

Chief Investment Officer Monthly Report

Board of Investments

August 10, 2022



Jonathan Grabel 
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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Market Environment

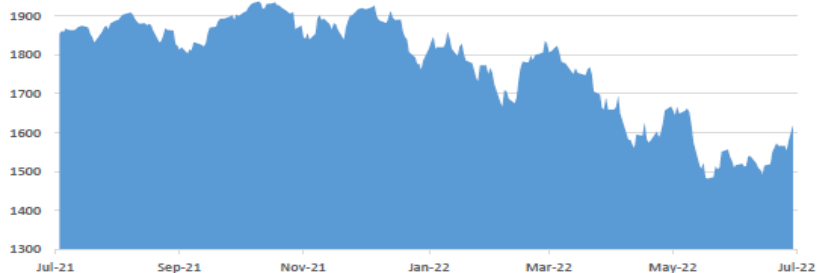


Global Market Performance as of July 31, 2022

MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
7.1	-2.0	-14.8	-11.0	8.3	7.6	9.3

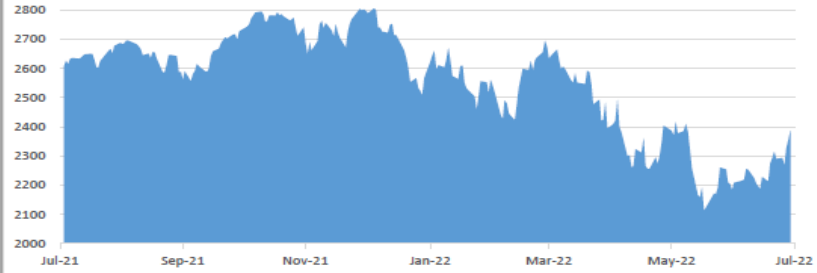
MSCI ACWI IMI Index 1-Year Performance



Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
9.4	0.1	-13.7	-7.4	12.6	12.2	13.5

Russell 3000 1-Year Performance



MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-0.2	-6.5	-17.8	-20.1	0.9	1.0	2.8

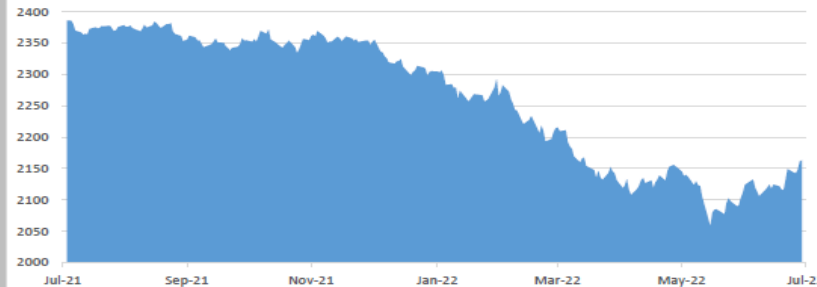
MSCI Emerging Markets 1-Year Performance



Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
2.4	1.5	-8.2	-9.1	-0.2	1.3	1.7

Barclays U.S. Aggregate Bond Index 1-Year Performance



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

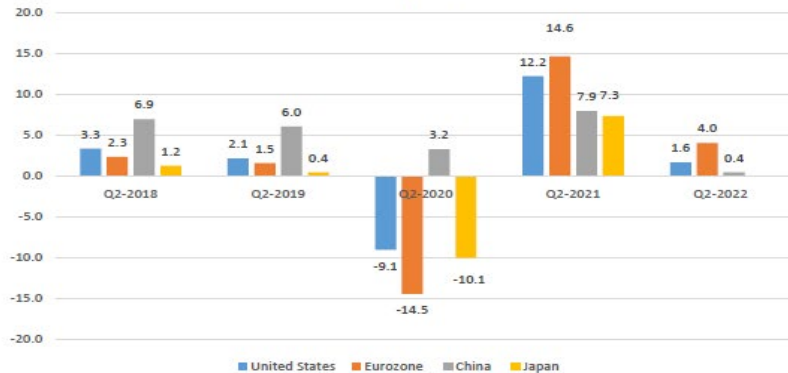
Source: Bloomberg



Key Macro Indicators*

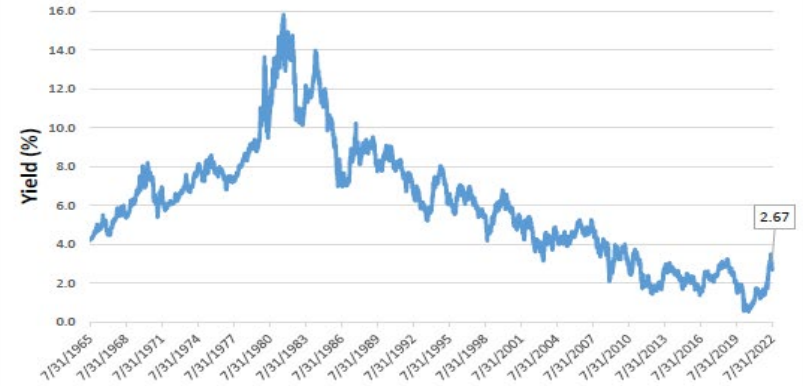
GDP Growth of Major Economies¹

Real GDP Growth YoY (%) - Last Five Years



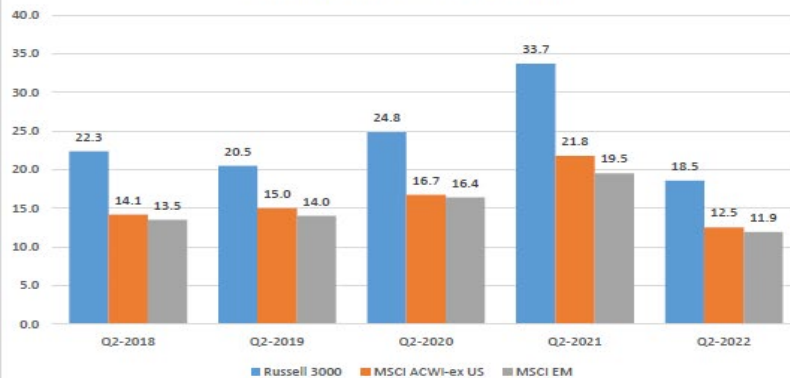
10-Year Treasury Yield²

Historical 10-Year Treasury Yield



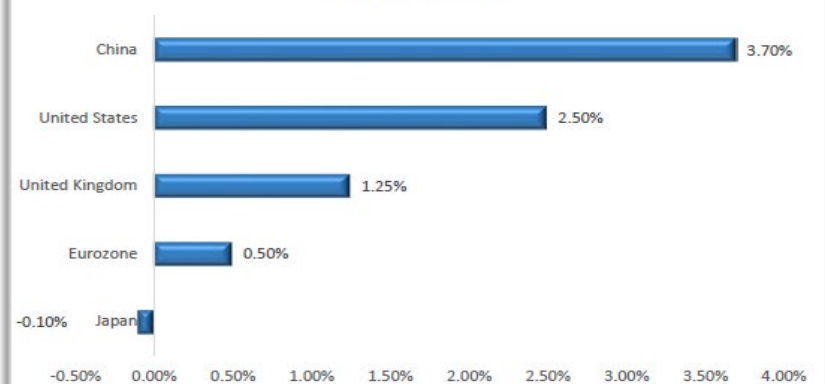
World Equity Valuation³

Price-to-Earnings - Last Five Years



Central Bank Rates⁴ (as of 7/31/2022)

