Associates LP	\$114,558,891	0.7
Parametric Bonds Plus - MV and Returns	\$46,056,258	0.3
Pharo Gaia Ltd	\$1,626,319	0.0
Dorsal Capital Partners LP	\$99,094,301	0.6

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Garda FI Rel Val Oppty Ltd	\$67,999,522	0.4
Glazer Enhanced LP	\$60,386,800	0.4
Pac Allnce Asia Opp IV LP	\$28,907,952	0.2
Systematica Alt Mkts LP CIB	\$86,241,194	0.5
Millennium USA LP	\$122,807,525	0.8
Two Sigma Abs Return LP	\$69,346,951	0.4
Real Assets	\$2,839,699,863	17.4
Real Estate Only Comp	\$1,430,032,280	8.8
Liquid Real Estate Comp	\$286,935	0.0
DFA Real Estate Securities	\$286,362	0.0
Security Capital Alpha	\$573	0.0
Security Capital Beta	\$1	0.0
Illiquid Real Estate Comp	\$1,429,745,345	8.8
Aermont Cap RE IV SCSp	\$33,641,161	0.2
Blackstone RE Ptnrs VII	\$6,809,039	0.0
Blackstone RE Ptnrs Eur III	\$1,702,870	0.0
Carlyle Rlty Ptnrs VI	\$1,693,840	0.0
Carlyle Rlty Ptnrs V	\$74,103	0.0
Harrison St RE Ptnrs V & V A	\$25,653,099	0.2
Harrison St RE Ptnrs VII, A	\$64,355,519	0.4
KSL Cptl Ptnrs IV LP	\$56,587,345	0.3
North Haven RE VII Gbl T LP	\$248,361	0.0
Rockwood Cap RE Ptnrs IX LP	\$5,508,326	0.0
Rockwood Cap RE Ptnrs X LP	\$29,779,048	0.2
Starwood Gbl Op VIII LP	\$1,578,554	0.0
Starwood Op X Gbl LP	\$12,095,547	0.1
Starwood Global Oppty XI LP	\$60,711,474	0.4

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Starwood Distd Op IX Gbl LP	\$2,076,523	0.0
Walton Street RE VI LP	\$13,270,423	0.1
Wheelock Street RE II LP	\$13,493,629	0.1
Rockpt Gwth & Inc RE II LP	\$39,799,143	0.2
Aermont Cap PW RE III LP	\$24,987,814	0.2
Harrison St RE Ptnrs VI, A	\$47,431,856	0.3
New Rock Core LP	\$273,731,486	1.7
GEM Rlty Evergreen PF NM LP	\$123,273,843	0.8
Rockwood Cap RE Ptnrs XI LP	\$37,419,705	0.2
Rockpt Gwth & Inc RE III LP	\$28,854,882	0.2
Rockwood MultiFamily PT LP	\$104,487,861	0.6
Stockbridge Niche Lgstcs LP	\$271,334,906	1.7
Harrison St RE Ptnrs VIII A, B	\$66,698,620	0.4
Stockbridge Value IV LP	\$71,269,852	0.4
Starwood Dist Op XII Gbl LP	\$11,176,516	0.1
Liquid Real Assets Comp	\$157,457,015	1.0
PIMCO Commodities	\$938	0.0
PIMCO TIPS	\$40,063	0.0
DWS Listed Infrastructure	\$49,780,397	0.3
Harvest MLP Alpha	\$435,916	0.0
Parametric Real Assets Ovly	\$107,199,701	0.7
Illiquid Real Assets Comp	\$1,251,570,856	7.7
ACM II LLC	\$23,618,259	0.1
Antin Infra Ptnrs III LP	\$65,398,868	0.4
Ardian Infra V	\$50,077,315	0.3
Ardian Infra IV	\$47,745,138	0.3
BEP Legacy A LP	\$41,220	0.0

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Brookfield Infra II	\$34,276,246	0.2
Brookfield Infra III	\$78,762,934	0.5
Carlyle Power Partners II	\$64,077,647	0.4
Denham VI O&G LP	\$43,519	0.0
Denham CPF VI LP	\$11,933,794	0.1
EnCap Energy Cptl VIII LP	\$9,587,831	0.1
EnCap Energy Cptl IX LP	\$8,177,517	0.1
EnCap Flatrock Mdst III LP	\$17,835,139	0.1
EnCap Energy Cptl XI LP	\$94,323,828	0.6
First Reserve XII LP	\$31,425	0.0
IFM Global Infra LP	\$201,897,134	1.2
KKR Global Infra Inv II LP	\$25,377,649	0.2
Kayne Andrsn Energy V LP	\$4,660,665	0.0
Lime Rock Partners VI, L.P.	\$86,575	0.0
Lime Rock Resources III A LP	\$27,357,096	0.2
Lime Rock Ptnrs V LP	\$1,439,948	0.0
Meridiam Infra NA III LP	\$58,243,339	0.4
Natural Gas Prtnrs IX LP	\$56,257	0.0
Ntl Gas Prtnrs Ntl Res X LP	\$2,323,703	0.0
Ntl Gas Prtnrs Ntl Res XI LP	\$31,463,136	0.2
Ntl Gas Prtnrs Ntl Res XII LP	\$40,718,586	0.3
Paine Schwtz Food Chn IV LP	\$36,688,720	0.2
Quantum Energy Ptnrs V LP	\$720,154	0.0
Riverst Rnw&Alt Engy II LP	\$186,048	0.0
Riverst GI Engy & Pwr V LP	\$7,106,985	0.0
Riverst Gbl Engy & Pwr IV	\$24,608	0.0
Tillridge Gbl Agri Ptnrs II LP	\$37,486,460	0.2

