

LIVE VIRTUAL BOARD MEETING



TO VIEW VIA WEB



TO PROVIDE PUBLIC COMMENT

You may submit a request to speak during Public Comment or provide a written comment by emailing PublicComment@lacera.com. If you are requesting to speak, please include your contact information, agenda item, and meeting date in your request.

Attention: Public comment requests must be submitted via email to PublicComment@lacera.com no later than 5:00 p.m. the day before the scheduled meeting.

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION
300 N. LAKE AVENUE, SUITE 650, PASADENA, CA

NOTICE OF A REGULAR MEETING OF THE BOARD OF INVESTMENTS
LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

HYATT REGENCY LONG BEACH

200 SOUTH PINE AVENUE, LONG BEACH, CA 90802

WEDNESDAY, SEPTEMBER 14, 2022

8:30 A.M. – REGENCY ROOM A

This meeting will be conducted by teleconference under California Government Code Section 54953(e).

*Any person may view the meeting online at
<http://www.lacera.com/leadership/board-meetings>*

*The Board may take action on any item on the agenda,
and agenda items may be taken out of order.*

- I. CALL TO ORDER
- II. WELCOME AND OPENING REMARKS
- III. PUBLIC COMMENT
(Written Public Comment - You may submit written public comments by email to PublicComment@lacera.com. Correspondence will be made part of the official record of the meeting. Please submit your written public comments or documentation as soon as possible and up to the close of the meeting.

Verbal Public Comment - You may also request to address the Board at PublicComment@lacera.com before and during the meeting at any time up to the end of the Public Comment item. We will contact you with information and instructions as to how to access the meeting as a speaker. If you would like to remain anonymous at the meeting without stating your name, please let us know.)
- IV. REAL ESTATE OPPORTUNITIES

Amit Aggarwal, LACERA
Mary Ludgin, Heitman
Margaret McKnight, Stepstone Group
Bob Perry, CBRE Investment Management
Broderick Storie, PAG

IV. REAL ESTATE OPPORTUNITIES (Continued)

This session commences with a discussion on megatrends that will shape the future of real estate. Thereafter, there will be a panel discussion on economic growth, demographics, climate change, and how all three may influence real estate investing.

V. INVESTMENT BELIEFS

Magdalia Armstrong, LACERA
Krista Powell, LACERA
Cindy Rivera, LACERA

An evaluation on the existing Investment Beliefs that were developed and adopted by the Board in 2016 – how they should be constructed and how applicable the beliefs are today. A discussion on existing and potential new themes to expand on or incorporate into the Investment Beliefs.

VI. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of August 10, 2022

VII. CHIEF EXECUTIVE OFFICER'S REPORT
(Memo dated August 30, 2022)

VIII. CHIEF INVESTMENTS OFFICER'S REPORT
(Memo dated September 14, 2022)

IX. CONSENT ITEMS

A. Recommendation that the Board approve attendance of Trustees at the PPI Executive Seminar and the Asia Pacific Roundtable in Singapore on October 16-21, 2022 and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated July 26, 2022) (Placed on the agenda at the request of Trustee Green)

X. NON-CONSENT ITEMS

- A. Recommendation as submitted by Jude Pérez, Principal Investment Officer and John Kim, Investment Officer: That the Board approve BlackRock Institutional Trust Company, N.A. (“BlackRock”) to manage a long-term U.S. Treasury bond index portfolio in a separate account for the OPEB Master Trust (“OPEB”) on an interim basis. (Memo dated September 1, 2022)

XI. REPORTS

- A. LACERA Quarterly Performance Book
Meketa Quarterly Performance Book
Jude Pérez Principal Investment Officer
Dale Johnson, Investment Officer
John Kim, Investment Officer
Terra Elijah, Investment Analyst
(Memo dated September 1, 2022)
- B. LACERA OPEB Quarterly Performance Book
Meketa OPEB Quarterly Performance Book
Jude Pérez, Principal Investment Officer
(For Information Only) (Memo dated September 1, 2022)
- C. Principles For Responsible Investment Board Nomination Window
Scott Zdrazil, Principal Investment Officer
(For Information Only) (Memo dated September 6, 2022)
- D. International Corporate Governance Network (ICGN) Annual
General Meeting Ballot
Scott Zdrazil, Principal Investment Officer
(For Information Only) (Memo dated August 24, 2022)
- E. Sustainability Accounting Standards Board (SASB) Alliance
Conversion to IFRS Sustainability Alliance
Scott Zdrazil, Principal Investment Officer
(For Information Only) (Memo dated August 24, 2022)
- F. Monthly Status Report on Legislation
Barry W. Lew, Legislative Affairs Officer
(For Information Only) (Memo dated August 30, 2022)

XI. REPORTS (Continued)

G. Legal Projects
Christine Roseland, Senior Staff Counsel
(For Information Only) (Memo dated September 2, 2022)

H. 2023 Star COLA Program
Ted Granger, Interim Chief Financial Officer
(For Information Only) (Memo dated August 26, 2022)

I. Monthly Travel & Education Reports – July 2022
Ted Granger, Interim Chief Financial Officer

Monthly Trustee Travel & Education Reports for July 2022
(Public memo dated August 22, 2022)
(Confidential memo dated August 22, 2022 – Includes Pending Travel)

4th Quarter Trustee Travel & Education Reports
(Public memo dated August 22, 2022)

J. August 2022 Fiduciary Counsel Contact and Billing Report
Steven P. Rice, Chief Counsel
(For Information Only) (Privileged and Confidential)
(Attorney-Client Communication/Attorney Work Product)
(Memo dated August 31, 2022)

XII. ITEMS FOR STAFF REVIEW

(This item summarizes requests and suggestions by individual trustees during the meeting for consideration by staff. These requests and suggestions do not constitute approval or formal action by the Board, which can only be made separately by motion on an agenda item at a future meeting).

XIII. ITEMS FOR FUTURE AGENDAS

(This item provides an opportunity for trustees to identify items to be included on a future agenda as permitted under the Board's Regulations).

XIV. GOOD OF THE ORDER

(For information purposes only)

XV. EXECUTIVE SESSION (Continued)

- A. Public Employee Performance Evaluation (Pursuant to Paragraph (1) of Subdivision (b) of California Government Code Section 54957)

Title: Chief Executive Officer

XVI. ADJOURNMENT

Documents subject to public disclosure that relate to an agenda item for an open session of the Board of Investments that are distributed to members of the Board of Investments less than 72 hours prior to the meeting will be available for public inspection at the time they are distributed to a majority of the Board of Investments Members at LACERA's offices at 300 N. Lake Avenue, Suite 820, Pasadena, CA 91101, during normal business hours of 9:00 a.m. to 5:00 p.m. Monday through Friday.

Persons requiring an alternative format of this agenda pursuant to Section 202 of the Americans with Disabilities Act of 1990 may request one by calling Cynthia Guider at (626) 564-6000, from 8:30 a.m. to 5:00 p.m. Monday through Friday, but no later than 48 hours prior to the time the meeting is to commence. Assistive Listening Devices are available upon request. American Sign Language (ASL) Interpreters are available with at least three (3) business days' notice before the meeting date.

Requests for reasonable modification or accommodation of the telephone public access and procedures stated in this agenda from individuals with disabilities, consistent with the Americans with Disabilities Act of 1990, may call the Board Offices at (626) 564-6000, Ext. 4401/4402 from 8:30 a.m. to 5:00 p.m. Monday through Friday or email PublicComment@lacera.com, but no later than 48 hours prior to the time the meeting is to commence.

Real Estate Opportunities

**Board of Investments Offsite
September 14, 2022**



LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Real Estate Opportunities

This session commences with a discussion on megatrends that will shape the future of real estate. Thereafter, there will be a panel discussion on economic growth, demographics, climate change, and how all three may influence real estate investing.

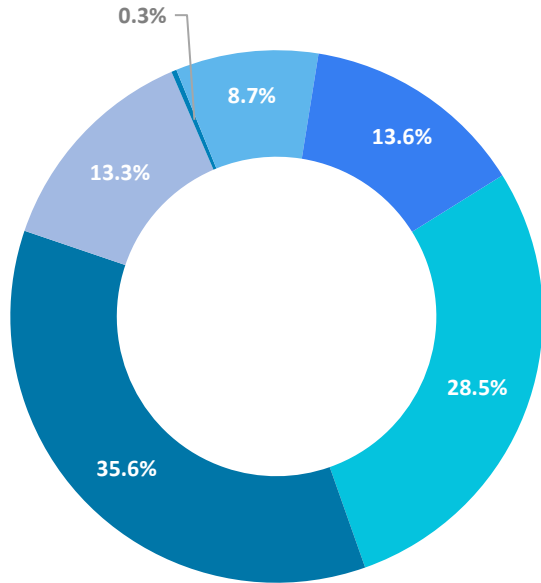
Session Outline

- **Introduction**
Amit Aggarwal (LACERA)
- **Looking ahead: real estate in 2028**
Mary Ludgin (Heitman)
- **Economic growth, demographics, climate change, and how it will influence real estate investing**
Bob Perry (CBRE Investment Management)
Broderick Storie (PAG)
Moderated by Margaret McKnight (Stepstone Group)

Real Estate Portfolio Weights

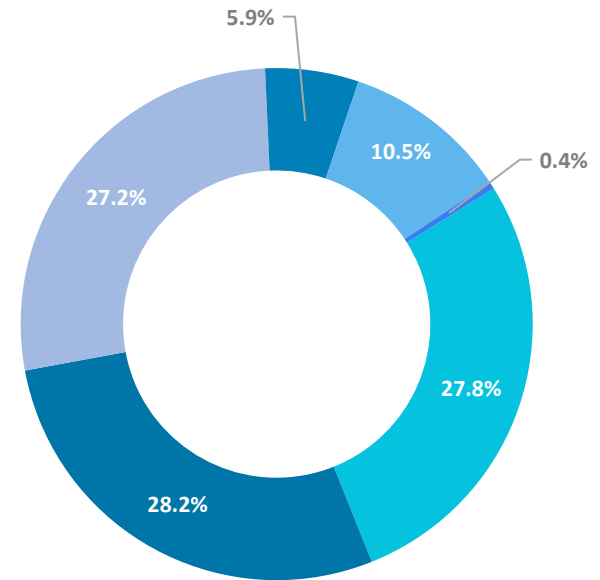
as of June 30, 2022

LACERA By Property Type



■ Apartment ■ Industrial ■ Office ■ Other ■ Retail ■ Various

ODCE By Property Type



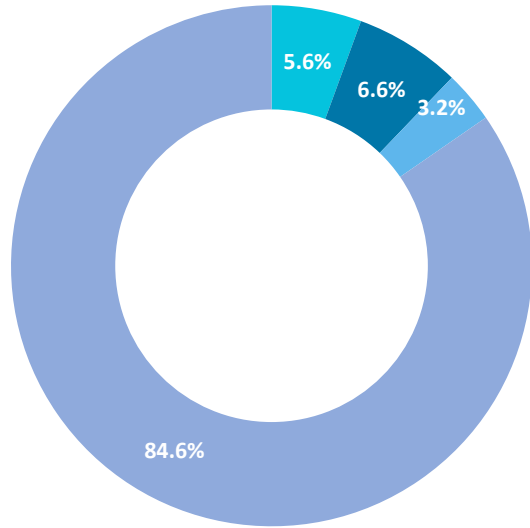
■ Apartment ■ Industrial ■ Office ■ Other ■ Retail ■ Land



Real Estate Portfolio Weights

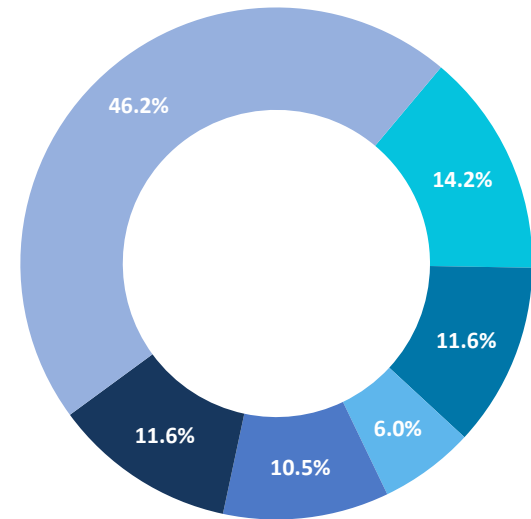
as of June 30, 2022

LACERA By Geography



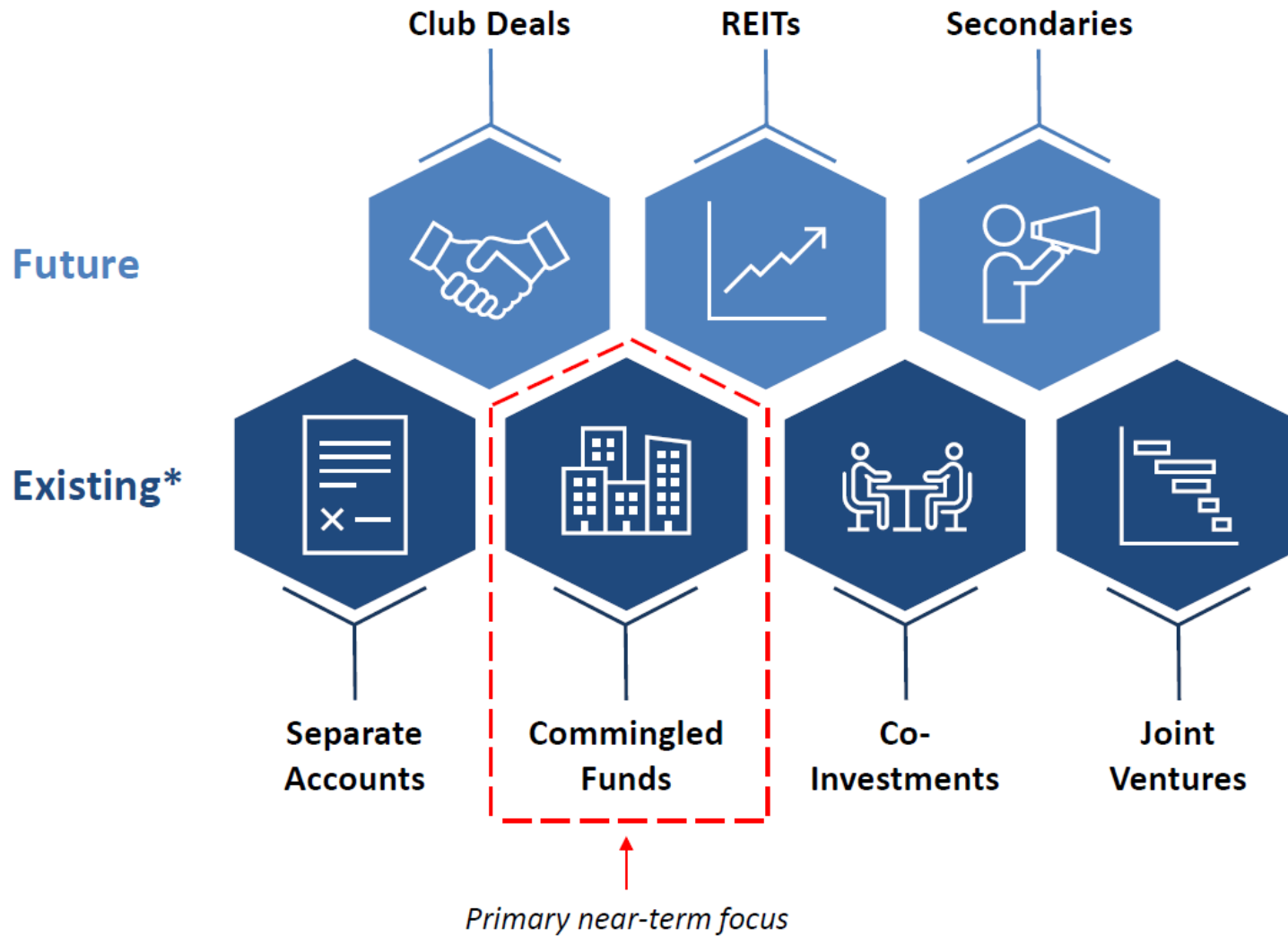
■ Asia ■ Europe ■ Global ■ North America

LACERA By Geography (US Region)



■ East ■ International ■ Midwest ■ South ■ Various ■ West

Real Estate Repositioning





Mary Ludgin

Heitman

Head of Global Investment Research

Mary Ludgin is Heitman's Head of Global Investment Research. She is a partner of the firm and sits on its global management, investment, and valuation committees. She holds an AB from Vassar and an MA and Ph.D. from Northwestern. Mary served as a Global Trustee of the Urban Land Institute and as chair of ULI's Chicago District Council. She currently chairs the board of ULI's Randall Lewis Center for Sustainability in Real Estate. She served as Chair of the Pension Real Estate Association, President of the National Council of Real Estate Investment Fiduciaries, and President of the Real Estate Research Institute. In 2019, Mary received PREA's James A. Graaskamp award, which recognizes researchers whose work contributes to the common body of knowledge regarding real estate investment. Mary oversees Heitman's work in the realm of ESG and has served as editor of the series on Climate Risk Heitman has authored in collaboration with the Urban Land Institute. The third report in that series was released in February and focuses on Climate Migration.



Margaret McKnight

StepStone

Partner and Head of Portfolio Solutions

Ms. McKnight is a member of the real estate team and focuses on various investment and portfolio management activities. Prior to joining StepStone, Ms. McKnight spent more than a decade at Carlyle's Metropolitan Real Estate, where she served as the co-Chief Investment Officer and was the fund head for Metropolitan's Global Funds series. She was a Consultant with Cambridge Associates and held various roles with JP Morgan. Ms. McKnight sits on the Investment Committee for Sutter Health, the fifth largest US non-profit community-based healthcare provider and the Real Assets Investment Subcommittee for Swarthmore College. She recently served as a Senior Advisor to Juniper Square, focused on Capital Markets applications of their investment management software. Ms. McKnight graduated with high honors from Swarthmore College and earned an MBA from New York University.



Bob Perry

CBRE

President Americas Real Estate Division

Robert Perry is President – Americas Real Estate Division and Head of the Strategic Partners U.S. fund series for CBRE Investment Management. In his capacity as President, Robert is responsible for all elements of investment execution in the Americas, including acquisition, disposition, asset management, development, redevelopment and asset finance. As Head of Strategic Partners U.S., Robert is responsible for all aspects of the firm’s enhanced return investment activity, including existing and future Strategic Partners funds. Robert leads capital raising, investment and operations decisions, and financing strategy. He is the Portfolio Manager for the CBRE Strategic Partners U.S. Value funds. Robert previously served as the leader of the North American real estate business for CarVal Investors, a global alternative investment fund manager and a subsidiary of Cargill. In that capacity, Robert was responsible for investment management and implementation for equity and credit investments, capital raising and investor relations. He served as Chairman of the Real Estate Investment Committee for North America and as a member of the firm’s Executive Committee. Robert also has extensive experience in real estate finance. He led the acquisition of large international real estate debt and equity portfolios across the Americas and Asia, leading several public-to-private executions and several initial public offerings in the U.S. and Canada. Robert earned a Bachelor of Arts degree and a Master of Science degree in Real Estate Investment Analysis from the University of Wisconsin-Madison. He is a past president of the Wisconsin Real Estate Alumni Association (WREAA) and an active member of ULI and PREA.



Broderick Storie, Partner

PAG (Hong Kong)

Co-Head of Real Assets

Mr. Broderick Storie is a Partner and Co-Head of PAG Real Assets. He is responsible for supervising operations and management of Real Assets strategy of our Group. Mr. Storie has been with PAG since April 2013. Prior to joining PAG, Mr. Storie was the Chief Risk and Investment Officer for Europe and Asia and a member of the Global Management Committee at Prudential Real Estate Investors (“PREI”) which had more than USD 55B under management. Mr. Storie started his career in Australia at Gresham Partners and subsequently joined Babcock & Brown, becoming Head of Real Estate for Asia (ex-Japan). Mr. Storie received his Bachelor’s degree as a Business double major in Finance and Accounting from the University of Technology (QLD), Australia.

Looking Ahead: **Real Estate in 2028**

ATTACHMENT

LACERA Board Presentation, September 2022

Mary Ludgin, PhD

HEAD OF GLOBAL INVESTMENT RESEARCH, HEITMAN



IMPORTANT NOTICE AND DISCLAIMER

- This confidential presentation and the information set out herein (the "Presentation") is summary in nature only and is qualified in its entirety by the information set out in the confidential private placement memorandum or other formal disclosure document (the "Disclosure Document") relating to the potential opportunity described herein (the "Opportunity").
- This Presentation has been provided to the recipient by Heitman, one of its affiliates or one of its affiliates as a sponsor (the "Sponsor") and is only intended to assist sophisticated professional investors in deciding whether they wish to consider reviewing the Disclosure Document. This Presentation is meant for use in one-on-one presentations with sophisticated professional investors. However, the contents of this Presentation are not to be construed as investment, legal or tax advice and do not consider the particular circumstances specific to any individual recipient to whom this Presentation has been delivered. The recipient should obtain advice from the appropriate qualified experts. Further, the Sponsor is not acting in the capacity of a fiduciary of any recipient of this Presentation.
- This Presentation is furnished on a strictly confidential basis to sophisticated professional investors. None of the information contained herein may be reproduced or passed to any person or used for any purpose other than for the purpose of considering the Opportunity. No approach of any kind may be made by any officer, employee or adviser of the recipient of this Presentation to any officer, employee, customer or supplier of the Sponsor without the prior written approval of the Sponsor. Notwithstanding the foregoing, recipients (and each employee, agent or representative of any recipient) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of an investment described herein and all materials of any kind (including opinions or other tax analyses) that are provided that relate to such tax treatment or tax structure, except to the extent maintaining such confidentiality is necessary to comply with any applicable securities laws. The foregoing language is not intended to waive any confidentiality obligations otherwise applicable, except with respect to the information and materials specifically referenced in the preceding sentence. By accepting delivery of this Presentation, each prospective investor agrees to the foregoing.
- Any opinions, forecasts, projections or other statements, other than statements of historical fact, that are made in this Presentation are forward-looking statements. Although the Sponsor believes that the expectations reflected in such forward-looking statements are reasonable, they do involve a number of assumptions, risks and uncertainties. Accordingly, neither the Sponsor nor any of its affiliates makes any express or implied representation or warranty, and no responsibility is accepted with respect to the adequacy, accuracy, completeness or reasonableness of the facts, opinions, estimates, forecasts, or other information set out in this Presentation or any further information, written or oral notice, or other document at any time supplied in connection with this Presentation, and nothing contained herein or in the Disclosure Document shall be relied upon as a promise or representation regarding any future events or performance. **Past returns from investment in real estate (or real estate related investments) are no guarantee that the same (or enhanced) returns from real estate (or real estate related investments) will be achieved in the future.**
- The recipient's attention is specifically drawn to the risk factors identified by the Sponsor relating to the Opportunity as set out in the Disclosure Document or any other documents provided to the recipient. The Sponsor also advises that any potential investment opportunities described herein are speculative, involve a degree of risk, and there is no guarantee of performance or a return of any capital with respect to any investment.
- By accepting delivery of this Presentation, the recipient accepts the terms of this notice and agrees, upon request, to return all materials received by the recipient from the Sponsor, including this Presentation without retaining any copies thereof.

Historical Patterns That Guided Real Estate Portfolio Construction Being Upended

HEITMAN

Regional malls rarely work anymore



CBD office looks solid but looks can deceive



Medical Office: No granite or marble but rock-solid cash flows

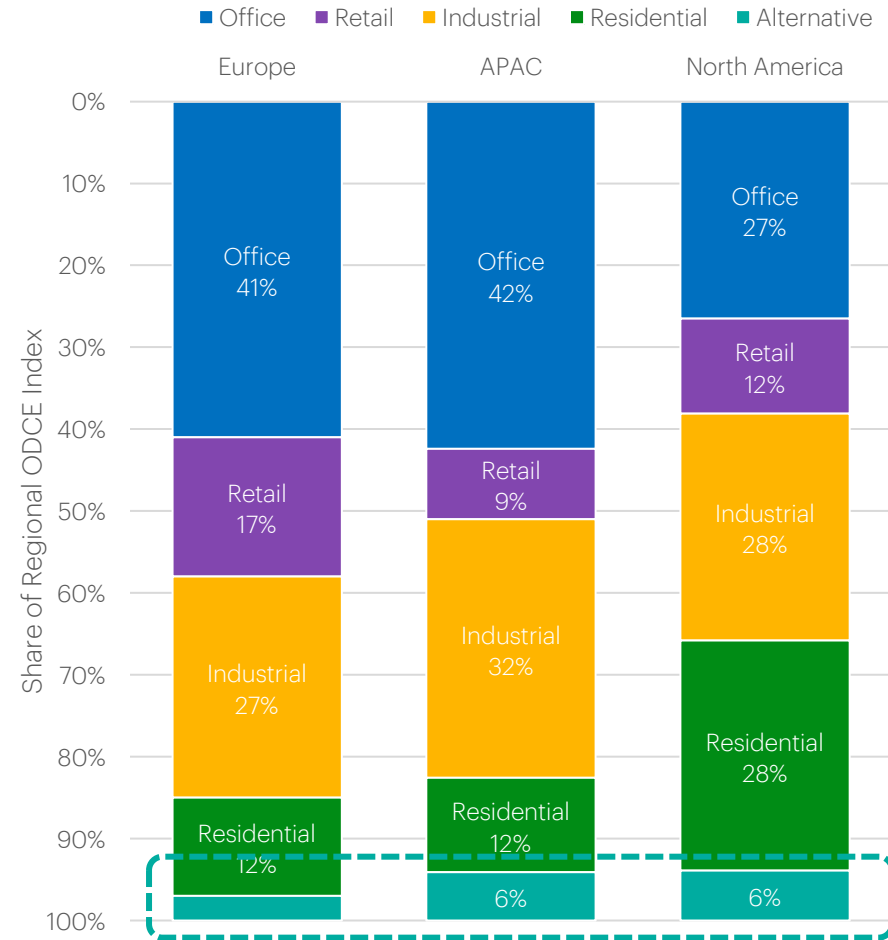


No curb appeal but Self Storage has performed across multiple cycles



Sector Rotation Underway With More Expected

**REGIONAL ODCE SECTOR WEIGHTS
2021 YEAR END**



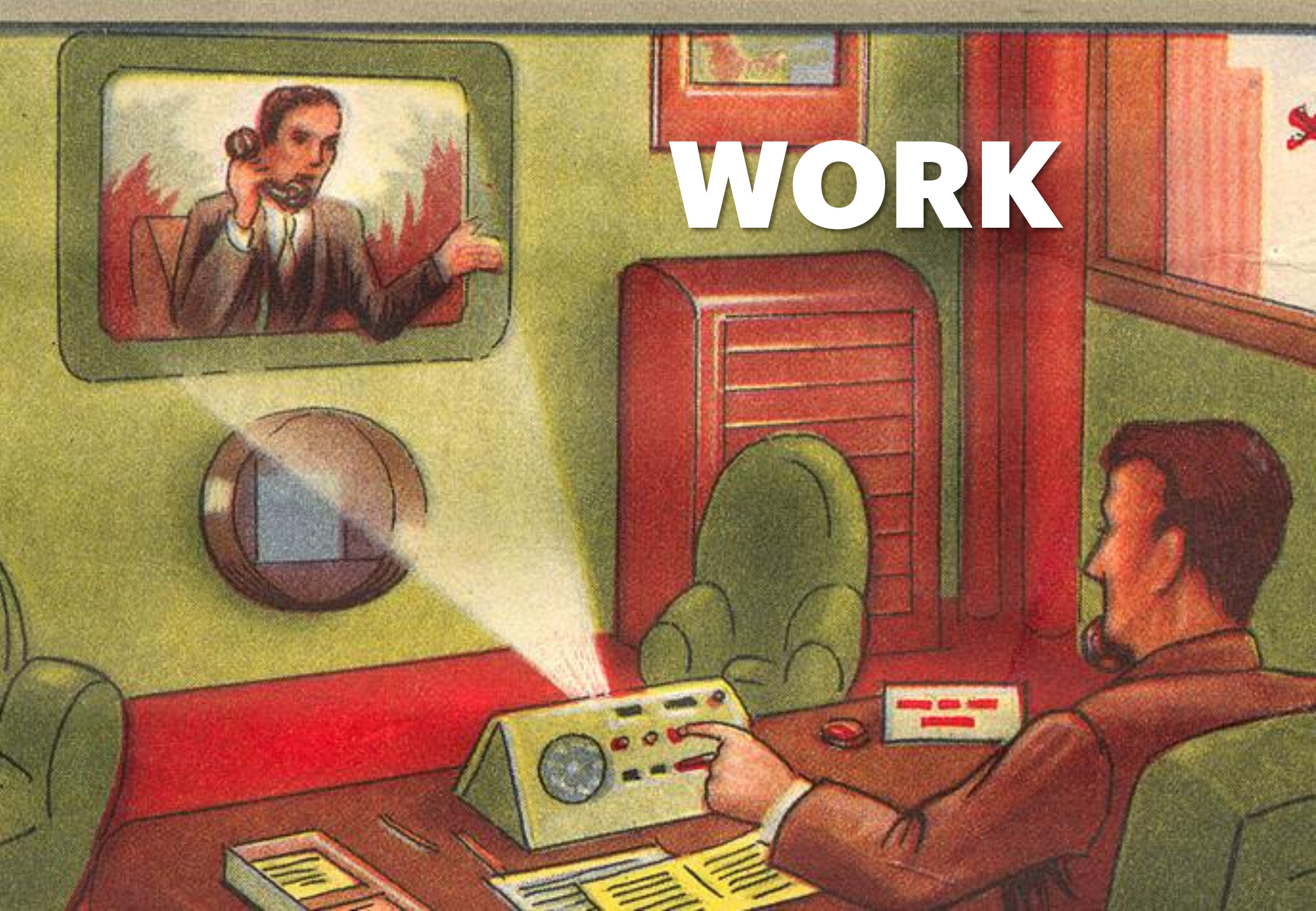
**PLANNED CAPITAL DEPLOYMENTS IN 2022
INREV SURVEY, BY INVESTOR DOMICILE**



Residential category includes some alternative assets, such as Student and Senior Housing.
Source: NCREIF, INREV, and ANREV ODCE Fund Indices; Heitman Research. US is Q4, others are Q3.

Source: INREV Investor Intentions Survey 2022; Heitman Research

WORK



COVID Permanently Destroyed Some Office Demand But ...

HEITMAN



WFH Isn't for everybody



WFH more likely here...



Cultural factors make it less likely in some regions



...than here

The Waning of Office Demand Will Create Re-Use Opportunities

HEITMAN



MAYFAIR, LONDON

Dampening of office occupier demand creates opportunity to convert former Victorian homes from office back to residential



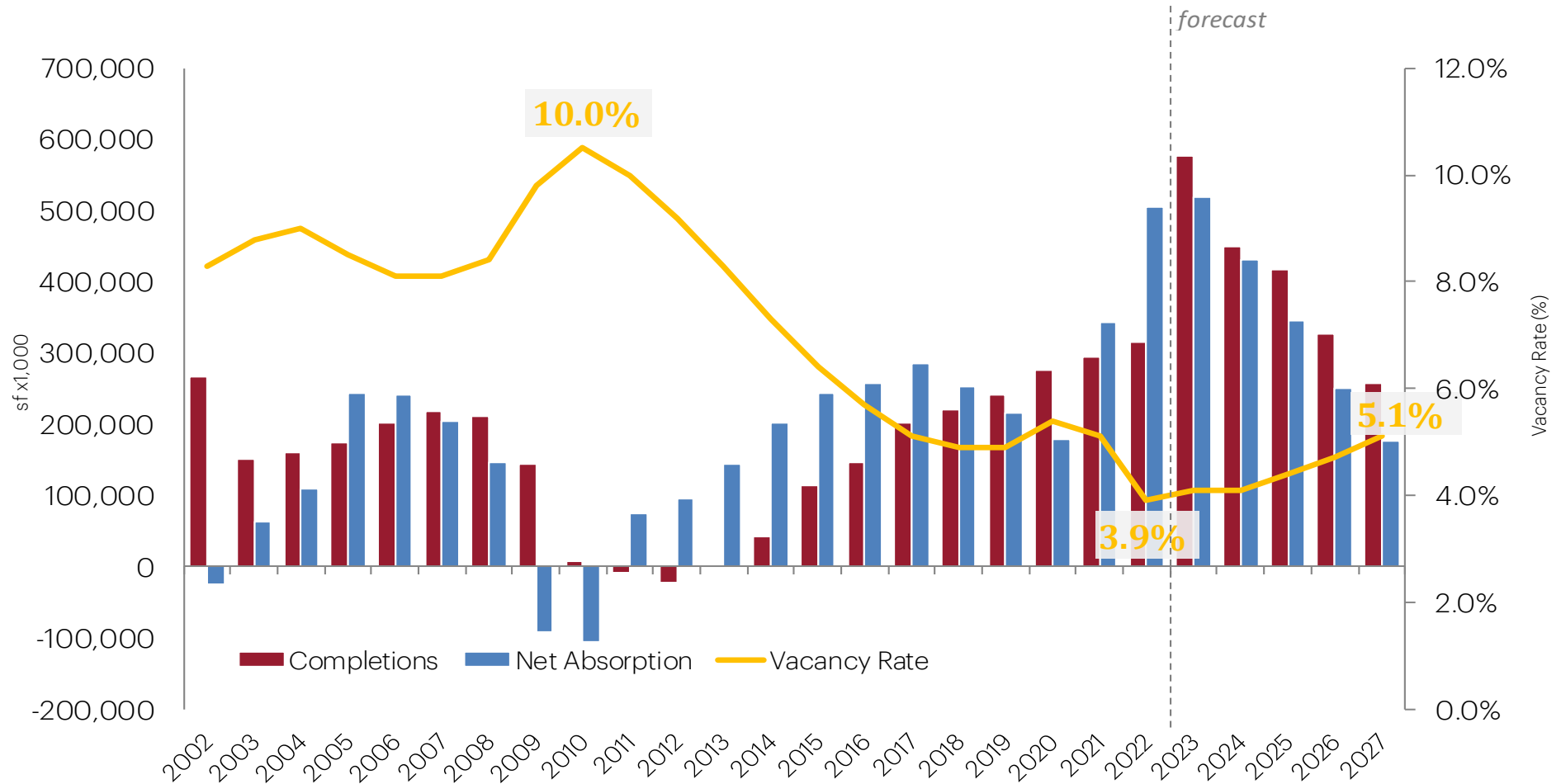
CANARY WHARF, LONDON

“Canary Wharf is a soulless island full of Blade Runner skyscrapers with few connections and fewer amenities. Hard to see who would want to live on the 55th floor of the HSBC Tower on an isolated peninsula with little shopping and no social life. “

-- Zubaer Mahboob, Heitman's Head of European Research

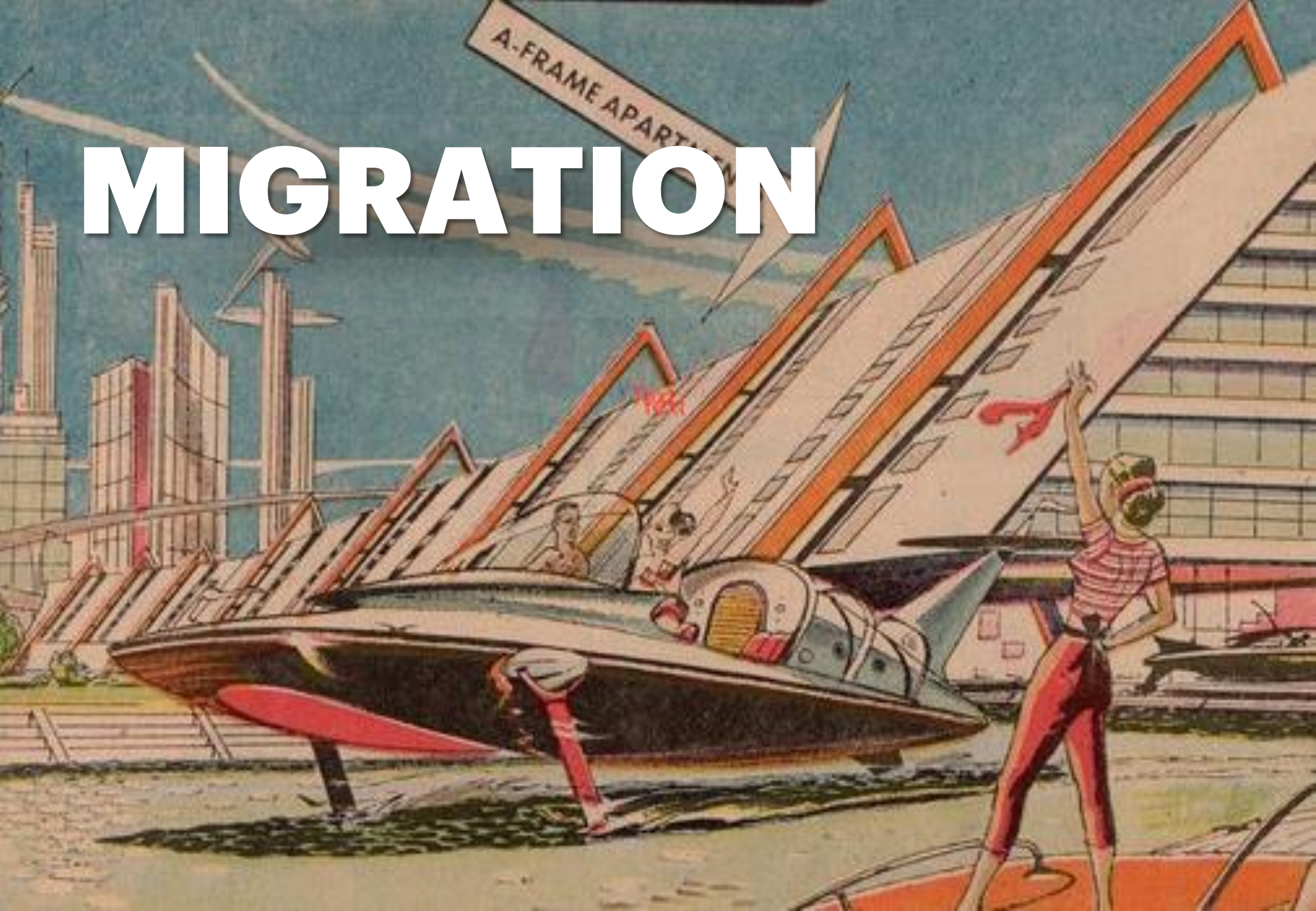
Industrial Real Estate is Morphing from Volatile and Macro-Dependent to a Portfolio Stalwart

INDUSTRIAL COMPLETIONS, NET ABSORPTION, AND VACANCY
US 2002-2027(F) (YEARS ENDING Q2)



Source: CoStar*, Heitman Research
 * adjustments made to CoStar forecast to account for disparity in market inventory

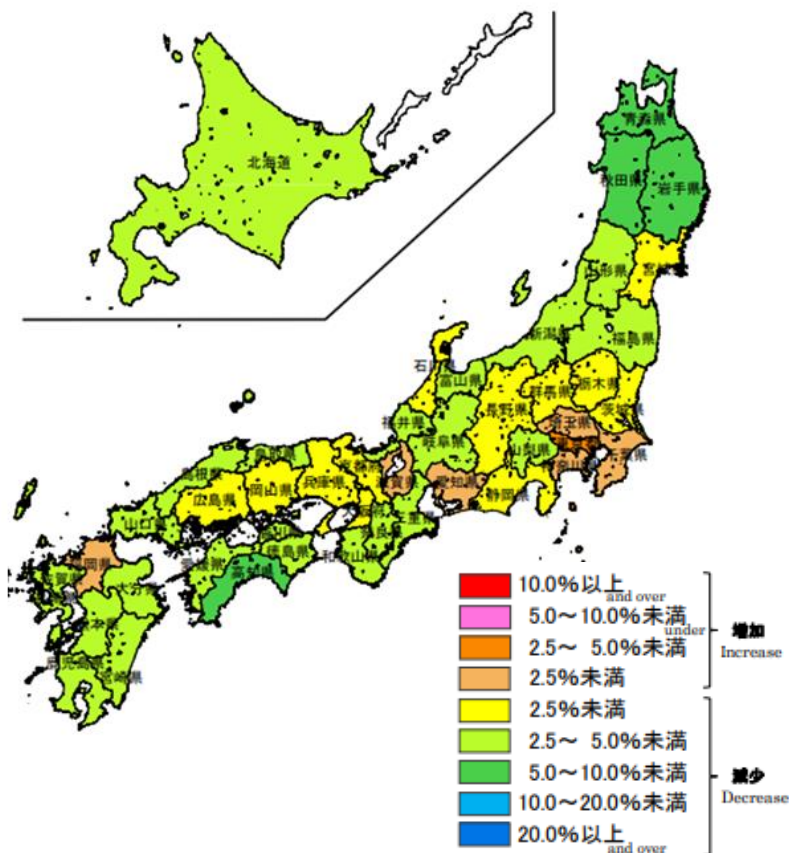
MIGRATION



Urbanization Will Remain an Investable Trend, But With Regional Twists

In countries where populations are plateauing or shrinking, focus on capital cities.

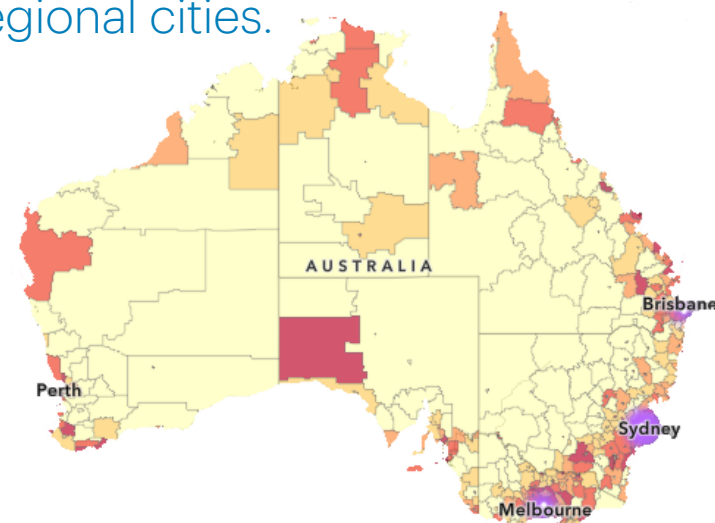
In countries where populations are growing, focus on affordable & amenitized regional cities.



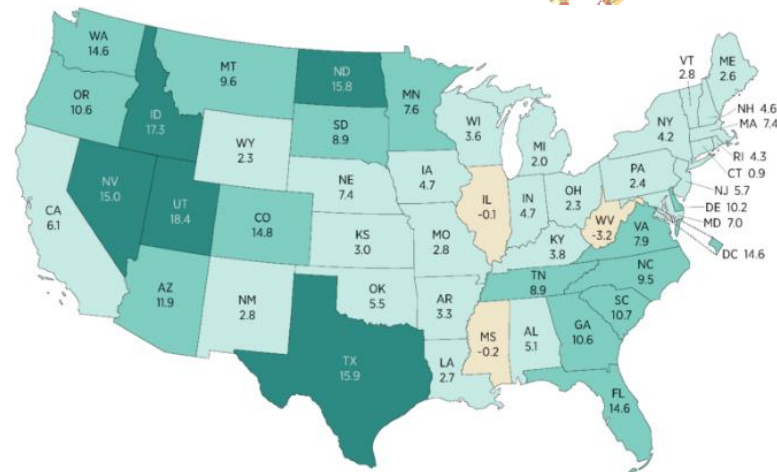
Top 10 growth areas - SA2

Statistical Areas Level 2

Change 2011-21 (%)



Percent Change



But Watch Out for Climate Change As It is Generating An Array of Risks to Property Value

HEITMAN

Dangers Range from Event Risks to Long-Term Existential Threats



PHYSICAL DAMAGE



INSURANCE PREMIUM REPRICING/ AVAILABILITY



TAX INCREASES TO FUND INFRASTRUCTURE



INVESTMENT LIQUIDITY REDUCED/ ASSETS REPRICED



ECONOMIC & DEMOGRAPHIC DAMAGE AS MIGRATION PATTERNS SHIFT



ABANDONMENT OF RISKIEST/LEAST-RESILIENT LOCATIONS

New Risks Emerging from Rapidly Escalating Regulations

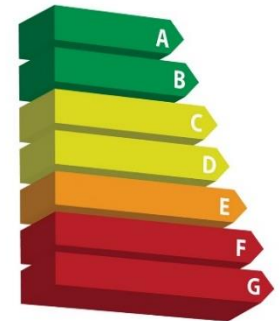
SEC's proposed climate risk disclosure rule

- Weather risks such as extreme heat, flooding, hurricanes.
- Climate change's potential impact to business operations.
- Scope 1, 2 and 3 greenhouse gas emissions.

NYC's Groundbreaking Emissions Law

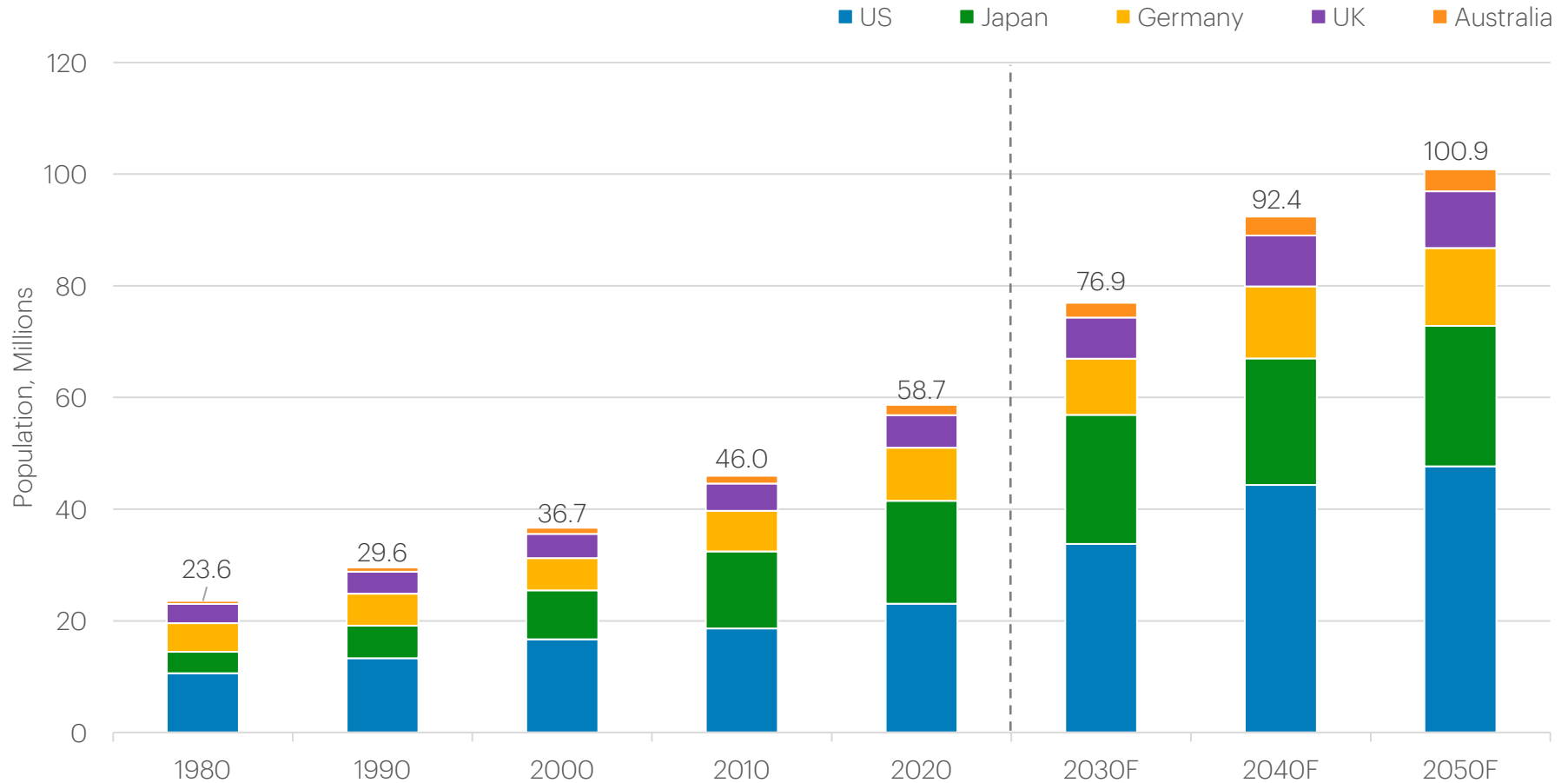
Local Law 97 (LL97) sets carbon emissions caps on buildings over 25,000 sq. ft.

[LEARN MORE >>](#)



The Silver Tsunami Underpins Future Tenant Demand

**POPULATION OVER 75 YEARS OF AGE, SELECT COUNTRIES
1980 - 2050 FORECAST**



Sources: UN Population Projections via Oxford Economics; Heitman Research

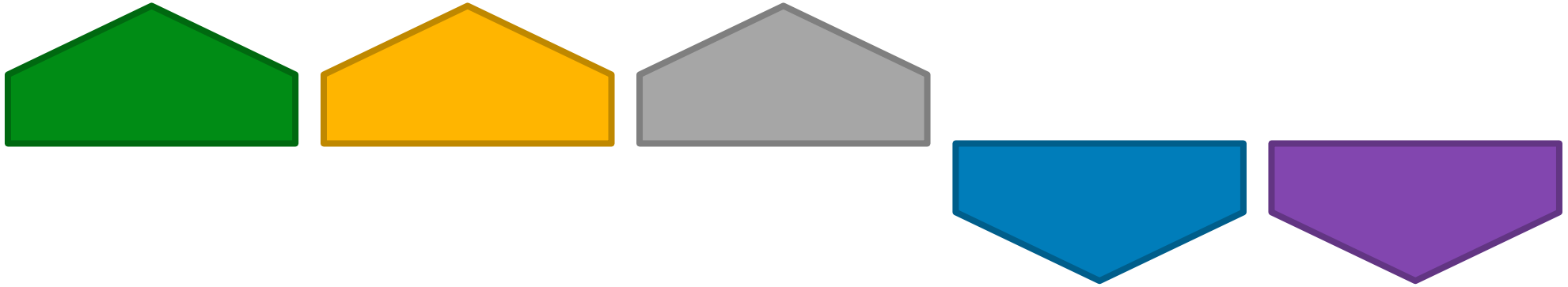


PORTFOLIO CONSTRUCTION

OLD WAREHOUSES ... who manages the ... not use the ... operated by a corps of m
may ... handling ... the op ... control cupola suspended from a
of ... building components ... on ... elec ... , number ... g, a robot warehouseman wo
population grows, the size of storage facilities will have to keep pace. Here is a ... energetically as the proverbial ant.

Property Type Winners and Losers

HEITMAN



RESIDENTIAL

INDUSTRIAL

OTHER

OFFICE

RETAIL

Downtown recoveries
Single-family rental
Workforce housing
Age-restricted
Student housing
Co-living/
micro-units

Bulk distribution
Infill/last-mile
Cold storage
Creative industrial

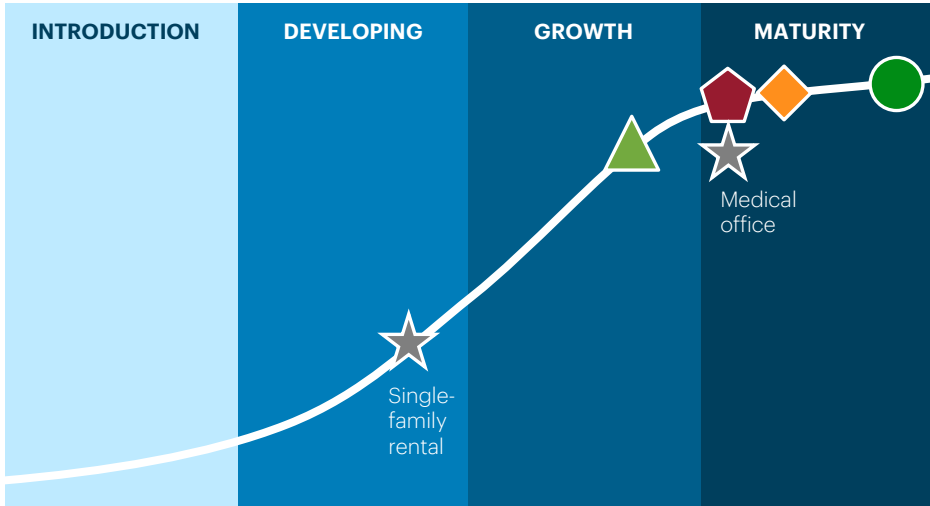
Self-Storage
Data centers
Lab/life sciences
Medical Office

New COVID-era
Office

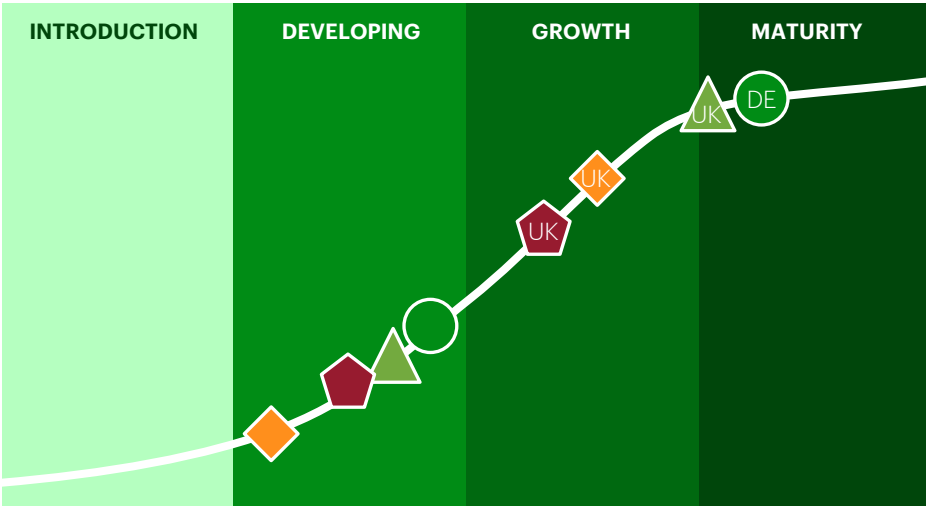
Dominant regional
malls
Hybrid box/
community centers
Mixed-use projects

Alternative Property Types in Different Stages of Evolution

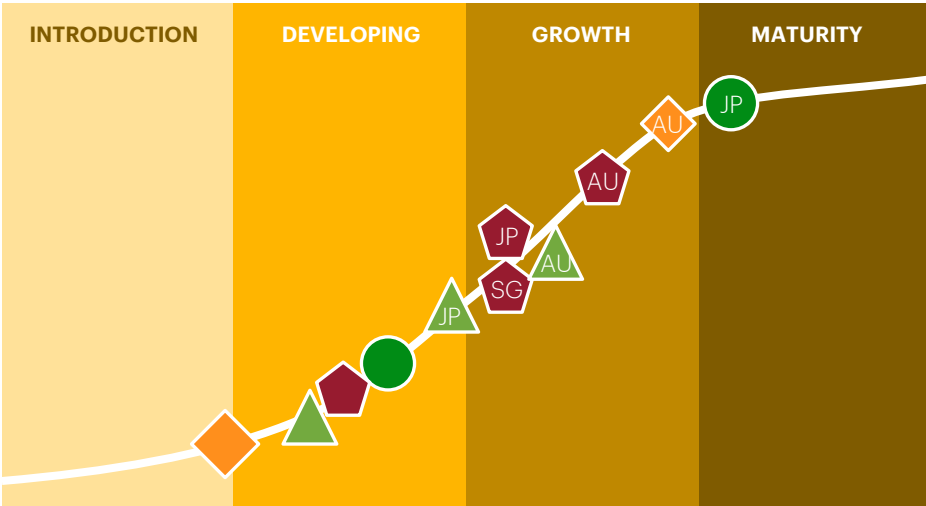
NORTH AMERICA








EUROPE



ASIA-PACIFIC



-  Multifamily
-  Self-Storage
-  Student Housing
-  Senior Housing
-  Other

Appendix



Climate change
will affect value



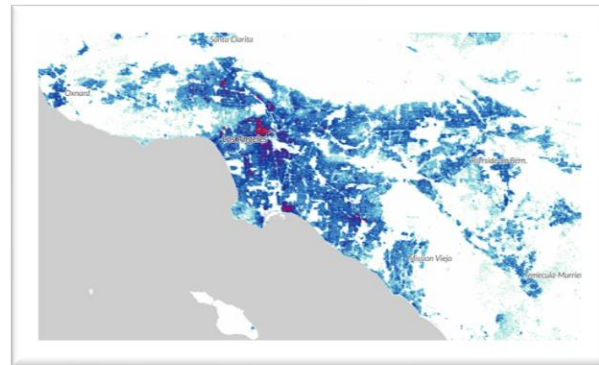
Deglobalization is
underway



Permanent **destruction**
of office demand



Ageing cohorts
create opportunity



Urbanization
patterns will differ



Disruption drives
portfolio rotation

Where Office Tenants Want to Be is in New Buildings in Dense, Mixed-Use Districts

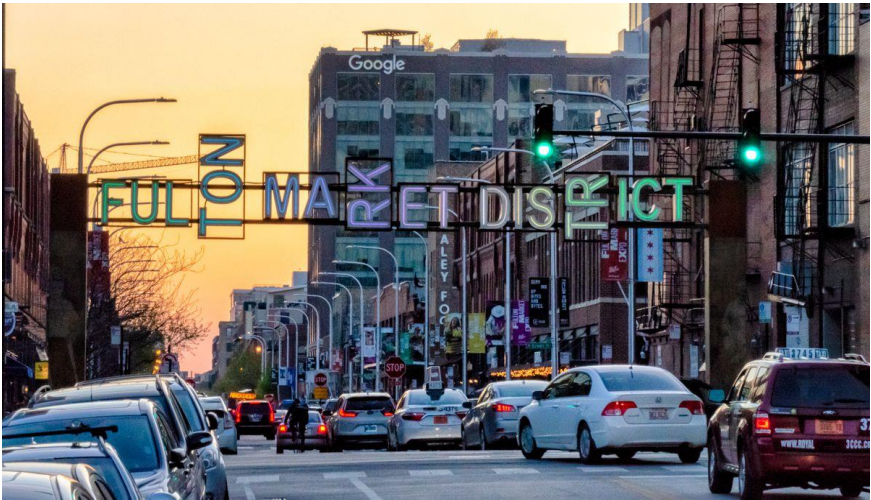
Fortitude Valley – Brisbane



Legacy West - Plano



Fulton Market, Chicago



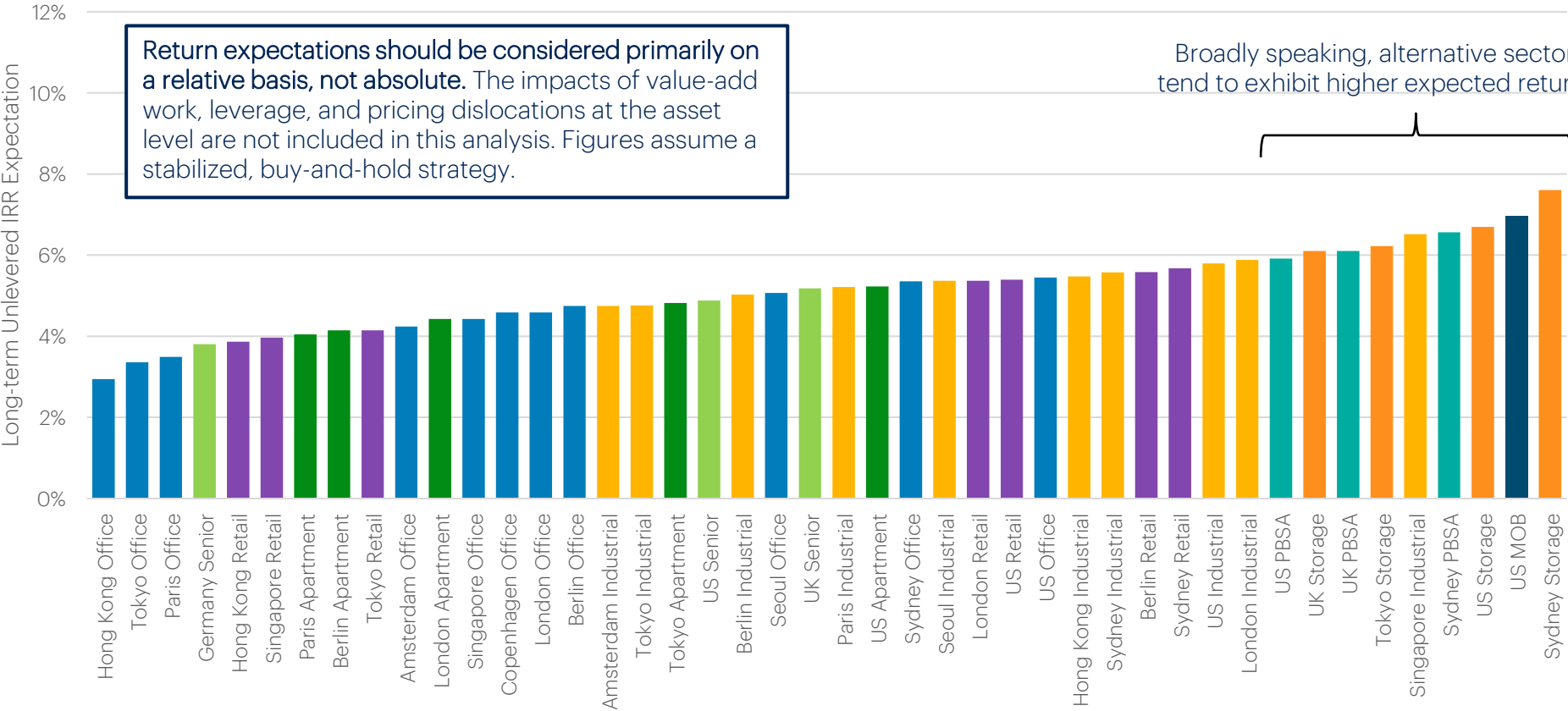
Meguro, Tokyo



Alternatives Show Good Relative Value Globally

EXPECTED LONG-TERM UNLEVERED RETURNS, IN USD, AS OF 2022

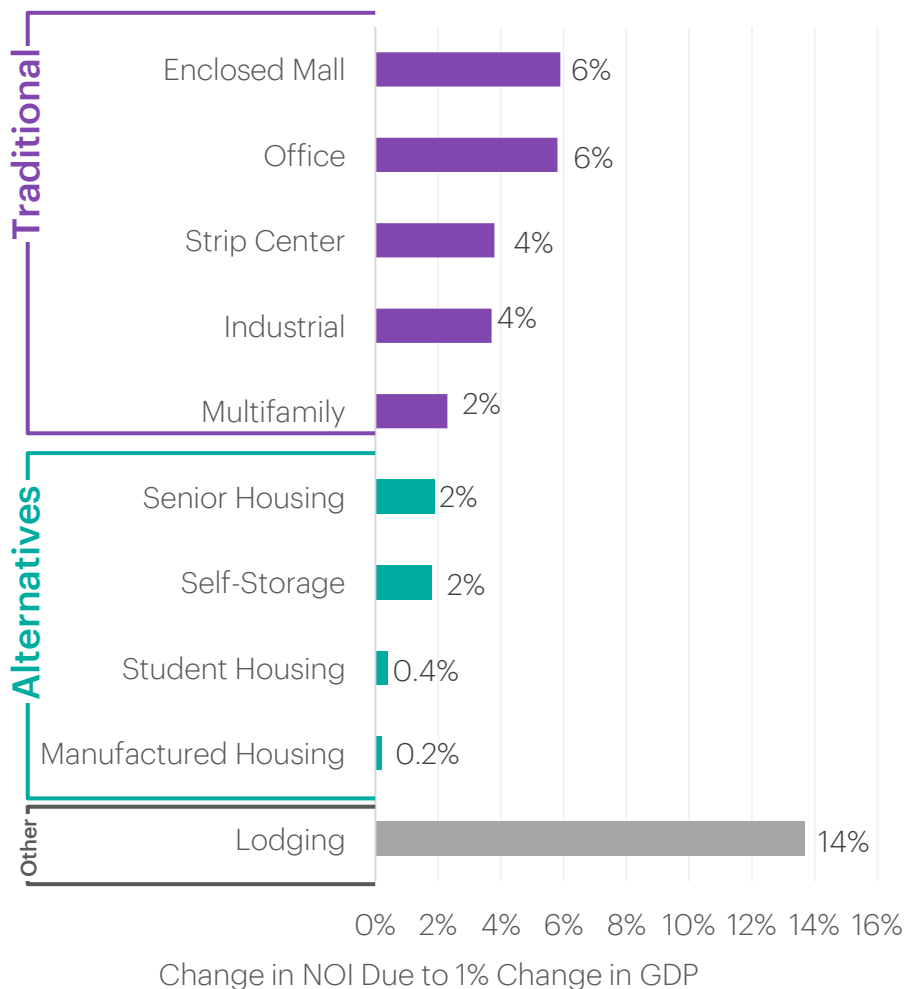
Industrial Office Apartment Retail Storage PBSA MOB Senior



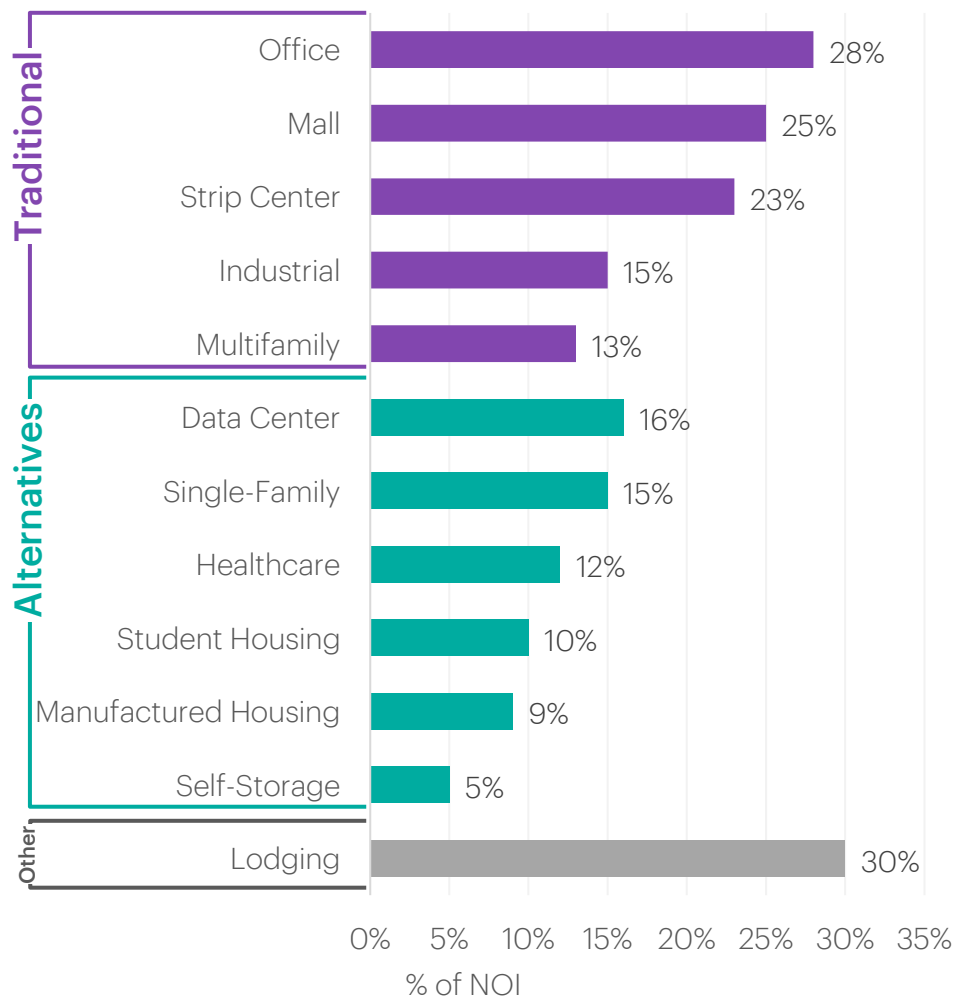
Sources: Green Street, NCREIF, NAREIT, RCA, CBRE, UK Self-Storage Association, Liang Buisson, JLL Asia-Pacific, Arealink, Tokyo Kantei, Urbis, Savills, M3 Property, and others; Heitman Research.
 Methodology approximates the "H-Model": [Long-term unlevered IRR] = [Current cap rate] + [Long-term NOI growth] + [Near-term NOI growth].
 All figures should be considered approximate, and considered primarily on a relative basis, not absolute.

Alternative Sectors Less Reliant on Macro Conditions and Require Less Capex

SENSITIVITY OF NOI TO 1% CHANGE IN GDP, 2001-2017

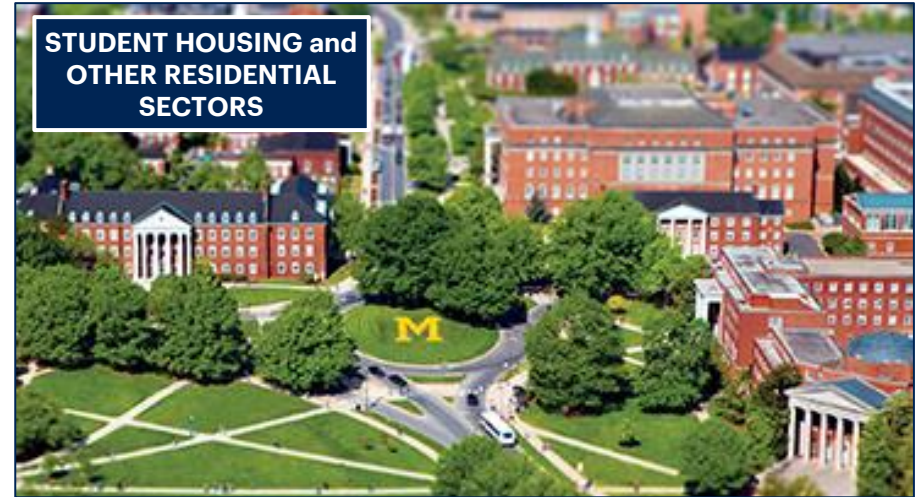


CAPEX RESERVE AS A % OF NOI, 2020



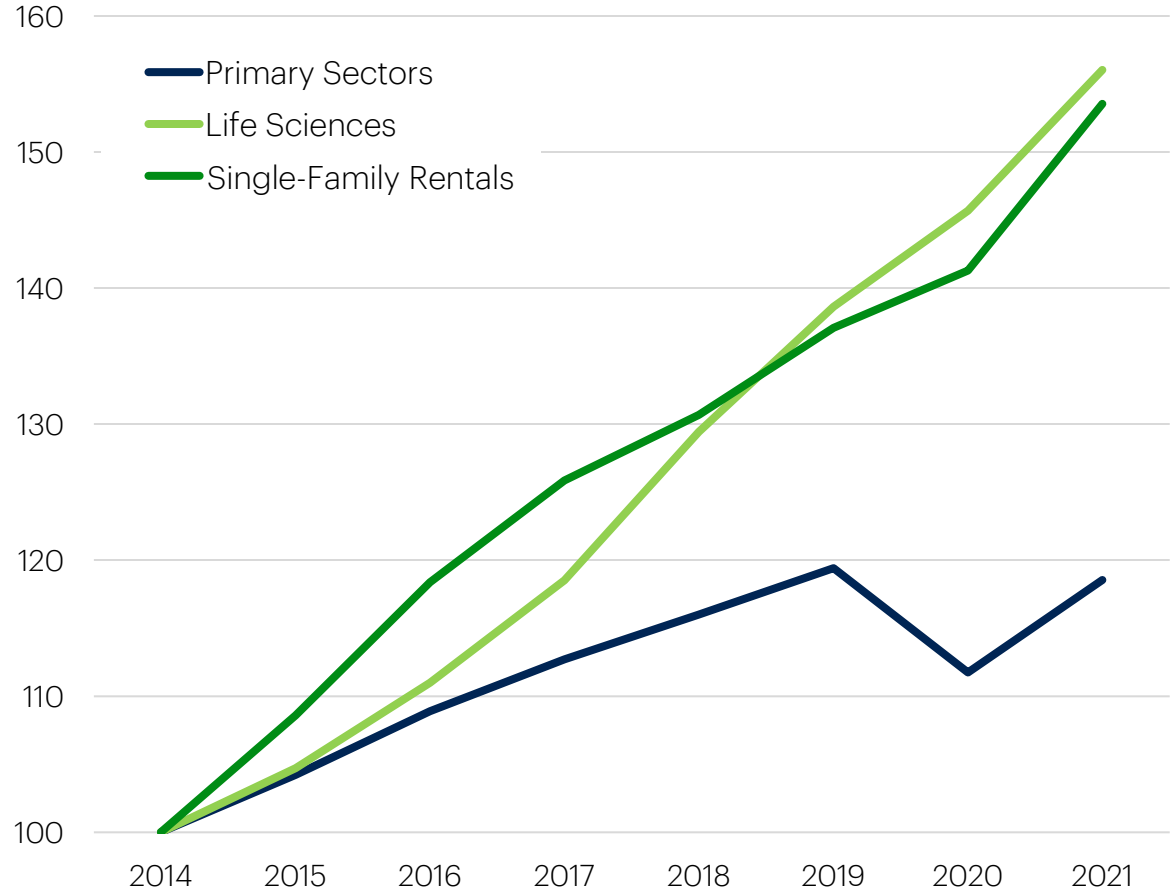
Sources: REIT performance disclosures via Green Street; Heitman Research

Short-Term Lease Sectors Playing Increasing Role in Institutional Real Estate Portfolios



Single-Family Rentals and Life Science Sectors Are Strong Performers

**INDEXED NOI GROWTH
2014-2021**

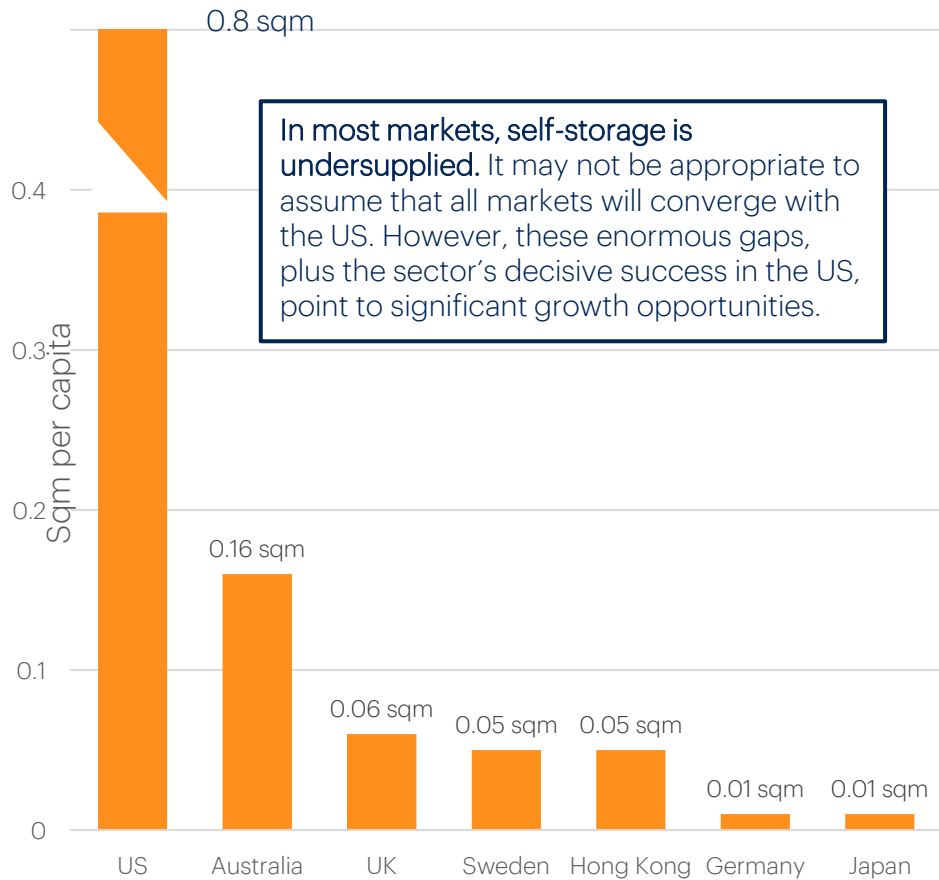


Source: Green Street; Heitman Research



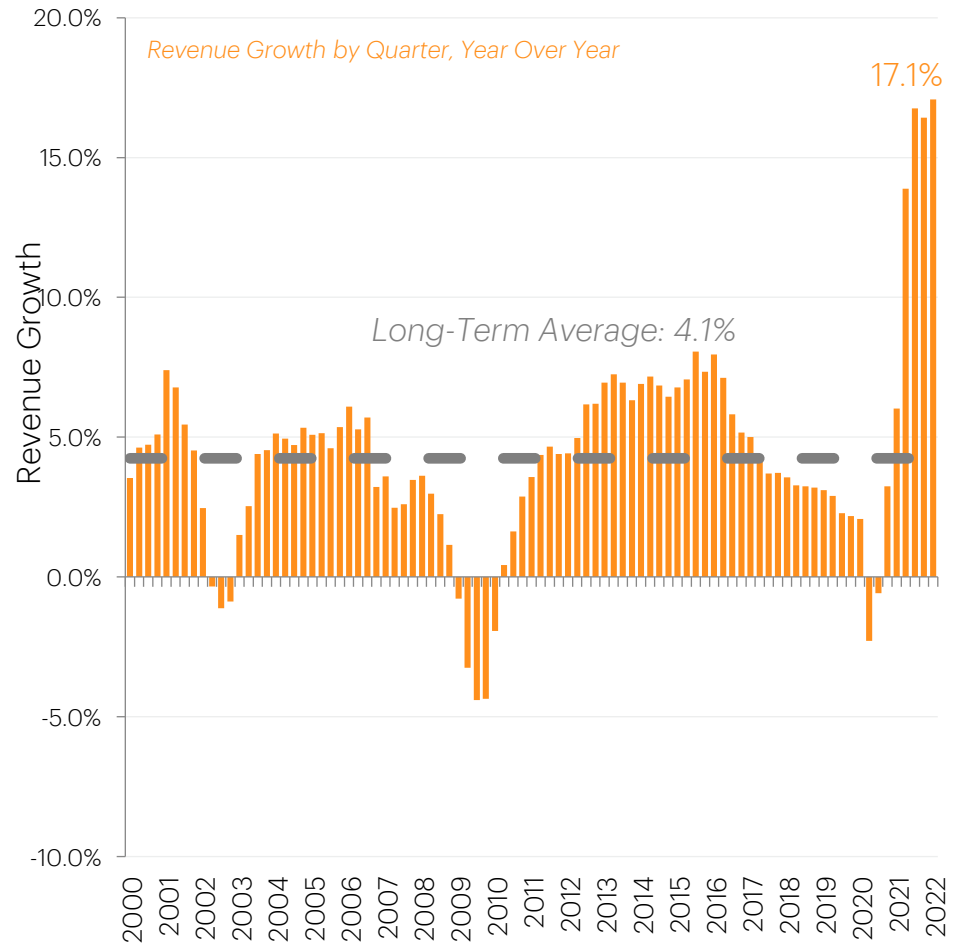
So Is Self-Storage, and It Has Room To Grow

SELF-STORAGE PENETRATION BY COUNTRY, 2019 OR LATEST AVAILABLE



Source: FEDESSA; JLL; Self-Storage Associate of Asia; Heitman Research

SELF-STORAGE REVENUE GROWTH US REIT SAME-STORE POOLS 2000-2022 (Q1)



Source: REIT Reports; Heitman Research

As Does The Aging of the Giant Millennial Generation

HEITMAN

Single-family rentals emerged as an institutional sector in the US in the aftermath of the Global Financial Crisis

The sector's characteristics fit well with demographic trends, including the maturation of the Millennial generation into its child-rearing stage

- Though many Millennials will seek to buy homes, homeownership remains out of reach for many households
- Single-family rentals provide an alternative



Investment Implications: Five- to Seven-Year Horizon HEITMAN

APARTMENTS AND LOGISTICS ARE THE NEW CORE

Investor demand is extremely high for **Logistics** and **Apartment** assets globally. Operational fundamentals in both sectors should generally remain strong, for now, as the supply pipeline appears reasonable in most markets. Rising borrowing costs notwithstanding, **we expect yields to remain very low as capital competes for available product. As affordability concerns rise, watch out for rent control**

CATCH A RISING STAR

Sharp pricing in Logistics and Apartments, and secular uncertainty in Office and Retail, are encouraging more investors to explore promising alternative sectors. These include **healthcare, life-science, self-storage, student housing, data centers, and others**. We expect such sectors to achieve higher returns than core sectors over the long term. Emerging geographies with good demographics also deserve further scrutiny.

REAL ESTATE IS A PARTIAL INFLATION HEDGE

Both normative models and empirical studies from across the world typically conclude that real estate returns are **(relatively) well-hedged against inflation**. Underlying lease features such as short terms and CPI step-up clauses help insulate some property types better than others. However, real interest rate increases could challenge richly valued sectors in the short term.

PORTFOLIO COMPOSITIONS SHOULD CHANGE

Compositions of many institutions' private commercial real estate portfolios had changed very little in the two decades prior to COVID. **Going forward, private portfolios should look more like the US REIT market, with more exposure to real estate alternatives**. Private investments typically require operating partners and JV terms are increasingly GP-friendly. Investors must educate themselves and build connections to access these smaller markets.

Investment Beliefs

**Board of Investments Offsite
September 14, 2022**



LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Table of Contents

Title	Slide No.
Session Overview	3
Objective	4
Background	5
Process	8
Survey Results – Summary	9
Part 1: Beliefs Structure	10
Part 2: Current Beliefs	11
Part 3: Prospective Themes	12
Survey Results – Detail	13
Summary and Next Steps	22
Attachment – Investment Policy Statement	23

Investment Beliefs

An evaluation on the existing Investment Beliefs that were developed and adopted by the Board in 2016 – how they should be constructed and how applicable the beliefs are today. A discussion on existing and potential new themes to expand on or incorporate into the Investment Beliefs.

Session Outline

- **An introduction to identify objectives, background and process for reviewing and evaluating the Investment Beliefs**
Magdalia Armstrong (LACERA)
- **A summary of the survey responses by each section: (1) beliefs structure, (2) current beliefs, (3) prospective themes**
Krista Powell (LACERA)
- **A detailed discussion on existing beliefs and Trustee input on prospective refinements**
Cindy Rivera (LACERA)

Objective

A set of investment beliefs articulates an investor's fundamental views on how financial markets operate to help guide the investment strategy of an investor, such as LACERA.¹

Revisit

- Investment beliefs may evolve over time and be refreshed periodically

Assess

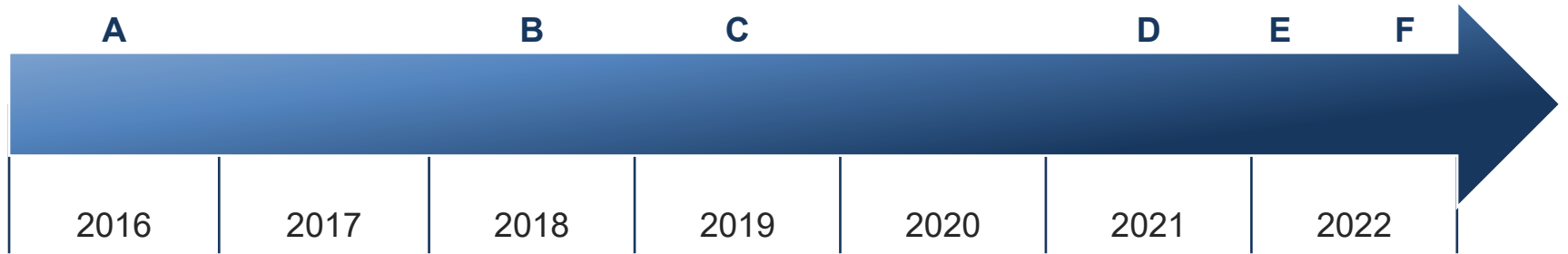
- Content of investment beliefs should articulate LACERA's beliefs about how financial markets work
- Structure should clearly and succinctly communicate such beliefs

Discuss

- Engagement between Trustees, staff, and consultants to discuss existing beliefs and potential refinements



Background



- A** LACERA adopted a standalone Statement of Investment Beliefs
- B** Investment Beliefs were incorporated into LACERA’s updated and restated Investment Policy Statement (“IPS”)
- C** Investment Beliefs shape the Board-approved “Allocator to Best-in-Class Investor” strategic initiatives
- D** LACERA’s BOI Offsite discussion on strategic initiatives included questions on possible refinements to Investment Beliefs
- E** LACERA’s 2022 Work Plan¹ demonstrated how each strategic initiative is rooted in Investment Beliefs
- F** LACERA’s BOI Offsite (today) includes a review of survey results and a discussion on Investment Beliefs

1. Approved by the Board of Investments on 1/12/2022.

Background – Formulated and Incorporated

LACERA's Investment Beliefs were deliberately elevated and incorporated into the forefront of the IPS to help guide LACERA's investment program

INVESTMENT POLICY STATEMENT

Investment Policy

I. Investment Philosophy and Strategy

A. Objectives of the Investment Program

LACERA follows a carefully planned and executed strategic investment program in order to:

- i. **Produce** the promised benefits for LACERA members and beneficiaries by achieving the Fund's assumed rate of return on a total return basis over the long-term, consistent with LACERA's mission;
- ii. **Protect** the promised benefits on behalf of LACERA members and beneficiaries by mitigating investment risks through Fund diversification and other means, consistent with LACERA's mission; and
- iii. **Provide** the promised benefits for LACERA members and beneficiaries, in part by ensuring adequate liquidity, consistent with LACERA's mission.

B. Investment Beliefs

The Board has adopted the following investment beliefs ("Investment Beliefs") to describe its core beliefs and underlying assumptions about how capital markets operate. Collectively, the Investment Beliefs provide a framework to guide LACERA's investment decisions in a manner consistent with the Fund's nature as an institutional investor with a long-term investment horizon in order to achieve the Fund's objectives defined above.

i. Strategic Asset Allocation

Long-term strategic asset allocation will be the primary determinant of LACERA's risk/return outcomes.

- a. It is important that LACERA be forward looking, as its investment horizon spans decades, if not indefinitely into the future.
- b. Asset allocation has a greater effect on return variability than asset class investment structure or manager selection. It is essential to account for LACERA's liabilities in setting long-term investment strategy.
- c. Rebalancing the portfolio is a key aspect of prudent long-term asset allocation policy.

ii. Market Efficiency

Markets are largely efficient over the long term (10–20 years); however, during certain economic and financial environments markets may not be efficient in setting prices.

- a. Consequently, LACERA will allow for modest tactical asset allocation adjustments during times of disruption.

iii. Active Versus Passive Management

As markets are largely efficient, passive management, when available, is the preferred structure for investment management; however, the Board recognizes that some asset classes may justify the higher fees and/or expected enhanced returns associated with active management.

PAGE 4

INVESTMENT POLICY STATEMENT

- a. Consequently, active strategies will be used only when there is strong conviction that they can be expected to add value net of their higher fees and are adjusted for risk.

iv. Private Markets and Liquidity

Private market assets can add value to a portfolio, providing opportunities for returns that exceed those expected from public markets.

- a. The total capital allocated to illiquid strategies must be kept at a prudent level.
- b. The high return potential of these assets needs to be balanced with LACERA's need for liquidity.
- c. Liquid assets serve a critical role to fund benefit payments and rebalance the portfolio.

v. Risk

Risk is a broad term used to capture the concept of uncertainty. Since no single metric adequately conveys risk, LACERA will evaluate risk holistically, incorporating quantitative measures and qualitative assessments in managing its portfolio.

- a. LACERA operates in a global financial marketplace, and as such, LACERA believes that in order to diversify its risk broadly, it is vital that LACERA possess a global perspective.
- b. Diversification across different risk factors is necessary for risk reduction.
- c. Markets are cyclical; risk premia, volatility, and correlations vary over time.
- d. The pattern of returns matters because volatility levels and the sequence of gains and losses can impact funded status and contribution rates.
- e. Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.
- f. For LACERA, not taking enough risk is risky; therefore, LACERA will accept a prudent amount of risk to achieve its long-term target returns.
- g. LACERA considers the risks of environmental, social, and governance ("ESG") factors as relevant to its investment process.
- h. LACERA believes that conflicts of interest may pose risk; therefore, any perceived conflicts should be identified and explored as a material factor in risk analysis.

vi. Costs and Fees

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and cost is the most certain.