Central Bank Rates



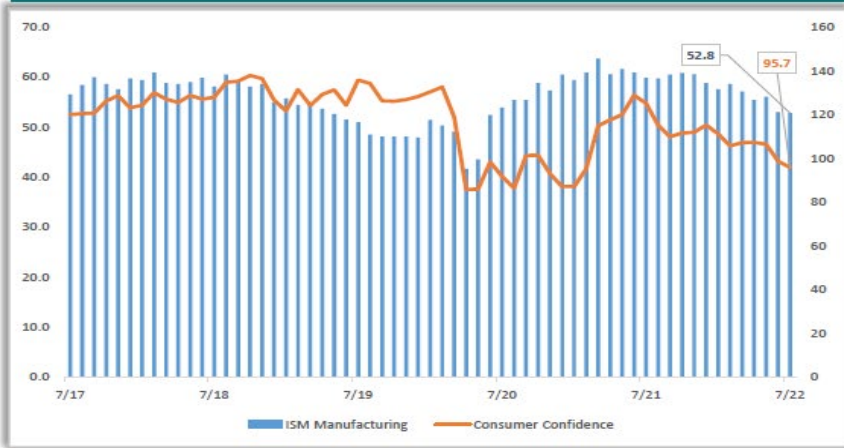
*The information on the "Key Macro Indicators" charts is the best available data as of 7/31/22 and may not reflect the current market and economic environment.

Sources: 1. Bloomberg
2. St. Louis Federal Reserve
3. FactSet
4. FactSet



Key Macro Indicators*

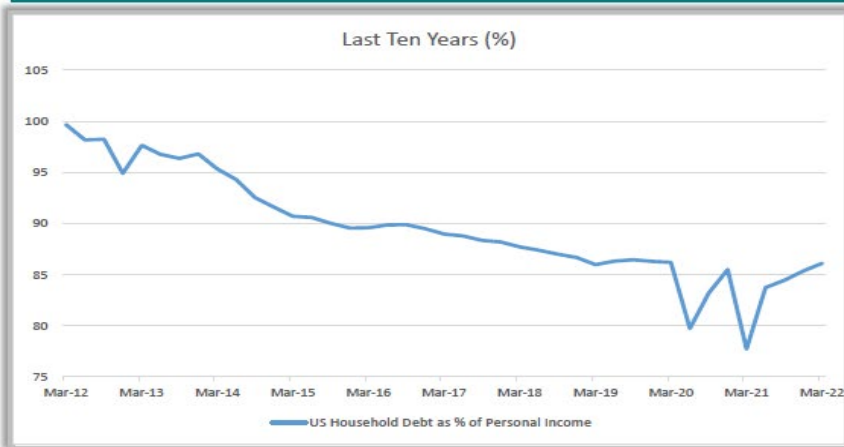
Consumer Confidence & ISM Manufacturing¹



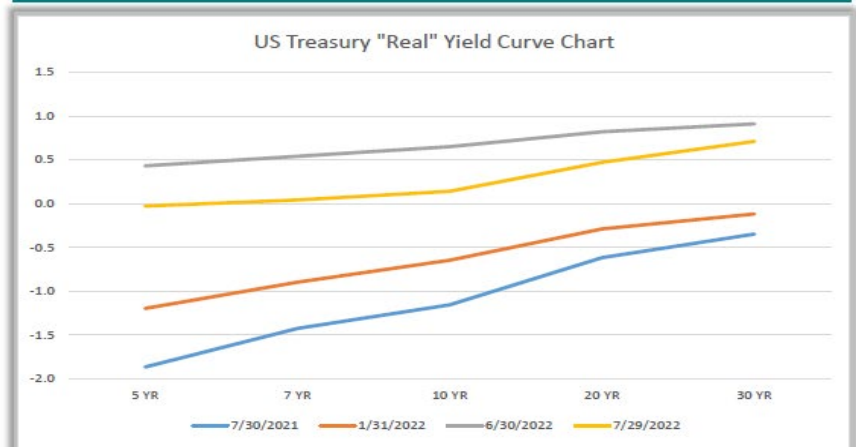
U.S. Inflation, Unemployment, & Labor Force Participation²



U.S. Household Debt as % of Personal Income³



U.S. Treasury "Real" Yield Curve⁴



*The information on the "Key Macro Indicators" charts is the best available data as of 7/31/22 and may not reflect the current market and economic environment.

Sources: 1. Bloomberg 3. Bloomberg
2. Bloomberg 4. U.S. Treasury



Market Themes and Notable Items to Watch

Recent Themes

- The U.S. Federal Reserve raised its primary borrowing rate by 0.75% in July, after an equally-sized rate hike in June
 - Policymakers stated that inflation “remains elevated”
- Real gross domestic product (GDP) decreased at an annual rate of 0.9% in the second quarter of 2022, according to the “advance” estimate released by the Bureau of Economic Analysis. In the first quarter, real GDP decreased 1.6%
- The U.S. 10-year Treasury yield ended July at 2.67%, up from 1.52% at the end of 2021 and 0.93% at the end of 2020
- Global equities (MSCI All Country World Investable Market Index) gained 7.1% in July and is now down 14.8% in 2022

What to Watch

- Interest rates and central bank actions
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Environmental, social, governance
 - Senate confirms two nominees for open SEC commissioner posts
 - SASB Standards are now overseen by International Sustainability Standards Board
 - SEC further revises proxy research regulations
- Russia-Ukraine war
- Covid-19
 - Covid variants, cases, transmission, vaccines
 - Economic and consumer behavior implications