Total Fund
Asset Allocation - Preliminary

New Mexico PERA
Period Ending: September 30, 2023

	Market Value	%
Ardian Mass Ascension Colnv LP	\$151,900,225	0.9
Four Corners Farmland LLC	\$108,654,766	0.7
Ardian Americas Infra V LP	\$7,084,781	0.0
Antin Infra Ptnrs V LP	\$2,163,340	0.0
Market Neutral Hedge Fund Comp	\$639,712	0.0
Farallon Cptl Instl Ptnrs LP	\$103,941	0.0
Stark Select Asset LLC	\$535,771	0.0
Multi-Risk	\$1,273,913,844	7.8
Zia Risk Parity LP	\$1,273,913,844	7.8

Placement Agent Disclosure

Pursuant to New Mexico statute PERA shall not make any investment, other than investments in publicly traded equities or publicly traded fixed-income securities, unless the recipient of the investment discloses the identity of any third-party marketer who rendered services on behalf of the recipient in obtaining the investment and discloses the amount of any fee, commission or retainer paid to the third-party marketer for the services rendered. “Third-party marketer” means a person who, on behalf of an investment fund manager or other person seeking an investment from the fund and under a written or implied agreement, receives a fee, commission, or retainer for such services from the person seeking an investment from the fund.

The following investments were approved during the quarter, with disclosures made under the policy:

NM PERA Crescit Eundo TJC Co-Invest, L.P. – NM PERA committed \$30 million to NM PERA Crescit Eundo TJC Co-Invest, L.P., an Evergreen fund-of-one dedicated to guideline-based, diversified co-investments alongside Resolute VI and future TJC funds in which NM PERA invests. The Jordan Company, LP has stated that they did not use a placement agent while soliciting PERAs investment.

The Resolute Fund VI, L.P. – NM PERA committed \$85 million to The Resolute Fund VI, L.P., a Private Equity fund focused on the middle-market. The Jordan Company, LP has stated that they did not use a placement agent while soliciting PERAs investment.

Altaris Health Partners VI, L.P. – NM PERA committed \$75 million to Altaris Health Partners VI, L.P., an illiquid Private Equity fund with a healthcare-focused investment strategy. Altaris Capital Partners, LLC has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Investments approved prior to the current quarter for which the fund engaged a placement agent follow:

Ares Pathfinder Core Fund, L.P. – NM PERA committed \$200 million to Ares Pathfinder Core Fund, L.P., an Evergreen fund with broad mandates across Private Markets. Ares has stated that no placement agent was used in relation to PERA’s commitment.

Apollo Defined Return Fund, L.P. – NM PERA committed \$200 million to Apollo Defined Return Fund, L.P., an Evergreen, multi-asset alternative Credit manager. Apollo has stated that they did not use a placement agent while soliciting PERAs investment.

CVC Capital Partners IX, L.P. – NM PERA committed €100 million to CVC Capital Partners IX, L.P., a 2023 vintage year in the Private Equity allocation. Noting the role of CVC’s internal Client & Product Solutions team, in certain regions where CVC has limited investor coverage or experience, CVC may consider the use of other third-party placement agents or where one is required for local regulatory reasons. Separately, in the case of attracting high net worth investors, CVC may engage with banks for a pooled investment from such investors. In the United States, this Questionnaire and interests in the Fund are being distributed by CVC Funding, LLC, a broker dealer registered with the SEC under the U.S. Exchange Act, a member of the Financial Industry Regulatory Authority (“FINRA”), a self-regulatory organization subject to oversight by the SEC, and a member of the Securities Investor Protection Corporation (“SIPC”). CVC Funding, LLC markets only to institutional

accounts (as defined by FINRA Rule 4512(c)) on behalf of the Fund. Any related costs are borne by CVC and are not charged to the CVC Funds. CVC's in-house Legal and Compliance Teams are involved in monitoring the use of placement agents and compliance with relevant laws in relation to solicitation and marketing.

Hellman & Friedman Capital Partners XI, L.P. – NM PERA committed \$75 million to Hellman & Friedman Capital Partners XI, L.P, a 2023 vintage year in the Private Equity allocation. Hellman & Friedman has stated that they did not use a placement agent while soliciting PERAs investment.

Kelso Chimayo Co-Invest – NM PERA committed \$15 million to PERA Chimayo Kelso Co-Invest, a 2022 vintage year in the Private Equity allocation. Kelso Investment Associates has stated that they did not use a placement agent while soliciting PERAs investment.

Antin Infrastructure Partners Fund V – NM PERA committed €100 million to Antin Infrastructure Partners Fund V, a 2022 vintage year in the Real Asset allocation. Antin Infrastructure Partners has confirmed that Evercore Group LLC was engaged as placement agent for Fund V. NM PERA will not be liable for any placement agent fees in relation to its commitment to Antin Fund V. Neither Evercore nor Antin has compensated or agreed to compensate, directly or indirectly, any Person or entity to act as a placement agent in connection with any commitment by NM PERA.