- a. Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy.
- b. Costs and fees should be actively monitored and negotiated to the greatest extent possible.

vii. Education

In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is essential for long-term success.

C. Strategic Asset Allocation

LACERA fundamentally believes long-term strategic asset allocation will be the primary determinant of risk/return outcomes, and therefore establishes a strategic asset allocation to meet its mission and investment objectives.

LACERA's strategic asset allocation categorizes capital outlays into five groups, defined by the function each

PAGE 5

Background – Inform Strategic Initiatives

Optimize Investment Model

- "LACERA will allow for modest tactical asset allocation adjustments during times of disruption."
- "LACERA believes that conflicts of interest may pose risk; therefore, any perceived conflicts should be identified and explored as a material factor in risk analysis."
- "Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy."

Enhance Operational Effectiveness

- "Risk is a broad term used to capture the concept of uncertainty. Since no single metric adequately conveys risk, LACERA will evaluate risk holistically, incorporating quantitative measures and qualitative assessments in managing its portfolio."
- "Rebalancing the portfolio is a key aspect of prudent long-term asset allocation policy."

Maximize Stewardship and Ownership Rights

- "LACERA considers the risks of environmental, social, and governance ("ESG") factors as relevant to its investment process."
- "In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is essential for long-term success."

Strengthen Influence on Fees and Cost of Capital

- "Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy."
- "Costs and fees should be actively monitored and negotiated to the greatest extent possible."
- "As markets are largely efficient, passive management, when available, is the preferred structure for investment management; however, the Board recognizes that some asset classes may justify the higher fees and/or expected enhanced returns associated with active management."



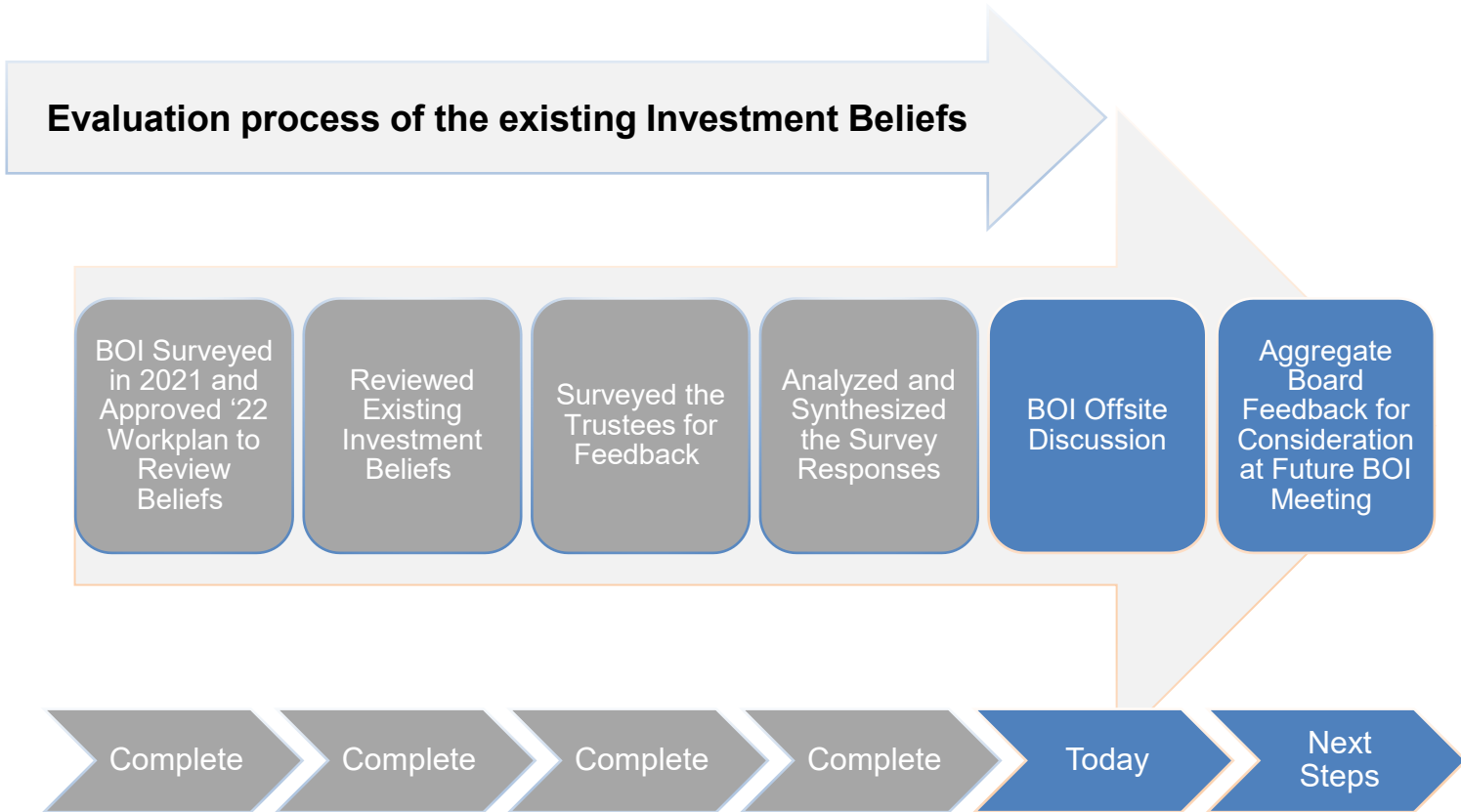
LACERA T.I.D.E.¹

Towards Inclusion, Diversity, and Equity

- "LACERA values diversity, equity, and inclusion, and believes that effectively accessing and managing diverse talent leads to improved outcomes."
- "LACERA's ongoing monitoring of third-party service providers incorporates an assessment of vendors' commitment to, adherence with, and track record of accessing and retaining diverse workforces in an inclusive and equitable manner."

1. LACERA T.I.D.E. Strategic Initiative is guided by the Investment Policy Statement.

Process

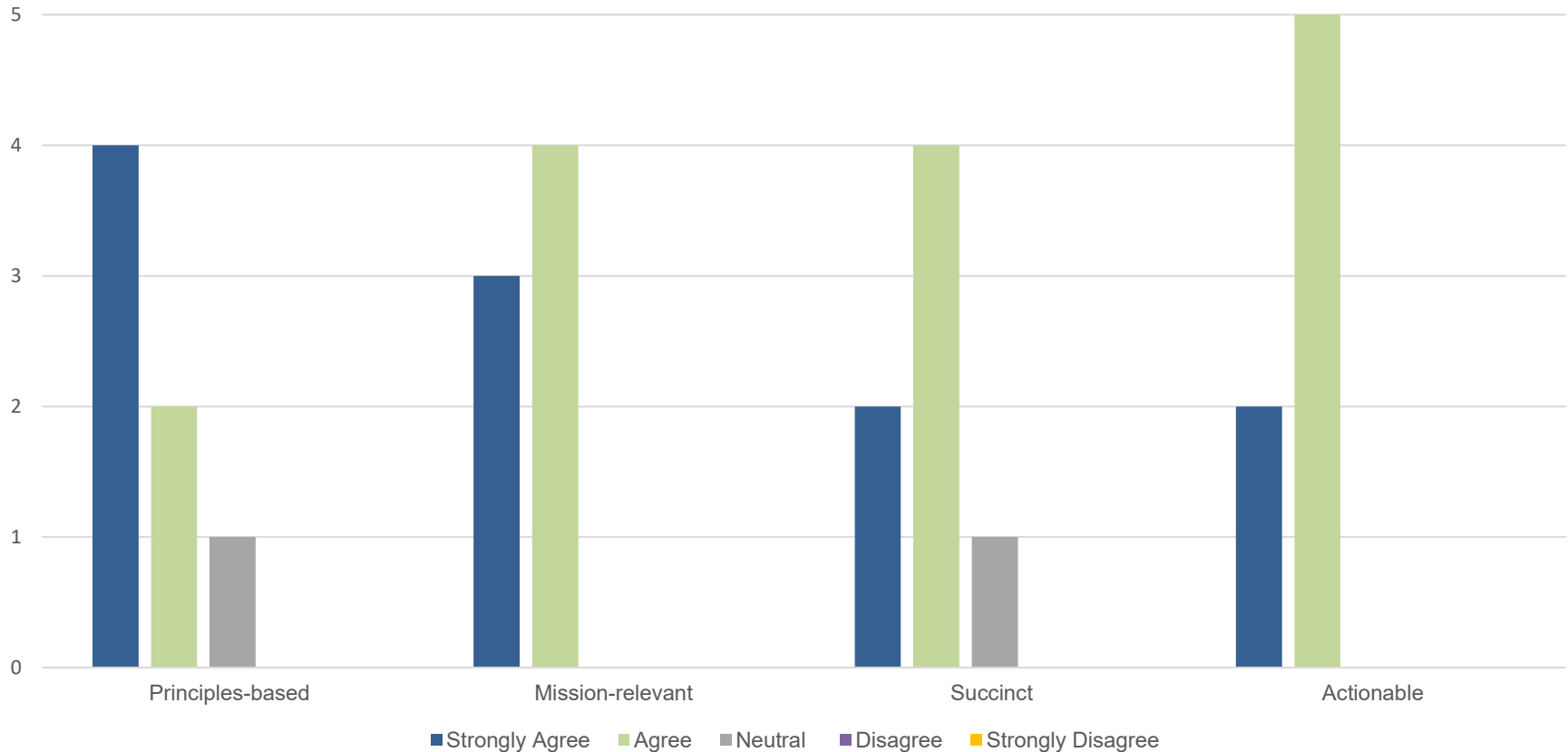


Survey Results – Summary



Survey Part 1: Beliefs Framework

How Should Investment Beliefs be Constructed?

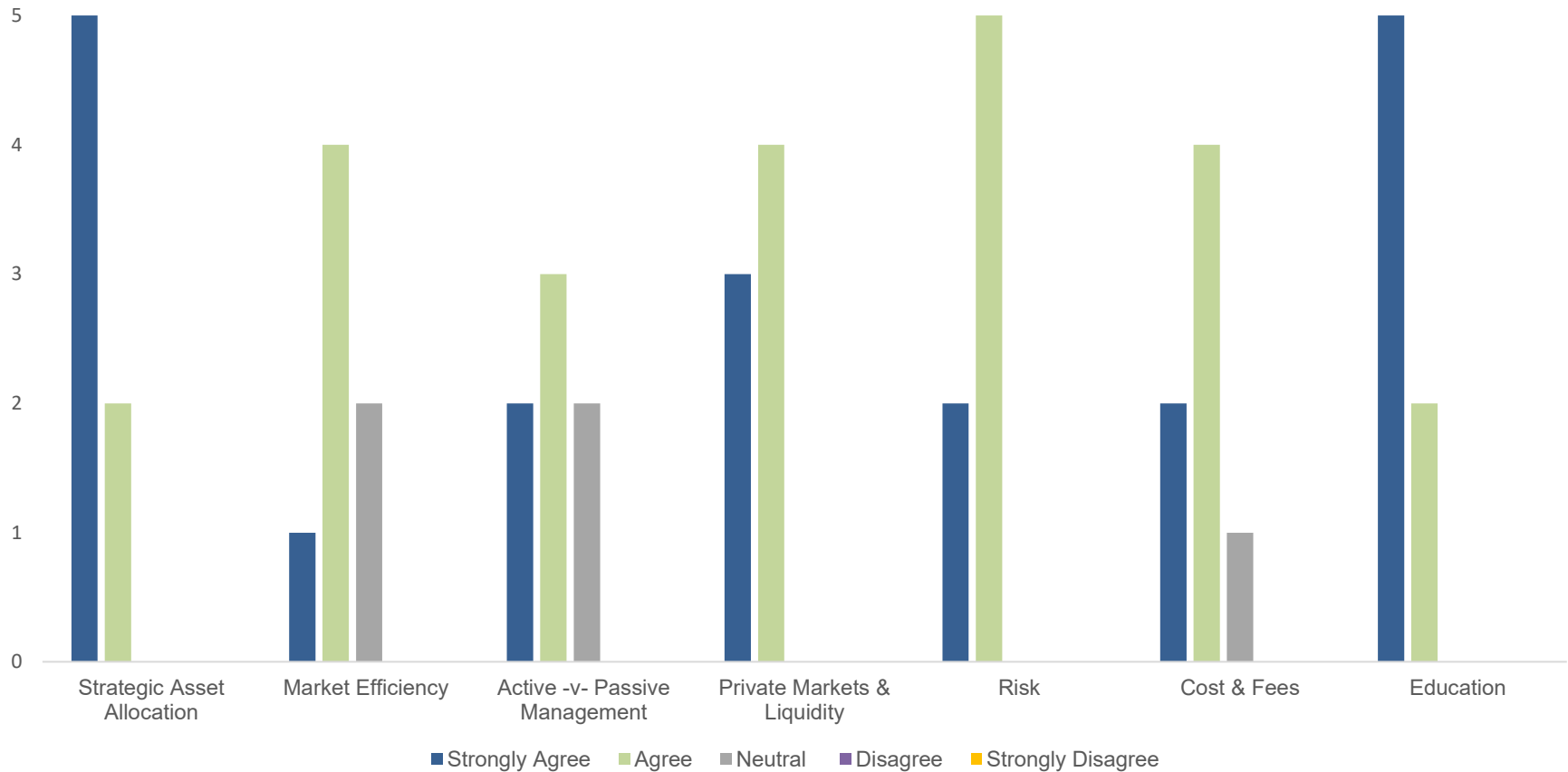


Responses generally **strongly agreed** or **agreed** that investment beliefs should be:

- Principles-based, Mission-relevant, Succinct and Actionable.

Survey Part 2: Current Beliefs

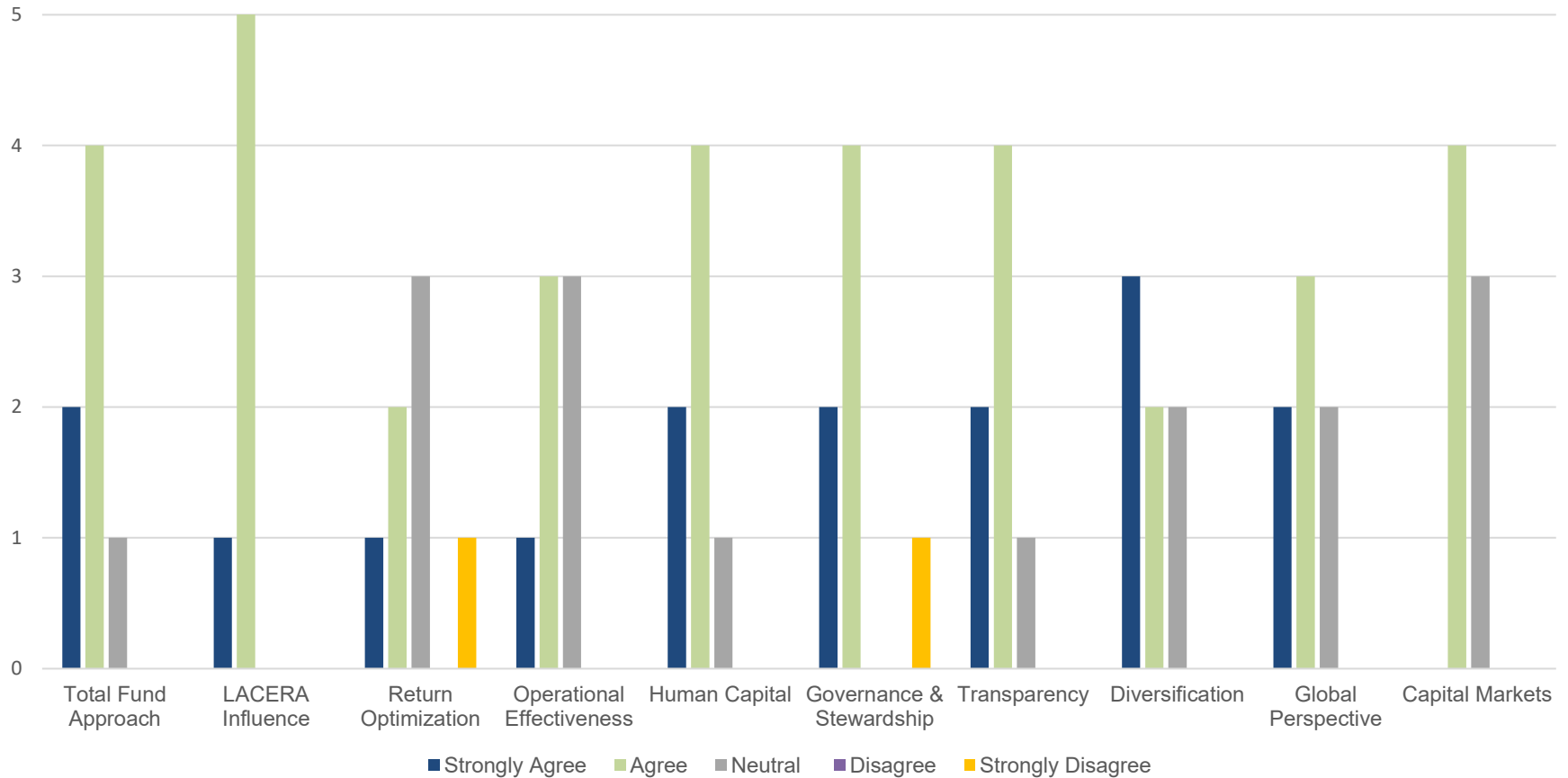
Current Investment Beliefs



Responses generally **strongly agreed/agreed** with current beliefs with a few **neutral** responses

Survey Part 3: Prospective Themes

Prospective Investment Beliefs



Responses were generally mixed with **agree** or **neutral** as well as some **strongly disagree**

Survey Results – Detail



Survey Part 1: Beliefs Framework

This framework may help assess and shape current and prospective Investment Beliefs

Mission-relevant

Investment Beliefs should be relevant to LACERA's fiduciary duties to produce and protect investment returns and pay benefits

Principles-based

Investment Beliefs should be principles that guide and inform Trustee deliberations, but avoid rigid rules that may constrain Trustees in determining how best to apply them to specific policies and decisions

Succinct

A relatively short set of guiding Investment Beliefs (optimally no more than 1-2 pages) can provide adequate guidance and clear vision, and is preferable to a lengthy document of Investment Beliefs

Actionable

Investment Beliefs should be actionable in the regular course of LACERA's investment process and decisions (i.e., related to items that LACERA can influence within its rights)

Strategic Asset Allocation

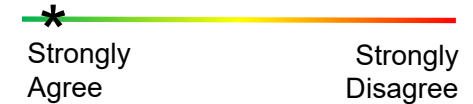
Mission-relevant	Principles-based	Succinct	Actionable
Y/N	Y/N	Y/N	Y/N

Survey Part 2: Existing Belief

i. Strategic Asset Allocation

Long-term strategic asset allocation will be the primary determinant of LACERA's risk/return outcomes.

- It is important that LACERA be forward looking, as its investment horizon spans decades, if not indefinitely into the future.
- Asset allocation has a greater effect on return variability than asset class investment structure or manager selection. It is essential to account for LACERA's liabilities in setting long-term investment strategy.
- Rebalancing the portfolio is a key aspect of prudent long-term asset allocation policy.

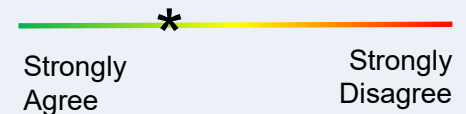


Survey Part 3: Prospective Beliefs and Themes

Total Fund Approach - In practice, LACERA examines investments in a total Fund context. Should LACERA incorporate a statement that a total Fund, multidimensional approach that considers multiple risk and value factors may lead to better investment outcomes?



Capital Markets - Capital market assumptions guide LACERA's investment program. Should LACERA include language of the importance of capital market assumptions to the actuarial framework?



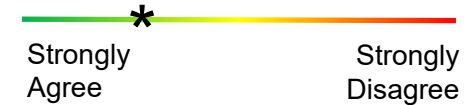
Mission-relevant	Principles-based	Succinct	Actionable
Y/N	Y/N	Y/N	Y/N

Survey Part 2: Existing Belief

ii. Market Efficiency

Markets are largely efficient over the long term (10-20 years); however, during certain economic and financial environments markets may not be efficient in setting prices.

- a. Consequently, LACERA will allow for modest tactical asset allocation adjustments during times of disruption.



Survey Part 3: Prospective Beliefs and Themes

Transparency - Transparency supports informed investment decision-making. Should LACERA incorporate language that addresses the importance of transparency as it relates to markets and mandates?



Active Versus Passive Management, Private Markets and Liquidity

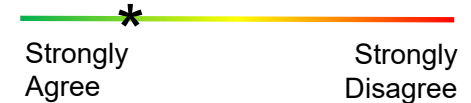
Mission-relevant	Principles-based	Succinct	Actionable
Y/N	Y/N	Y/N	Y/N

Survey Part 2: Existing Belief

iii. Active Versus Passive Management

As markets are largely efficient, passive management, when available, is the preferred structure for investment management; however, the Board recognizes that some asset classes may justify the higher fees and/or expected enhanced returns associated with active management.

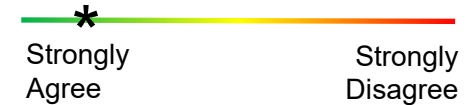
- a. Consequently, active strategies will be used only when there is strong conviction that they can be expected to add value net of their higher fees and are adjusted for risk.



iv. Private Markets and Liquidity

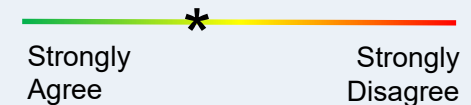
Private market assets can add value to a portfolio, providing opportunities for returns that exceed those expected from public markets.

- a. The total capital allocated to illiquid strategies must be kept at a prudent level.
- b. The high return potential of these assets needs to be balanced with LACERA's need for liquidity.
- c. Liquid assets serve a critical role to fund benefit payments and rebalance the portfolio.



Survey Part 3: Prospective Beliefs and Themes

Return Optimization - Currently, the Investment Beliefs include several characteristics that may enhance portfolio returns as individual and separate beliefs. Should LACERA consider an umbrella belief on optimizing returns through factors such as active management, illiquidity, leverage utilization, and prudent risk taking?



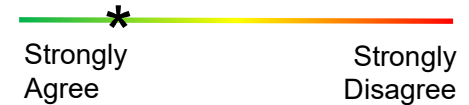
Mission-relevant	Principles-based	Succinct	Actionable
Y/N	Y/N	Y/N	Y/N

Survey Part 2: Existing Belief

vi. Costs and Fees

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and cost is the most certain.

- Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy.
- Costs and fees should be actively monitored and negotiated to the greatest extent possible.



Survey Part 3: Prospective Beliefs and Themes

LACERA Influence - LACERA's size and footprint in the markets can be utilized as an asset to influence several components such as terms and fees. Should LACERA consider including language that recognizes LACERA's size and position in the market can be used as a tool to influence?

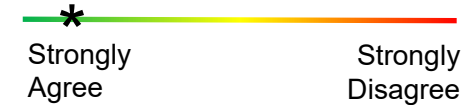


Mission-relevant	Principles-based	Succinct	Actionable
Y/N	Y/N	Y/N	Y/N

Survey Part 2: Existing Belief

vii. Education

In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is essential for long-term success.



Survey Part 3: Prospective Beliefs and Themes

Human Capital - LACERA's Investment Policy Statement and Corporate Governance and Stewardship Principles recognize human capital and DEI as elements that can influence performance. Should LACERA consider adding language about the role that talent plays in delivering desired investment outcomes?



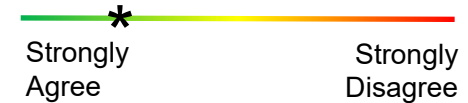
Operational Effectiveness - Technology and sound processes may enhance operational efficiency, which in turn may enhance investment performance and reduce risks. Should LACERA consider incorporating language highlighting that operational aspects may impact the portfolio's success?



Governance and Stewardship

Survey Part 3: Prospective Beliefs and Themes

Governance and Stewardship - LACERA's investment beliefs characterize ESG as "relevant" without defining how it is relevant, and only as a risk to be managed. Should LACERA consider language that defines how ESG and Stewardship are relevant to its investment process and objectives as both an investment risk and opportunity?



Excerpts from existing language elsewhere in the Investment Policy Statement include:

“LACERA recognizes that environmental, social, and governance factors may influence the risk-return profile and financial performance of investments.”

“Financially material ESG factors may vary by industry, geographic exposure, business strategy, investment time horizon, and other variables.”

“LACERA aims to promote sustainable, long-term value on behalf of its members and enhance LACERA’s ability to fulfill its mission.”

“Effectively accessing and managing diverse talent leads to improved outcomes.”

“LACERA supports...public policies governing financial markets that are consistent with LACERA’s economic interests.”

Offsite 2021 Strategic Initiatives

Enhance
Operational
Effectiveness

Optimize
Investment
Model

Maximize
Stewardship and
Ownership Rights

Strengthen
Influence on Fees
and Cost of Capital

LACERA
T.I.D.E.

Survey Question 8:

Should ESG investment considerations be separate from the “risks” section of the Investment Beliefs and added as a separate Investment Belief?

A. Yes
B. No

Results:

Response	# of Votes
Yes	5
No	2

Discussion Points

- General preference to revisit ESG Investment Belief as a separate Investment Belief
- Board revised Investment Policy Statement in August 2021, detailing ESG as part of investment strategy section
- Corporate Governance and Stewardship Principles articulate LACERA positions on various specific ESG matters
- Recognize "timeless" nature of Investment Beliefs

Summary and Next Steps

Summary

- Investment Beliefs were formulated in 2016
- In 2018 they were incorporated into the Investment Policy Statement
- Strategic initiatives and their connection to the Investment Beliefs were discussed at the 2021 BOI Offsite
- Investment Beliefs shape the Board-approved "Allocator to Best-in-Class Investor" strategic initiatives
- Trustees were surveyed for feedback on the current Investment Beliefs to inform offsite discussion

Next Steps

- Review and integrate Trustees' feedback following the offsite discussion
- Draft any updates to the Investment Beliefs for BOI review
- Present potential changes to the Investment Beliefs for consideration at a future BOI meeting

Attachment



Investment Policy Statement

Restated November 8, 2018
Revised December 11, 2019
Revised August 11, 2021



L/CERA

Contents

About LACERA	1
Statement of Purpose	2
Legal Authority	3
Fiduciary Duty	3
Ethics and Code of Conflicts	3
Process.	3
Investment Policy	
I. Investment Policy and Strategy.	4
Objectives of Investment Program	4
Investment Beliefs	4
Strategic Asset Allocation.	5
Overview of Strategic Asset Allocation.	6
Performance Objectives	8
Rebalancing	9
Responsible Stewardship and Beneficial Ownership Rights	9
Integration of Environmental, Social, and Governance (ESG) Factors	9
Diversity, Equity, and Inclusion.	9
II. Investment Process	10
Structure Review	10
Investment Management.	10
Liquidity Management and Other Investment Functions	11
III. Risk Management	12
Philosophy and Objectives	12
Approach.	12
IV. Roles and Responsibilities	13
Board of Investments.	13
Staff	13
Third Party Service Providers.	14

Appendix

A. Investment Tables 16

 Approved Asset Allocation. 16

 Benchmark Table 17

B. Chief Investment Officer Delegated Authorities 18

List of Attachments **20**

- Corporate Governance and Stewardship Principles
- Responsible Contractor Policy
- Emerging Manager Policy
- Placement Agent Policy
- Private Equity Privatization Policy
- Procurement Policy for Investment-Related Services

About LACERA

The Los Angeles County Employees Retirement Association (“LACERA”) administers a defined benefit retirement plan (the “Fund”) and other post-employment benefits (“OPEB” or the “Trust”) for employees of Los Angeles County and certain other districts.

The Los Angeles County Board of Supervisors established LACERA by ordinance in 1937. LACERA has operated since 1938, and today, serves over 170,000 active and retired members.

LACERA’s mission is to “produce, protect, and provide the promised benefits.” LACERA aims to fulfill its mission through prudent investment and conservation of plan assets, in accordance with its Investment Beliefs and in consideration of actuarial analysis.

LACERA MISSION STATEMENT

We Produce, Protect, and Provide
the Promised Benefits

LACERA’s Board of Investments (the “Board”) is responsible for establishing LACERA’s investment policy and objectives, as well as exercising oversight of the investment management for both the Fund and the Trust.

Statement of Purpose

LACERA's Investment Policy Statement (the "IPS") defines the framework by which LACERA manages the assets of the Fund in order to fulfill its mission. The document provides the primary guidance for LACERA's investment activities by outlining the philosophy and structure of LACERA's investment program, describing the general process by which assets are managed, and defining the key roles and responsibilities in LACERA's investment program.

Legal Authority

The California Constitution and LACERA's governing statutes create a legal framework within which this IPS must be interpreted and implemented by the Board in approaching its decisions. The Board is independent and has sole and exclusive legal responsibility over investment of the Fund's assets.

A. Fiduciary Duty

The Board and its members are fiduciaries, making decisions for the benefit of the Fund as a whole without other concerns or outside influence. All Board members, whether they are elected, appointed, or ex officio, have the same fiduciary duty under the law. This fiduciary duty has two components:

- *Duty of Loyalty.* Under the duty of loyalty, Board members have the sole and exclusive responsibility to administer the Fund to ensure prompt delivery of benefits to members and their beneficiaries. In making every decision, the Board must act according to a three-pronged legal formula that balances the interests of the Fund's stakeholders: (1) solely in the interest of providing benefits to members and beneficiaries, (2) to minimize employer contributions, and (3) to defray the expenses of administering the Fund. The Board's duty to members and their beneficiaries takes precedence over any other duty.
- *Duty of Prudence.* Board members must discharge their duties with the care, skill, prudence, and diligence that a prudent fiduciary familiar with the matters and the circumstances of each particular decision would use in the conduct of a similar enterprise with like aims. The Board must diversify fund investments so as to minimize risk of loss and maximize the rate of return, unless under the circumstances it is clearly prudent not to do so. The Board may invest or delegate the authority to invest Fund assets through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board.

B. Ethics and Code of Conflicts

The Board and LACERA staff must refrain from personal activity that could conflict with the proper management of the investment program, or that could impair their ability to make decisions in compliance with fiduciary duty. Further details are defined in LACERA's Code of Ethical Conduct, Conflict of Interest Code, the Political Reform Act, Fair Political Practices Commission regulations, and other applicable law.

C. Process

Because the Board is a governing body of a public agency, the Board and its members must conduct business according to the State of California Ralph M. Brown Act, which provides that Board meetings, deliberations, and actions must be public unless subject to a specific closed session exception. The Board may go into closed session to discuss the purchase and sale of particular, specific investments under the Brown Act.

Investment Policy

I. Investment Philosophy and Strategy

A. Objectives of the Investment Program

LACERA follows a carefully planned and executed strategic investment program in order to:

- i. **Produce** the promised benefits for LACERA members and beneficiaries by achieving the Fund's assumed rate of return on a total return basis over the long-term, consistent with LACERA's mission;
- ii. **Protect** the promised benefits on behalf of LACERA members and beneficiaries by mitigating investment risks through Fund diversification and other means, consistent with LACERA's mission; and
- iii. **Provide** the promised benefits for LACERA members and beneficiaries, in part by ensuring adequate liquidity, consistent with LACERA's mission.

B. Investment Beliefs

The Board has adopted the following investment beliefs ("Investment Beliefs") to describe its core beliefs and underlying assumptions about how capital markets operate. Collectively, the Investment Beliefs provide a framework to guide LACERA's investment decisions in a manner consistent with the Fund's nature as an institutional investor with a long-term investment horizon in order to achieve the Fund's objectives defined above.

i. Strategic Asset Allocation

Long-term strategic asset allocation will be the primary determinant of LACERA's risk/return outcomes.

- a. It is important that LACERA be forward looking, as its investment horizon spans decades, if not indefinitely into the future.
- b. Asset allocation has a greater effect on return variability than asset class investment structure or manager selection. It is essential to account for LACERA's liabilities in setting long-term investment strategy.
- c. Rebalancing the portfolio is a key aspect of prudent long-term asset allocation policy.

ii. Market Efficiency

Markets are largely efficient over the long term (10–20 years); however, during certain economic and financial environments markets may not be efficient in setting prices.

- a. Consequently, LACERA will allow for modest tactical asset allocation adjustments during times of disruption.

iii. Active Versus Passive Management

As markets are largely efficient, passive management, when available, is the preferred structure for investment management; however, the Board recognizes that some asset classes may justify the higher fees and/or expected enhanced returns associated with active management.

- a. Consequently, active strategies will be used only when there is strong conviction that they can be expected to add value net of their higher fees and are adjusted for risk.

iv. Private Markets and Liquidity

Private market assets can add value to a portfolio, providing opportunities for returns that exceed those expected from public markets.

- a. The total capital allocated to illiquid strategies must be kept at a prudent level.
- b. The high return potential of these assets needs to be balanced with LACERA's need for liquidity.
- c. Liquid assets serve a critical role to fund benefit payments and rebalance the portfolio.

v. Risk

Risk is a broad term used to capture the concept of uncertainty. Since no single metric adequately conveys risk, LACERA will evaluate risk holistically, incorporating quantitative measures and qualitative assessments in managing its portfolio.

- a. LACERA operates in a global financial marketplace, and as such, LACERA believes that in order to diversify its risk broadly, it is vital that LACERA possess a global perspective.
- b. Diversification across different risk factors is necessary for risk reduction.
- c. Markets are cyclical; risk premia, volatility, and correlations vary over time.
- d. The pattern of returns matters because volatility levels and the sequence of gains and losses can impact funded status and contribution rates.
- e. Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.
- f. For LACERA, not taking enough risk is risky; therefore, LACERA will accept a prudent amount of risk to achieve its long-term target returns.
- g. LACERA considers the risks of environmental, social, and governance ("ESG") factors as relevant to its investment process.
- h. LACERA believes that conflicts of interest may pose risk; therefore, any perceived conflicts should be identified and explored as a material factor in risk analysis.

vi. Costs and Fees

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and cost is the most certain.

- a. Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy.
- b. Costs and fees should be actively monitored and negotiated to the greatest extent possible.

vii. Education

In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is essential for long-term success.

C. Strategic Asset Allocation

LACERA fundamentally believes long-term strategic asset allocation will be the primary determinant of risk/return outcomes, and therefore establishes a strategic asset allocation to meet its mission and investment objectives.

LACERA's strategic asset allocation categorizes capital outlays into five groups, defined by the function each

allocation is intended to serve in the portfolio: (1) Growth, (2) Credit, (3) Real Assets and Inflation Hedges, (4) Risk Reduction and Mitigation, and (5) Overlays and Hedges. The functional categories include various asset classes that represent the risk/return characteristics of each area. LACERA expects the five functional categories to diversify the Fund and optimize upside growth while mitigating downside risk. The asset allocation determines what proportion of the Fund is allocated to each functional category and underlying asset class, including target weights and allowable ranges as a percentage of the Fund.

In order to determine its strategic asset allocation, LACERA conducts a comprehensive asset allocation study every three to five years, or at the Board's request. The asset allocation study considers a number of factors, such as:

- A projection of actuarial assets, liabilities, benefits payments, contributions, and the actuarial rate of return for the Fund, as well as its current and projected funded status.
- Historical results and expected long-term capital market risk, return, and correlation forecasts.
- An assessment of future economic conditions, including inflation and interest rate levels.
- Various risk/return scenarios.
- The Fund's liquidity requirements.

LACERA's approved asset allocation and benchmarks are detailed in the tables of the Appendix.

D. Overview of Strategic Asset Allocation

LACERA groups asset classes into the following functional categories:

i. Growth

- a. Role in the portfolio: The role of assets in this category is to be the primary driver of long-term total returns for the Fund.
- b. Asset Classes: Global Equity, Private Equity, and Non-Core Private Real Estate.
- c. Investment Approach: Growth assets generally represent equity or equity-like interests in current and future income streams. Growth assets include public and private market strategies that include both liquid and illiquid investments. LACERA utilizes passive strategies in relatively efficient segments of the market for global equity. LACERA employs active strategies in relatively less efficient market segments of global equities, as well as in private equity and non-core private real estate.
- e. Risk Factors: Growth assets are primarily equity ownership positions that tend to perform well in times of positive economic growth. They are highly sensitive to economic conditions and are subject to potential loss in value based on a number of factors. For example, growth assets may be sensitive to inflation and generally perform poorly in times of high and unexpected inflation. To a lesser extent, growth assets may be sensitive to interest rates due to the use of leverage in certain strategies as well as the relationship between interest rates and the discount rates used to price securities.

ii. Credit

- a. Role in the portfolio: LACERA expects assets categorized as Credit to produce current income and moderate long-term total returns. Credit has more moderate levels of risk than assets categorized as Growth, and, accordingly, provides incremental diversification to the total Fund.

- b. Asset Classes: Liquid Credit (High Yield, Bank Loans, Emerging Market Debt), and Illiquid Credit.
- c. Investment Approach: Credit assets are generally fixed claims on assets or income streams of an issuer (e.g., government, corporation, asset-backed securities). The category is composed of certain fixed income, hedge funds, real estate, and private debt investments. Investment strategies within this category may have a specific mandate or be multi-strategy. The investment strategies may be liquid, illiquid, or a combination of both, depending on the nature and terms of the specific investment vehicle. LACERA employs active strategies across all asset classes within the Credit category but may employ passive strategies in certain segments that are relatively more efficient.
- d. Risk Factors: The primary risk for owners of Credit assets is the failure of the borrower to make timely payments of interest and principal. There are three elements of credit risk: the risk of default, the risk of a credit downgrade, and spread risk, which is the risk that investors may demand greater compensation for bearing the first two types of risk. Bonds with credit risk offer a yield premium over government bonds to compensate investors for the additional risk. Bonds with greater credit risk (i.e., bonds with lower credit ratings) are typically less liquid than higher quality bonds.

iii. Real Assets and Inflation Hedges

- a. Role in the portfolio: LACERA expects assets in this category to provide income as well as a hedge against inflation, while diversifying the Fund due to the assumed low correlation of returns between these assets and other asset classes.
- b. Asset classes: Core Private Real Estate, Natural Resources & Commodities, Infrastructure, and Treasury Inflation-Protected Securities (“TIPS”).
- c. Investment Approach: Real Assets generally include physical assets, such as real estate and infrastructure, or securities whose value is derived from a physical asset, such as commodities or natural resources. Assets in this category may be invested in both public and private investments and may be liquid or illiquid, as well as passively or actively managed.
- d. Risk Factors: Real Assets and Inflation Hedges are sensitive to inflation. The primary risk for owners of real assets/inflation hedges is that they fail to provide a hedge against long-term changes in inflation. A secondary risk is loss of principal. The value of real estate and natural resources assets may fall, particularly during an economic downturn, but also due to idiosyncratic aspects of each asset. Diversification may offset asset-specific risk. Foreign assets are also subject to currency movements against the U.S. dollar. TIPS are exposed to liquidity risk, as they tend to be less liquid than nominally U.S. Treasuries, particularly during a market environment in which there is a flight to safety.

iv. Risk Reduction and Mitigation

- a. Role in the portfolio: LACERA expects assets in this category to provide moderate amounts of current income by generating a modest level of return while also reducing total Fund risks, in part by preserving capital in the event of a downturn in equity markets. LACERA anticipates that assets in this category will have a low level of volatility and a low correlation to Growth assets, thereby providing downside protection. In the event of a market correction, these assets could also provide a source of liquidity for benefit payments.

- b. Asset classes: Investment Grade Bonds, Diversified Hedge Fund Portfolio, Long-Term Government Bonds, and Cash.
- c. Investment Approach: The category is composed of investment grade bonds, diversified hedge funds, long-term government bonds, and cash. Cash is the least volatile asset class, as well as the most liquid; the flexibility it provides during periods of market decline helps to mitigate risk. Investment grade bonds comprise a mix of U.S. Treasuries, corporate debt, and other bonds of high quality, typically rated “BBB” or above by rating agencies. High quality bonds would be expected to protect the total Fund by retaining or increasing their value during a market correction. Diversified hedge funds comprise a variety of hedged investments, such as relative value, arbitrage, and long/short strategies within a diversified portfolio. They would be expected to produce returns at or above high-grade bond portfolios, with equal or lower volatility, and be largely uncorrelated with other portfolio assets.
- d. Risk Factors: The primary risk factor for Risk Reduction and Mitigation Assets is that they will fail to provide the anticipated level of protection during market downturns. Assets in this category are also subject to additional risks. For example, investment grade bonds are sensitive to fluctuations in interest rates and have some risk of default. Specific hedge fund investments are subject to a variety of risk factors, including equity risk, credit risk, interest rate risk, and leverage risk. Cash can include short-term instruments and vehicles where there is a low probability of loss of principal.

v. Overlays and Hedges

- a. Role in the portfolio: The category consists of overlays and hedges as a distinct functional category. LACERA expects exposures in this group to assist in adhering to total Fund policy allocation targets, meeting asset class-specific objectives, and managing portfolio risk.
- b. Asset classes: Total Fund and all BOI approved asset classes may be utilized or subject to overlays and hedging strategies.
- c. Investment Approach: The category is composed of derivatives and synthetic replication investment vehicles that emulate LACERA’s physical assets, holdings, foreign currency, or market exposures via overlay and hedging programs. The separation of these mandates into one category allows for increased ability to monitor exposures across the total Fund and enhances the ability to evaluate performance, attribution, portfolio impacts, and risk drivers across individual asset categories and the total Fund.
- d. Risk Factors: The primary risk factors for Overlays and Hedges are exposure mismatch and benchmarking. Best efforts will be made to replicate LACERA’s underlying exposures and risk; however, there may be instances when the vehicles used will not mirror a given asset, causing an exposure mismatch. Another consideration is benchmarking. Benchmarking overlay and hedging programs is challenging as positions are often resized more frequently than underlying physical exposures, and mandates may be used to achieve multiple objectives or be a temporary portfolio construction tool.

E. Performance Objectives

The Fund’s long-term performance objective is to generate risk-adjusted returns that meet or exceed its defined actuarial target as well as its policy benchmark, net-of-fees, over the Fund’s designated investment time horizon. LACERA’s policy benchmarks at the total Fund level, the functional category level, and the asset class level can be found in the Appendix.

F. Rebalancing

LACERA considers rebalancing the Fund a key aspect of prudent long-term portfolio management. LACERA rebalances the Fund's portfolio in accordance with established guidelines and procedures to adhere to its approved strategic asset allocation, consistent with the Fund's stated Investment Beliefs. The approved ranges for each functional asset category and underlying asset class are defined in the Appendix.

G. Responsible Stewardship and Beneficial Ownership Rights

In pursuing its investment program, and as part of mitigating risks associated with LACERA's investments, LACERA seeks to manage its investments in a manner that promotes and safeguards the economic interests of LACERA and its members, consistent with LACERA's mission. LACERA prudently exercises its rights as an investor to support policies and practices at companies in which LACERA invests, as well as public policies governing financial markets, that are consistent with LACERA's economic interests. In doing so, LACERA aims to promote sustainable, long-term value on behalf of its members and enhance LACERA's ability to fulfill its mission. LACERA has therefore adopted Corporate Governance and Stewardship Principles (see Attachments). Beneficial ownership rights pertaining to LACERA's investments, including, but not limited to proxy voting, are managed in accordance with LACERA's Corporate Governance and Stewardship Principles.

H. Integration of Environmental, Social, and Governance (ESG) Factors

LACERA recognizes that environmental, social, and governance factors may influence the risk-return profile and financial performance of investments. Financially material ESG factors may vary by industry, geographic exposure, business strategy, investment time horizon, and other variables. LACERA endeavors to identify, assess, and manage relevant ESG factors in its market research, portfolio construction, and throughout its investment process in furtherance of its mission and fiduciary duties. Careful consideration of ESG factors throughout LACERA's investment process aims to generate sustainable investment returns. LACERA assesses and monitors all investment partners on their capacity and skill in evaluating ESG risks and opportunities in a compelling manner to enhance LACERA's risk-adjusted returns.

I. Diversity, Equity, and Inclusion

LACERA values diversity, equity, and inclusion, and believes that effectively accessing and managing diverse talent leads to improved outcomes. LACERA considers diversity broadly, inclusive of—but not limited to—professional backgrounds, age, experience, race, sexual orientation, gender, gender identity, disability status, military service, ethnicity, national origin, and culture. LACERA expects external asset managers and other third party providers to respect and reflect LACERA's value of diversity, equity, and inclusion. LACERA's ongoing monitoring of third party service providers incorporates an assessment of vendors' commitment to, adherence with, and track record of accessing and retaining diverse workforces in an inclusive and equitable manner.

II. Investment Process

The following sections articulate the general parameters and processes by which LACERA executes its investment strategy, in adherence to established policies and procedures.

A. Structure Review

After an asset allocation study apportions capital across categories, LACERA conducts a structure review to address how to implement each asset category. A structure review establishes the framework for each asset category by addressing its role within a total Fund context. The structure review evaluates the objectives, portfolio composition, related strategic initiatives, and how the portfolio may evolve in the near to medium term. These reviews are presented to the Board no less frequently than the comprehensive asset allocation study conducted for the total Fund, or at the Board's request.

B. Investment Management

i. Investment Agreements

Board-approved investment recommendations are subject to negotiation and execution of an agreement that, in the judgment of LACERA's Chief Investment Officer and Chief Counsel, includes all terms necessary to provide adequate protection for LACERA's interests under the circumstances of the transaction, including but not limited to an appropriate standard of care on the part of the investment manager.

ii. Selection and Monitoring

LACERA may utilize internal resources or externally managed portfolios implemented by asset management firms and service providers to effectuate LACERA's investment program. In determining whether to use internal or external resources to implement a specific investment mandate, strategy, or investment-related service, LACERA takes into consideration numerous factors, including, but not limited to, return expectations, associated risks, compliance requirements, and expenses related to the specific strategy or service.

LACERA has adopted formal procedures to guide the selection, appointment, and monitoring of external managers and service providers. LACERA expects any external party that manages Fund assets on behalf of LACERA to serve as a fiduciary.

iii. Costs

LACERA considers the costs and expenses related to executing its investment program to be a crucial component of its fiduciary duty and an important element in determining its strategic asset allocation. In all aspects and functions of its investment program, LACERA seeks to actively identify, assess, and monitor expenses. LACERA expects that the economic terms and conditions by which any external party is compensated for investment-related services should promote an alignment of interests between LACERA and the external party in fulfilling LACERA's mission and investment objectives. Accordingly, LACERA diligently attends to and negotiates the economic terms of investment services rendered to the Fund.

C. Liquidity Management and Other Investment Functions

The following sections provide the general guiding principles and parameters for certain components of LACERA's investment process, including liquidity management, the use of derivative instruments, securities lending, and certain prohibited transactions.

i. Liquidity and Cash Management

Effective cash management is integral to LACERA's investment process. LACERA strives to maintain appropriate levels of liquidity—i.e., the ability to convert investments into cash—in order to meet immediate or short-term obligations and liabilities, such as funding member benefits, meeting capital calls, and rebalancing the portfolio per the strategic asset allocation. LACERA manages liquidity by monitoring the Fund's aggregate liquidity and liquidity risk exposures.

ii. Derivatives Management

LACERA may employ derivative instruments to hedge or gain exposure to certain investments. A derivative is a financial instrument that derives its value from an underlying asset which represents direct ownership of a security or a direct obligation of an issuer. Derivatives may be exchange-traded or traded over the counter (OTC). LACERA expects that any use of derivatives by external managers must adhere to LACERA's policies and investment guidelines.

iii. Securities Lending

LACERA may lend designated securities to provide the Fund with additional income generation and offset administrative expenses. LACERA lends eligible securities (both U.S. and Non-U.S. equities and bonds) to approved and qualified borrowers, subject to the terms and conditions specified in LACERA's contract agreements. Any securities lending activity is expected to be transparent to LACERA's external investment managers and should not impede or otherwise impair the investment management process.

iv. Prohibited Transactions

LACERA prohibits the following transactions unless stated otherwise in the investment management agreement:

- "Prohibited transactions" as defined under the Employee Retirement Income Security Act of 1974 (ERISA)
- Transactions that involve a broker acting as a "principal," where such broker is also the investment manager (or an entity related to the investment manager) who is making the transaction
- Any or all applicable investment activities forbidden by the United States Securities and Exchange Commission or other applicable governing bodies
- Any acts or omissions that violate state and local laws regarding conflicts of interest and disclosures

LACERA does not lever the Fund's investment portfolio as a whole. However, leverage is implicit in many investment strategies. LACERA expects that any use of leverage by external managers must adhere to LACERA's established policies and investment guidelines.

III. Risk Management

LACERA manages risk by establishing and adhering to investment guidelines, pursuing multiple approaches to diversification (such as asset class, geography, liquidity profile, currency, and degree of active management), and conducting regular measurement and analytical exercises. LACERA assumes certain risks to achieve sufficient returns to meet the Fund's financial obligations and investment objectives. Investment risks pertain to the prospect of a permanent loss of capital or of not meeting objectives within the designated timeframe. LACERA seeks to mitigate the impact of a drawdown to the Fund in order to accomplish its investment objectives, reduce volatility, and avoid increased contributions to the Fund from the plan sponsor or employees.

A. Philosophy and Objectives

LACERA considers risk multi-faceted and, therefore, views risk from multiple perspectives. Risk may vary and evolve over time, across sectors or geographic exposures, and depends on the nature and terms of the investment vehicle that LACERA deploys to implement the Fund's investment strategies. Risk may be systematic (i.e. present across the market) or unsystematic (i.e., specific to a particular investment strategy). A risk may pertain to and potentially impact the total Fund, a functional asset category, or individual underlying asset classes.

LACERA seeks to diligently identify, assess, and monitor relevant investment risks throughout the investment process, from determining its strategic asset allocation to ongoing evaluation and monitoring of the Fund's performance. This helps to ensure that risks assumed by the Fund are intentional and adequately compensated.

B. Approach

LACERA's strategic asset allocation attempts to position the Fund to capture growth while mitigating large drawdowns. LACERA's investment strategy is designed to take intentional risk, called active risk, in order to achieve commensurate investment results. LACERA may define expectations for active return earned per unit of active risk taken for various investment strategies and portfolios.

LACERA seeks to identify and acknowledge the sources and types of risk inherent in each investment strategy. However, LACERA also recognizes that even sophisticated risk measurement techniques may not detect certain risks, including extreme events, in advance. Accordingly, risk models may only provide limited predictive qualities. LACERA endeavors to test and challenge investment strategies and assumptions prior to a capital outlay as well as for ongoing monitoring.

LACERA measures investment risk using multiple metrics on both an absolute and relative basis at all relevant levels (i.e., total Fund, functional asset categories, and underlying asset classes). LACERA also strives to employ stress testing, scenario analyses, and broader financial and economic analyses to understand current and potential risks related to its investment strategy and decisions. LACERA selects appropriate benchmarks to assess and determine whether investment risks taken by the Fund are appropriate in order to achieve expected investment returns.

LACERA may establish a risk budget to set active risk targets for each functional asset category and underlying asset classes. LACERA aims to minimize unintended risk caused by asset allocation drift or other factors.

IV. Roles and Responsibilities

LACERA has established the following roles and responsibilities to implement its investment program. The duties explained below apply to the Board, staff, and various external parties who collectively oversee and administer the functions necessary for LACERA to accomplish its investment objectives.

The overview outlined below is further complemented by the following documents: (*Board of Investments Charter, Board of Investments Powers Reserved Defined, Board of Investments Powers Reserved and Delegated Authorities, and the Board of Investments Regulations (previously referred to as "Bylaws").*)

A. Board of Investments

i. Board

The exclusive fiduciary responsibility of the Board is to ensure prudent investment and management of the Fund so as to provide for the timely payment of benefits to members and their beneficiaries, minimize employer contributions, and defray the reasonable cost of administration, with the duty to members being paramount. It is the responsibility of the Board to ensure that LACERA employees administer Fund investments at reasonable cost, while preserving the quality of investments. The Board exercises oversight of all aspects of the investment program. The Board oversees the management of the Fund in compliance with all aspects of this IPS and all applicable federal and state laws and regulations concerning the administration of a government pension plan. The Board may request staff and investment consultants to inform and make recommendations on matters pertinent to LACERA's investment operations. The Board may also delegate specific authorities to the Chief Investment Officer ("CIO"), as further outlined in the Appendix.

ii. Committees

To assist the Board in carrying out its duties, the Board may establish one or more committees ("Committee"). A Committee makes recommendations to the Board on investment actions related to its area of focus. A Committee may request staff and investment consultants to inform and make recommendations to it on matters pertinent to LACERA's investment program.

B. Staff

i. Chief Executive Officer

The Board and LACERA'S Board of Retirement jointly appoint the Chief Executive Officer ("CEO"). The CEO is responsible for planning, organizing, and administering the operations of LACERA under policy guidance and direction from the Board and the Board of Retirement. The CEO exercises administrative oversight of the CIO, excluding investment decisions delegated to the CIO. The Board provides input to the CEO in the CEO's oversight of the CIO.

ii. Chief Investment Officer and Investment Staff

The CIO and staff assist the Board in performing its fiduciary duty. The internal investment staff reports to the CIO, who in turn reports to the CEO, with the input of the Board. The CIO, with the assistance of staff, has the responsibility and authority to assist the Board in establishing investment and administrative policies. The CIO and staff are responsible for implementing the policies and programs established by the Board. The CIO has primary responsibility for the implementation of the Board's investment decisions.

The CIO and staff manage the portfolio according to the Board's policies, advise and inform the Board about investments, assist with development and review of investment policies and procedures, oversee operational aspects of the Fund, report on the progress of the Fund in meeting its investment objectives, and monitor and report to the Board on the performance of the Fund relative to the appropriate benchmarks. The Board has delegated specific investment authority and responsibility directly to the CIO as described in the Appendix. The CIO is authorized to interact with and communicate directly with the Board regarding all investment-related matters. The CEO does not have any authority over any and all investment decisions that are delegated to the CIO.

iii. Chief Counsel and Legal Staff

The Office of Chief Counsel and legal staff (Legal Counsel) are primarily responsible for legal issues concerning the investment program and advise the Board, CEO, CIO, and staff on investment-related legal matters. Legal Counsel advises the Board in performing its fiduciary responsibility. In addition to reliance upon internal resources for such matters, the Chief Counsel or designee within the Legal Office may retain external legal counsel, when deemed necessary and appropriate, to advise staff, negotiate and prepare contracts on investment-related matters and individual transactions, and provide other investment legal advice to protect LACERA's interests, including its status as a tax-exempt government plan.

C. Third Party Service Providers

LACERA may engage external service providers, as described below, to implement its investment program. All service providers, unless otherwise not applicable, are expected to serve as fiduciaries to the Fund in fulfilling their contracted services. Third party service providers must refrain from gift-giving or other efforts that may jeopardize the impartiality, or appearance thereof, of LACERA's Board and staff.

i. Investment Consultants

An investment consultant works for the Board in the oversight and implementation of investment objectives. In meeting the Board's objectives, investment consultants may work with staff and investment managers. The Board's general investment consultant provides advice and recommendations to the Board or Committee regarding LACERA's strategic objectives, risks, oversight, and implementation of investment objectives. Investment consultants, both general and specialized, provide advice and recommendations regarding strategic asset allocation, portfolio implementation, and oversight of the Fund to the Board, CIO, and staff. Investment consultants report to the Board or the Committee, as directed, and serve as an independent resource accountable to the Board. Investment consultants have a fiduciary duty to LACERA and must report economic interests and conflicts in accordance with California law and LACERA policy, including the Code of Ethical Conduct and filing of Form 700s.

ii. Custodian Bank

The Custodian Bank ("Bank") serves as a fiduciary in the safekeeping of Fund assets. The Bank is responsible for maintaining the Fund's official accounting book of record, including the ongoing pricing and valuation of all assets, collection of income generated by those assets, any corporate action notification, and performance calculation. The Bank cooperates with and provides assistance to staff and investment managers in the reconciliation process. LACERA may opt to designate other duties to the Bank as stipulated in the professional services agreement. LACERA's investment office works with LACERA's accounting division to manage the custodial relationship.

iii. Investment Managers

Investment managers are selected by the Board and, subject to the terms and conditions of this IPS, serve LACERA through contracts that specify investment guidelines, administrative requirements, responsibilities, investment fees, and performance expectations for management of each mandate. Investment managers provide reporting to LACERA on the performance of specific investment mandates in adherence to established guidelines and agreements. Staff and consultants synthesize investment managers' performance for presentation to the Board in accordance with established performance monitoring and oversight procedures. Investment managers should accept a fiduciary duty to LACERA, must report economic interests and conflicts in accordance with California law and LACERA policy, including the Code of Ethical Conduct and filing of Form 700s, and enforce their own diversity, ethics, and sexual harassment policies.

iv. Other Third Party Service Providers

Additional third party service providers may be retained, subject to the terms and conditions of LACERA's established policies and procedures, in order to perform other duties to assist in the administration of the Fund.

Appendix

A. Investment Tables

Table 1: Approved Asset Allocation

Asset Class	Target Allocation (%)	Allocation Range +/- (%)	Target Allocation (½ Step) 10/1/2021
Growth	53	+/-8	51
Global Equity	32	+/-7	34
Private Equity	17	+3/-5	14
Non-Core Private Real Estate	4	+/-2	3
Credit	11	+/-3	11
Liquid Credit	4	+/-3	6
Illiquid Credit	7	+/-3	5
Real Assets and Inflation Hedges	17	+/-3	17
Core Real Estate	6	+/-3	6
Natural Resources & Commodities	3	+/-2	4
Infrastructure	5	+1/-3	4
TIPS	3	+/-3	3
Risk Reduction and Mitigation	19	+/-6	21
Investment Grade Bonds	7	+/-6	13
Diversified Hedge Funds	6	+2/-4	5
Long-term Government Bonds	5	+/-5	2
Cash	1	+2/-1	1
Overlays and Hedges	0		0
Cash Overlay	0		0
Currency Hedge	0		0
TOTAL FUND	100.0		100.0

Table 2: Benchmark Table

Asset Class	Benchmark
Growth	Custom Blend
Global Equity	MSCI ACWI IMI Net
Private Equity	MSCI ACWI IMI + 200 bps (3-Month lagged)
Non-Core Real Estate	NFI ODCE + 225 bps (3-Month lagged)
Credit	Custom Blend
Liquid Credit	40% BBg Barc U.S. Corporate High Yield; 40% Credit Suisse Leveraged Loans; 10% JP Morgan EMBI GD; 5% JP Morgan GBI-EM GD; 5% JP Morgan CEMBI BD
Illiquid Credit	Custom Liquid Credit Benchmark + 150 bps (1-Month lagged)
Real Assets and Inflation Hedges	Custom Blend
Core Real Estate	NFI ODCE (3-Month lagged)
Natural Resources & Commodities	33% Bloomberg Commodity; 66% S&P Global Natural Resources TR
Infrastructure	Dow Jones Brookfield Global Composite Infrastructure TR
TIPS	BBg Barc U.S. TIPS
Risk Reduction and Mitigation	Custom Blend
Investment Grade Bonds	BBg Barc U.S. Aggregate TR
Diversified Hedge Funds	FTSE 3-Month US Treasury Bill + 250 bps (1-Month lagged)
Long-term Government Bonds	BBg Barc U.S. Long Treasury Bond
Cash	FTSE 3-Month U.S. Treasury Bill
Overlays and Hedges	N/A
Cash Overlay	—
Currency Hedge	—
TOTAL FUND	Custom Blended Policy Benchmark

B. Chief Investment Officer Delegated Authorities

The Board has delegated to the CIO the following authorities in accordance with Board-approved asset class specific program parameters. CIO actions will be reported to Trustees consistent with the reporting provisions below, or in a timely manner

Total Fund

<p>General Authorities</p>	<p>Authority to limit or freeze manager trading activity pending discussion and action by the Board. Such actions shall be reported as an informational item as reasonably practicable to the Board, and no later than the next scheduled meeting of the Board.</p> <p>Authority to take actions not otherwise specifically delegated, in concurrence with the CEO and the Chair of the Board, when deemed necessary in the best interest of the Fund and when there is not enough time to take the action to the full Board. Such actions shall be reported as an informational item as soon as reasonably practicable to the full Board, and no later than the next scheduled meeting of the Board.</p> <p>Authority to rebalance the Fund in order to raise cash for benefit payments, adjust investment exposures, or pay operational expenses while adhering to investment policy targets. Rebalancing may include increasing or decreasing all Board-approved mandates.</p> <p>Authority to take actions as specified in LACERA's Procurement Policy.</p>
<p>Approval of Variances</p>	<p>Authority to approve temporary variances from asset-level program and investment manager guidelines.</p>
<p>Contract Authorities</p>	<p>Authority to sign, or delegate authority to sign, all investment-related contracts and agreements necessary to implement Board-approved action. Thereafter, during the original term, authority to sign all amendments and modifications with respect to such contracts and agreements and make all decisions with respect to their day-to-day operation and implementation where the investment mandate remains substantially unchanged. Upon expiration of a contract or agreement for Board-approved mandates, an extension or modification may only be made with Board approval or as outlined in LACERA's Procurement Policy.</p> <p>Authority to approve reductions to investment manager fee schedules and service provider costs.</p> <p>Authority to negotiate and execute investment agreements that, in the judgment of the CIO and Chief Counsel, provide adequate protection for LACERA's interests, including an appropriate standard of care on the part of each manager.</p>

Asset Class Specific

Private Equity	<p>Authority to approve the purchase or sale of any existing fund investment within the Private Equity portfolio.</p> <p>Authority to approve co-investments, secondary transactions, re-ups, and advisory board seats.</p>
Real Estate	<p>Authority to approve the purchase or sale of any existing fund investment within the Real Estate portfolio.</p> <p>Authority to authorize the formation, dissolution of, and designate officers for Title Holding Companies.</p> <p>Authority to approve co-investments, secondary transactions, re-ups, and advisory board seats.</p>
Real Assets (ex-Real Estate)	<p>Authority to approve the purchase or sale of any existing fund investment within the Real Assets portfolio.</p> <p>Authority to approve co-investments, secondary transactions, re-ups, and advisory board seats.</p>
Credit	<p>Authority to approve the purchase or sale of any existing fund investment within the Credit portfolio.</p> <p>Authority to approve co-investments, secondary transactions, re-ups, and advisory board seats.</p>
Hedge Funds (Including Equity)	<p>Authority to approve the purchase or sale of any existing fund investment.</p> <p>Authority to approve co-investments, secondary transactions, re-ups, and advisory board seats.</p> <p>Authority to terminate a hedge fund manager.</p>

In the event the CIO is not available, and time is of the essence in making a decision, LACERA will follow the Board-approved Crisis Response Plan. The Board will receive written notification of all such actions.

List of Attachments

Corporate Governance and Stewardship Principles
Responsible Contractor Policy
Emerging Manager Policy
Placement Agent Policy
Private Equity Privatization Policy
Procurement Policy for Investment-Related Services

MINUTES OF THE REGULAR MEETING OF THE BOARD OF INVESTMENTS

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, PASADENA, CA 91101

9:00 A.M., WEDNESDAY, AUGUST 10, 2022

This meeting was conducted by teleconference under California Government Code Section 54953(e).

PRESENT: Herman Santos, Chair

David Green, Vice Chair

Elizabeth Greenwood

Joseph Kelly (Left the meeting at 11:30 a.m.)

Keith Knox (Left the meeting at 11:15 a.m.)

Elizabeth B. Ginsberg (Joined the meeting at 11:03 a.m.)

Onyx Jones

Patrick Jones (Left the meeting at 11:30 a.m.)

Gina Sanchez

ABSENT: Shawn Kehoe, Secretary

STAFF ADVISORS AND PARTICIPANTS

Jonathan Grabel, Chief Investment Officer

Santos H. Kreimann, Chief Executive Officer

Steven P. Rice, Chief Counsel

Luis Lugo, Deputy Chief Executive Officer

JJ Popowich, Assistant Executive Officer

STAFF ADVISORS AND PARTICIPANTS (Continued)

Laura Guglielmo, Assistant Executive Officer

Christine Roseland, Senior Staff Counsel

Ted Granger, Interim Chief Financial Officer

Vache Mahseredjian, Principal Investment Officer

James Rice, Principal Investment Officer

Jude Pérez, Principal Investment Officer

Scott Zdrazil, Principal Investment Officer

Chad Timko, Senior Investment Officer

Quoc Nguyen, Investment Officer

Krista Powell, Investment Officer

Ron Senkandwa, Investment Officer

Amit Aggarwal, Investment Officer

Mike Romero, Senior Investment Analyst

Mel Tsao, Senior Investment Analyst

David Simpson, Investment Officer

Pushpam Jain, Investment Officer

John Kim, Senior Investment Analyst

Terra Elijah, Investment Analyst

Bob Schlotfelt, Chief Information Security Officer

Kathy Delino, Interim Chief Information Technology Officer

STAFF ADVISORS AND PARTICIPANTS (Continued)

Barry W. Lew, Legislative Affairs Officer

Meketa Investment Group (General Investment Consultants)

Aysun Kilic, Managing Principal

Tim Filla, Managing Principal

Albourne (Real Assets ex-Real Estate, Illiquid Credit & Hedge Funds Consultant)

Mark White, Head of Real Assets

James Walsh, Partner

Steven Kennedy, Partner

StepStone Group LP (Real Estate Consultants)

Thomas Hester, Managing Director

Margaret McKnight, Partner

James Maina, Vice President

Milliman,

Nick Collier, Actuary Consultant

Craig Glyde, Actuary Consultant

I. CALL TO ORDER

The meeting was called to order virtually by Chair Santos at 9:00 a.m.

II. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of July 13, 2022

Ms. Greenwood made a motion, Mr. Green seconded, to approve the minutes of the regular meeting of July 13, 2022. The motion passed (roll call), with Messrs. Kelly, Knox, Green, P. Jones, Santos, Mses. O. Jones, and Greenwood voting yes and Ms. Sanchez abstaining. Mr. Kehoe was absent from the vote.

III. REPORT ON CLOSED SESSION ITEMS

There was nothing to report.

IV. PUBLIC COMMENT

There were no requests from the public to speak.

V. CHIEF EXECUTIVE OFFICER'S REPORT
(Memo dated July 26, 2022)

Mr. Kreimann provided a brief presentation on the Chief Executive Officer's Report and answered questions from the Board.

VI. CHIEF INVESTMENT OFFICER'S REPORT
(Presentation dated August 10, 2022)

Mr. Grabel provided a brief presentation on the Chief Investment Officer's Report and answered questions from the Board.

VII. CONSENT ITEMS

Ms. Sanchez made a motion, Mr. Green seconded, to approve consent items VII.A through VII.D. The motion passed (roll call), with Messrs. Kelly, Knox, Green, P. Jones, Santos, Meses. O. Jones, Sanchez, and Greenwood. Mr. Kehoe was absent from the vote.

- A. Recommendation as submitted by Steven P. Rice, Chief Counsel: That the Board approves that, under AB 361 and Government Code Section 54953(e)(3) of the Brown Act, the Board of Retirement and Board of Investments separately consider whether to find that the Governor's COVID-19 State of Emergency continues to directly impact the ability of each Board and its Committees to meet safely in person and that the County of Los Angeles and other agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days, and if so, direct staff to comply with the agenda and public comment requirements of the statute. Action taken by each Board will only apply to that Board and its Committees. (Memo dated July 25, 2022)

VII. CONSENT ITEMS (Continued)

- B. Recommendation that the Board approve attendance of Trustees at the 16th Annual Small and Emerging Managers (SEM) Conference in Chicago, IL on October 12 – 13, 2022 and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated July 26, 2022) (Placed on the agenda at the request of Trustee Greenwood)
- C. Recommendation that the Board approve attendance of Trustees at the 2022 SuperReturn Africa in Cape Town, South Africa on December 5 – 7, 2022 and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated July 26, 2022) (Placed on the agenda at the request of Trustee O. Jones)
- D. Recommendation that the Board approve attendance of Trustees at the Infrastructure Investor America Forum Conference in New York, New York on December 6 – 7, 2022 and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated July 22, 2022) (Placed on the agenda at the request of Trustee P. Jones)

VIII. NON-CONSENT ITEMS

- A. Recommendation as submitted by Jude Pérez, Principal Investment Officer; Laura Guglielmo, Assistant Executive Officer; Ted Granger, Interim Chief Financial Officer; Christine Roseland, Senior Staff Counsel; Bob Schlotfeld, Chief Information Security Officer; and Kathy Delino, Interim Chief Information Technology Officer: That the Board retain State Street Bank and Trust Co. for global custody and commercial banking services for LACERA's Pension Plan and OPEB Master Trust. (Memo dated July 26, 2022)

Messrs. Perez, Granger, Schlotfeld and Meses. Guglielmo, Roseland, Delino were present and provided a presentation to the Board.

Mr. Kelly made a motion, Ms. Sanchez seconded, to retain State Street Bank and Trust Co. for global custody and commercial banking services for LACERA's Pension Plan and OPEB Master Trust.

VIII. NON-CONSENT ITEMS (Continued)

The motion passed (roll call), with Messrs. Kelly, Knox, Green, P. Jones, Santos, Mses. O. Jones, and Sanchez voting yes. Mr. Kehoe and Ms. Greenwood were absent from the vote.

IX. REPORTS

- A. 2022 Triennial Actuarial Projects – Retirement Benefits Educational Session
Santos H. Kreimann, Chief Executive Officer
Ted Granger, Interim Chief Financial Officer
Nick Collier, Milliman
Craig Glyde, Milliman
(Memo dated August 10, 2022)

Mr. Granger and Mr. Collier and Glyde of Milliman provided a presentation and answered questions from the Board.

This item was received and filed.

- B. U.S. Securities and Exchange Commission Comment Letter Regarding Climate-Related Disclosures
Scott Zdrazil, Principal Investment Officer
(For Information Only) (Memo dated July 29, 2022)

This item was received and filed.

- C. U.S. Securities and Exchange Commission Comment Letter Regarding Private Fund Advisers
Scott Zdrazil, Principal Investment Officer
(For Information Only) (Memo dated August 1, 2022)

This item was received and filed.

- D. Monthly Status Report on Legislation
Barry W. Lew, Legislative Affairs Officer
(For Information Only) (Memo dated June 26, 2022)

This item was received and filed.

IX. REPORTS (Continued)

E. Legal Projects

Christine Roseland, Senior Staff Counsel
(For Information Only) (Memo dated August 1, 2022)

Ms. Roseland was present and answered questions from the Board.

This item was received and filed.

F. Status Report on Recruitment Progress

Santos H. Kreimann, Chief Executive Officer
(For Information Only) (Memo dated July 28, 2022)

This item was received and filed.

G. Monthly Travel & Education Reports – June 2022

Ted Granger, Interim Chief Financial Officer

Staff Travel and Education Report for Fiscal Year End 2021-2022
(Memo dated July 18, 2022)

Trustee Travel and Education Report for Fiscal Year End 2021-2022
(Memo dated July 18, 2022)

Mr. Granger was present and answered questions from the Board.

This item was received and filed.

H. Semi-Annual Interest Crediting for Reserves as of June 30, 2022
(UNAUDITED)

Ted Granger, Interim Chief Financial Officer
(For Information Only) (Memo dated July 26, 2022)

This item was received and filed.

I. July 2022 Fiduciary Counsel Contact and Billing Report

Steven P. Rice, Chief Counsel
(For Information Only) (Privileged and Confidential)
(Attorney-Client Communication/Attorney Work Product)
(Memo dated July 25, 2022)

This item was received and filed.

X. ITEMS FOR STAFF REVIEW

A trustee requested the CEO to include the Report on Status of the EKA Strategic Update in the monthly CEO Report.

In addition, a trustee requested that a discussion of the topic of a uniform device policy for trustees be added to a future agenda.

A trustee requested staff to provide an update regarding the Status of PrimeGov and live Board meetings at a future meeting.

Lastly, a trustee requested staff to revise the Trustee Travel and Education Report for Fiscal Year End 2021-2022 to reflect an additional conference for Trustee Sanchez.

XI. GOOD OF THE ORDER
(For information purposes only)

This item was received and filed.

XII. EXECUTIVE SESSION (Mr. Kelly and Mr. Jones left the meeting at 11:30 a.m.)

A. Conference with Staff and Legal Counsel to Consider the Purchase or Sale of Particular, Specific Pension Fund Investments
(Pursuant to California Government Code Section 54956.81)

1. Illiquid Credit Emerging Manager Program Separate Account Manager Search Recommendation
Vache Mahseredjian, Principal Investment Officer
Chad Timko, Senior Investment Officer
Quoc Nguyen, Investment Officer
Krista Powell, Investment Officer
(Memo dated July 29, 2022)

Messrs. Mahseredjian, Timko, Nguyen and Ms. Powell provided a presentation and answered questions from the Board.

XII. EXECUTIVE SESSION (Continued)

Ms. Sanchez made a motion, seconded by Mr. Green, to approve the engagement of Stable Asset Management as a separate account manager to build an evergreen emerging manager program of illiquid credit strategies. The motion passed (roll call), with Messrs. Green and Santos and Meses. Ginsberg, Greenwood, O. Jones, and Sanchez voting yes. Messrs. P. Jones, Kehoe, and Kelly were absent from the vote.

2. Blackstone Real Estate Partners X
James Rice, Principal Investment Officer
Amit Aggarwal, Investment Officer
Mike Romero, Senior Investment Analyst
Mel Tsao, Senior Investment Analyst
(Memo dated July 25, 2022)

Messrs. Rice, Aggarwal, Romero and Tsao and Messrs. Hester and Maina and Ms. McKnight of StepStone Group provided a presentation and answered questions from the Board.

Ms. O. Jones made a motion, seconded by Mr. Santos, to approve a commitment of up to \$300 million to Blackstone Real Estate Partners X, which is a private real estate fund making opportunistic investments in the growth segment globally, with a primary focus in the United States and Canada. The motion passed (roll call), with Messrs. Green and Santos and Meses. Ginsberg, Greenwood, O. Jones, and Sanchez voting yes. Messrs. P. Jones, Kehoe, and Kelly were absent from the vote.

XII. EXECUTIVE SESSION

3. Brookfield Strategic Real Estate Partners IV
James Rice, Principal Investment Officer
Amit Aggarwal, Investment Officer
Cindy Rivera, Senior Investment Analyst
(Memo dated July 25, 2022)

Messrs. Rice, Aggarwal, and Ms. Rivera and Messrs. Hester and Maina and Ms. McKnight of StepStone Group provided a presentation and answered questions from the Board.

Ms. O. Jones made a motion, seconded by Mr. Green, to approve a commitment of up to \$300 million to Brookfield Strategic Real Estate Partners IV, which is a private real estate fund making opportunistic investments in the growth segment globally, with focus in the Americas, Europe, and Asia-Pacific. The motion passed (roll call), with Messrs. Green and Santos and Meses. Ginsberg, Greenwood, O. Jones, and Sanchez voting yes. Messrs. P. Jones, Kehoe, and Kelly were absent from the vote.

4. OPEB Master Trust Private Market Investment Search Recommendation
Jude Pérez, Principal Investment Officer
Chad Timko, Senior Investment Officer
David Simpson, Investment Officer
Pushpam Jain, Investment Officer
John Kim, Senior Investment Analyst
Terra Elijah, Investment Analyst
(Memo dated July 28, 2022)

Messrs. Perez, Timko, Simpson, Jain, Kim and Ms. Elijah provided a presentation and answered questions from the Board.

XII. EXECUTIVE SESSION

Ms. Sanchez made a motion, seconded by Mr. Green, to approve engagement of Hamilton Lane Advisors as a discretionary separate account manager to implement a private markets investment program, up to 20% of assets under management, for the OPEB Master Trust. The motion passed 6-0 (roll call), with Messrs. Green and Santos and Mses. Ginsberg, Greenwood, O. Jones, and Sanchez voting yes. Messrs. P. Jones, Kehoe, and Kelly were absent from the vote.

- B. Public Employee Performance Evaluation (Pursuant to Paragraph (1) of Subdivision (b) of California Government Code Section 54957)

Title: Chief Executive Officer

There was nothing to report. This item will be agendaized for the Board of Investments meeting on September 14, 2022.

XIII. ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 12:50 p.m.

SHAWN KEHOE, SECRETARY

HERMAN SANTOS, CHAIR



August 30, 2022

TO: Each Trustee,
Board of Retirement
Board of Investments

FROM: Santos H. Kreimann
Chief Executive Officer

SUBJECT: **CHIEF EXECUTIVE OFFICER'S REPORT – SEPTEMBER 2022**

The following Chief Executive Officer's Report highlights key operational and administrative activities that have taken place during the past month.

Strategic Plan Update

KH Consulting has provided the Advisory Team with the results of their engagements with the various Action Planning Teams (APT's). The APT's did an excellent job providing ideas, suggestions, and tactical plans for the Advisory Team to consider. The Advisory Team will now synthesize the ideas and suggestions from the APT's to help formulate and finalize the Strategic Plan. KH Consulting and the Advisory Team are scheduled to meet on August 31, 2022.

KH Consulting has also closed the Member and Employee surveys. We're pleased to report that over 24,000 members and retirees submitted a member survey, of which 11,144 were submitted by mail. The Employee survey received a response rate of about 50% (214 employees completed the voluntary Employee survey). We will now begin to analyze information and incorporate findings to inform our strategic planning goals and objectives.

Return to Boardroom

The Chairs, Vice Chairs, and LACERA executive team met on Monday, August 29, 2022, to discuss plans for holding in-person board meetings. After talking through options and assessing risk, the team determined that meetings would continue to be held remotely, as allowed by Governor Newsom's Executive Order. The board Chairs, Vice Chairs, and LACERA executive team will revisit this topic in November 2022 or sooner if the Governor's Executive order is lifted or other material developments occur.

Communication Plan Update

The LACERA executive team met on August 30, 2022, to review and discuss Communication Plan(s) drafted by both EKA and the LACERA Communications division. Both plans outlined a more tactical approach to engaging our members and various stakeholders, as opposed to a strategic roadmap. The team discussed opportunities and

ideas for improving the Communication plan document. We're going to coordinate these efforts with our Strategic Planning process, since the work overlaps with our current Strategic Planning efforts.

We expect to present the final draft of LACERA's Communication Plan around the same time our Strategic Plan is finalized.

Board/Committee Agenda Management, Recordings, Online Archives, and Public Interface Update

At its March 2022 Board of Retirement meeting, the Board approved to utilize and contract with Prime Government Solutions, Inc. (PrimeGov) now called OneMeeting. This application will be used for both Boards and all Committee meetings, including agenda management, livestreaming, recordings, online archives, and a public interface solution, with an indefinite retention period for archiving the audio and visual recordings. Staff is currently in the application testing phase for the agenda management (agenda, minutes, item authorization) portion. Once that is completed, testing for the in-meeting management (voting, public comment, speaker queue, livestreaming, archive materials/recording) and public interface will go into beta testing in preparation for implementation in January 2023. Staff will be incorporating trustee involvement for feedback and training no later than the end of October. Staff plan to provide a presentation at the Operations Oversight Committee in November 2022.

Cost of Living Adjustment Update

The Board of Supervisors administratively approved the successor Memorandum of Understanding (MOU) for LACERA represented employees and related salary and fringe benefit changes for LACERA non-represented employees during their June 28, 2022 meeting. The 4% salary increase, and retroactive adjustment, was paid on July 29, 2022, and the one-time bonus was paid on August 15, 2022. We will also process the negotiated 3% COLA effective January 2023.

2022 Safety Member Elections

The 2022 safety member election was closed on August 31, 2022, for the safety member trustee seats on both boards. The positions are: seventh trustee seat and alternate safety trustee seat on the Board of Retirement, and the fourth trustee seat on the Board of Investments. The trustees' three-year terms will run from January 1, 2023 through December 31, 2025.

As part of our review process, LACERA's Communications Division has worked with the County to identify opportunities for improvement. The team did identify an email routing issue, which was quickly resolved. We worked with the Executive Office of the Board of Supervisors to adjust the domain name from Board of Supervisors – Executive Office to LACERA Safety Member Elections to ensure future emails are routed correctly.

The chart below outlines the next steps in the finalization process for the election results:

Event	Date Range	
LACERA E-Voting	8/5/2022	8/31/2022
Protest Filing Deadline		9/15/2022
Executive Office of the Board Supervisors Notifies Candidates of the Election Results		9/21/2022
Board of Supervisors Declares the Election Results Official		10/18/2022

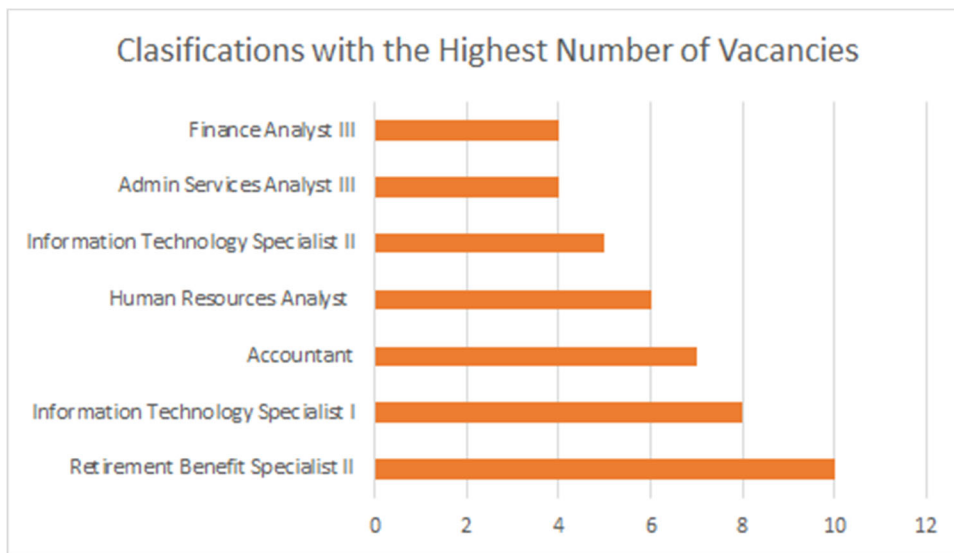
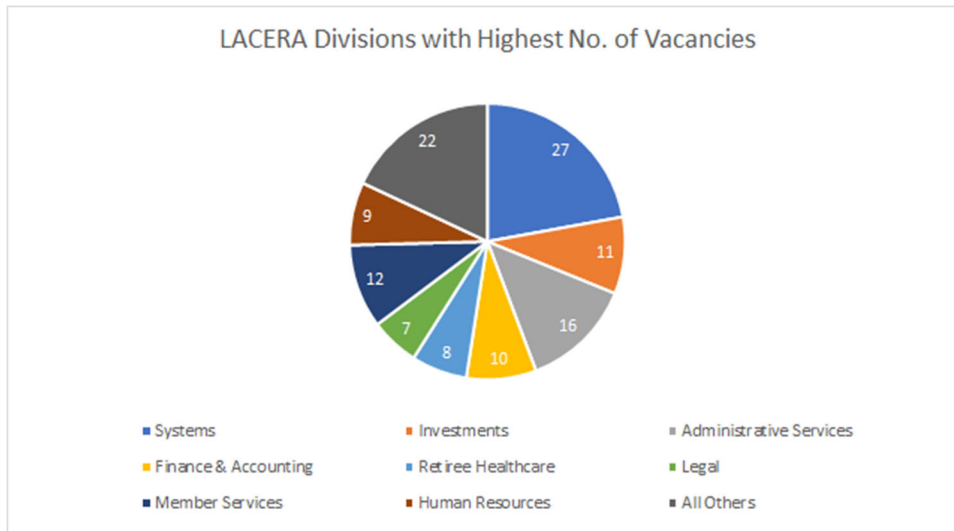
Recruitment Updates

Vacancies and Hiring

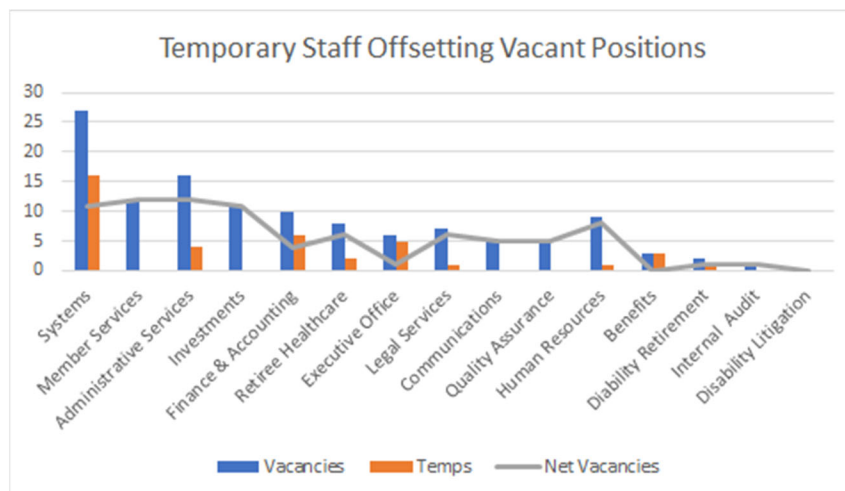
The current hiring priority in the Investments Division recruitment efforts is the Senior Investment Officer. There are eleven (11) vacancies in Investments (24% vacancy rate) and below is a summary of the recruitment status of these positions.

Classification	# of		Recruitment Stage
	Vacancies	LACERA Priority	
Deputy Chief Investment Officer	1	Tier 2 – December 2022	Outsourced Recruitment
Senior Investment Officer (SIO)	1	Tier 1 – June 2022	9 – Division Interviews
Finance Analyst III (FA III)	4	Tier 1 – June 2022	9 – Division Interviews
Finance Analyst II (FA II)	2	Tier 2 – December 2022	1 – Exam Requested
Executive Administrative Asst.	1	Tier 2 – December 2022	n/a
Principal Investment Officer (PIO)	1	Tier 2 – December 2022	n/a
Senior Investment Officer	1	Unassigned	n/a

LACERA has 530 budgeted positions, of which 122 are vacant (23% vacancy rate). The Divisions with the highest number of vacancies, and the classifications with the highest number of vacancies, are shown below.



The chart below highlights temporary hires across divisions to address critical vacancy needs in the short term.



Development

Human Resources works with the hiring Division to review the classification description, create an ideal candidate profile, and discuss the assessment process. This information is used by HR to create the job bulletin and recruiting brochure (management positions only). The recruitments/assessments for the following classifications are currently in development:

- Retirement Systems Specialist
- Staff Counsel (Benefits)
- Human Resources Analyst
- Senior Human Resources Analyst
- Senior Human Resources Assistant

Recruiting & Assessment

The Human Resources Team has open recruitments for the following positions:

- Accountant
- Retirement Benefits Specialist I, Temporary (Trainee Class)
- Staff Counsel (Investments)
- Financial Analyst III (Real Estate)
- Financial Analyst III (Corporate Governance and Stewardship)
- Senior Investment Officer (Real Estate)

The assessment process has started for Retirement Benefits Specialist I and Accountant.

New Lists Promulgated

A new eligibility register (list) has been promulgated for Financial Analyst III – Real Estate and Finance Analyst III – Corporate Governance. Selection interviews continue for Senior Investment Officer - Real Estate and Financial Analyst III for Real Estate. Recruitment for the Financial Analyst III- Corporate Governance and Real Estate positions continue. Additional candidates are in the assessment phase and those that pass will be added to the eligibility register (list).

Hiring

Hiring and selection activity for the month of August is as follows:

Division	Classification	No. Positions	Status
Systems	Data Systems Analyst I	2	Started August 1
Systems	Data Systems Analyst I	1	Started August 16
Systems	Data Systems Analyst I	1	Will start September 1
Administrative Services	Procurement & Supply Clerk	1	Selection made

FASD	Accountant	1	Selection made; pending background
Investments	Financial Analyst III Portfolio Analytics	1	Selection made (promotion)
Disability Retirement	Senior Disability Retirement Specialist	1	Selection made (promotion)

Retiree Healthcare (RHC) Update

\$1 Million Lifetime Maximum Benefit (LMB) for Non-Medicare Plans - Update

LACERA staff continues to be engaged with the Board of Supervisors and County of Los Angeles CEO's office on the elimination of the \$1 million Lifetime Maximum Benefit (LMB). The LMB applies to over 8,700 County active members and retirees enrolled now (or in the future) in the PPO and indemnity plan options. A meeting has been scheduled with the County CEO the first week of September to discuss options related to the \$1 million LMB.