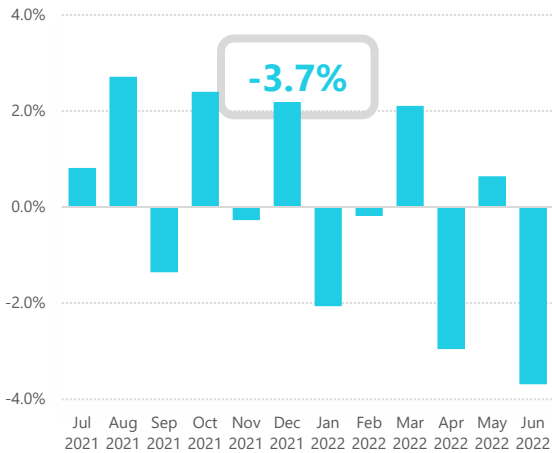
Portfolio Performance & Risk Updates



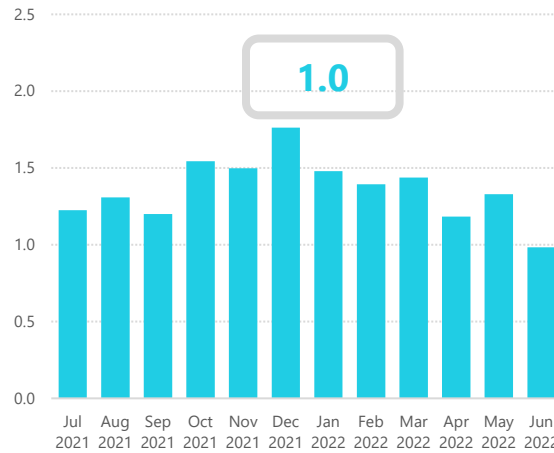
Total Fund Summary

as of June 2022

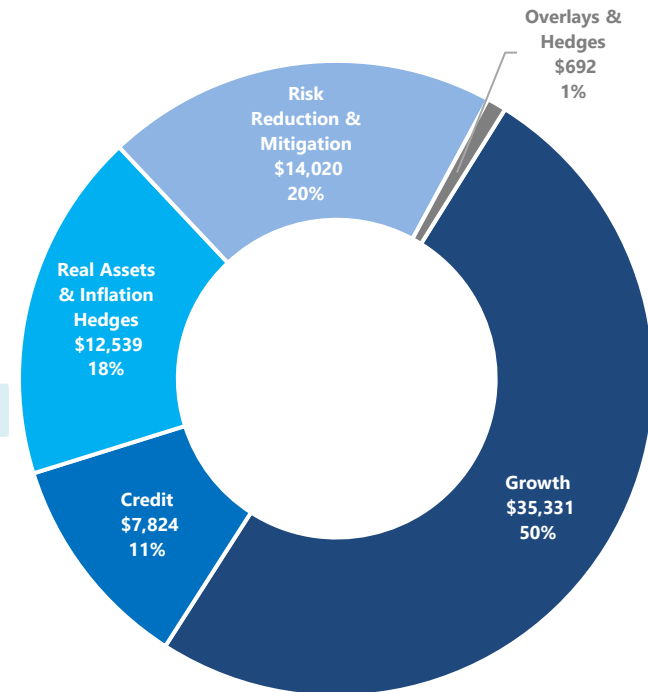
Monthly Return (net)



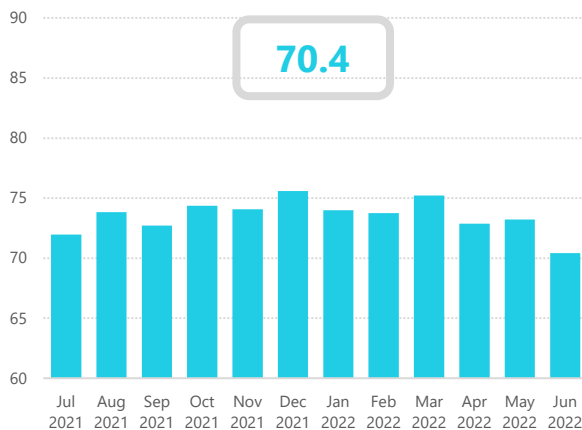
Sharpe Ratio (3-year annualized)



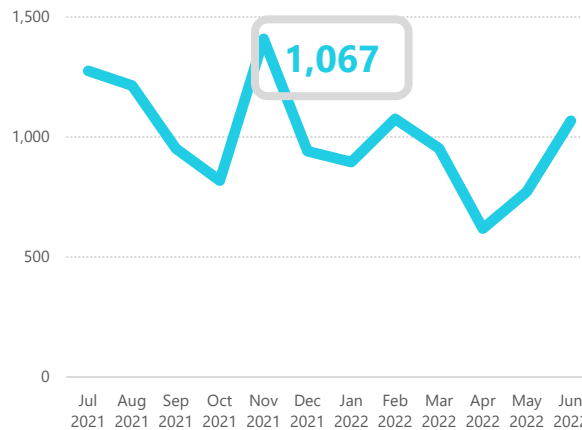
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

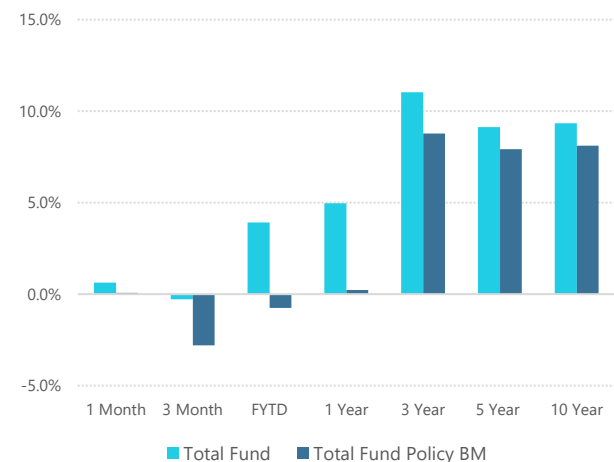


Historical Net Performance

as of June 2022

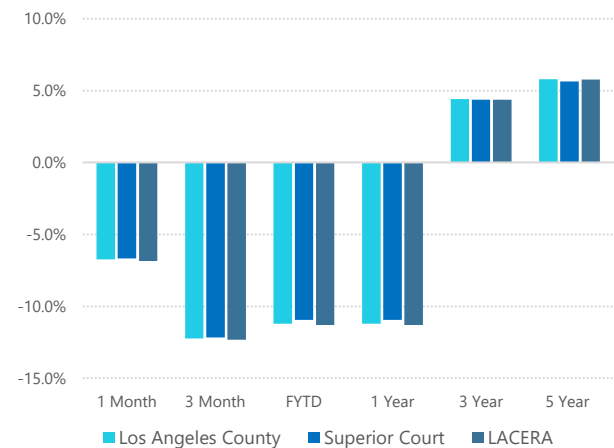
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	70,407	100.0%	100.0%	-3.7%	-5.9%	0.1%	0.1%	8.5%	8.1%	8.6%
Total Fund Policy BM				-3.9%	-7.9%	-4.6%	-4.6%	6.2%	7.0%	7.9%
7% Annual Hurdle Rate				0.6%	1.7%	7.0%	7.0%	7.0%	7.0%	7.0%
Growth	35,331	50.2%	51.0%	-4.9%	-9.4%	-2.0%	-2.0%	12.6%		
Growth Policy BM				-5.0%	-11.6%	-8.1%	-8.1%	9.5%		
Credit	7,824	11.1%	11.0%	-3.2%	-5.2%	-4.2%	-4.2%	3.1%		
Credit Policy BM				-2.8%	-5.7%	-7.5%	-7.5%	1.2%		
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	-4.8%	-1.6%	14.3%	14.3%	7.9%		
Real Assets & Inflation Hedges Policy BM				-4.9%	-3.2%	12.4%	12.4%	8.7%		
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-1.0%	-3.4%	-7.1%	-7.1%	0.8%		
Risk Reduction & Mitigation Policy BM				-1.0%	-3.9%	-7.7%	-7.7%	-0.1%		
Overlays & Hedges	692	1.0%		29.5%	73.9%					