Warburg Pincus Global Growth 14 – NM PERA committed \$100 million to Warburg Pincus LLC a 2022 vintage year in the Equity allocation. Warburg Pincus has engaged and expects to engage placement agents and/or feeder sponsors in certain jurisdictions, including outside of the United States. In connection with these engagements, the firm expects to pay placement fees that it believes are customary in each respective jurisdiction. Warburg Pincus Global Growth 14, L.P. will not be responsible for placement fees payable to any placement agents. The firm has also engaged and expects to engage financial institutions to sponsor or arrange feeder funds that target high net worth individuals. In connection with the engagements, the firm may pay placement fees to such financial institutions. Any placement fees paid to such financial institutions would be borne by Warburg Pincus and/or the respective feeder fund.

JMI Equity Fund XI, L.P. – NM PERA committed \$50 million to JMI Equity Fund XI, L.P., a 2022 vintage year in the Equity allocation. JMI Equity Fund XI, L.P. has stated that they did use a placement agent, however, no placement agent has provided any services or is expected to provide any services related to PERA's commitment, thus no fees will be paid in relation to PERA's commitment.

Rockwood Multifamily Partners, L.P. Fund – NMPERA committed \$100 million to Rockwood Multifamily Partners Fund, a 2021 vintage year in the Real Estate allocation. Rockwood Multifamily Partners, L.P. Fund has stated that they did not use a placement agent while soliciting PERAs investment.

Stockbridge Niche Logistics Fund – NM PERA committed an additional \$100 million to Stockbridge Niche Logistics Fund, a 2020 vintage year in the Real Estate allocation. Stockbridge Niche Logistics Fund has stated that they did not use a placement agent while soliciting PERAs investment.

General Catalyst XI; Creation, Endurance, Ignition – NMPERA committed \$85 million to General Catalyst XI, a 2021 vintage year in the Equity allocation. General Catalyst XI has stated that they did not use a placement agent while soliciting PERAs investment.

Kelso Investment Associates XI– NM PERA committed \$60 million to Kelso Investment Associates XI, a 2021 vintage year in the Equity allocation. Kelso Investment Associates has stated that they did not use a placement agent while soliciting PERAs investment.

Trident IX– NM PERA committed \$50 million to Trident IX, a 2021 vintage year in the Equity allocation. Trident has stated that they did not use a placement agent while soliciting PERAs investment.

Orchid Asia VIII– NM PERA committed \$75 million to Orchid Asia VIII, a 2021 vintage year in the Equity allocation. Orchid Asia has stated that they did not use a placement agent while soliciting PERAs investment.

Hellman & Freidman X– NM PERA committed \$50 million to Hellman & Freidman X, a 2021 vintage year in the Equity allocation. Hellman & Freidman has stated that they did not use a placement agent while soliciting PERAs investment.

Ristra MDP Co-Invest– NM PERA committed \$20 million to Ristra MDP Co-Invest, a 2021 vintage year in the Equity allocation. MDP has stated that they did not use a placement agent while soliciting PERAs investment.

Ardian Americas Infrastructure Fund V– NM PERA committed \$75 million to Ardian Americas Infrastructure Fund V, a 2021 vintage year in the infrastructure allocation. Ardian Americas has stated that they did not use a placement agent while soliciting PERAs investment.

D.E. Shaw – NM PERA committed u\$120 million to D.E. Shaw Composite Fund and/or Multi-Asset Fund, diversified multi-strategy fund. This is a portable alpha allocation. D.E. Shaw & Co. has stated that they did not use a placement agent while soliciting PERAs investment.

Starwood XII – NM PERA committed \$50 million to Starwood XII a 2020 vintage year in the Real Estate allocation. Starwood XIII has stated that they did not use a placement agent while soliciting PERAs investment.

Harrison Street Real Estate Fund VIII – NM PERA has committed \$75 million to Harrison Street Real Estate Fund VIII a 2020 vintage year in the Real Estate allocation. Harrison Street Real Estate has stated that they did not use a placement agent while soliciting PERAs investment.

Stockbridge Niche Logistics Fund – NM PERA committed \$100 million to Stockbridge Niche Logistics Fund a 2020 vintage year in the Real Estate allocation. Stockbridge Niche Logistics Fund has stated that they did not use a placement agent while soliciting PERAs investment.

Two Sigma – NM PERA has committed \$75 million to Two Sigma a Portable Alpha allocation. Two Sigma has stated that they did not use a placement agent while soliciting PERAs investment.

Millennium USA Fund – NM PERA increased commitment by \$50 million to Millennium USA Fund in the Portable Alpha allocation. Millennium has stated that they did not use a placement agent while soliciting PERAs investment.

Stockbridge Value Fund IV, LP – NM PERA committed \$75 million to Stockbridge Value Fund IV, LP's 2020 vintage year in the Real Estate allocation. Stockbridge Core and Value-Add Advisors, LLC ("CVA") stated that they did not use placement agents during the fundraising period.

Montagu VI., LP – NM PERA increased commitment by \$25 million to Montagu VI in the Equity allocation. Montagu Private Equity LLP has stated that it did not use placement agents during the fundraising period.