SHK
CEO report September 2022.doc

Attachments



CEO DASHBOARD



September 7, 2022



Striving for Excellence

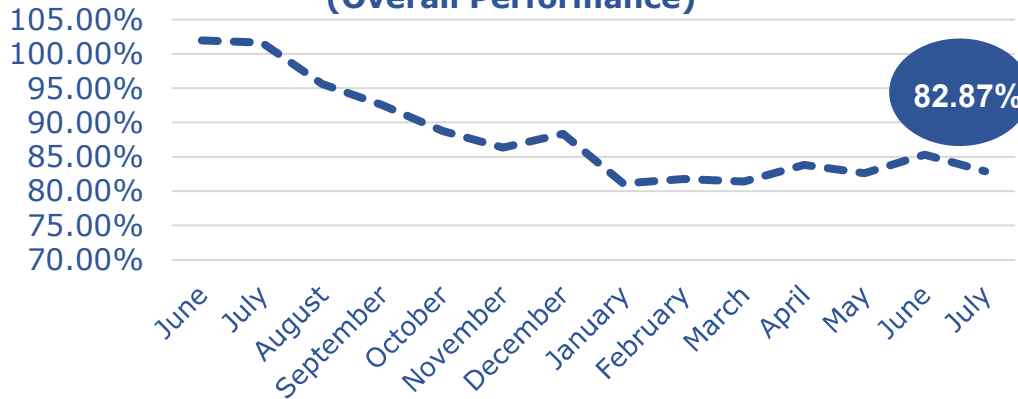
Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

 <p>WORKSHOP ATTENDANCE 1,056 Year-to-Date: 1,056</p>	 <p>OUTREACH EVENTS 19 Year-to-Date: 19</p>	 <p>WORKSHOP SATISFACTION N/A Mo. To Mo. Change: N/A</p>	 <p>MSC SATISFACTION N/A Mo. To Mo. Change: N/A</p>	 <p>MEMBER SERVICES CALL CENTER 11,714 3 Month Average: 12,281</p>
---	--	---	--	---

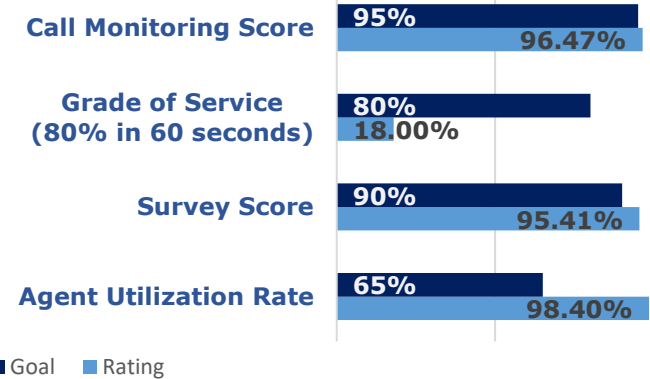
Member Services

Key Performance Indicator (Overall Performance)

Goal: 100%



Key Performance Indicator (Components)



Top Calls

1. Retirement Counseling: Process Overview
2. Retirement Counseling: Estimate
3. Retirement Counseling: Plan Overview



Emails

651
Avg. Response Time (ART)

24:00 hours

Secure Message
1,154



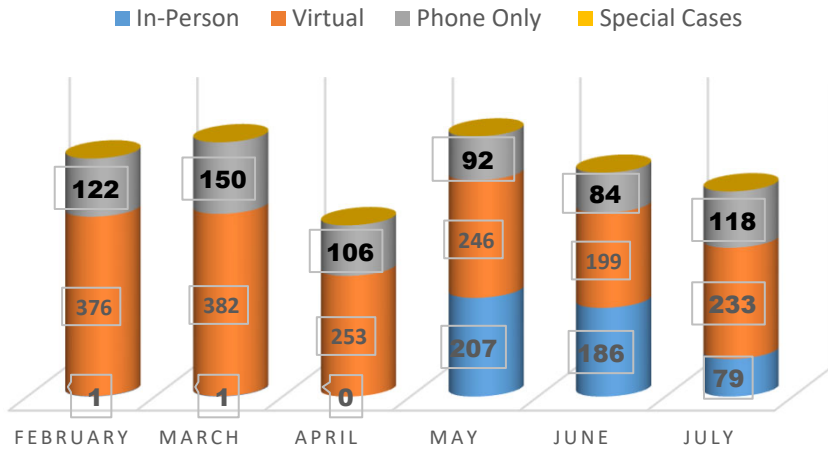


Striving for Excellence

Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

Member Services

Member Service Center Appointments

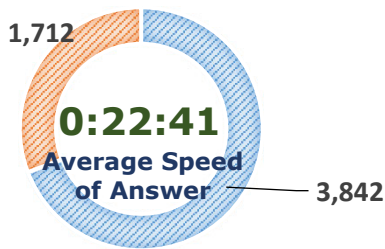


COMING SOON

Retiree Healthcare



Total RHC Calls: 5,554



■ Calls Answered ■ Calls Abandoned

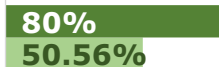
Top Calls

1. Medical/Dental Enrollments
2. Medicare Part B Inquiries
3. General Inquiries

Call Monitoring Score



Grade of Service (80% in 60 seconds)



Survey Score



Agent Utilization Rate



■ Goal ■ Rating



Emails 415

Avg. Response Time (ART) 5 Days



Secure Messages

441



Striving for Excellence

Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

Applications
893

In Process
As Of
7/31/2022

895 Pending on: 6/30/2022

56 Received

56 Year-to-Date

0 Re-Opened

0 Year-to-Date

55 To Board - Initial

55 Year-to-Date

3 Closed

3 Year-to-Date

Appeals
77

In Process
As Of
7/31/2022

77 Pending on: 6/30/2022

2 Received

2 Year-to-Date

1 Admin Closed/Rule 32

1 Year-to-Date

0 Referee Recommended

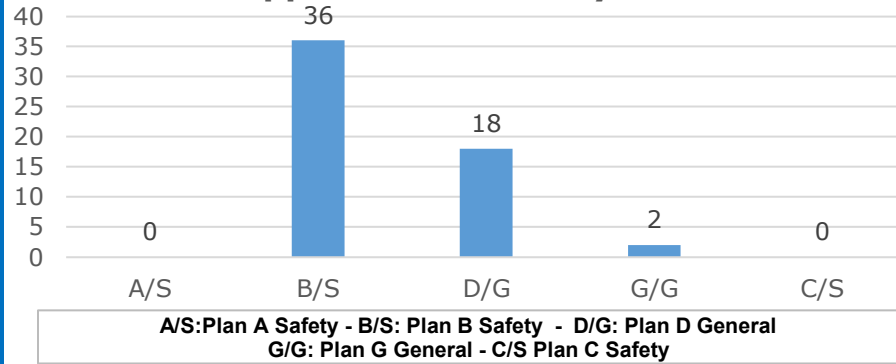
0 Year-to-Date

1 Revised/Reconsidered for Granting

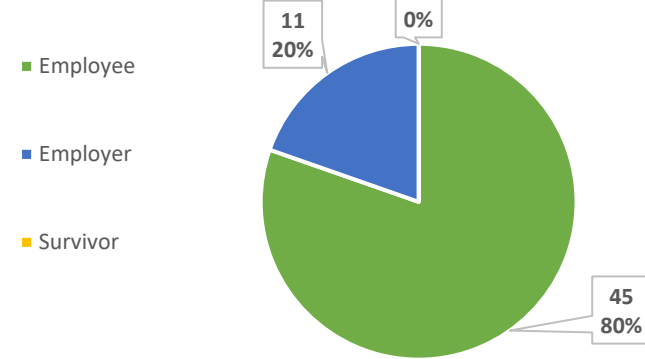
1 Year-to-Date

Disability

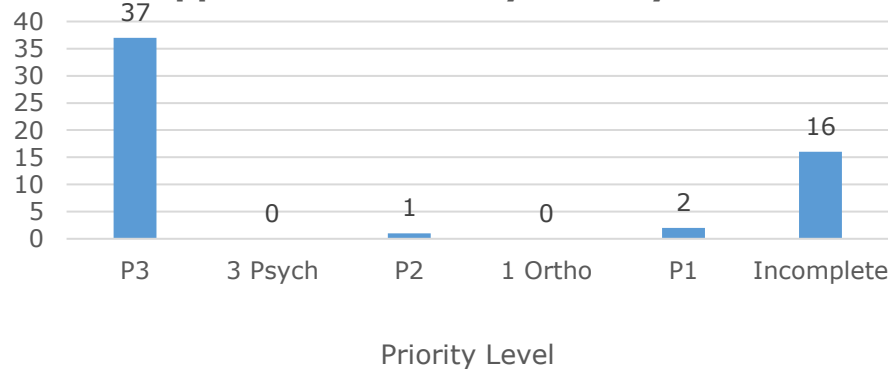
Applications Filed By Plan



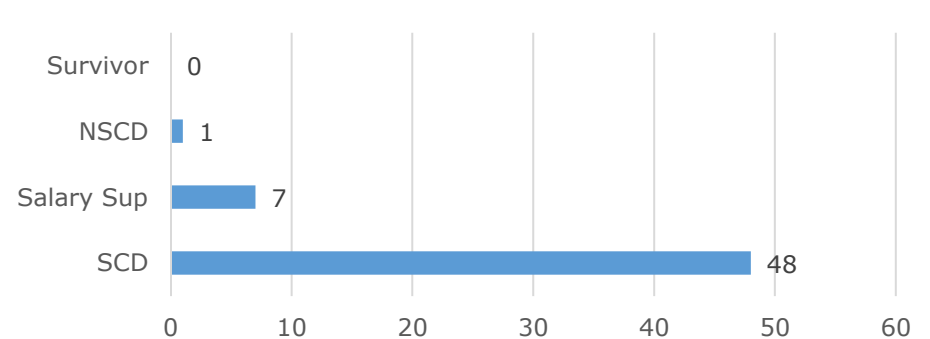
Applications Filed By Source



Applications Filed By Priority Level



Applications Filed By Type

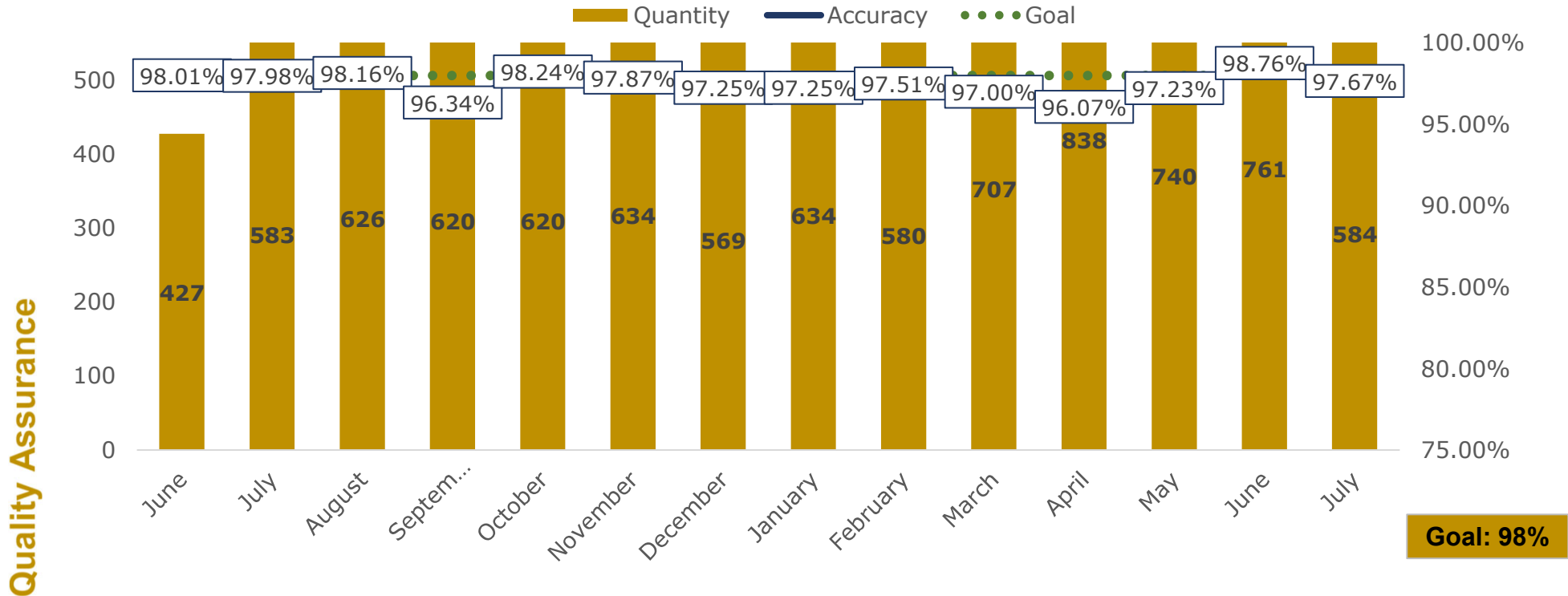




Striving for Excellence in Quality

Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

Audits of Retirement Elections, Payment Contracts, and Data Entry Completed by QA



July 2022

97.67%



Retirement Elections

164 Samples
97.46% Accuracy

Payment Contracts

330 Samples
96.11% Accuracy

Data Entry

90 Samples
99.44% Accuracy

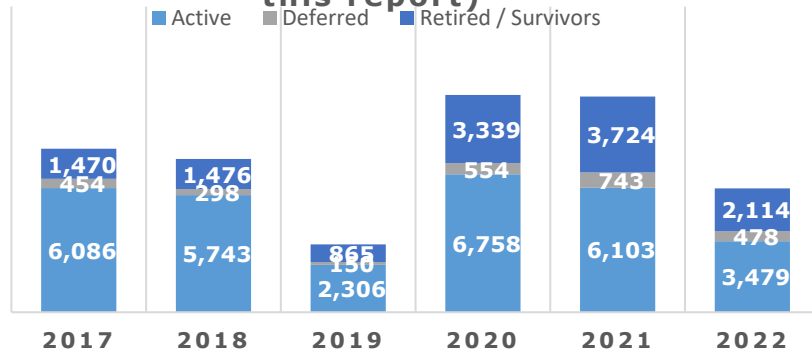


Service On-Line for All

Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

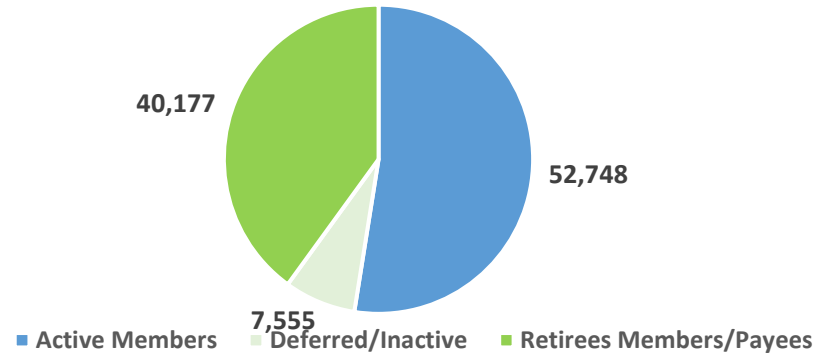
Serving Members Through LACERA.com and MyLACERA

MyLACERA Annual Registration
(as of the 15th of the month prior to this report)

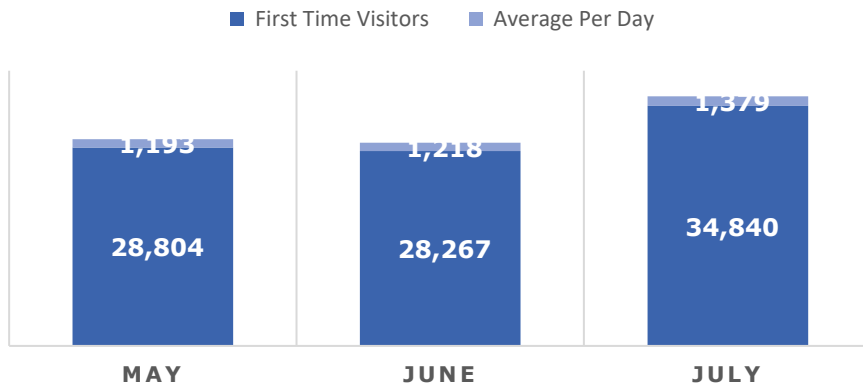


Total Registered Members 100,480 60%

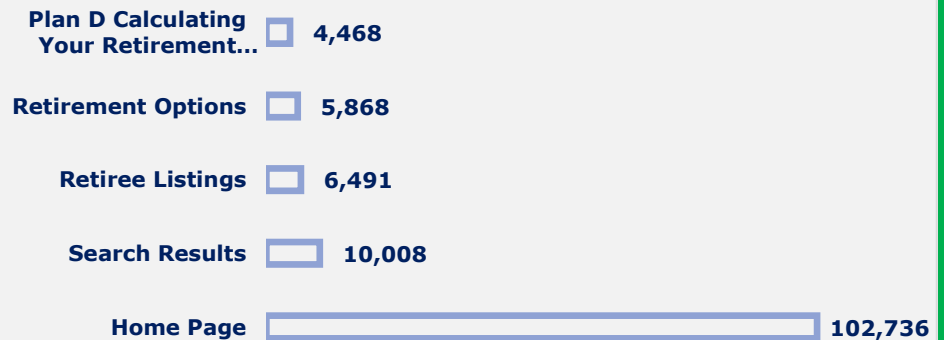
Total Registrations By Member Type



LACERA.com User Traffic



Top Five LACERA.com Page Views



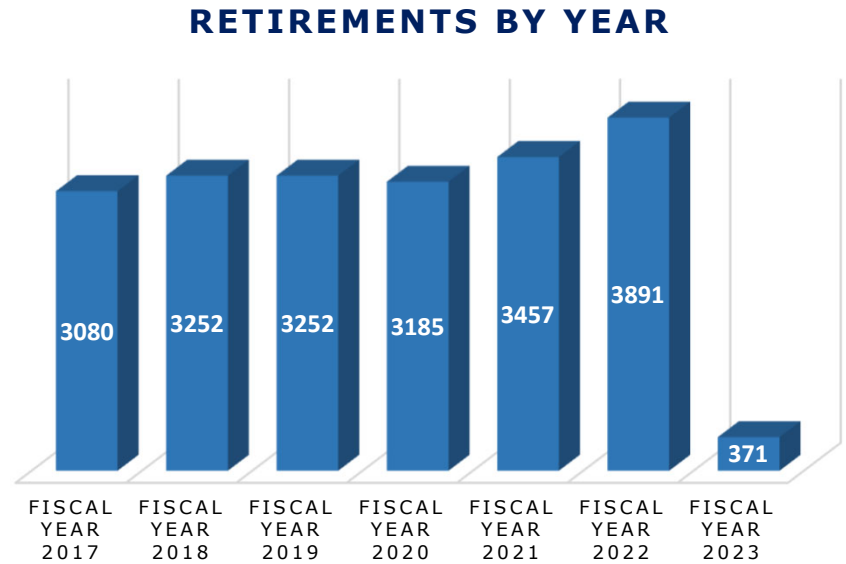
Home Page "I Would Like To" View	Views	% of Change	Home Page Tile Views	Views	% of Change
See my retirement options	5,868	45%	My LACERA	3,931	39%
Download 2022 RHC forms	2,385	31%	Pre-Retirement Workshops	2,419	51%
Learn About Service Credit	1,775	43%	Careers	2,687	41%
Print a Payday Calendar	1,919	51%	Investments	1,742	40%
Set up a Power of Attorney	660	-1%	Annual Reports	1,140	47%
Busiest Day of the Month:	Friday, July 29, 2022		Forms & Publications	328	43%



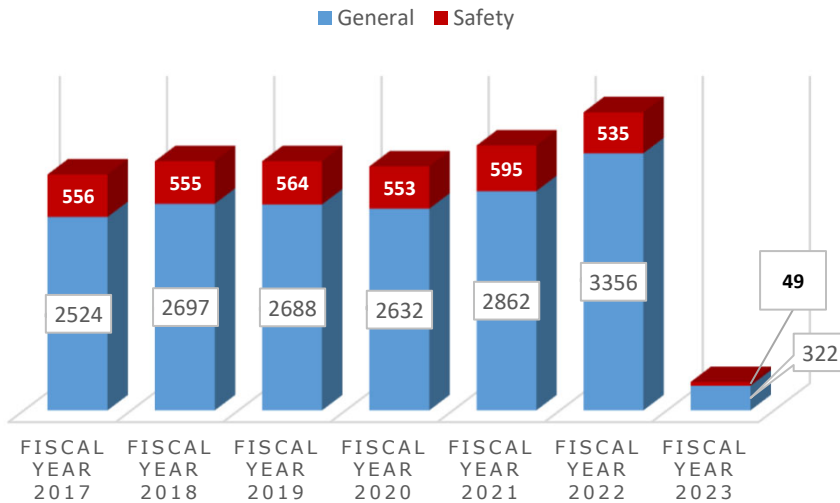
Member Snapshot

Service Metrics Reported on a Fiscal Year Basis (July 1) Through: July 2022

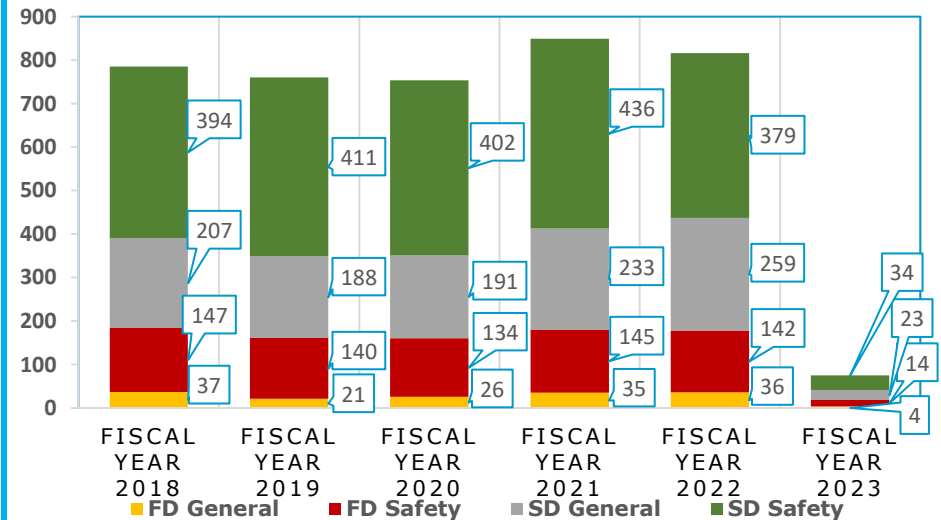
		Members as of 08/15/2022			
General	Plan	Active	Retired	Survivors	Total
	Plan A	54	13,851	4,138	18,043
	Plan B	14	640	71	725
	Plan C	17	417	66	500
	Plan D	35,622	20,119	1,845	57,586
	Plan E	13,911	14,930	1,539	30,380
	Plan G	33,801	192	14	34,007
	Total General	83,419	50,149	7,673	141,241
Safety	Plan A	1	4,509	1,655	6,165
	Plan B	8,059	7,455	383	15,897
	Plan C	4,729	20	2	4,751
	Total Safety	12,789	11,984	2,040	26,813
TOTAL MEMBERS		96,208	62,133	9,713	168,054
% by Category		57%	37%	6%	100%



ANNUAL RETIREMENTS BY TYPE



GENERAL VS. SAFETY RETIREMENTS FOR FIRE AND SHERIFF





Member Snapshot

Average Monthly Benefit Allowance Distribution Aug. 24, 2022

	General	Safety	Total	%
\$0 to \$3,999	30,140	1,500	31,640	51.0%
\$4,000 to \$7,999	14,194	3,452	17,646	28.5%
\$8,000 to \$11,999	4,048	4,275	8,323	13.4%
\$12,000 to \$15,999	1,123	2,122	3,245	5.2%
\$16,000 to \$19,999	367	430	797	1.3%
\$20,000 to \$23,999	112	137	249	0.4%
\$24,000 to \$27,999	30	41	71	0.1%
> \$28,000	23	5	28	0.0%
Totals	50,037	11,962	61,999	100%

Average Monthly Benefit Amount: \$ 4,725.00

Healthcare Program

(Mo. Ending: 7/31/2022)

	Employer	Member
Medical	\$49.9	\$3.6
Dental	\$3.9	\$0.4
Part B	\$7.6	\$0.0
Total	\$61.4	\$4.0

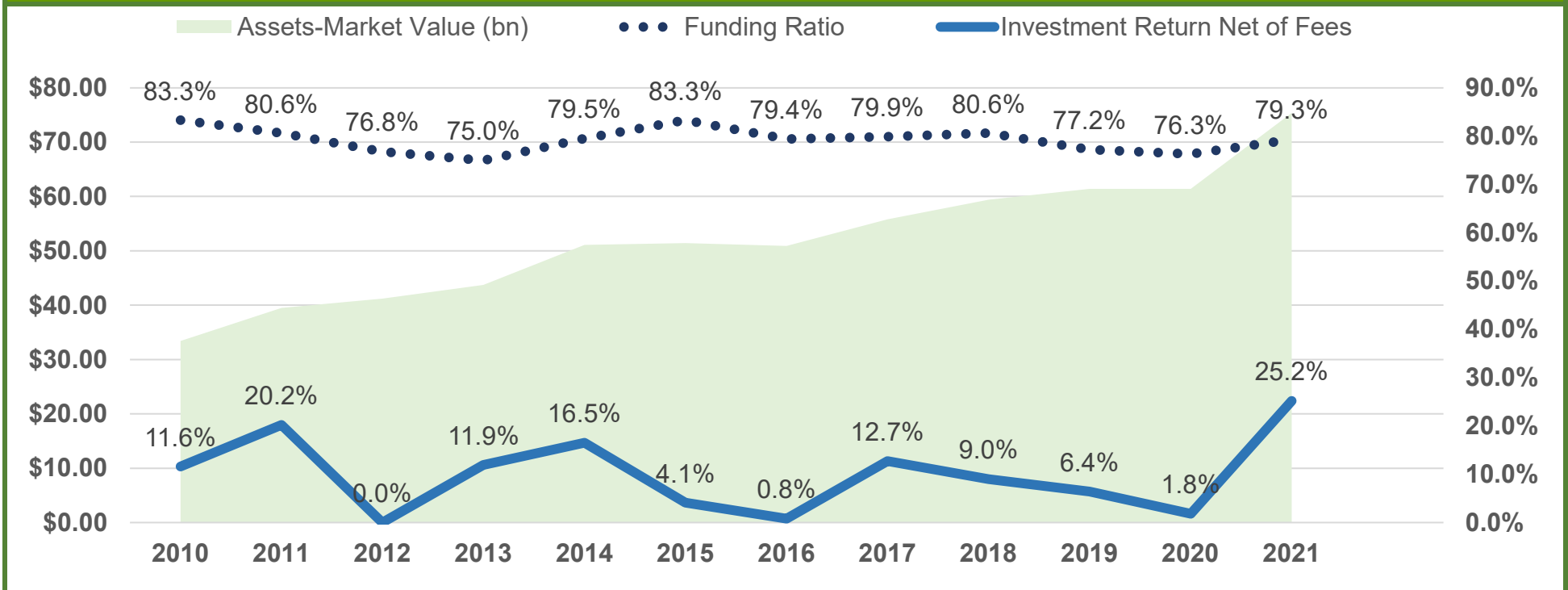
Health Care Enrollments

(Mo. Ending: 7/31/2022)

Medical	54,068
Dental	55,773
Part B	37,093
LTC	530
Total	147,464

KEY FINANCIAL METRICS

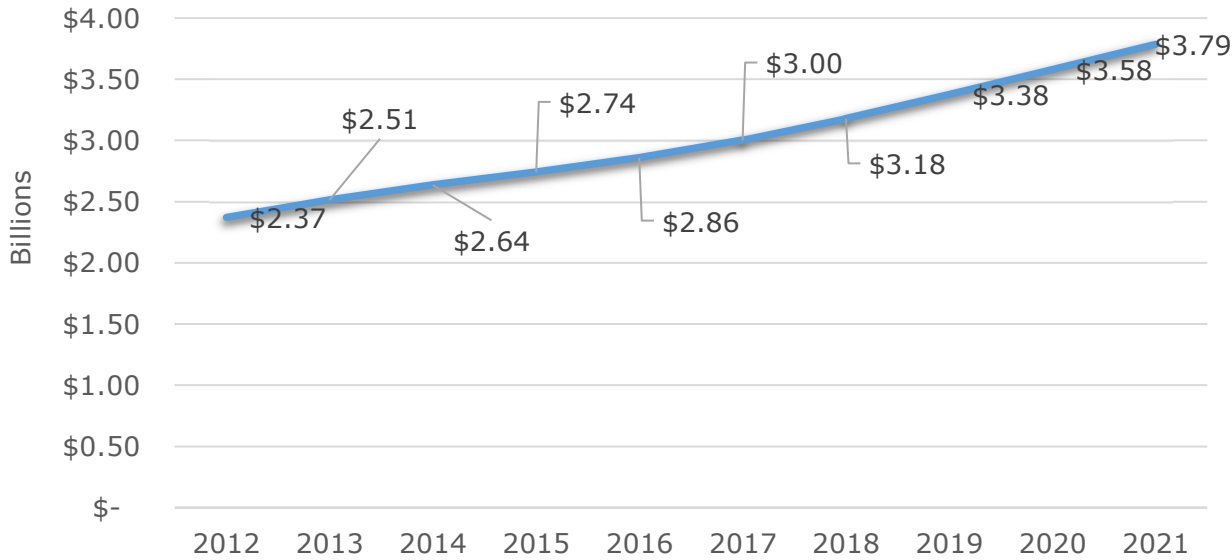
Fiscal Year End Financial Update (as of 06/30/2021)





Key Financial Metrics

Retiree Payroll by Year



FUNDING METRICS (as of 6/30/21)

Employer NC	10.88%
UAAL	13.58%
Assumed Rate	7.00%
Star Reserve	\$614m
Total Assets	\$73.0b

Contributions (as of 6/30/21)

	<u>Employer</u>	<u>Member</u>
Annual Adc	\$2.0b	\$761.0m
% of Payrol	24.46%	7.87%

Contributions (as of 6/30/21)

(Net of Fees)

5 YR:	10.8%	10 YR:	8.6%
--------------	-------	---------------	------

Retired Members Payroll

(As of 7/31/2022)

Monthly Payroll	\$351.87m
Payroll YTD	\$0.4b
New Retired Payees Added	332
Seamless %	95.48%
New Seamless Payees Added	258
Seamless YTD	94.19%
By Check %	2.00%
By Direct Deposit %	98.00%



QUIET PERIOD LIST
Administrative/Operations
 Last Update:8/17/2022

RFP/RFI Name	Issuing Division	RFP Issued	Status*	Quiet Period for RFP Respondents*
Search for Classification & Compensation Study Services (HR)	Human Resources	5/24/2021	Bid Review	<ul style="list-style-type: none"> • Koff and Associates • Magnova Consultant • Grant Thornton • Reward Strategy Group
Search for Classification & Compensation Study Services (RHC)	Human Resources	5/24/2021	Bid Review	<ul style="list-style-type: none"> • Koff and Associates • Magnova Consultant • Grant Thornton • Reward Strategy Group
Contract Lifecycle Management Application	Administrative Services/ Systems	3/4/2022	BOR Presentation – Vendor Recommendation September 7 Session	<ul style="list-style-type: none"> • Cobblestone • Icertis
Case Management Software Solution	Systems Division	10/6/2021	Procurement Processing Stage and Preparing for Project Kick-off	<ul style="list-style-type: none"> • Eccentex
Investments Operational Due Diligence	Internal Audit	5/20/2022	Solicitation Process	<ul style="list-style-type: none"> • KPMG • Deloitte
Prepaid Debit Card Services	Benefits	6/15/2022	Solicitation Process	<ul style="list-style-type: none"> • US Bank
Executive Recruitment Services	Human Resources	2/23/2022	Bid Review	<ul style="list-style-type: none"> • Alliance Consulting • David Gomez Partners, Inc • EFL • Ralph Anderson • Spencer Stuart • WBCP
Budget Software	Administrative Services/ Systems	3/10/2022	Vendor Proof of Concept	<ul style="list-style-type: none"> • Neubrain • ClearGov • Workday • Vena • Prophix



RFP/RFI Name	Issuing Division	RFP Issued	Status*	Quiet Period for RFP Respondents*
				<ul style="list-style-type: none"> • Questica • Denovo/Oracle • Board • TruEd/TruGov • IGM/Gravity

*Subject to change

INVESTMENTS QUIET PERIOD FOR SEARCH RESPONDENTS

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

Date	Conference
September, 2022	
16	CALAPRS (California Association of Public Retirement Systems) Round Table – Benefits Virtual
20-22	Council of Institutional Investors (CII) Fall Conference Boston, MA
October, 2022	
8-11	National Association of Corporate Directors (NACD) Summit 2022 National Harbor, MD (<i>or virtual</i>)
9-10	CRCEA (California Retired County Employees Association) Fall Conference Sacramento, CA
12-13	16 th Annual Small and Emerging Managers (SEM) Conference Chicago, IL
10-14	Investment Strategies & Portfolio Management Wharton School, University of Pennsylvania
19-21	PREA (Pension Real Estate Association) Annual Institutional Investor Conference Washington D.C.
19-21	Pacific Pension Institute (PPI) Asia Roundtable Singapore
23-26	NCPERS (National Conference on Public Employee Retirement Systems) Public Safety Conference Nashville, TN
23-26	IFEBC (International Foundation of Employment Benefit Plans) Annual Employee Benefits Conference Las Vegas, NV
28	CALAPRS (California Association of Public Retirement Systems) Round Table – Trustees Virtual
November, 2022	
8-10	Institutional Limited Partners Association (ILPA) General Partner Summit New York, NY
8-11	SACRS Fall Conference Long Beach, CA
December, 2022	
5-7	2022 SuperReturn Africa Cape Town, South Africa

Chief Investment Officer Monthly Report

Board of Investments
September 14, 2022



Jonathan Grabel 
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Table of Contents

1. Market Environment
2. Portfolio Performance and Risk Updates
3. Portfolio Structural Updates
4. Key Initiatives and Operational Updates
5. Commentary

Market Environment



Global Market Performance as of August 31, 2022

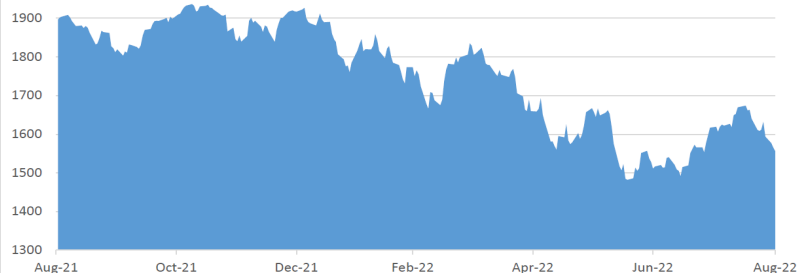
MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-3.6	-5.6	-17.8	-16.2	8.0	6.8	8.7

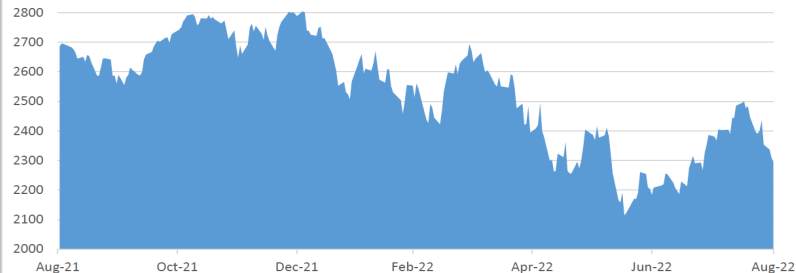
Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-3.7	-3.5	-16.9	-13.3	11.9	11.3	12.8

MSCI ACWI IMI Index 1-Year Performance



Russell 3000 1-Year Performance



MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
0.4	-6.5	-17.5	-21.8	2.7	0.6	2.9

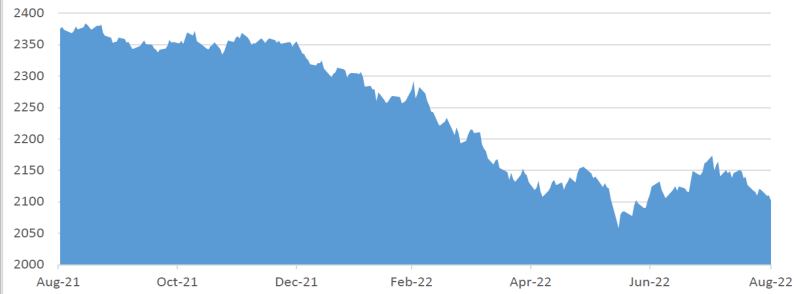
Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-2.8	-2.0	-10.8	-11.5	-2.0	0.5	1.4

MSCI Emerging Markets 1-Year Performance



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

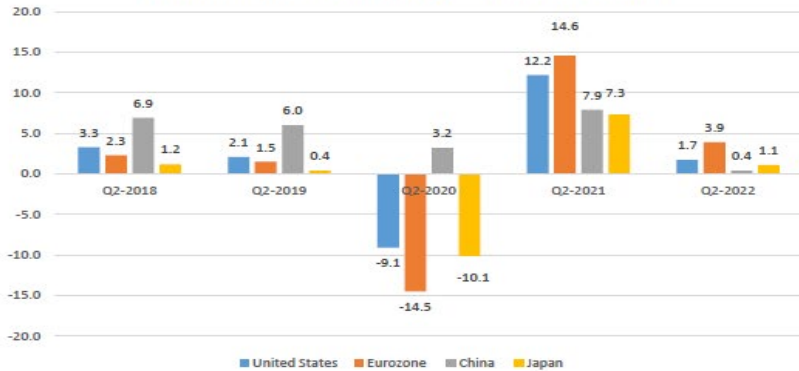
Source: Bloomberg



Key Macro Indicators*

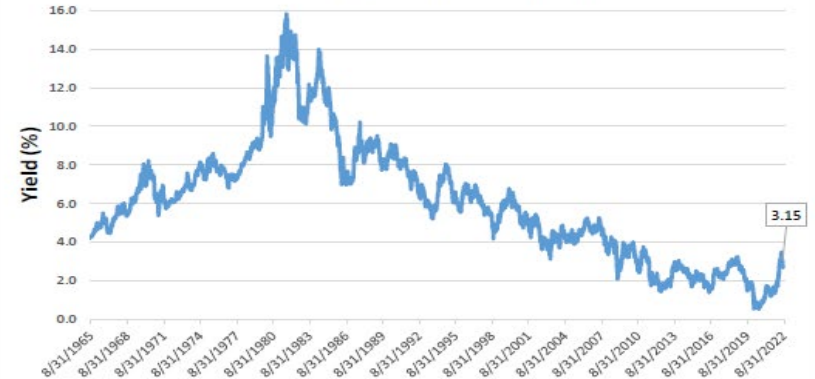
GDP Growth of Major Economies¹

Real GDP Growth YoY (%) - Last Five Years



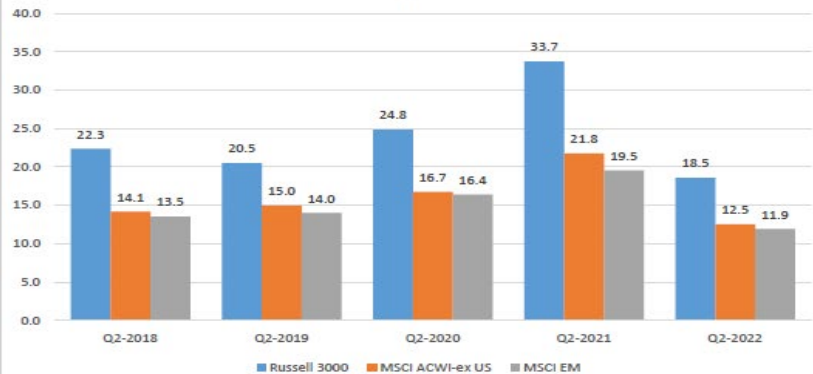
10-Year Treasury Yield²

Historical 10-Year Treasury Yield



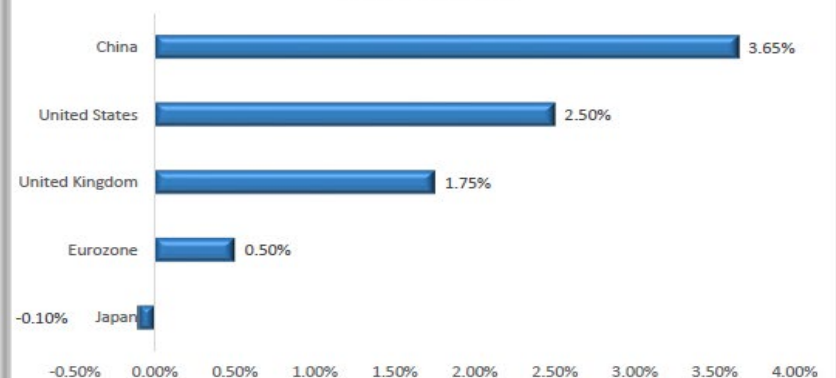
World Equity Valuation³

Price-to-Earnings - Last Five Years



Central Bank Rates⁴ (as of 8/31/2022)

Central Bank Rates



*The information on the "Key Macro Indicators" charts is the best available data as of 8/31/22 and may not reflect the current market and economic environment.

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

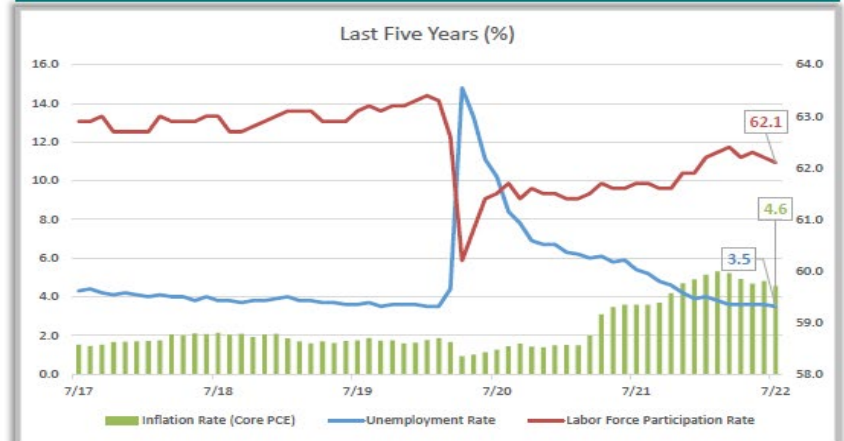


Key Macro Indicators*

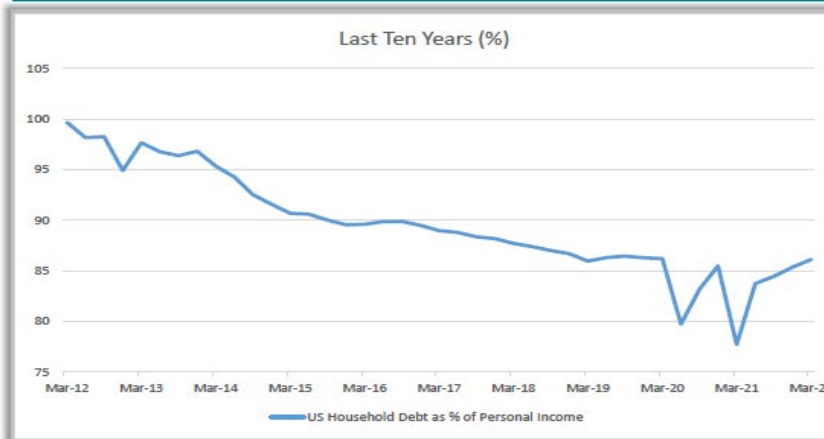
Consumer Confidence & ISM Manufacturing¹



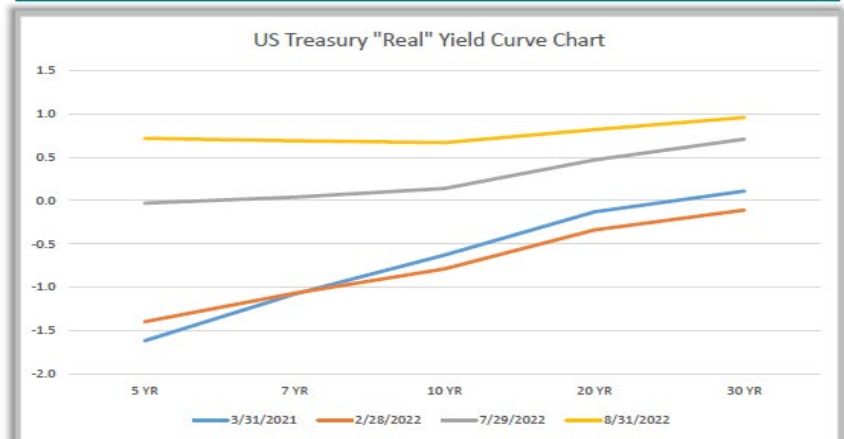
U.S. Inflation, Unemployment, & Labor Force Participation²



U.S. Household Debt as % of Personal Income³



U.S. Treasury "Real" Yield Curve⁴



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

*The information on the "Key Macro Indicators" charts is the best available data as of 8/31/22 and may not reflect the current market and economic environment.



Market Themes and Notable Items to Watch

Recent Themes

- Euro zone inflation hit a record high in August at 9.1% (year over year), according to estimates from Europe's statistics office Eurostat with energy having the highest annual inflation rate at 38.3%
- The value of the U.S. dollar as measured against a basket of six other major currencies hit a 20-year high in late August as Federal Reserve Chairman Jerome Powell made comments signaling further interest rate hikes
- The U.S. 10-year Treasury yield ended August at 3.15%, 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) declined 3.6% in August and is now down 17.8% 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
 - SEC finalizes CEO pay-for-performance reporting guidance from 2010 Dodd-Frank bill
 - 73% of global GDP in countries pledging to meet net-zero emissions by 2050
 - State-level inquiries and legislative bills scrutinize ESG integration in investments
- Covid-19
 - Covid variants, cases, transmission, vaccines
 - Economic and consumer behavior implications



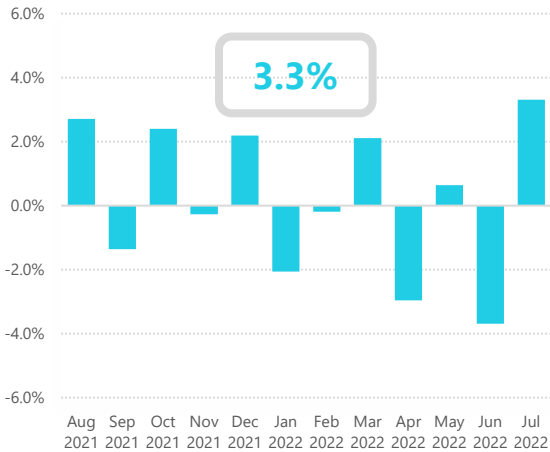
Portfolio Performance & Risk Updates



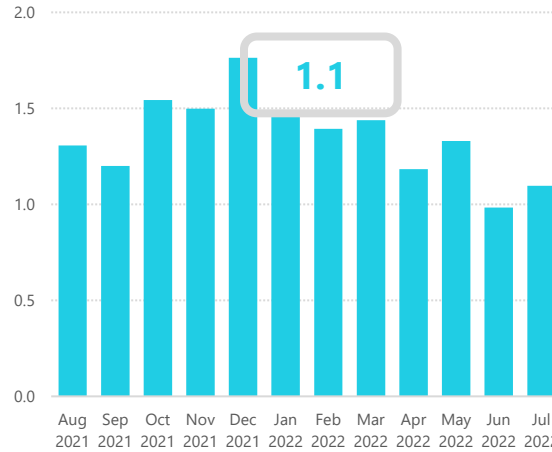
Total Fund Summary

as of July 2022

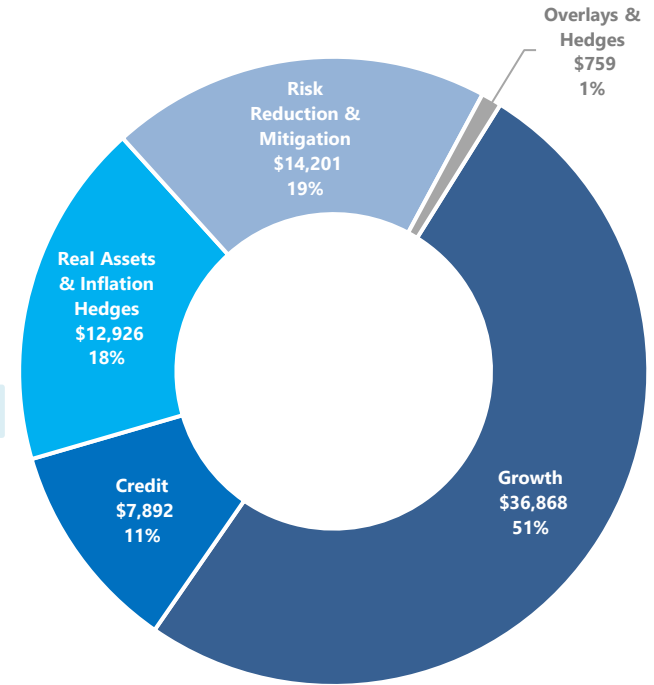
Monthly Return (net)



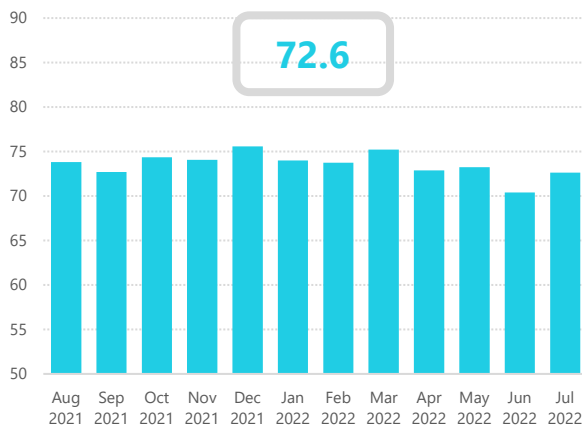
Sharpe Ratio (3-year annualized)



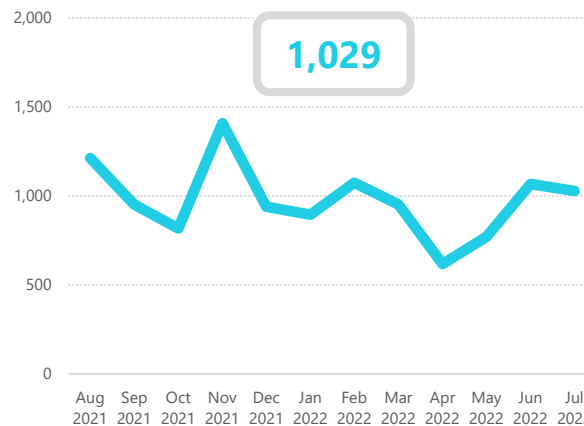
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

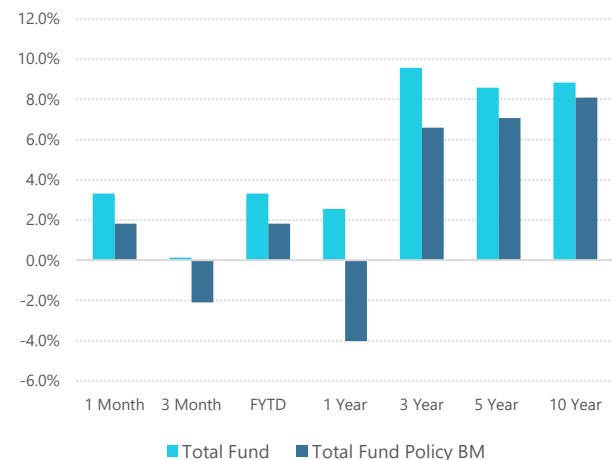


Historical Net Performance

as of July 2022

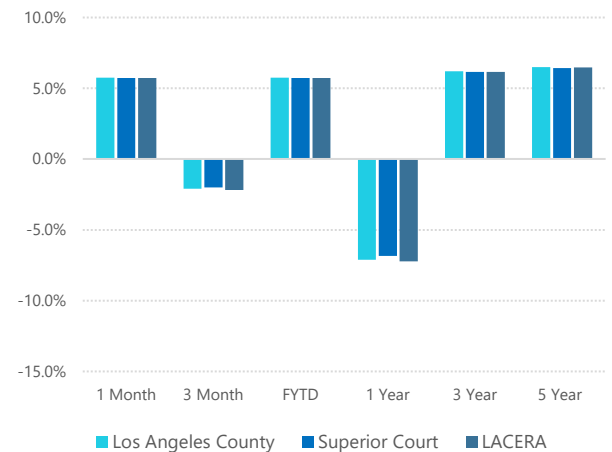
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	72,646	100.0%	100.0%	3.3%	0.1%	3.3%	2.6%	9.6%	8.6%	8.8%
Total Fund Policy BM				1.8%	-2.1%	1.8%	-4.0%	6.6%	7.1%	8.1%
7% Annual Hurdle Rate				0.6%	1.7%	0.6%	7.0%	7.0%	7.0%	7.0%
Growth	36,868	50.8%	53.0%	4.3%	-0.8%	4.3%	1.5%	14.0%		
Growth Policy BM				1.9%	-3.5%	1.9%	-7.6%	9.9%		
Credit	7,892	10.9%	11.0%	0.9%	-3.1%	0.9%	-3.9%	3.3%		
Credit Policy BM				-1.5%	-5.7%	-1.5%	-9.2%	0.4%		
Real Assets & Inflation Hedges	12,926	17.8%	17.0%	2.9%	1.8%	2.9%	16.4%	9.0%		
Real Assets & Inflation Hedges Policy BM				3.7%	0.9%	3.7%	15.0%	10.0%		
Risk Reduction & Mitigation	14,201	19.5%	19.0%	1.6%	0.9%	1.6%	-6.4%	1.2%		
Risk Reduction & Mitigation Policy BM				1.7%	0.9%	1.7%	-7.0%	0.3%		
Overlays & Hedges	759	1.0%		23.6%	50.4%					



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	2,531			5.7%	-2.1%	5.7%	-7.1%	6.2%	6.5%
Los Angeles County	2,461	97.2%	—	5.7%	-2.1%	5.7%	-7.1%	6.2%	6.5%
Superior Court	59	2.3%	—	5.7%	-2.0%	5.7%	-6.8%	6.2%	6.4%
LACERA	11	0.5%	—	5.7%	-2.2%	5.7%	-7.2%	6.2%	6.5%
OPEB Growth	1,285	50.8%	47.5%	7.2%	-1.9%	7.2%	-10.8%	8.6%	7.9%
OPEB MT Growth Policy BM				6.4%	-2.8%	6.4%	-11.7%	8.1%	7.4%
OPEB Credit	491	19.4%	19.0%	3.2%	-1.9%	3.2%	-6.4%	0.3%	--
OPEB MT Credit Policy BM				2.4%	-3.0%	2.4%	-7.6%	0.3%	--
OPEB Real Assets & Inflation Hedges	507	20.0%	20.0%	6.7%	-4.2%	6.7%	3.2%	7.9%	--
OPEB MT RA & IH Policy BM				3.4%	-7.1%	3.4%	-0.2%	6.5%	--
OPEB Risk Reduction & Mitigation	247	9.7%	13.5%	2.0%	1.3%	2.0%	-7.2%	0.1%	1.8%
OPEB MT RR & M Policy BM				2.1%	1.4%	2.1%	-7.1%	0.0%	1.6%
Operational Cash	0	0.0%							

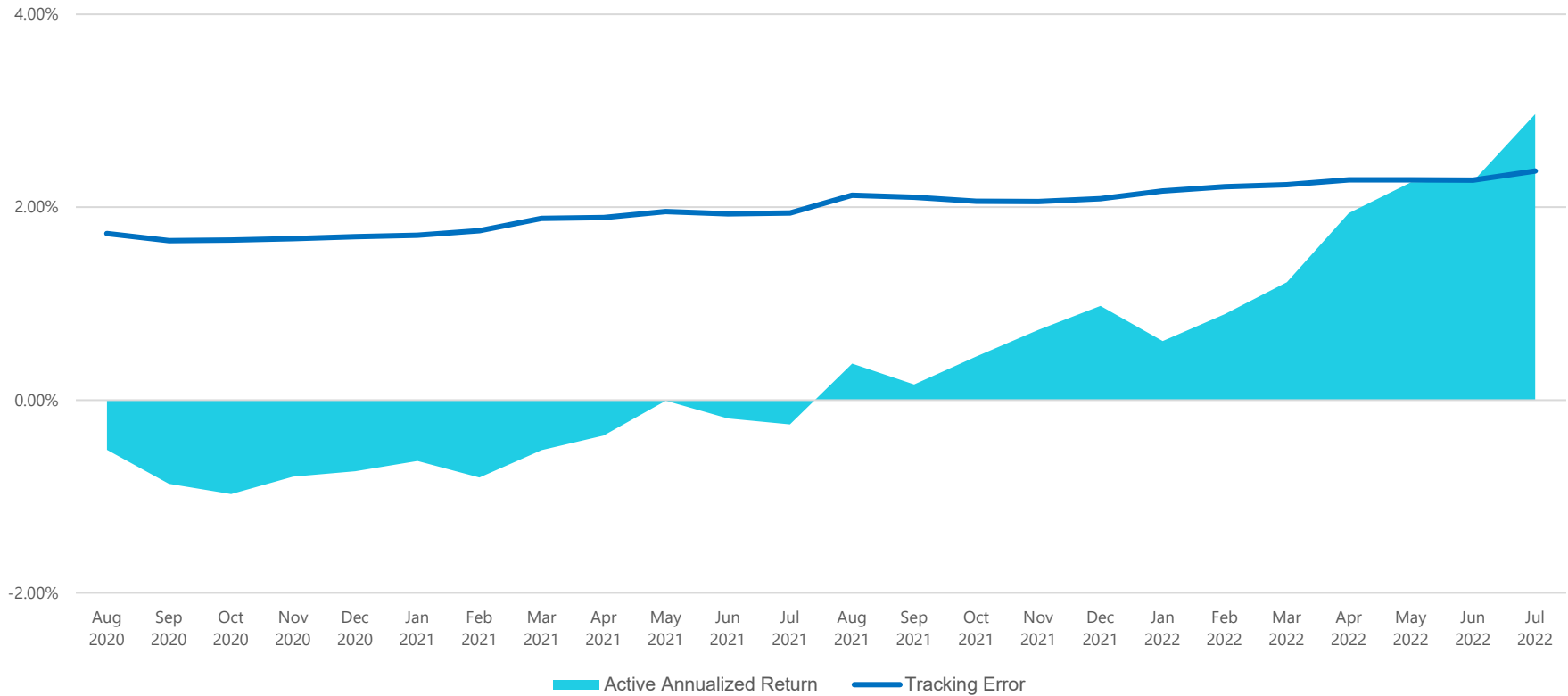


1. Market value differences between the sub-trusts and functional composites are due to operational cash.

Performance Based Risk

as of July 2022

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



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
July 2022	9.6%	6.6%	3.0%	2.4%

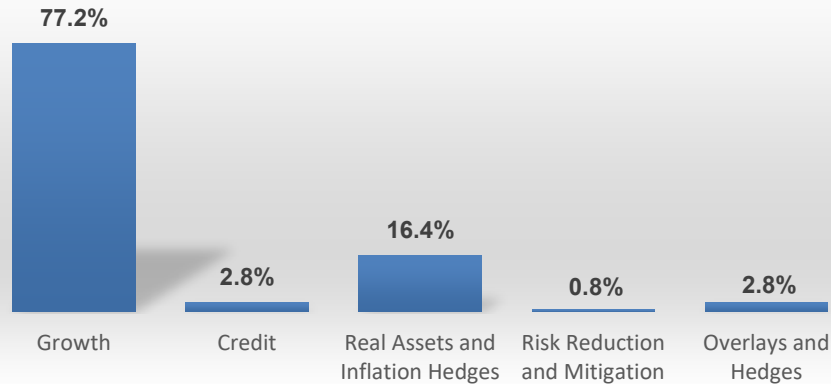
1. Rolling 36 months.
 2. Active return equals the difference in return between a portfolio and its benchmark.
 3. Tracking error (or active risk) measures the volatility of active returns.



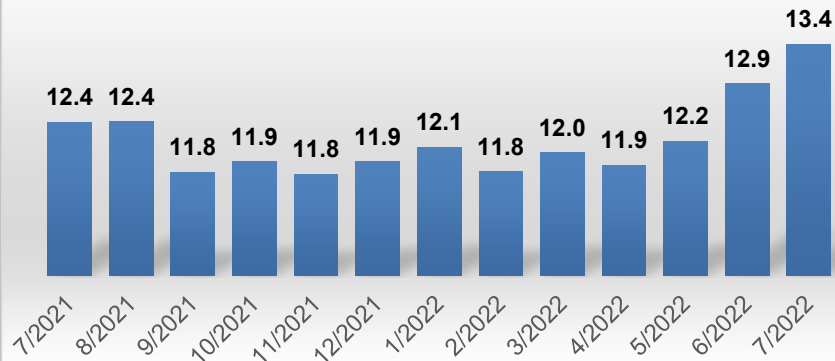
Total Fund Forecast Risk*

as of July 2022

%Contribution to Total Risk



Total Risk



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
Total Fund			13.4	12.7
Growth	50.7%	77.2%	20.6	19.3
Global Equity	31.8%	41.3%	18.3	18.4
Private Equity	17.4%	33.2%	29.1	26.9
Non-Core Private Real Estate	1.5%	2.7%	37.1	19.6
Credit	10.9%	2.8%	4.6	5.3
Liquid Credit	6.4%	2.1%	5.8	5.3
Illiquid Credit	4.5%	0.7%	4.3	5.3
Real Assets & Inflation Hedges	18.1%	16.4%	14.0	13.8
Core Private Real Estate	6.1%	6.8%	21.8	19.6
Natural Resources & Commodities	4.1%	3.6%	16.7	21.6
Infrastructure	5.1%	5.6%	17.0	17.2
TIPS	2.8%	0.5%	6.2	6.1
Risk Reduction and Mitigation	19.4%	0.8%	5.6	5.4
Investment Grade Bonds	7.8%	0.4%	5.6	5.5
Diversified Hedge Funds	5.6%	0.5%	3.9	0.2
Long-Term Government Bonds	4.6%	-0.1%	13.2	13.2
Cash	1.4%	0.0%	-	-
Overlays and Hedges	0.9%	2.8%	-	-

*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

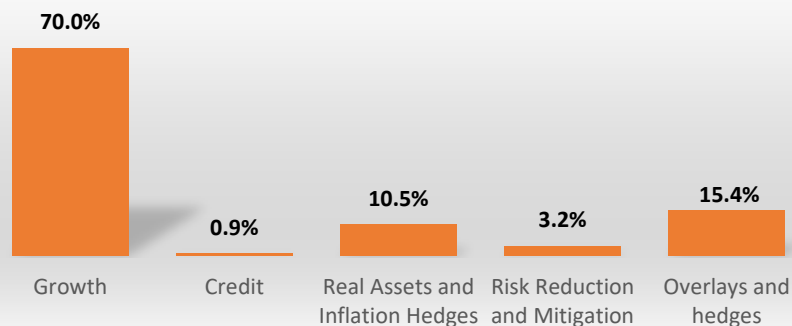
**BMK Risk stands for Benchmark Risk



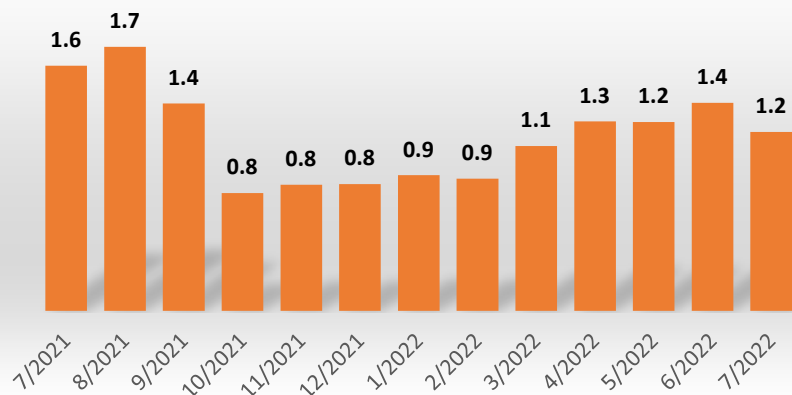
Total Fund Forecast Active Risk*

as of July 2022

Active Risk Contribution



Active Risk



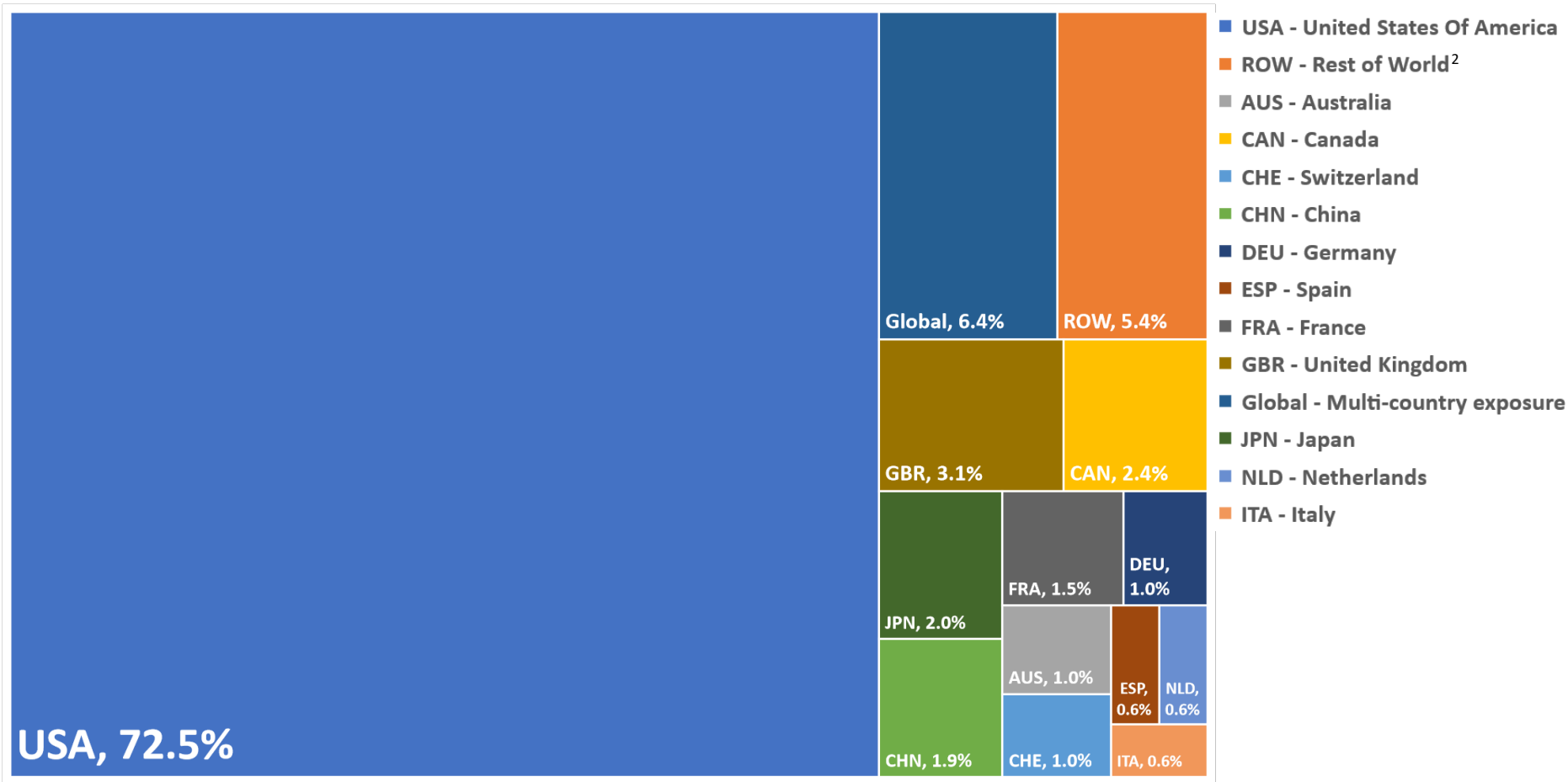
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			1.18	0.02	1.17
Growth	50.7%	-2.29%	0.83	-0.11	0.94
Global Equity	31.8%				
Private Equity	17.4%				
Non-Core Private Real Estate	1.5%				
Credit	10.9%	-0.08%	0.01	0.00	0.01
Liquid Credit	6.4%				
Illiquid Credit	4.5%				
Real Assets & Inflation Hedges	18.1%	1.07%	0.12	-0.03	0.16
Core Private Real Estate	6.1%				
Natural Resources & Commodities	4.1%				
Infrastructure	5.1%				
TIPS	2.8%				
Risk Reduction and Mitigation	19.4%	0.43%	0.04	-0.03	0.07
Investment Grade Bonds	7.8%				
Diversified Hedge Funds	5.6%				
Long-Term Government Bonds	4.6%				
Cash	1.4%				
Overlays and Hedges	0.9%	0.87%	0.18	0.18	-

*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 July 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

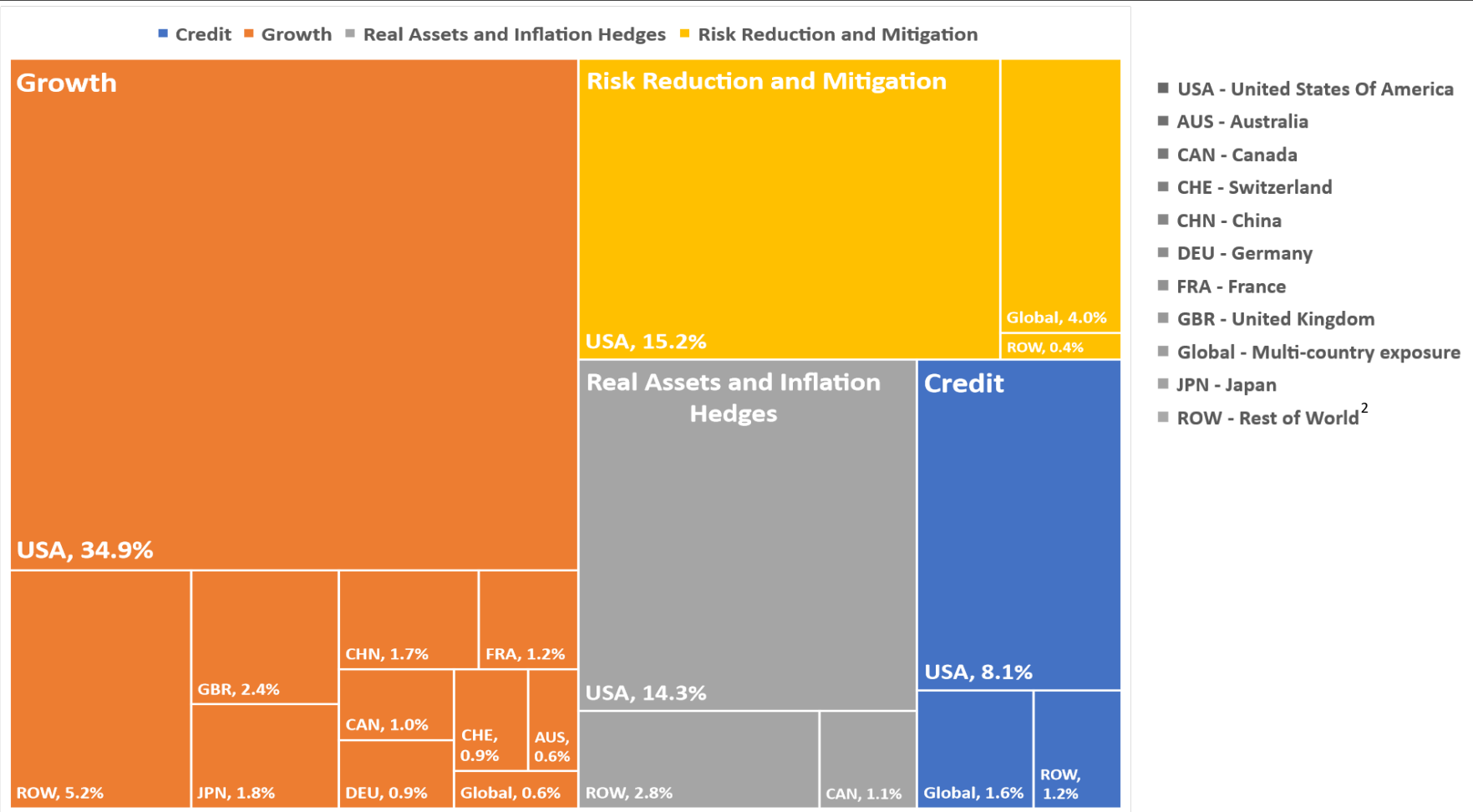
² "ROW - Rest of World" is sum of countries with weight below 0.5%

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



- USA - United States Of America
- AUS - Australia
- CAN - Canada
- CHE - Switzerland
- CHN - China
- DEU - Germany
- FRA - France
- GBR - United Kingdom
- Global - Multi-country exposure
- JPN - Japan
- ROW - Rest of World²

*AUM = assets under management

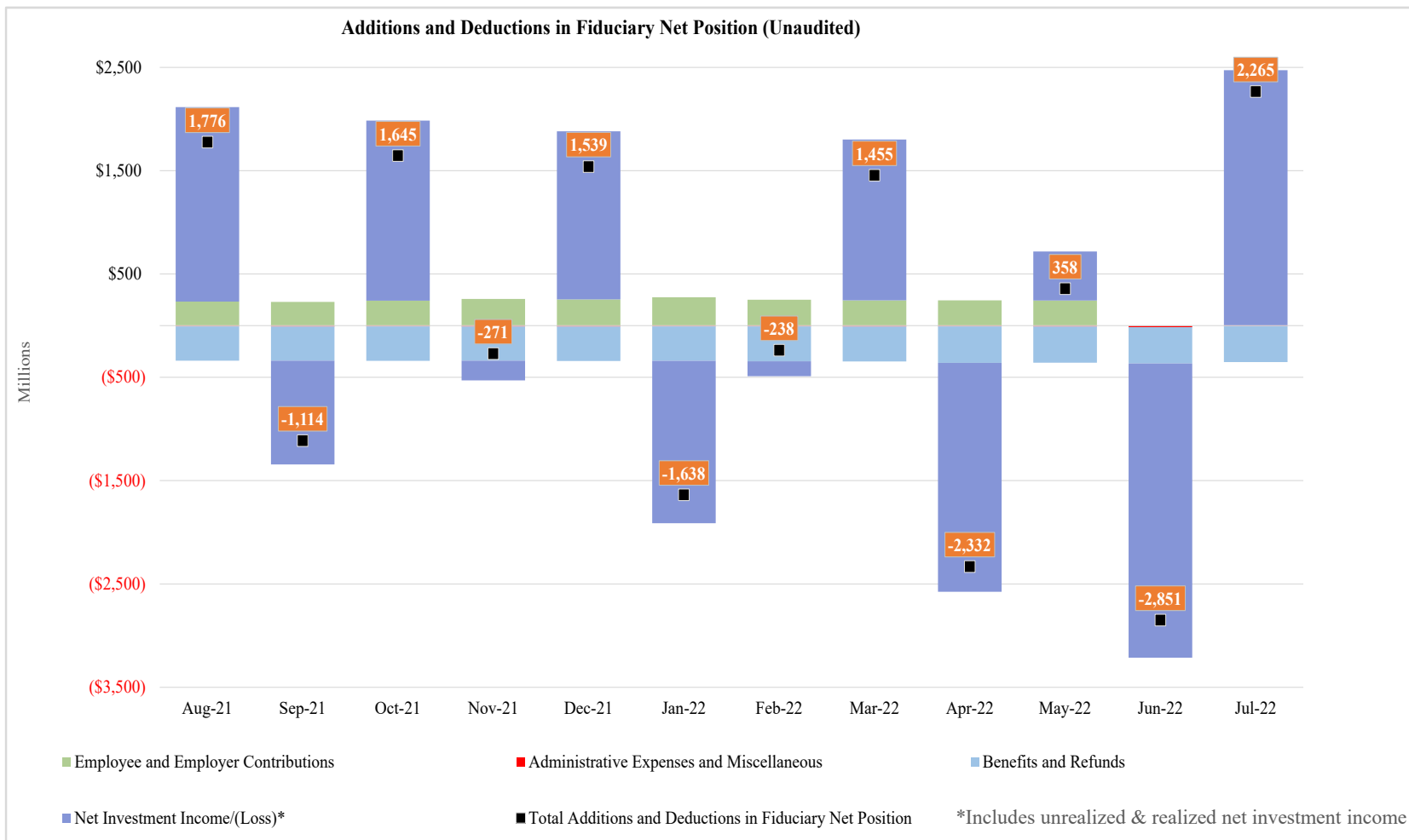
¹ *Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 3/31/2022

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



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-21	2	10	\$13.8 billion
FY-22	7	5	(\$2.5 billion)
FY-23	0	1	\$2.3 billion



Portfolio Structural Updates



Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity



Hedges and Overlays

Program	July Return	July Gain/(Loss)	Inception* Gain/(Loss)
Currency Hedge**	0.1%	\$88.0 Million	\$1.3 Billion
Cash/Rebalance Overlay***	5.2%	\$147.7 Million	\$304.8 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
Global Equity Emerging Separate Account Manager Search	●	●	Anticipated Late 2022

Quiet Period for Search Respondents

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.



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

Operational Updates

- Annual contract compliance review underway
- Annual DEI diligence of all investment partners is underway.

Manager/Consultant Updates

No material updates for this month's report.

Team Searches and Open Positions

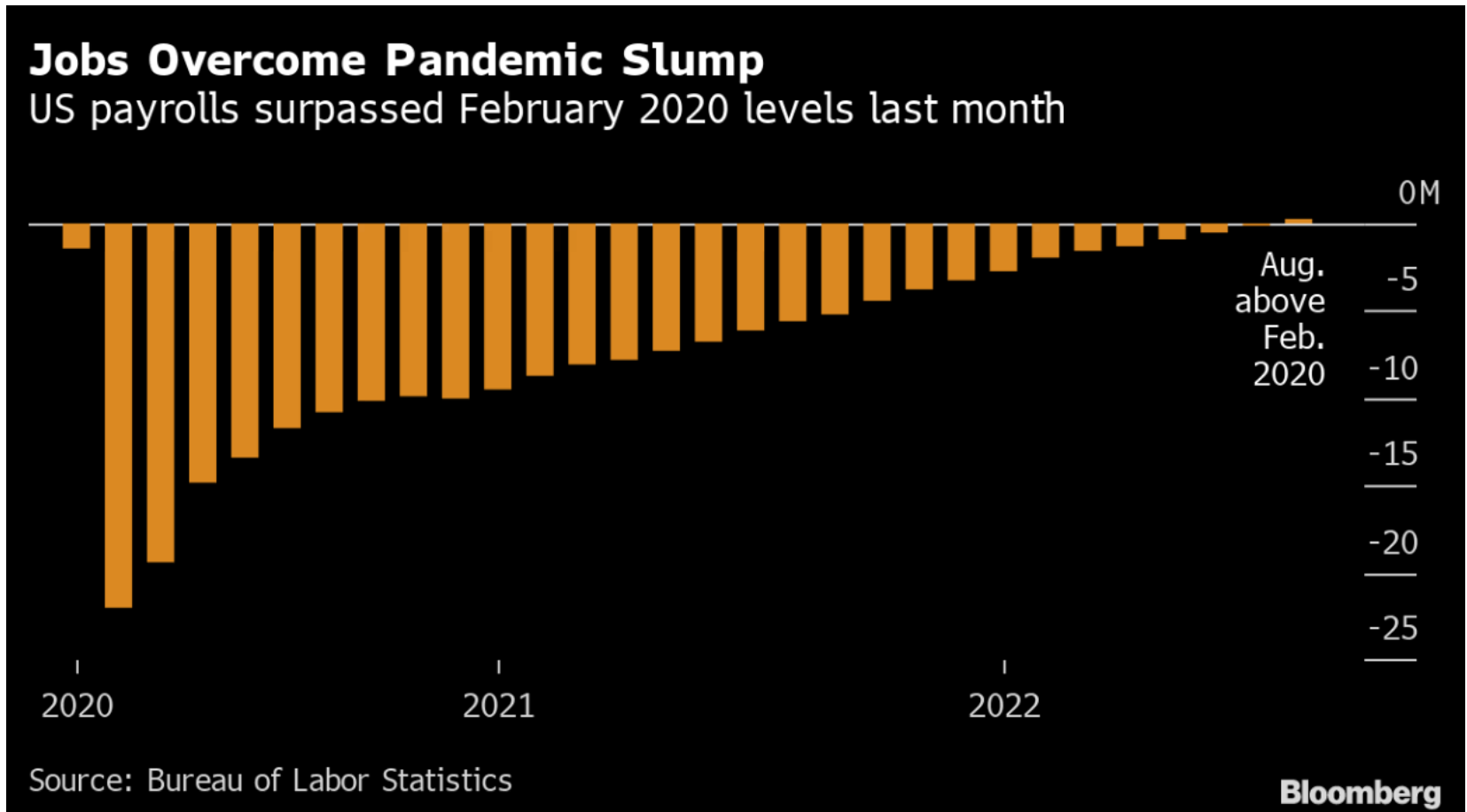
- Working on launching new searches
 - 1 – Deputy Chief Investment Officer
 - 1 – Principal Investment Officer
 - 2 – Senior Investment Officer
 - 1 search in progress
 - 3 – Financial Analyst-III
 - 3 searches in progress
 - 3 – Financial Analyst-II

Commentary



Staff Chart of the Month*

US Employment Exceeded Its Pre-Pandemic Level



Source: Bloomberg



* Submitted by the Global Equity team



July 26, 2022

TO: Each Trustee,
Board of Investments

FOR: Board of Investments Meeting of September 14, 2022

SUBJECT: The PPI Executive Seminar and the Asia Pacific Roundtable in Singapore on October 16-21, 2022.

PPI is excited to return to Singapore, where it will convene with two programs in October. The Executive Seminar and the Asia Pacific Roundtable will be held at the Shangri-La Hotel in Singapore from October 16-18, 2022 and October 19-21, 2022, respectively.

The Executive Seminar convenes a small group of PPI members who will dive deep into the innovation economy of Singapore.

The main conference highlights include the following:

- Fintech, Decentralized Finance (Defi), And Crypto in Singapore
- Sustainability and Social Stewardship in Southeast Asia
- Gulf Investors and The Future Of The Indian Ocean Economy

Following are approximate conference and travel costs:

Registration: Executive Seminar - October 16-18, 2022 ~ \$3,500.00
Asia Pacific Roundtable - October 19-21, 2022 ~ \$950.00

Hotel: \$275.00 daily rate (plus taxes and fees)

Airfare: \$6,000.00 - \$11,000.00

Ground Transportation: \$60.00 per day

Daily Per Diem & Incidentals: \$129.00 per day
(The registration fee includes most meals)

Approximate Cost Per Traveler: \$13,000- \$18,000.00

If the registration fee is insufficient to pay the cost of the meals provided by the conference sponsor, LACERA must reimburse the sponsor for the actual cost of the meals, less any registration fee paid. Otherwise, the attendee will be deemed to have received a gift equal to the value of the meals, less any registration fee paid, under California's Political Reform Act.

July 26, 2022

Page 2

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Trustees at the PPI Executive Seminar and the Asia Pacific Roundtable in Singapore on October 16-21, 2022, and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies.

Attachment

LE

Reimagining Singapore as Asia's Innovation Center

Sunday, October 16 at 6:00 PM SGT - Tuesday, October 18 at 8:30 PM SGT

Shangri-La Hotel, Singapore & Business Site Visits

As a city state with scant natural resources, Singapore's rise as a hub for trade, finance, and now technological innovation has been motivated by existential necessity and driven by government policies. Buoyed by an open economy, a highly educated workforce, advanced digital infrastructure, and sound governance, Singapore has become not only the Asian base for a growing number of international businesses and investors, but also home to a thriving start-up ecosystem. How can investors in the region look to Singapore as a springboard for opportunities in fintech, ag-tech, and other sectors in the new economy? How must Singapore adapt to an increasingly complex global environment transformed by COVID-19, geopolitical challenges, and competition from other regional centers? How can its multicultural population remain a source of strength over the long term?

Sunday - October 16

6:00 PM - 6:30 PM SGT > OPENING RECEPTION

6:30 PM - 6:35 PM SGT > WELCOME REMARKS

6:35 PM - 7:15 PM SGT > PPI IN SINGAPORE: DEVELOPMENTS SINCE 2014

- Since PPI last convened in Singapore in November 2014, much has changed in the world. How has Singapore changed with it?
- With the fourth generation of leaders, or 4G, expected to assume the reins of government in the very near future, to what extent might this transition affect Singapore's current policies on economic development, trade, and foreign policy?
- What steps has Singapore taken to become a regional center for innovation?

7:15 PM - 8:45 PM SGT > DINNER

Monday - October 17

8:00 AM - 9:00 AM SGT > BREAKFAST AVAILABLE

9:00 AM - 9:05 AM SGT > WELCOME REMARKS

9:05 AM - 10:00 AM SGT > ENHANCING FOOD SECURITY AND SUSTAINABILITY WITH AG-TECH AND FOOD-TECH

- Climate change, loss of agricultural land, soil degradation and declining biodiversity are all known trends that threaten global food security. Adding to those concerns are new disruptions such as geopolitical conflicts and supply chain challenges. How do these issues impact a food-importer country like Singapore?
- What other region-specific food and water challenges does Singapore face?
- What are Singapore's plans to address food security and sustainability in the long run? What roles might agricultural technology (ag-tech) and food technology (food-tech) play in these initiatives?

LIM CHUAN POH, Chairman, Singapore Food Agency

10:00 AM - 10:30 AM SGT > BREAK

10:30 AM - 11:30 AM SGT > FINTECH, DECENTRALIZED FINANCE (DEFI), AND CRYPTO IN SINGAPORE

- Many startup companies in fintech, DeFi and crypto have made Singapore their corporate home, with business operations and customers around the world. What are the reasons behind their choice?
- Each set out to disrupt different aspects of traditional finance (TradFi). How are these companies, or in some cases projects, gradually changing financial services?
- In Asia, where there is a much more prominent gaming community, especially among millennials and generation-Z, how are crypto assets becoming an integral part of that lifestyle?

11:30 AM - 1:30 PM SGT > LUNCH AND CONVERSATION: WHY SINGAPORE - A MULTINATIONAL CORPORATION'S PERSPECTIVE

EXECUTIVE SEMINAR - OCTOBER 16-18, 2022

All times are SGT = Singapore Time, UTC/GMT +8

- Singapore's appeal to companies extend far beyond startups. In fact, prominent multinational corporations have chosen to relocate their corporate headquarters to Singapore. For well-established, mature companies, what advantages does Singapore offer?
- As product cycles and market opportunities evolve, companies often have to reinvent themselves and their products to cater to new consumer demands. What external and internal elements might be helpful to such pivotal transitions?
- What is the current state and future trajectory of Singapore's manufacturing sector, in terms of skilled labor, supporting infrastructure, and policy stability?

ROLAND KRUEGER, Chief Executive Officer, Dyson

1:30 PM - 2:00 PM SGT > BREAK

2:00 PM - 5:00 PM SGT > BUSINESS SITE VISIT 1: AG-TECH FACILITY

5:00 PM - 6:00 PM SGT > BREAK

6:00 PM - 6:15 PM SGT > DEPART FOR DINNER

6:15 PM - 6:45 PM SGT > RECEPTION

6:45 PM - 8:30 PM SGT > DINNER AND KEYNOTE CONVERSATION: HOW CAN SINGAPORE INC. REMAIN GLOBALLY COMPETITIVE?

- What has been the secret sauce for Singapore to be competitive on a global scale? As neighboring economies rise and fall, can Singapore remain a regional center and international hub?
- What can the government do to help drive innovation in the private sector?
- Innovation requires human capital - can Singapore emerge as a winner in the global talent war?

JACQUELINE POH, Managing Director, Singapore Economic Development Board (EDB)

8:30 PM - 8:45 PM SGT > RETURN TO HOTEL

Tuesday - October 18

8:00 AM - 9:00 AM SGT > BREAKFAST AVAILABLE

9:00 AM - 10:00 AM SGT > WHAT'S NEXT IN SINGAPORE'S EVOLUTION AS A TOP
GLOBAL MARITIME HUB

- In July 2022, Singapore once again ranked number one among global maritime hubs, for the ninth consecutive year, according to the Xinhua-Baltic International Shipping Centre Development Index. What factors have contributed to Singapore's almost decade-long lead over other shipping centers around the world?
- Singapore is still adding capacity to its existing port infrastructure - a 14 billion USD project is underway and when delivered (by 2040) will become the world's largest automated port. What is the significance of this development?
- How might new trade agreements such as the Regional Comprehensive Economic Partnership (RCEP) and Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) affect trade routes through Singapore?