OPEB Master Trust¹

	Market Value (\$ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB MASTER TRUST	2,394			-6.7%	-12.2%	-11.2%	-11.2%	4.4%	5.8%
Los Angeles County	2,327	97.2%	—	-6.7%	-12.2%	-11.2%	-11.2%	4.4%	5.8%
Superior Court	56	2.3%	—	-6.7%	-12.2%	-11.0%	-11.0%	4.4%	5.6%
LACERA	11	0.5%	—	-6.8%	-12.3%	-11.3%	-11.3%	4.4%	5.8%
OPEB Growth	1,200	50.1%	50.0%	-8.6%	-15.7%	-16.3%	-16.3%	6.2%	7.0%
OPEB MT Growth Policy BM				-8.6%	-15.8%	-16.5%	-16.5%	6.0%	6.7%
OPEB Credit	476	19.9%	20.0%	-4.2%	-6.8%	-9.4%	-9.4%	-0.5%	--
OPEB MT Credit Policy BM				-4.3%	-7.2%	-9.8%	-9.8%	-0.2%	--
OPEB Real Assets & Inflation Hedges	475	19.9%	20.0%	-7.0%	-12.0%	0.5%	0.5%	5.9%	--
OPEB MT RA & IH Policy BM				-7.0%	-12.1%	0.2%	0.2%	5.6%	--
OPEB Risk Reduction & Mitigation	242	10.1%	10.0%	-1.2%	-3.7%	-8.2%	-8.2%	-0.5%	1.4%
OPEB MT RR & M Policy BM				-1.2%	-3.7%	-8.3%	-8.3%	-0.6%	1.2%
Operational Cash	0	0.0%							

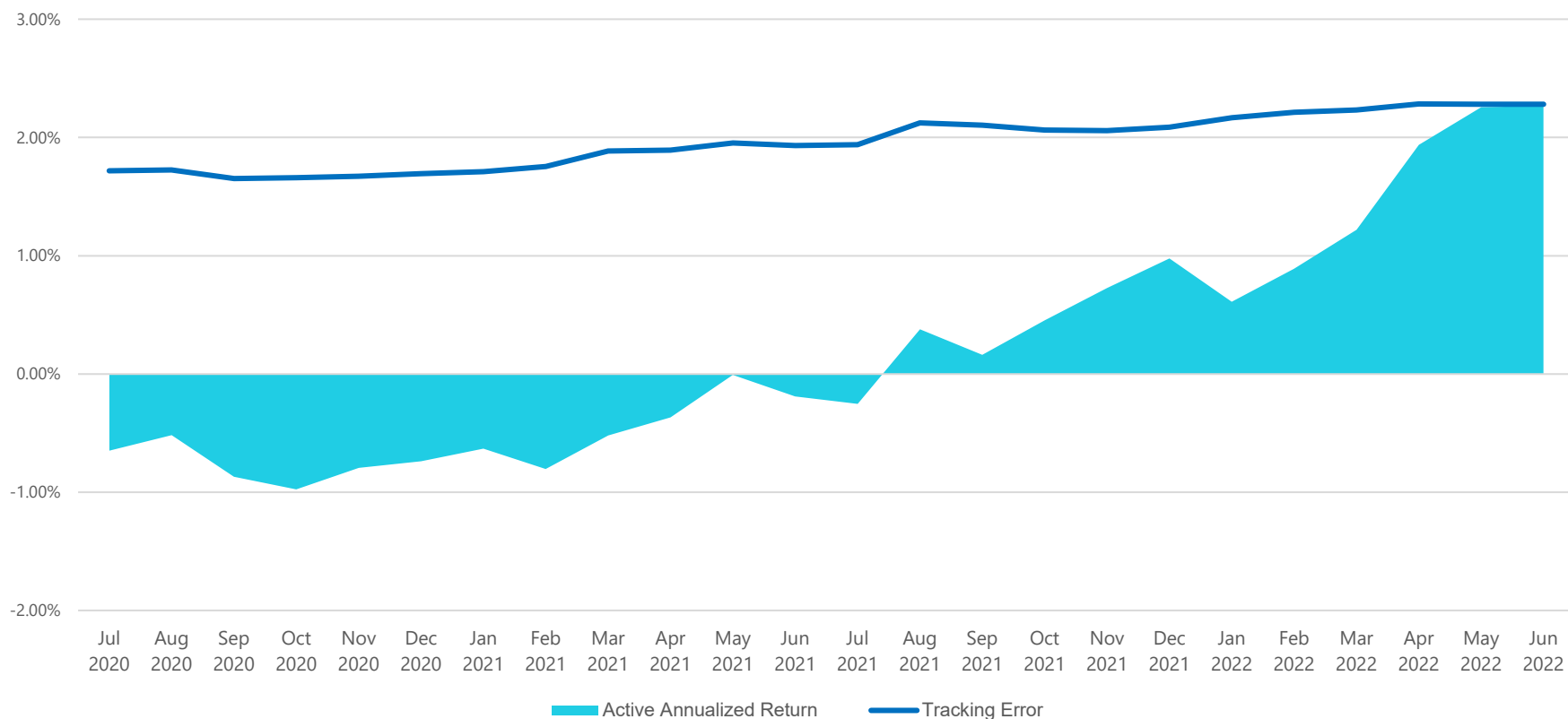


1. Market value differences between the sub-trusts and functional composites are due to operational cash.

Performance Based Risk

as of June 2022

Active Return vs. Tracking Error^{1,2,3}



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Jun 2022	8.5%	6.2%	2.3%	2.3%

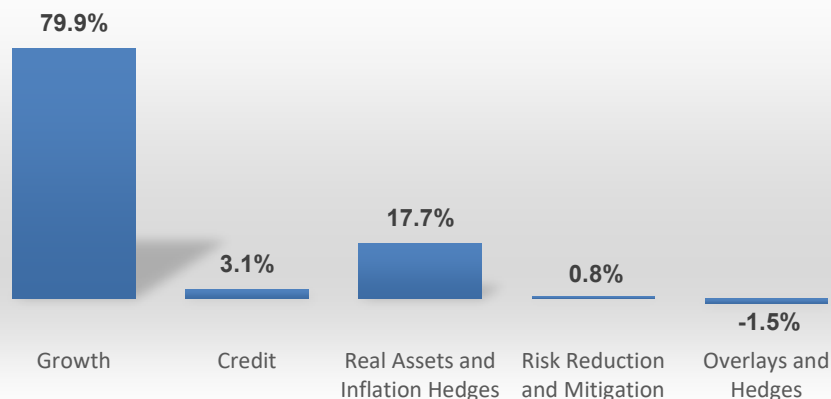
1. Rolling 36 months.
 2. Active return equals the difference in return between a portfolio and its benchmark.
 3. Tracking error (or active risk) measures the volatility of active returns.