Millennium USA Fund – NM PERA committed \$100 million to Millennium USA Fund a Portable Alpha allocation. Millennium has stated that they did not use a placement agent while soliciting PERAs investment.

Marshall Wace Fund – NM PERA committed \$50 million to Marshall Wace Fund a Portable Alpha allocation. Marshall Wace has stated that they did not use a placement agent while soliciting PERAs investment.

Tenex Capital Partners III L.P. & PERA White Sands Tenex Co-Invest – NM PERA committed \$45 million to Tenex Capital Partners III L.P. & PERA White Sands Tenex Co-Invest a 2020 vintage year in the Private Equity allocation. The Tenex Capital has stated that they did not use a placement agent while soliciting PERAs investment.

Jordan Resolute V, L.P. – NM PERA committed \$75 million to Jordan Resolute V, L.P. a 2020 vintage year in the Private Equity allocation. The Jordan Company, LP has stated that they did not use a placement agent while soliciting PERAs investment.

Garda FIRVO Fund – NM PERA committed \$50 million to Garda FIRVO Fund a Portable Alpha allocation. Garda Capital Partners has stated that they did not use a placement agent during fundraising.

Ardian NM Co-Invest (Mass Ascension), L.P. – NM PERA committed \$125 million to Ardian NM Co-invest a 2020 vintage year in the Real Assets allocation. Ardian FRANCE has stated that they may use placement agents in certain geographies where they do not have a presence. However, in any case, placement fees would not be payable by the fund.

AgIS Club Fund (Four Corners), L.P. – NM PERA committed \$150 million to Agis Club Fund a 2020 vintage year in the Real Asset allocation. AgIS Capital LLC has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Altaris Health Partners V, L.P. – NM PERA committed \$75 million to Altaris Health Partners V, L.P. a 2020 vintage year in the Private Equity allocation. Altaris Capital Partners, LLC has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Systematica Alternative Markets Fund – NM PERA committed \$75 million to Systematica Alternative Markets Fund a Portable Alpha allocation.

Systematica has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Pharo Gaia Fund – NM PERA committed \$40 million to Pharo Gaia Fund a Portable Alpha allocation. Pharo Management has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Pacific Alliance Asia Opportunity Fund – NM PERA committed \$70 million to Pacific Alliance Asia Opportunity Fund a 2020 vintage year in the Portable Alpha allocation. PAG has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Glazer Enhanced Fund – NM PERA committed \$40 million to Dorsal Enhanced Fund a Portable Alpha allocation. Glazer Capital Management has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Dorsal Fund – NM PERA committed \$70 million to The Dorsal Fund a Portable Alpha allocation. Dorsal Capital Management has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Madison Dearborn Capital Partners VIII, L.P. – NM PERA committed \$75 million to Madison Dearborn Capital Partners VIII, L.P. a 2019 vintage year in the Equity allocation. Madison Dearborn Capital Partners has stated that a placement agent was used for certain funds, but these fees are offset 100% by managements fees.

TSSP NM Contingent Capital Fund NM PERA committed \$150 million to TSSP NM Contingent Capital Funds a 2019 vintage year in the Private Credit allocation. TPG Sixth Street Partners Group has stated that they did not use a placement agent during fundraising, however in any case, placement fees would not be payable by the fund.

Petershill IV, L.P. – NM PERA committed \$70 million to Petershill IV, L.P. a 2019 vintage year in the Equity allocation. The Goldman Sachs Group, Inc. AIMS Group has stated that it did not use placement agents during the fundraising period.

Rockwood Capital Real Estate Partners Fund XI, L.P. – NM PERA committed \$50 million to Rockwood Capital a 2019 vintage year in the Real Estate allocation. Rockwood Capital has stated that it does use placement agent fees in some situations. However, all placement agent fees are incurred by the General Partner or its affiliates and not by the Fund.

Montagu VI., LP – NM PERA committed \$75 million to Montagu Private Equity LLP a 2019 vintage year in the Real Estate allocation. Montagu Private Equity LLP has stated that it did not use placement agents during the fundraising period.

Ardian Infrastructure V, L.P. – NM PERA committed €60 million to Ardian Group a 2018 vintage year Real Assets allocation. Ardian Group has

stated that it does use placement agent fees in some situations. However, all placement agent fees are incurred by the General Partner or its affiliates and not by the Fund. Axiom Emerging Markets Equity Fund. – Axiom Investors received final approval in the quarter for an investment of \$215 million in the Liquid Equity Assets allocation. Axiom Investors did not use placement agents for our investment in the fund.

Aermont Capital Real Estate Fund IV SCPs –NM PERA committed €50 million to Aermont Capital LLP a 2018 vintage year in the Real Estate allocation. Aermont Capital LLP has stated that the Fund will pay all fees, costs and expenses relating to the formation and launch of the Fund, the General Partner and any Feeder Fund provided that the amount of such costs and expenses will not exceed 0.15% of Total Commitments (inclusive of VAT). Any fees, costs and expenses in excess of such amount will be borne by Aermont

Harrison Real Estate Partners VII, L.P. – NM PERA committed \$75 million to Harrison Street Real Estate Capital, LLC a 2018 vintage year in the Real Estate allocation. Harrison Street Real Estate Capital, LLC has confirmed that no placement agents were used for this commitment.