RENÉ PIIL PEDERSEN, Managing Director, AP Moller Singapore Private Limited

BENG TEE TAN, Executive Director, Singapore Maritime Foundation (SMF); Senior Advisor, Maritime and Port Authority of Singapore (MPA)

10:00 AM - 10:30 AM SGT > BREAK

10:30 AM - 11:30 AM SGT > NEXT-GENERATION TALENT AND LEADERS

- For a natural resource-scarce country like Singapore, human capital has been crucial to its economic development and remains essential for its continued growth as an innovation hub. What are some initiatives for building a sustainable pipeline of world-class talent and future leaders in the asset management industry?
- How are young GPs viewing the evolution of their industry and embracing the opportunities that arise from global and regional trends?
- How might they develop into innovative and entrepreneurial investors?

11:30 AM - 1:30 PM SGT > LUNCH AND CONVERSATION: DIVERSITY, EQUITY, AND
INCLUSION - A SOURCE OF SINGAPORE'S STRENGTH

- Unlike Japan, South Korea, Hong Kong or Taiwan, the racial and ethnic makeup of Singapore is more diverse. Residents of Chinese, Malay, Indian and other heritages have learned to thrive together under a Singaporean identity. In what ways has Singapore's melting pot of cultures contributed to its economic success?
- How can Singapore avoid the pitfalls of identity politics in the age of social media, misinformation and disinformation, and religious extremism?
- What can other societies learn from Singapore's experience in promoting diversity, equity, and inclusion? How does foreign talent and immigration factor into the conversation?

1:30 PM - 2:00 PM SGT > BREAK

2:00 PM - 5:00 PM SGT > BUSINESS SITE TOUR 2: THE MARINA BARRAGE

5:00 PM - 6:00 PM SGT > BREAK

6:00 PM - 6:45 PM SGT > RECEPTION

**6:45 PM - 8:30 PM SGT > DINNER AND KEYNOTE REMARKS: MACRO
INFLECTION POINTS AND A NEW INVESTMENT PARADIGM**

- With inflationary pressures still lurking and many economies tipping into recession, is the best course of action for central banks to continue extracting liquidity from financial systems?
- Will prolonged armed conflicts and flaring geopolitical tensions further disrupt already-fragile global supply chains?
- Could new COVID variants and other pandemic outbreaks lead to more sporadic economic shutdowns?
- Will the global energy transition be sufficient to mitigate climate change?
- What kind of a new investment paradigm will be co-shaped by these and other macro inflection points?

JEFFREY JAENSUBHAKIJ, Group Chief Investment Officer, GIC Private Limited

ASEAN Economies and Asia's Growth

Wednesday, October 19 at 1:45 PM SGT - Friday, October 21 at 12:00 PM SGT

Shangri-La Hotel, Singapore

Countries in the Association of Southeast Asian Nations, or ASEAN, have been central to the robust economic outlook that many hold for the broader Asia-Pacific region, especially from a demographic standpoint, relative to the aging economies in Northeast Asia. ASEAN nations have led the ratification and implementation of the Regional Comprehensive Economic Partnership (RCEP), which is expected to boost the economic integration of participating countries in the long term. To their west, the emergence of India's economy, the wealth of Gulf nations, and the rich natural resources in East Africa all contribute to the future of the Indian Ocean economy. Geographically well-placed to facilitate commerce across the entire Indo-Pacific region, ASEAN economies will likely benefit from its centrality in this regard as well.

However, many challenges stand in the way: How will the pandemic continue to impact the region, which is still largely under-vaccinated? How much responsibility should developing economies in the region assume for carbon reduction? Should local companies in labor-intensive traditional industries be held to the same social and governance standards as their Western counterparts? Can energy and transportation infrastructure keep up with the pace of economic activities? Will ASEAN countries be forced to choose sides as geopolitical tensions continue to rise?

Wednesday - October 19

1:45 PM - 2:30 PM SGT > CHECK IN AND COMMUNITY TIME

2:30 PM - 2:40 PM SGT > WELCOME REMARKS

2:40 PM - 3:30 PM SGT > KEYNOTE REMARKS: UNDERSTANDING ASEAN CENTRALITY

- "ASEAN centrality" is a frequently referenced but often misunderstood term even in diplomatic circles - what is the true essence of this concept and how has it borne out in practical terms?
- As the Indo-Pacific region becomes the preeminent theater of big power rivalry, can the people of Southeast Asia shape their own future?
- Since Southeast Asia is by no means homogenous, how can ASEAN nations build policy consensus and present a united front to external parties?

3:30 PM - 4:00 PM SGT > COMMUNITY TIME

4:00 PM - 4:30 PM SGT > CO-CHAIRS' INTRODUCTIONS

4:30 PM - 5:30 PM SGT > SUPPLY CHAIN REMAPPING UNDER RCEP

- It has been nearly two years since the signing of the Regional Comprehensive Economic Partnership (RCEP) by ASEAN nations and five regional partners. While still early days, and amid a pandemic, is RCEP already beginning to remap trade routes in the Asia-Pacific region?
- In recent years, many companies have sought to relocate parts of their supply chains away from China and add capacities in Southeast Asia. To what extent have they been successful? How does this trend differ by industries?
- The United States and India remain outside RCEP by choice. Will or when will this become an appreciable disadvantage to American and Indian companies?

5:30 PM - 6:00 PM SGT > COMMUNITY TIME

6:00 PM - 7:00 PM SGT > KEYNOTE REMARKS: COPING WITH GEOPOLITICAL UNCERTAINTY AND BIG POWER RIVALRY

- In June 2022, the 19th IISS Shangri-La Dialogue, a top defense and security conference in the Indo-Pacific region, was held at this very venue in Singapore. What were the key insights from this year's summit?
- Between Singapore joining U.S.-led sanctions against Russia, and Indonesia's President Joko Widodo's visit to both Kyiv and Moscow, why are ASEAN countries compelled to play bigger roles in international affairs?
- With U.S.-China strategic competition in the backdrop, how can countries in Southeast Asia chart their own paths forward?

7:00 PM - 8:30 PM SGT > RECEPTION & DINNER

Thursday - October 20

7:00 AM - 8:00 AM SGT > BREAKFAST

8:00 AM - 8:05 AM SGT > BOARD CHAIR'S REMARKS

8:05 AM - 9:00 AM SGT > SOUTHEAST ASIA'S ENERGY TRANSITION

- The economic impact of high oil prices has varied across Southeast Asia. Malaysia and Indonesia, for example, have been able to stabilize their domestic gasoline prices better than neighbors like Thailand, Vietnam or the Philippines. Why is that the case and is the status quo sustainable?
- In terms of electricity demand, Southeast Asia is one of the fastest-growing regions in the world, at 6 percent per annum. As such, the region is also one of the few in the world where coal-fired power generation is gaining capacity. How can renewables better scale to meet the growing demand for electricity in this region?
- Looking at the big picture of energy transition around the world, will Southeast Asia decidedly become a laggard, or can countries in the region leapfrog into cleaner energy mixes?

9:00 AM - 9:30 AM SGT > COMMUNITY TIME

9:30 AM - 10:30 AM SGT > SUSTAINABILITY AND SOCIAL STEWARDSHIP IN SOUTHEAST ASIA

- How has the thinking on sustainability evolved in Southeast Asia, especially in traditional industries such as textile, palm oil, and petrochemicals?
- Are Southeast Asian economies trending toward greater inclusivity for women and across social groups?
- For institutional investors based in the region, what are the top priorities in terms of engaging managers, portfolio companies and commercial partners on sustainability and social stewardship?

10:30 AM - 11:00 AM SGT > COMMUNITY TIME

11:00 AM - 12:00 PM SGT > SHIFTING OPPORTUNITY SETS IN ASIA

- Many foreign investors in mainland China have found themselves in challenging situations following a flurry of economic policy adjustments in recent years and the zero-COVID strategy. Will they double down or lighten up on their investments in China?
- Looking in from the outside, Hong Kong also seems to be in a precarious place, particularly in terms of foreign investor confidence in the special administrative region's judicial independence. Can Hong Kong regain that trust and its vibrancy as Asia's premier capital market?
- Taking a pan-Asia view, if at least some capital is flowing out of China, where are they flowing into? How are opportunity sets shifting in emerging Asia?

12:00 PM - 1:30 PM SGT > LUNCH

1:30 PM - 2:30 PM SGT > GULF INVESTORS AND THE FUTURE OF THE INDIAN OCEAN ECONOMY

- Asset allocators and managers based in the Gulf have greatly diversified their holdings internationally over the years. What are their current views on the investment opportunities in other parts of Asia, especially South and Southeast Asian economies along the Indian Ocean?
- How is the Gulf connected to the rest of Asia, in terms of trade, natural resource, labor, and capital flows?
- With the FIFA World Cup taking place in Qatar this year, what inbound investment opportunities might the global event underscore in the Gulf region as well as other parts of West Asia?

2:30 PM - 3:00 PM SGT > COMMUNITY TIME

3:00 PM - 4:00 PM SGT > INDIA: CREATING VALUE THROUGH BUILDING BUSINESSES

- How are Indian conglomerates in traditional industries such as chemicals expanding their global footprints, while promoting sustainable practices?
- Has the global real estate slowdown affected India at all? How will India's continued urbanization trends shape the country's real estate market?
- Venture capital investing in India outgrew many neighboring Asian countries in 2021. What is the current state of the start-up ecosystem in India and where will it go from here?

4:00 PM - 5:30 PM SGT > BREAK

5:30 PM - 6:15 PM SGT > RECEPTION

6:15 PM - 8:30 PM SGT > DINNER AND KEYNOTE CONVERSATION: DEVELOPMENT PRIORITIES IN SOUTHEAST ASIA

- What are the top economic and human development priorities in Southeast Asia? How will these priorities interact with important global themes such as climate change, pandemic resiliency, and trade re-negotiations?
- How are critical infrastructure projects for energy, water, transportation, and telecommunication currently being funded and financed in Southeast Asian countries? What lessons can the rest of emerging Southeast Asia learn from Sri Lanka's recent debt and political crisis?
- How might the private sector, especially long-term institutional investors, become more involved in the sustainable development of Southeast Asia?

Friday - October 21

7:00 AM - 7:45 AM SGT > BREAKFAST AVAILABLE

7:45 AM - 8:45 AM SGT > THE OTHER SIDE OF ILLIQUIDITY PREMIUM - A
COLLABORATIVE RESEARCH ON PORTFOLIO LIQUIDITY

- Private market investments have been and still are the darling asset classes for many allocators. Target allocations to illiquid assets have been raised steadily in the past decade, often at the expense of listed securities, especially fixed income. While there are many good reasons for this trend, what implications does it have on liquidity conditions of the asset mix?
- How can allocators, especially pension plan sponsors, conduct stress tests on their portfolios, in preparation for unlikely but possible scenarios such as mass early withdrawals by members, i.e. a bank run on pension systems?
- Finally, as more allocators start to embrace the use of leverage, how does that further complicate the dynamics of portfolio liquidity, in terms of margins or collaterals?

8:45 AM - 9:15 AM SGT > COMMUNITY TIME

9:15 AM - 10:15 AM SGT > BLOSSOMING CONSUMER MARKETS IN SOUTHEAST ASIA

- Recent data and projections from World Data Lab and published by Brookings Institution suggest that Indonesia, the Philippines, and Vietnam will see significant growth in their consumer classes, adding well over 100 million people in total by 2030. How does this rate of expansion compare to other consumer markets in the world?
- Among Southeast Asian countries, Indonesia has the largest consumer base, with the number of consumers expected to reach 200 million, or close to 70 percent of the population by 2030, making it the fourth largest consumer market in the world. Also noteworthy is that it is a Muslim-majority (over 85 percent) nation. What unique opportunities does this combination present?
- Other important attributes of the emerging Southeast Asian consumer include: high digital (especially mobile) penetration, youth, and at the lower-end of the consumer class. What types of products and services are likely to be in high demand?

10:15 AM - 10:45 AM SGT > COMMUNITY TIME

ASIA PACIFIC ROUNDTABLE - OCTOBER 19-21, 2022

All times are SGT = Singapore Time, UTC/GMT +8

10:45 AM - 11:45 AM SGT > CEO/CIO PERSPECTIVES

11:45 AM - 12:00 PM SGT > CLOSING REMARKS & ADJOURNMENT

12:00 PM SGT > BOXED LUNCH AVAILABLE

September 1, 2022

TO: Trustees – Board of Investments

FROM: Jude Pérez, Principal Investment Officer *JP*
John Kim, Investment Officer *JK*

FOR: September 14, 2022 Board of Investments Meeting

SUBJECT: **OPEB MASTER TRUST LONG-TERM GOVERNMENT BONDS
RECOMMENDATION**

RECOMMENDATION

Approve BlackRock Institutional Trust Company, N.A. (“BlackRock”) to manage a long-term U.S. Treasury bond index portfolio in a separate account for the OPEB Master Trust (“OPEB”) on an interim basis.

BACKGROUND

At the June 2021 Board of Investments (“BOI”) meeting, Trustees approved a new strategic asset allocation for OPEB. Similar to the pension plan, a new Long-Term Government (“LTG”) Bonds segment was added with a discrete 5% allocation. As discussed with the BOI during the asset allocation study, LTG Bonds provide a higher degree of downside protection to growth assets compared to investment-grade bonds and may offer greater diversification benefits to the Risk Reduction and Mitigation functional category and to OPEB overall. LTG Bonds broadly exhibit minimal credit risk and high liquidity with long durations and attractive yields.

To effectively execute the new strategic asset allocation, Trustees approved a three-step implementation plan for OPEB. Step I commenced on October 1, 2021, and Step II went into effect on July 1, 2022, which included an increase in target allocation from 0% to 3% for LTG Bonds. The third and final step will take effect on July 1, 2023, increasing further from 3% to 5%. To achieve the initial 3% target allocation (approximately \$70 million of total OPEB in dollar terms) and as part of rebalancing towards policy targets, it is recommended to use BlackRock’s long-term U.S. Treasury bond index. As part of the rebalance mentioned above, funding is expected to come from decreasing allocations in both the Growth and Credit functional categories. In addition, BlackRock currently sits on LACERA’s transition management bench (BOI approved in December 2020) and serves as the single public markets index provider for OPEB as well as the long-term U.S. Treasuries investment manager for the pension fund (BOI approved in March 2022).

In preparation for the third and final step of the implementation plan in 2023, staff will seek authorization to issue a Request for Proposal (“RFP”) for all public markets investment management services for OPEB. This search will address multiple objectives for the trust:

1. Identify a permanent LTG Bonds investment manager
2. Reassess OPEB’s existing public market mandates
3. Elevate several of LACERA’s strategic initiatives

In addition, this search will continue OPEB’s evolution to a similar framework as the pension fund.

CONCLUSION

To implement OPEB’s asset allocation and rebalance towards policy targets, BlackRock is being recommended to manage OPEB’s LTG Bonds segment of the Risk Reduction and Mitigation functional category on an interim basis until the search noted above is completed in 2023. As highlighted in the March 2022 BOI recommendation memo for the pension fund, BlackRock has the requisite scale, systems, risk-management process, and consistent performance to manage this mandate. Terms will match the current fee schedule of the pension fund’s mandate.

Noted and Reviewed:



Jonathan Grabel
Chief Investment Officer

MEMORANDUM

TO: LACERA Board of Investments
FROM: Tim Filla, Aysun Kilic, Leandro Festino, and Imran Zahid
DATE: September 14, 2022
RE: OPEB Long-Term Government Bonds Recommendation

Background

The LACERA Board of Investments (“BOI”) approved a Strategic Asset Allocation for the OPEB Master Trust in June of 2021 which included a discrete allocation to Long-Term Government Bonds. The BOI also approved a three-phase plan for implementing the new allocation. The plan called for adding Long-Term Government Bonds beginning in July of 2022.

Process

The relatively low dollar allocation to Long-Term Government Bonds within the OPEB Trust makes conducting a full search for a manager an inefficient use of LACERA’s resources. That is especially the case when considering that LACERA staff is planning for a search for investment management services across public markets for the OPEB Trust within the next year.

BlackRock currently serves as investment manager for the OPEB Trust’s public markets exposure and was also recently selected by the BOI as the Long-Term Government Bond manager for the LACERA Pension Trust. Based on those two factors, BlackRock is in a unique position to serve as interim manager for the OPEB Trust’s Long-Term Government Bonds.

Recommendation

Staff concluded that BlackRock could serve as the manager of the Long-Term Government Bond allocation on an interim basis. We support staff’s recommendation that the Board utilize BlackRock for the OPEB Trust’s Long-Term Government Bond allocation until a search for public markets investment services is completed. If you have any questions, please do not hesitate to contact us. We look forward to answering any questions at the upcoming meeting.

TF/AK/LF/IZ/sf

September 1, 2022

TO: Trustees – Board of Investments
FROM: Jude Pérez, Principal Investment Officer
FOR: September 14, 2022 Board of Investments Meeting
SUBJECT: **LACERA QUARTERLY PERFORMANCE BOOK**

Attached is LACERA's quarterly performance book as of June 30, 2022. The report includes both performance and risk sections utilizing data from our platform providers, Solovis and MSCI BarraOne, respectively.

Noted and Reviewed:



Jonathan Grabel
Chief Investment Officer

Attachments



Los Angeles County Employees Retirement Association

Investments Division

TOTAL FUND

PERFORMANCE REPORT

For the quarter ended
June 30, 2022



review

A nighttime photograph of the California State Capitol building in Sacramento, California, illuminated against a dark sky with a purple and orange sunset. The building's dome is a prominent feature. In the foreground, there are trees and a street with some light trails from traffic. The word 'review' is overlaid in a large, light blue, lowercase sans-serif font across the bottom half of the image.

Table of Contents

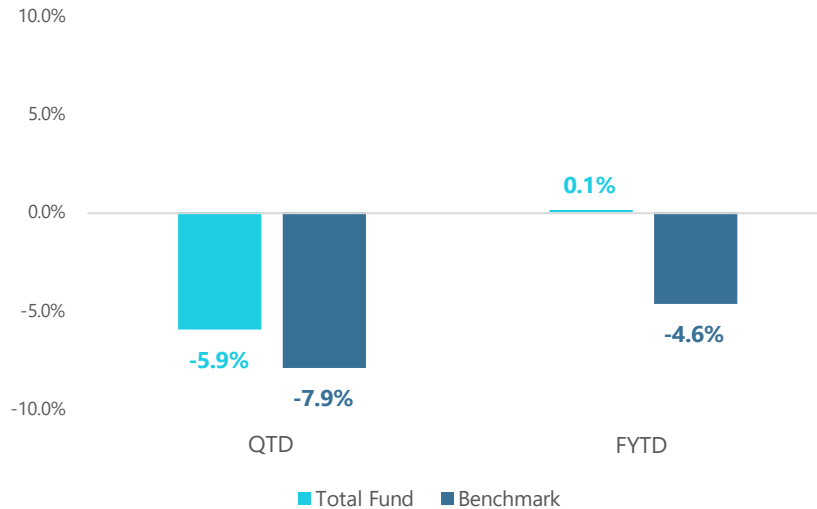
01	TOTAL FUND
02	GROWTH
03	CREDIT
04	REAL ASSETS & INFLATION HEDGES
05	RISK REDUCTION & MITIGATION
06	PRIVATE MARKETS
07	EMERGING MANAGER PROGRAM
08	RISK REPORTS
09	MANAGER SCORECARDS
10	APPENDIX

total fund

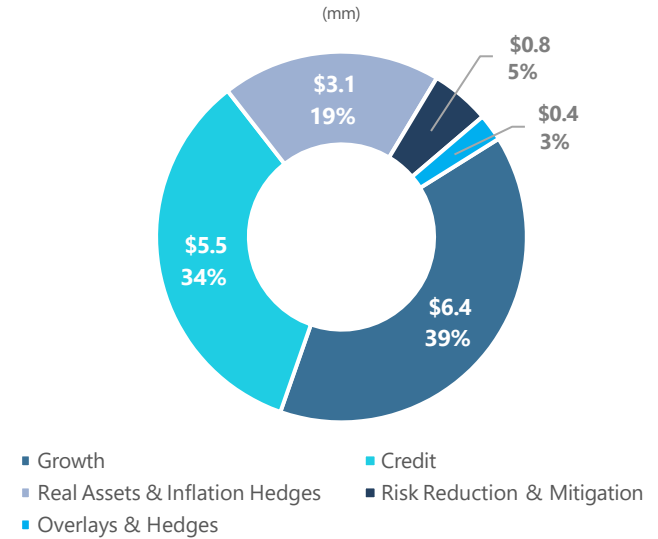
Quarterly Snapshot

for the quarter ended June 30, 2022

Performance (net)



Public Markets Fees¹



Ending Market Value

70,407

↓ -6%
from prior quarter

Sharpe Ratio²

0.9

↓ -30%
from prior quarter

Batting Average³

41%

↓ -19%
from prior quarter

Standard Deviation²

8.6

↑ 5%
from prior quarter

Tracking Error²

2.3

↑ 2%
from prior quarter

1. Reflects estimated investment management fees only. Additional details found in the appendix.

2. 3 Year Annualized

3. Percentage of managers that outperformed the benchmark for the quarter.

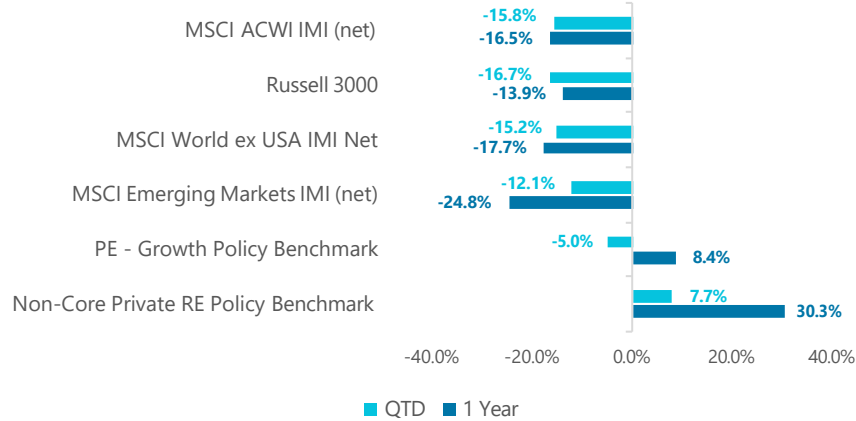
Market Environment

for the quarter ended June 30, 2022

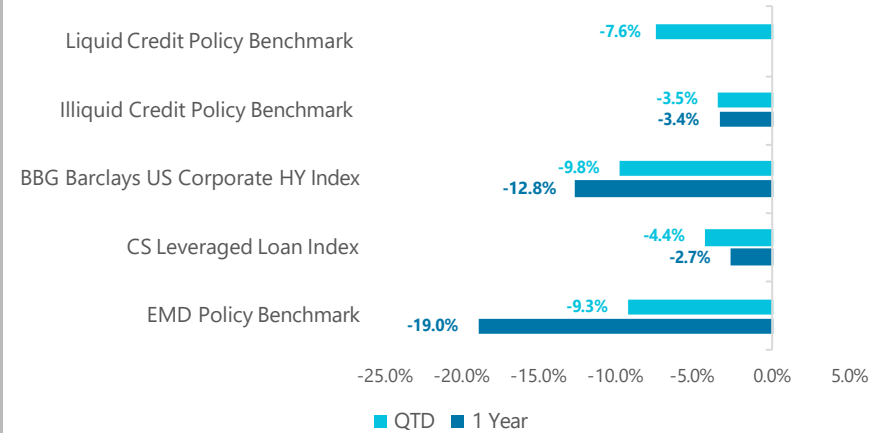


Los Angeles County Employees Retirement Association

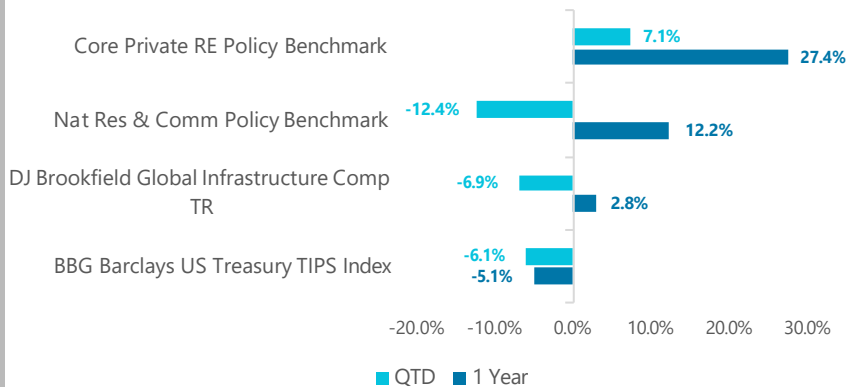
Growth



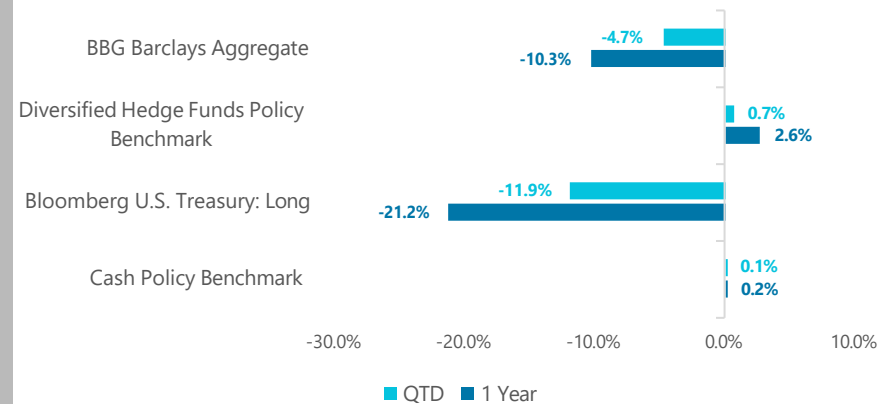
Credit



Real Assets & Inflation Hedges



Risk Reduction & Mitigation



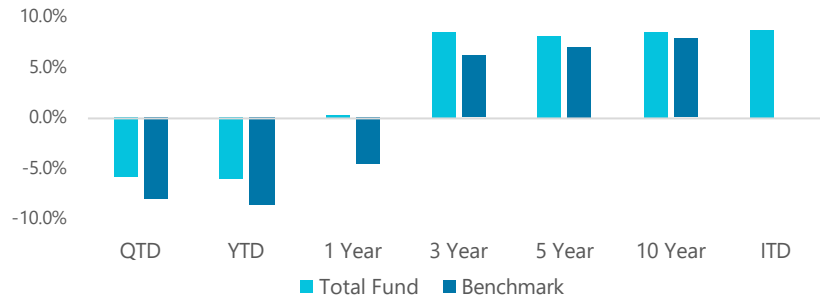
Summary

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Benchmark	-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Excess	2.0%	2.4%	4.7%	2.3%	1.2%	0.7%	--

	FY22	FY21	FY20	FY19	FY18
Total Fund	0.1%	25.2%	1.8%	6.4%	9.0%
Benchmark	-4.6%	23.1%	2.0%	8.6%	7.8%

Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Growth	-9.4%	-2.0%	-2.0%	12.6%
Growth Policy Benchmark	-11.6%	-8.1%	-8.1%	9.5%
Excess	2.2%	6.1%	6.1%	3.1%
Credit	-5.2%	-4.2%	-4.2%	3.1%
Credit Policy Benchmark	-5.7%	-7.5%	-7.5%	1.2%
Excess	0.5%	3.3%	3.3%	1.9%
Real Assets & Inflation Hedges	-1.6%	14.3%	14.3%	7.9%
RA & IH Policy Benchmark	-3.2%	12.4%	12.4%	8.7%
Excess	1.6%	1.9%	1.9%	-0.7%
Risk Reduction & Mitigation	-3.4%	-7.1%	-7.1%	0.8%
RR & M Policy Benchmark	-3.9%	-7.7%	-7.7%	-0.1%
Excess	0.5%	0.6%	0.6%	0.9%
Overlays & Hedges	73.9%	--	--	--

Peer Ranking (gross)

	QTD	1 Year	3 Year	5 Year	10 Year					
Total Fund	-5.9%	27	0.5%	18	8.8%	18	8.5%	19	8.9%	28
60/40 Portfolio	-11.5%	95	-13.9%	96	3.5%	87	4.7%	86	6.0%	88
S&P 500 Index	-16.1%	100	-10.6%	83	10.6%	7	11.3%	4	13.0%	4
5th Percentile	-3.9%		4.9%		11.6%		10.5%		10.3%	
25th Percentile	-5.8%		-1.9%		8.5%		5.3%		9.1%	
50th Percentile	-7.2%		-3.6%		7.5%		7.4%		8.3%	
75th Percentile	-9.1%		-9.2%		5.6%		6.1%		7.5%	
95th Percentile	-11.9%		-13.8%		0.2%		2.0%		3.9%	

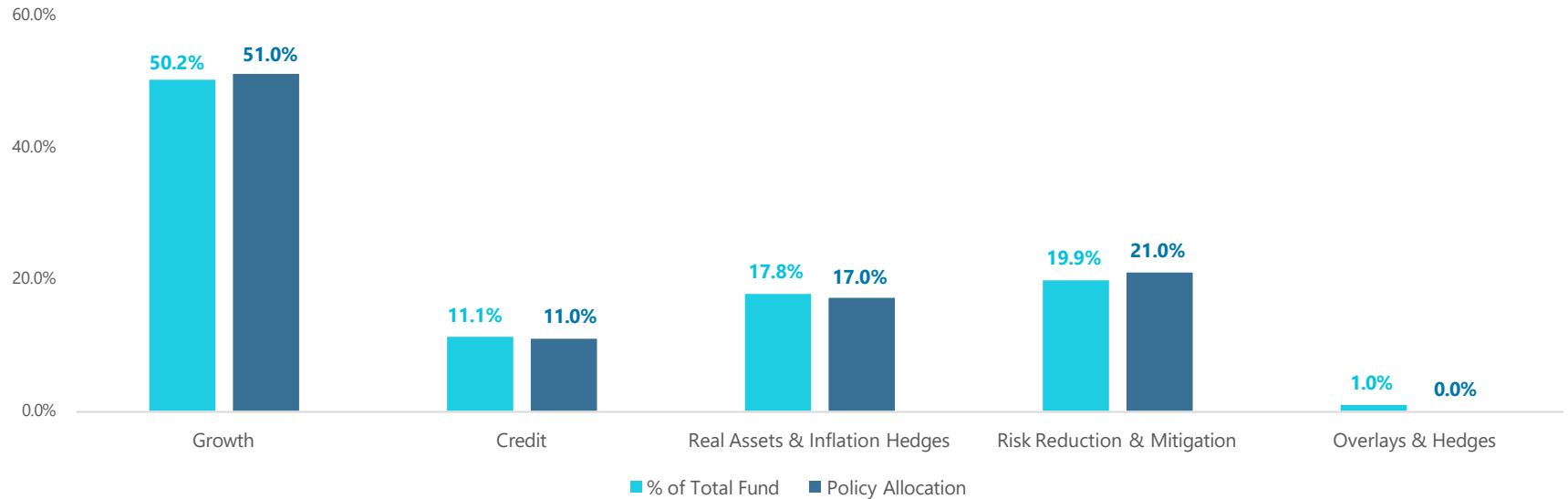
Asset Allocation

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Actual vs. Policy



	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Over/Under (%)	Over/Under (mm)
Total Fund	70,407	100.0%	100.0%		
Growth	35,331	50.2%	51.0%	-0.8%	-576
Credit	7,824	11.1%	11.0%	0.1%	79
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	0.8%	570
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-1.1%	-765
Overlays & Hedges	692	1.0%	0.0%	1.0%	692

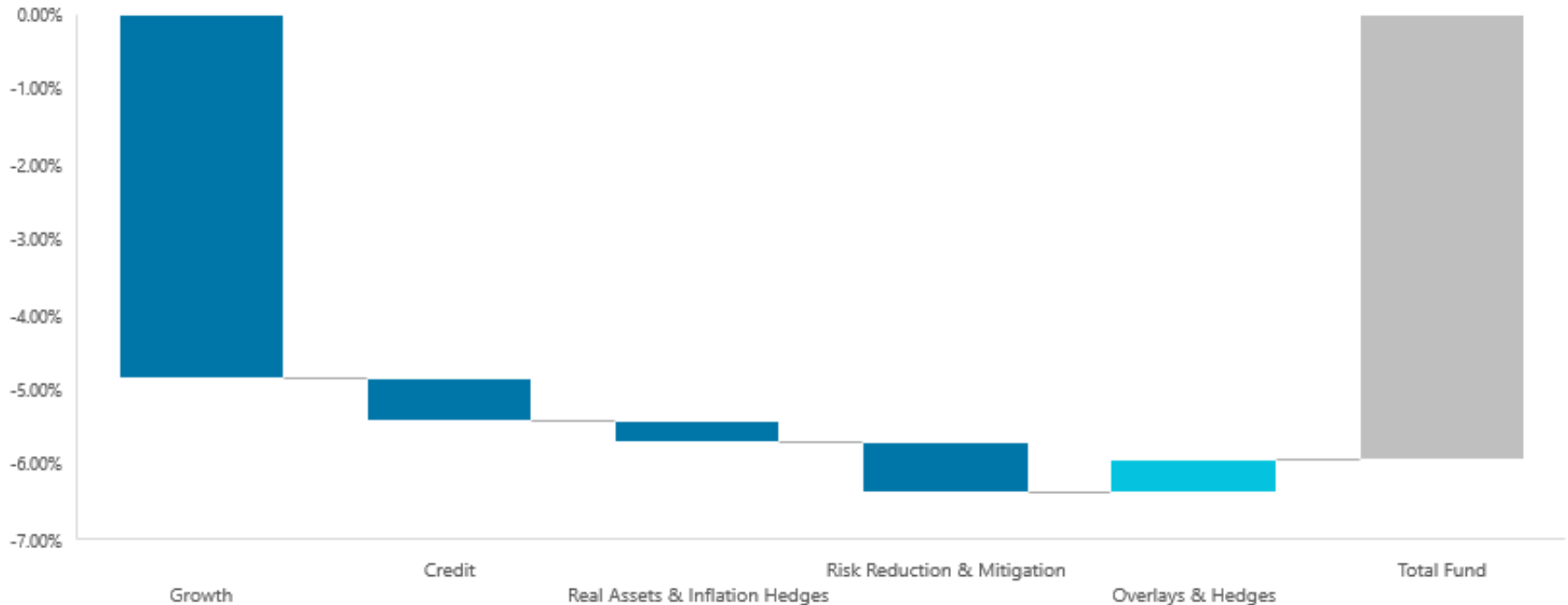
Contribution to Return

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Growth	-4.86%	Real Estate - Real Assets	0.45%	SSGA MSCI ACWI IMI	-3.20%
Credit	-0.57%	Private Equity - Growth	0.15%	JPMAM Strategic Beta US	-0.99%
Real Assets & Inflation Hedges	-0.29%	Brevan Howard Master Fund	0.08%	BTC Passive Currency Hedge	-0.95%
Risk Reduction & Mitigation	-0.65%	Parametric RA & IH Overlay	0.07%	BTC US Debt Index Fund	-0.32%
Overlays & Hedges	0.43%	Real Estate - Growth	0.07%	DWS Natural Resources	-0.30%
Total Fund	-5.94%				

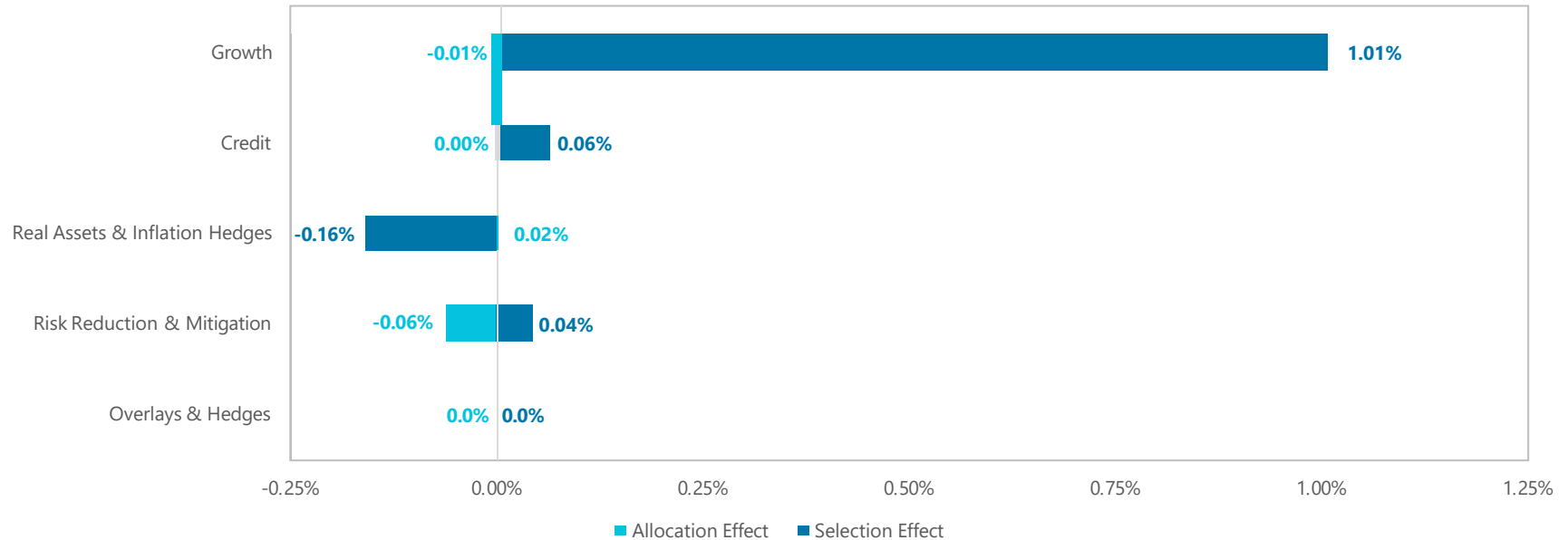
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



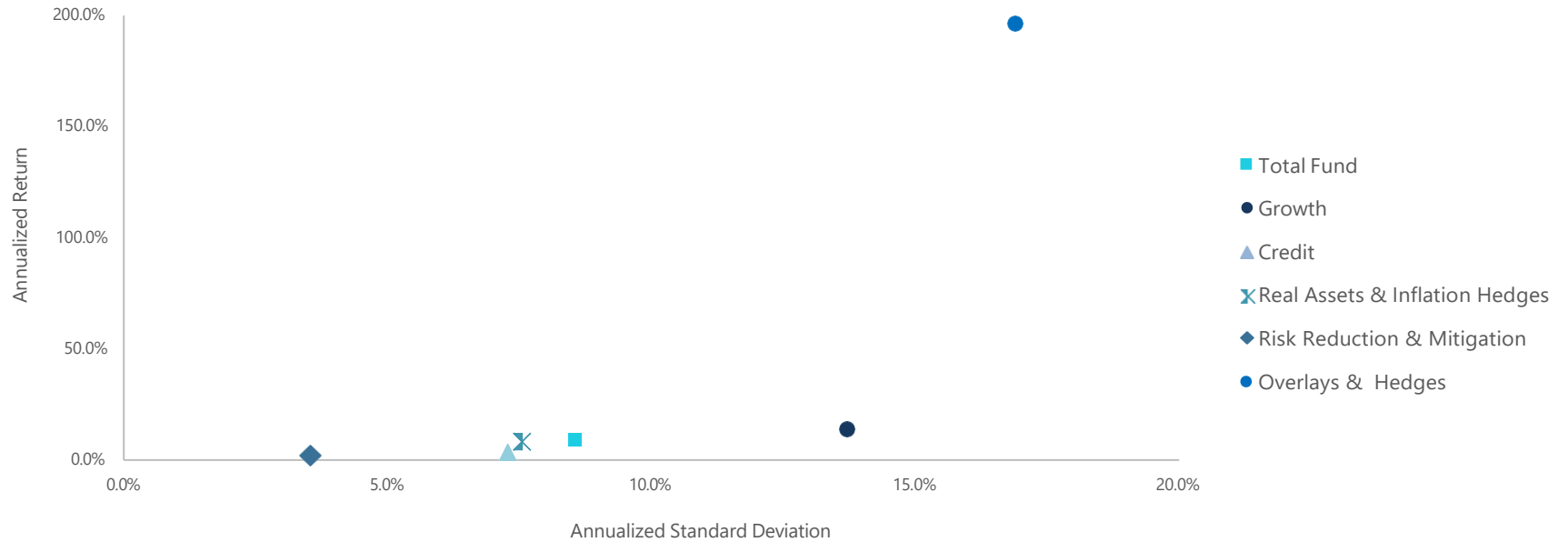
	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Total Fund	70,407	100.0%	100.0%	-5.9%	-7.9%	0.00%	0.96%	1.97%
Growth	35,331	50.2%	51.0%	-9.4%	-11.6%	-0.01%	1.01%	1.13%
Credit	7,824	11.1%	11.0%	-5.2%	-5.7%	0.00%	0.06%	0.05%
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	-1.6%	-3.2%	0.02%	-0.16%	0.29%
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-3.4%	-3.9%	-0.06%	0.04%	0.03%
Overlays & Hedges	692	1.0%	0.0%	73.9%	--	--	--	--

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Total Fund	8.5%	8.6%	0.92	0.99	0.96	2.3%
Growth	12.8%	13.7%	0.90	0.60	0.95	4.0%
Credit	3.6%	7.3%	0.44	0.64	1.00	2.8%
Real Assets & Inflation Hedges	7.8%	7.5%	0.95	(0.29)	0.95	2.2%
Risk Reduction & Mitigation	1.6%	3.5%	0.24	1.13	0.94	0.8%
Overlays & Hedges	195.6%	16.9%				

1. Functional composites risk statistics are since inception.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Total Fund	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	100.0%	70,407	75,209	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Total Fund Policy Benchmark				-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Growth	50.2%	35,331	38,682	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Growth Policy Benchmark				-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Global Equity	30.3%	21,343	25,137	-15.1%	-19.8%	-15.1%	6.6%	--	--	7.2%
Global Equity Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	--	--	6.6%
Private Equity - Growth	18.3%	12,901	12,457	0.8%	9.1%	30.2%	26.6%	--	--	24.1%
PE - Growth Policy Benchmark				-5.0%	1.3%	8.4%	15.7%	--	--	12.8%
Non-Core Private Real Estate	1.5%	1,087	1,088	4.7%	12.9%	23.5%	14.2%	13.2%	12.0%	4.7%
Non-Core Private RE Policy Benchmark				7.7%	16.6%	30.3%	13.4%	12.0%	13.1%	11.6%
Credit	11.1%	7,824	8,111	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Credit Policy Benchmark				-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Liquid Credit	6.5%	4,581	4,977	-7.9%	-10.9%	--	--	--	--	-10.7%
Liquid Credit Policy Benchmark				-7.6%	-11.0%	--	--	--	--	-10.7%
Illiquid Credit	4.6%	3,243	3,135	-1.0%	-0.7%	6.7%	11.2%	--	--	10.9%
Illiquid Credit Policy Benchmark				-3.5%	-5.0%	-3.4%	3.4%	--	--	4.5%
Real Assets & Inflation Hedges	17.8%	12,539	12,933	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
RA & IH Policy Benchmark				-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Core Private Real Estate	6.1%	4,323	4,079	8.4%	15.9%	27.9%	8.4%	8.3%	8.8%	7.3%
Core Private RE Policy Benchmark				7.1%	15.3%	27.4%	10.7%	9.4%	10.4%	7.2%
Natural Resources & Commodities	4.2%	2,958	3,796	-6.1%	11.4%	18.6%	12.5%	8.0%	-0.3%	-1.0%
Nat Res & Comm Policy Benchmark				-12.4%	4.7%	12.2%	11.2%	7.0%	-1.5%	-2.2%
Infrastructure	4.7%	3,327	2,999	-6.5%	-3.6%	4.1%	7.6%	--	--	8.9%
DJ Brookfield Global Infrastr Comp TR				-6.9%	-2.7%	2.8%	4.5%	--	--	5.7%
TIPS	2.7%	1,931	2,059	-6.3%	-8.6%	-4.8%	3.1%	--	--	3.7%
Bloomberg U.S. Treasury: U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.7%
Risk Reduction & Mitigation	19.9%	14,020	14,969	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
RR & M Policy Benchmark				-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Investment Grade Bonds	7.9%	5,556	8,649	-4.8%	-10.4%	-10.6%	-0.7%	1.1%	2.1%	5.3%
BBG BC Aggregate Bond Index				-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	4.8%
Diversified Hedge Funds	6.0%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
Long-Term Government Bonds	1.7%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Bloomberg U.S. Treasury: Long				-11.9%	-21.3%	--	--	--	--	-22.1%
Long Treasury Bonds Transition	2.8%	1,992	--	--	--	--	--	--	--	-0.4%
Bloomberg U.S. Treasury: Long				--	--	--	--	--	--	-0.3%
Cash	1.5%	1,067	953	0.7%	0.9%	1.5%	1.3%	1.6%	1.1%	1.8%
Cash Policy Benchmark				0.1%	0.2%	0.2%	0.6%	1.1%	0.7%	1.4%
Overlays & Hedges	1.0%	692	513	73.9%	174.0%	--	--	--	--	195.6%
Cash Overlay	0.7%	525	448	17.2%	59.5%	64.7%	--	--	--	-5.2%
Total Overlay Policy BM				-11.5%	-15.5%	-11.9%	--	--	--	4.2%
Currency Hedge	0.2%	167	65	3.6%	4.6%	--	--	--	--	5.2%
50% FX Hedge Custom Benchmark				3.6%	4.7%	--	--	--	--	5.3%

growth

Summary

for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Growth	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Benchmark	-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Excess	2.2%	2.3%	6.1%	3.1%	--	--	2.3%

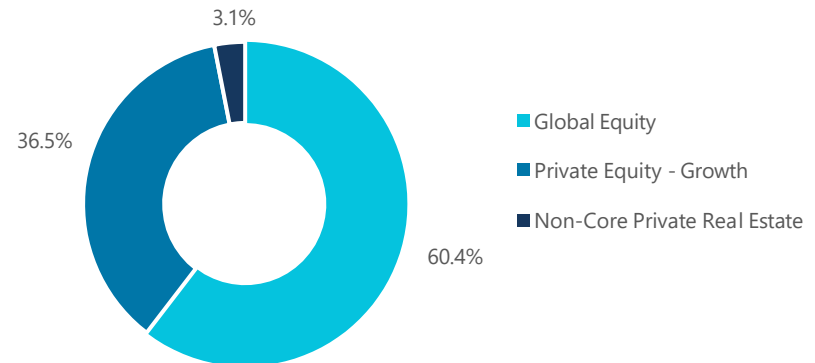
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Global Equity	-15.1%	-15.1%	-15.1%	6.6%
Global Equity Policy Benchmark	-15.8%	-16.5%	-16.5%	6.0%
Excess	0.7%	1.4%	1.4%	0.6%
Private Equity - Growth	0.8%	30.2%	30.2%	26.6%
PE - Growth Policy Benchmark	-5.0%	8.4%	8.4%	15.7%
Excess	5.8%	21.8%	21.8%	10.9%
Non-Core Private Real Estate	4.7%	23.5%	23.5%	14.2%
Non-Core Private RE Policy Benchmark	7.7%	30.3%	30.3%	13.4%
Excess	-3.0%	-6.8%	-6.8%	0.8%

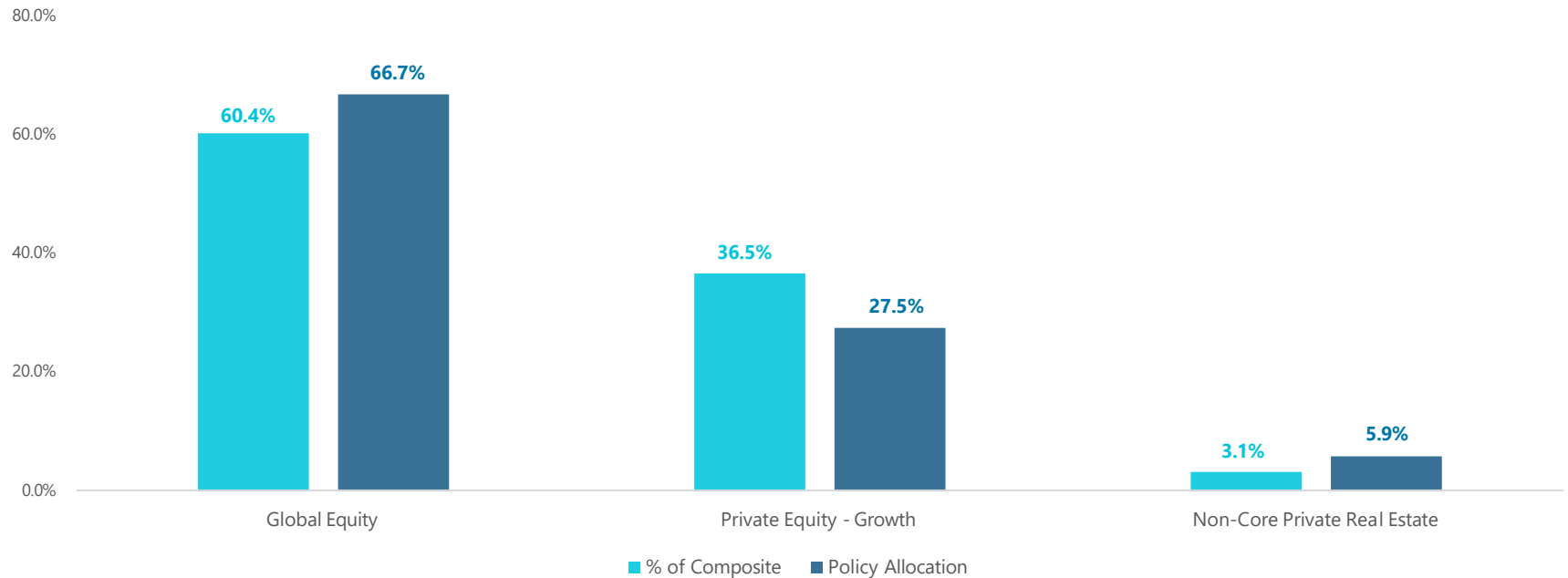
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

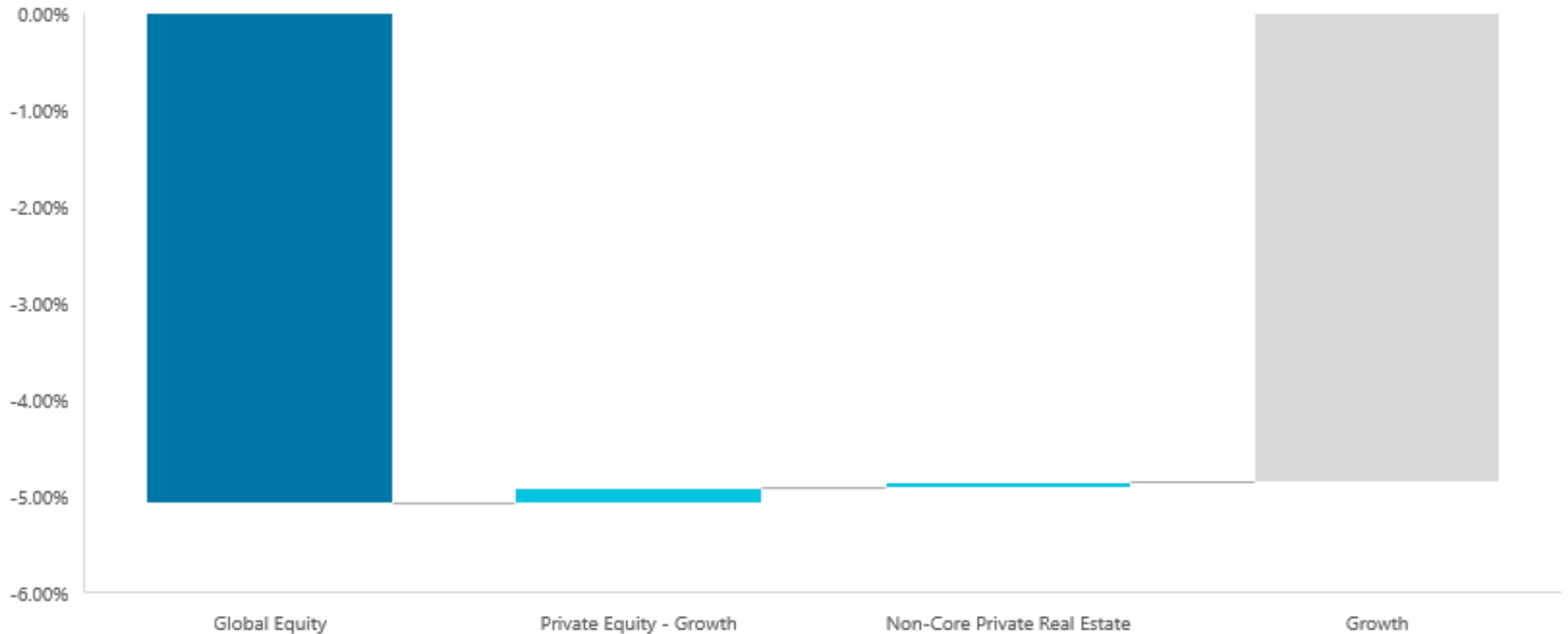


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Growth	35,331	100.0%	100.0%		
Global Equity	21,343	60.4%	66.7%	-6.3%	-2,212
Private Equity - Growth	12,901	36.5%	27.5%	9.1%	3,203
Non-Core Private Real Estate	1,087	3.1%	5.9%	-2.8%	-990

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return

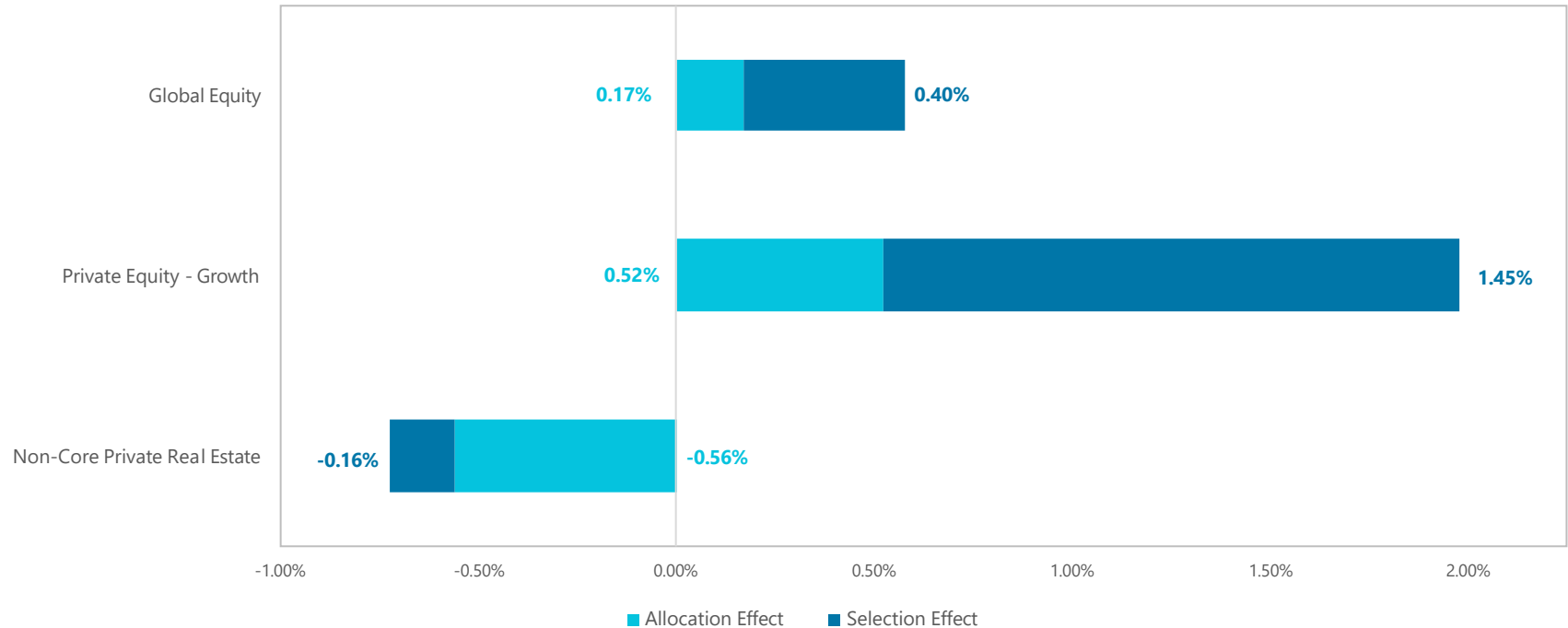


Functional Category	Contributors	Detractors
Global Equity	Private Equity - Growth	SSGA MSCI ACWI IMI
Private Equity - Growth	Real Estate - Growth	JPMAM Strategic Beta US
Non-Core Private Real Estate		Acadian Developed Markets
Growth		JPMAM Strategic Beta Non-US
		BTC Euro Tilts

Return Attribution

for the quarter ended June 30, 2022

QTD Performance Attribution¹



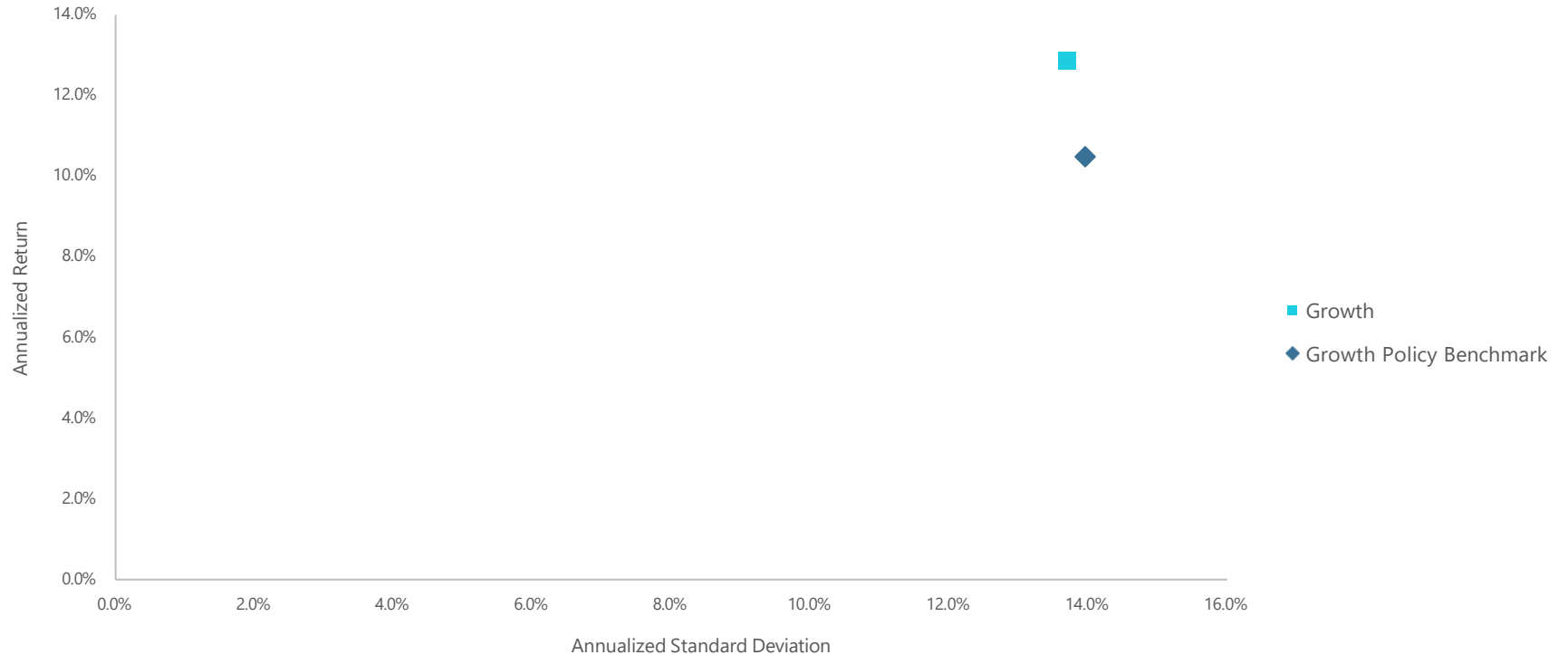
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Growth	35,331	100.0%	100.0%	-9.4%	-11.6%	0.14%	1.70%	2.17%
Global Equity	21,343	60.4%	66.7%	-15.1%	-15.8%	0.17%	0.40%	0.65%
Private Equity - Growth	12,901	36.5%	27.5%	0.8%	-5.0%	0.52%	1.45%	2.16%
Non-Core Private Real Estate	1,087	3.1%	5.9%	4.7%	7.7%	-0.56%	-0.16%	-0.63%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Growth	12.8%	13.7%				
Growth Policy Benchmark	10.5%	14.0%	0.90	0.60	0.95	4.0%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Growth	100.0%	35,331	38,682	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Growth Policy Benchmark				-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Global Equity	60.4%	21,343	25,137	-15.1%	-19.8%	-15.1%	6.6%	--	--	7.2%
Global Equity Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	--	--	6.6%
Passive										
SSGA MSCI ACWI IMI	37.1%	13,120	15,518	-15.5%	-20.0%	-15.6%	--	--	--	4.3%
Factor Based										
JPMAM Strategic Beta Non-US	1.5%	533	618	-13.8%	-17.3%	-17.3%	--	--	--	3.8%
JPMAM Strategic Beta US	11.0%	3,901	4,643	-16.0%	-19.9%	-11.2%	--	--	--	12.7%
Active										
Acadian Developed Markets	1.5%	531	632	-15.9%	-19.4%	-17.9%	4.3%	4.5%	8.2%	4.1%
BTC Euro Tilts	1.4%	483	560	-13.7%	-20.1%	-14.9%	2.8%	2.9%	7.1%	2.8%
Capital Group Developed Markets	1.0%	343	414	-17.2%	-27.8%	-28.3%	1.5%	4.4%	6.8%	--
Cevian Capital II - Activist	1.0%	359	393	-8.6%	-13.2%	-7.7%	6.9%	4.2%	--	6.4%
Cornercap US Small Cap - EMP	0.2%	77	86	-10.6%	-11.6%	-6.6%	9.9%	--	--	6.8%
Frontier US SMID Growth	0.7%	242	298	-18.9%	-22.6%	-20.2%	5.6%	5.5%	10.5%	9.6%
Genesis Emerging Markets	1.4%	491	557	-11.9%	-23.0%	-32.4%	-2.9%	1.0%	2.8%	3.1%
Global Alpha Intl Small Cap - EMP	0.5%	162	189	-14.1%	-20.9%	-21.1%	2.3%	--	--	4.2%
Jana JSI Fund V - Activist	0.3%	118	123	-8.0%	-7.1%	2.3%	17.8%	10.4%	--	17.4%
Lazard Emerging Markets	1.1%	374	413	-9.3%	-21.2%	-26.9%	2.2%	3.6%	--	2.3%
Parametric GE Market Cap	0.4%	134	139	-3.4%	0.0%	--	--	--	--	19.8%
Parametric GE Region	0.2%	80	124	-24.6%	-30.7%	--	--	--	--	-29.9%
Symphony Financial - Activist	0.6%	204	237	-14.3%	-22.6%	-10.4%	5.0%	9.2%	--	10.8%
Systematic US Small Cap Value	0.5%	174	197	-11.7%	-16.1%	-12.2%	7.4%	--	--	4.1%
Private Equity - Growth	36.5%	12,901	12,457	0.8%	9.1%	30.2%	26.6%	--	--	24.1%
PE - Growth Policy Benchmark				-5.0%	1.3%	8.4%	15.7%	--	--	12.8%
Non-Core Private Real Estate	3.1%	1,087	1,088	4.7%	12.9%	23.5%	14.2%	13.2%	12.0%	4.7%
Non-Core Private RE Policy Benchmark				7.7%	16.6%	30.3%	13.4%	12.0%	13.1%	11.6%

Growth Risk Summary

for the quarter ended June 30, 2022

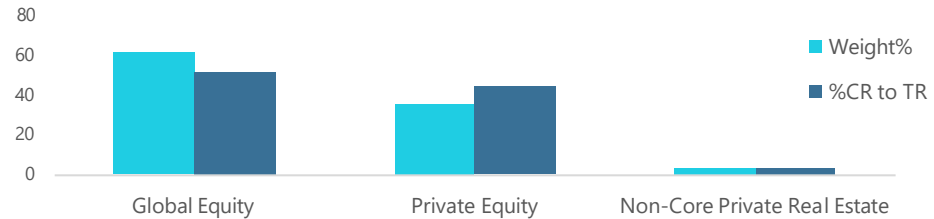
Risk Summary

	Value
Total Risk	20.26
Benchmark Risk	18.93
Active Risk	2.24
Portfolio Beta	1.07

Risk Decomposition

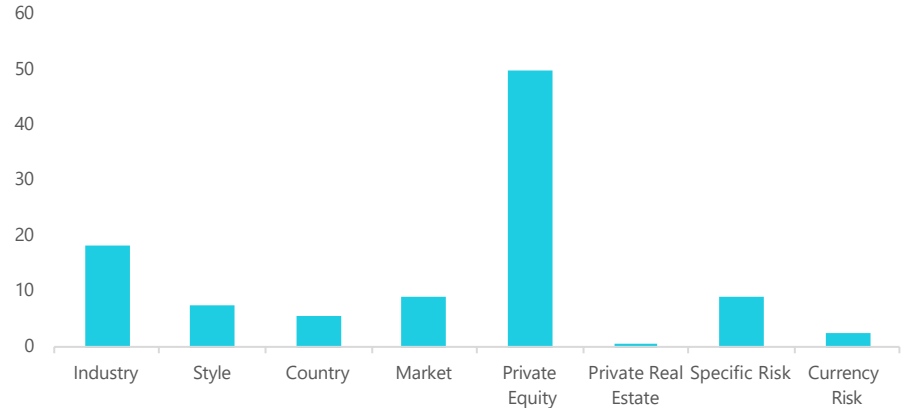
Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
Total Risk	20.26	100.00	2.24	100.00
Local Market Risk	19.47	96.06	2.19	97.85
Common Factor Risk	19.42	95.83	1.99	88.91
Specific Risk	0.05	0.23	0.20	8.94
Currency Risk	0.80	3.94	0.05	2.15

Contribution to Risk



	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Growth	34,694	100.00	20.26	20.26	100.00
Global Equity	21,253	61.26	18.07	10.50	51.83
Private Equity	12,391	35.72	27.44	9.09	44.84
Non-Core Private Real Estate	1,050	3.03	37.01	0.67	3.33

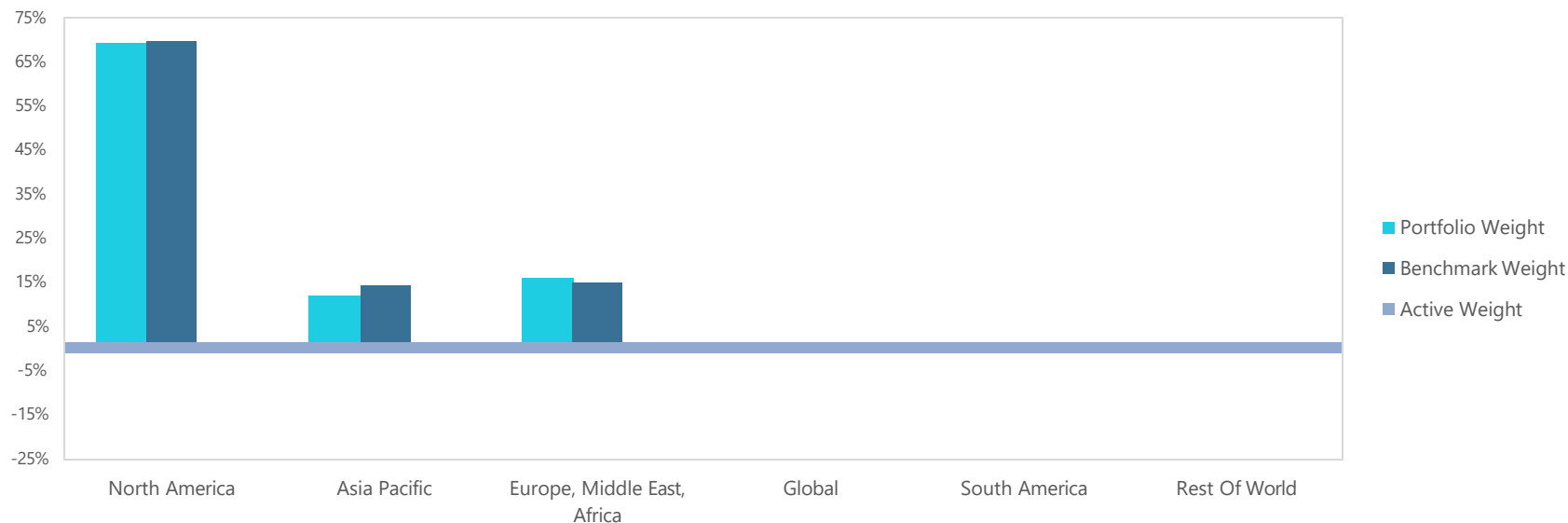
Active Risk from Common Factors



Growth Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Region

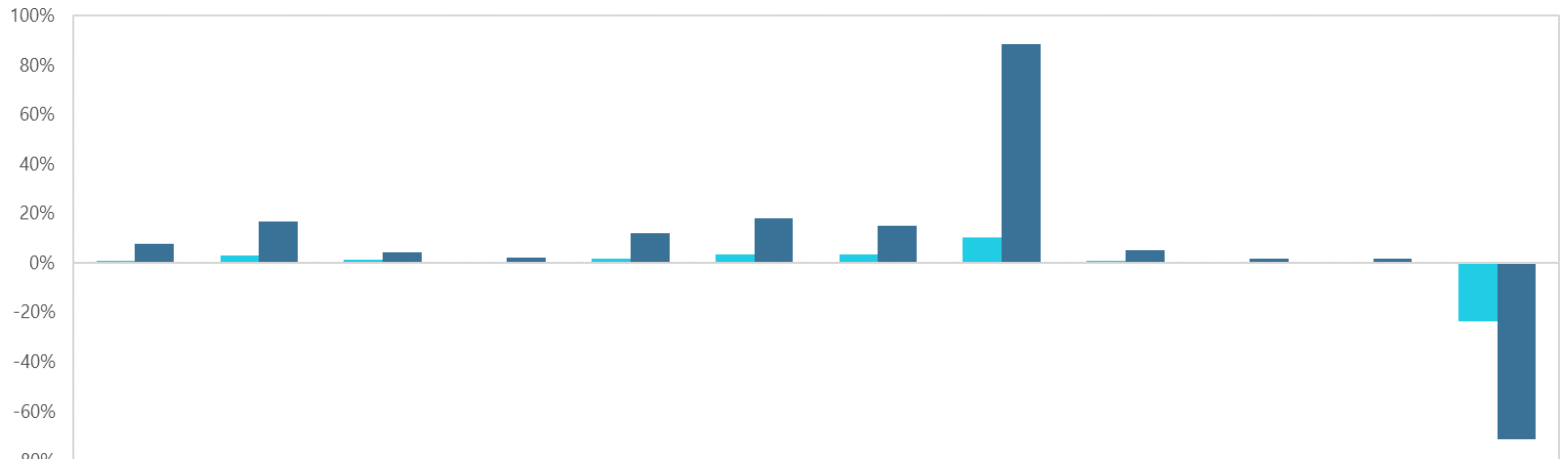


Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	20.26	2.24	100.00	0.02
North America	69.41%	70.03%	-0.62%	22.27	1.76	78.50	0.09
Asia Pacific	12.12%	14.50%	-2.39%	15.89	0.22	9.68	-0.05
Europe, Middle East, Africa	16.04%	14.61%	1.43%	21.27	0.22	9.85	0.01
Global	1.06%	0.00%	1.06%	21.29	-0.04	-1.57	-0.03
South America	1.10%	0.61%	0.49%	31.94	0.07	3.17	0.05
Rest Of World	0.28%	0.24%	0.03%	15.93	0.01	0.36	-0.05

Growth Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By GICS Sector



	Communicati on Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Real Estate	Utilities	Others
Active Weight	0.88%	2.92%	1.25%	-0.12%	1.84%	3.53%	3.38%	10.20%	0.78%	-0.40%	-0.36%	-23.89%
Active Risk Contribution	7.63%	16.48%	4.16%	2.17%	12.05%	17.87%	14.81%	88.20%	4.94%	1.56%	1.57%	-71.44%

■ Active Weight ■ Active Risk Contribution

Growth – Global Equity Acadian Developed Markets

for the quarter ended June 30, 2022

Strategy

Seeks to capture mispriced opportunities through systematic stock, sector, and country valuation models that are customized to each market. The strategy may be suited to investors looking to gain exposure in non-U.S. developed markets and diversify portfolio through active quantitative investment approach.

Inception Date: April 2006

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	40,074.7	69,943.2
No. Of Issues	576.0	--
Dividend Yield	4.5	3.4
Return on Equity	25.6	18.0
Price to Sales	2.5	3.4
Price to Book	4.9	2.0
PE Ratio	9.6	14.5

Top Holdings (% of assets)

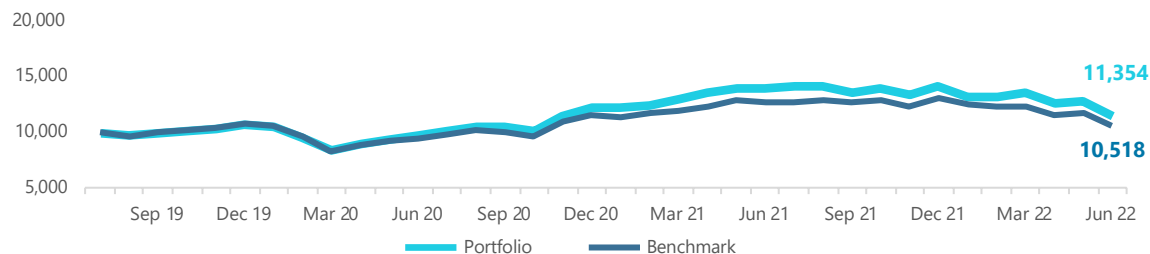
ROCHE HOLDING AG GENUSSSCHEIN	3.3%
NOVO NORDISK A/S B	3.0%
WOLTERS KLUWER	1.8%
SOUTH32 LTD DI	1.7%
BHP GROUP LTD	1.6%
Top 5 Holdings	11.4%

Performance (net)¹

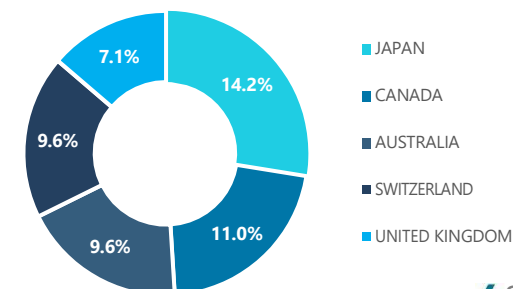
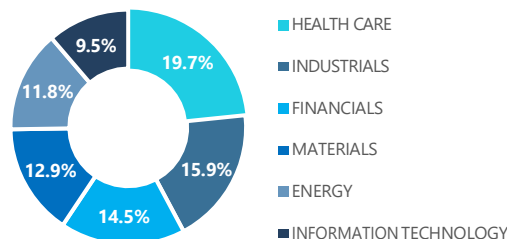
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Acadian Developed Markets	531.5	-15.9%	-17.9%	4.3%	4.5%
MSCI EAFE + Canada Net Index		-14.7%	-16.8%	1.7%	2.7%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Acadian Developed Markets	-15.9%	81	-17.6%	51	4.7%	48	4.9%	51
Median	-13.5%		-17.3%		4.3%		5.0%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

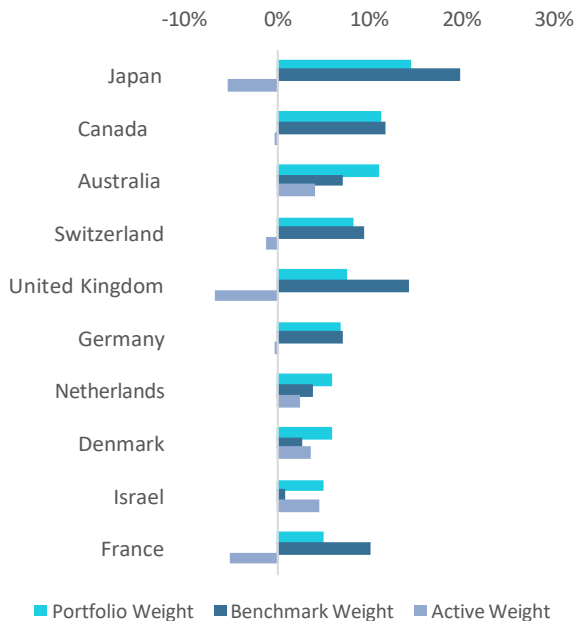
Acadian Developed Markets

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.99
Benchmark Risk	17.67
Active Risk	5.40
Portfolio Beta	1.09

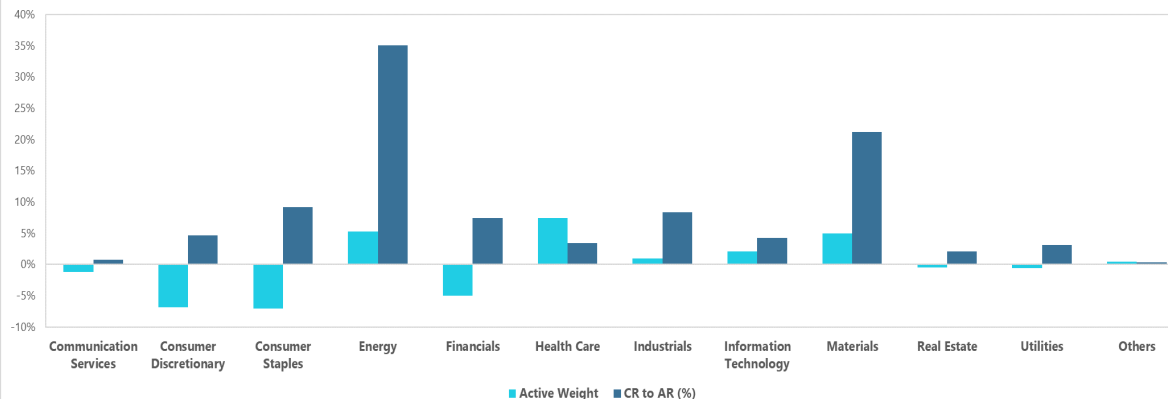
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
TOURMALINE OIL CORP	1.37%	0.11%	1.27%	47.10	5.53	0.289
SOUTH32 LIMITED	1.67%	0.08%	1.59%	41.47	5.27	0.233
MEG ENERGY CORP	0.72%	0.00%	0.72%	63.63	4.66	0.405
EQUINOR ASA	1.54%	0.22%	1.32%	39.92	4.13	0.223
BIRCHCLIFF ENERGY LTD	0.63%	0.00%	0.63%	63.59	3.52	0.358
WHITECAP RESOURCES INC	0.50%	0.00%	0.50%	59.34	3.00	0.381
ANGLO AMERICAN PLC	1.25%	0.29%	0.95%	44.85	2.64	0.203
BLUESCOPE STEEL LTD	1.01%	0.03%	0.97%	42.06	2.60	0.198
NESTLE SA	0.03%	2.13%	-2.10%	18.65	2.56	-0.012
AKER BP ASA	0.57%	0.07%	0.50%	53.01	2.41	0.313

Portfolio Risk by GICS Sector



Growth – Global Equity BTC Europe Alpha Tilts

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate risk-controlled and consistent active returns by using a unique blend of bottom-up stock selection insights and broader top-down thematic insights. The strategy may be suited to investors looking to capture active return opportunities in European region.

Inception Date: January 2007

Risk Statistics (since inception)

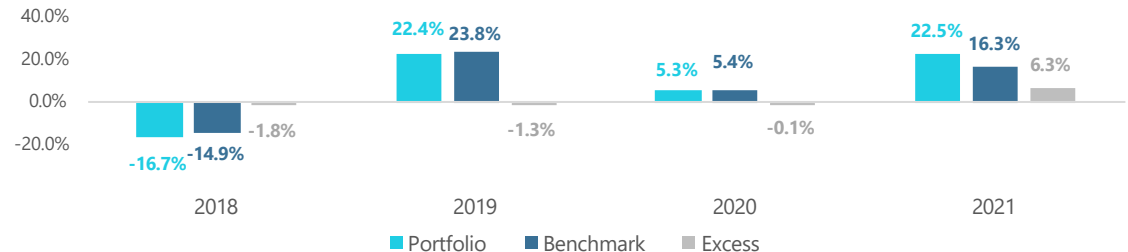
Standard Deviation	19.2%
Benchmark Standard Deviation	19.2%
Sharpe Ratio	0.20
Information Ratio	0.49
Beta	0.99
Tracking Error	1.9%

Performance (net)¹

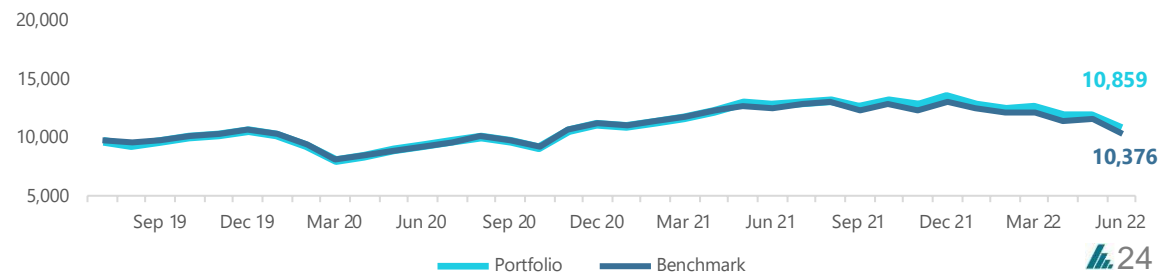
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
BTC Euro Tilts	482.7	-13.7%	-14.9%	2.8%	2.9%
MSCI EUROPE		-14.5%	-17.6%	1.2%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Developed Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
BTC Euro Tilts	-13.6%	53	-14.5%	31	3.2%	28	3.3%	39
Median	-13.5%		-17.9%		1.8%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

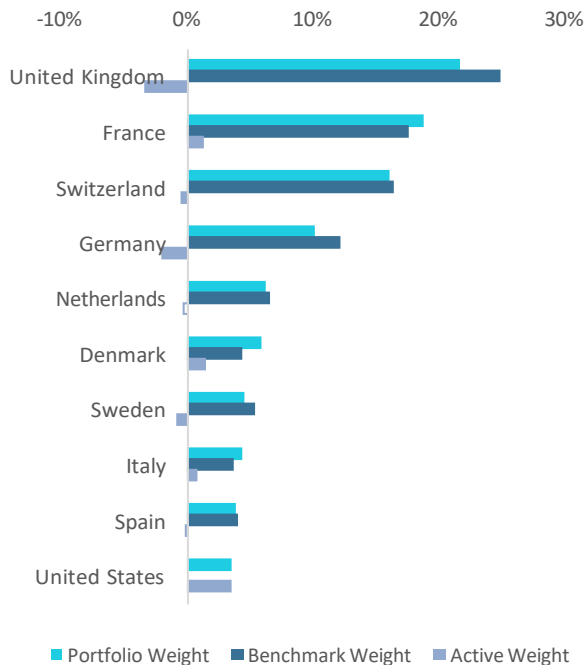
BTC Europe Alpha Tilts

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.19
Benchmark Risk	19.65
Active Risk	1.48
Portfolio Beta	0.97

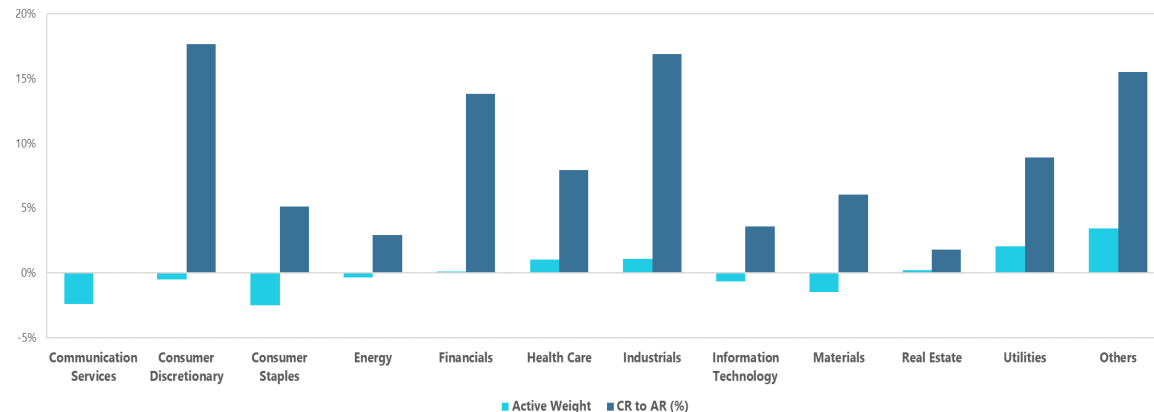
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
G L OTHER	3.21%	0.00%	3.21%	0.00	14.61	0.000
BRITISH AMERICAN TOBACCO PLC	2.49%	1.06%	1.42%	24.00	4.68	-0.019
HERMES INTERNATIONAL SCA	1.96%	0.40%	1.56%	32.14	4.16	-0.028
ENGIE	1.34%	0.24%	1.10%	34.79	3.91	-0.015
ACCIONA SA	0.96%	0.05%	0.91%	30.66	3.77	-0.006
PROSUS NV	0.00%	0.62%	-0.62%	43.41	3.74	-0.157
NOVO NORDISK A/S	2.94%	2.13%	0.81%	27.54	3.30	-0.007
WOLTERS KLUWER NV	1.32%	0.29%	1.03%	24.41	3.24	-0.021
TRYG A/S	1.04%	0.09%	0.95%	26.44	2.59	-0.027
HSBC HOLDINGS PLC	0.51%	1.51%	-1.00%	31.03	2.49	-0.104

Portfolio Risk by GICS Sector



Growth – Global Equity

Capital Group Developed Markets

for the quarter ended June 30, 2022

Strategy

Seeks to generate long-term capital appreciation through fundamental research and proprietary models for earnings estimates and valuations. The strategy may be suited to investors looking to gain exposures in non-U.S. developed markets with emphasis on bottom-up, fundamental investment analysis.