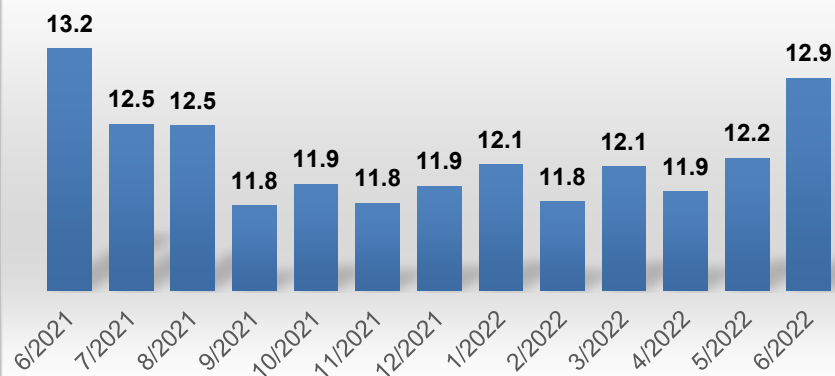
Total Fund Forecast Risk*

as of June 2022

%Contribution to Total Risk



Total Risk



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
Total Fund			12.9	12.2
Growth	51.5%	79.9%	20.3	18.9
Global Equity	31.5%	42.0%	18.1	18.2
Private Equity	18.4%	34.9%	27.4	26.2
Non-Core Private Real Estate	1.6%	3.0%	37.0	19.5
Credit	11.5%	3.1%	4.6	5.7
Liquid Credit	6.6%	2.3%	5.9	5.7
Illiquid Credit	4.9%	0.8%	4.3	5.7
Real Assets & Inflation Hedges	18.7%	17.7%	13.8	13.8
Core Private Real Estate	6.4%	7.5%	21.7	19.5
Natural Resources & Commodities	4.6%	4.1%	15.8	20.8
Infrastructure	4.9%	5.6%	17.1	17.3
TIPS	2.9%	0.5%	5.7	5.8
Risk Reduction and Mitigation	17.3%	0.8%	4.4	4.6
Investment Grade Bonds	8.1%	0.3%	5.5	5.5
Diversified Hedge Funds	5.8%	0.5%	3.8	0.2
Long-Term Government Bonds	1.8%	-0.1%	13.4	12.9
Cash	1.6%	0.0%	-	-
Overlays and Hedges	1.0%	-1.5%	-	-

*Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 3/31/2022

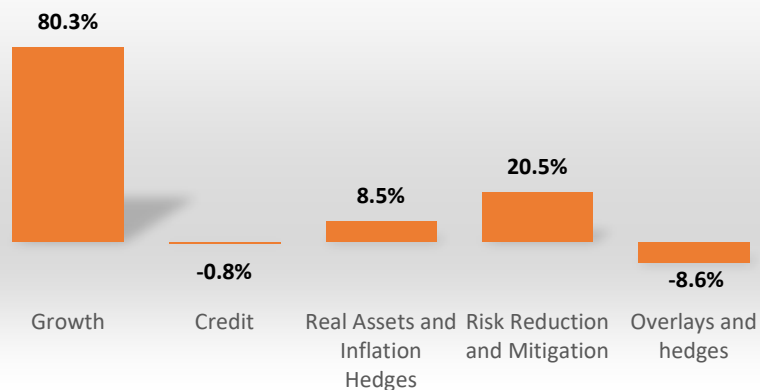
**BMK Risk stands for Benchmark Risk



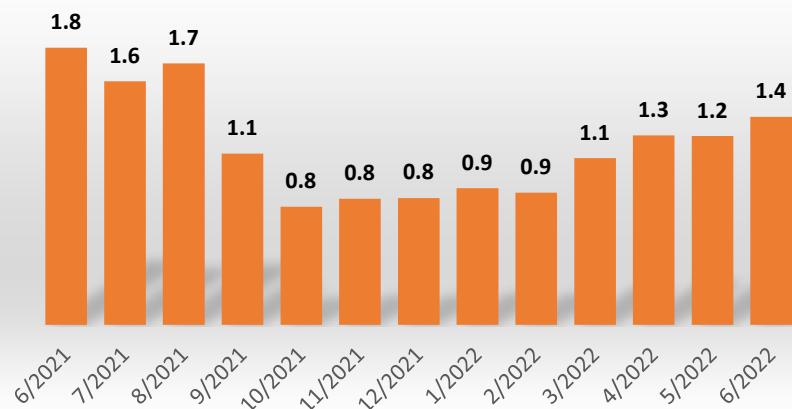
Total Fund Forecast Active Risk*

as of June 2022

Active Risk Contribution



Active Risk



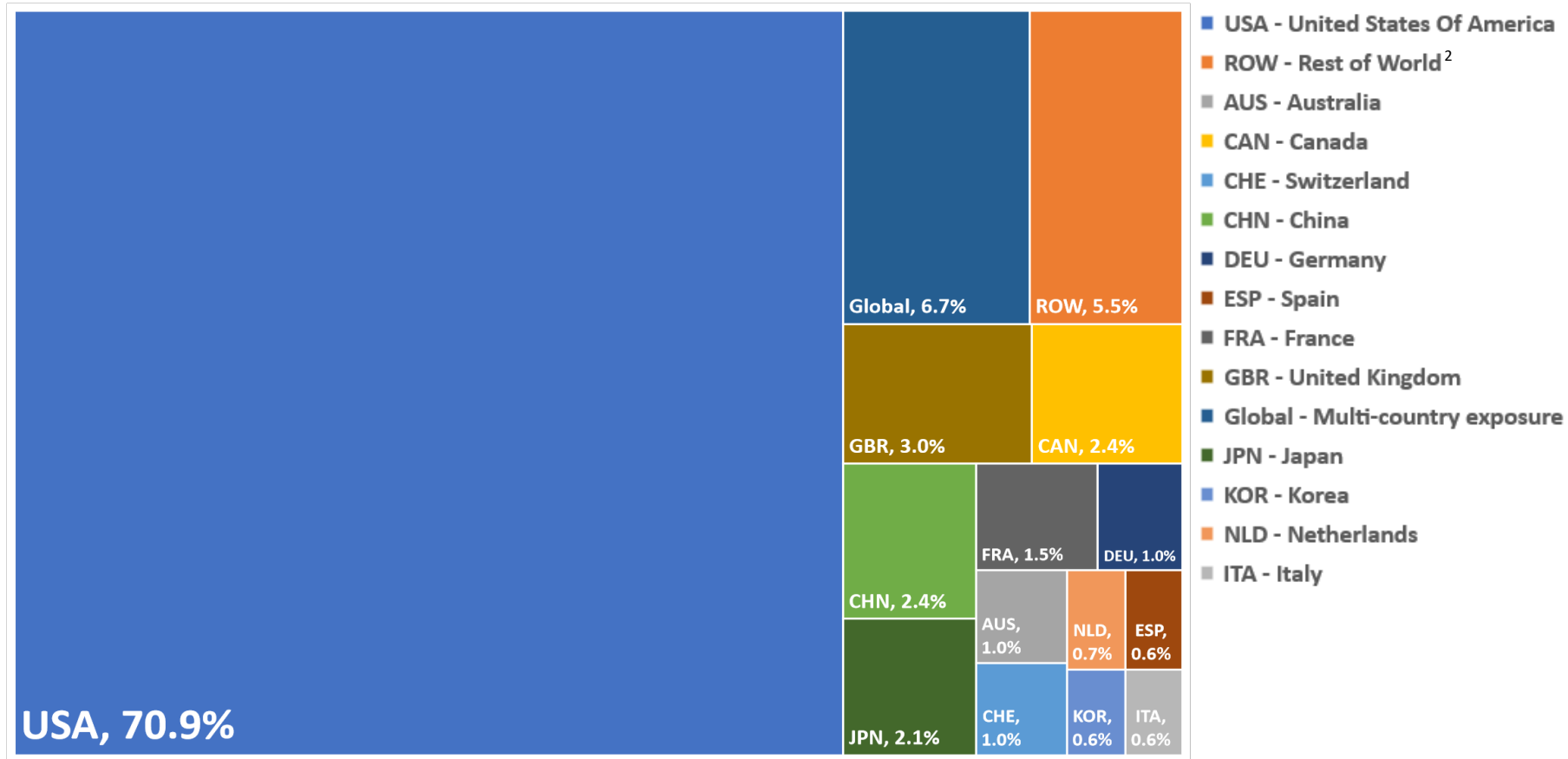
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			1.37	0.07	1.30
Growth	51.5%	0.49%	1.10	0.02	1.08
Global Equity	31.5%				
Private Equity	18.4%				
Non-Core Private Real Estate	1.6%				
Credit	11.5%	0.47%	-0.01	-0.02	0.01
Liquid Credit	6.6%				
Illiquid Credit	4.9%				
Real Assets & Inflation Hedges	18.7%	1.72%	0.12	-0.04	0.15
Core Private Real Estate	6.4%				
Natural Resources & Commodities	4.6%				
Infrastructure	4.9%				
TIPS	2.9%				
Risk Reduction and Mitigation	17.3%	-3.69%	0.28	0.23	0.05
Investment Grade Bonds	8.1%				
Diversified Hedge Funds	5.8%				
Long-Term Government Bonds	1.8%				
Cash	1.6%				
Overlays and Hedges	1.0%	1.00%	-0.12	-0.12	-

*Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 3/31/2022



Geographic Exposures by AUM* - Total Fund

as of June 2022 ex-overlays and hedges



*AUM = assets under management

¹ *Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 3/31/2022

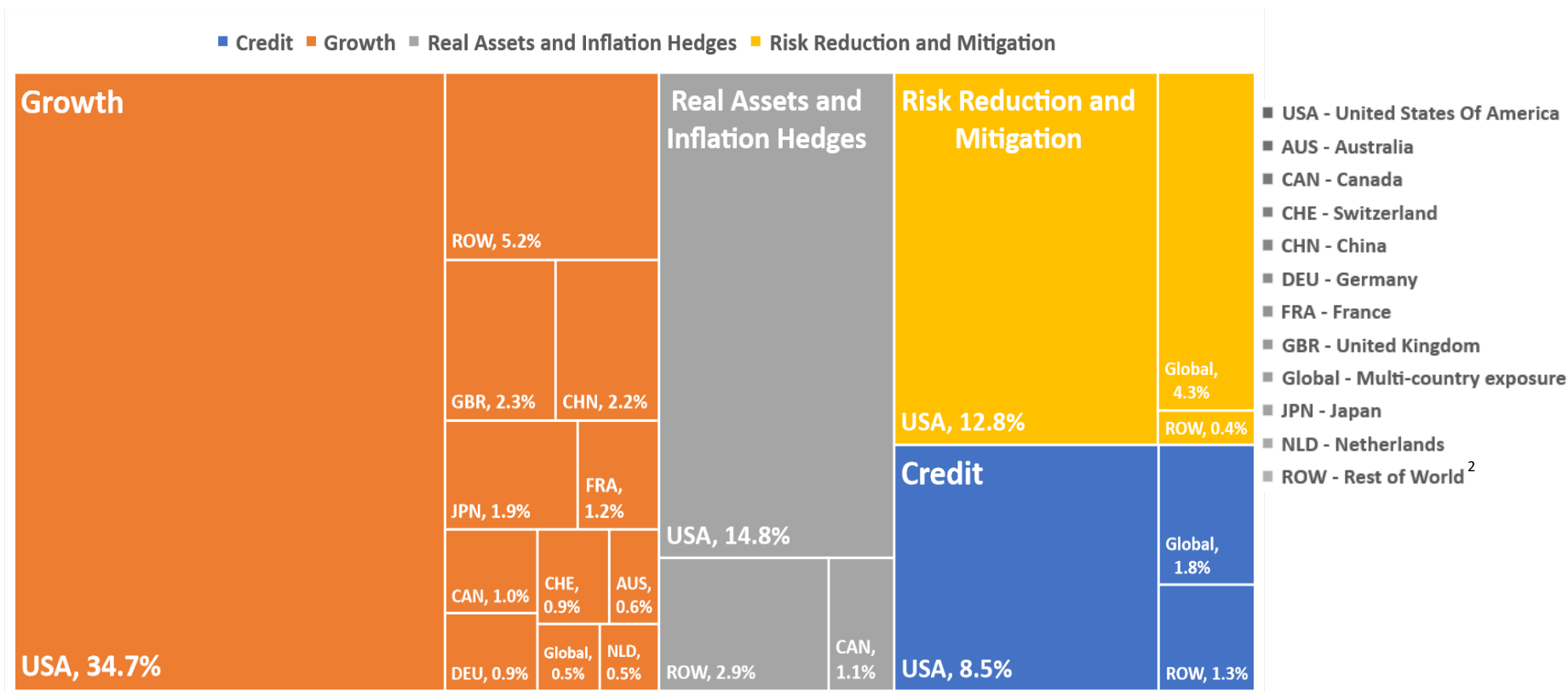
² "ROW - Rest of World" is sum of countries with weight below 0.5%