TCV X, L.P. – NM PERA has committed \$70 million to Technology Crossover Ventures a 2018 vintage year in the Equity allocation. Technology Crossover Ventures has stated that all placement agent fees will be borne by the GP.

Kayne Anderson Rudnick Investment Management LLC – NM PERA committed up to \$350 million to Kayne Anderson Rudnick Investment Management LLC a 2018 vintage year in the Equity allocation. Kayne Anderson Rudnick Investment Management LLC has confirmed that no placement agents were used for this commitment.

Pine Bridge High Yield Fixed Income – NM PERA committed \$350 million to PineBridge Investments a 2018 vintage year in the Risk Mitigation allocation. PineBridge Investments has confirmed that no placement agents were used for this commitment.

Rock Point Growth and Income Real Estate Fund III, L.P. – NM PERA committed \$60 million to Rockpoint Group LLC a 2018 vintage year in the Equity allocation. Rockpoint Group LLC may engage one or more placement agents on a limited basis for engagement solely with a small number of investors outside of the United States. If a placement agent fee is paid in connection with Growth and Income Fund III, the General Partner will be responsible for all such fees and expenses.

Warburg Pincus Global Growth, L.P. – NM PERA committed \$115 million to Warburg Pincus LLC a 2018 vintage year in the Equity allocation. Warburg Pincus LLC does not expect to engage a placement agent in the U.S., although the firm has engaged financial institutions to sponsor or arrange feeder funds that target high net worth individuals to invest in WPGG. In connection with the engagements, the firm may pay customary fees to such financial institutions. Any fees paid to such financial institutions would be borne by Warburg Pincus and/or the respective feeder fund.

Kelso Investment Associates X, L.P. – NM PERA committed \$60 million to Kelso Investment Associates X, L.P. a 2018 vintage year Equity allocation. Kelso & Company has confirmed that it did use placement agents for this commitment. It was stated that “Kelso will bear the

economic burden of all placement agent fees.”

Acadian Asset Management LLC – NM PERA committed \$285 million to Acadian Asset Management LLC a 2018 vintage year in the Equity allocation. Acadian Asset Management has confirmed that no placement agents were used for this commitment.

Patria Private Equity VI, L.P. – NM PERA committed \$50 million to Patria Finance Limited a 2018 vintage year Real Assets allocation. Patria Finance Limited has confirmed that no placement agents were used for this commitment.

Jordan Resolute IV, L.P. – NM PERA committed \$65 million to The Jordan Company a 2018 vintage year in the Real Assets allocation. The Jordan Company has confirmed that no placement agents were used for this commitment.

PIMCO Liquid Real Assets Completion Portfolio – NM PERA committed \$300 million to Pacific Investment Management Company a 2017 vintage year in the Real Assets allocation. There was no placement agent was engaged.

NGP Natural Resources XII, L.P. – NM PERA committed \$75 million to Natural Gas Partners a 2017 vintage year in the Real Assets allocation. Natural Gas Partners has confirmed that placement fees will be paid by the fund. However, all placement agent fees paid by the fund will be offset.

Altaris Health Partners IV, L.P. – NM PERA committed \$50 million to Altaris Health Partners a 2017 vintage year in the Private Equity allocation. Altaris Health Partners has confirmed that no placement agent was engaged.

Altaris Constellation Partners IV, L.P. – NM PERA committed \$25 million to Altaris Health Partners a 2017 vintage year in the Private Equity allocation. Altaris Constellation Partners has that there was no placement agent used for fundraising

CVC Capital Partners VII, L.P. – NM PERA committed €100 million to CVC Capital Partners a 2017 vintage year in the Real Estate allocation. CVC Capital Partners has confirmed that CVC Funding, LLC is to conduct activities as a distributor and/or placement agent for private funds managed by or otherwise affiliated with CVC Credit Partners or a CVC Entity. The Distributor does not sit within the same corporate group as the General Partner. No placement agent fees, or expenses will be borne by the Fund.

EnCap Energy Capital Fund XI, L.P. – NM PERA committed \$100 million to EnCap Investments. L.P. a 2017 vintage year in the Private Equity allocation. EnCap Investments. L.P. has confirmed that there was no placement agent used for fundraising.

Cerberus Global Residential Mortgage Opportunity Fund, L.P. – NM PERA committed \$100 million to Cerberus Capital Management a 2017 vintage year in the Credit allocation. Cerberus Capital Management has confirmed that there was no placement agent used for fundraising.

Eagle Point Credit Partners, L.P. – NM PERA committed \$100 million to Eagle Point Credit Partners, L.P. a 2017 vintage year in the Credit allocation. Eagle Point Credit Partners, L.P. has confirmed that there was no placement agent used for fundraising.

Meridiam Infrastructure North America Fund III, LP. – NM PERA committed \$75 million to Meridiam Infrastructure Partners a 2017 vintage year in the Real Assets allocation. Meridiam Infrastructure Partners has confirmed that they have used CL to act as placement agent for the Fund. Meridiam or its affiliates will bear the cost of all placement fees.

Onex Partners V, L.P. – NM PERA committed \$75 million to Onex Partners Manager LP a 2017 vintage year in the Private Equity allocation. Onex Partners Manager LP Partners has confirmed that Credit Suisse to act as placement agent for the Fund. Meridiam or its affiliates will bear the cost of all placement fees. 100% of any advisory, monitoring, transaction, topping, break-up, or directors' fees and other fees received, including placement agent fees will be offset by management fees.