Inception Date: October 1987

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	102,050.9	69,943.2
No. Of Issues	166.0	--
Dividend Yield	2.5	3.4
Return on Equity	20.0	18.0
Price to Sales	5.5	3.4
Price to Book	6.2	2.0
PE Ratio	20.6	14.5

Top Holdings (% of assets)

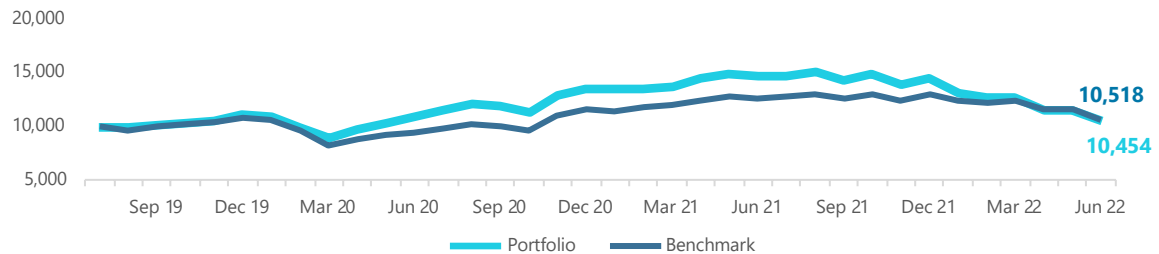
ASML HOLDING NV	4.4%
NOVO NORDISK A/S B	3.5%
LVMH MOET HENNESSY LOUIS VUI	2.8%
EVOLUTION AB	2.8%
ASTRAZENECA PLC	2.4%
Top 5 Holdings	15.9%

Performance (net)¹

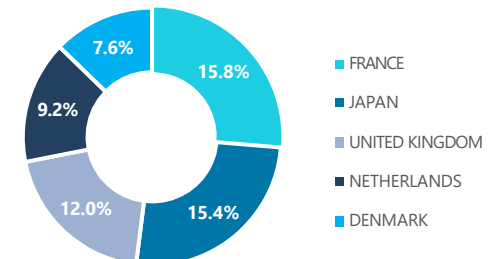
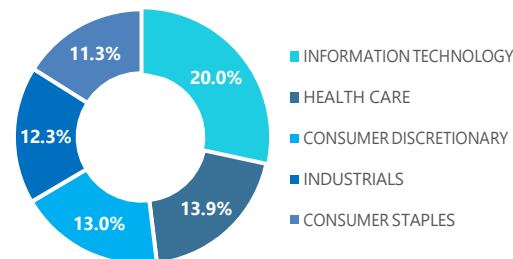
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Capital Group Developed Markets	343.0	-17.2%	-28.3%	1.5%	4.4%
EAFE Custom Benchmark		-14.7%	-16.8%	1.7%	2.7%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Capital Group Developed Markets	-17.1%	89	-28.0%	92	1.8%	71	4.8%	52
Median	-13.5%		-17.3%		1.3%		5.0%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity Capital Group Developed Markets

for the quarter ended June 30, 2022

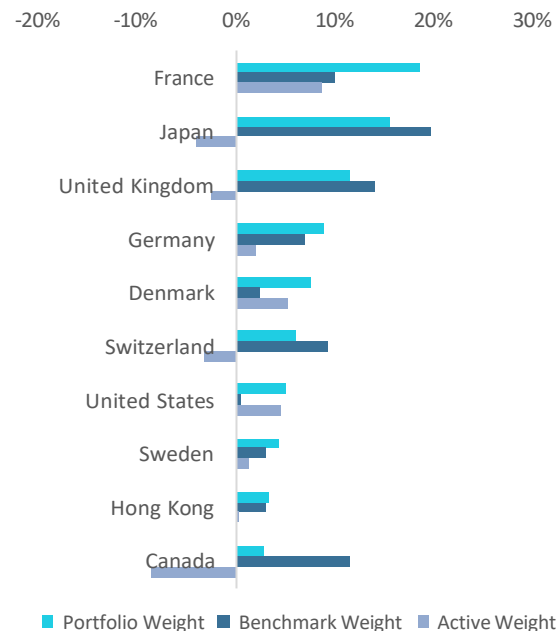


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	18.96
Benchmark Risk	17.67
Active Risk	4.73
Portfolio Beta	1.04

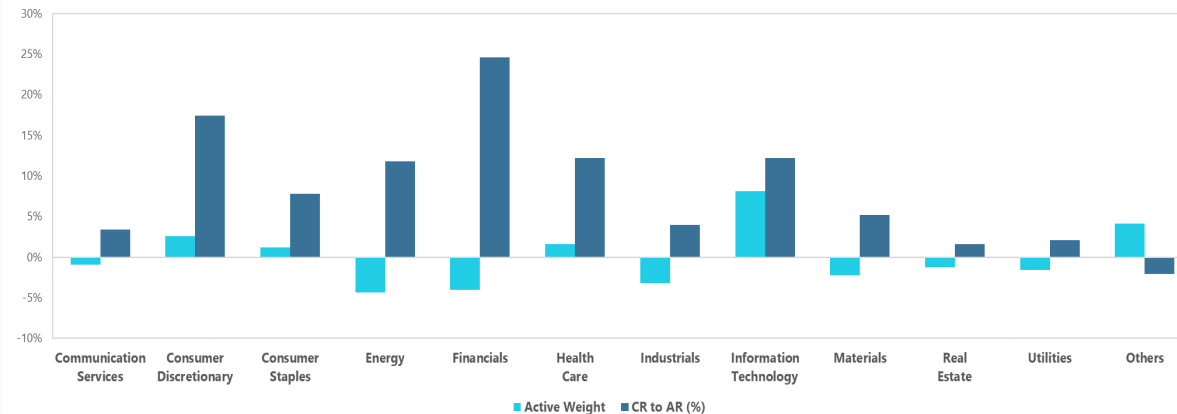
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
AURELIUS EQUITY OPPORTUNITIES SE & CO.	5.50%	0.00%	5.50%	41.86	14.35	0.150
EVOLUTION AB (PUBL)	2.77%	0.11%	2.67%	53.96	11.44	0.229
OCADO GROUP PLC	1.77%	0.04%	1.74%	46.86	5.49	0.176
GENMAB A/S	1.74%	0.14%	1.60%	33.86	3.87	0.141
SHELL PLC	0.00%	1.28%	-1.28%	34.00	2.96	-0.083
NOVO NORDISK A/S	3.47%	1.21%	2.25%	27.54	2.42	0.077
LVMH MOET HENNESSY LOUIS VUITTON SE	2.81%	1.10%	1.72%	29.20	2.38	0.092
KERING	1.58%	0.25%	1.33%	35.15	2.11	0.101
BEIGENE LTD	0.45%	0.00%	0.45%	53.30	1.85	0.219
L'OREAL SA	1.58%	0.54%	1.04%	24.32	1.79	0.081

Portfolio Risk by GICS Sector



Growth – Global Equity

Cevian Capital II

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate long-term returns by researching and investing in European companies that have profitable businesses and significant improvement potential. The strategy may be suited to investors looking to increase portfolio diversification through differentiated investment approach and take advantage of return opportunities in Europe.

Inception Date: October 2016

Risk Statistics (since inception)

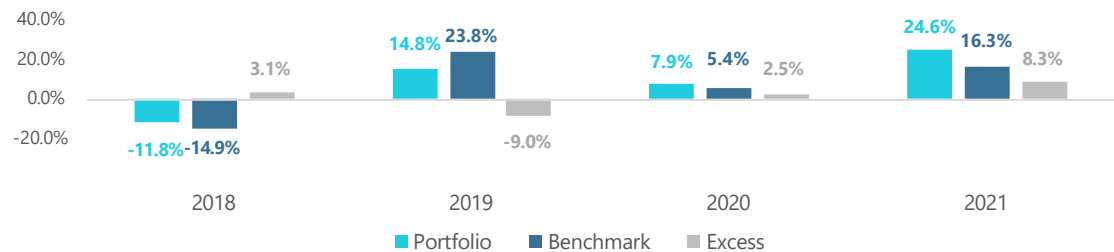
Standard Deviation	16.4%
Benchmark Standard Deviation	16.7%
Sharpe Ratio	0.40
Information Ratio	0.22
Beta	0.83
Tracking Error	9.3%

Performance (net)¹

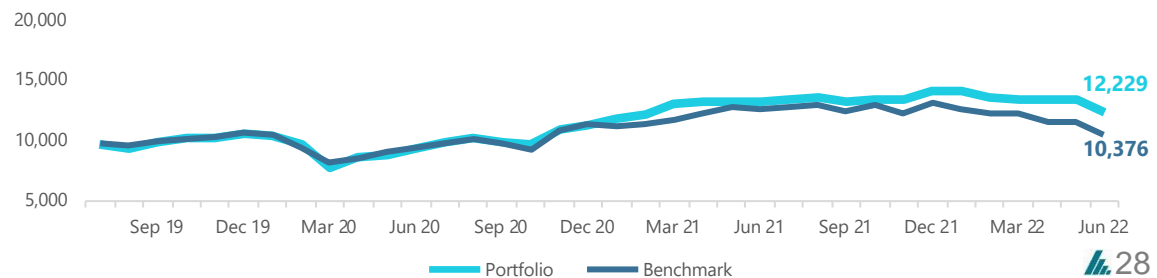
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Cevian Capital II - Activist	358.9	-8.6%	-7.7%	6.9%	4.2%
MSCI EUROPE		-14.5%	-17.6%	1.2%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Europe Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Cevian Capital II - Activist	-8.3%	18	-6.8%	7	8.1%	7	5.5%	16
Median	-13.5%		-17.9%		1.8%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

Cevian Capital II

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	21.77
Benchmark Risk	19.65
Active Risk	8.67
Portfolio Beta	1.02

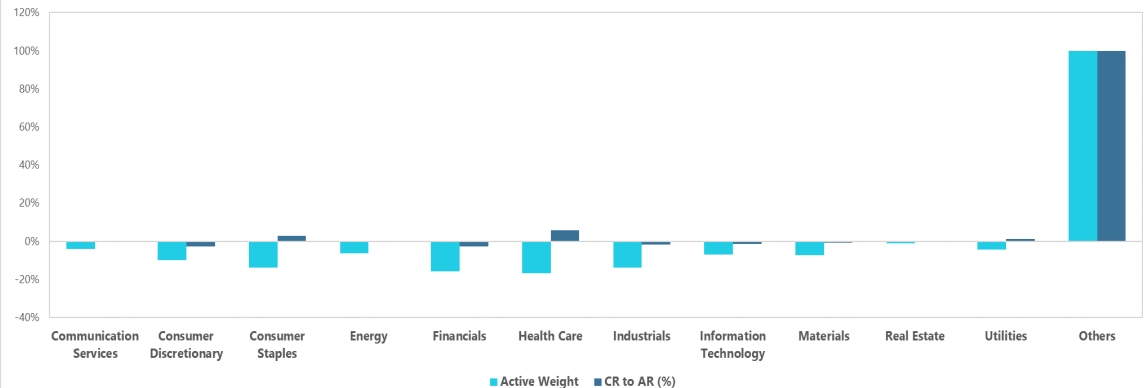
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
CEVIAN CAPITAL II - ACTIVIST	100.00%	0.00%	100.00%	21.77	100.00	0.094
ASTRAZENECA PLC	0.00%	2.33%	-2.33%	27.03	1.48	-0.048
NESTLE SA	0.00%	3.75%	-3.75%	18.65	1.23	-0.021
ROCHE HOLDING AG	0.00%	2.67%	-2.67%	23.87	1.08	-0.028
NOVO NORDISK A/S	0.00%	2.13%	-2.13%	27.54	1.02	-0.034
NOVARTIS AG	0.00%	2.12%	-2.12%	19.80	0.84	-0.027
GSK PLC	0.00%	1.25%	-1.25%	22.38	0.59	-0.034
SANOFI SA	0.00%	1.31%	-1.31%	22.10	0.45	-0.023
UNILEVER PLC	0.00%	1.32%	-1.32%	22.99	0.44	-0.021
SHELL PLC	0.00%	2.26%	-2.26%	34.00	0.38	-0.007

Portfolio Risk by GICS Sector



Note: Commingled fund account with no position-level transparency.

Growth – Global Equity CornerCap US Small Cap

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to exploit small cap market inefficiencies by using proprietary fundamental factors. The strategy may be suited to investors looking to increase U.S. small cap exposure and diversify portfolio through an active quantitative investment approach.

Inception Date: October 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	2,455.3	2,537.0
No. Of Issues	339.0	--
Dividend Yield	1.9	1.5
Return on Equity	12.6	10.9
Price to Sales	3.7	10.9
Price to Book	-0.7	3.1
PE Ratio	15.5	33.6

Top Holdings (% of assets)

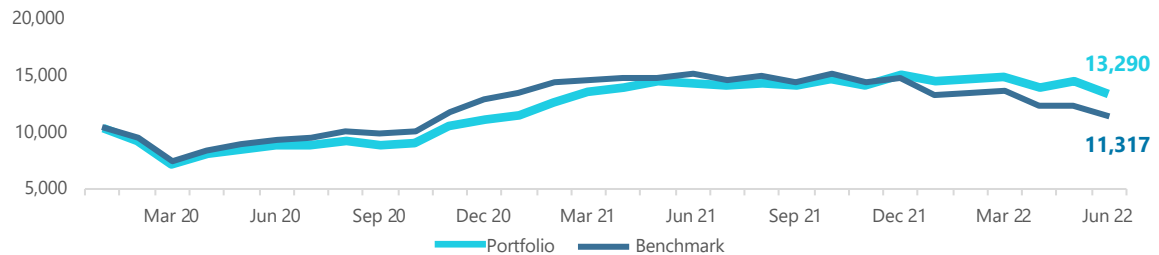
PALOMAR HOLDINGS INC	0.5%
UNITED THERAPEUTICS CORP	0.5%
SP PLUS CORP	0.5%
SOLARIS OILFIELD INFRAST A	0.5%
DORMAN PRODUCTS INC	0.5%
Top 5 Holdings	2.5%

Performance (net)¹

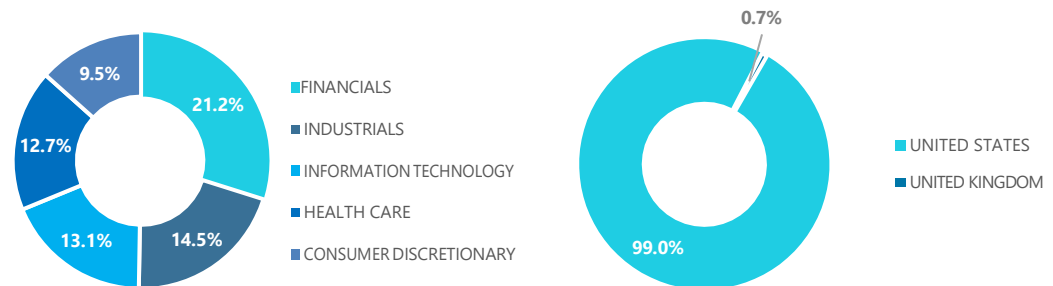
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Cornercap US Small Cap - EMP	76.6	-10.6%	-6.6%	9.9%	--
RUSSELL 2000		-17.2%	-25.2%	4.2%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Cornercap US Small Cap - EMP	-10.5%	5	-6.1%	7	10.5%	8	--	--
Median	-15.3%		-14.6%		6.9%		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

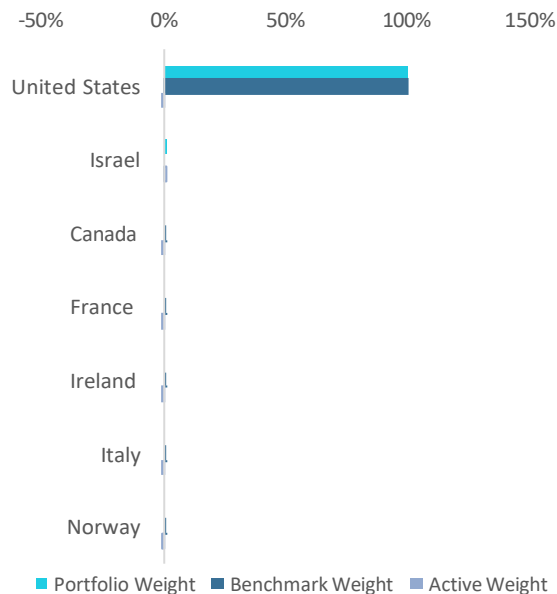
CornerCap US Small Cap

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	23.67
Benchmark Risk	25.20
Active Risk	5.04
Portfolio Beta	0.92

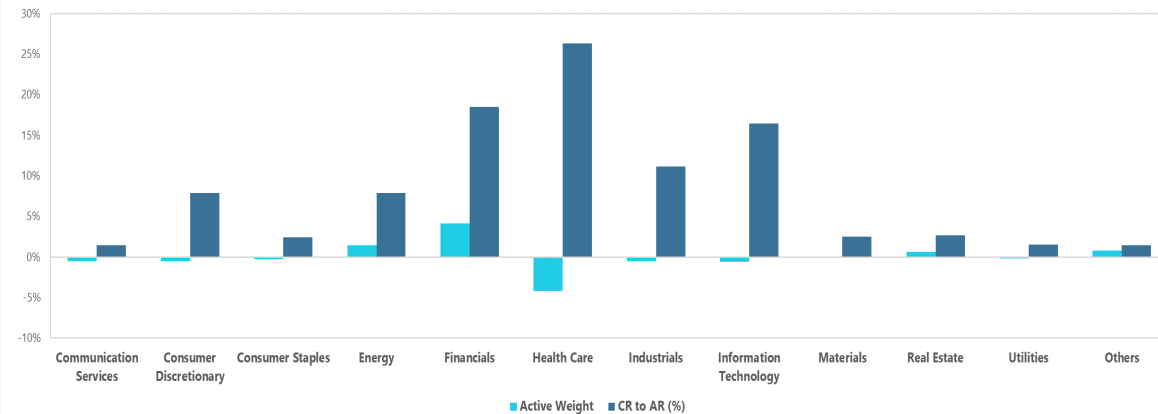
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
WHITING PETROLEUM CORPORATION	0.46%	0.00%	0.46%	61.00	1.60	0.075
APA CORP	0.45%	0.00%	0.45%	61.37	1.53	0.073
SSC GOVERNMENT MM GVMXX	0.75%	0.00%	0.75%	2.91	1.44	-0.003
BIOHAVEN PHARMACEUTICAL HLDG	0.00%	0.40%	-0.40%	56.54	1.34	-0.268
OVINTIV INC	0.48%	0.00%	0.48%	62.26	1.33	0.040
MIDLAND STS BANCORP INC	0.47%	0.02%	0.45%	31.54	1.25	0.041
SOLARIS OILFIELD INFRASTRUCTURE INC	0.50%	0.02%	0.48%	57.59	1.20	0.026
PROPETRO HOLDING CORP	0.41%	0.04%	0.37%	66.18	1.19	0.062
MERCANTILE BANK CORP	0.43%	0.02%	0.41%	32.42	1.17	0.045
CNB FINANCIAL CORP	0.39%	0.02%	0.38%	33.10	1.17	0.057

Portfolio Risk by GICS Sector



Growth – Global Equity Frontier US SMID Growth

for the quarter ended June 30, 2022

Strategy

Seeks to invest in high quality companies at attractive valuations and sustainable secular growth through fundamental analysis. The strategy may be suited to investors looking to increase U.S. mid and small cap exposures and generate returns through stock selection and low turnover.

Inception Date: June 2002

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	6,782.0	5,538.1
No. Of Issues	143.0	--
Dividend Yield	0.6	1.5
Return on Equity	13.1	14.4
Price to Sales	3.1	6.8
Price to Book	6.5	0.6
PE Ratio	26.0	23.7

Top Holdings (% of assets)

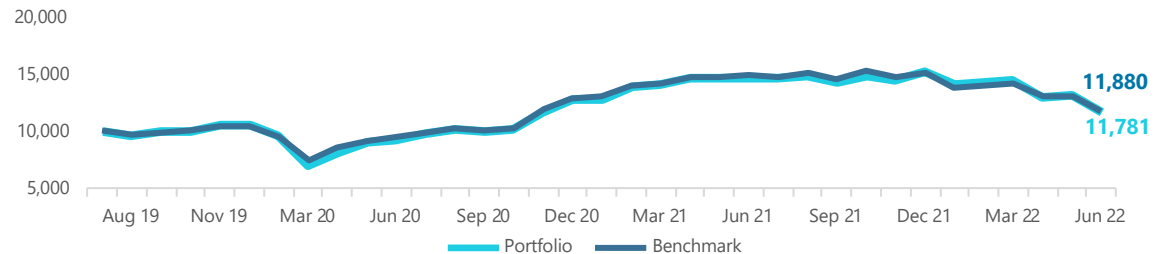
BUILDERS FIRSTSOURCE INC	2.0%
LPL FINANCIAL HOLDINGS INC	1.9%
KBR INC	1.9%
MACOM TECHNOLOGY SOLUTIONS H	1.7%
INSULET CORP	1.5%
Top 5 Holdings	9.0%

Performance (net)¹

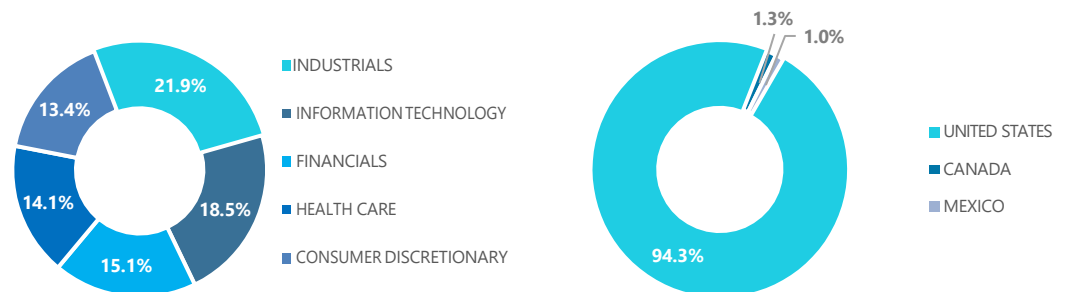
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Frontier US SMID Growth	241.7	-18.9%	-20.2%	5.6%	5.5%
RUSSELL 2500		-17.0%	-21.0%	5.9%	7.0%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Frontier US SMID Growth	-18.7%	83	-19.6%	74	6.4%	63	6.3%	68
Median	-15.3%		-14.6%		6.9%		7.1%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

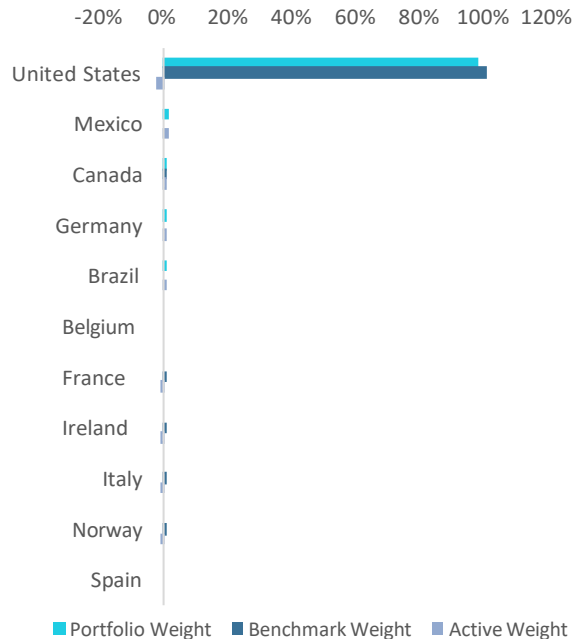
Growth Risk Analysis – Global Equity Frontier US SMID Growth

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	26.55
Benchmark Risk	24.21
Active Risk	4.22
Portfolio Beta	1.09

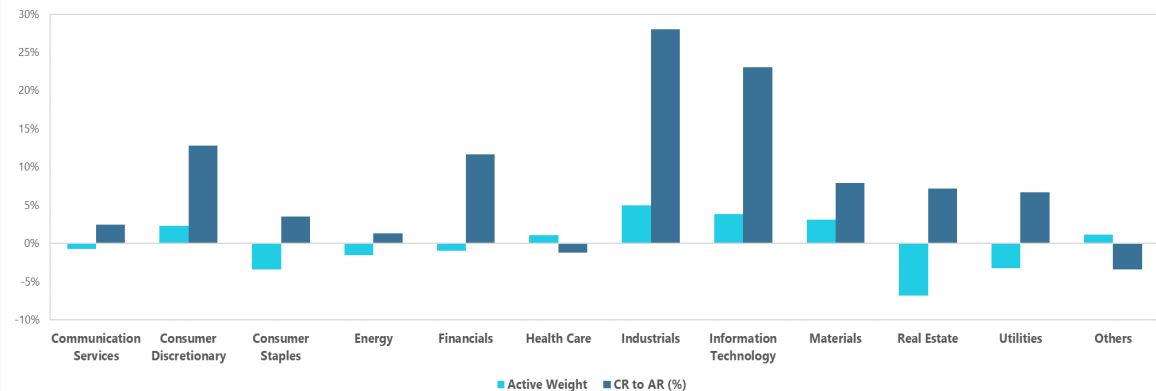
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ARRAY TECHNOLOGIES INC	1.11%	0.03%	1.08%	79.21	6.39	0.370
MRC GLOBAL INC	1.54%	0.02%	1.52%	56.66	4.85	0.254
WOLFSPEED INC	1.34%	0.14%	1.20%	54.46	4.74	0.287
BUILDERS FIRSTSOURCE INC	1.99%	0.18%	1.81%	43.02	3.93	0.211
MACOM TECHNOLOGY SOLUTIONS INC	1.71%	0.04%	1.66%	37.82	3.77	0.215
DANA INC	1.32%	0.03%	1.28%	48.24	3.74	0.243
CAESARS ENTERTAINMENT INC	1.12%	0.00%	1.12%	57.81	3.72	0.259
ALBEMARLE CORP	1.39%	0.00%	1.39%	46.01	3.24	0.218
CONTROLADORA VUELA	1.01%	0.00%	1.01%	59.71	3.02	0.246
STONERIDGE INC	0.95%	0.01%	0.94%	55.75	2.33	0.224

Portfolio Risk by GICS Sector



Growth – Global Equity Genesis Emerging Markets

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate long-term returns in emerging markets through independent bottom-up research and creating a diversified portfolio. The strategy may be suited to investors looking to take advantage of emerging market growth opportunities at attractive valuations.

Inception Date: September 2007

Risk Statistics (since inception)

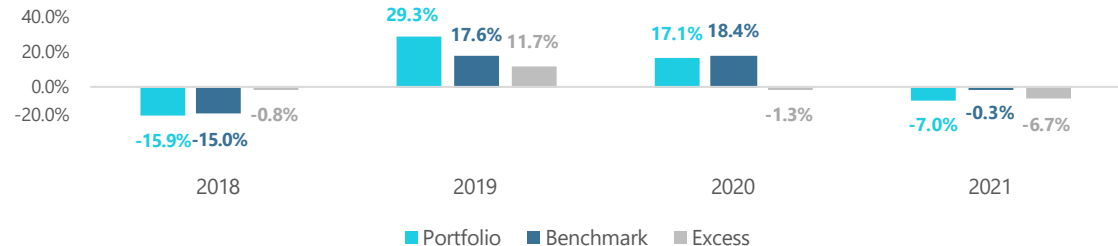
Standard Deviation	21.0%
Benchmark Standard Deviation	21.6%
Sharpe Ratio	0.22
Information Ratio	0.25
Beta	0.95
Tracking Error	4.3%

Performance (net)¹

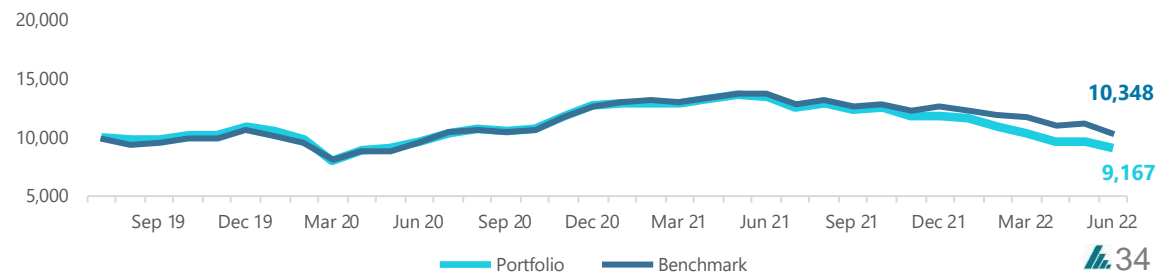
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Genesis Emerging Markets	490.9	-11.9%	-32.4%	-2.9%	1.0%
MSCI EM IMI Custom Benchmark		-12.1%	-24.8%	1.1%	2.3%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Emerging Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Genesis Emerging Markets	-11.7%	40	-31.9%	91	-2.1%	92	1.8%	82
Median	-12.1%		-24.9%		1.7%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

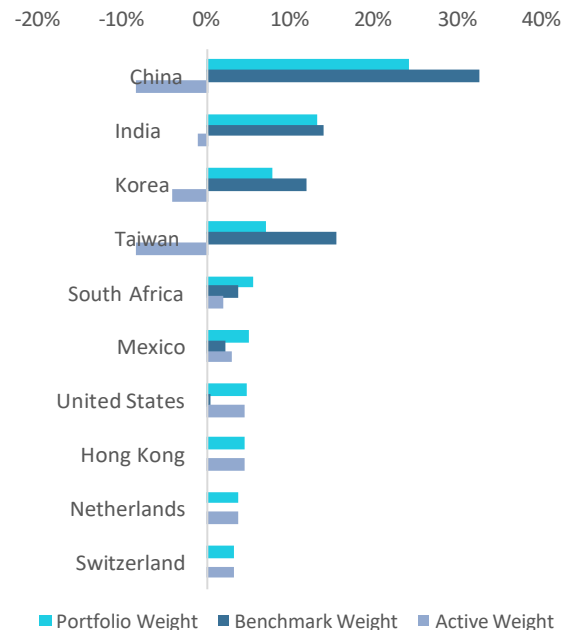
Growth Risk Analysis – Global Equity Genesis Emerging Markets

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	18.02
Benchmark Risk	18.76
Active Risk	5.09
Portfolio Beta	0.92

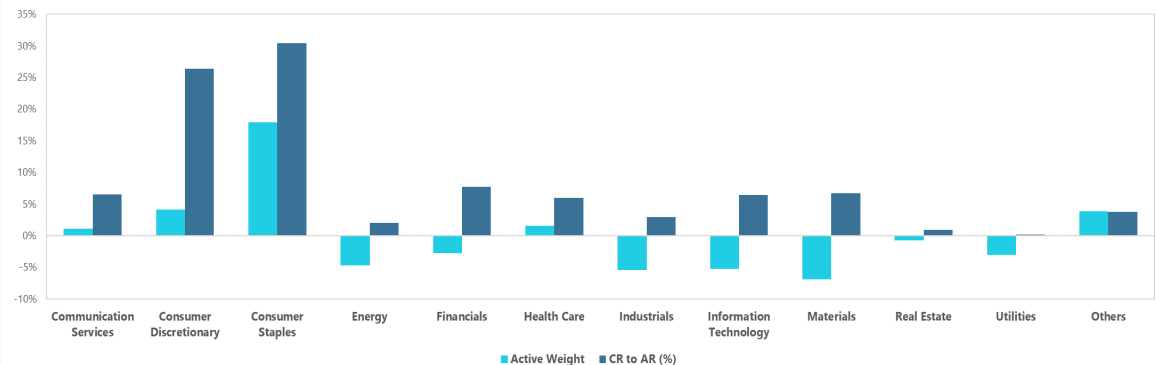
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
NEW ORIENTAL EDUCATION & TECH GRP	2.45%	0.00%	2.45%	73.67	9.65	0.149
COMPAGNIE FINANCIERE RICHEMONT SA	2.98%	0.00%	2.98%	36.69	5.47	0.041
HEINEKEN NV	1.92%	0.00%	1.92%	24.06	3.95	0.053
WULIANGYE YIBIN CO LTD	2.15%	0.00%	2.15%	37.25	3.87	0.040
HEINEKEN HOLDING NV	1.71%	0.00%	1.71%	23.94	3.46	0.051
YANDEX N.V.	0.68%	0.00%	0.68%	85.37	3.45	0.206
MAGNIT PAO	0.61%	0.00%	0.61%	75.32	2.94	0.193
MEDICLINIC INTERNATIONAL PLC	1.81%	0.00%	1.81%	32.18	2.84	0.028
GREEK ORGA OF FOOTBALL PROGNOSTICS	1.79%	0.04%	1.75%	33.63	2.67	0.025
US Dollar	2.49%	0.00%	2.49%	0.00	2.55	0.000

Portfolio Risk by GICS Sector



Growth – Global Equity

Global Alpha

for the quarter ended June 30, 2022

Strategy

Seeks to identify mispriced companies with high rates of growth, strong balance sheets, and high insider ownership using a bottom-up, research-based approach coupled with investment themes. The strategy may be suited to investors looking to increase exposure to international small cap stocks.

Inception Date: November 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	2,204.1	2,395.8
No. Of Issues	66.0	--
Dividend Yield	2.8	3.8
Return on Equity	9.8	13.0
Price to Sales	13.0	7.8
Price to Book	2.3	2.3
PE Ratio	18.0	14.6

Top Holdings (% of assets)

BIFFA PLC	4.0%
ORMAT TECHNOLOGIES INC	3.4%
L OCCITANE INTERNATIONAL SA	3.2%
SEGA SAMMY HOLDINGS INC	3.1%
INTERNET INITIATIVE JAPAN	3.1%

Top 5 Holdings

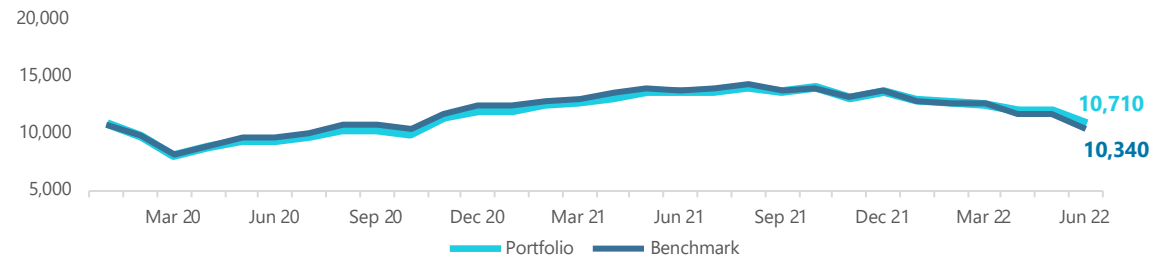
16.7%

Performance (net)¹

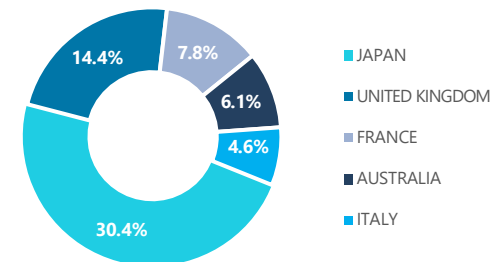
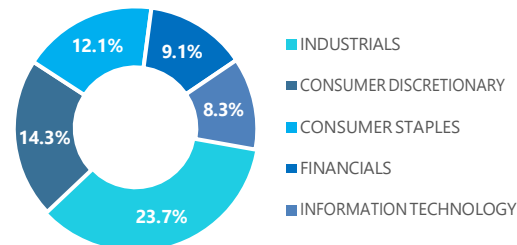
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Global Alpha Intl Small Cap - EMP	162.1	-14.1%	-21.1%	2.3%	--
MSCI EAFE SMALL CAP NET		-17.7%	-24.0%	1.1%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: International Equity Funds Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Global Alpha Intl Small Cap - EMP	-13.9%	60	-20.6%	64	3.1%	58	--	--
Median	-13.5%		-17.3%		4.3%		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

Global Alpha

for the quarter ended June 30, 2022

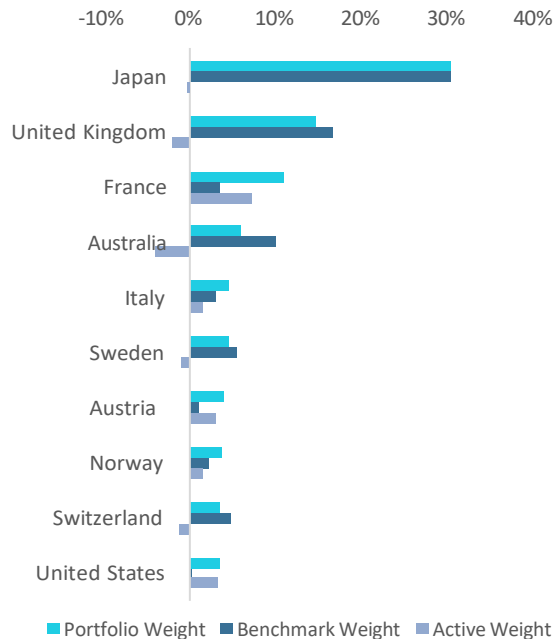


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	19.47
Benchmark Risk	19.67
Active Risk	4.35
Portfolio Beta	0.97

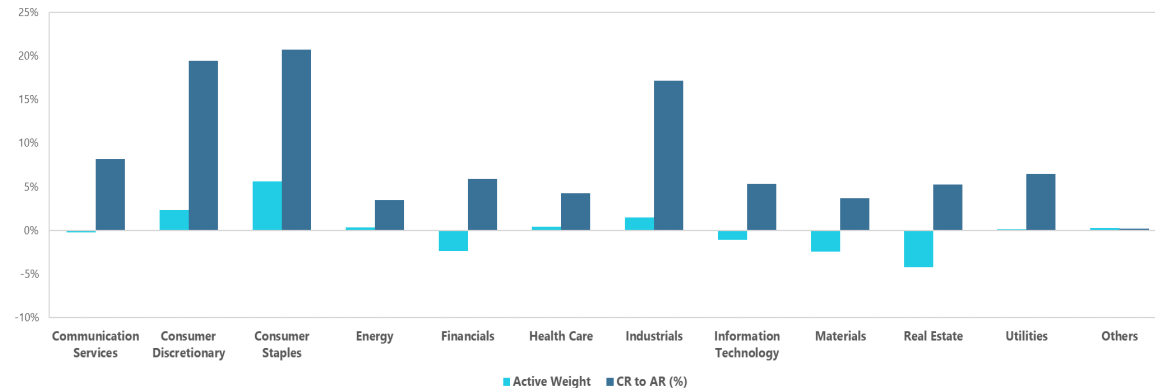
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
L'OCCITANE INTERNATIONAL SA	3.18%	0.00%	3.18%	38.23	8.20	0.082
NORWAY ROYAL SALMON ASA	3.01%	0.01%	3.00%	47.14	8.05	0.086
INTERNET INITIATIVE JAPAN INC	3.09%	0.08%	3.02%	37.66	7.46	0.077
ORMAT TECHNOLOGIES INC	3.36%	0.00%	3.36%	38.03	6.67	0.056
BIFFA PLC	3.97%	0.06%	3.91%	38.48	6.25	0.039
ASICS CORP	2.59%	0.12%	2.46%	45.95	5.81	0.072
SEGA SAMMY HOLDINGS INC	3.12%	0.12%	3.01%	30.51	5.01	0.042
AUTOGRILL SPA	2.50%	0.05%	2.45%	47.22	4.69	0.053
SOPRA STERIA GROUP SA	3.08%	0.10%	2.99%	30.55	3.30	0.017
AIN HOLDINGS	1.81%	0.06%	1.76%	32.78	2.92	0.042

Portfolio Risk by GICS Sector



Growth – Global Equity

JANA JSI Fund V

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to invest in undervalued public companies located primarily in North America, with a potential catalyst for value creation that management has not considered or is not executing. The strategy may be suited to investors looking to increase portfolio diversification through activist approach and focus on absolute return.

Inception Date: October 2016

Risk Statistics (since inception)

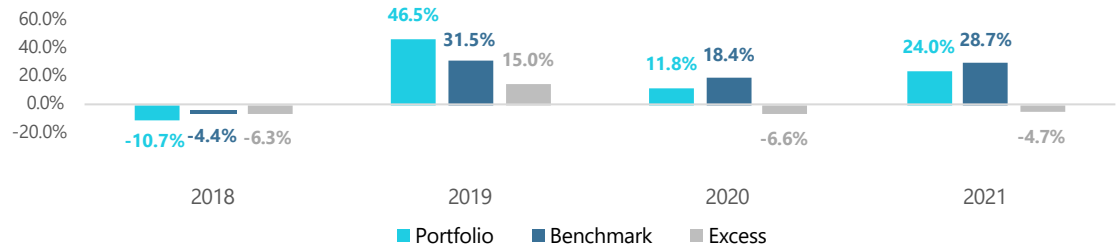
Standard Deviation	24.0%
Benchmark Standard Deviation	15.8%
Sharpe Ratio	0.73
Information Ratio	0.23
Beta	0.80
Tracking Error	20.7%

Performance (net)¹

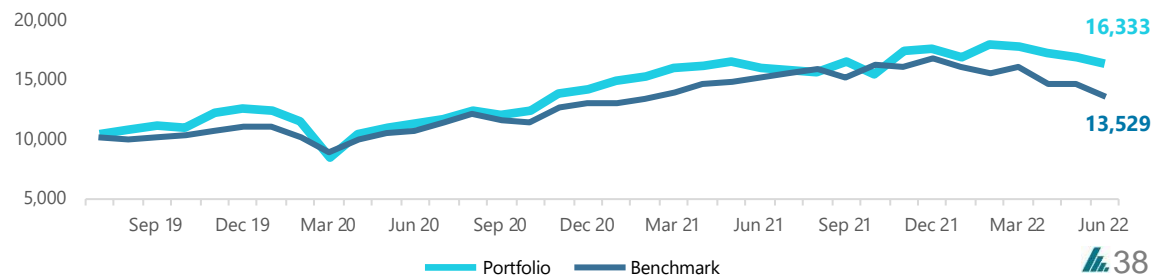
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Jana JSI Fund V - Activist	118.4	-8.0%	2.3%	17.8%	10.4%
S&P 500 INDEX		-16.1%	-10.6%	10.6%	11.3%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Large Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Jana JSI Fund V - Activist	-7.7%	3	6.1%	2	22.6%	2	14.5%	3
Median	-16.1%		-11.2%		9.5%		10.6%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

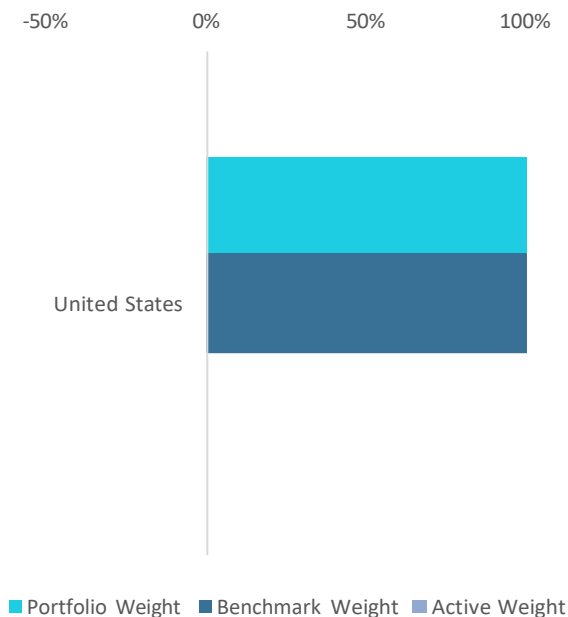
JANA JSI Fund V

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.52
Benchmark Risk	17.77
Active Risk	12.95
Portfolio Beta	0.84

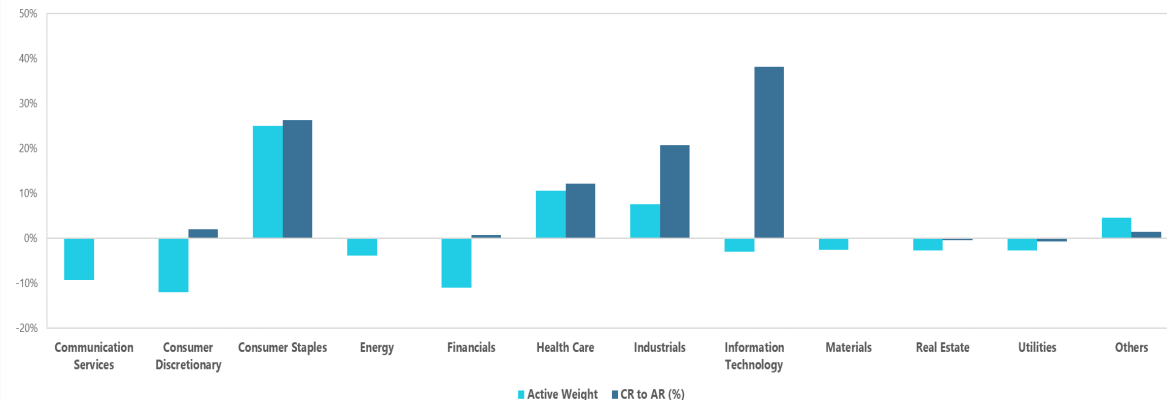
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ZENDESK INC	20.95%	0.00%	20.95%	43.21	33.12	0.165
MERCURY SYSTEMS INC	15.34%	0.00%	15.34%	42.28	21.00	0.138
TREEHOUSE FOODS INC	12.50%	0.00%	12.50%	35.18	14.25	0.108
CONAGRA BRANDS	18.59%	0.04%	18.55%	21.11	13.36	0.054
ENCOMPASS HEALTH CORPORATION	14.21%	0.00%	14.21%	28.34	9.73	0.049
LABORATORY CORPORATION OF AMERICA	9.91%	0.06%	9.85%	25.48	5.38	0.031
APPLE INC	0.00%	7.07%	-7.07%	28.79	2.16	-0.079
NEW RELIC INC	3.97%	0.00%	3.97%	45.41	1.72	0.016
TESLA INC	0.00%	2.36%	-2.36%	52.63	1.24	-0.107
NVIDIA CORP	0.00%	1.78%	-1.78%	42.59	0.79	-0.097

Portfolio Risk by GICS Sector



Note: Data is as of March 31, 2022 (one quarter lagged).

Growth – Global Equity

JPMorgan Strategic Beta Non-US

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to capture incremental alpha through investing in equity factors that are rule-based, transparent, and academically proven. This strategy may be suited to investors looking to gain equity factor exposures in non-U.S. markets at lower volatility and cost than active strategies.

Inception Date: August 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	68,387.5	67,474.5
No. Of Issues	1,644.0	--
Dividend Yield	3.9	3.4
Return on Equity	19.3	17.3
Price to Sales	3.6	4.4
Price to Book	2.2	2.6
PE Ratio	11.6	13.7

Top Holdings (% of assets)

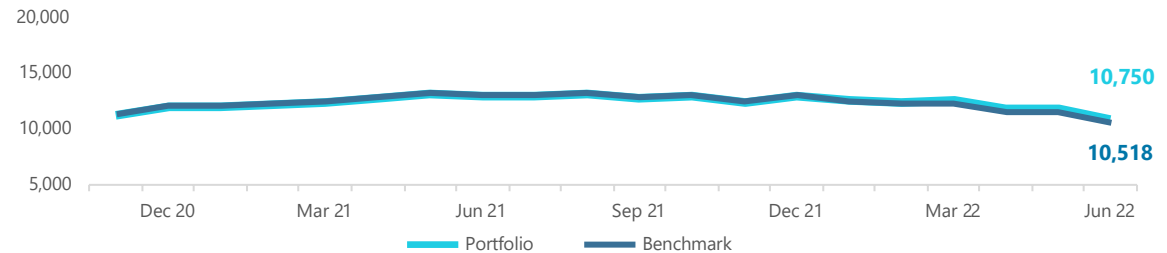
ISHARES MSCI INDIA ETF	3.8%
TAIWAN SEMICONDUCTOR MANUFAC	1.5%
ISHARES MSCI SAUDI ARABIA ETF	1.3%
NESTLE SA REG	1.3%
TENCENT HOLDINGS LTD	1.1%
Top 5 Holdings	9.0%

Performance (net)¹

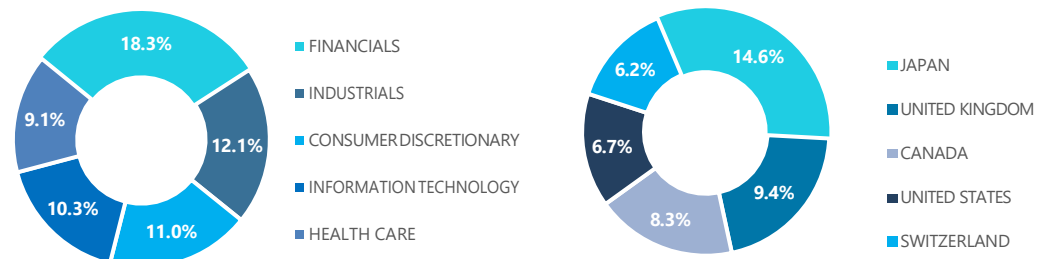
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
JPMAM Strategic Beta Non-US	532.5	-13.8%	-17.3%	--	--
MSCI ACWI ex USA IMI Net		-14.3%	-19.9%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: International Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
JPMAM Strategic Beta Non-US	-13.8%	61	-17.3%	31	--	--	--	--
Median	-13.5%		-19.5%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

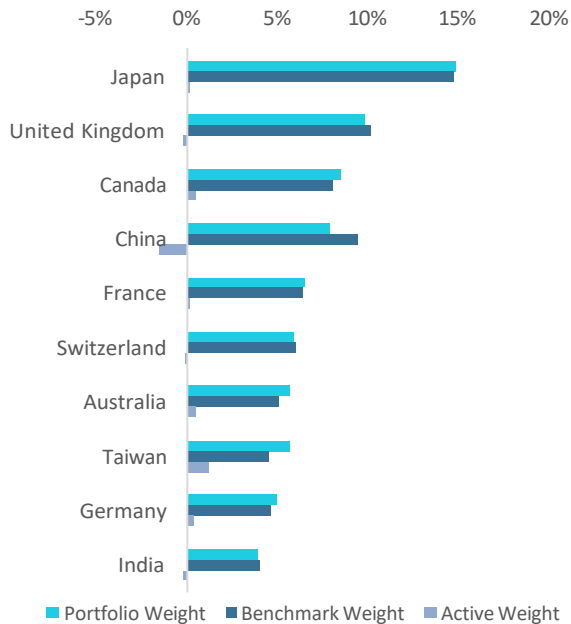
JPMorgan Strategic Beta Non-US

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	17.34
Benchmark Risk	17.51
Active Risk	1.07
Portfolio Beta	0.99

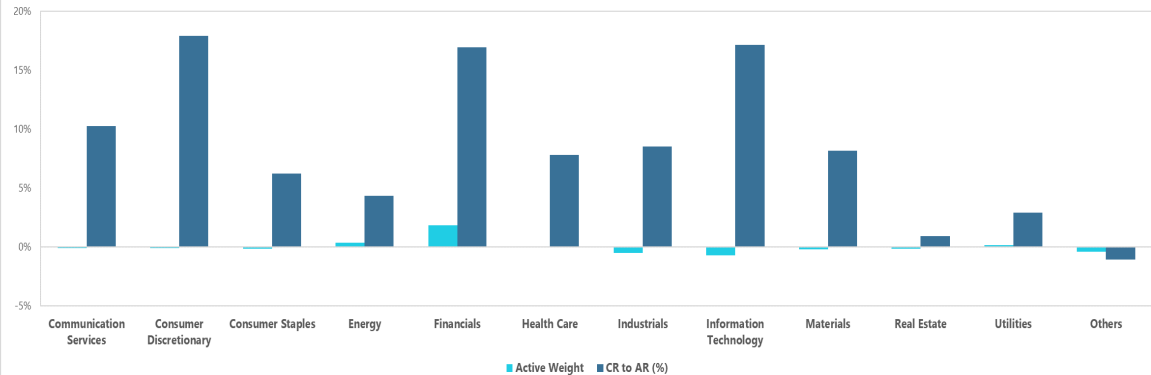
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ALIBABA GROUP HOLDING LTD	0.00%	0.85%	-0.85%	50.36	17.65	-0.255
AURELIUS EQUITY OPPORTUNITIES SE & CO.	0.78%	0.00%	0.78%	41.86	8.01	0.077
ASML HOLDING NV	0.00%	0.76%	-0.76%	35.67	6.38	-0.123
JD.COM INC	0.04%	0.25%	-0.22%	51.78	4.58	-0.260
BAIDU INC	0.00%	0.17%	-0.17%	48.90	3.31	-0.246
NETEASE INC	0.00%	0.15%	-0.15%	40.67	1.83	-0.164
VALE SA COMMON STOC	0.25%	0.00%	0.25%	49.70	1.78	0.043
NIO INC	0.05%	0.11%	-0.06%	64.68	1.70	-0.320
XPENG INC	0.00%	0.05%	-0.05%	68.36	1.41	-0.320
KUAISHOU TECHNOLOGY	0.02%	0.08%	-0.05%	60.72	1.39	-0.310

Portfolio Risk by GICS Sector



Growth – Global Equity

JPMorgan Strategic Beta US

for the quarter ended June 30, 2022

Strategy

Seeks to capture incremental alpha through investing in equity factors that are rule-based, transparent, and academically proven. This strategy may be suited to investors looking to gain equity factor exposures in the U.S. at lower volatility and cost than active strategies.

Inception Date: July 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	413,780.0	483,340.6
No. Of Issues	954.0	--
Dividend Yield	1.4	1.3
Return on Equity	30.4	31.3
Price to Sales	4.6	4.9
Price to Book	7.0	7.3
PE Ratio	17.7	19.0

Top Holdings (% of assets)

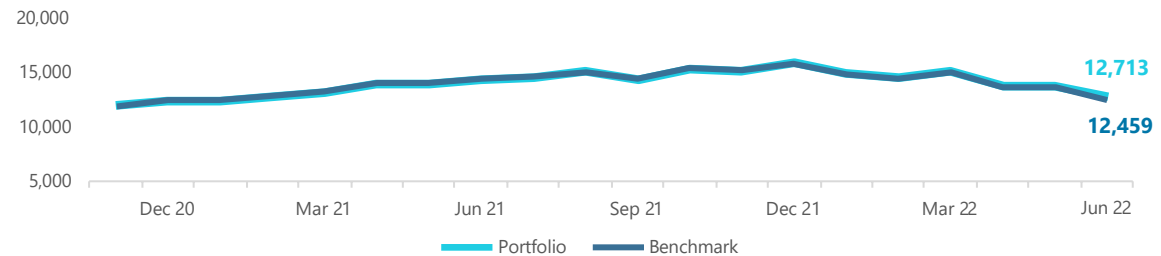
APPLE INC	5.9%
MICROSOFT CORP	4.9%
AMAZON.COM INC	2.5%
ALPHABET INC CL A	1.7%
ALPHABET INC CL C	1.6%
Top 5 Holdings	16.7%

Performance (net)¹

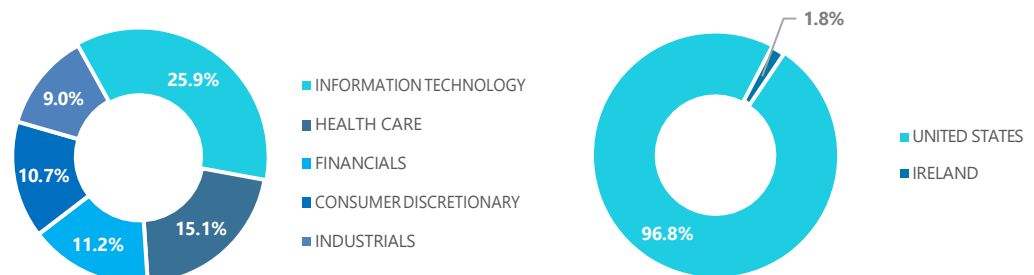
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
JPMAM Strategic Beta US	3,900.9	-16.0%	-11.2%	--	--
MSCI USA IMI Gross		-16.8%	-13.7%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: U.S. Equities Total Large Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
JPMAM Strategic Beta US	-16.0%	47	-11.2%	49	--	--	--	--
Median	-16.1%		-11.2%		--		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

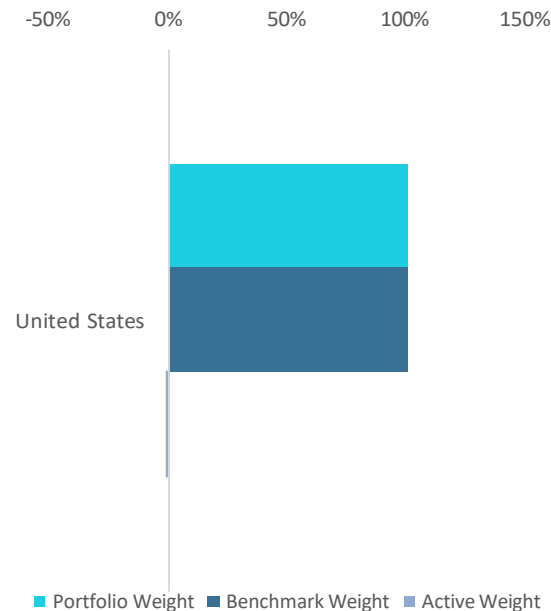
JPMorgan Strategic Beta US

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.33
Benchmark Risk	19.78
Active Risk	0.88
Portfolio Beta	0.98

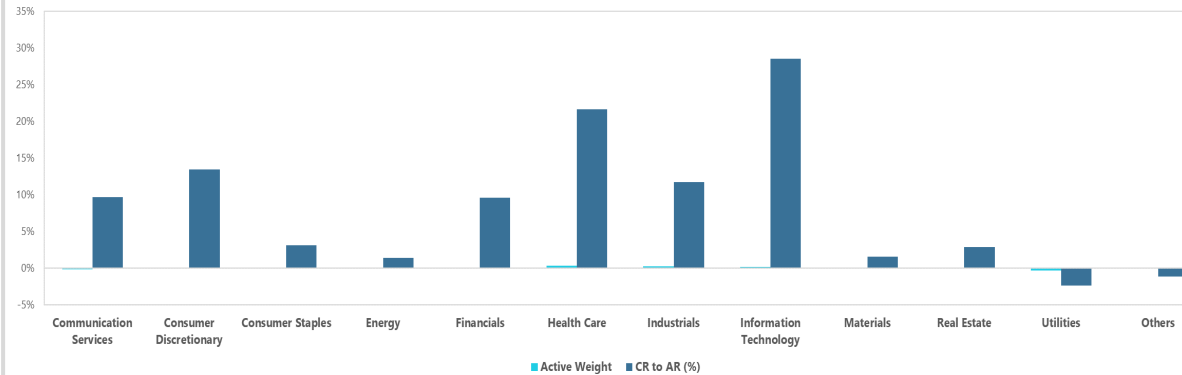
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
JPMORGAN CHASE & CO	0.00%	0.88%	-0.88%	28.19	4.48	-0.149
SSC GOVERNMENT MM GVMXX	0.13%	0.00%	0.13%	2.91	1.55	0.003
MONGODB INC	0.01%	0.05%	-0.04%	59.64	1.27	-0.394
OKTA INC	0.00%	0.04%	-0.04%	59.15	1.24	-0.412
PALANTIR TECHNOLOGIES INC	0.00%	0.04%	-0.04%	61.05	1.20	-0.374
TWILIO INC	0.01%	0.04%	-0.03%	56.58	1.15	-0.419
CROWDSTRIKE HOLDINGS INC	0.04%	0.09%	-0.04%	52.58	1.09	-0.319
BLOCK INC	0.05%	0.08%	-0.03%	56.66	1.06	-0.389
ROBLOX CORP	0.00%	0.03%	-0.03%	65.43	1.03	-0.401
ZOOM VIDEO COMMUNICATIONS	0.02%	0.06%	-0.04%	51.77	1.03	-0.326

Portfolio Risk by GICS Sector



Growth – Global Equity

Lazard Emerging Markets

for the quarter ended June 30, 2022

Strategy

Seeks to provide long-term capital appreciation by investing in companies trading at a discount to their estimated net asset value, sum of the parts valuation, and/or underlying investments/businesses. The strategy may be suited to investors looking to capture growth opportunities in emerging markets and increase portfolio diversification.

Inception Date: February 2013

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	34,346.6	97,423.5
No. Of Issues	52.0	--
Dividend Yield	5.0	3.3
Return on Equity	19.8	17.6
Price to Sales	9.4	4.8
Price to Book	2.4	4.2
PE Ratio	8.8	11.8

Top Holdings (% of assets)

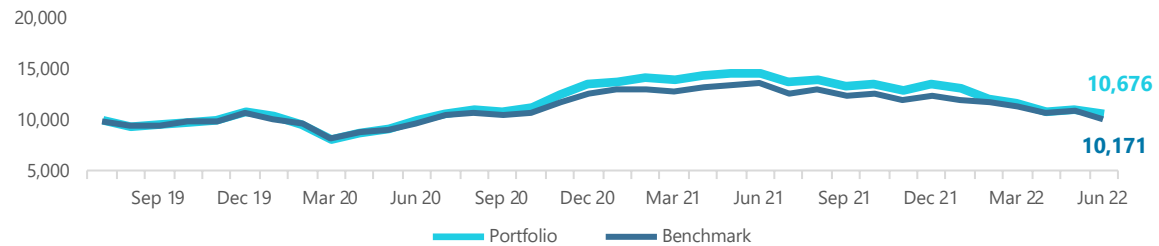
PROSUS NV	9.6%
FIDELITY CHINA SPECIAL SITUATI	6.7%
CITIC SECURITIES CO LTD H	6.5%
JPMORGAN EMERGING MARKETS INVE	6.3%
TEMPLETON EMERGING MARKETS INV	5.6%
Top 5 Holdings	34.7%

Performance (net)¹

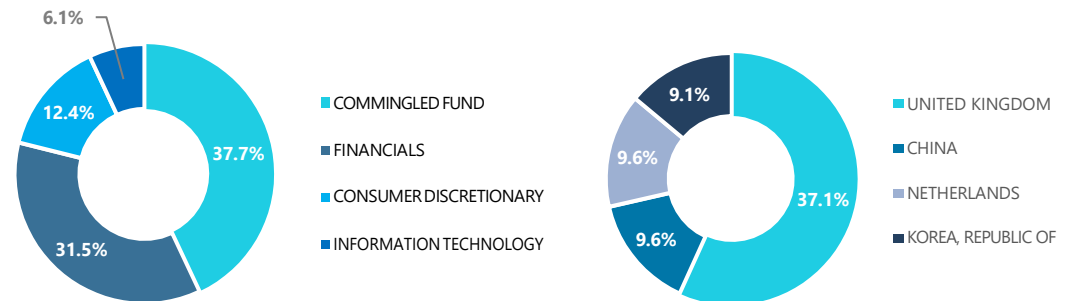
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Lazard Emerging Markets	374.3	-9.3%	-26.9%	2.2%	3.6%
MSCI EMERGING MARKETS		-11.4%	-25.3%	0.6%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Emerging Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Lazard Emerging Markets	-9.2%	13	-26.5%	65	2.9%	37	4.3%	28
Median	-12.1%		-24.9%		1.7%		2.7%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

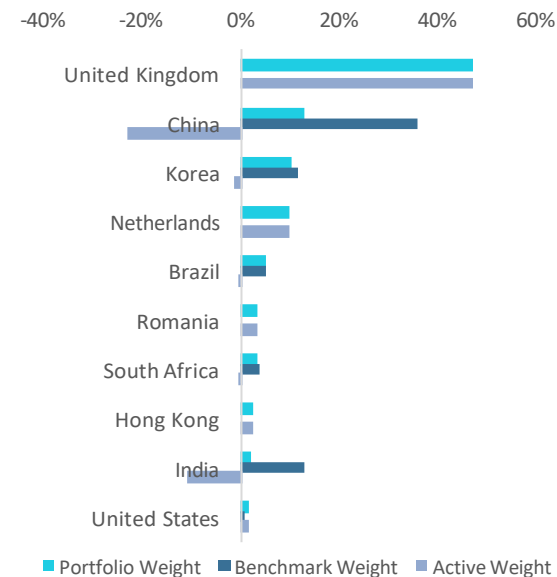
Lazard Emerging Markets

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	20.57
Benchmark Risk	18.74
Active Risk	11.08
Portfolio Beta	0.93

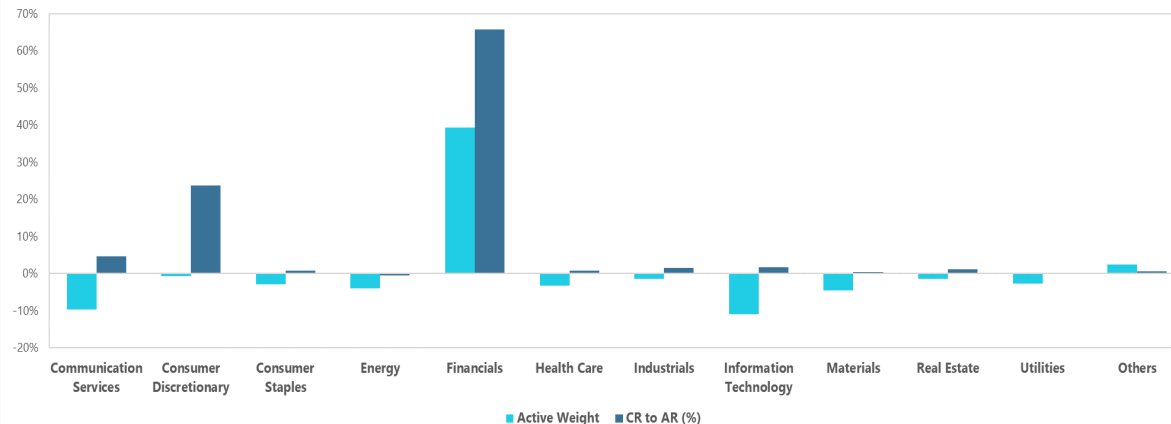
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
PROSUS NV	9.62%	0.00%	9.62%	43.41	15.26	0.153
FIDELITY CHINA SPECIAL SITUATIONS PLC	6.59%	0.00%	6.59%	40.01	11.25	0.166
JPMORGAN EMERGING MK	6.36%	0.00%	6.36%	30.56	9.42	0.141
TEMPLETON EMERG MARKETS INV TRUST	5.50%	0.00%	5.50%	30.71	7.08	0.120
VINACAPITAL VIETNAM OPPORTUNITY FD	3.97%	0.00%	3.97%	28.70	5.12	0.120
TENCENT HOLDINGS LTD	0.26%	4.33%	-4.06%	38.50	3.90	-0.129
ABRDN CHINA INVESTMENT COMPANY LTD	2.35%	0.00%	2.35%	35.30	3.70	0.152
SCHRODER ASIA PAC	2.81%	0.00%	2.81%	28.89	3.67	0.122
ASIA DRAGON TRUST PLC	2.59%	0.00%	2.59%	31.83	3.65	0.133
UTILICO EMERGING MARKETS TRUST PLC	2.34%	0.00%	2.34%	30.11	3.24	0.131

Portfolio Risk by GICS Sector



Note: Weights represent country of domicile of closed-end fund and not country of underlying fund holdings.

Growth – Global Equity

SSGA MSCI ACWI IMI

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide global equity market exposure and passive index returns. This strategy may be suited to investors looking to gain passive, global equity exposures with low tracking error.

Inception Date: January 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	275,242.0	274,587.5
No. Of Issues	6,523.0	--
Dividend Yield	2.2	2.1
Return on Equity	24.3	24.1
Price to Sales	5.0	4.9
Price to Book	5.3	5.3
PE Ratio	16.6	16.9

Top Holdings (% of assets)

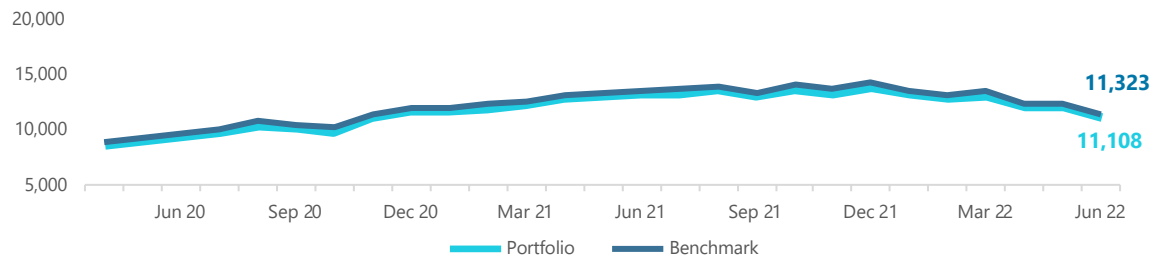
APPLE INC	3.5%
MICROSOFT CORP	2.8%
AMAZON.COM INC	1.5%
ALPHABET INC CL A	1.0%
ALPHABET INC CL C	1.0%
Top 5 Holdings	9.8%

Performance (net)¹

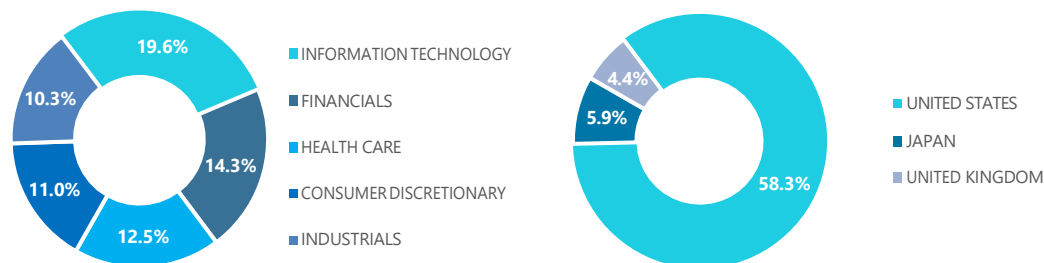
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
SSGA MSCI ACWI IMI	13,119.5	-15.5%	-15.6%	--	--
MSCI ACWI IMI Net		-15.8%	-16.5%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Global Equity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
SSGA MSCI ACWI IMI	-15.5%	76	-15.6%	55	--	--	--	--
Median	-13.4%		-15.0%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

SSGA MSCI ACWI IMI

for the quarter ended June 30, 2022

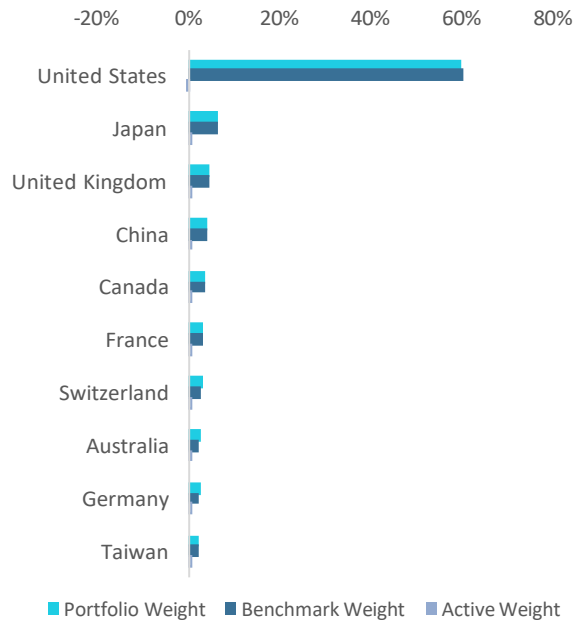


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	18.22
Benchmark Risk	18.25
Active Risk	0.24
Portfolio Beta	1.00

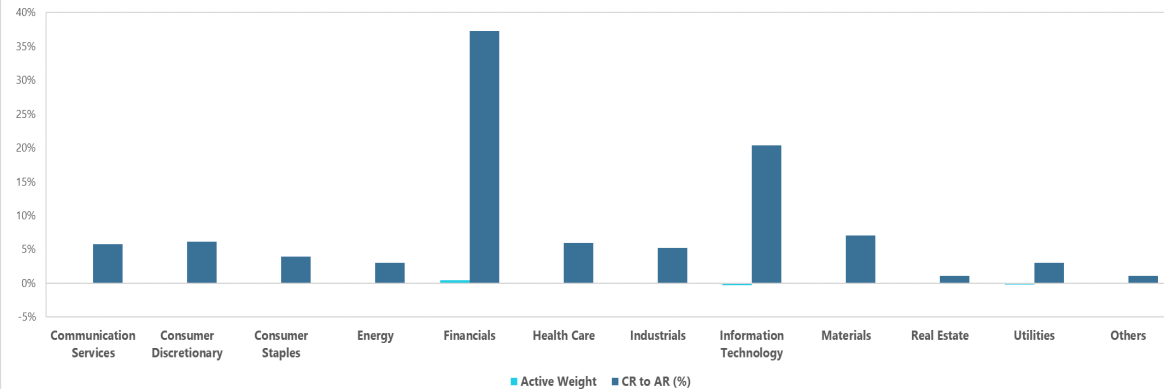
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
AURELIUS EQUITY OPPORTUNITIES SE & CO.	0.30%	0.00%	0.30%	41.86	20.48	0.138
ASML HOLDING NV	0.01%	0.31%	-0.30%	35.67	7.77	-0.086
SSC GOVERNMENT MM GVMXX	0.61%	0.00%	0.61%	2.91	6.45	0.001
EURO CURRENCY	0.14%	0.00%	0.14%	6.90	2.00	0.011
RELIANCE INDUSTRIES LTD	0.00%	0.16%	-0.16%	33.32	1.89	-0.053
AL RAJHI BANK	0.00%	0.07%	-0.07%	28.77	1.58	-0.080
MITSUBISHI UFJ FINANCIAL GRO	0.10%	0.00%	0.10%	22.45	1.32	0.007
SAUDI NATIONAL BANK	0.00%	0.06%	-0.06%	28.05	1.23	-0.073
POUND STERLING	0.09%	0.00%	0.09%	8.12	1.22	0.008
VALE SA COMMON STOC	0.08%	0.00%	0.08%	49.70	1.20	0.010

Portfolio Risk by GICS Sector



Growth – Global Equity Symphony Financial

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to invest in profitable Japanese companies where the share prices do not reflect the true value of the underlying business. The strategy may be suited to investors looking to capture return opportunities in Japan.

Inception Date: November 2016

Risk Statistics (since inception)

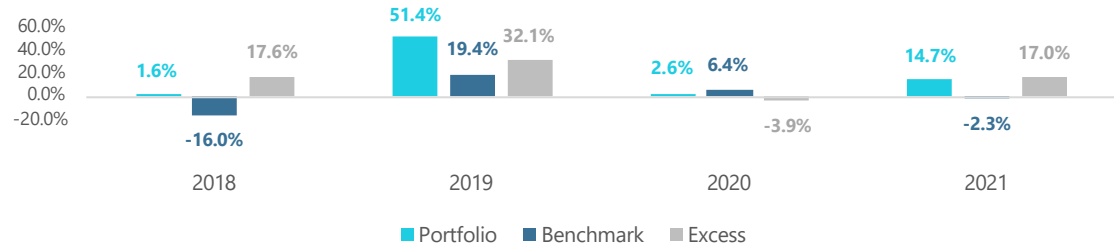
Standard Deviation	22.5%
Benchmark Standard Deviation	13.7%
Sharpe Ratio	0.52
Information Ratio	0.49
Beta	0.91
Tracking Error	18.6%

Performance (net)¹

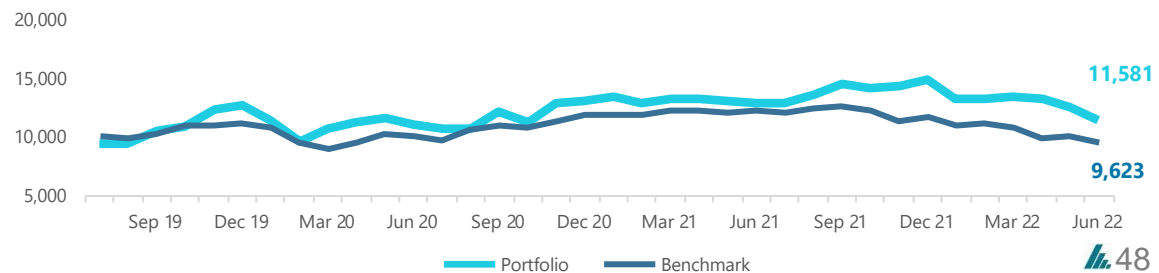
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Symphony Financial - Activist	203.5	-14.3%	-10.4%	5.0%	9.2%
MSCI Japan Small Cap		-11.4%	-21.5%	-1.3%	-0.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Developed Mkt Funds (Active)	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Symphony Financial - Activist	-12.7%	45	-6.7%	8	8.6%	8	12.1%	1
Median	-13.3%		-17.9%		1.8%		2.6%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

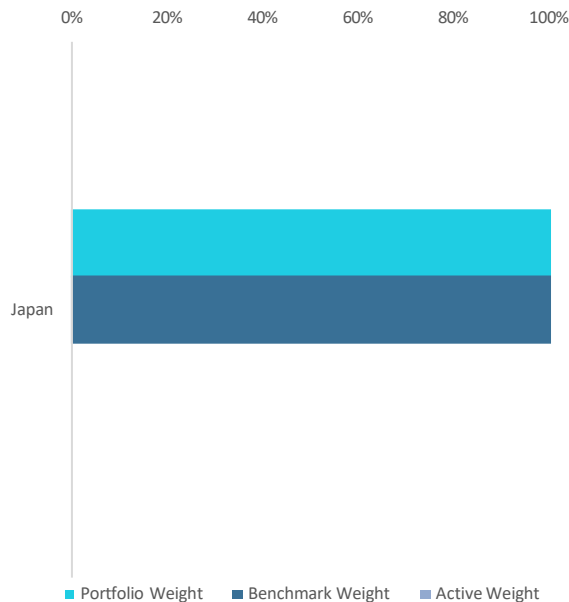
Symphony Financial

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	20.57
Benchmark Risk	15.74
Active Risk	11.96
Portfolio Beta	1.07

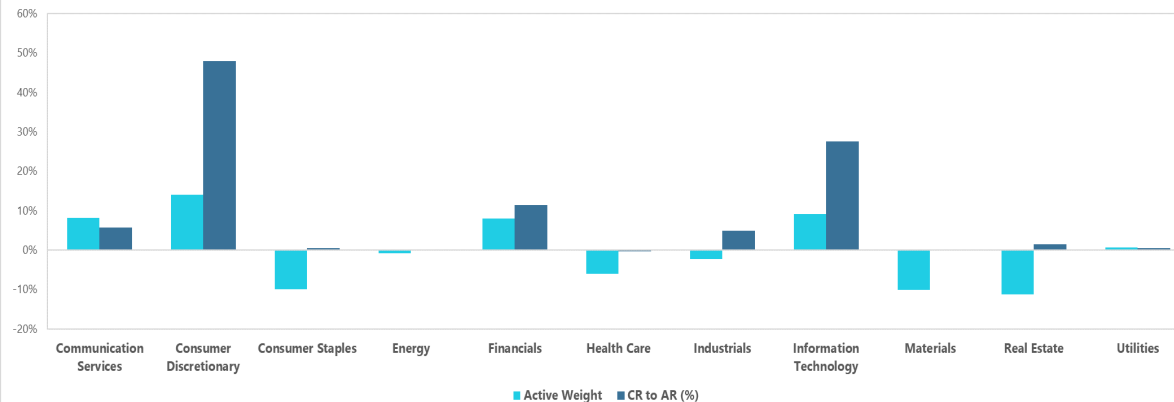
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
NAGAWA	24.89%	0.06%	24.83%	36.08	45.53	0.233
INFOMART	10.53%	0.07%	10.46%	52.09	18.74	0.228
JAPAN SECURITIES FINANCE CO LTD	14.75%	0.08%	14.67%	30.41	11.13	0.104
RIKEN KEIKI	8.88%	0.05%	8.84%	44.98	10.40	0.154
UNDISCLOSED – ENTERTAINMENT ¹	10.52%	0.11%	10.41%	29.38	6.04	0.083
ZUIKO	6.78%	0.00%	6.78%	30.55	2.79	0.063
KOMATSU MATERE CO LTD	5.70%	0.00%	5.70%	32.50	2.44	0.065
NISHIO RENT ALL	8.67%	0.05%	8.62%	25.17	1.70	0.037
DENYO	2.31%	0.00%	2.31%	27.40	0.28	0.028
KANAME KOGYO CO LTD	2.52%	0.00%	2.52%	23.95	0.20	0.023

Portfolio Risk by GICS Sector



¹ Security name undisclosed due to confidentiality reasons.

Growth – Global Equity Systematic US Small Cap Value

for the quarter ended June 30, 2022

Strategy

Seeks to identify high quality small cap companies capable of generating high rates of return with attractive valuations. The strategy may be suited for investors looking to increase U.S. small cap exposure with defensive characteristics.