³ Geographic exposure is based on the domicile country of a given security/asset



Geographic Exposures by AUM* - Asset Categories

as of June 2022 ex-overlays and hedges



*AUM = assets under management

¹ *Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 3/31/2022

² "ROW - Rest of World" is sum of countries with weight below 0.5%

³ Geographic exposure is based on the domicile country of a given security/asset



Change In Fiduciary Net Position

Additions and Deductions in Fiduciary Net Position (Unaudited)



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-20	5	7	-
FY-21	2	10	\$13.8 billion
FY-22	7	5	(\$2.5 billion)



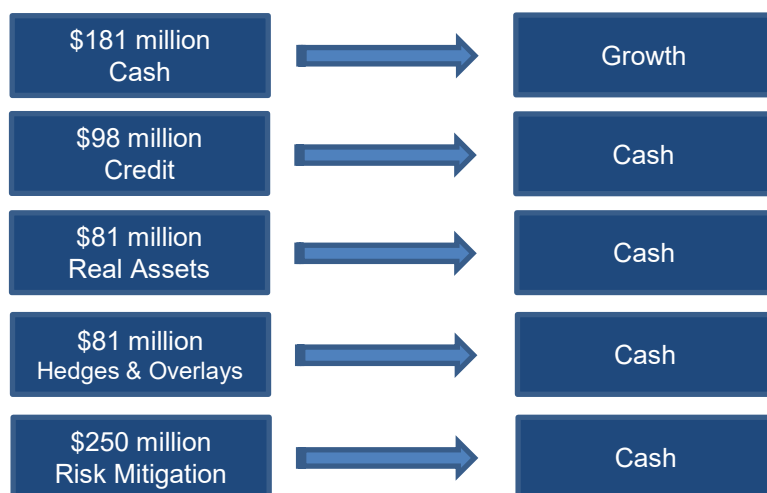
Portfolio Structural Updates



Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity



Hedges and Overlays

Program	June Return	June Gain/(Loss)	Inception* Gain/(Loss)
Currency Hedge**	1.6%	\$81.4 Million	\$1.2 Billion
Cash/Rebalance Overlay***	2.6%	\$51.6 Million	\$157.1 Million

*Currency and overlay program inception dates are 9/2010 & 7/2019, respectively.

** LACERA's currency hedge program's 1-month return is calculated monthly whereas the monthly gain/loss amount for the same period is the net realized dollar amount at contract settlement over three monthly tranches.

*** LACERA's overlay program's 1-month return includes interest earned on the cash that supports the futures contracts.

Current Search Activity

Status of Active Searches – Subject to Change

Name	RFP Issued	Due Diligence	BOI Review
Illiquid Credit Emerging Manager Program Search	●	●	August 10, 2022 BOI
Custody Bank Search	●	●	August 10, 2022 BOI
OPEB Private Markets Investments Search	●	●	August 10, 2022 BOI
Global Equity Emerging Separate Account Manager Search	●	●	Anticipated Late 2022

Quiet Period for Search Respondents

Please see the Appendix for this month's list of respondents to active searches



Key Initiatives and Operational Updates



Notable Initiatives and Operational Updates

Key Initiative Updates

- Implementation is ongoing for the new strategic asset allocation final policy targets and benchmarks
- Preparations for the BOI Offsite in September are underway

Team Searches and Open Positions

- Working on launching new searches
 - 1 – Deputy Chief Investment Officer
 - 1 – Principal Investment Officer
 - 2 – Senior Investment Officer
 - 1 search in progress
 - 4 – Financial Analyst-III
 - 4 searches in progress
 - 2 – Financial Analyst-II

Manager/Consultant Updates

Acadian – Growth – David Purdy, Senior Vice President, and portfolio manager of the Core Equity team departed the firm in June. Acadian will be seeking a replacement to fill his role. Additionally, as announced previously, co-CEO John Chisholm retired at the end of June after a 35 year plus career at Acadian. Ross Dowd who served as co-CEO assumed the sole CEO role effective July 1, 2022.

JP Morgan - Growth – Announced that Lara Clarke, Managing Director, and LACERA's relationship manager is leaving the firm. Darren Smith, Managing Director, and Akash Patel, Executive Director, will assume Ms. Clarke's responsibilities until a replacement is identified.



Commentary



Staff Chart of the Month*

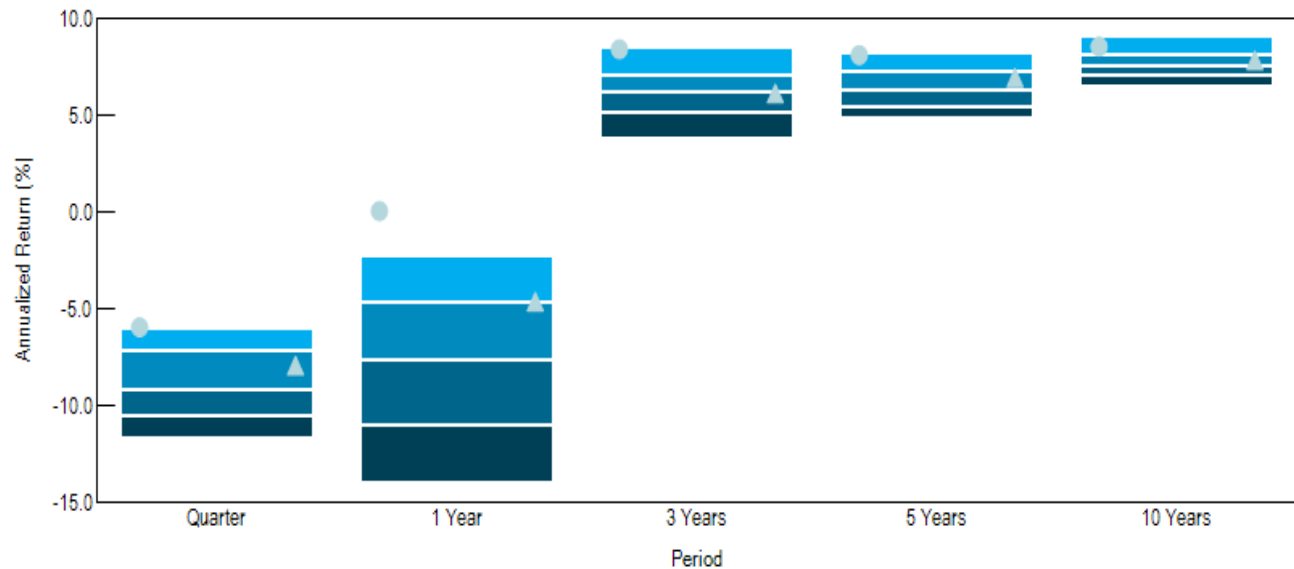
Preliminary Peer Rankings – June 30th, 2022

Preliminary

~1/2 of the funds have reported

InvMetrics Public DB > \$1B Net Return Comparison

Ending June 30, 2022



Return (Rank)

5th Percentile	-6.0	-2.3	8.5	8.2	9.1
25th Percentile	-7.1	-4.6	7.2	7.3	8.2
Median	-9.1	-7.6	6.3	6.3	7.6
75th Percentile	-10.5	-10.9	5.2	5.5	7.2
95th Percentile	-11.7	-13.9	3.9	5.0	6.6
# of Portfolios	34	34	33	33	32
● Total Fund	-5.9 (5)	0.1 (1)	8.5 (6)	8.2 (8)	8.6 (9)
▲ Total Fund Policy Benchmark	-7.9 (36)	-4.6 (26)	6.2 (51)	7.0 (34)	7.9 (46)



Appendix



Quiet Period for Search Respondents

Custody Bank Search

- ✓ State Street Bank and Trust Co.