Cheyne Real Estate Credit Fund V –Opportunistic L.P. – NM PERA committed \$90 million to Cheyne Real Estate Credit Fund V –Opportunistic L.P. a 2016 vintage year in the Credit allocation. Cheyne Capital has communicated that there was no placement agent used for fundraising

Rockpoint Growth and Income Real Estate Fund II – NM PERA committed \$75 million to Rockpoint Growth and Income Real Estate Fund II, L.P. a 2017 vintage year in the Real Estate allocation. Rockpoint Group, L.L.C. has confirmed that Hodes Weill UK LLP on a limited basis for engagement solely with a small number of investors outside of the United States. If a placement agent fee is paid in connection with Growth and Income Fund II, the General Partner will be responsible for all such fees and expenses.

NewRock Core Real Estate (Rockwood Capital) – NM PERA committed \$150 million to NewRock a 2017 vintage year in the Real Estate allocation. Rockwood Capital, L.L.C. has communicated that there was no placement agent used for fundraising.

GEM Realty Evergreen Fund, L.P. –NM PERA committed \$100 million to GEM Realty Evergreen Fund, L.P. a 2017 vintage year in the Real Estate allocation. GEM Realty Capital, Inc. has confirmed that they have not engaged a private placement agent to assist with its current fundraising efforts.

Petershill Private Equity L.P. – NM PERA committed \$150 million to Petershill Private Equity LP. a 2017 vintage year in the illiquid Private Equity allocation. GSAM –Petershill Alternative Investments & Manager Selection (AIMS) has communicated that there was no placement agent used for fundraising.

Antin Infrastructure Partners III, L.P. – NM PERA committed \$76 million to Antin Infrastructure Partners III, L.P. a 2017 vintage year in the Real Assets allocation. Antin Infrastructure Partners has confirmed that Campbell Lutyens & Co. Ltd are engaged as placement agent. The fee terms are as follows: GP will incur all costs associated with the hiring of said placement agent.

Tennenbaum Capital Partners, Direct Lending Fund of One – NM PERA committed \$200 million to Tennenbaum Capital Partners, Direct Lending Fund of One a 2017 vintage year the Credit allocation. Tennenbaum Capital Partners has they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

RCP Small & Emerging Manager Fund of One – NM PERA committed \$75 million to RCP Small & Emerging Manager Fund of One a 2017 vintage year in the Global Equity allocation. RCP Advisors has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Napier Park Global Capital Specialized & Complex Credit – NM PERA committed \$300 million to Napier Park Global Capital Specialized & Complex Credit a 2016 vintage year in the Credit allocation. Napier Park Global Capital (US) has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

FountainVest China Capital Partners III, L.P. – NM PERA committed \$83 million to FountainVest China Capital Partners III, L.P. a 2016 vintage year in the Global Equity allocation. FountainVest Advisors Ltd. has confirmed that UBS are engaged as placement agent. The fee terms are as follows: FountainVest believes that the amount that will be paid to UBS which relates to NM PERA's investment is between 0.3% and 1.75% of NM PERA's commitment. The actual dollar amount of placement fees payable being US\$685,201. As per the LPA, as the entire placement agent fee is not treated as a fund expense but a GP expense, NM PERA will in effect be paying US\$0 to the placement agent.

Harrison Street Real Estate Partners VI, L.P. – NM PERA committed \$75 million to Harrison Street Real Estate Partners VI, L.P. a 2016 vintage year in the Real Estate allocation. Harrison Street Real Estate Capital, LLC has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Tillridge Global Agribusiness Partners II, L.P. – NM PERA committed \$75 million to Tillridge Global Agribusiness Partners II, L.P. a 2016 vintage year in the Real Assets allocation. Tillridge is a NGP affiliate, a 35% owner. Tillridge Capital Partners, LLC has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Charterhouse Capital Partners X, L.P. – NM PERA committed \$117 million to Charterhouse Capital Partners X, L.P. a 2016 vintage year in the Illiquid Credit allocation Charterhouse Capital Partners LLP LLC has confirmed that they did not engage a placement agent or third party marketer with respect to the NM PERA commitment.

ACM Fund II, LLC. – NM PERA committed \$40 million to ACM Fund II, LLC. a 2016 vintage year in the Real Assets allocation. ACM Management Company, LLC. ACM is working with Equilibrium Capital to fundraise for Fund II. Equilibrium Capital is a founding member of ACM, a significant minority shareholder and a member of the Investment and Management Committees. For the current Fund, ECS will receive 1.5 percent of total committed capital paid over two years, as compensation for these services. For Fund I, ECS was also paid 1.5 percent of total committed capital, paid over three years, for these services. No placement fees will be paid by the Fund. The GP will pay placement costs out of

its management fee. The amount relating to NM PERA commitment of \$40 million is therefore \$600,000.