Inception Date: July 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	3,844.2	2,537.0
No. Of Issues	151.0	--
Dividend Yield	1.5	1.5
Return on Equity	16.9	10.9
Price to Sales	2.0	10.9
Price to Book	2.1	3.1
PE Ratio	13.1	33.6

Top Holdings (% of assets)

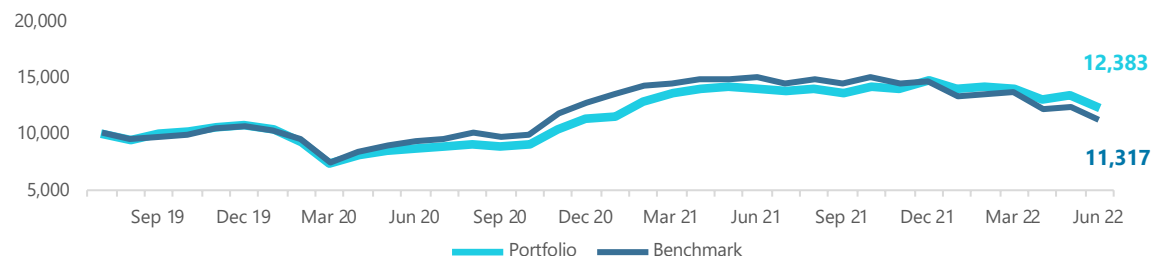
FIRST CITIZENS BCSHS CL A	3.1%
MAGNOLIA OIL + GAS CORP A	2.0%
KBR INC	1.6%
CROSS COUNTRY HEALTHCARE INC	1.6%
SILICON MOTION TECHNOL ADR	1.5%
Top 5 Holdings	9.8%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Systematic US Small Cap Value	173.6	-11.7%	-12.2%	7.4%	--
RUSSELL 2000		-17.2%	-25.2%	4.2%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Systematic US Small Cap Value	-11.6%	8	-11.7%	27	8.0%	31	--	--
Median	-15.3%		-14.6%		6.9%		7.1%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

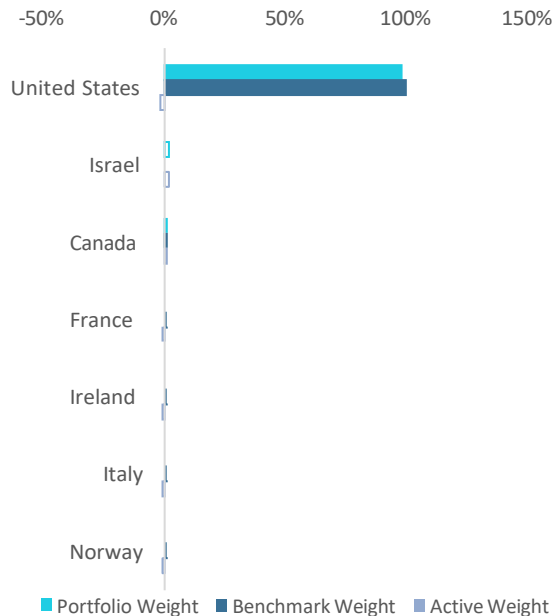
Growth Risk Analysis – Global Equity Systematic US Small Cap Value

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	22.44
Benchmark Risk	25.20
Active Risk	6.25
Portfolio Beta	0.87

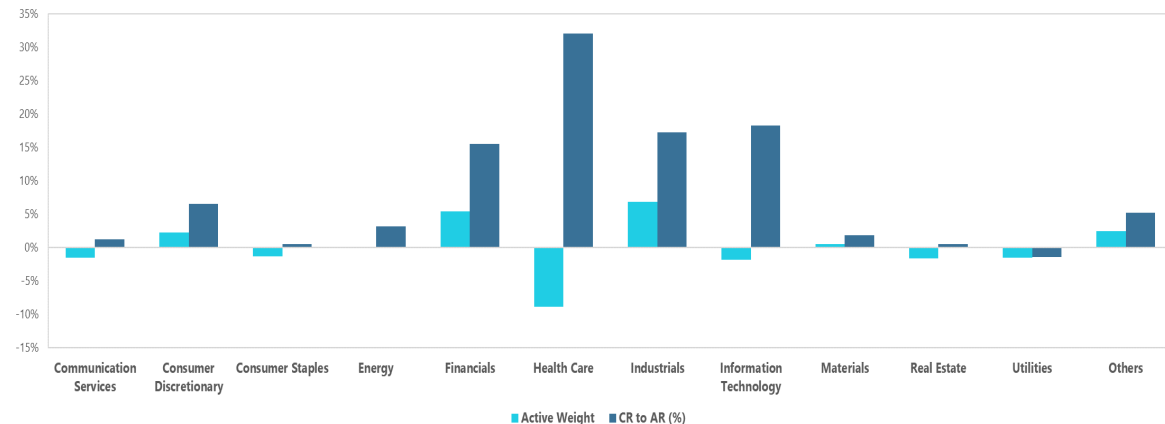
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
SSC GOVERNMENT MM GVMXX	2.46%	0.00%	2.46%	2.91	5.35	0.000
FIRST CITIZENS BANCSHARES INC NRTH	3.14%	0.00%	3.14%	37.92	4.94	-0.038
NORTHWESTERN CORP	1.53%	0.14%	1.38%	23.82	2.68	-0.015
WASHINGTON FEDERAL INC	1.26%	0.09%	1.18%	30.38	2.34	-0.012
SILICON MOTION TECHNOLOGY CORP	1.54%	0.00%	1.54%	46.71	2.27	-0.044
MAGNOLIA OIL & GAS CORP	2.00%	0.15%	1.84%	53.62	1.82	-0.075
WEBSTER FINANCIAL CORP	1.27%	0.00%	1.27%	34.95	1.77	-0.049
EVEREST RE GROUP LTD	1.06%	0.00%	1.06%	26.59	1.74	-0.034
SELECTIVE INSURANCE GROUP INC	1.39%	0.23%	1.16%	27.27	1.68	-0.046
MUELLER INDUSTRIES INC	1.27%	0.13%	1.14%	33.23	1.65	-0.046

Portfolio Risk by GICS Sector

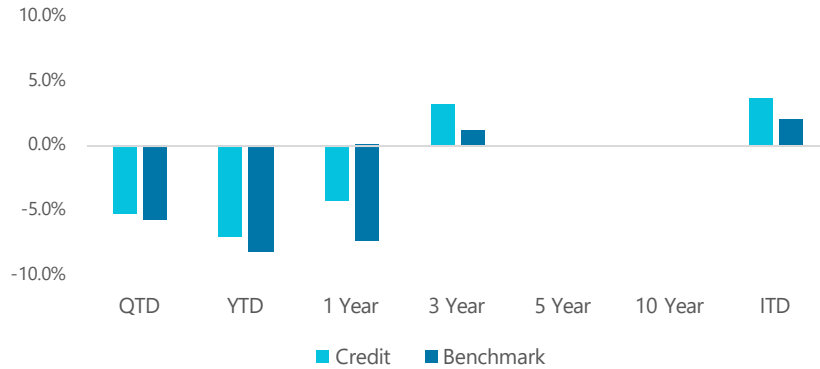


credit

Summary

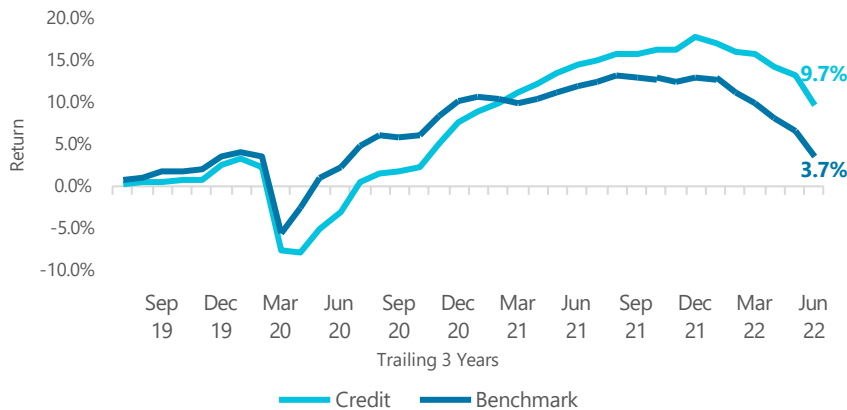
for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Credit	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Benchmark	-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Excess	0.5%	1.3%	3.3%	1.9%	--	--	1.6%

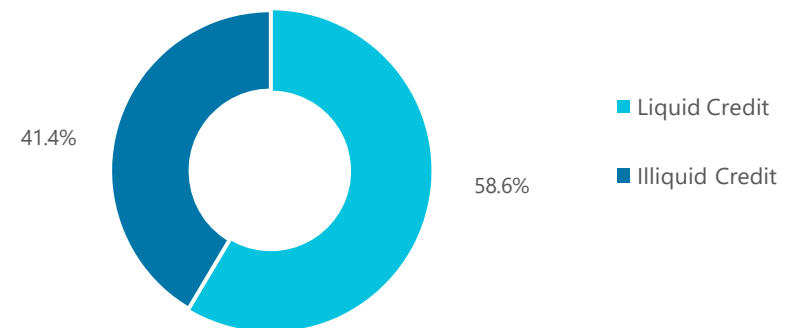
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Liquid Credit	-7.9%	--	--	--
Liquid Credit Policy Benchmark	-7.6%	--	--	--
Excess	-0.4%	--	--	--
Illiquid Credit	-1.0%	6.7%	6.7%	11.2%
Illiquid Credit Policy Benchmark	-3.5%	-3.4%	-3.4%	3.4%
Excess	2.5%	10.1%	10.1%	7.9%

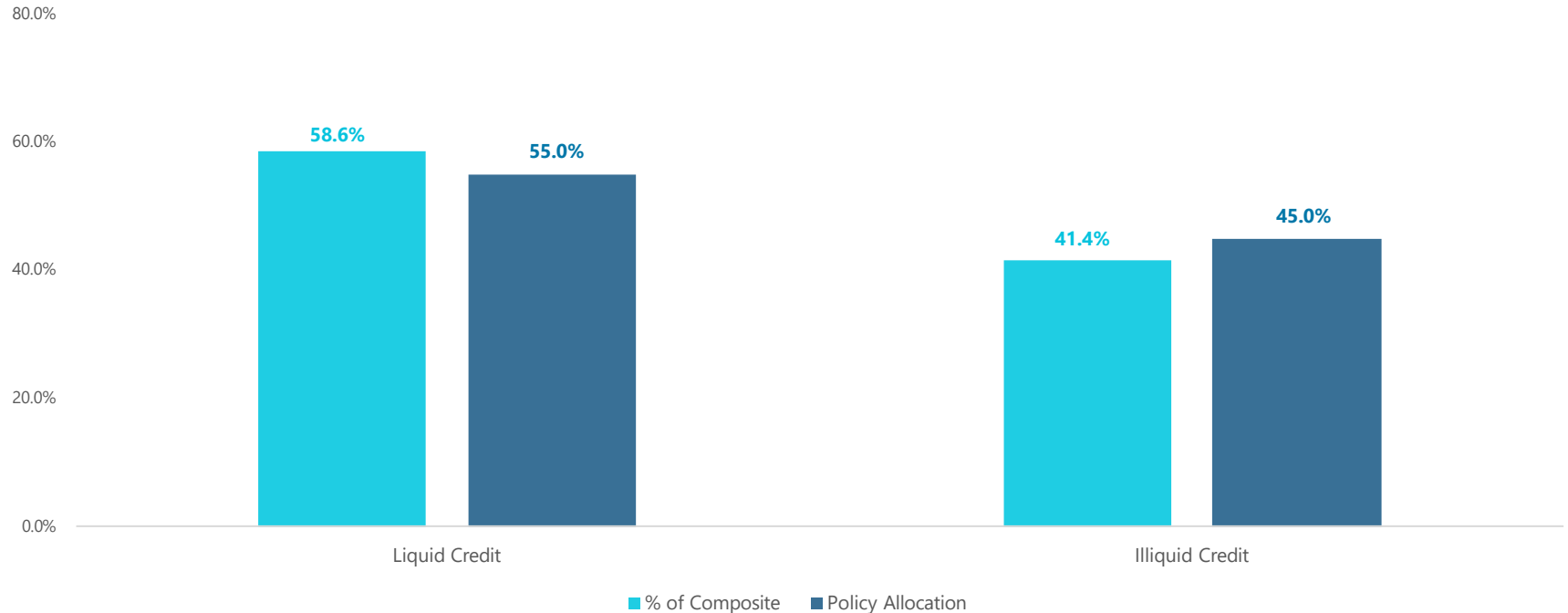
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

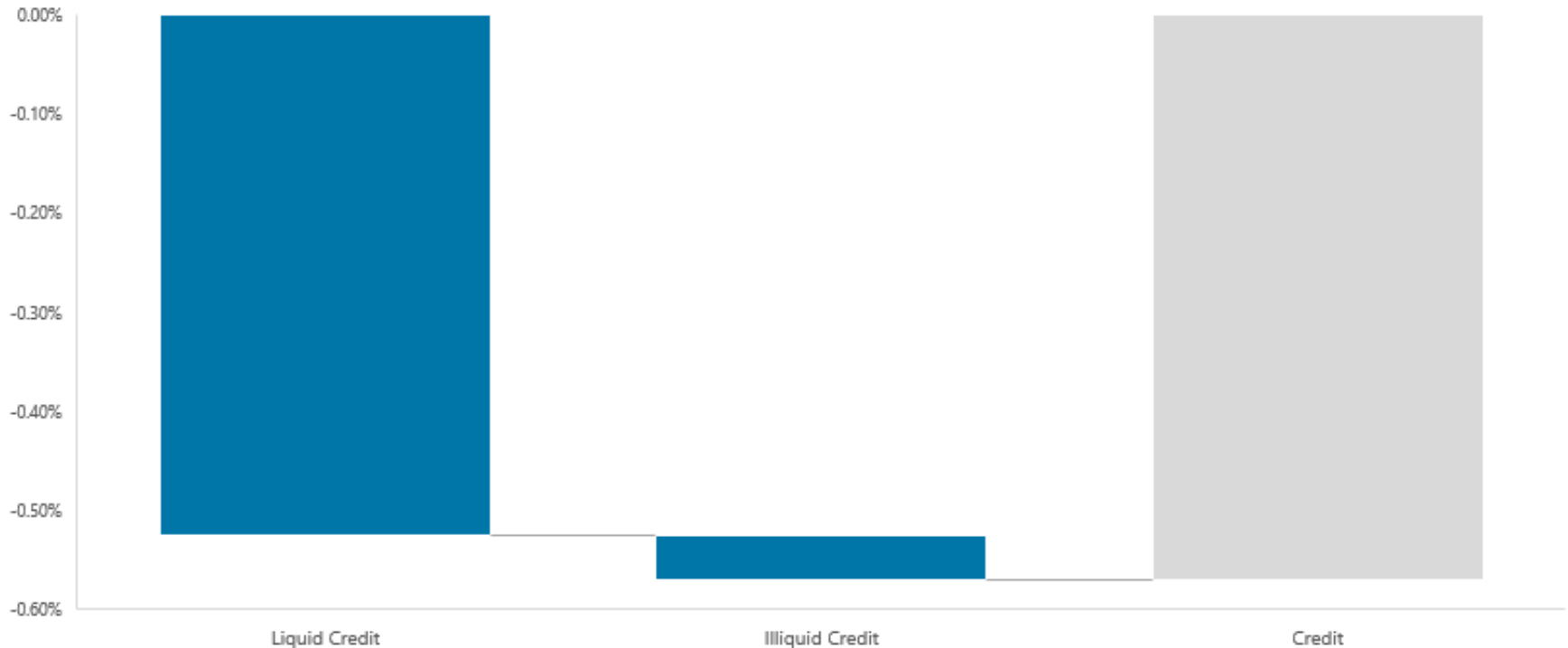


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Credit	7,824	100.0%	100.0%		
Liquid Credit	4,581	58.6%	55.0%	3.6%	278
Illiquid Credit	3,243	41.4%	45.0%	-3.6%	-278

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Liquid Credit	-0.53%	Private Equity - Credit	0.02%	Brigade Cap Mgmt	-0.09%
Illiquid Credit	-0.04%	Tennenbaum Capital	0.01%	BlackRock HY ETF	-0.08%
Credit	-0.57%	Magnetar	0.01%	Credit Suisse Bank Loans	-0.07%
		Grosvenor OPCRD 2 HFOF	0.00%	Pinebridge Investments	-0.07%
		Real Estate - Credit	0.00%	Ashmore Investment Management	-0.06%

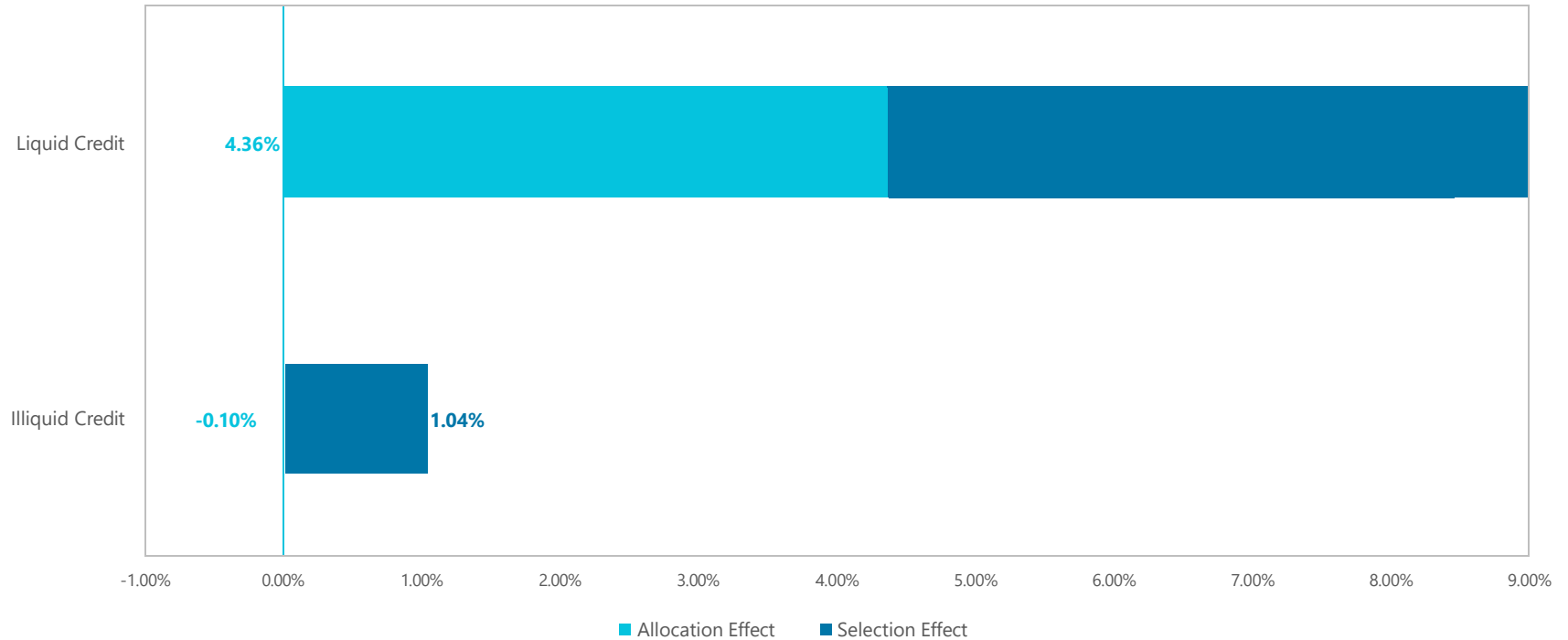
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



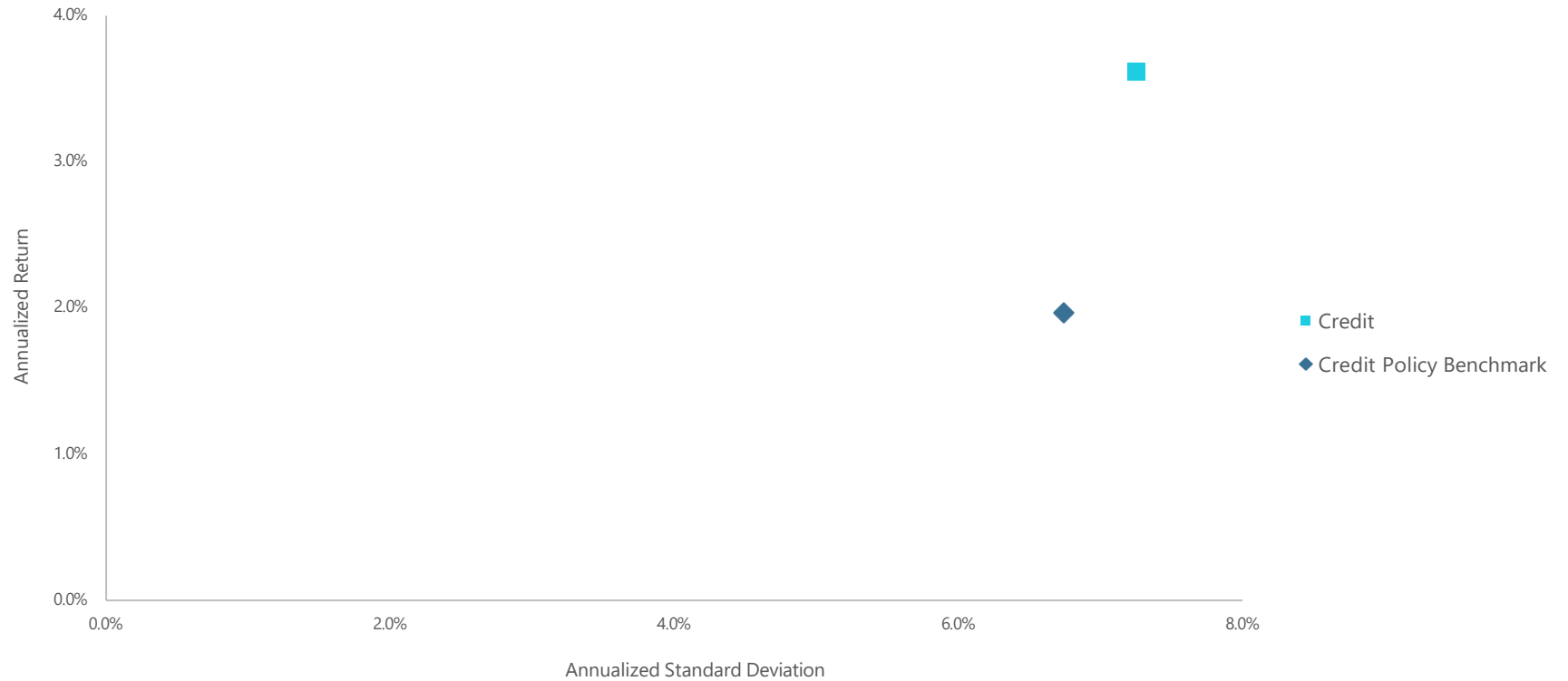
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Credit	7,824	100.0%	100.0%	-5.2%	-5.7%	4.26%	5.12%	0.52%
Liquid Credit	4,581	58.6%	55.0%	-7.9%	-7.6%	4.36%	4.09%	-0.32%
Illiquid Credit	3,243	41.4%	45.0%	-1.0%	-3.5%	-0.10%	1.04%	0.84%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Credit	3.6%	7.3%				
Credit Policy Benchmark	2.0%	6.7%	0.44	0.64	1.00	2.8%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Credit	100.0%	7,824	8,111	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Credit Policy Benchmark				-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Liquid Credit	58.6%	4,581	4,977	-7.9%	-10.9%	--	--	--	--	-10.7%
Liquid Credit Policy Benchmark				-7.6%	-11.0%	--	--	--	--	-10.7%
Aberdeen Asset Management	4.5%	356	401	-11.2%	-19.8%	-22.2%	-5.7%	-1.9%	--	-1.9%
Ashmore Investment Management	4.2%	330	377	-12.3%	-20.3%	-24.1%	-8.4%	-3.3%	--	-3.3%
Bain Capital	5.2%	407	421	-3.5%	-3.5%	-1.2%	3.1%	3.5%	--	3.4%
Beach Point	3.5%	273	304	-10.4%	-14.1%	-13.2%	-0.1%	2.1%	--	3.8%
BlackRock HY ETF	7.2%	561	619	-9.4%	-13.7%	-12.6%	--	--	--	-1.9%
Brigade Cap Mgmt	8.1%	632	696	-9.3%	-10.9%	-9.1%	2.5%	2.7%	4.8%	6.0%
Credit Suisse Bank Loans	14.1%	1,103	1,158	-4.8%	-4.8%	-3.1%	--	--	--	5.6%
Crescent Capital	6.2%	489	517	-5.4%	-6.0%	-4.4%	3.5%	3.6%	--	3.2%
Pinebridge Investments	5.5%	432	484	-10.7%	-14.9%	--	--	--	--	-14.2%
Illiquid Credit	41.4%	3,243	3,135	-1.0%	-0.7%	6.7%	11.2%	--	--	10.9%
Illiquid Credit Policy Benchmark				-3.5%	-5.0%	-3.4%	3.4%	--	--	4.5%
Beach Point - Fund II	0.2%	12	14	--	--	--	--	--	--	--
Beach Point - Fund III	2.3%	180	197	-3.1%	-5.0%	20.3%	15.5%	12.4%	--	12.7%
Grosvenor OPCRD 2 HFOF	0.4%	31	32	7.9%	5.8%	11.4%	4.8%	4.2%	--	5.9%
Lake Vineyard	1.7%	134	0	0.6%	--	--	--	--	--	0.6%
Magnetar	10.7%	840	810	0.5%	-1.1%	5.5%	--	--	--	23.4%
Napier Park	10.3%	805	848	-5.1%	-5.0%	-1.0%	--	--	--	18.9%
PIMCO Tac Opps	3.6%	282	290	-2.8%	-3.2%	4.2%	7.4%	--	--	7.0%
Private Equity - Credit	2.8%	221	212	5.4%	10.3%	28.2%	17.6%	--	--	15.1%
Real Estate - Credit	1.4%	109	107	0.9%	6.8%	13.0%	10.2%	9.7%	9.2%	9.1%
Tennenbaum Capital	8.0%	630	624	1.0%	2.5%	6.6%	6.8%	7.2%	--	7.2%

Liquid Credit Risk Summary

for the quarter ended June 30, 2022

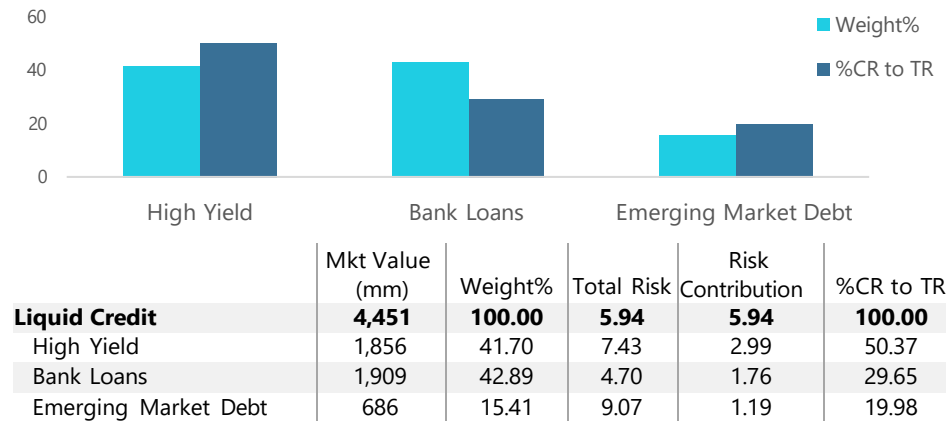
Risk Summary

	Value
Total Risk	5.94
Benchmark Risk	5.69
Active Risk	0.57
Portfolio Beta	1.04
Cont. to Eff. Duration	2.97
Convexity	0.17
Yield to Worst (%)	8.70
OAS to Swap (bp)	528

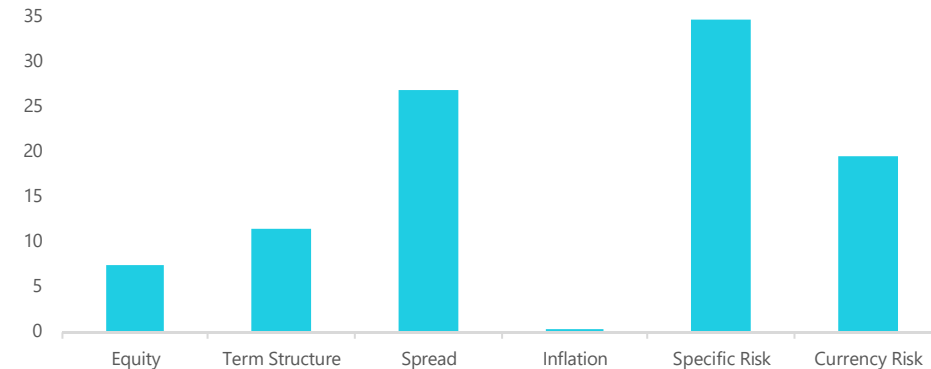
Risk Decomposition

Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
Total Risk	5.94	100.00	0.57	100.00
Local Market Risk	5.72	96.16	0.46	80.44
Common Factor Risk	5.69	95.76	0.26	45.78
Specific Risk	0.02	0.40	0.20	34.66
Currency Risk	0.23	3.84	0.11	19.56

Contribution to Risk



Active Risk from Common Factors



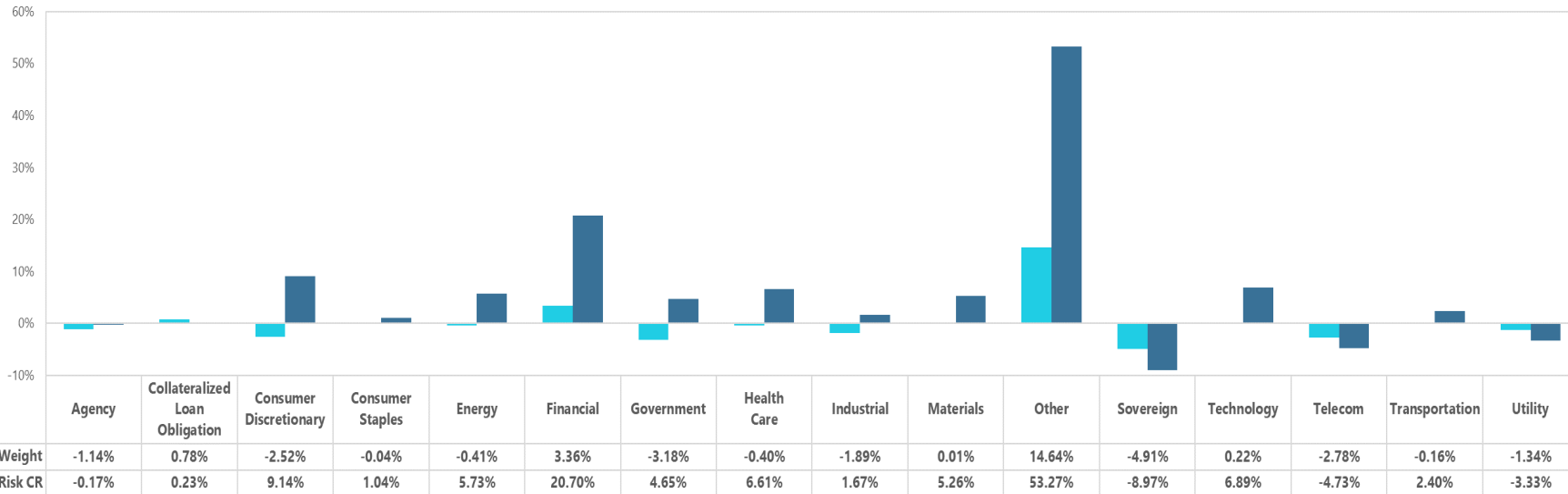
Liquid Credit Risk Summary

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

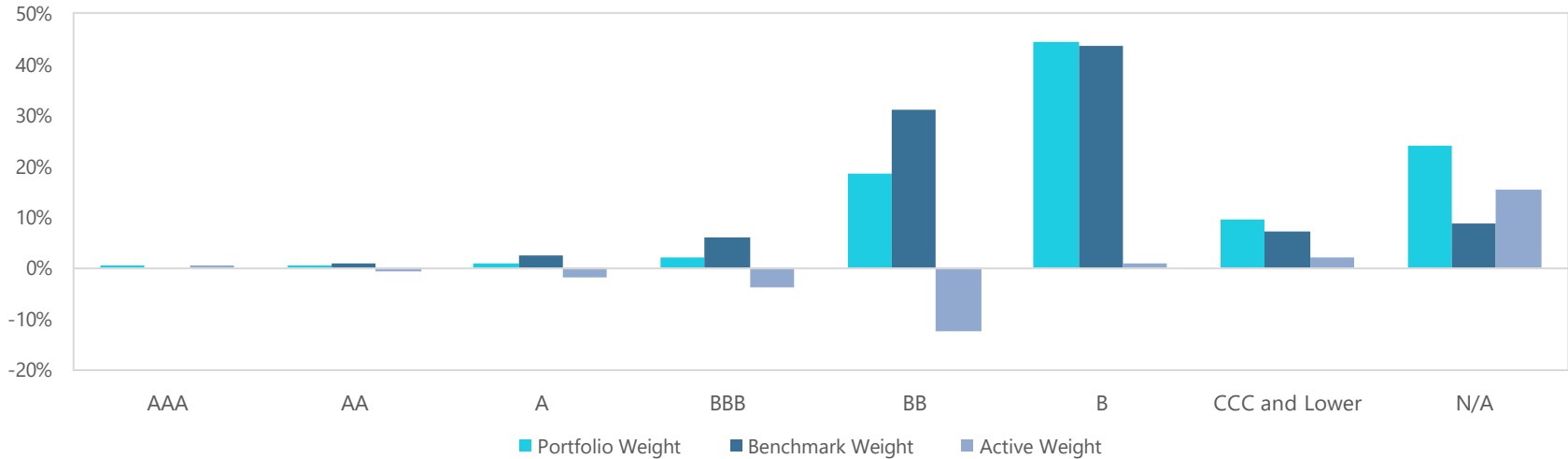
Portfolio Allocation By Bond Sector



Liquid Credit Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Moody's Rating



Rating	Weight%			Total Risk	Active Risk CR	% of Active TR	CR to Effective Duration
	Portfolio	Benchmark	Active				
Credit	100.00%	100.00%	0.00%	5.94	0.57	100.00	2.97
AAA	0.14%	0.00%	0.14%	13.65	0.00	-0.74%	0.02
AA	0.30%	0.94%	-0.64%	11.12	0.02	2.80%	0.04
A	0.75%	2.48%	-1.73%	10.62	0.04	6.34%	0.11
BBB	2.04%	5.81%	-3.76%	6.83	0.04	6.77%	0.14
BB	18.72%	31.32%	-12.60%	6.40	0.19	32.49%	0.84
B	44.59%	43.54%	1.06%	6.38	0.20	34.92%	0.88
CCC and Lower	9.49%	7.23%	2.26%	9.47	0.06	10.75	0.24
N/A	23.96%	8.68%	15.28%	4.30	0.04	6.67%	0.70

Credit – Liquid Credit

Aberdeen Asset Management

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

An emerging market debt strategy that invests in sovereigns, quasi-sovereigns, and corporate bonds denominated in US Dollar or local currencies.

Inception Date: July 2017

Risk Statistics (since inception)

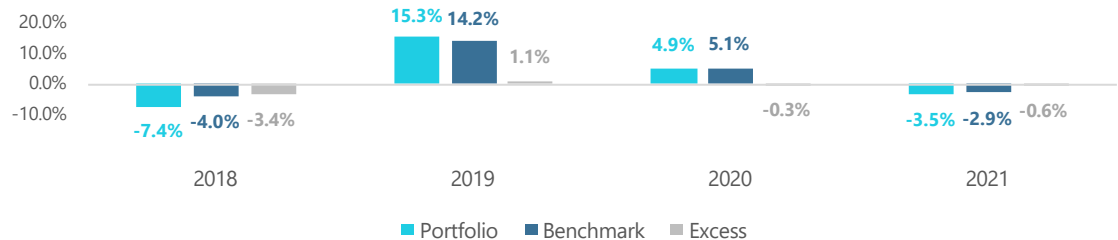
Standard Deviation	11.0%
Benchmark Standard Deviation	9.2%
Sharpe Ratio	-0.22
Information Ratio	-0.47
Beta	1.19
Tracking Error	2.5%

Performance (net)¹

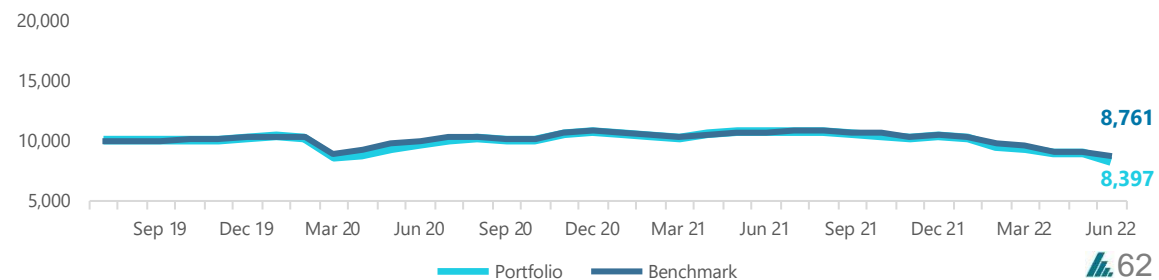
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Aberdeen Asset Management	355.6	-11.2%	-22.2%	-5.7%	-1.9%
EMD Custom Benchmark		-9.3%	-19.0%	-4.3%	-0.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Aberdeen Asset Management	-11.2%	90	-21.9%	97	-5.3%	98	-1.5%	97
Median	-3.6%		-7.2%		0.1%		1.4%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

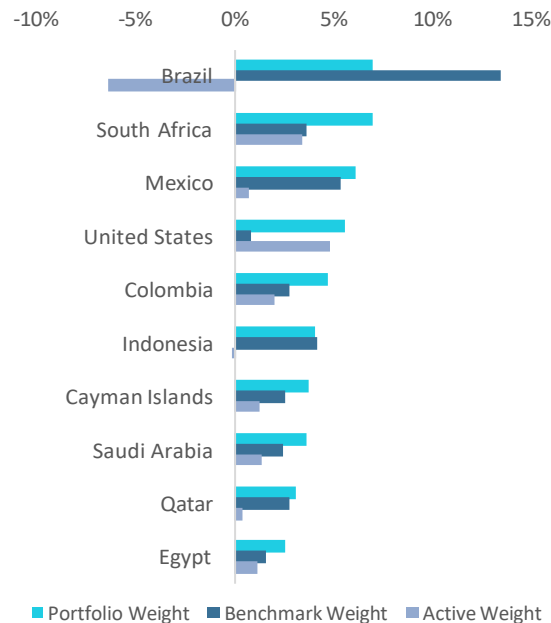
Credit Risk Analysis – Liquid Credit Aberdeen Asset Management

for the quarter ended June 30, 2022

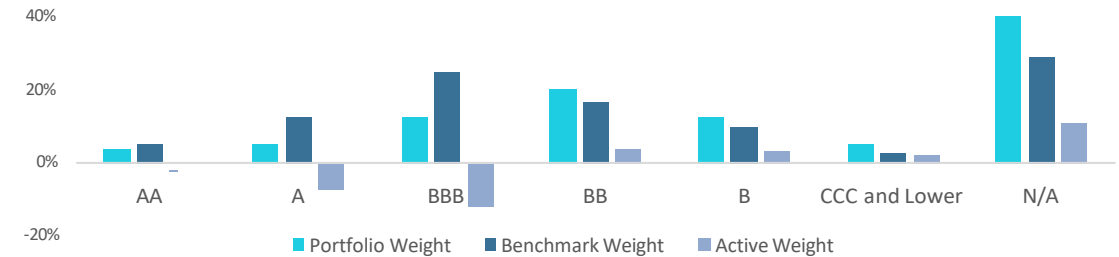
Portfolio Risk Summary

	Value
Total Risk	10.20
Benchmark Risk	7.58
Active Risk	3.53
Portfolio Beta	1.30
Cont. to Eff. Duration	5.75
Yield to Worst (%)	9.79
OAS to Swap (bp)	478

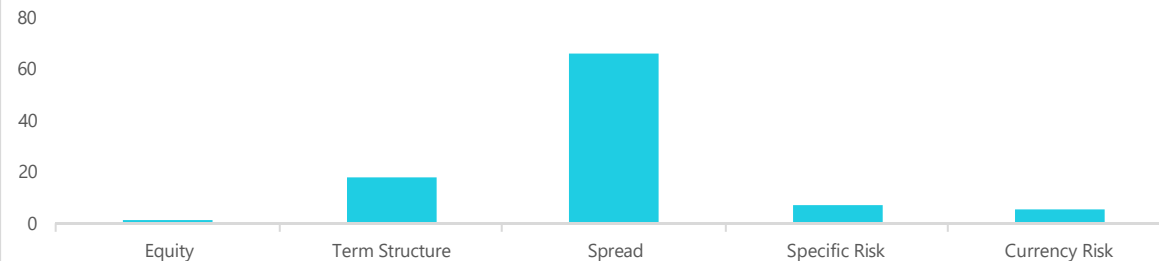
Top Countries by Weight%



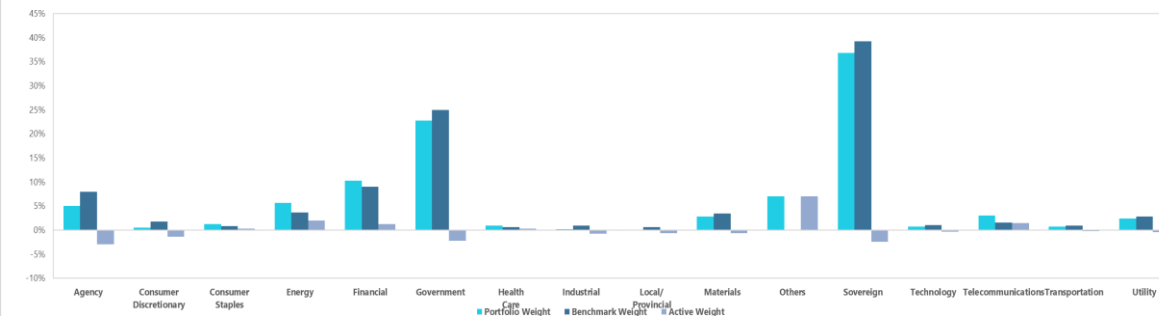
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Ashmore

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A value-driven emerging market debt strategy that applies a macro, top-down approach to build a well-diversified portfolio that adds value through asset rotation, security selection, and currency positioning utilizing a committee driven, systematic risk mitigating process.

Inception Date: June 2017

Risk Statistics (since inception)

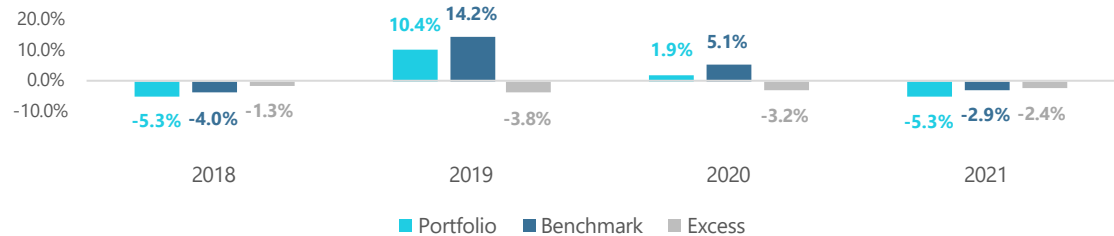
Standard Deviation	13.2%
Benchmark Standard Deviation	9.2%
Sharpe Ratio	-0.26
Information Ratio	-0.52
Beta	1.40
Tracking Error	4.6%

Performance (net)¹

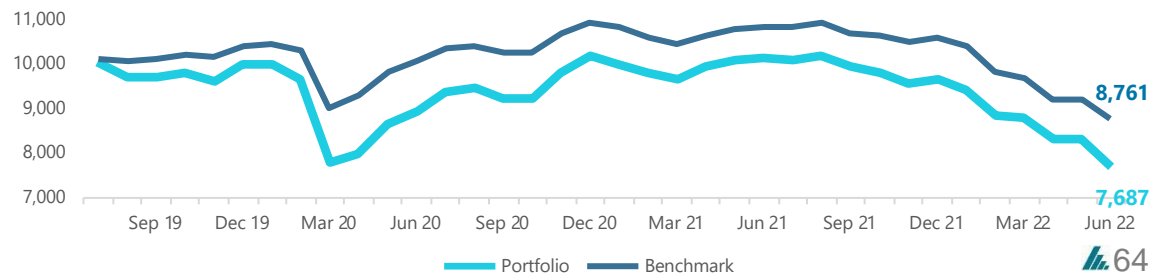
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Ashmore Investment Management	330.1	-12.3%	-24.1%	-8.4%	-3.3%
EMD Custom Benchmark		-9.3%	-19.0%	-4.3%	-0.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Ashmore Investment Management	-12.2%	93	-23.7%	98	-7.9%	99	-2.7%	98
Median	-3.6%		-7.2%		0.1%		1.4%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

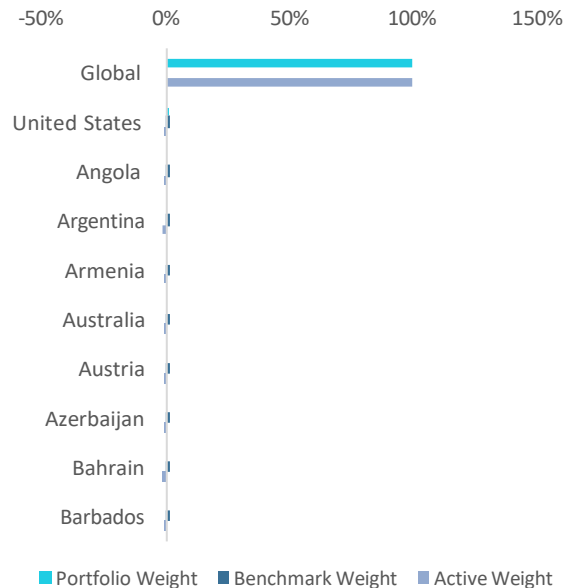
Credit Risk Analysis – Liquid Credit Ashmore

for the quarter ended June 30, 2022

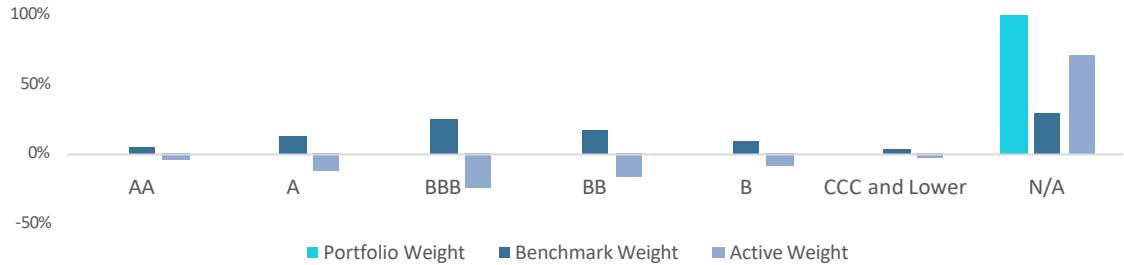
Portfolio Risk Summary

	Value
Total Risk	8.86
Benchmark Risk	7.58
Active Risk	5.04
Portfolio Beta	0.96
Cont. to Eff. Duration	5.32
Yield to Worst (%)	0.00
OAS to Swap (bp)	-309

Top Countries by Weight%



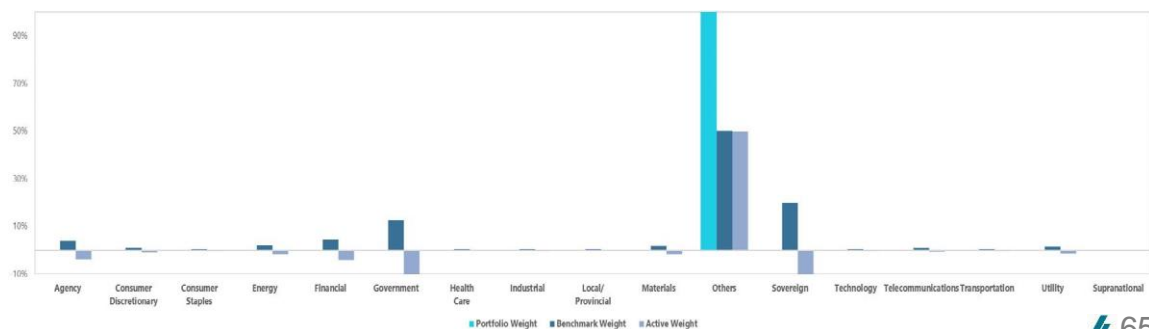
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit

Bain Capital

for the quarter ended June 30, 2022

Strategy

A long-only strategy designed to provide exposure to senior secured, floating-rate bank loans. The strategy takes a fundamental, active, and global approach to investing, capitalizing on opportunities in an inefficient asset class. The return objective is to outperform the Index through strong credit selection and active portfolio management.

Inception Date: June 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	555.0	--
Effective Duration	0.3	4.4
Convexity	0.0	0.1
Coupon Rate	4.3	5.7
Yield to Maturity	6.8	8.7
Current Yield	4.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

CPS GROUP HOLDINGS INC	0.9%
AQGEN ISLAND HOLDINGS INC	0.8%
NAVICURE INC	0.7%
CHAMBER BIDCO LIMITED	0.7%
CST BUYER COMPANY	0.6%

Top 5 Holdings

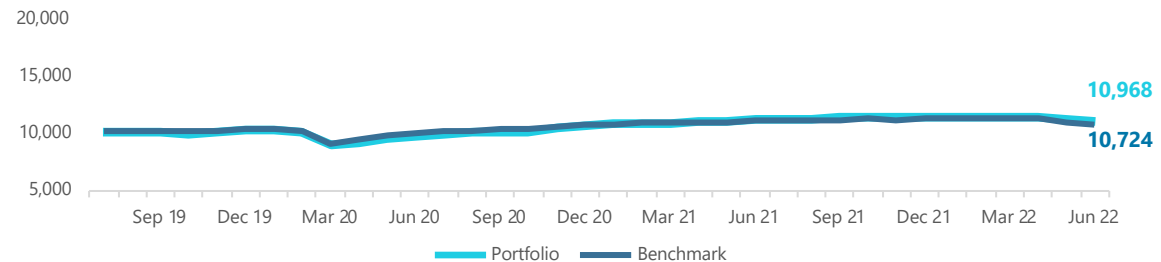
3.7%

Performance (net)¹

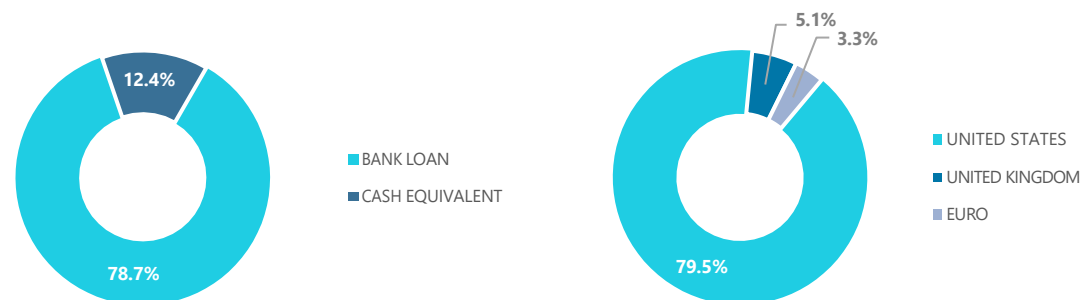
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Bain Capital	406.6	-3.5%	-1.2%	3.1%	3.5%
Bank Loans Custom Benchmark		-4.4%	-2.7%	2.4%	3.3%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Bain Capital	-3.4%	49	-0.7%	30	3.8%	19	4.2%	15
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

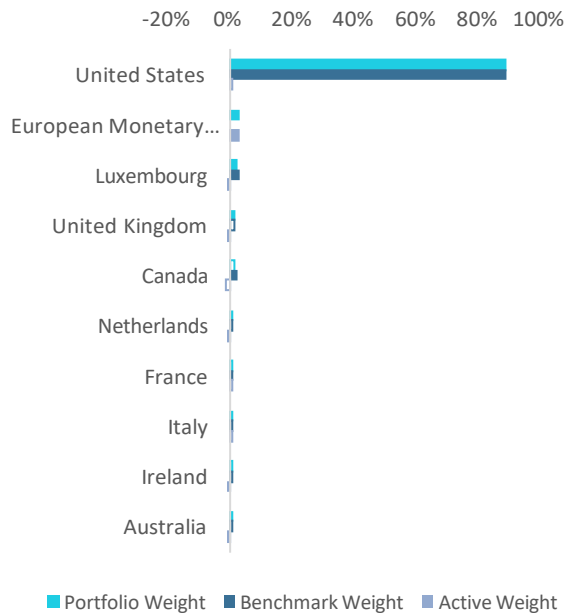
Credit Risk Analysis – Liquid Credit Bain Capital

for the quarter ended June 30, 2022

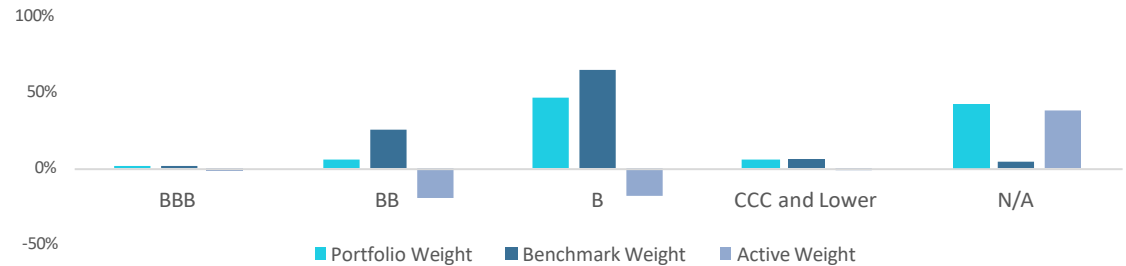
Portfolio Risk Summary

	Value
Total Risk	3.61
Benchmark Risk	5.32
Active Risk	1.93
Portfolio Beta	0.67
Cont. to Eff. Duration	0.69
Yield to Worst (%)	6.37
OAS to Swap (bp)	486

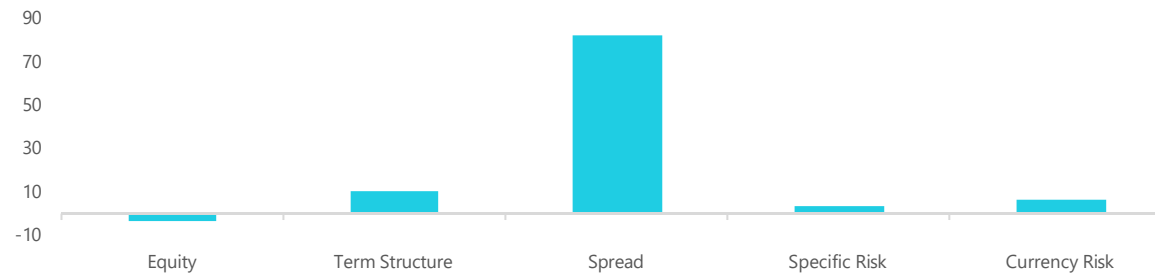
Top Countries by Weight%



Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Beach Point

for the quarter ended June 30, 2022

Strategy

A fundamental, value oriented high yield bond strategy that utilizes legal skills to identify market anomalies in bond covenants and indentures. The primary investment goal is to generate superior returns while controlling risk to minimize the possibility of capital impairment.

Inception Date: March 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	276.0	--
Effective Duration	4.2	4.4
Convexity	0.1	0.1
Coupon Rate	5.5	5.7
Yield to Maturity	9.0	8.7
Current Yield	6.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

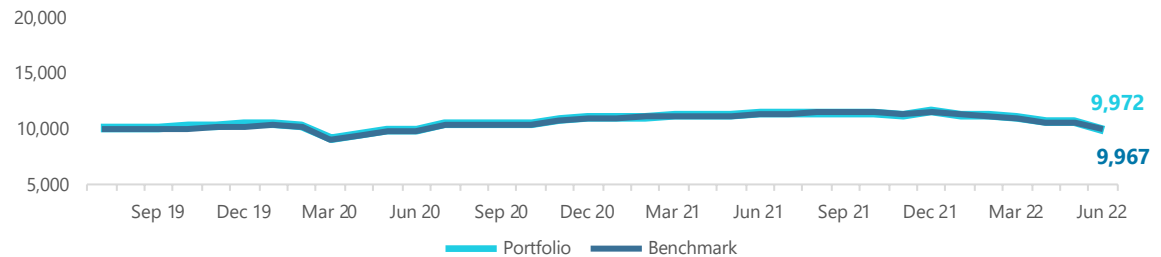
AMERICAN GREETINGS CORP	1.9%
DEALER TIRE LLC/DT ISSR	1.5%
MPH ACQUISITION HOLDINGS	1.4%
COMPASS GROUP DIVERSIFIE	1.4%
SANDSTONE PEAK LTD.	1.2%
Top 5 Holdings	7.3%

Performance (net)¹

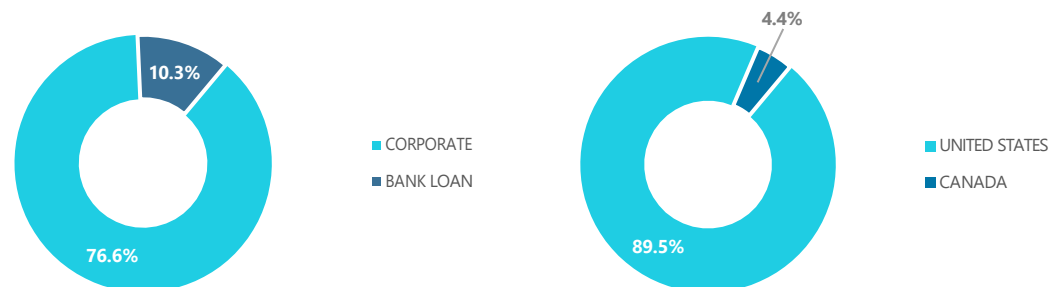
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Beach Point	272.7	-10.4%	-13.2%	-0.1%	2.1%
Beachpoint Custom Benchmark		-9.8%	-12.8%	-0.1%	1.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Beach Point	-10.3%	88	-12.8%	85	0.4%	41	2.7%	24
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

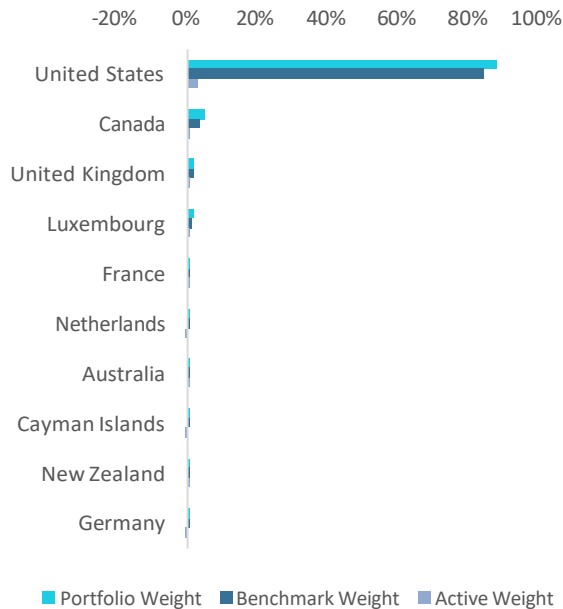
Credit Risk Analysis – Liquid Credit Beach Point

for the quarter ended June 30, 2022

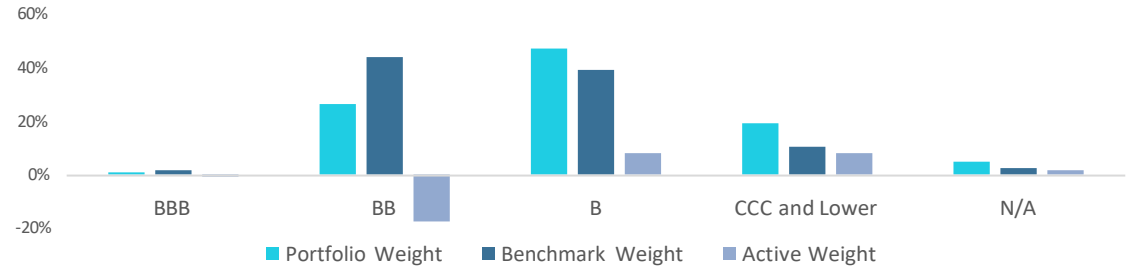
Portfolio Risk Summary

	Value
Total Risk	7.80
Benchmark Risk	6.91
Active Risk	1.41
Portfolio Beta	1.12
Cont. to Eff. Duration	4.34
Yield to Worst (%)	8.98
OAS to Swap (bp)	574

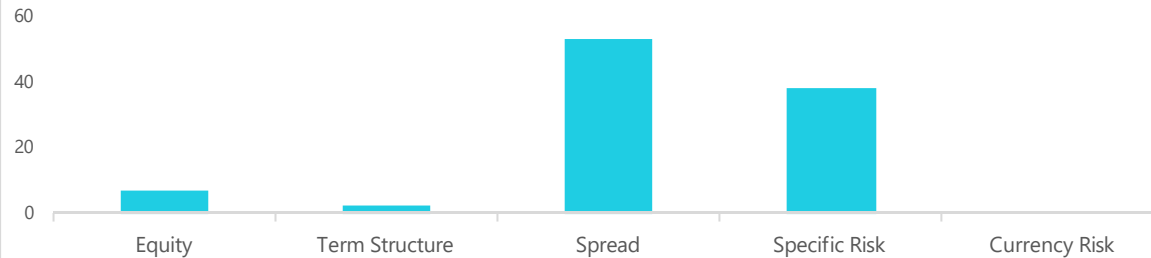
Top Countries by Weight%



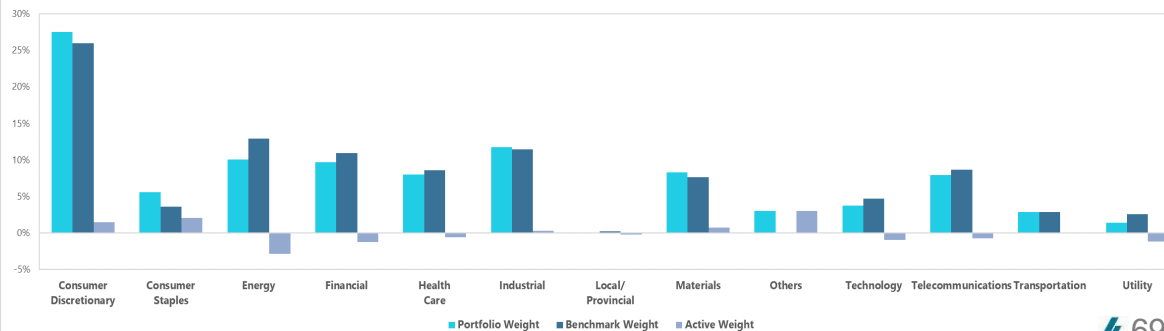
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Brigade Capital

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A strategy that focuses on identifying attractive companies within the high yield bond marketplace. The strategy invests in companies that have a lower likelihood of default or are better able to recover from economic downturns because of their substantial asset value relative to debt.

Inception Date: July 2010

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	340.0	--
Effective Duration	4.1	4.4
Convexity	0.4	0.1
Coupon Rate	6.5	5.7
Yield to Maturity	10.9	8.7
Current Yield	7.9	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B-2	BB-

Top Holdings (% of assets)

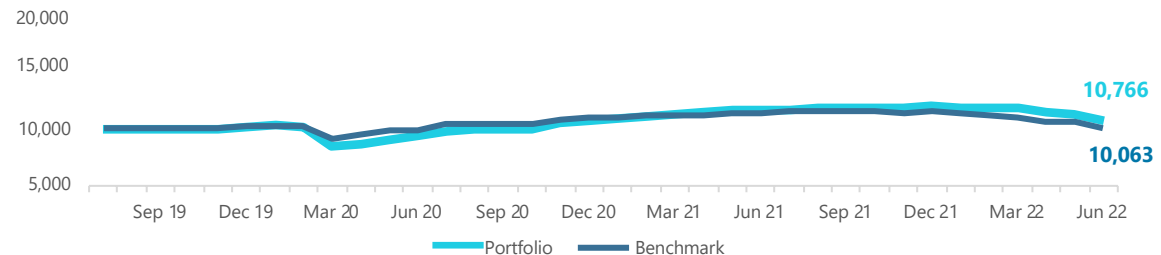
CORNERSTONE CHEMICAL CO	2.0%
EPIC Y GRADE SERVICES, LP	1.8%
RAIN CII CARBON LLC/CII	1.2%
BAFFINLAND IRON CORP/LP	1.1%
MASHANTUCKET	0.9%
Top 5 Holdings	7.1%

Performance (net)¹

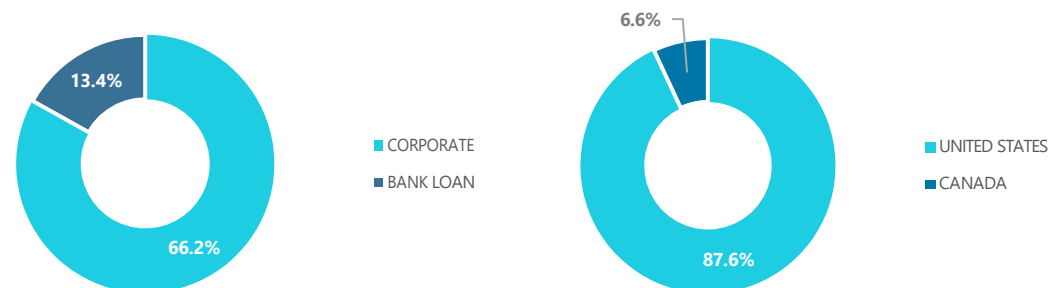
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Brigade Cap Mgmt	632.0	-9.3%	-9.1%	2.5%	2.7%
Brigade Custom Benchmark		-9.8%	-12.8%	0.2%	2.0%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Brigade Cap Mgmt	-9.2%	86	-8.8%	58	3.0%	22	3.4%	17
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

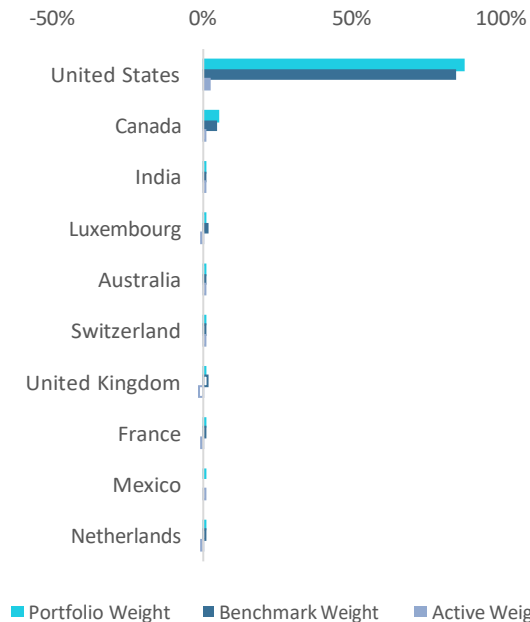
Credit Risk Analysis – Liquid Credit Brigade Capital

for the quarter ended June 30, 2022

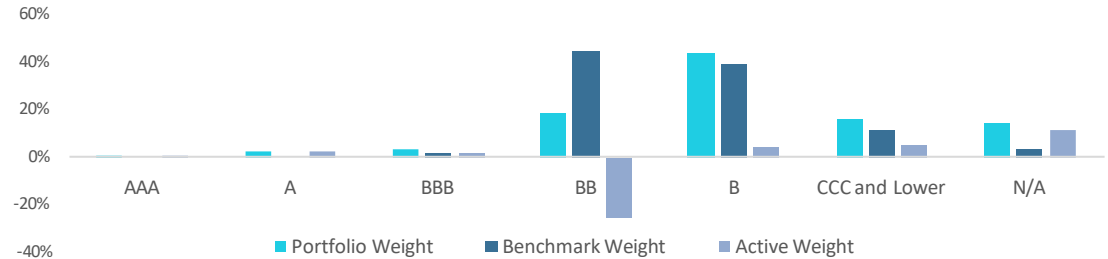
Portfolio Risk Summary

	Value
Total Risk	7.71
Benchmark Risk	6.91
Active Risk	1.70
Portfolio Beta	1.09
Cont. to Eff. Duration	4.18
Yield to Worst (%)	9.09
OAS to Swap (bp)	582

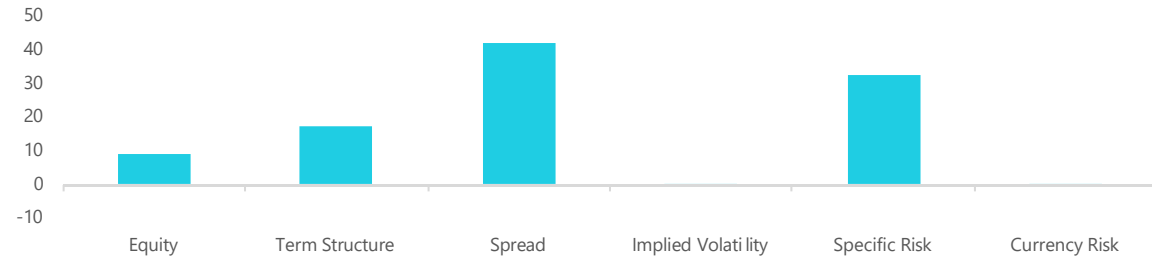
Top Countries by Weight%



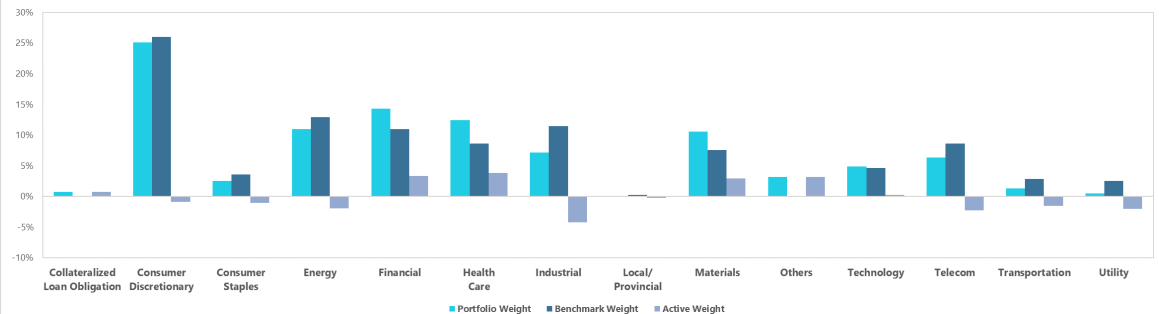
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit

Credit Suisse

for the quarter ended June 30, 2022

Strategy

A bank loan strategy that invests in senior floating rate loans whose primary performance objective is to generate alpha while mitigating loss, utilizing bottom-up, fundamental credit analysis emphasizing a relative value approach.

Inception Date: April 2020

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	514.0	--
Effective Duration	0.2	4.4
Convexity	--	0.1
Coupon Rate	4.7	5.7
Yield to Maturity	7.7	8.7
Current Yield	5.0	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

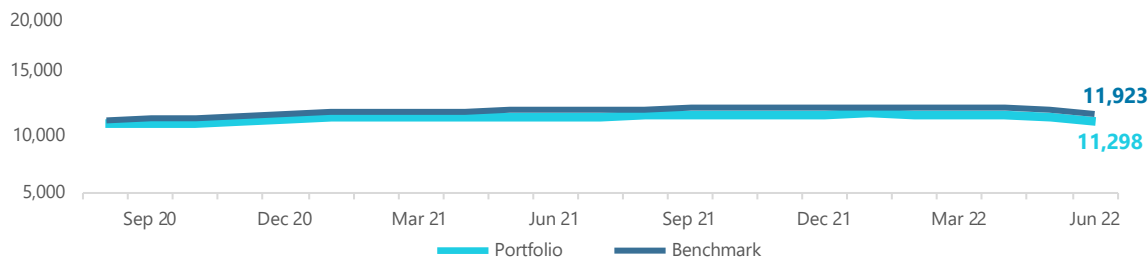
FINASTRA USA, INC.	0.8%
ATOTECH B.V.	0.8%
WILLIAM MORRIS ENDEAVOR ENTMT	0.7%
HORNBLLOWER SUB LLC	0.7%
NFP CORP	0.7%
Top 5 Holdings	3.7%

Performance (net)¹

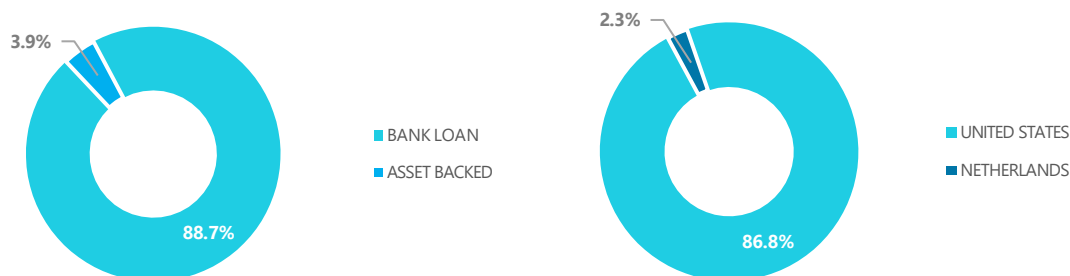
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Credit Suisse Bank Loans	1,102.5	-4.8%	-3.1%	--	--
CS Leveraged Loan Index		-4.4%	-2.7%	--	--
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Credit Suisse Bank Loans	-4.7%	64	-2.9%	35	--	--	--	--
Median	-3.6%		-7.2%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Credit Risk Analysis – Liquid Credit

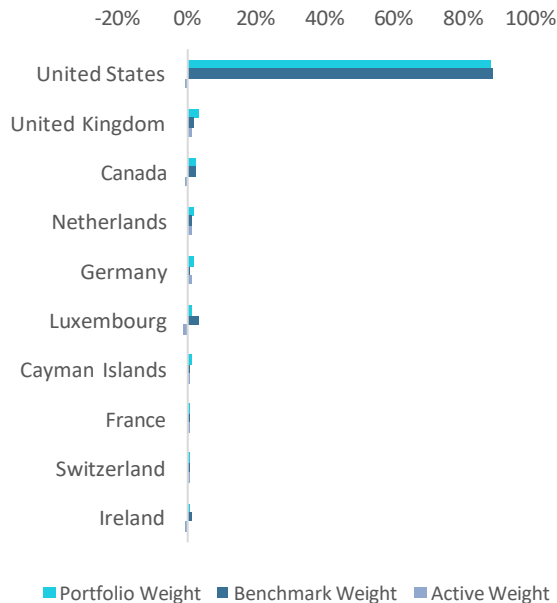
Credit Suisse

for the quarter ended June 30, 2022

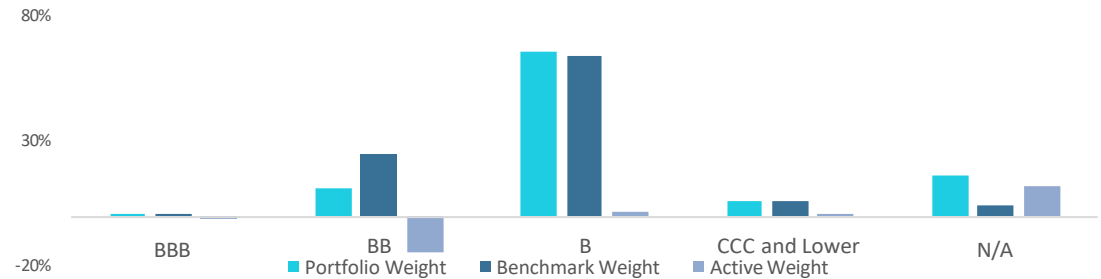
Portfolio Risk Summary

	Value
Total Risk	4.55
Benchmark Risk	5.32
Active Risk	0.98
Portfolio Beta	0.85
Cont. to Eff. Duration	0.52
Yield to Worst (%)	7.04
OAS to Swap (bp)	541

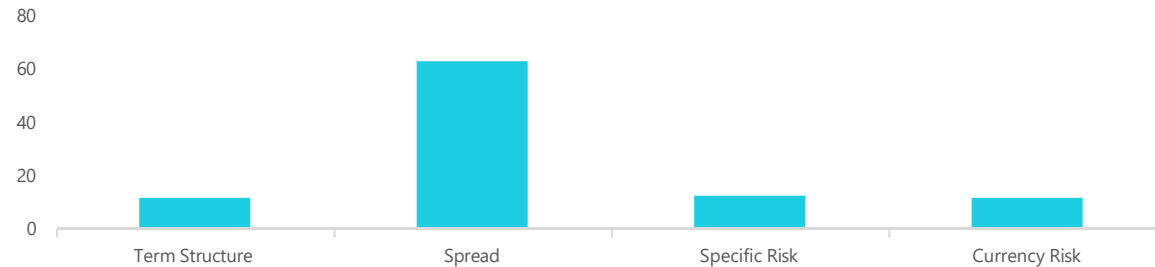
Top Countries by Weight%



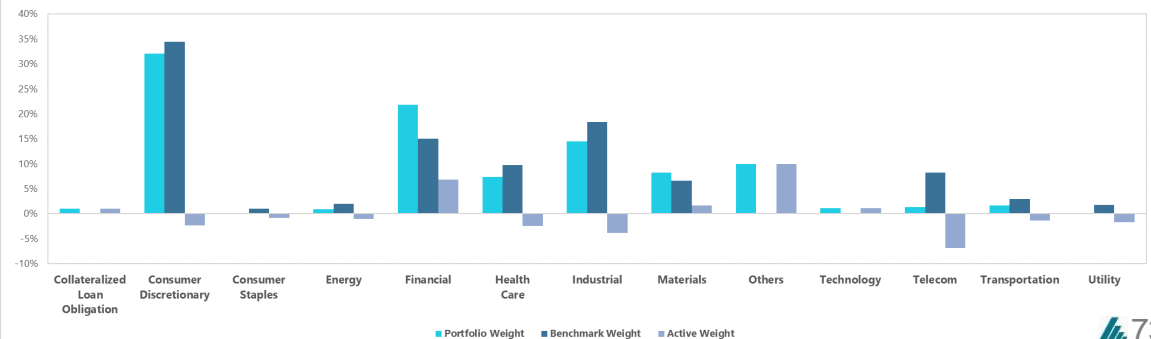
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Crescent Capital

for the quarter ended June 30, 2022

Strategy

A bank loan strategy that invests in privately negotiated, below investment grade, secured corporate debt. The primary target is U.S. based middle market companies whose EBITDA falls between \$30M to \$100M. The strategy's bottom-up credit research process emphasizes high current income and principal preservation.

Inception Date: May 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	138.0	--
Effective Duration	0.4	4.4
Convexity	0.0	0.1
Coupon Rate	6.1	5.7
Yield to Maturity	9.4	8.7
Current Yield	6.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B-	BB-

Top Holdings (% of assets)

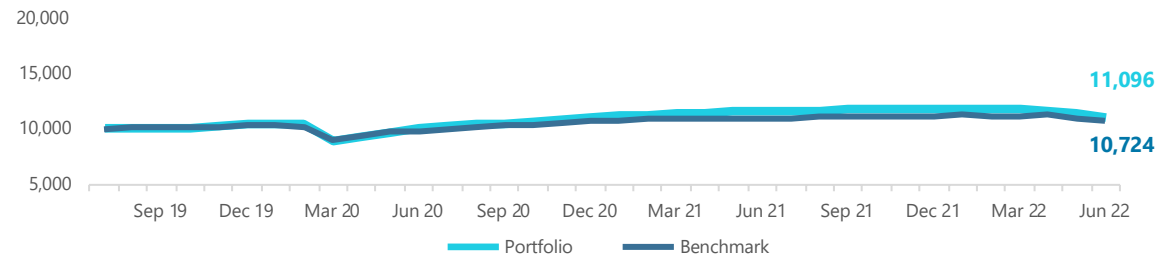
THE KNOT WORLDWIDE INC	1.9%
MAGNATE WORLDWIDE LLC	1.9%
EVERGREEN ACQCO 1 LP	1.8%
BARRACUDA NETWORKS INC	1.7%
KAMC HOLDINGS INC	1.6%
Top 5 Holdings	9.0%

Performance (net)¹

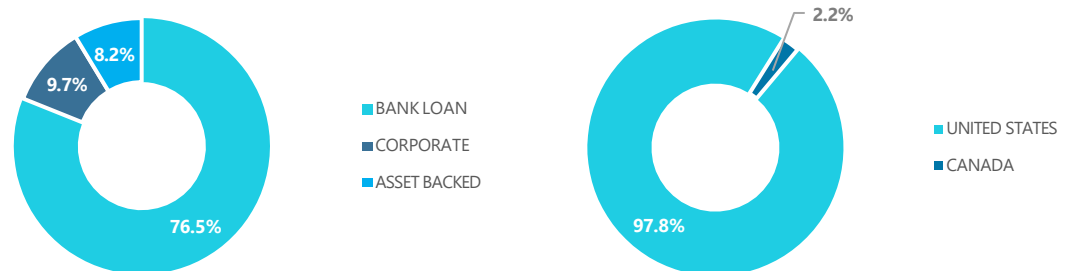
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Crescent Capital	488.8	-5.4%	-4.4%	3.5%	3.6%
Bank Loans Custom Benchmark		-4.4%	-2.7%	2.4%	3.3%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Crescent Capital	-5.3%	70	-3.9%	38	4.0%	19	4.2%	15
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

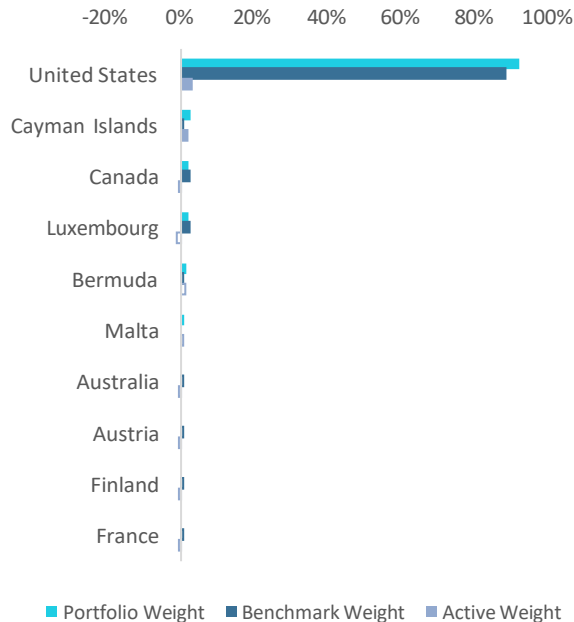
Credit Risk Analysis – Liquid Credit Crescent Capital

for the quarter ended June 30, 2022

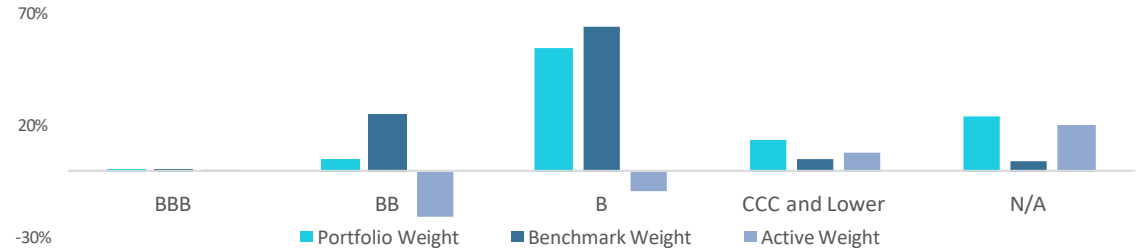
Portfolio Risk Summary

	Value
Total Risk	5.97
Benchmark Risk	5.32
Active Risk	1.40
Portfolio Beta	1.10
Cont. to Eff. Duration	0.66
Yield to Worst (%)	8.42
OAS to Swap (bp)	627

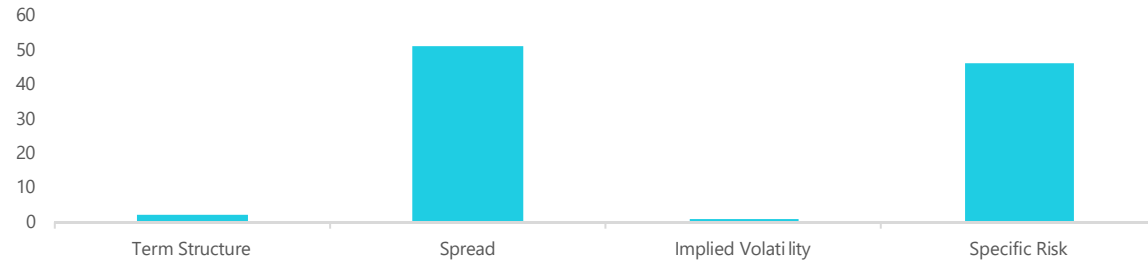
Top Countries by Weight%



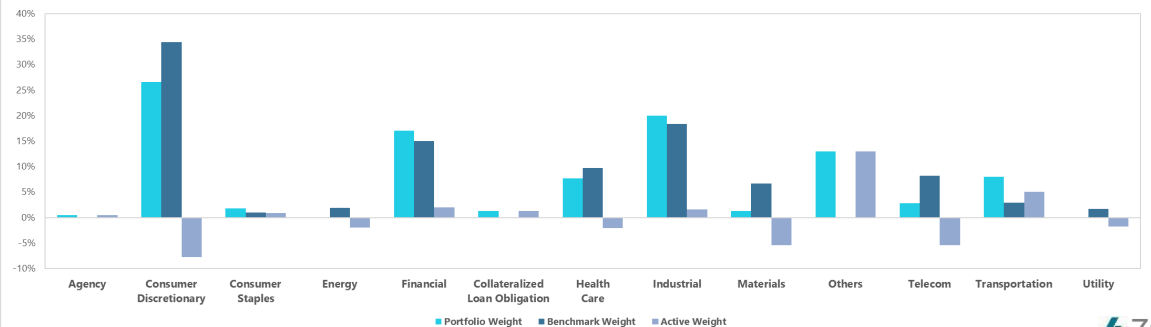
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Pinebridge

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Active manager of a broadly diversified portfolio primarily of U.S. dollar denominated high yield securities.