Illiquid Credit Emerging Manager Program Search

- ✓ BlackRock Alternative Advisors
- ✓ Blackstone Alternative Asset Management
- ✓ Cambridge Associates
- ✓ GCM Grosvenor
- ✓ Stable Asset Management

OPEB Private Markets Investments Search

- ✓ BlackRock Financial Management Inc.
- ✓ Cambridge Associates LLC
- ✓ Goldman Sachs Asset Management, L.P.
- ✓ Hamilton Lane Advisors, LLC
- ✓ HarbourVest Partners, LLC
- ✓ J.P. Morgan Asset Management
- ✓ Morgan Stanley Investment Management
- ✓ Neuberger Berman Alternatives Advisers, LLC
- ✓ Pathway Capital Management, LP
- ✓ StepStone Group Holdings, LLC

Global Equity Emerging Separate Account Manager Search

- ✓ Attucks Asset Management, LLC
- ✓ Bivium Capital Partners, LLC
- ✓ Leading Edge Investment Advisors, LLC
- ✓ New Alpha Asset Management
- ✓ Stable Asset Management
- ✓ Xponance, Inc.



Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of June 2022*

LACERA PENSION FUND

10

GROWTH

Total # of Advisory

GROWTH

Global Equity

Asset Allocation Policy Compliance

✓

Investment Guideline Compliance

✓

1

One manager had guideline violations that resulted from securities breaching maximum individual weights relative to the portfolio's average position size during May. The manager was back within compliance by month-end.

Emerging Manager Program

✓

of Sudan/Iran Holdings Held by Managers

✓

9

9 issuers held, totaling \$27.0 mm in market value

Private Equity - Growth**

Asset Allocation Policy Compliance

✓

Guideline Compliance by
Strategv

✓

Guideline Compliance by Geographic Location

✓

Investment Exposure Limit

✓

Non-Core Private Real Estate**

(See Real Assets & Inflation Hedges - Core Private Real Estate section)

0

CREDIT

Total # of Advisory

CREDIT

Liquid Credit, Illiquid Credit**

Asset Allocation Policy Compliance

✓

Investment Guideline Compliance

✓

Emerging Manager Program

✓

of Sudan/Iran Holdings Held by Managers

✓

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of June 2022*

LACERA PENSION FUND

1

REAL ASSETS & INFLATION HEDGES

Total # of Advisory

REAL ASSETS & INFLATION HEDGES****

Core Private Real Estate**

- Asset Allocation Policy Compliance
- Guideline Compliance by Strategy (Core/Non-Core)
- Guideline Compliance by Manager
- Guideline Compliance by Property Type
- Guideline Compliance by Geographic Location
- Guideline Compliance by Leverage

Quarterly Review Status	# of Advisory	Notes
✓		
✓		
✓	1	One manager is 41% of the core risk category which exceeds the 35% limit. The actual allocations of the portfolio may fall outside of the ranges as the portfolio makes its Board approved strategic transition.
✓		
✓		
✓		

Natural Resources & Commodities***

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- # of Sudan/Iran Holdings Held by Managers

✓		
✓		
✓		

Infrastructure

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- # of Sudan/Iran Holdings Held by Managers

✓		
✓		
✓		

TIPS

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- # of Sudan/Iran Holdings Held by Managers

✓		
✓		
✓		

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of June 2022*

LACERA PENSION FUND

2

RISK REDUCTION & MITIGATION

Total # of Advisory

RISK REDUCTION & MITIGATION

Investment Grade Bonds

Asset Allocation Policy Compliance
Investment Guideline Compliance
Emerging Manager Program
of Sudan/Iran Holdings Held by Managers

Quarterly Review Status

of Advisory

Notes

✓

✓

✓

✓

2

2 issuers held, totaling \$0.8 mm in market value

Diversified Hedge Funds**

Asset Allocation Policy Compliance
Portfolio Level Compliance
Direct Portfolio Manager Guideline Compliance

✓

✓

✓

Long-term Government Bonds

Asset Allocation Policy Compliance
Investment Guideline Compliance
Emerging Manager Program
of Sudan/Iran Holdings Held by Managers

✓

✓

✓

✓

Cash

Asset Allocation Policy Compliance
Investment Guideline Compliance
of Sudan/Iran Holdings Held by Managers

✓

✓

✓

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of June 2022*

INVESTMENT OPERATIONS

6

INVESTMENT OPERATIONS

Total # of Advisory

INVESTMENT OPERATIONS	Quarterly Review Status	# Advisory	Notes
Securities Lending			
Investment Guideline Compliance	✓		
\$ Value on Loan	✓	1	State Street \$3,720.9 mm
\$ Value of Cash/Non-Cash Collaterals	✓	1	State Street \$3,974.8 mm
Total Income - Calendar YTD	✓	1	State Street \$4.7 mm
Total Fund Overlays and Hedges			
Investment Guideline Compliance	✓		
Proxy Voting			
Number of Meetings Voted	✓	1	4,642 meetings voted
Tax Reclaims			
Total Paid Reclaims - Calendar YTD	✓	1	\$270,222
Total Pending Reclaims	✓	1	\$25.2 mm in process; timing of recovery is unique to each country
Fee Validation			
Fee Reconciliation Project	✓		
AB 2833	✓		
Investment Manager Meetings*****			
Manager Meeting Requests	✓		

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of June 2022*

OPEB MASTER TRUST

Functional Asset Categories	Quarterly Review Status	# Advisory	Notes
(Growth, Credit, Inflation Hedges, Risk Reduction & Mitigation)			
Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
# of Sudan/Iran Holdings Held by Managers	✓		

* This list is not exhaustive as various compliance processes are completed throughout the year. Each quarter, different items may appear on the compliance monitor.

** Represents the comprehensive Private Equity (3-month lag), Real Estate (3-month lag), Illiquid Credit (1- and 3-month lags), and Hedge Funds (1-month lag) programs across the total plan.

*** Investment guideline compliance based on public market exposure.

**** Reflects the most recent data available.

***** Advisory noted if the CEO or a Board member recommends staff to meet with a specific manager three or more times in a year. The purpose of notifying the activity is to promote transparency and governance best practices designed to preserve the integrity of the decision-making process.