DRC European Real Estate Debt Fund III, L.P. – NM PERA committed \$73 million to DRC European Real Estate Debt Fund III, L.P. a 2016 vintage year in the Private Credit allocation. DRC Capital Partners has confirmed that Evercore Partners International are engaged as placement agent. The fee terms are as follows: “New” Capital Commitments (new investors & element of re-ups exceeding Fund II commitment level) – 1.5%. “Existing” Capital Commitments (existing investors with re-ups up to Fund II commitment level) – 1.0%

Starwood XI Management, L.P. – NM PERA committed \$75 million to Starwood XI Management, L.P. a 2016 vintage year in the Real Estate allocation. Starwood Capital has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Brookfield Infrastructure Fund III, L.P. – NM PERA committed \$75 million to Brookfield Infrastructure Fund III, L.P. a 2016 vintage year in the Real Assets allocation. Brookfield Asset Management Inc. has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

TCV IX Fund – NM PERA committed \$65 million to TCV IX Fund, L.P. a 2016 vintage year in the Private Equity allocation. Technology Crossover Ventures has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

PineBridge Passport I, L.P. – NM PERA committed \$150 million to PineBridge Passport I, L.P. a 2016 vintage year in the Private Equity allocation. PineBridge has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Carlyle Power Partners II, L.P. – NM PERA committed \$65 million to Carlyle Power Partners II, L.P. a 2015 vintage year in the Private Equity allocation. Carlyle has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Warburg Pincus Private Equity XII, L.P. – NM PERA committed \$85 million to Warburg Pincus Private Equity XII, L.P. a 2015 vintage year in the Private Equity allocation. Warburg Pincus has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Madison Realty Capital Debt Fund III, L.P. – NM PERA committed \$50 million to Madison Realty Capital Debt Fund III, L.P. a 2015 vintage year in the Real Estate allocation. Madison has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Century Focused Fund IV, L.P. – NM PERA committed \$30 million to Century Focused Fund IV, L.P. a 2015 vintage year in the Private Equity allocation. Century Capital Management has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Trinity Ventures XII, L.P. – NM PERA committed \$30 million to Trinity Ventures XII, L.P. a 2015 vintage year in the Private Equity allocation. Trinity Ventures has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

RRJ Capital Master Fund III, L.P. – NM PERA committed \$65 million to RRJ Capital Master Fund III, L.P. a 2015 vintage year in the Private Equity allocation. RRJ Capital III Ltd. has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Rockwood X, L.P. – NM PERA committed \$60 million to Rockwood X, L.P. a 2015 vintage year in the Real Estate allocation. Rockwood Capital has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Ardian Infrastructure IV, L.P. – NM PERA committed \$69 million to Ardian Infrastructure IV, L.P. a 2015 vintage year in the Real Assets allocation. Ardian has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Atalaya Special Opportunities Fund VI, L.P. – NM PERA committed \$50 million to Atalaya Special Opportunities Fund VI, L.P. a 2015 vintage year in the Private Equity-Credit allocation. Atalaya Capital Management has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Charterhouse Capital Partners X, L.P. – NM PERA committed \$117 million to Charterhouse Capital Partners X, L.P. a 2015 vintage year in the Private Equity allocation. Charterhouse Capital Partners LLP has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Athyrium Opportunities Fund II, L.P. – NM PERA committed \$57.9 million to Athyrium Opportunities Fund II, L.P. a 2015 vintage year in the Private Equity allocation. Neuberger Berman Alternatives Advisers LLC and its affiliates (“Neuberger Berman”) provide sub-advisory services and other ancillary services to Athyrium Capital Management LLC, including assistance with fundraising and marketing of the Fund. For investors introduced by Neuberger Berman, Neuberger Berman typically receives approximately 60% of one year’s management fee, paid out over a three-year period. Such fees are not paid by the fund, rather out of the management fee collected by Athyrium Capital Management, LLC. Neuberger Berman, LLC. is a FINRA regulated broker dealer.

KSL Capital Partners IV, L.P. – NM PERA committed \$60 million to KSL Capital Partners IV, L.P. a 2015 vintage year in the Real Estate allocation. KSL Capital Partners, LLC has confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Garrison Opportunity Fund IV-A, LLC. – NM PERA committed \$60 million to Garrison Opportunity Fund IV-A, LLC a 2014 vintage year in the Private Equity allocation. Garrison Investment Group confirmed that they did not engage a placement agent or third-party marketer with

respect to the NM PERA commitment.

Harrison Street Real Estate Partners V, L.P. – NM PERA committed \$45 million to Harrison Street Real Estate Partners V, L.P. a 2014 vintage year in the Real Estate allocation. Harrison Street confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Paine & Partners Capital Fund IV, L.P. – NM PERA committed \$45 million to Paine & Partners Capital Fund IV, L.P. a 2014 vintage year in the Real Assets allocation. Paine & Partners confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Kelso Investments Associates IX – NM PERA committed \$60 million to Kelso Investment Associates IX a 2014 vintage year in the Private Equity allocation. Kelso disclosed that TransPacific Group LLC and TransPacific Group (Asia) Ltd will act as a placement agent in relation to the targeted marketing of limited partner interests in KIA IX to certain specified prospective investors in East Asia and Hong Kong & China respectively. Kelso was introduced to Mark Mason, the founder of the TransPacific companies, by a former executive of a limited partner. KTB Investment & Securities Co., Ltd. is the sub-agent in Korea. The placement agent fee is 100% offset to management fees.