Inception Date: August 2021

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	238.0	--
Effective Duration	6.5	6.4
Convexity	0.7	0.7
Coupon Rate	2.8	2.5
Yield to Maturity	3.8	3.6
Current Yield	3.0	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

OCCIDENTAL PETROLEUM COR	1.1%
AMERICAN AIRLINES INC	1.0%
ALTICE FINANCING SA	1.0%
FORD MOTOR COMPANY	1.0%
CALIFORNIA RESOURCES CRP	0.9%
Top 5 Holdings	5.0%

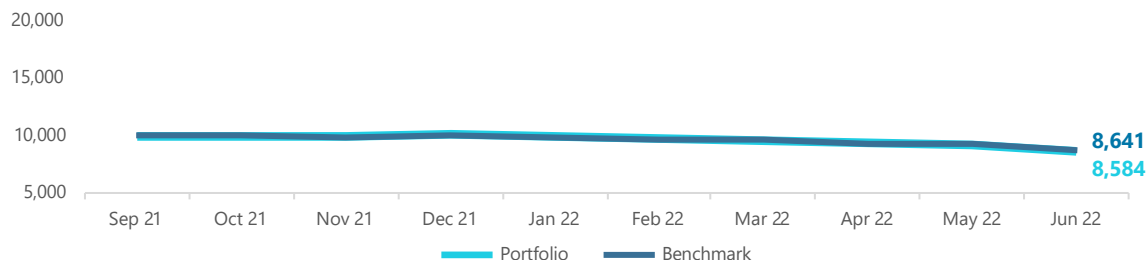
Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Performance (net)¹

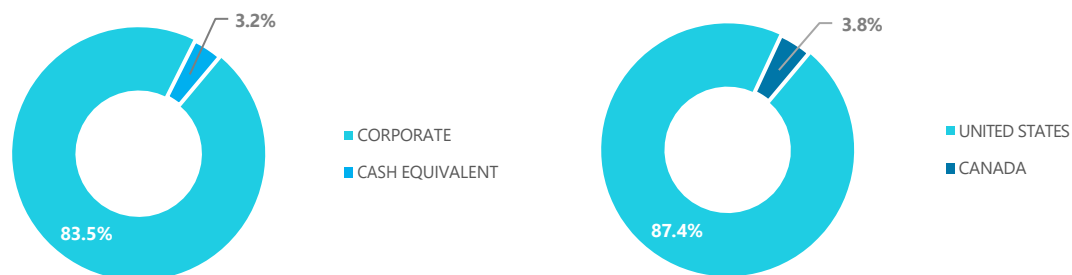
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Pinebridge Investments	432.0	-10.7%	--	--	--
BBG BARC US Corp HY Idx		-9.8%	--	--	--
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Pinebridge Investments	-10.6%	82	--	--	--	--	--	--
Median	-4.6%		--		--		--	

Growth of \$10,000



Top Exposures (% of assets)



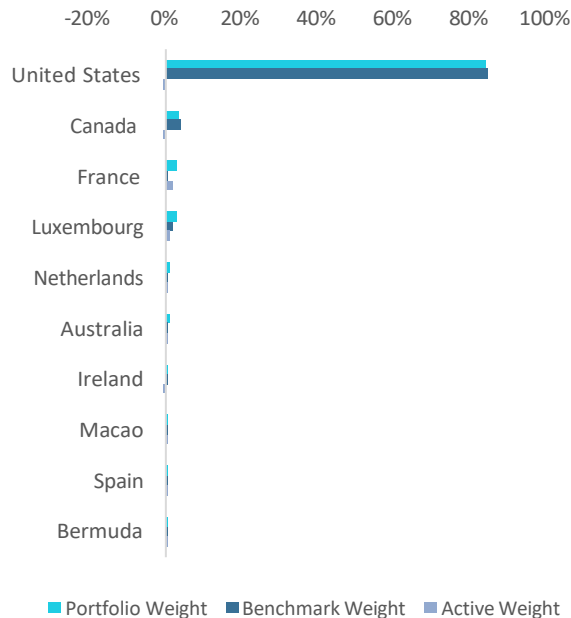
Credit Risk Analysis – Liquid Credit Pinebridge

for the quarter ended June 30, 2022

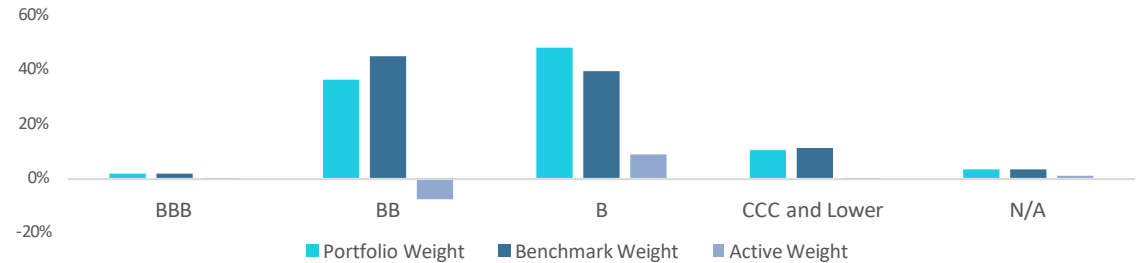
Portfolio Risk Summary

	Value
Total Risk	7.61
Benchmark Risk	6.91
Active Risk	1.01
Portfolio Beta	1.10
Cont. to Eff. Duration	4.67
Yield to Worst (%)	8.61
OAS to Swap (bp)	528

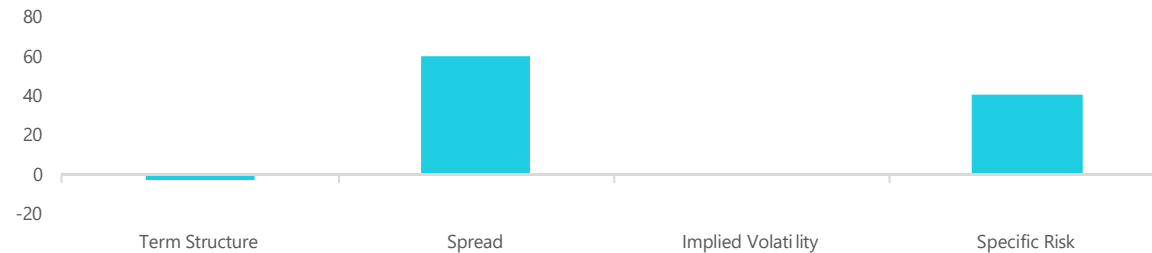
Top Countries by Weight%



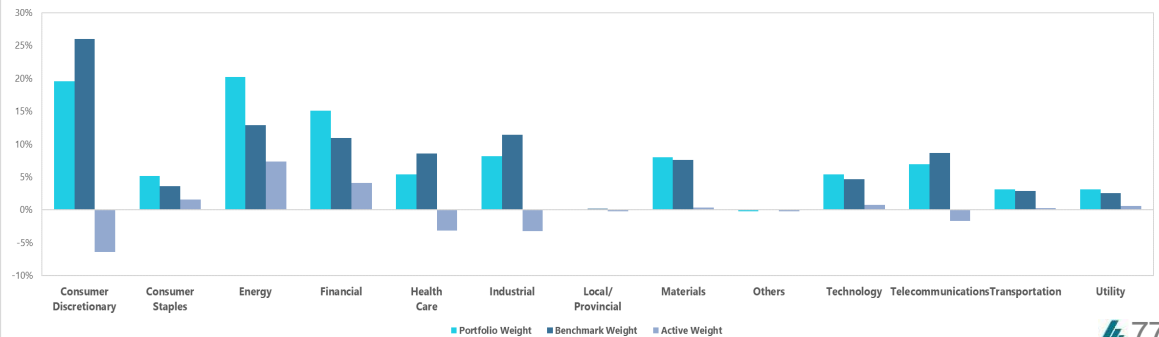
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



real assets & inflation hedges

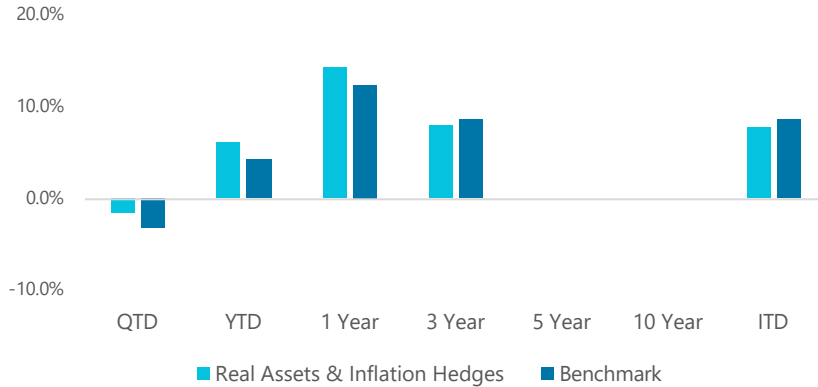
Summary

for the quarter ended June 30, 2022



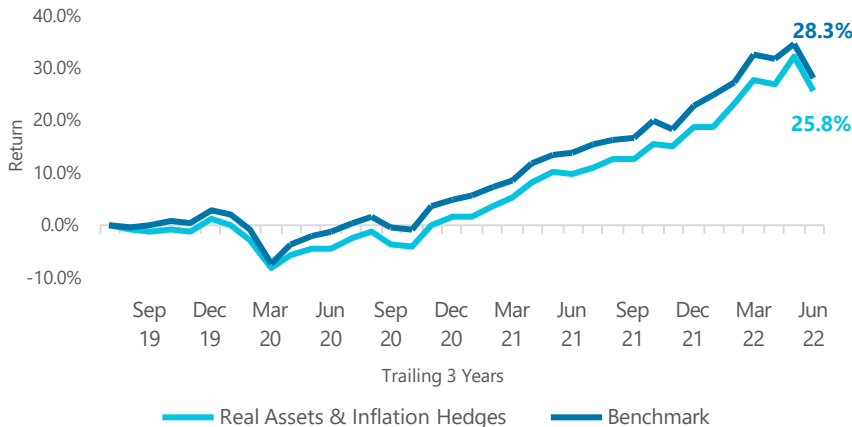
Los Angeles County Employees Retirement Association

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Assets & Inflation Hedges	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
Benchmark	-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Excess	1.6%	1.8%	1.9%	-0.7%	--	--	-0.8%

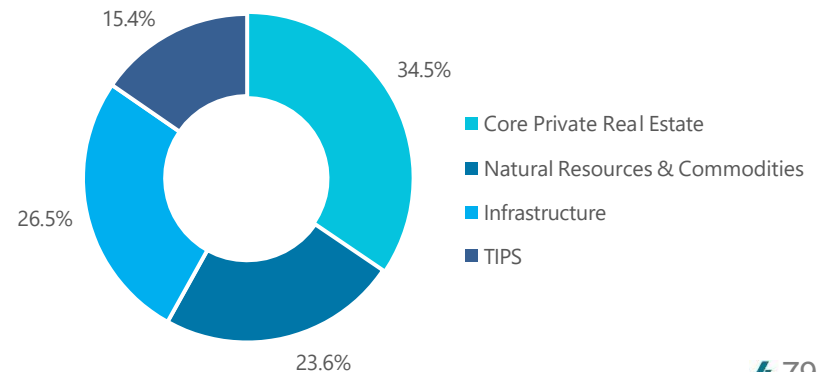
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Core Private Real Estate	8.4%	27.9%	27.9%	8.4%
Core Private RE Policy Benchmark	7.1%	27.4%	27.4%	10.7%
Excess	1.2%	0.5%	0.5%	-2.3%
Natural Resources & Commodities	-6.1%	18.6%	18.6%	12.5%
Nat Res & Comm Policy Benchmark	-12.4%	12.2%	12.2%	11.2%
Excess	6.3%	6.3%	6.3%	1.3%
Infrastructure	-6.5%	4.1%	4.1%	7.6%
DJ Brookfield Global Infrastr Comp TR	-6.9%	2.8%	2.8%	4.5%
Excess	0.4%	1.3%	1.3%	3.1%
TIPS	-6.3%	-4.8%	-4.8%	3.1%
BBG BARC US Tsy TIPS Idx	-6.1%	-5.1%	-5.1%	3.0%
Excess	-0.2%	0.3%	0.3%	0.1%

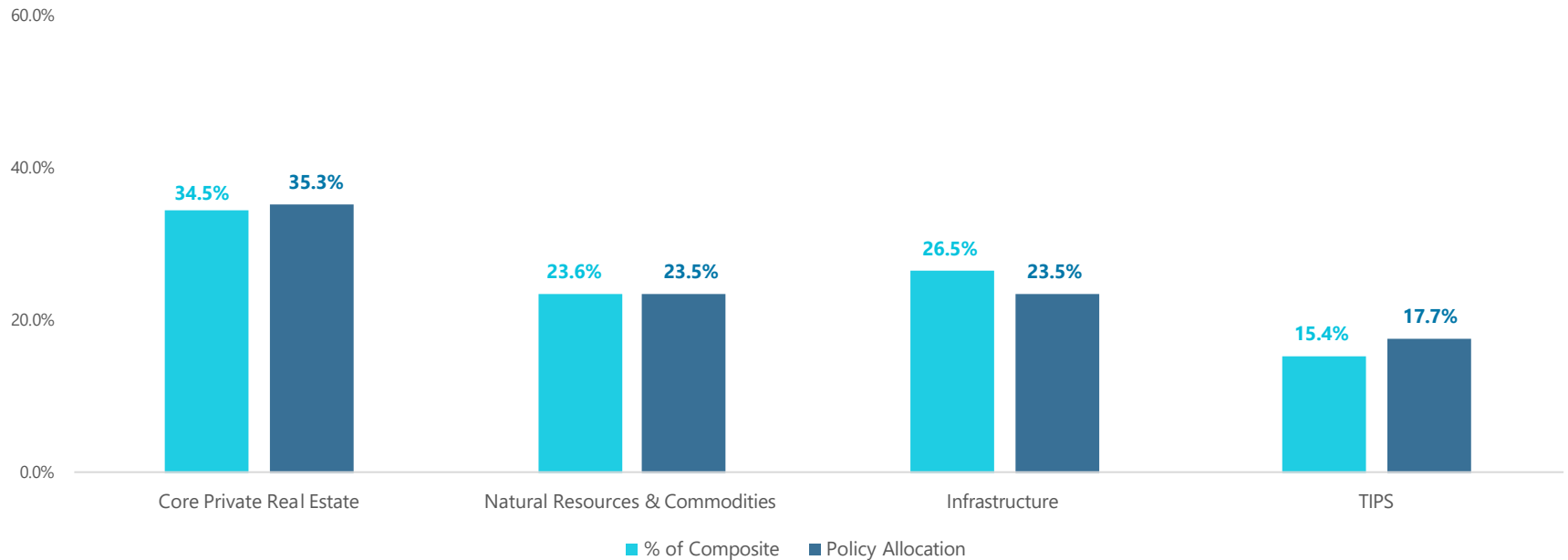
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

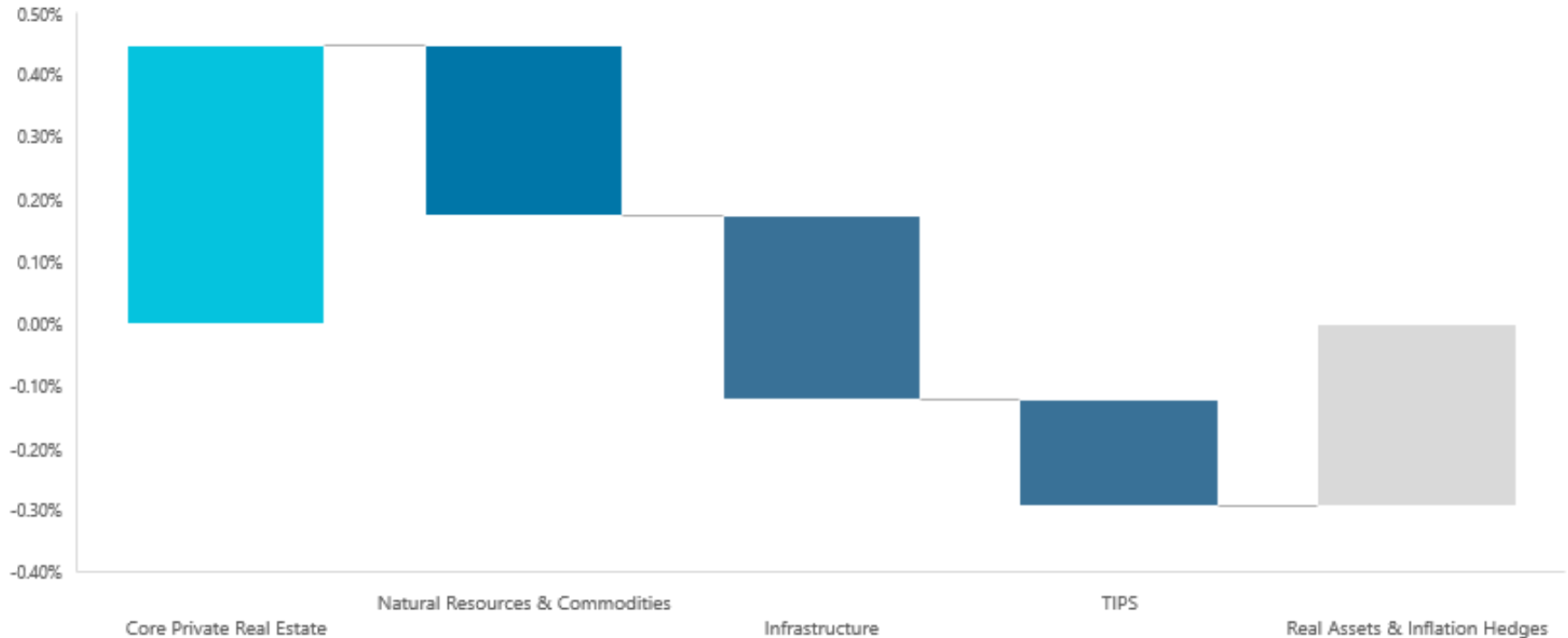


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Real Assets & Inflation Hedges	12,539	100.0%	100.0%		
Core Private Real Estate	4,323	34.5%	35.3%	-0.8%	-102
Natural Resources & Commodities	2,958	23.6%	23.5%	0.1%	7
Infrastructure	3,327	26.5%	23.5%	3.0%	377
TIPS	1,931	15.4%	17.7%	-2.3%	-283

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return



Functional Category	Contributors	Detractors
Core Private Real Estate	Real Estate - Real Assets	DWS Natural Resources
Natural Resources & Commodities	TIAA-CREF Global Agriculture II	DWS Infrastructure
Infrastructure	Private Equity - Real Assets	BlackRock TIPS
TIPS	DIF Infrastructure VI	Credit Suisse Commodity
Real Assets & Inflation Hedges	Partners Grp Direct Infra 2020	PIMCO Commodity Plus

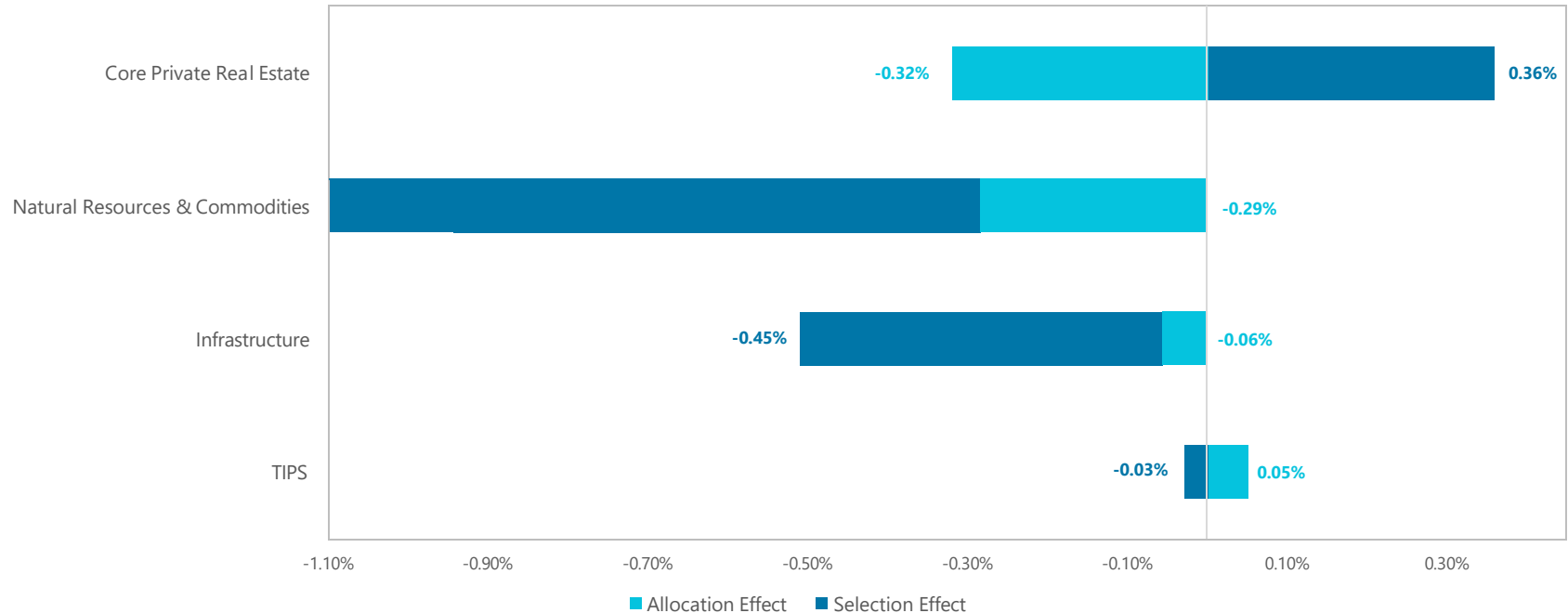
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



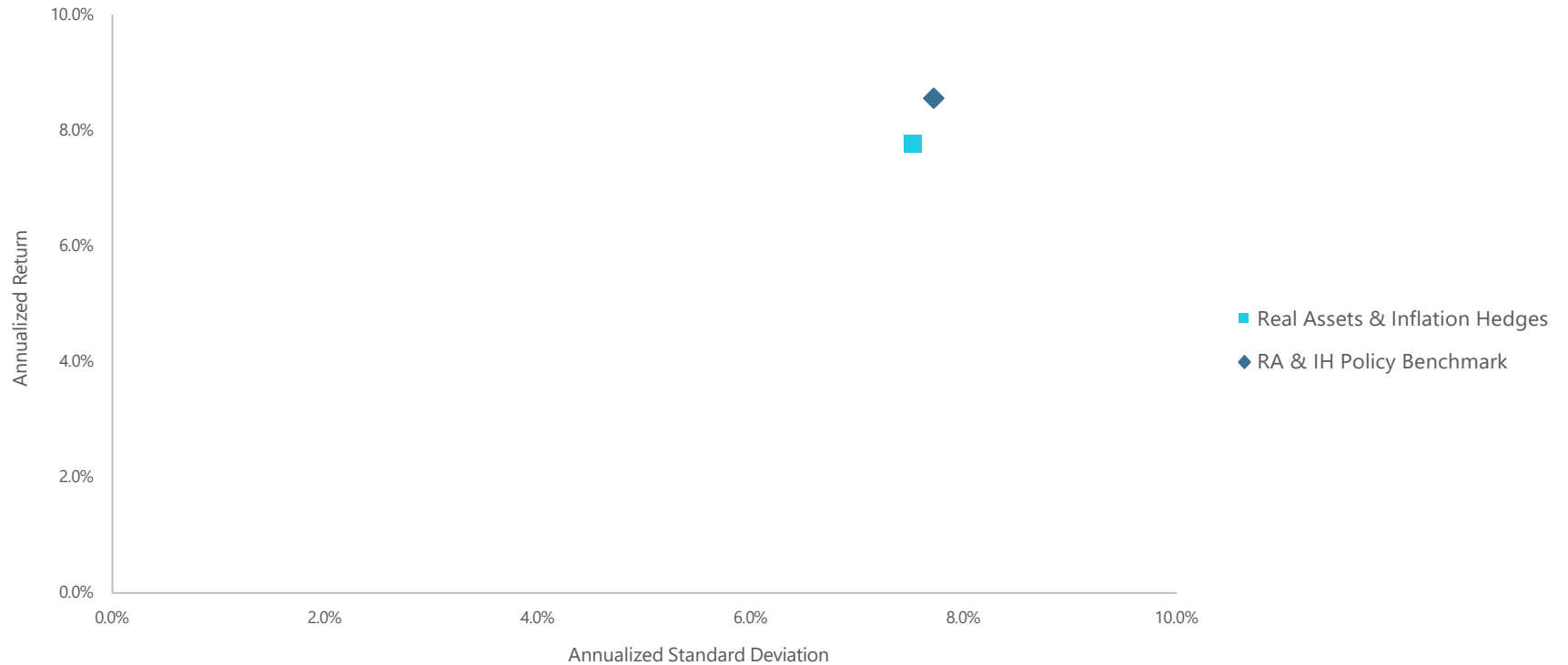
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Real Assets & Inflation Hedges	12,539	100.0%	100.0%	-1.6%	-3.2%	-0.61%	-0.78%	1.58%
Core Private Real Estate	4,323	34.5%	35.3%	8.4%	7.1%	-0.32%	0.36%	-0.01%
Natural Resources & Commodities	2,958	23.6%	23.5%	-6.1%	-12.4%	-0.29%	-0.66%	1.47%
Infrastructure	3,327	26.5%	23.5%	-6.5%	-6.9%	-0.06%	-0.45%	0.10%
TIPS	1,931	15.4%	17.7%	-6.3%	-6.1%	0.05%	-0.03%	0.02%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Real Assets & Inflation Hedges	7.8%	7.5%				
RA & IH Policy Benchmark	8.6%	7.7%	0.95	(0.29)	0.95	2.2%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Assets & Inflation Hedges	100.0%	12,539	12,933	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
RA & IH Policy Benchmark				-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Core Private Real Estate	34.5%	4,323	4,079	8.4%	15.9%	27.9%	8.4%	8.3%	8.8%	7.3%
Core Private RE Policy Benchmark				7.1%	15.3%	27.4%	10.7%	9.4%	10.4%	7.2%
Natural Resources & Commodities	23.6%	2,958	3,796	-6.1%	11.4%	18.6%	12.5%	8.0%	-0.3%	-1.0%
Nat Res & Comm Policy Benchmark				-12.4%	4.7%	12.2%	11.2%	7.0%	-1.5%	-2.2%
Cibus Enterprise II	0.0%	4	0	--	--	--	--	--	--	0.0%
Cibus Fund II	0.1%	18	0	--	--	--	--	--	--	0.0%
Credit Suisse Commodity	4.4%	551	580	-4.9%	19.4%	25.9%	15.7%	8.9%	-0.2%	-1.9%
DWS Natural Resources	7.4%	934	1,455	-17.0%	-0.3%	6.8%	9.6%	--	--	12.3%
Neuberger Berman/Gresham	4.3%	541	562	-3.7%	21.2%	26.4%	14.6%	9.5%	0.2%	-0.4%
Orion Mine Finance Fund III	0.9%	108	88	6.7%	6.7%	--	--	--	--	9.4%
Orion Mining Royalty Fund I	0.1%	15	14	1.2%	1.2%	--	--	--	--	12.5%
PIMCO Commodity Plus	1.7%	213	569	-5.3%	18.1%	24.5%	14.9%	9.3%	0.7%	-0.5%
Private Equity - Real Assets	0.7%	85	81	7.8%	11.2%	25.0%	-8.9%	--	--	-9.8%
TIAA-CREF Global Agriculture I	1.7%	211	183	16.8%	16.8%	--	--	--	--	16.8%
TIAA-CREF Global Agriculture II	2.2%	278	265	12.4%	12.4%	--	--	--	--	12.4%
Infrastructure	26.5%	3,327	2,999	-6.5%	-3.6%	4.1%	7.6%	--	--	8.9%
DJ Brookfield Global Infrastr Comp TR				-6.9%	-2.7%	2.8%	4.5%	--	--	5.7%
Antin Mid Cap	0.1%	17	12	1.2%	-15.2%	--	--	--	--	-15.0%
Axiom Infrastructure	1.5%	193	14	1.8%	-0.8%	--	--	--	--	-0.8%
Axiom Infrastructure Canada	0.0%	0	0	0.0%	-100.0%	--	--	--	--	-100.0%
DIF CIF III	0.1%	7	0	--	--	--	--	--	--	-0.9%
DIF Infrastructure VI	0.5%	66	65	1.9%	1.8%	56.6%	--	--	--	22.4%
DWS Infrastructure	21.3%	2,668	2,742	-8.0%	-4.7%	3.2%	7.5%	--	--	8.8%
Grain Communications Opportunity III	0.2%	27	29	-7.6%	-7.6%	-14.6%	--	--	--	--
Grain Spectrum Holdings III	0.4%	47	47	-0.1%	-0.3%	-0.5%	--	--	--	-1.1%
KKR DCIF	1.6%	200	0	0.0%	--	--	--	--	--	0.0%
Pan-European Infrastructure Fund III	0.4%	52	44	-3.4%	2.1%	6.3%	--	--	--	1.0%
Partners Grp Direct Infra 2020	0.4%	50	45	2.2%	--	--	--	--	--	2.2%
TIPS										
Blackrock TIPS	15.4%	1,931	2,059	-6.3%	-8.6%	-4.8%	3.1%	--	--	3.7%
Bloomberg U.S. Treasury: U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.7%

1. Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Real Assets & Inflation Hedges

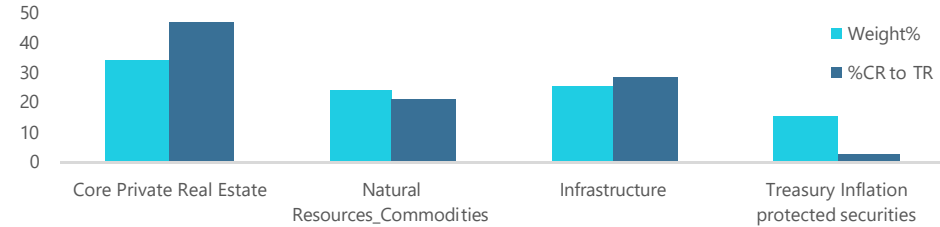
Risk Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	13.83
Benchmark Risk	13.77
Active Risk	1.81
Portfolio Beta	1.00

Contribution to Risk

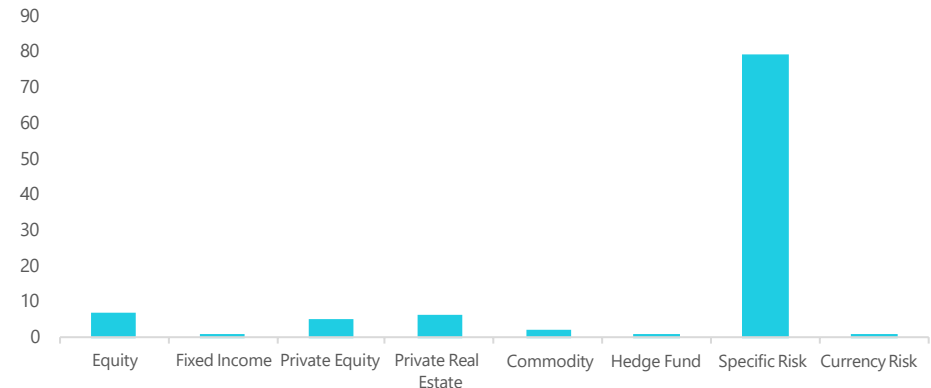


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Real Assets & Inflation Hedges	12,621	100.00	13.83	13.83	100.00
Core Private Real Estate	4,323	34.25	21.68	6.50	46.97
Natural Resources Commodities	3,095	24.53	15.82	3.00	21.70
Infrastructure	3,271	25.92	17.10	3.97	28.69
Treasury Inflation protected securities	1,932	15.30	5.72	0.37	2.65

Risk Decomposition

Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
Total Risk	13.83	100.00	1.81	100.00
Common Factor Risk	13.06	94.41	0.37	20.44
Specific Risk	0.09	0.63	1.43	79.14
Currency Risk	0.69	4.96	0.01	0.42

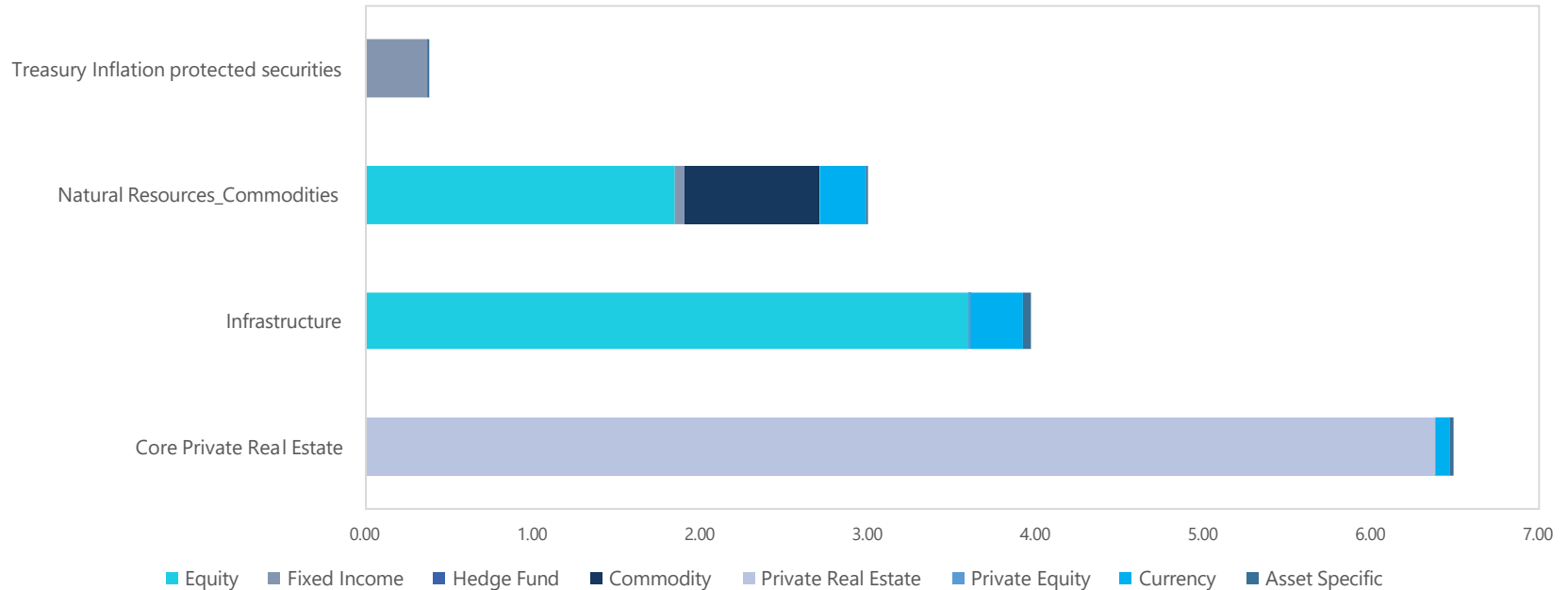
Active Risk from Common Factors



Real Assets & Inflation Hedges Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Sector

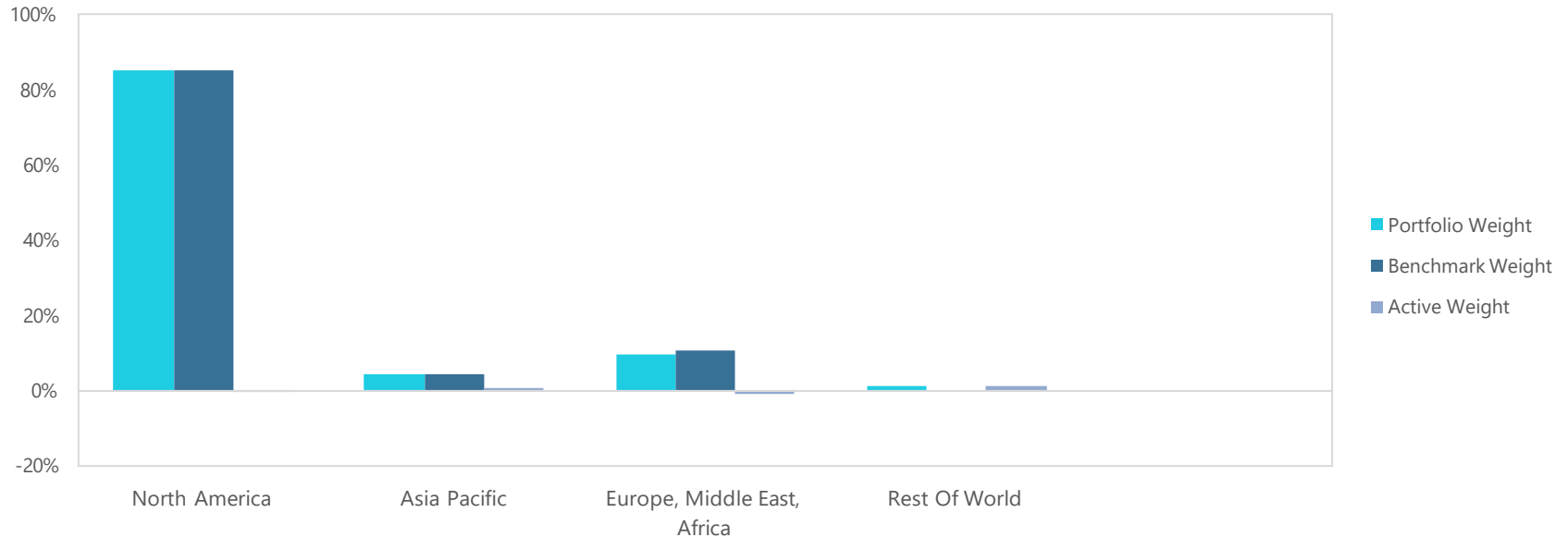


Functional Category	Port Risk Contribution	Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total Fund	13.83	5.45	0.43	0.00	0.80	6.38	0.01	0.69	0.09
Core Private Real Estate	6.50	0.00	0.00	0.00	0.00	6.38	0.00	0.09	0.03
Infrastructure	3.97	3.60	0.00	0.00	0.00	0.00	0.01	0.31	0.05
Natural Resources_Commodities	3.00	1.85	0.06	0.00	0.80	0.00	0.00	0.28	0.01
Treasury Inflation protected securities	0.37	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00

Real Assets & Inflation Hedges Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	13.83	1.81	100.00	0.02
North America	85.07%	85.27%	-0.20%	13.61	1.59	88.32	0.02
Asia Pacific	4.52%	4.32%	0.21%	16.18	0.04	1.93	0.01
Europe, Middle East, Africa	9.45%	10.41%	-0.96%	23.19	0.17	9.41	0.01
Rest Of World	0.96%	0.00%	0.96%	4.92	0.01	0.34	0.01

Real Assets & Inflation Hedges

Natural Resources & Commodities

Credit Suisse

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining.

Inception Date: March 2011

Risk Statistics (since inception)

Standard Deviation	16.1%
Benchmark Standard Deviation	16.4%
Sharpe Ratio	0.53
Information Ratio	0.89
Beta	0.98
Tracking Error	0.9%

Top Holdings (% of assets)

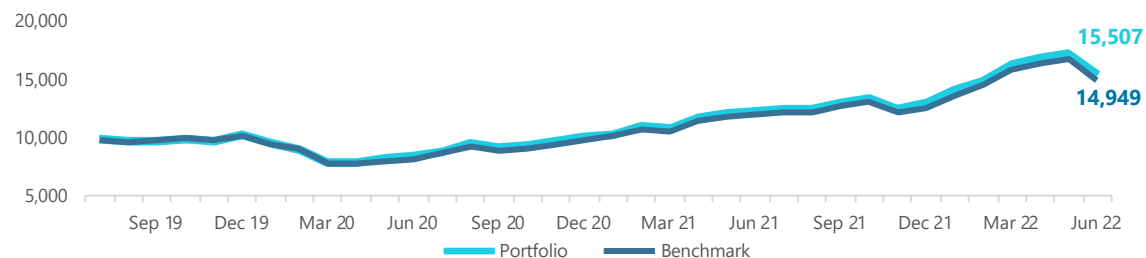
GOLD 100 OZ FUTR AUG22	13.5%
US TREASURY FRN	11.8%
NATURAL GAS FUTR SEP22	10.4%
US TREASURY FRN	10.2%
US TREASURY FRN	10.1%
Top 5 Holdings	56.0%

Performance (net)¹

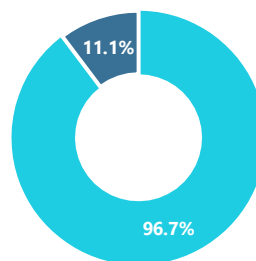
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Credit Suisse Commodity	551.2	-4.9%	25.9%	15.7%	8.9%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Credit Suisse Commodity	-4.9%	71	26.2%	44	16.1%	36	9.2%	43
Median	0.0%		25.2%		14.3%		7.9%	

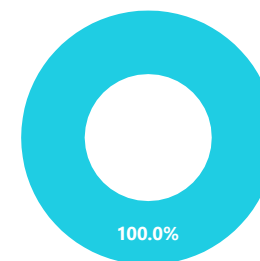
Growth of \$10,000



Top Exposures (% of assets)²



■ AGENCY
■ CASH EQUIVALENT



■ UNITED STATES

1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

Credit Suisse

for the quarter ended June 30, 2022

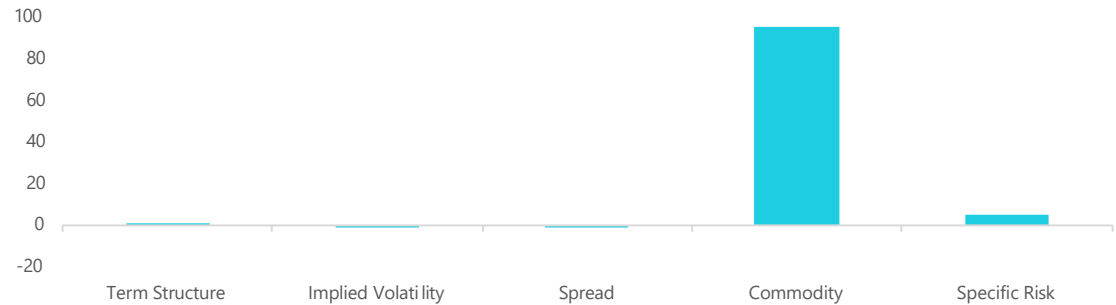


Los Angeles County Employees Retirement Association

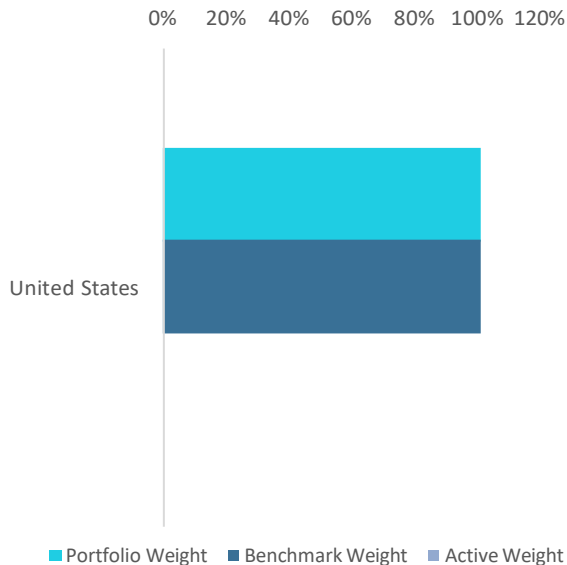
Portfolio Risk Summary

	Value
Total Risk	16.99
Benchmark Risk	18.88
Active Risk	4.88
Portfolio Beta	0.87

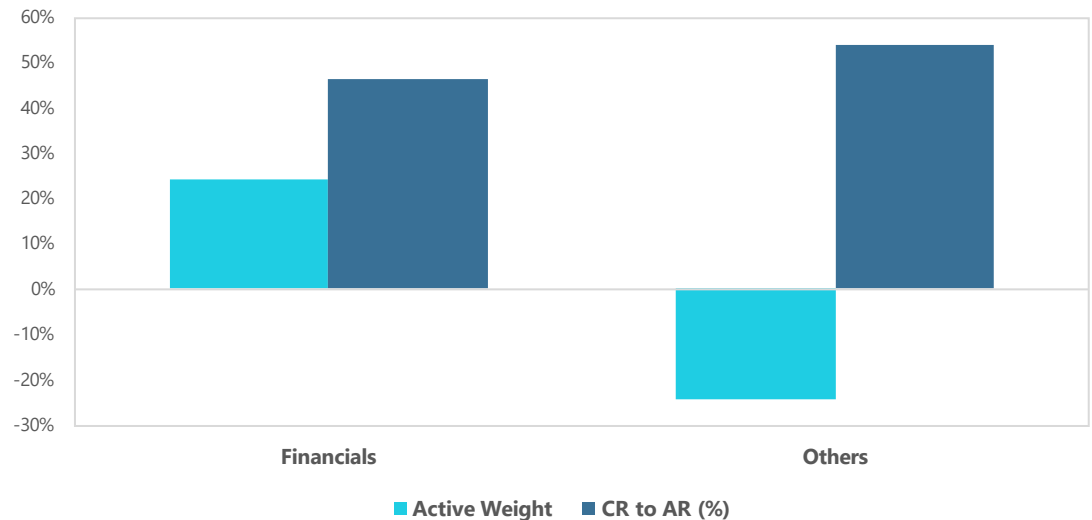
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

DWS

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide capital appreciation and a hedge to inflation. A diversified approach within infrastructure to gain exposure to infrastructure related to telecommunication, transportation, utilities, waste and energy.

Inception Date: June 2019

Risk Statistics (since inception)

Standard Deviation	25.1%
Benchmark Standard Deviation	25.1%
Sharpe Ratio	0.56
Information Ratio	-0.34
Beta	0.98
Tracking Error	4.4%

Top Holdings (% of assets)

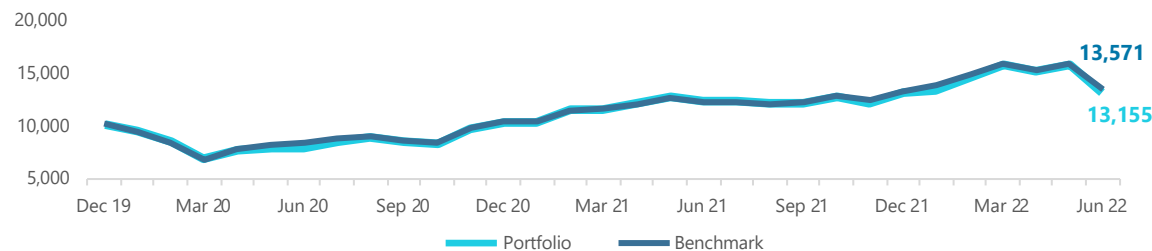
NUTRIEN LTD	9.0%
EXXON MOBIL CORP	7.7%
CORTEVA INC	6.7%
SHELL PLC	4.8%
VALE SA SP ADR	4.6%
Top 5 Holdings	32.8%

Performance (net)¹

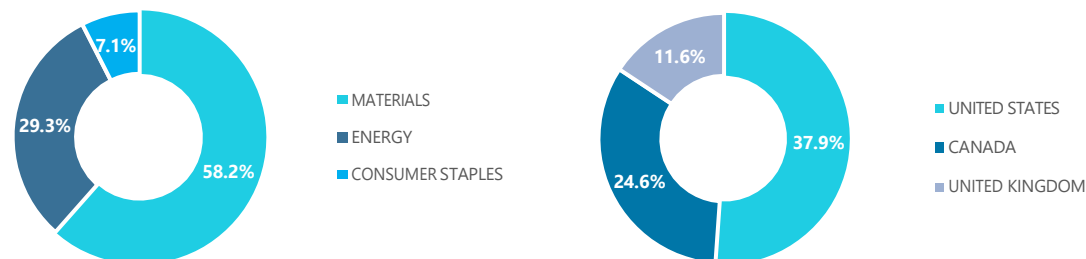
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DWS Natural Resources	933.6	-17.0%	6.8%	9.6%	--
S&P Glb LargeMidCap Commod & Resources		-15.1%	10.2%	10.7%	--
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DWS Natural Resources	-17.0%	100	7.0%	64	9.8%	60	--	--
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

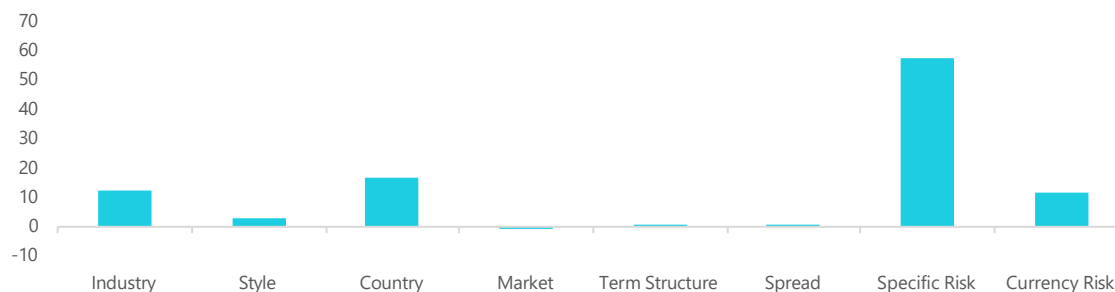
DWS

for the quarter ended June 30, 2022

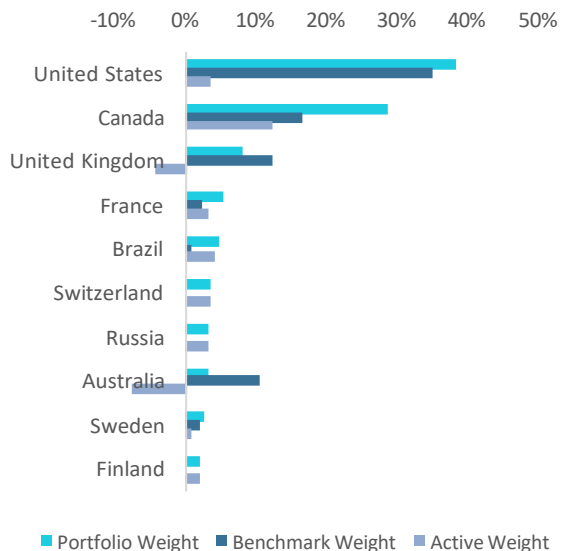
Portfolio Risk Summary

	Value
Total Risk	23.81
Benchmark Risk	23.80
Active Risk	4.63
Portfolio Beta	0.98

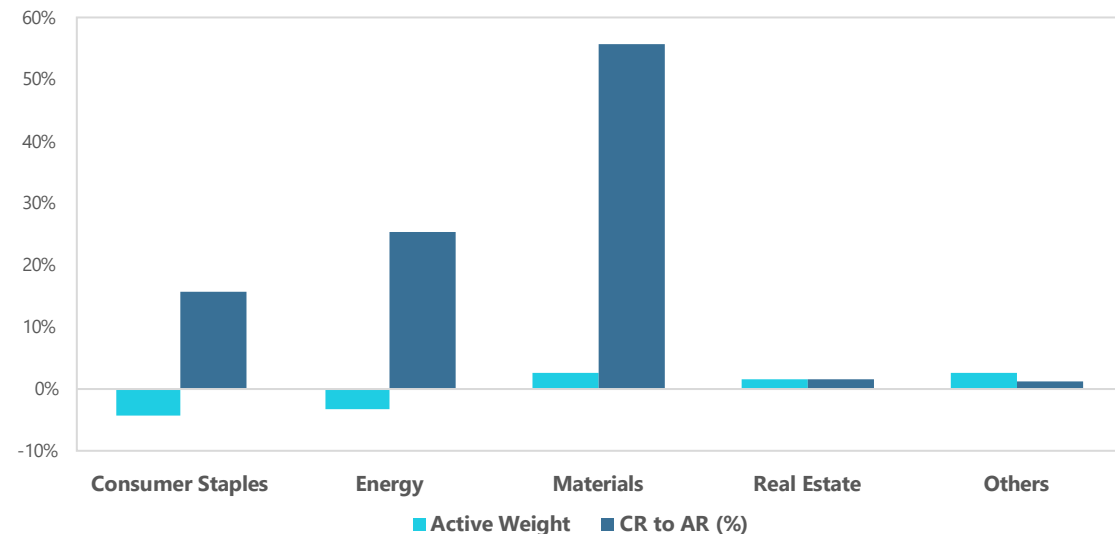
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

Neuberger Berman / Gresham

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining. The collateral portfolio provides income with conservative fixed income exposure.

Inception Date: July 2007

Risk Statistics (since inception)

Standard Deviation	18.6%
Benchmark Standard Deviation	17.1%
Sharpe Ratio	0.14
Information Ratio	0.52
Beta	1.05
Tracking Error	5.0%

Top Holdings (% of assets)

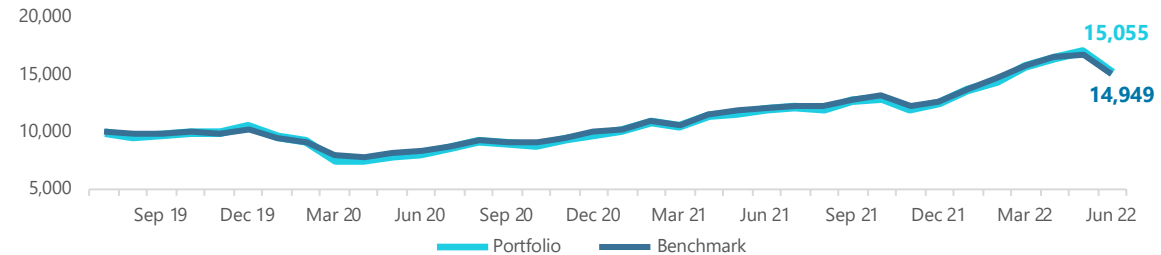
GOLD 100 OZ FUTR AUG22	10.6%
NATURAL GAS FUTR SEP22	9.7%
SOYBEAN FUTURE NOV22	6.6%
WTI CRUDE FUTURE SEP22	6.1%
TREASURY BILL	5.5%
Top 5 Holdings	38.6%

Performance (net)¹

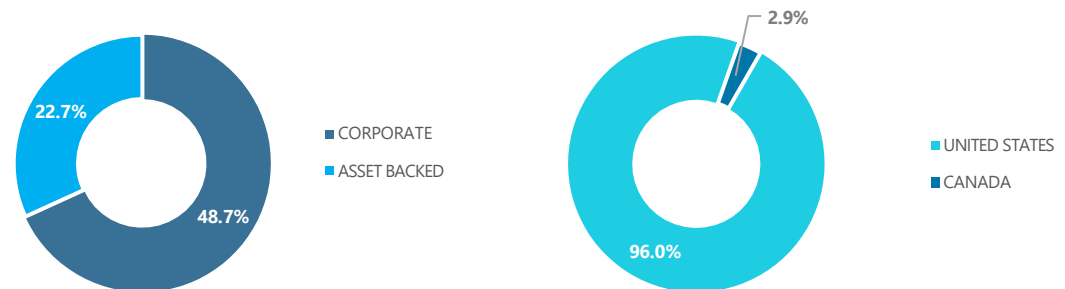
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Neuberger Berman/Gresham	541.4	-3.7%	26.4%	14.6%	9.5%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodities Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Neuberger Berman/Gresham	-3.6%	68	26.8%	43	15.0%	48	9.1%	40
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

Neuberger Berman / Gresham

for the quarter ended June 30, 2022

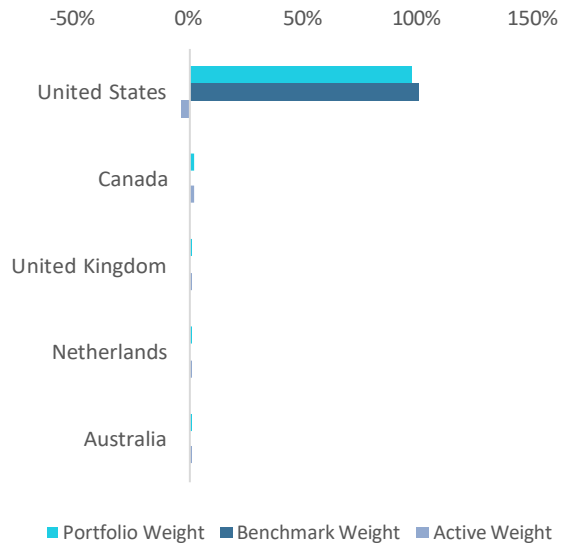


Los Angeles County Employees Retirement Association

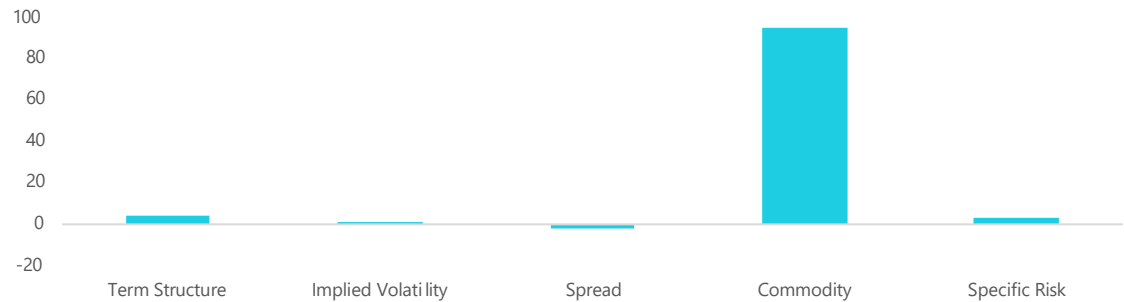
Portfolio Risk Summary

	Value
Total Risk	14.79
Benchmark Risk	19.34
Active Risk	5.05
Portfolio Beta	0.76

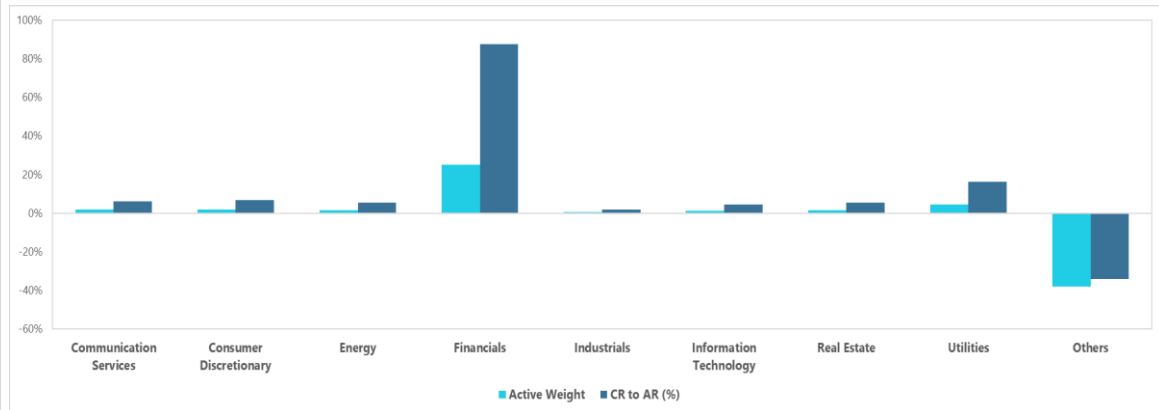
Top Countries by Weight%



Active Risk from Common Factors



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

PIMCO

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining. The collateral portfolio provides income with conservative fixed income exposure.

Inception Date: July 2007

Risk Statistics (since inception)

Standard Deviation	18.2%
Benchmark Standard Deviation	17.1%
Sharpe Ratio	0.03
Information Ratio	0.51
Beta	1.05
Tracking Error	2.5%

Top Holdings (% of assets)

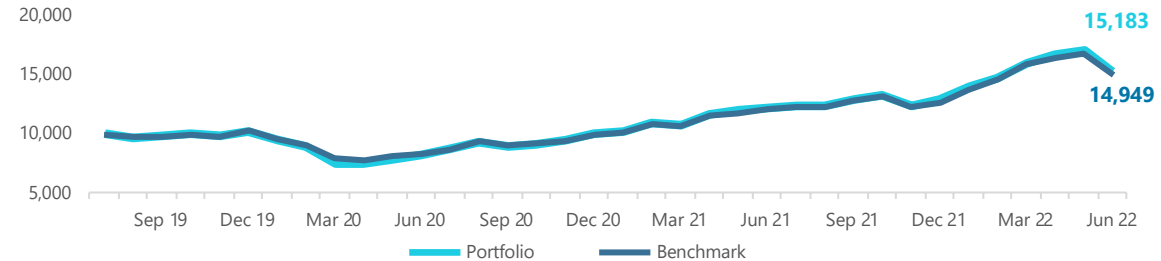
PIMCO FDS SHORT TERM FLTG NAV MUTUAL FUND	36.8%
SWU0SY268 TRS USD R E	22.8%
SWU0SY417 TRS USD R E	18.7%
SWU0SY425 TRS USD R E	13.3%
BRENT CRUDE FUTR DEC23	6.6%
Top 5 Holdings	98.3%

Performance (net)¹

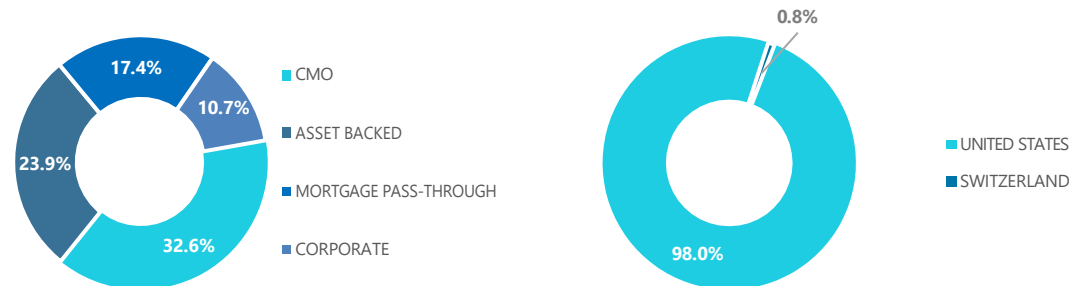
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
PIMCO Commodity Plus	212.8	-5.3%	24.5%	14.9%	9.3%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
PIMCO Commodity Plus	-5.2%	71	25.0%	52	15.4%	47	9.7%	41
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

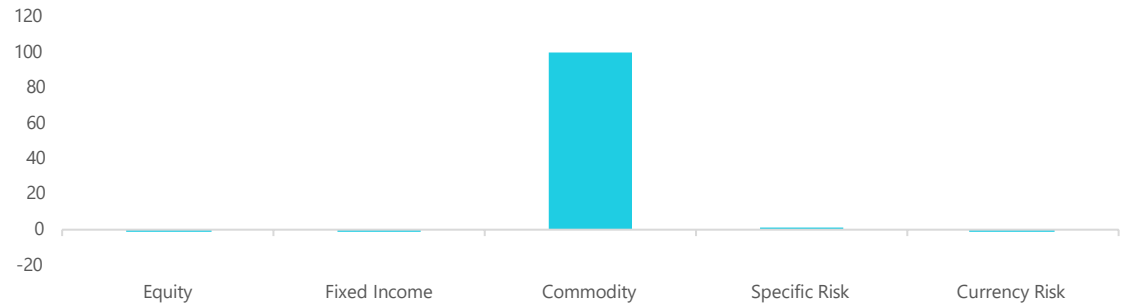
PIMCO

for the quarter ended June 30, 2022

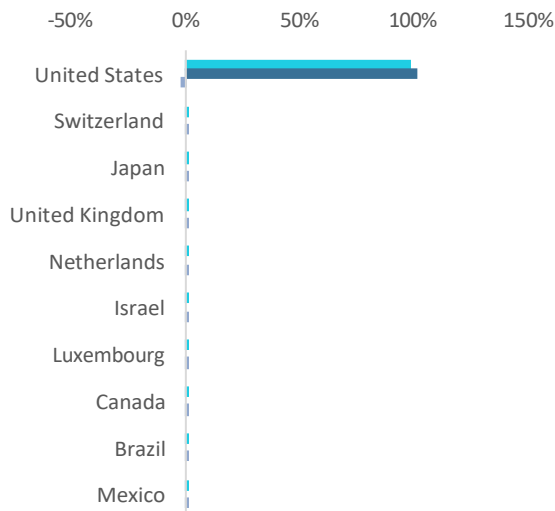
Portfolio Risk Summary

	Value
Total Risk	1.61
Benchmark Risk	18.88
Active Risk	19.00
Portfolio Beta	0.00

Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

Real Assets & Inflation Hedges

Infrastructure

DWS

for the quarter ended June 30, 2022

Strategy

Seeks to provide capital appreciation and income with global infrastructure securities. The strategy takes a diversified approach within infrastructure to gain exposure to infrastructure related to telecommunication, transportation, utilities, waste and energy.

Inception Date: June 2019

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	43,813.9	41,933.7
No. Of Issues	46.0	--
Dividend Yield	2.5	3.2
Return on Equity	15.9	14.8
Price to Sales	5.9	5.5
Price to Book	3.7	4.0
PE Ratio	35.0	29.6

Top Holdings (% of assets)

CROWN CASTLE INTL CORP	7.6%
AMERICAN TOWER CORP	6.5%
ENBRIDGE INC	5.9%
SEMPRA ENERGY	5.3%
WILLIAMS COS INC	4.7%

Top 5 Holdings

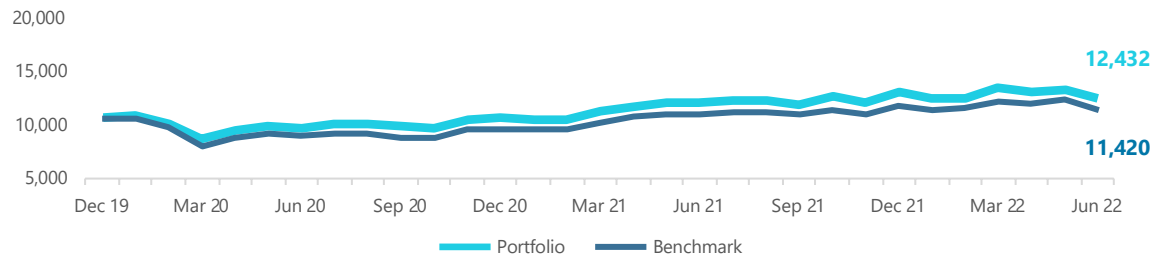
30.0%

Performance (net)¹

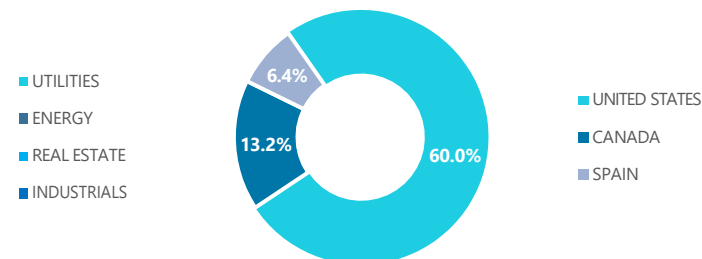
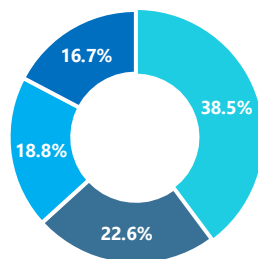
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DWS Infrastructure	2,668.3	-8.0%	3.2%	7.5%	--
DJ Brookfield Global Infrastr Comp TR		-6.9%	2.8%	4.5%	--
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Infrastructure	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DWS Infrastructure	-7.9%	--	3.4%	--	7.7%	--	--	--
Median	--		--		--		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data for infrastructure is unavailable.
 2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Infrastructure

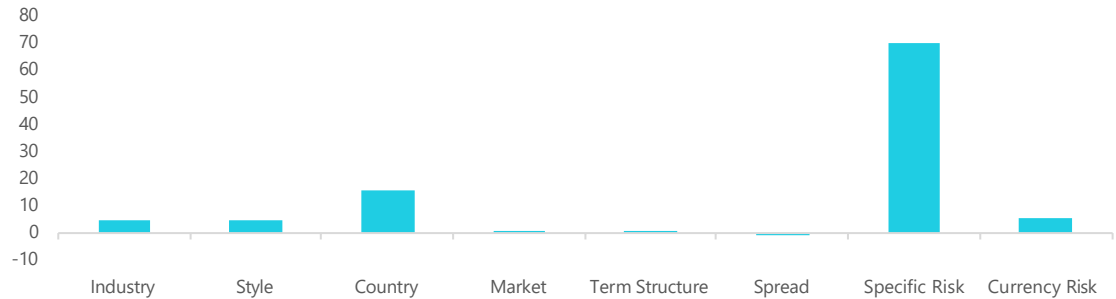
DWS

for the quarter ended June 30, 2022

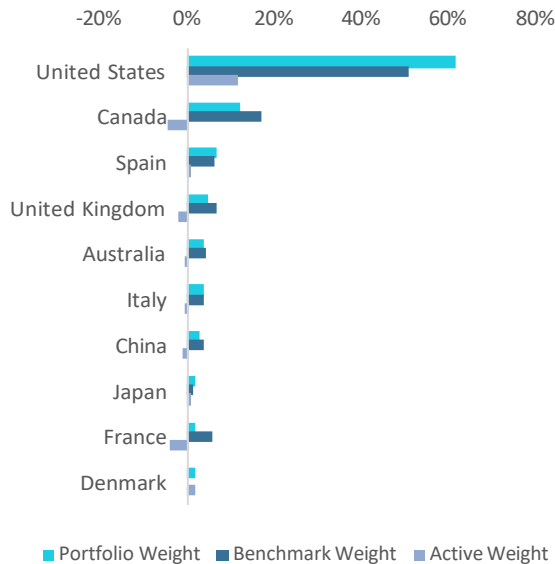
Portfolio Risk Summary

	Value
Total Risk	17.13
Benchmark Risk	17.29
Active Risk	2.18
Portfolio Beta	0.98

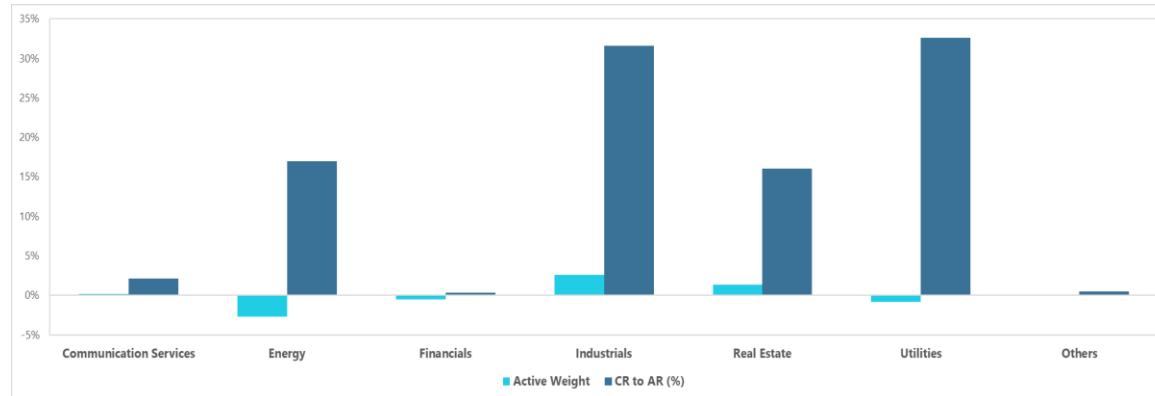
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

TIPS

BlackRock

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide income and a hedge against inflation with passive TIPS exposure.

Inception Date: May 2019

Risk Statistics (since inception)

Standard Deviation	5.0%
Benchmark Standard Deviation	4.9%
Sharpe Ratio	0.62
Information Ratio	0.08
Beta	1.00
Tracking Error	0.7%

Top Holdings (% of assets)

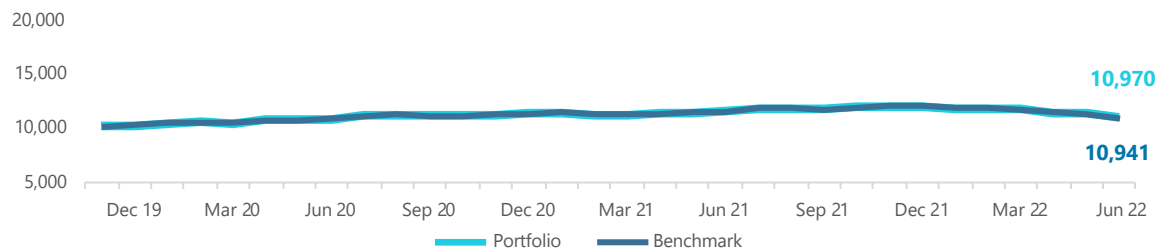
TSY INFL IX N/B	6.3%
TSY INFL IX N/B	4.8%
TSY INFL IX N/B	4.5%
TSY INFL IX N/B	4.0%
TSY INFL IX N/B	3.9%
Top 5 Holdings	23.5%

Performance (net)¹

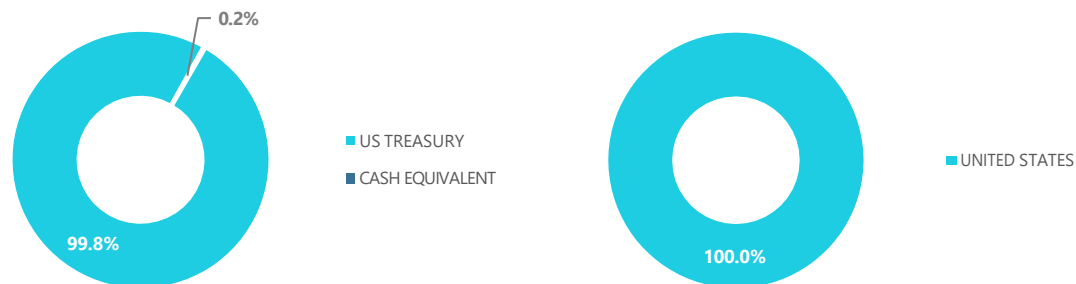
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
BlackRock TIPS	1,930.6	-6.3%	-4.8%	3.1%	--
Bloomberg U.S. Treasury: U.S. TIPS		-6.1%	-5.1%	3.0%	--
Real Assets & Inflation Hedges Policy BM		-3.2%	12.4%	8.7%	--

Universe data: Inflation Linked Bond Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
BlackRock TIPS	-6.3%	--	-4.8%	--	3.1%	--	--	--
Median	--		--		--		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data for TIPS is unavailable.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

TIPS

BlackRock

for the quarter ended June 30, 2022

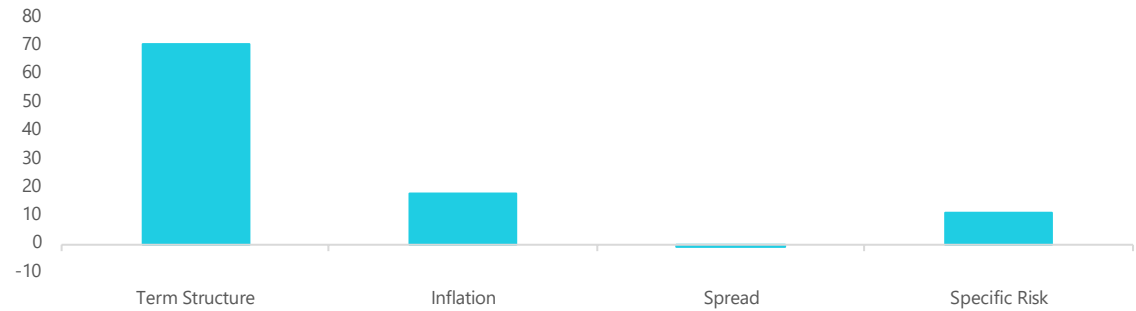


Los Angeles County Employees Retirement Association

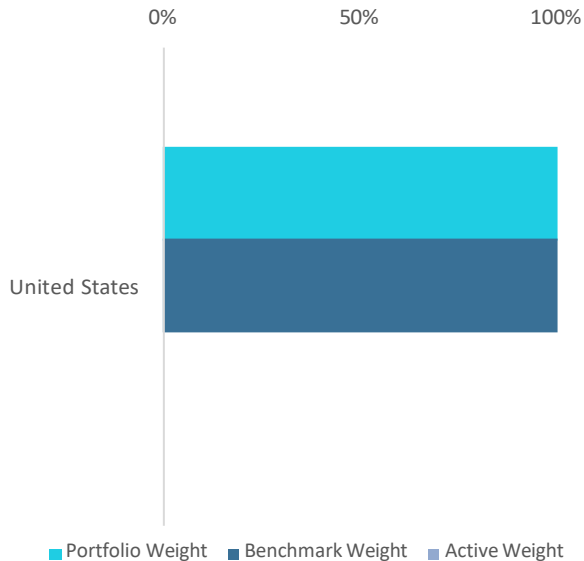
Portfolio Risk Summary

	Value
Total Risk	5.72
Benchmark Risk	5.78
Active Risk	0.08
Portfolio Beta	0.99

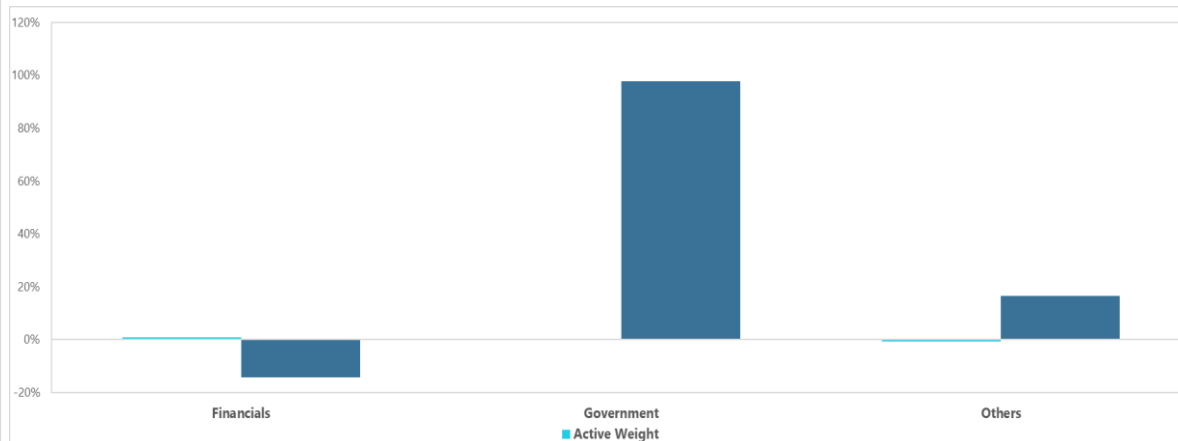
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



risk reduction & mitigation

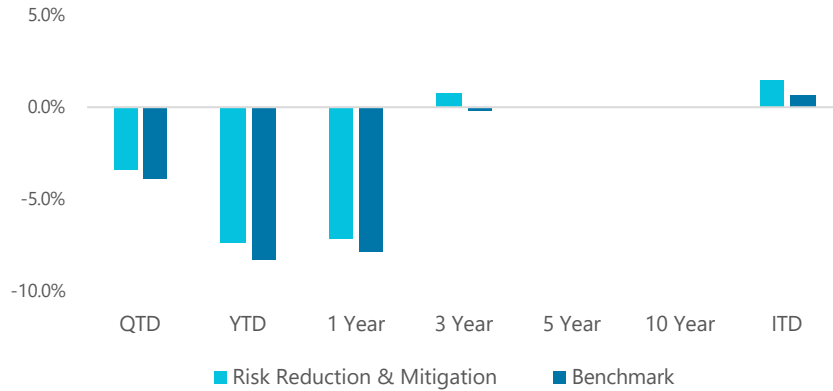
Summary

for the quarter ended June 30, 2022



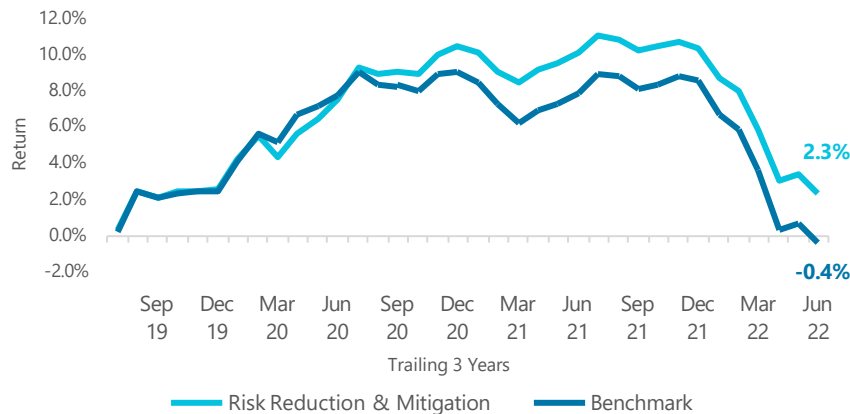
Los Angeles County Employees Retirement Association

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Risk Reduction & Mitigation	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
Benchmark	-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Excess	0.5%	1.0%	0.6%	0.9%	--	--	0.9%

Cumulative Return

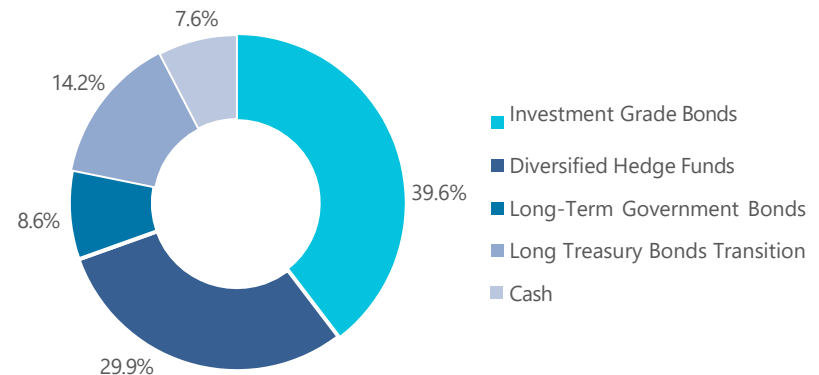


Functional Category¹

	QTD	FYTD	1 Year	3 Year
Investment Grade Bonds	-4.8%	-10.6%	-10.6%	-0.7%
BBG BC Aggregate Bond Index	-4.7%	-10.3%	-10.3%	-0.9%
Excess	-0.1%	-0.3%	-0.3%	0.2%
Diversified Hedge Funds	1.5%	4.0%	4.0%	7.1%
Diversified Hedge Funds Policy Benchmark	0.7%	2.6%	2.6%	3.2%
Excess	0.8%	1.4%	1.4%	3.9%
Long-Term Government Bonds	-11.4%	--	--	--
Bloomberg U.S. Treasury: Long	-11.9%	--	--	--
Excess	0.5%	--	--	--
Cash	0.7%	1.5%	1.5%	1.3%
Cash Policy Benchmark	0.1%	0.2%	0.2%	0.6%
Excess	0.5%	1.3%	1.3%	0.7%

1. Diversified Hedge Funds returns are net of all fees and expenses.

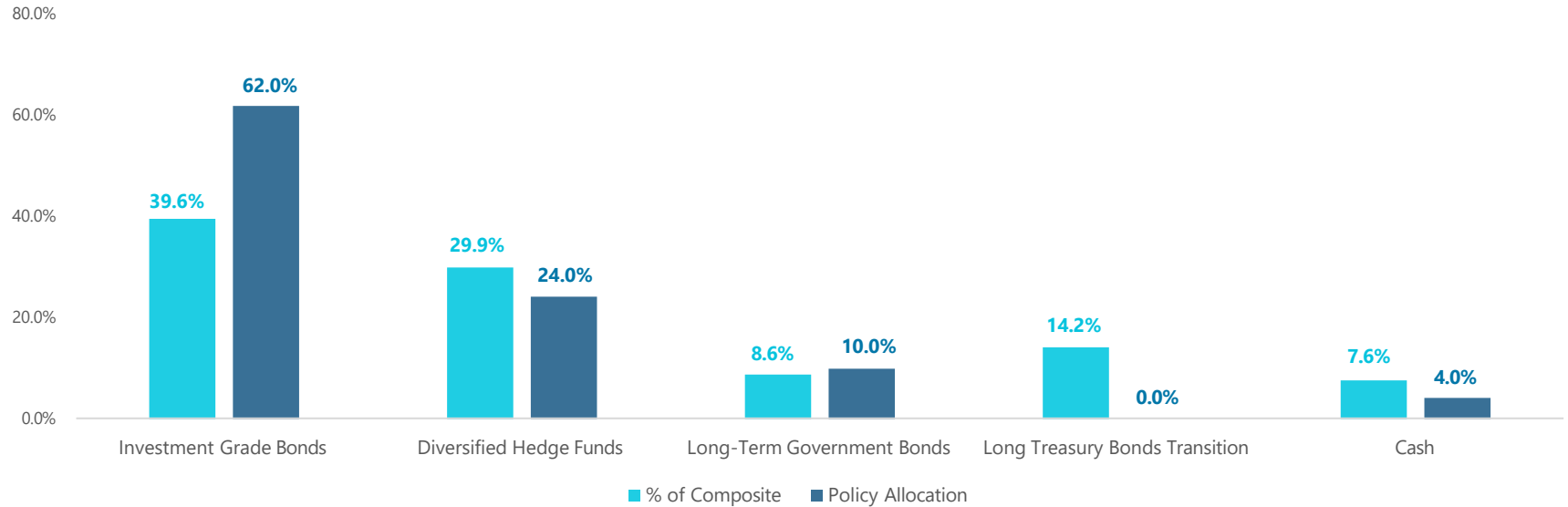
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy



	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Risk Reduction & Mitigation	14,020	100.0%	100.0%		
Investment Grade Bonds	5,556	39.6%	62.0%	-22.4%	-3,137
Diversified Hedge Funds	4,196	29.9%	24.0%	5.9%	831
Long-Term Government Bonds	1,210	8.6%	10.0%	-1.4%	-192
Long Treasury Bonds Transition	1,992	14.2%	0.0%	14.2%	1,992
Cash	1,067	7.6%	4.0%	3.6%	506

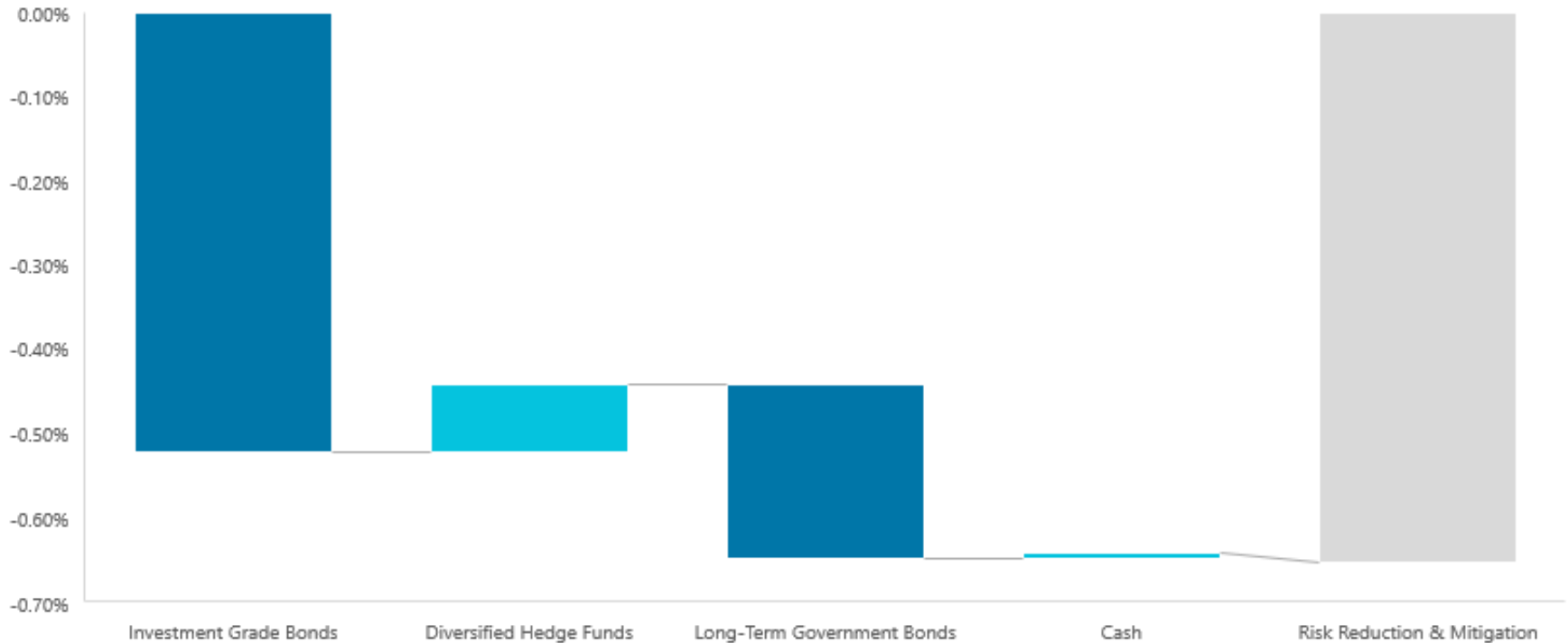
Contribution to Return

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Investment Grade Bonds	-0.52%	Brevan Howard Master Fund	0.08%	BTC US Debt Index Fund	-0.32%
Diversified Hedge Funds	0.08%	Caxton Global Investments	0.02%	BlackRock Long Treasury Bonds	-0.21%
Long-Term Government Bonds	-0.21%	Capula GRV	0.02%	Allspring/Wells	-0.12%
Cash	0.01%	Cash	0.01%	Pugh Capital Mgmt	-0.07%
Risk Reduction & Mitigation	-0.65%	Linear B	0.00%	DK Institutional Partners	-0.01%

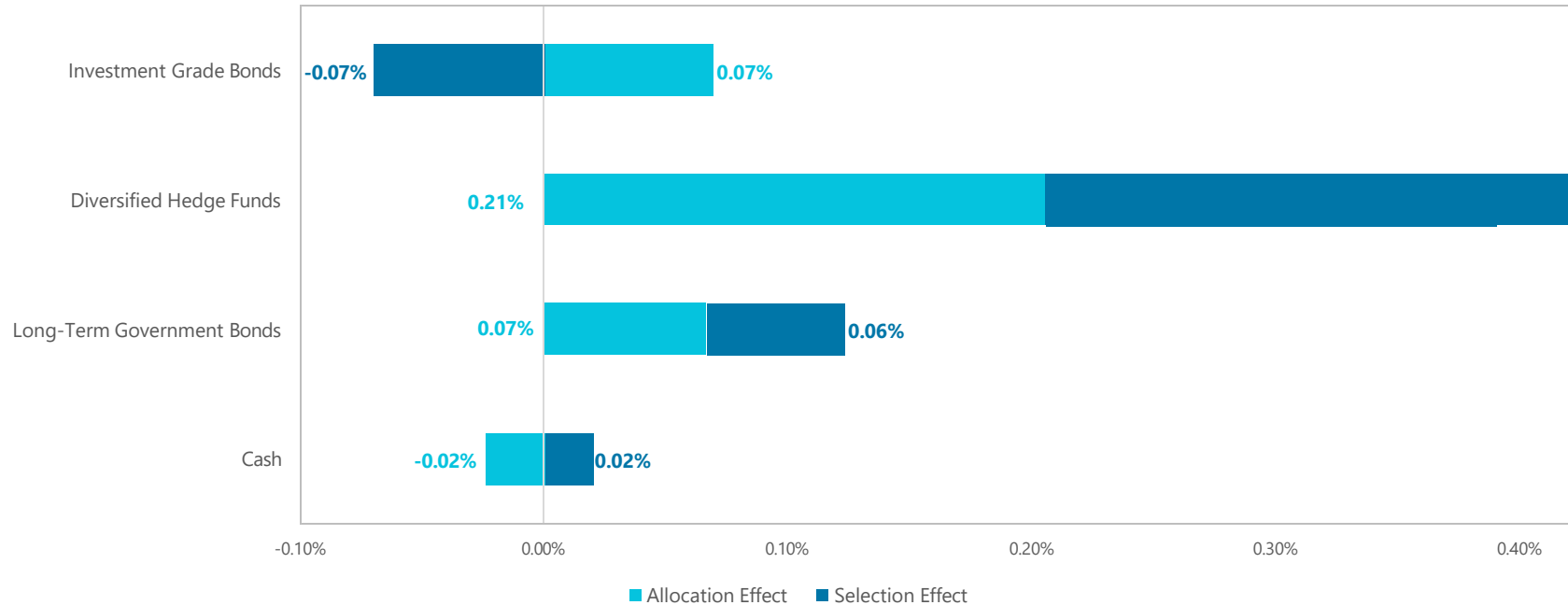
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



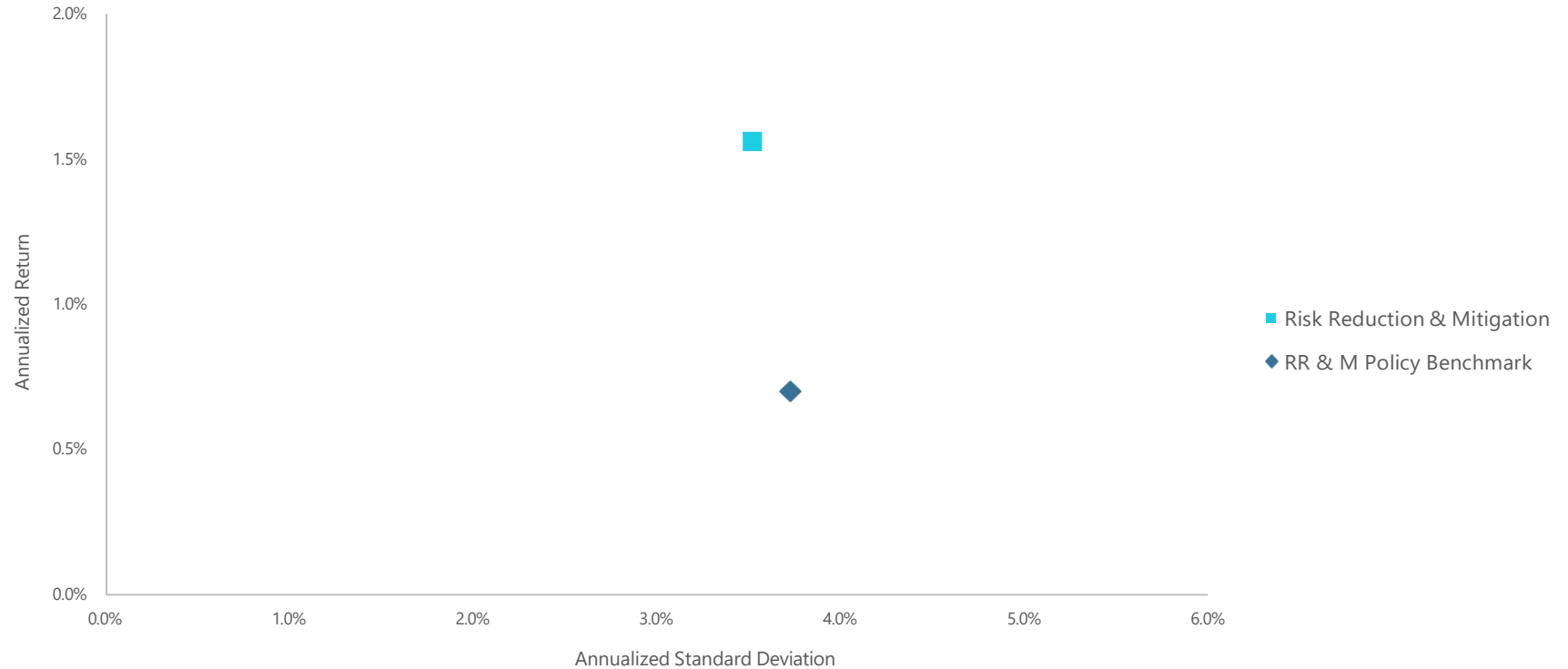
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Risk Reduction & Mitigation	14,020	100.0%	100.0%	-3.4%	-3.9%	0.39%	0.19%	0.57%
Investment Grade Bonds	5,556	39.6%	62.0%	-4.8%	-4.7%	0.07%	-0.07%	0.02%
Diversified Hedge Funds	4,196	29.9%	24.0%	1.5%	0.7%	0.21%	0.18%	0.42%
Long-Term Government Bonds	1,210	8.6%	10.0%	-11.4%	-11.9%	0.07%	0.06%	0.11%
Cash	1,067	7.6%	4.0%	0.7%	0.1%	-0.02%	0.02%	0.00%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Risk Reduction & Mitigation	1.6%	3.5%				
RR & M Policy Benchmark	0.7%	3.7%	0.24	1.13	0.94	0.8%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Risk Reduction & Mitigation	100.0%	14,020	14,969	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
RR & M Policy Benchmark				-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Investment Grade Bonds	39.6%	5,556	8,649	-4.8%	-10.4%	-10.6%	-0.7%	1.1%	2.1%	5.3%
BBG BARC Agg				-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	4.8%
Allspring/Wells	12.0%	1,686	1,977	-4.7%	-10.4%	-10.4%	-0.4%	1.2%	2.1%	4.0%
BTC US Debt Index Fund	21.4%	2,998	5,549	-4.6%	-10.2%	-10.2%	-0.9%	0.9%	1.6%	4.0%
MHLP	0.1%	12	13	1.2%	2.4%	5.2%	5.3%	8.0%	5.2%	5.4%
Pugh Capital Mgmt	6.1%	861	1,110	-4.8%	-10.5%	-10.6%	-0.8%	1.0%	1.7%	3.5%
Diversified Hedge Funds	29.9%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
AM Asia Strategies	1.6%	220	229	-3.9%	-2.6%	-2.6%	--	--	--	-2.6%
Brevan Howard Master Fund	4.5%	625	566	10.5%	14.0%	12.3%	--	--	--	10.0%
Capula GRV	4.3%	608	543	2.6%	5.9%	5.8%	5.8%	--	--	5.9%
Caxton Global Investments	2.1%	289	273	5.9%	12.9%	12.9%	--	--	--	11.5%
DK Institutional Partners	3.5%	486	495	-1.8%	-1.2%	-1.2%	5.9%	--	--	5.2%
Grosvenor HFOF	0.3%	45	52	-5.9%	-5.8%	-3.0%	7.2%	5.3%	4.6%	4.4%
HBK Multi-Strategy	3.9%	549	558	-1.5%	-1.3%	2.5%	5.3%	--	--	4.9%
Hudson Bay	4.5%	632	631	0.2%	0.1%	3.7%	--	--	--	11.9%
Polar	3.3%	459	464	-1.1%	-0.6%	-0.3%	--	--	--	12.1%
Stable Asset Management	2.0%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Long-Term Government Bonds	8.6%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Bloomberg U.S. Treasury: Long				-11.9%	-21.3%	--	--	--	--	-22.1%
BlackRock Long Treasury Bonds	8.6%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Long Treasury Bonds Transition	14.2%	1,992	0	--	--	--	--	--	--	-0.4%
Cash	7.6%	1,067	953	0.7%	0.9%	1.5%	1.3%	1.6%	1.1%	1.8%
Cash Policy BM				0.1%	0.2%	0.2%	0.6%	1.1%	0.7%	1.4%

1. Diversified Hedge Funds returns are net of all fees and expenses.

Risk Reduction & Mitigation

Investment Grade Bonds

Allspring/Wells

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A core fixed income strategy focusing on bottom-up quantitative and qualitative security selection and comprehensive risk management. Value is added primarily through security selection and sector rotation.