KKR Global Infrastructure Fund II – NM PERA committed \$50 million KKR Global Infrastructure Fund a 2014 vintage year in the Real Assets allocation. KKR confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Natural Gas Partners XI – NM PERA committed \$50 million to Natural Gas Partners XI a 2014 vintage year in the Real Assets allocation. NGP confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

Starwood Global Opportunity X – NM PERA committed \$60 million to Starwood Global Opportunity X a 2014 vintage year for the Real Estate allocation. Starwood confirmed that they did not engage a placement agent or third-party marketer with respect to the NM PERA commitment.

EnCap Flatrock Midstream Energy III – NM PERA committed \$30 million to EnCap Flatrock III a 2014 vintage year for the Real Asset allocation. EnCap disclosed that no placement agent or third-party marketer was used.

Harvest MLP – NM PERA committed \$140 million a 2014 vintage year in the Real Assets allocation. Harvest disclosed that no placement agent or third-party marketer was used.

DRC European Real Estate Debt Fund II – NM PERA committed £26 million to DRC a 2013 vintage year fund in the Real Estate allocation. DRC engaged EverCore Private Funds Group for the marketing of ERED II in North America. The GP pays up to 2% on amounts raised by Evercore payable in installments over 3 years, or up to 520,000 on PERA's £26 million commitment. The GP pays the placement fee.

Onex Partners IV, LP – NM PERA committed \$45 million to Onex IV a 2013 vintage year fund in the US buyout allocation. Onex engaged Credit Suisse for the marketing of Fund IV. Onex pays a flat fee. The GP pays the placement fee.

Blackstone Real Estate Partners VII – NM PERA committed \$35 million to Blackstone VII a 2012 vintage year fund in the Real Estate allocation. Blackstone engaged Park Hill Group LLC for the marketing of BREP VII. Although Blackstone engaged Park Hill in connection for certain clients, Park Hill was not used in connection with PERA's commitment, thus PERA did not pay any placement fees.

Gilde Buyout Fund IV – NM PERA committed €15 million Euro to Gilde IV a 2011 vintage year fund in the non-US buyout allocation. Gilde engaged MVision for the marketing of Fund IV. Gilde pays a 0.35% fee on aggregate commitments, or €52,500 on PERA's €15 million commitment. The GP pays the placement fee.

Selene Residential Mortgage Opportunity Fund II – NM PERA committed \$20 million to Selene II a 2011 vintage year fund in the Real Estate allocation. Selene engaged Capstone Partners for the marketing of Fund II. Selene pays a 1% fee, or \$200,000 on PERA's \$20 million commitment. The fee is offset by the management fee.

Blackstone Real Estate Partners Europe III – NM PERA committed \$25 million to BREP Europe III a 2008 vintage year fund in the Real Estate allocation. Blackstone engaged Park Hill Group LLC for the marketing of BREP Europe III. BREP's agreement is to pay Park Hill 1% on aggregate commitments, or \$250,000 on PERA's \$25 million commitment.

Onex Partners III – NM PERA committed \$25 million to Onex III a 2008 vintage year fund in the Private Equity buyout allocation. Onex engaged Credit Suisse for the marketing of Fund III. The approximate fee paid on PERA's \$25 million commitment was \$325,000.

Selene Residential Mortgage Opportunity Fund I – NM PERA committed \$30 million to Selene I, a 2008 vintage year fund in the Real Estate allocation. Selene engaged Capstone Partners for the marketing of Fund II. Selene pays a 1% fee, or \$300,000 on PERA's \$30 million commitment. The fee is offset by the management fee.

Jordan Resolute Fund II – NM PERA committed \$25 million to Jordan Resolute II a 2007 vintage year fund in the Private Equity buyout allocation. Jordan engaged Credit Suisse for the marketing of Fund II. Jordan pays Credit Suisse 0.5%, or \$113,354 on PERA's \$25 million commitment.

Kelso Investment Associates VIII, L.P. – NM PERA committed \$30 million to Kelso III a 2007 vintage year fund in the Private Equity buyout allocation. Kelso engaged Credit Suisse for the marketing of Fund VIII. Kelso pays Credit Suisse 0.143%, or \$43,045 on PERA's \$30 million commitment.

Wayzata Opportunities Fund II, L.P. – NM PERA committed \$30 million to Wayzata II a 2007 vintage year fund in the distressed private equity allocation. Wayzata engaged Park Hill Group LLC for the marketing of Fund II. Wayzata pays a fee of 0.35% on aggregate commitments, or \$105,000 on PERA’s \$30 million commitment. Wayzata II is now classified as an Illiquid Credit manager.

Cerberus Institutional Partners Series IV, L.P. – NM PERA committed \$25 million to Cerberus IV a 2006 vintage year fund in the distressed Private Equity allocation. Cerberus engaged Monument Group for the marketing of Fund IV.

Coller International Partners V, L.P. – NM PERA committed \$25 million to Coller V a 2006 vintage year fund in the Private Equity portfolio. Coller engaged Credit Suisse for the marketing of Fund V.

Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: $\text{Portfolio Return} - [\text{Risk free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk free Rate})]$.

Benchmark R squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book to Market: The ratio of book value per share to market price per share. Growth managers typically have low book to market ratios while value managers typically have high book to market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price to Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price to earnings ratios whereas value managers hold stocks with low price to earnings ratios.

R Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$.

Sortino Ratio: Measures the risk adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.