Inception Date: March 2004

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	865.0	--
Effective Duration	6.7	6.4
Convexity	0.7	0.7
Coupon Rate	2.6	2.5
Yield to Maturity	3.9	3.6
Current Yield	2.8	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

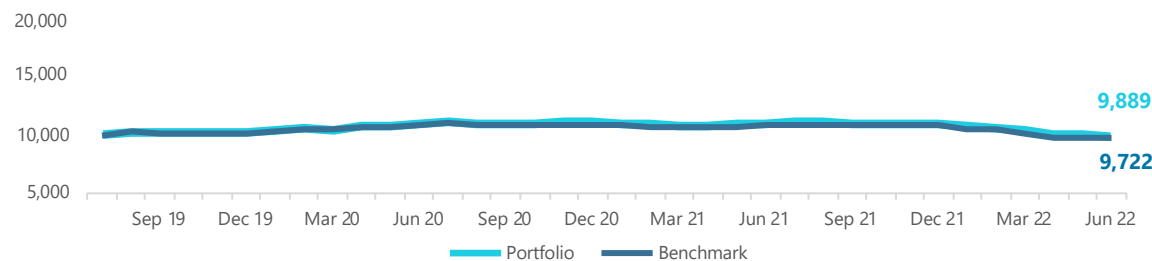
FNMA TBA 30 YR 5	3.0%
US TREASURY N/B	2.6%
US TREASURY N/B	2.3%
US TREASURY N/B	2.0%
US TREASURY N/B	1.9%
Top 5 Holdings	11.8%

Performance (net)¹

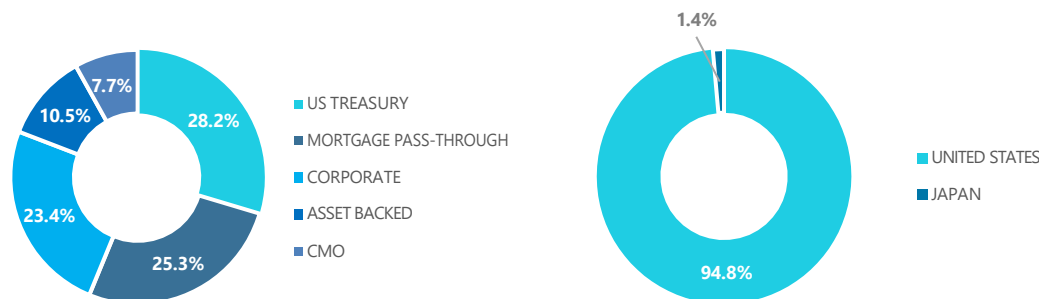
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Allspring/Wells	1,685.7	-4.7%	-10.4%	-0.4%	1.2%
BBG BARC Agg		-4.7%	-10.3%	-0.9%	0.9%
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Allspring/Wells	-4.7%	53	-10.3%	58	-0.3%	60	1.3%	56
Median	-4.6%		-9.0%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Risk Reduction & Mitigation

Investment Grade Bonds

Pugh Capital

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A core fixed income strategy that invests in investment-grade securities, with an emphasis on higher credit quality and mortgage-backed securities. The strategy seeks to add value relative to the Index by minimizing downside risk across the portfolio while adding incremental return through issue selection.

Inception Date: July 2005

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	238.0	--
Effective Duration	6.5	6.4
Convexity	0.7	0.7
Coupon Rate	2.8	2.5
Yield to Maturity	3.8	3.6
Current Yield	3.0	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

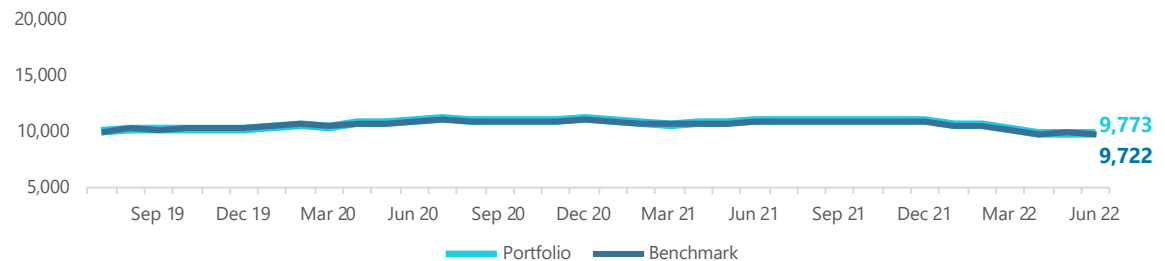
US TREASURY N/B	4.7%
US TREASURY N/B	3.5%
US TREASURY N/B	3.1%
US TREASURY N/B	2.7%
US TREASURY N/B	2.4%
Top 5 Holdings	16.3%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Pugh Capital Mgmt	860.7	-4.8%	-10.6%	-0.8%	1.0%
BBG BARC Agg		-4.7%	-10.3%	-0.9%	0.9%
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Pugh Capital Mgmt	-4.8%	53	-10.5%	62	-0.6%	67	1.1%	64
Median	-4.6%		-9.0%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Risk Reduction & Mitigation

Diversified Hedge Funds

AM Asia Strategies Fund

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: June 2021

Risk Statistics (since inception)

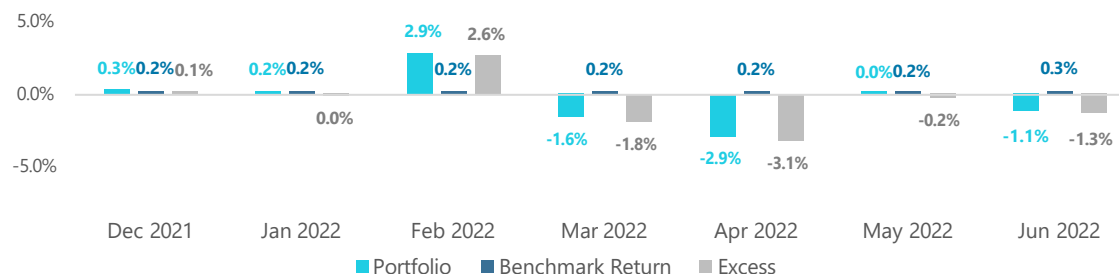
Standard Deviation	1.4%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.28
Information Ratio	-0.28
Beta	-29.72
Tracking Error	5.0%

Performance (net all)¹

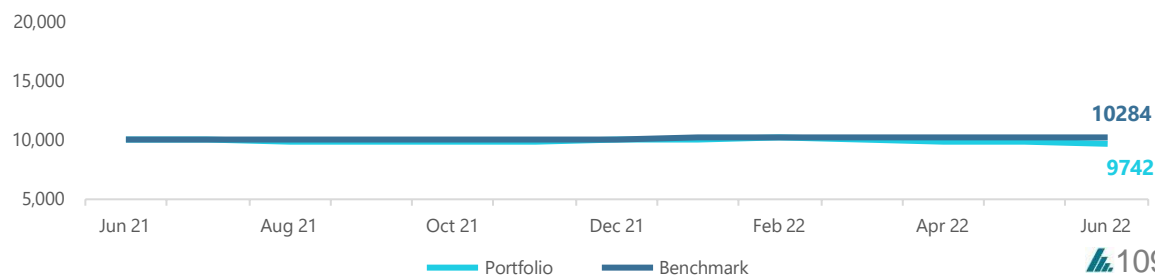
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
AM Asia Strategies	220.0	-3.9%	-2.6%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
AM Asia Strategies	-3.9%	71	-2.6%	62	--	--	--	--
Median	-0.1%		--		--		--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Brevan Howard

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Discretionary global macro fund with multiple portfolio manager teams that focus on both directional and relative value trading strategies.

Inception Date: March 2021

Risk Statistics (since inception)

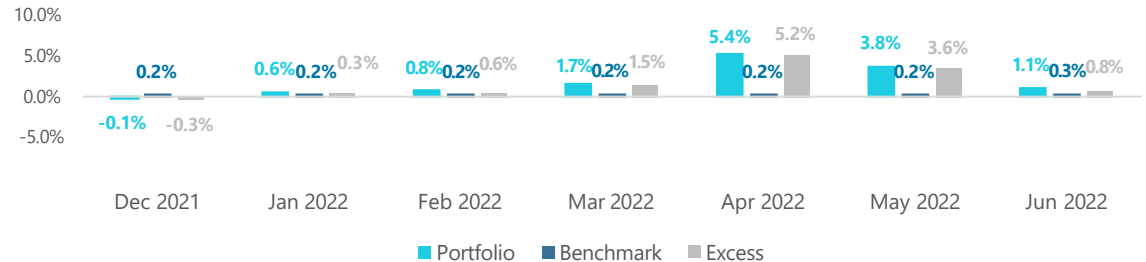
Standard Deviation	5.8%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	1.47
Information Ratio	1.08
Beta	-39.08
Tracking Error	5.7%

Performance (net all)¹

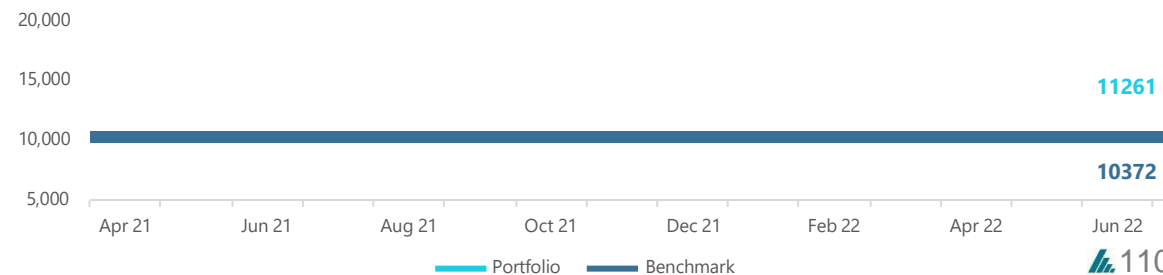
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Brevan Howard Master Fund	625.2	10.5%	12.3%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Brevan Howard Master Fund	10.6%	8	12.3%	31	--	--	--	--
Median	-0.1%		--		--	--	--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Capula GRV

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Global fixed income relative value hedge fund. The strategy seeks to benefit from pricing distortions generally caused by market flows in the government bond, interest rate swap and bond futures markets.

Inception Date: December 2018

Risk Statistics (since inception)

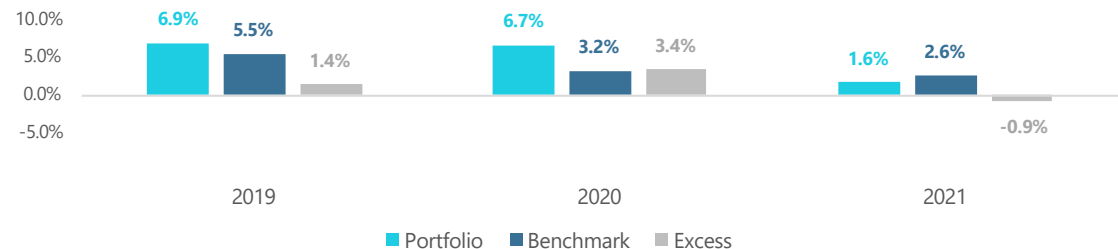
Standard Deviation	1.8%
Benchmark Standard Deviation	0.4%
Sharpe Ratio	2.71
Information Ratio	1.24
Beta	-0.51
Tracking Error	1.8%

Performance (net all)¹

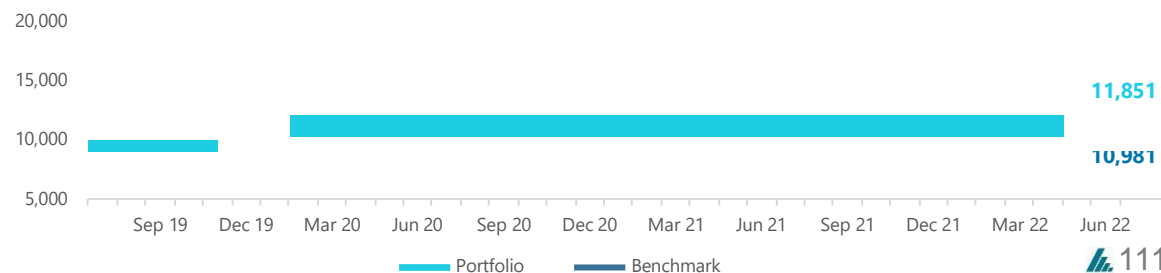
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Capula GRV	607.5	2.6%	5.8%	5.8%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Capula GRV	2.6%	23	5.8%	39	5.8%	39	--	--
Median	-0.1%		0.0%		4.8%		4.9%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Caxton

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Discretionary global macro fund with multiple portfolio manager teams that focus on both directional and relative value trading strategies.

Inception Date: February 2021

Risk Statistics (since inception)

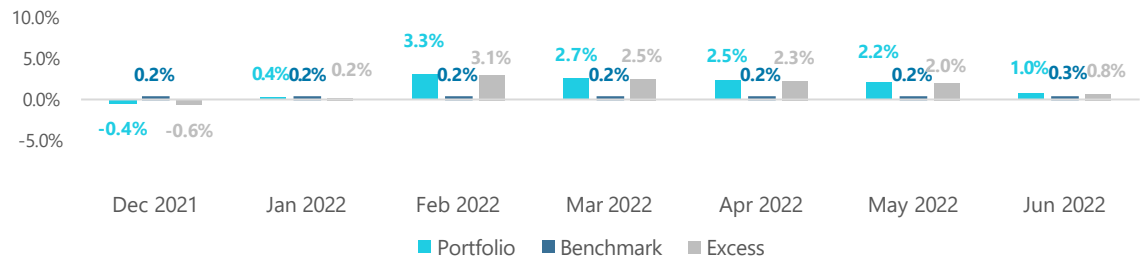
Standard Deviation	5.6%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	1.94
Information Ratio	1.58
Beta	-26.37
Tracking Error	5.6%

Performance (net all)¹

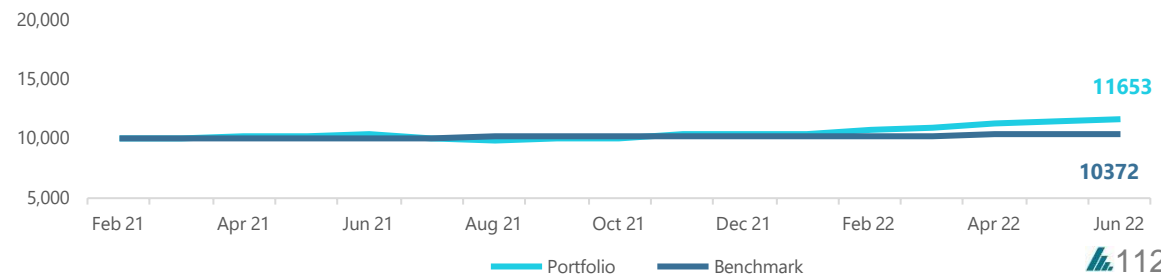
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Caxton Global Investments	289.5	5.9%	12.9%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Caxton Global Investments	5.9%	14	13.0%	28	--	--	--	--
Median	-0.1%		--		--	--	--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
 1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

DK Institutional Partners

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: May 2018

Risk Statistics (since inception)

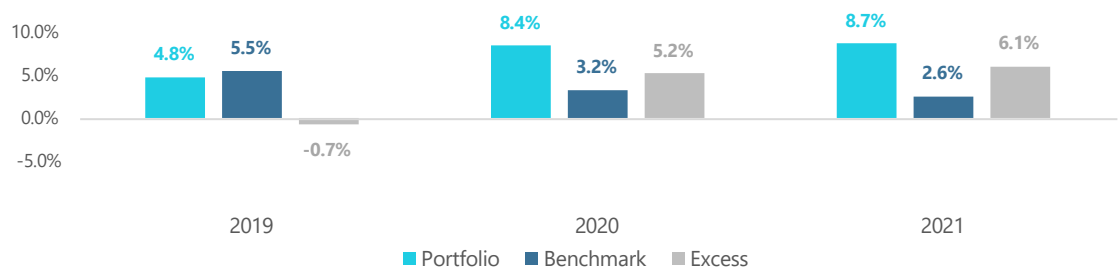
Standard Deviation	4.7%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.87
Information Ratio	0.22
Beta	-3.33
Tracking Error	4.8%

Performance (net all)¹

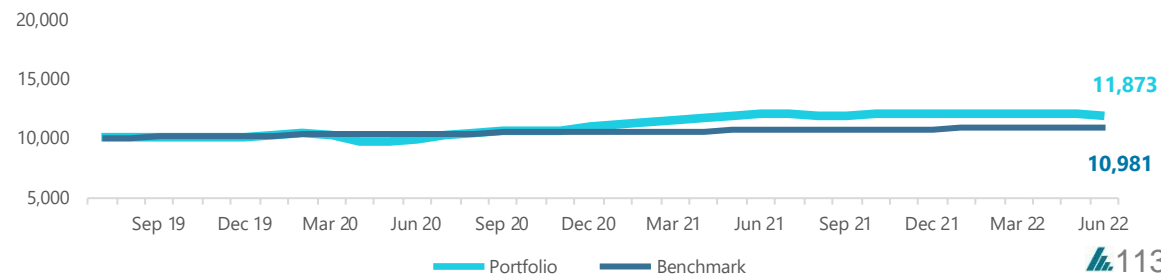
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DK Institutional Partners	486.3	-1.8%	-1.2%	5.9%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DK Institutional Partners	-1.8%	60	-1.2%	56	5.9%	39	--	--
Median	-0.1%		0.0%		4.8%		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

HBK Multi-Strategy

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: June 2018

Risk Statistics (since inception)

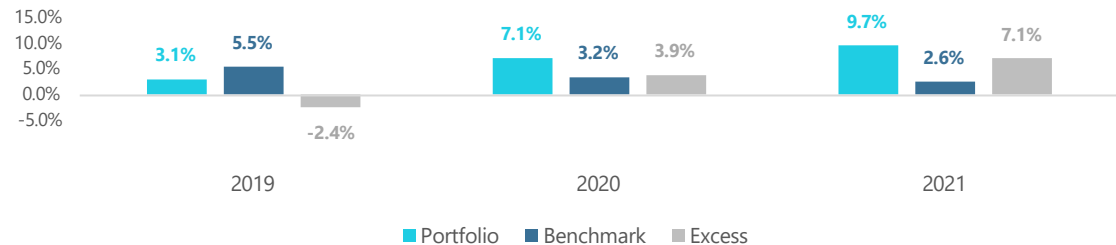
Standard Deviation	5.9%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.63
Information Ratio	0.11
Beta	-2.31
Tracking Error	6.0%

Performance (net all)¹

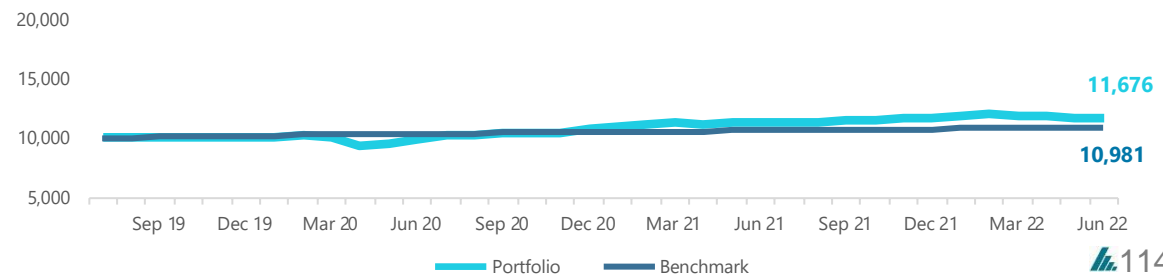
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
HBK Multi-Strategy	549.2	-1.5%	2.5%	5.3%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
HBK Multi-Strategy	-1.5%	59	2.5%	43	5.3%	42	--	--
Median	-0.1%		0.0%		4.8%		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Hudson Bay Fund

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: July 2020

Risk Statistics (since inception)

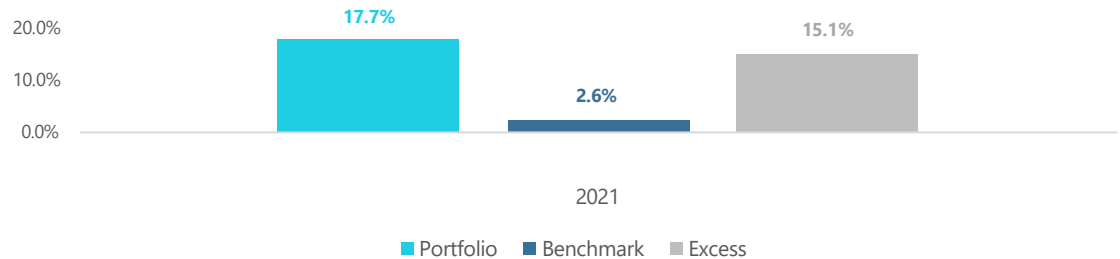
Standard Deviation	5.1%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	2.33
Information Ratio	1.93
Beta	7.83
Tracking Error	5.1%

Performance (net all)¹

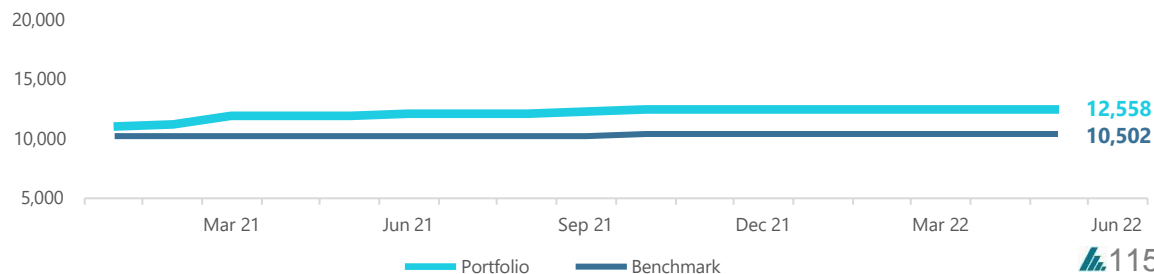
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Hudson Bay	632.6	0.3%	4.1%	--	--
Custom Hedge Fund Benchmark		0.5%	2.6%	--	--
RR & M Policy Benchmark		-3.2%	-7.6%	0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Hudson Bay	0.2%	41	3.7%	--	--	--	--	--
Median	-0.1%		--		--		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Polar

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: May 2020

Risk Statistics (since inception)

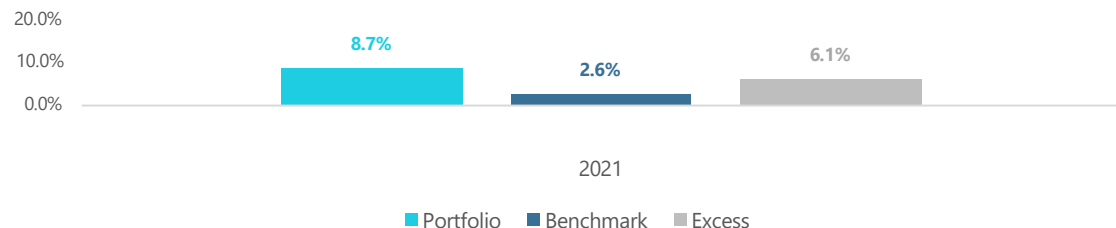
Standard Deviation	5.4%
Benchmark Standard Deviation	0.2%
Sharpe Ratio	1.60
Information Ratio	1.16
Beta	-0.74
Tracking Error	5.5%

Performance (net all)¹

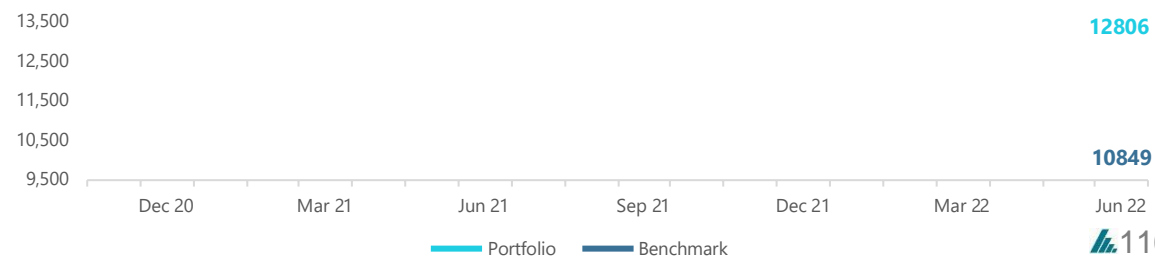
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Polar	459.2	-1.1%	-0.3%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Polar	-1.1%	56	-0.3%	54	--	--	--	--
Median	-0.1%		--		--		--	

Calendar Year Returns



Growth of \$10,000



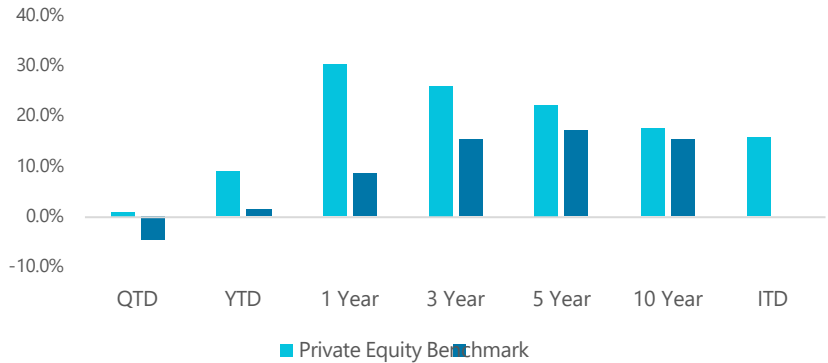
Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

private markets

Summary Private Equity

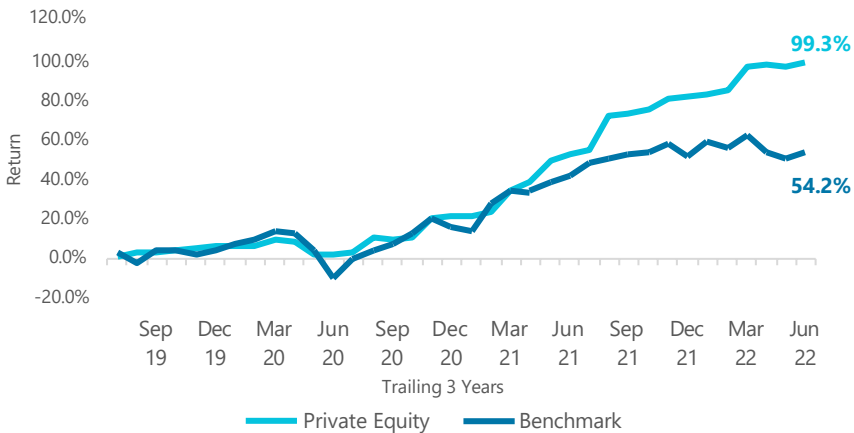
for the quarter ended June 30, 2022

Performance (net)



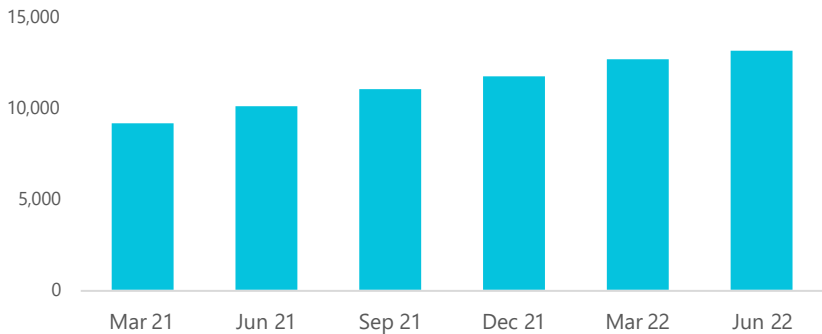
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Equity	1.0%	9.1%	30.1%	25.8%	22.3%	17.7%	15.9%
Benchmark	-4.8%	1.4%	8.4%	15.5%	17.3%	15.2%	--
Excess	5.8%	7.8%	21.7%	10.3%	5.0%	2.5%	--

Cumulative Return

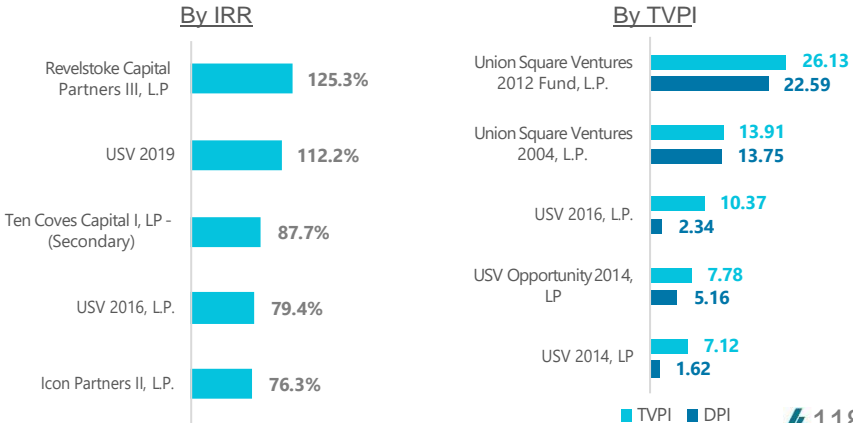


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	12,751	10,129	5,890
Net Cash Flow	330	95	812
Gain/Loss	126	2,983	6,505
Ending Market Value	13,207	13,207	13,207



Top Performing Investments (since inception)

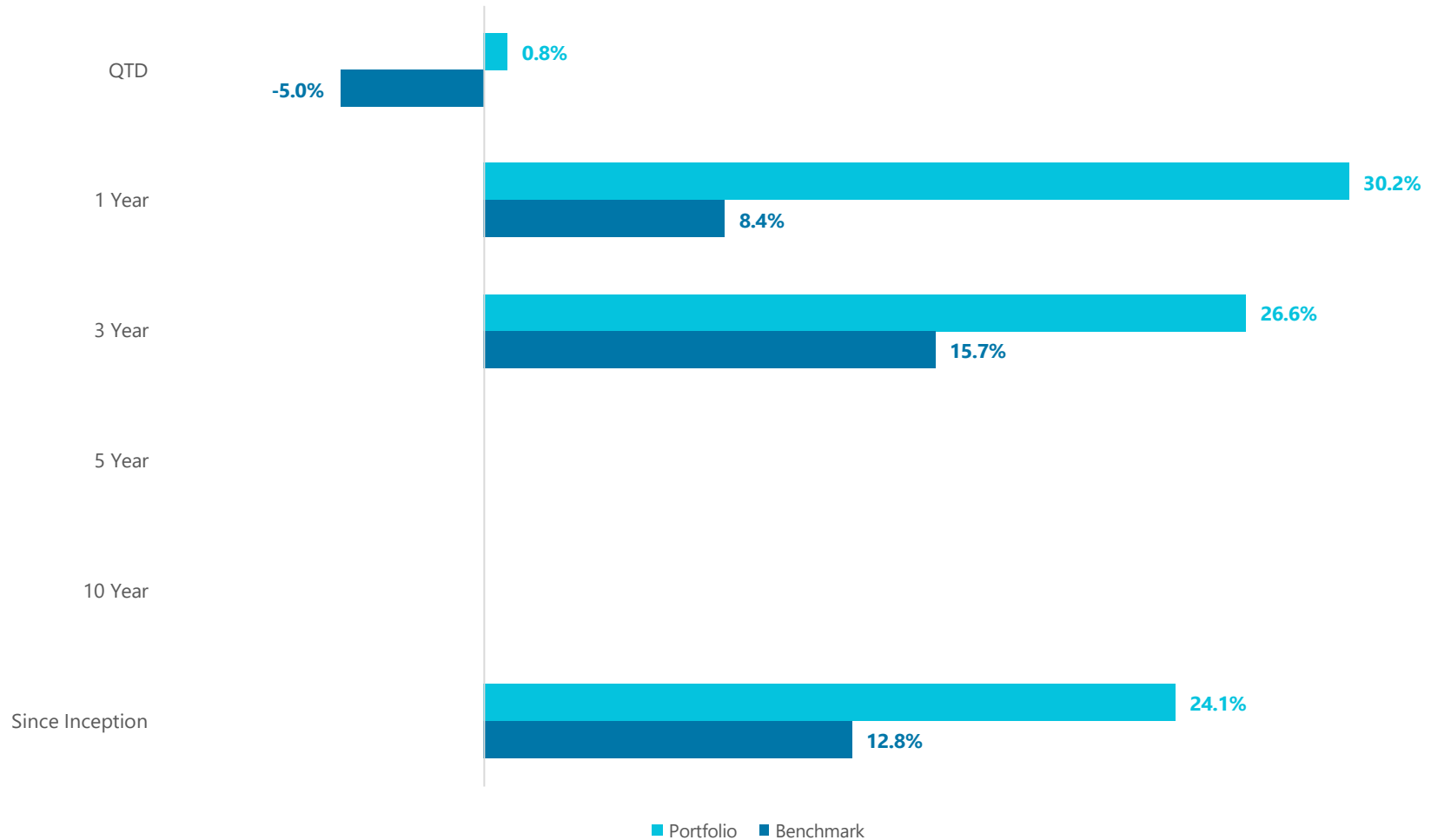


Historical Returns

Private Equity – Growth

for the quarter ended June 30, 2022

Time-Weighted Returns (net)



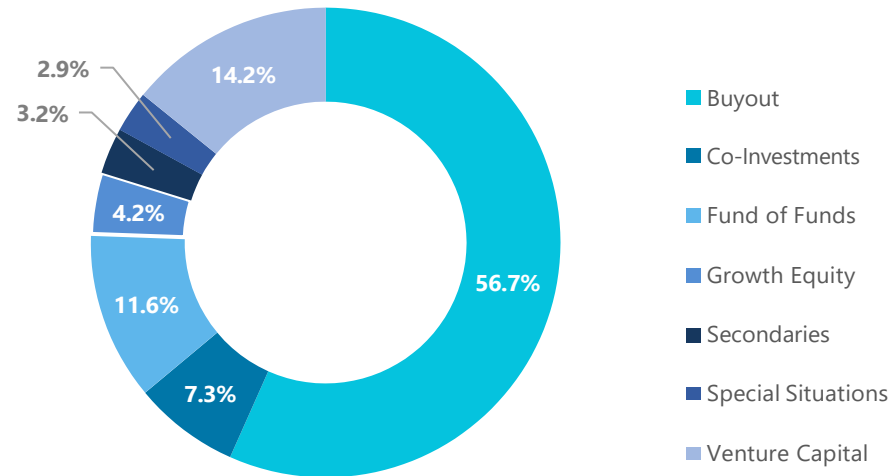
Performance by Strategy

Private Equity – Growth
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Strategy^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Buyout	199	14,079.1	12,314.1	13,695.9	7,197.2	20,893.1	8,579.0	1.11x	1.70x	14.2%	1.61
Co-Investments	12	1,177.4	1,110.8	927.1	925.6	1,852.7	741.9	0.83x	1.67x	18.6%	1.54
Fund of Funds	16	1,454.1	1,286.5	1,469.0	1,476.4	2,945.4	1,658.9	1.14x	2.29x	15.4%	1.70
Growth Equity	21	1,245.6	1,008.6	1,439.7	536.4	1,976.0	967.4	1.43x	1.96x	86.9%	1.75
Secondaries	15	733.1	567.1	360.9	403.0	763.9	196.8	0.64x	1.35x	17.7%	1.35
Special Situations	22	1,171.3	991.2	1,032.0	362.0	1,394.1	402.9	1.04x	1.41x	9.3%	1.15
Venture Capital	104	2,253.4	1,894.1	2,519.1	1,800.1	4,319.2	2,425.1	1.33x	2.28x	21.8%	2.11
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76

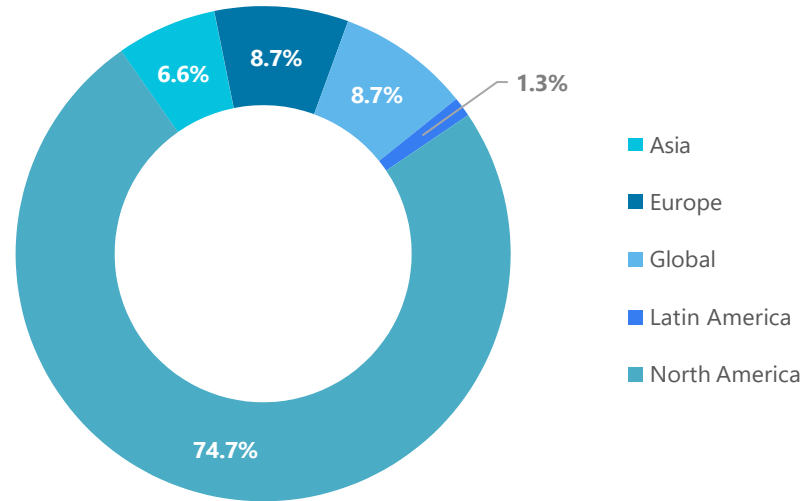
1. Based on best available cash flow adjusted market values.

2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

Performance by Geography

Private Equity – Growth
for the quarter ended June 30, 2022

By Geography^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Asia	14	826.0	681.7	398.9	832.9	1,231.7	550.0	0.59x	1.81x	17.1%	1.43
Europe	34	2,279.3	2,083.2	2,174.4	1,110.3	3,284.7	1,201.4	1.04x	1.58x	15.7%	1.37
Global	25	2,033.0	1,234.2	765.3	1,102.3	1,867.6	633.4	0.62x	1.51x	16.6%	1.39
Latin America	2	200.0	176.1	49.1	163.4	212.5	36.4	0.28x	1.21x	7.7%	1.04
North America	314	16,775.7	14,997.2	18,056.1	9,492.0	27,548.1	12,550.9	1.20x	1.84x	16.6%	1.79
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76

1. Based on best available cash flow adjusted market values.
2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

Performance by Vintage Year

Private Equity – Growth
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME	Quartile Ranking
1986	3	80.0	80.0	267.5	0.0	267.5	187.5	3.34x	3.34x	15.7%	--	1st
1987	1	25.0	25.0	40.3	0.0	40.3	15.3	1.61x	1.61x	7.3%	--	3rd
1988	2	200.0	216.6	466.9	0.0	466.9	250.3	2.16x	2.16x	15.5%	89.91	2nd
1989	0	--	--	--	--	--	--	--	--	--	--	N/A
1990	1	7.5	7.5	16.7	0.0	16.7	9.2	2.22x	2.22x	13.0%	9.13	3rd
1991	0	--	--	--	--	--	--	--	--	--	--	N/A
1992	10	116.0	111.0	242.5	0.0	242.5	131.6	2.19x	2.19x	29.1%	3.78	2nd
1993	8	68.0	64.8	239.5	0.0	239.5	174.7	3.70x	3.70x	39.7%	3.22	1st
1994	5	56.9	58.8	237.6	0.0	237.6	178.8	4.04x	4.04x	54.1%	2.82	1st
1995	7	100.5	102.3	362.6	0.0	362.6	260.2	3.54x	3.54x	43.2%	2.58	1st
1996	12	222.9	225.2	608.8	0.0	608.8	383.6	2.70x	2.70x	37.5%	2.15	1st
1997	11	397.5	410.4	606.4	0.0	606.4	196.0	1.48x	1.48x	7.7%	1.20	3rd
1998	22	644.4	655.2	945.2	0.7	945.9	290.6	1.44x	1.44x	7.3%	1.19	2nd
1999	21	362.3	369.7	436.6	0.1	436.7	67.0	1.18x	1.18x	3.4%	0.96	2nd
2000	25	375.2	387.3	575.0	0.2	575.2	187.9	1.48x	1.49x	8.7%	1.07	2nd
2001	15	408.8	442.4	834.2	3.6	837.8	395.4	1.89x	1.89x	21.7%	1.38	1st
2002	8	220.4	230.3	537.4	0.0	537.4	307.1	2.33x	2.33x	19.0%	1.64	2nd
2003	8	308.2	339.2	700.6	1.2	701.9	362.7	2.07x	2.07x	21.3%	1.60	1st
2004	7	340.8	392.2	744.2	2.8	747.0	354.8	1.90x	1.90x	19.5%	1.58	1st
2005	15	502.2	506.2	1,038.8	3.9	1,042.7	536.5	2.05x	2.06x	13.4%	1.64	1st
2006	28	1,509.4	1,607.0	2,554.7	48.8	2,603.4	996.4	1.59x	1.62x	9.0%	1.25	2nd
2007	11	516.1	461.1	777.6	32.6	810.3	349.2	1.69x	1.76x	11.4%	1.20	2nd
2008	10	635.6	700.2	1,228.5	35.6	1,264.1	563.9	1.75x	1.81x	13.3%	1.21	2nd
2009	0	--	--	--	--	--	--	--	--	--	--	N/A
2010	2	450.0	470.6	671.0	340.0	1,011.0	540.4	1.43x	2.15x	16.9%	1.53	2nd
2011	7	391.0	413.2	792.6	174.9	967.5	554.3	1.92x	2.34x	18.9%	1.51	2nd
2012	7	435.0	577.0	1,030.0	155.4	1,185.4	608.4	1.79x	2.05x	22.2%	1.71	2nd
2013	10	893.4	966.0	1,102.8	597.9	1,700.7	734.7	1.14x	1.76x	15.2%	1.31	2nd
2014	11	1,245.0	1,370.3	1,375.7	1,289.3	2,665.0	1,294.7	1.00x	1.94x	18.4%	1.48	2nd
2015	10	1,087.0	1,199.1	1,202.7	1,655.8	2,858.5	1,659.4	1.00x	2.38x	26.2%	1.89	2nd
2016	12	1,126.0	1,275.3	813.7	1,488.3	2,302.0	1,026.7	0.64x	1.81x	20.1%	1.43	3rd
2017	8	594.0	552.8	314.6	765.5	1,080.1	527.3	0.57x	1.95x	25.2%	1.60	3rd
2018	9	1,282.1	1,083.6	281.6	1,420.9	1,702.4	618.9	0.26x	1.57x	26.0%	1.51	3rd
2019	32	2,574.8	2,043.7	258.5	2,790.9	3,049.4	1,005.7	0.13x	1.49x	27.5%	1.45	3rd
2020	10	1,018.4	631.6	97.5	684.0	781.6	150.0	0.15x	1.24x	24.8%	1.38	3rd
2021	35	2,689.5	1,022.9	41.6	1,037.9	1,079.5	56.6	0.04x	1.06x	9.4%	1.23	2nd
2022	6	1,229.9	174.0	--	170.5	--	--	0.00x	0.98x	-2.5%	1.13	2nd
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76	

1. Based on best available cash flow adjusted market values.

2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

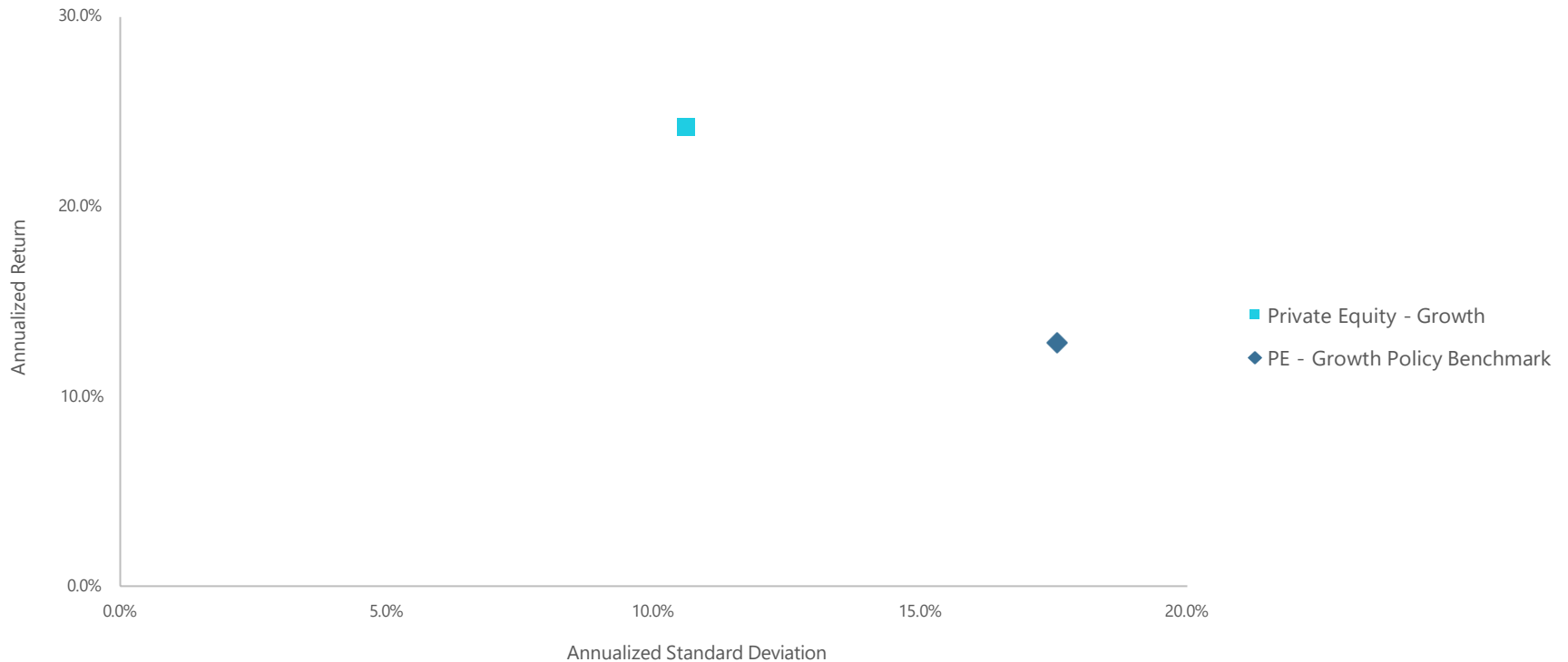
3. Benchmark data used is latest available by Burgiss Private IQ. Quartile rankings are reported as not applicable (N/A) if commitment date is within 3 years of reporting date or if no commitments were made for the respective vintage year.

Risk vs. Return

Private Equity – Growth

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Equity - Growth	24.1%	10.6%				
PE - Growth Policy Benchmark	12.8%	17.6%	2.02	0.63	0.19	17.8%

1. Composite risk statistics are relative to the policy benchmark.

Annual Cash Flow Activity

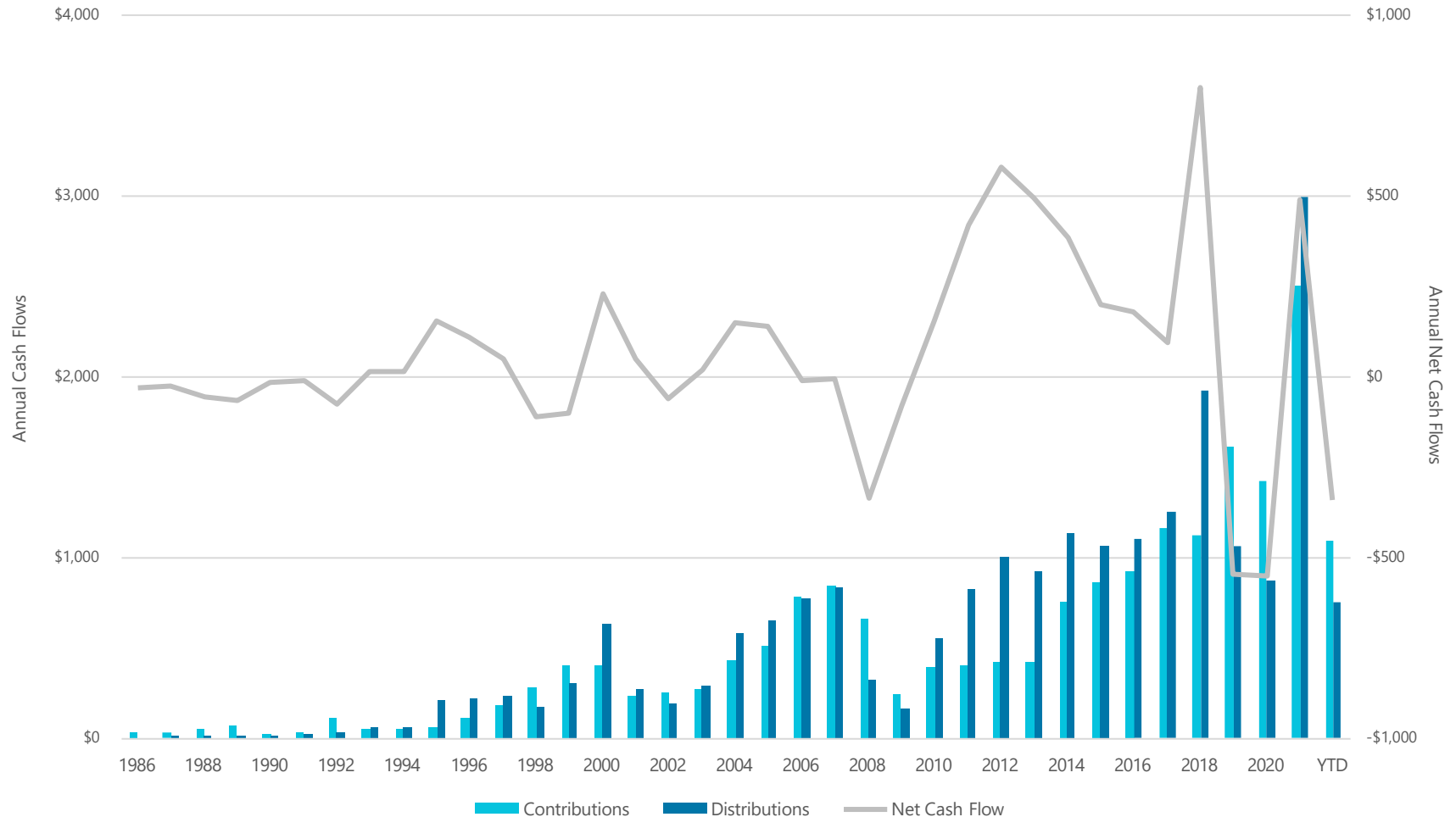
Private Equity

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



Summary

Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Performance (net)



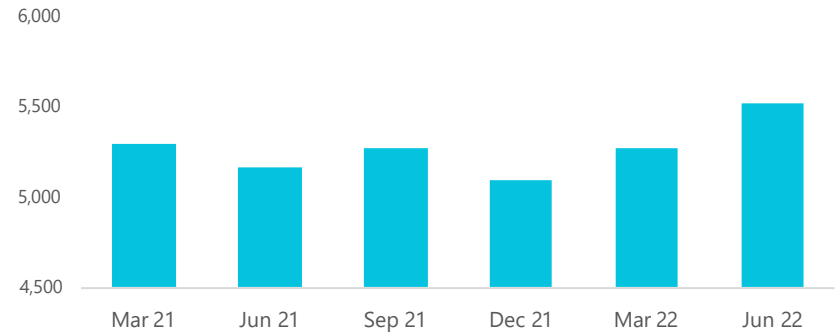
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Estate	7.5%	15.1%	26.4%	9.1%	8.9%	9.2%	8.1%
Benchmark	7.0%	15.1%	27.1%	10.9%	9.4%	10.3%	--
Excess	0.4%	0.0%	-0.7%	-1.8%	-0.5%	-1.1%	--

Cumulative Return

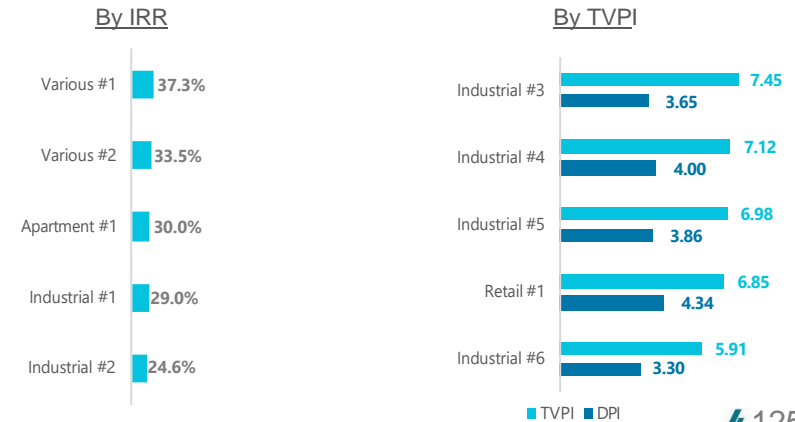


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	5,274	5,162	6,398
Net Cash Flow	-142	-884	-2,274
Gain/Loss	387	1,240	1,394
Ending Market Value	5,519	5,519	5,519



Top Performing Investments (since inception)¹



1. Property names removed due to confidentiality reasons.

Historical Returns

Real Estate

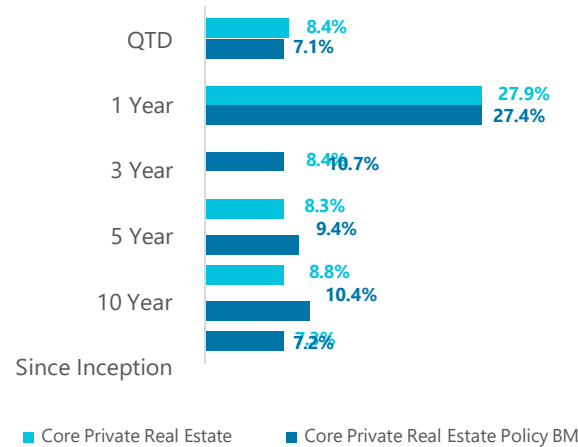
for the quarter ended June 30, 2022



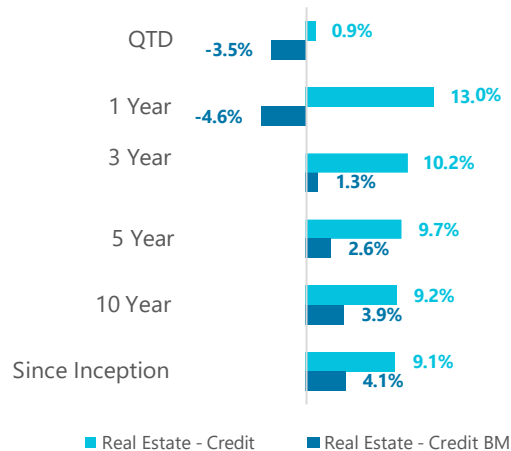
Los Angeles County Employees Retirement Association

Time-Weighted Returns (net)

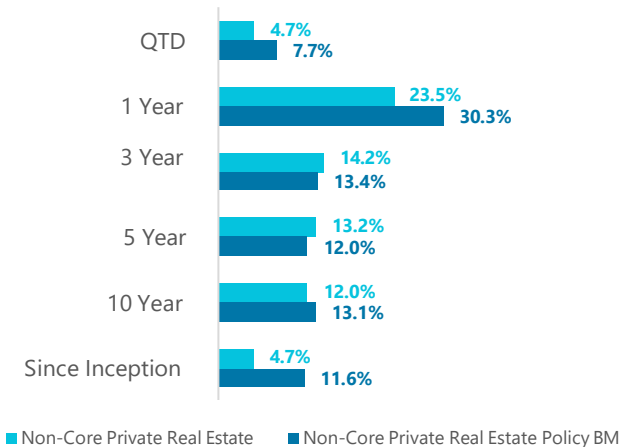
Core



Debt



Non-Core

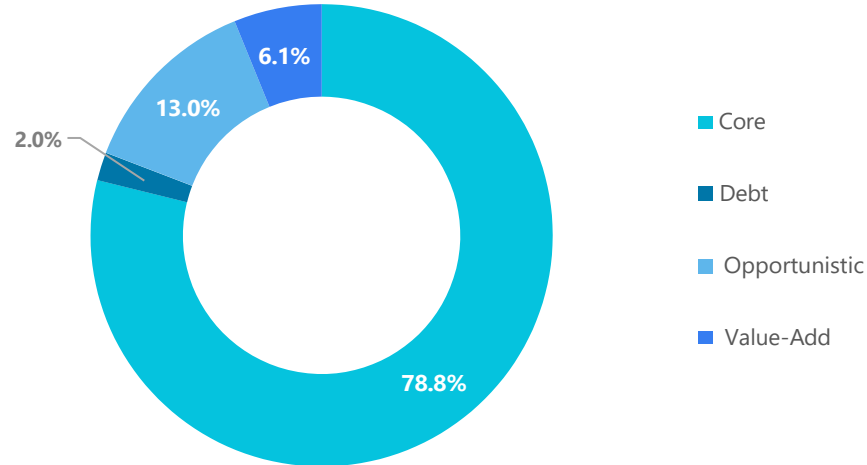


Performance by Strategy

Real Estate

for the quarter ended June 30, 2022

By Strategy^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Core	95	429.5	8,962.8	8,772.5	4,369.0	13,141.5	4,178.7	0.98x	1.47x	8.7%	1.09
Debt	12	0.0	586.6	526.4	109.0	635.3	48.8	0.90x	1.08x	8.7%	1.11
Opportunistic	22	1,000.1	1,313.4	1,070.3	722.2	1,792.6	479.2	0.81x	1.36x	7.8%	1.01
Value-Add	13	465.3	586.1	147.1	340.7	487.8	(98.3)	0.25x	0.83x	-4.5%	0.57
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

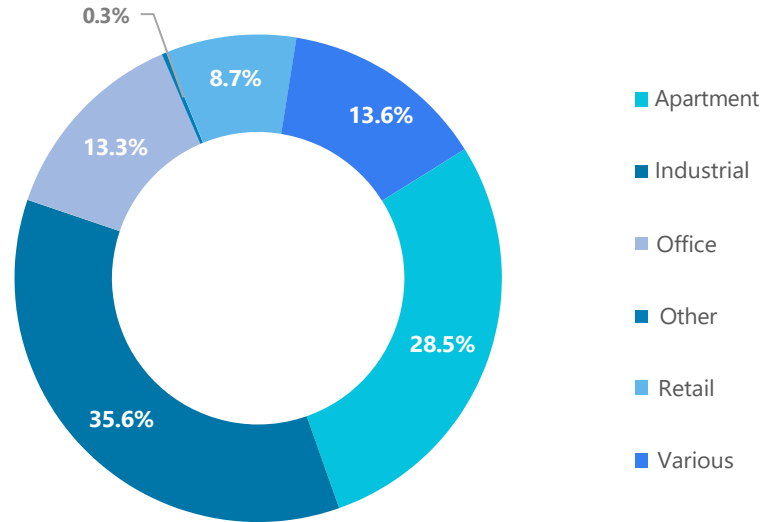
2. Commitment amounts reflect only commingled fund investments.

Performance by Property Type

Real Estate

for the quarter ended June 30, 2022

By Property Type^{1,2,3}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Apartment	51	384.0	4,097.6	4,015.3	1,578.6	5,593.9	1,496.3	0.98x	1.37x	8.7%	1.04
Industrial	25	229.5	1,770.2	1,391.4	1,973.3	3,364.8	1,594.5	0.79x	1.90x	13.3%	1.60
Office	27	0.0	2,820.7	2,866.0	738.4	3,604.4	783.7	1.02x	1.28x	6.7%	1.08
Other	4	100.0	170.2	185.3	17.6	202.8	32.6	1.09x	1.19x	3.9%	0.75
Retail	17	0.0	1,570.7	1,646.6	480.1	2,126.6	556.0	1.05x	1.35x	7.0%	0.82
Various	18	1,181.4	1,019.4	411.7	752.9	1,164.7	145.2	0.40x	1.14x	2.9%	0.79
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.
2. Commitment amounts reflect only commingled fund investments.
3. Various refers to commingled fund investments with more than one property type; Other refers to hotel.

Performance by Geography

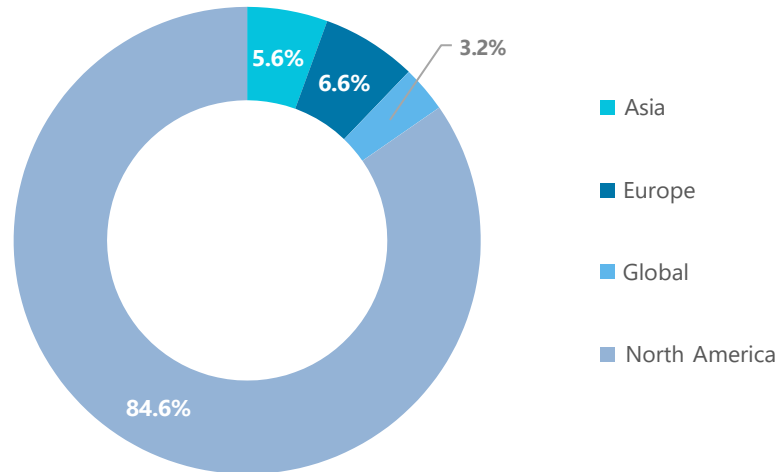
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Geography (non-US)^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Asia	4	300.0	302.5	98.6	309.2	407.8	105.3	0.33x	1.35x	7.3%	1.07
Europe	10	460.9	590.8	353.9	364.9	718.8	128.0	0.60x	1.22x	4.8%	0.86
Global	4	375.0	243.0	190.3	177.7	368.1	125.0	0.78x	1.51x	12.5%	1.11
North America	124	759.0	10,312.5	9,873.5	4,689.0	14,562.5	4,250.0	0.96x	1.41x	8.4%	1.07
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

2. Commitment amounts reflect only commingled fund investments.

Performance by Geography

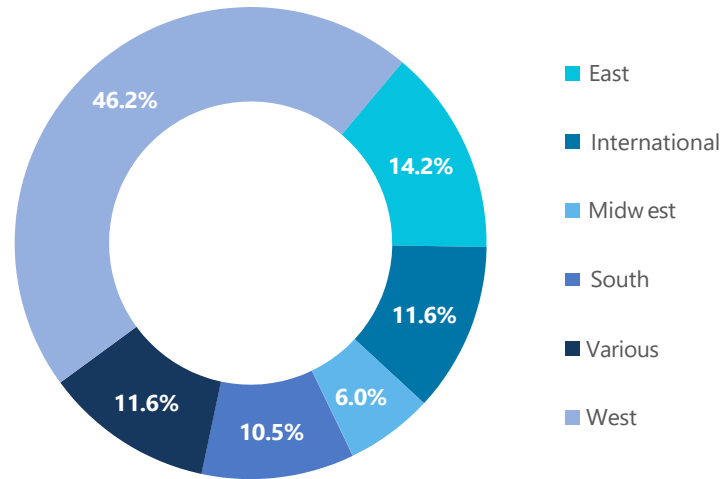
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Geography (US NCREIF)^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
East	36	0.0	3,586.9	3,828.9	784.2	4,613.2	1,026.3	1.07x	1.29x	7.1%	0.89
International	13	708.7	858.6	452.5	642.9	1,095.4	236.8	0.53x	1.28x	5.7%	0.93
Midwest	13	0.0	676.4	523.1	332.6	855.7	179.3	0.77x	1.27x	5.4%	0.86
South	19	0.0	1,665.1	1,769.0	580.8	2,349.7	684.6	1.06x	1.41x	9.6%	1.01
Various	10	802.3	656.9	320.6	641.8	962.3	305.5	0.49x	1.47x	7.5%	1.00
West	51	384.0	4,005.0	3,622.2	2,558.6	6,180.9	2,175.9	0.90x	1.54x	9.5%	1.35
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

2. Commitment amounts reflect only commingled fund investments.

Performance by Vintage Year

Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME	Quartile Ranking
1990	1	0.0	249.9	297.5	117.7	415.2	165.3	1.19x	1.66x	6.3%	4.53	N/A
1991	3	0.0	32.7	122.3	97.3	219.6	186.9	3.74x	6.72x	12.4%	13.82	N/A
1992	0	0.0	--	--	--	--	--	--	--	--	--	N/A
1993	0	0.0	--	--	--	--	--	--	--	--	--	N/A
1994	1	0.0	15.3	66.5	38.4	104.8	89.5	4.34x	6.85x	13.0%	1.44	N/A
1995	1	0.0	39.1	109.5	75.8	185.3	146.2	2.80x	4.74x	11.7%	1.25	N/A
1996	1	0.0	24.0	38.8	32.5	71.3	47.4	1.62x	2.98x	7.8%	0.80	N/A
1997	1	0.0	18.3	66.8	69.4	136.1	117.9	3.65x	7.45x	15.9%	2.06	N/A
1998	2	0.0	367.5	558.6	50.8	609.4	241.9	1.52x	1.66x	8.1%	0.77	N/A
1999	1	0.0	80.9	203.8	0.0	203.8	122.9	2.52x	2.52x	9.6%	0.90	N/A
2000	1	0.0	203.2	275.7	0.0	275.7	72.5	1.36x	1.36x	7.9%	0.78	N/A
2001	1	0.0	143.3	75.4	92.5	167.8	24.5	0.53x	1.17x	4.5%	0.71	N/A
2002	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2003	1	0.0	142.7	130.6	72.0	202.6	60.0	0.92x	1.42x	4.5%	0.71	N/A
2004	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2005	1	0.0	116.3	119.6	0.0	119.6	3.3	1.03x	1.03x	0.5%	0.64	N/A
2006	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2007	3	36.4	454.5	401.8	1.1	402.9	(51.6)	0.88x	0.89x	-5.4%	0.54	4th
2008	1	150.0	150.0	95.5	0.9	96.4	(53.6)	0.64x	0.64x	-5.7%	0.34	4th
2009	1	18.1	22.3	28.5	0.4	28.8	6.5	1.27x	1.29x	8.2%	0.84	3rd
2010	1	100.0	97.1	138.3	17.7	156.1	58.9	1.42x	1.61x	9.5%	0.91	3rd
2011	4	16.7	213.4	114.9	40.6	155.5	(57.9)	0.54x	0.73x	-19.5%	0.34	4th
2012	5	134.0	734.3	543.7	160.6	704.3	(30.0)	0.74x	0.96x	-1.1%	0.69	4th
2013	8	100.0	524.2	662.7	111.3	773.9	249.7	1.26x	1.48x	9.1%	1.02	3rd
2014	19	256.8	1,079.6	914.4	696.7	1,611.0	531.5	0.85x	1.49x	8.7%	1.14	3rd
2015	13	0.0	1,396.1	1,209.4	689.0	1,898.5	502.3	0.87x	1.36x	12.3%	1.31	2nd
2016	10	150.0	551.0	357.1	500.8	858.0	307.0	0.65x	1.56x	14.5%	1.33	2nd
2017	15	177.3	1,434.3	992.7	937.8	1,930.5	496.2	0.69x	1.35x	11.9%	1.19	3rd
2018	12	150.0	405.3	230.9	274.9	505.8	100.5	0.57x	1.25x	9.9%	1.12	3rd
2019	30	427.3	2,822.3	2,744.6	1,344.1	4,088.7	1,266.4	0.97x	1.45x	9.6%	1.05	3rd
2020	3	0.0	77.8	16.7	59.3	76.0	(1.8)	0.21x	0.98x	-1.1%	1.00	4th
2021	2	178.4	53.4	0.0	59.6	59.6	6.1	0.00x	1.12x	17.0%	1.25	2nd
2022	0	0.0	--	--	--	--	--	--	--	--	--	N/A
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06	

1. Based on best available cash flow adjusted market values.
2. Commitment amounts reflect only commingled fund investments.
3. Benchmark data used is latest available by Burgiss Private IQ. Quartile rankings exclude IMAs and Core Funds.

Leverage Exposure

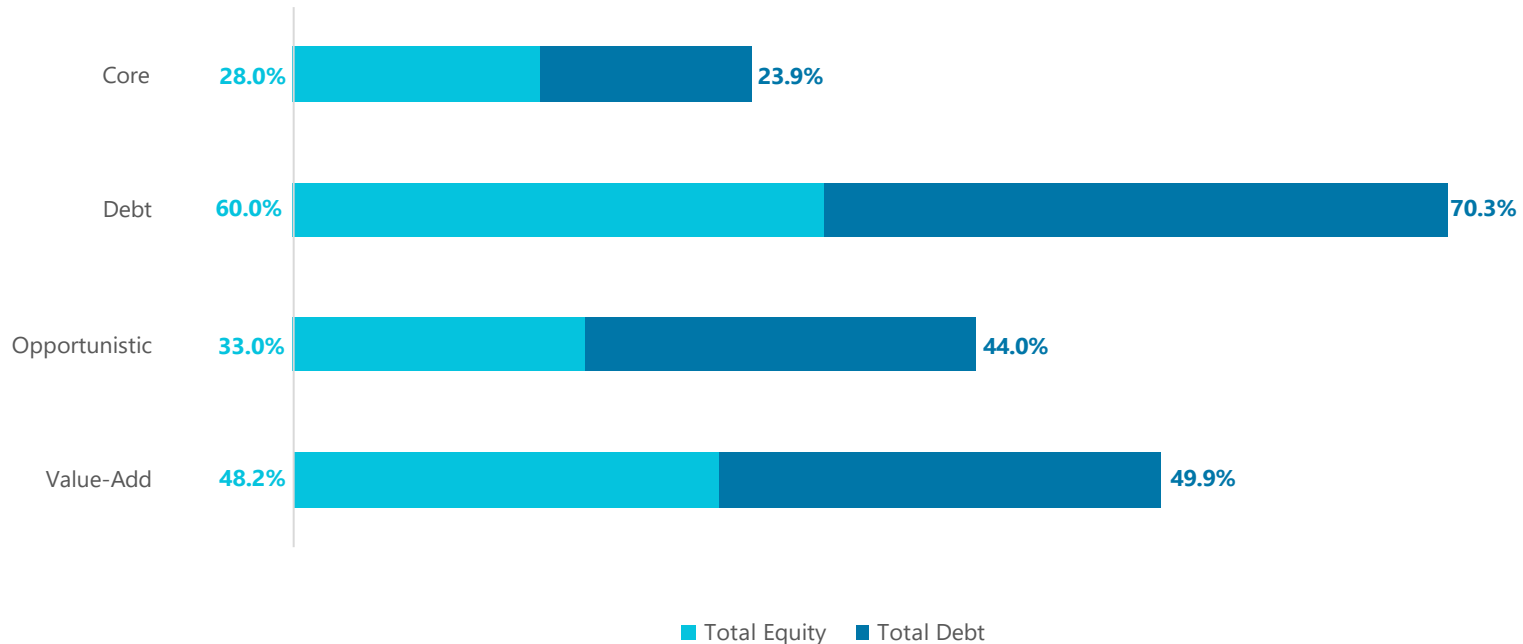
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Leverage Exposure^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME	Total Debt-Fund Level (mm)	Total Equity-Fund Level (mm)	Total Debt-Fund Level (%)	Total Equity-Fund Level (%)
Core	95	429.5	8,962.8	8,772.5	4,369.0	13,141.5	4,178.7	0.98x	1.47x	8.7%	1.09	7,022.8	8,215.5	23.9%	28.0%
Debt	12	0.0	586.6	526.4	109.0	635.3	48.8	0.90x	1.08x	8.7%	1.11	192.0	163.8	70.3%	60.0%
Opportunistic	22	1,000.1	1,313.4	1,070.3	722.2	1,792.6	479.2	0.81x	1.36x	7.8%	1.01	7,323.4	5,493.1	44.0%	33.0%
Value-Add	13	465.3	586.1	147.1	340.7	487.8	(98.3)	0.25x	0.83x	-4.5%	0.57	74,747.3	72,224.5	49.9%	48.2%
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06	89,285.5	86,097.0	45.6%	43.9%

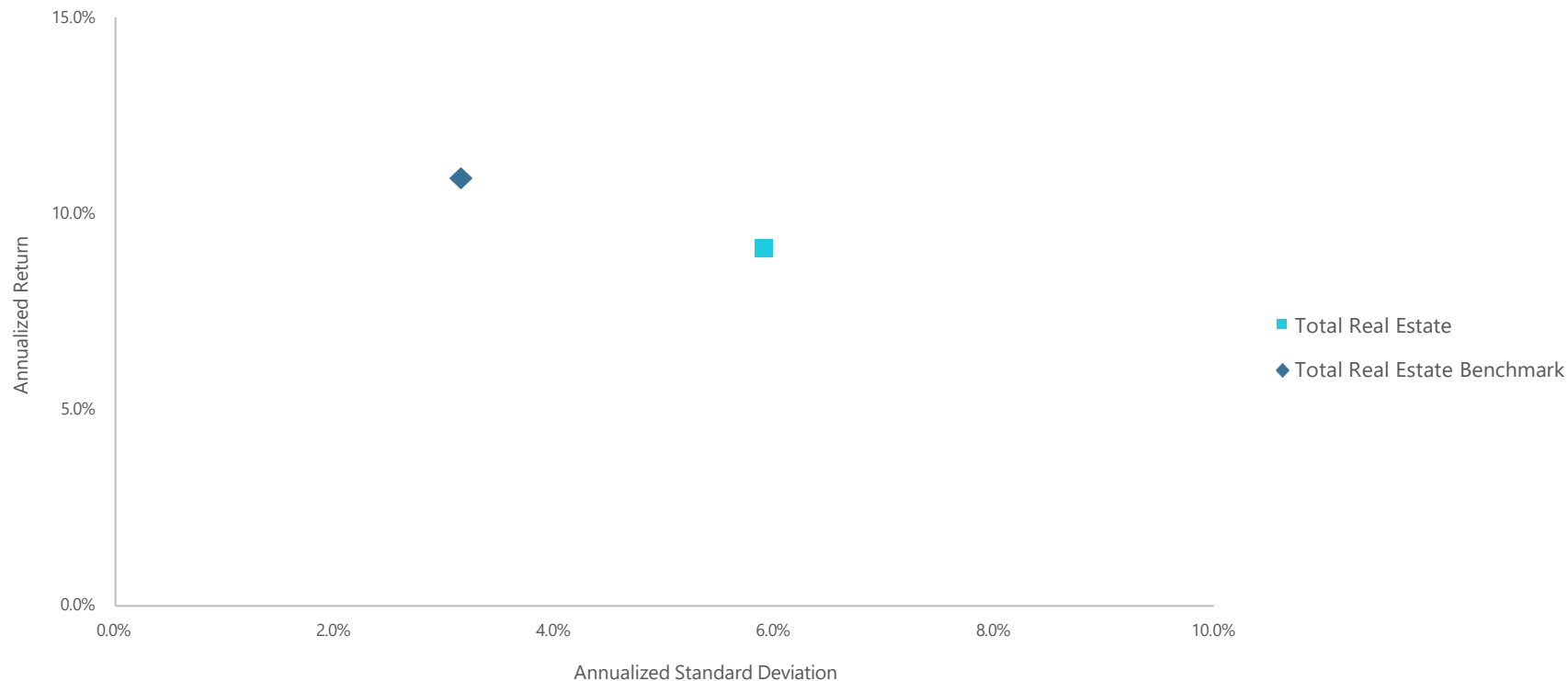
1. Based on best available cash flow adjusted market values and includes only active investments.
 2. Commitment amounts reflect only commingled fund investments.

Risk vs. Return

Real Estate

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Total Real Estate	9.1%	5.9%				
Total Real Estate Benchmark	10.9%	3.1%	1.40	(0.36)	1.03	17.1%

1. Composite risk statistics are relative to the policy benchmark.

Annual Cash Flow Activity

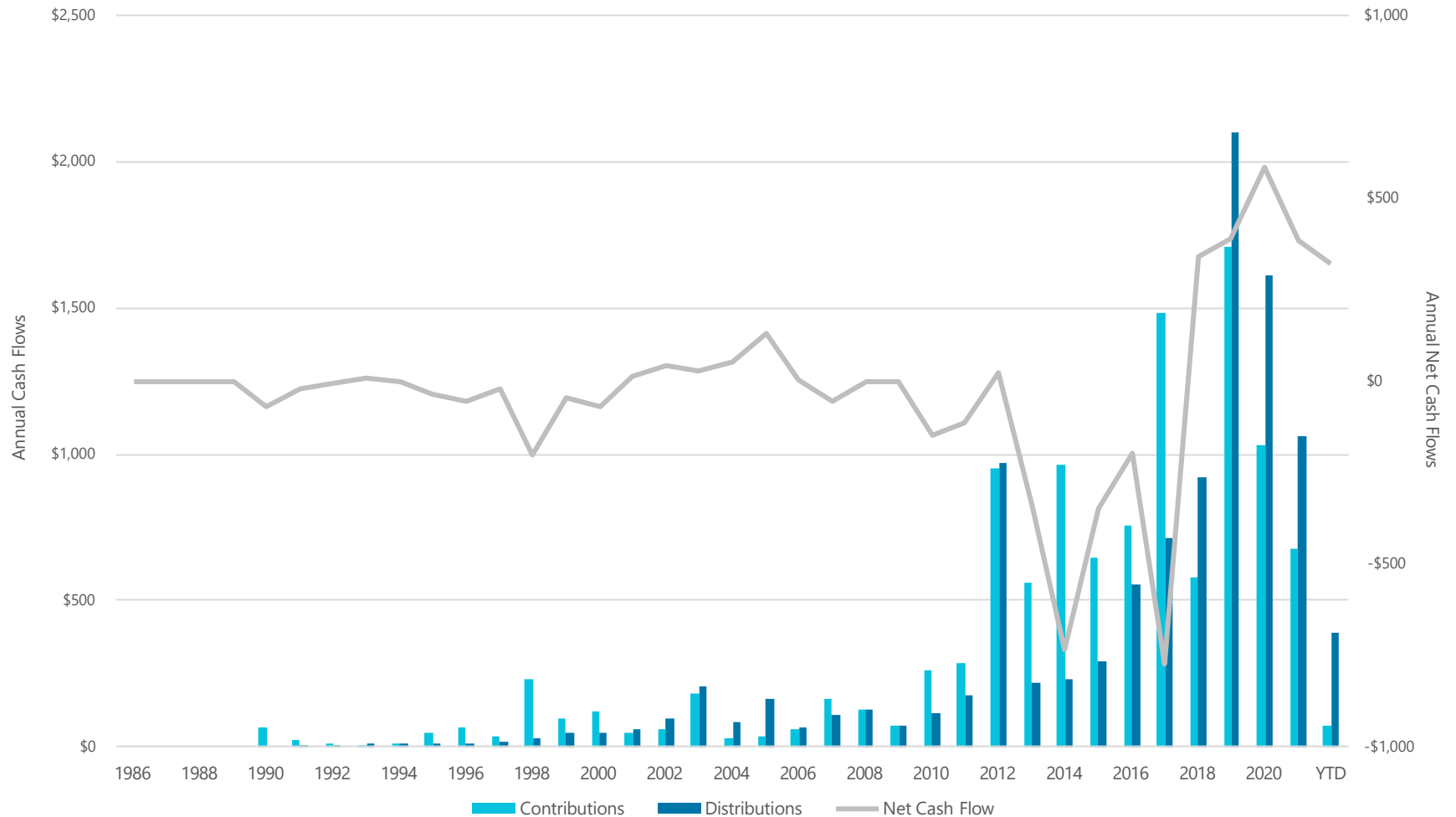
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



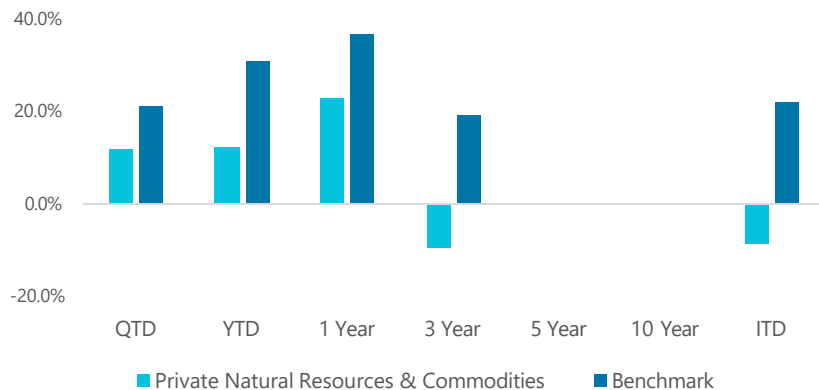
Summary

Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022



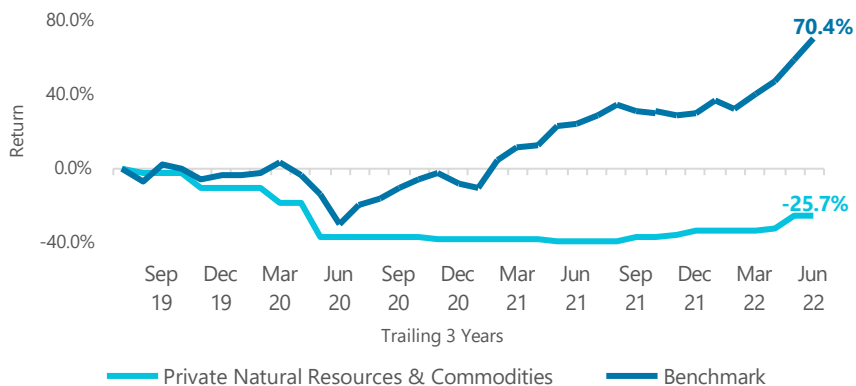
Los Angeles County Employees Retirement Association

Performance (net)¹



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Natural Resources & Commodities	12.0%	12.4%	23.0%	-9.4%	--	--	-8.4%
Benchmark	20.9%	30.9%	36.9%	19.4%	--	--	22.1%
Excess	-9.0%	-18.5%	-13.9%	-28.9%	--	--	-30.5%

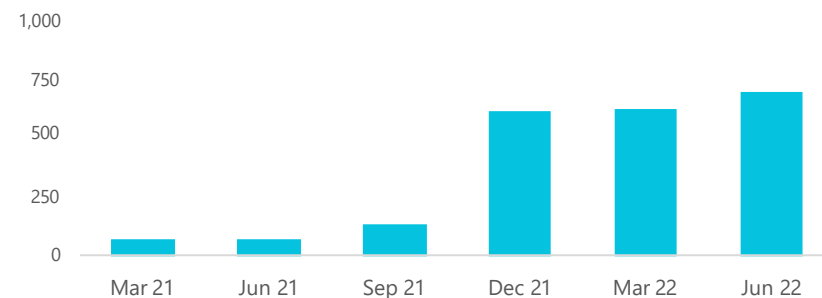
Cumulative Return¹



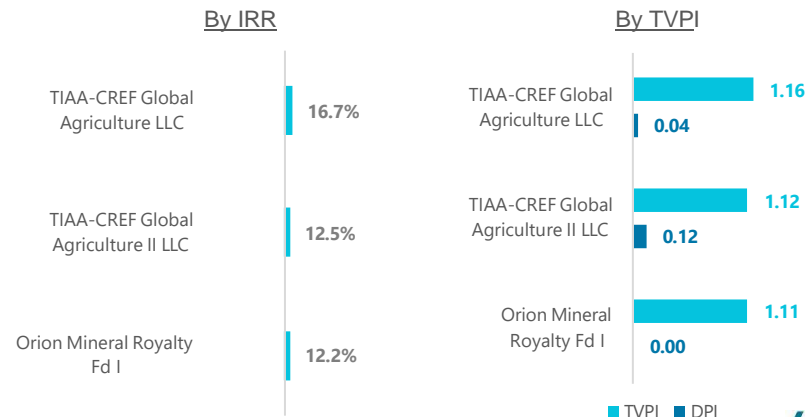
1. Private natural resources & commodities funds reflect early-stage life cycle performance.

Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	631	70	112
Net Cash Flow	-11	536	540
Gain/Loss	77	90.7	45.2
Ending Market Value	697	697	697



Top Performing Investments (since inception)¹



TVPI DPI

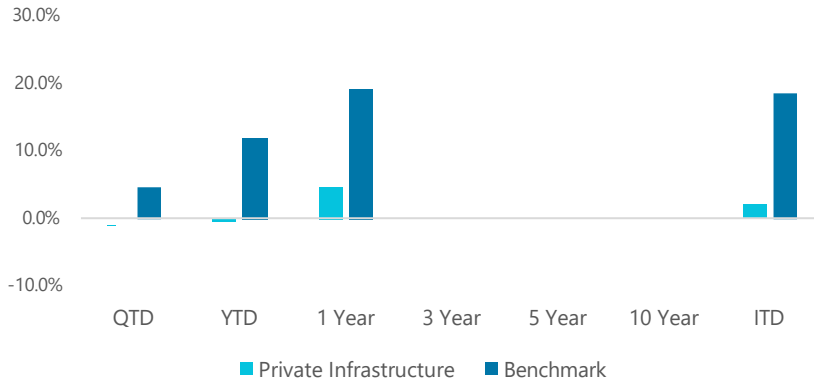
Summary

Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022



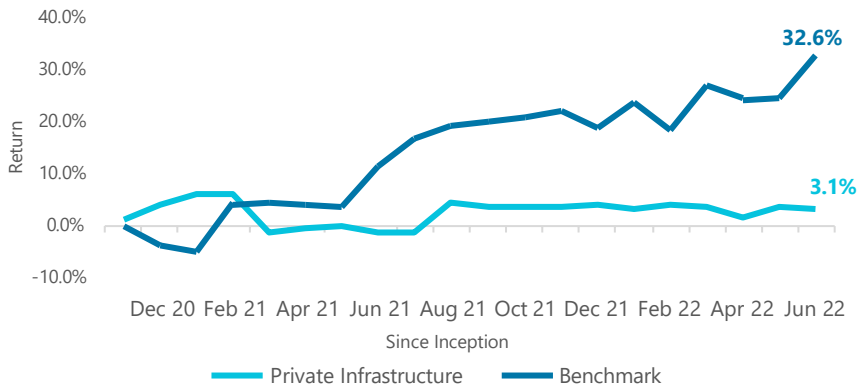
Los Angeles County Employees Retirement Association

Performance (net)¹



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Infrastructure	-0.1%	-0.5%	4.7%	--	--	--	2.1%
Benchmark	4.6%	11.8%	19.3%	--	--	--	18.5%
Excess	-4.7%	-12.3%	-14.6%	--	--	--	-16.5%

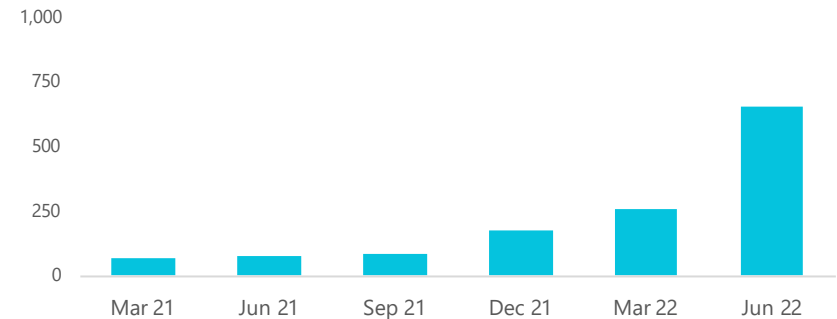
Cumulative Return¹



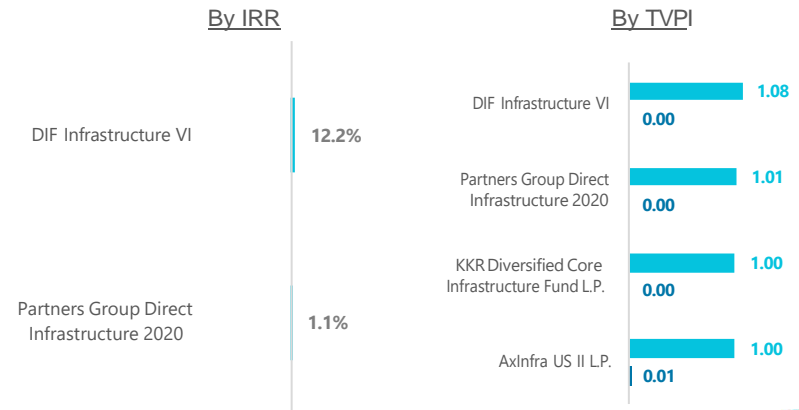
1. Private infrastructure funds reflect early-stage life cycle performance.

Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	257	74	--
Net Cash Flow	396	576	--
Gain/Loss	-1	3	--
Ending Market Value	652	652	--



Top Performing Investments (since inception)¹



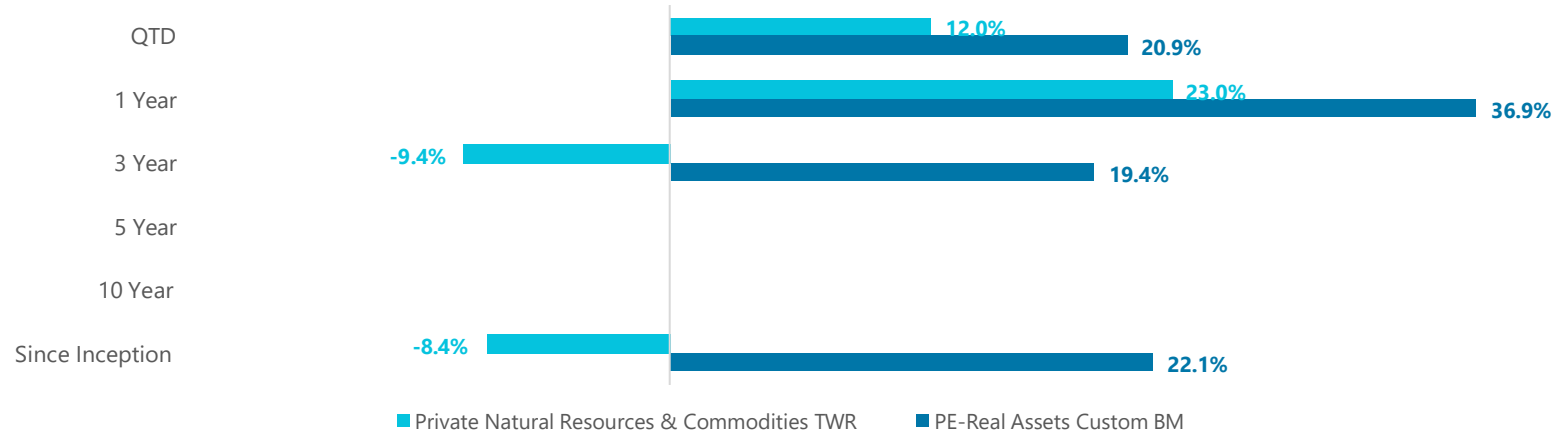
■ TVPI ■ DPI

Historical Returns

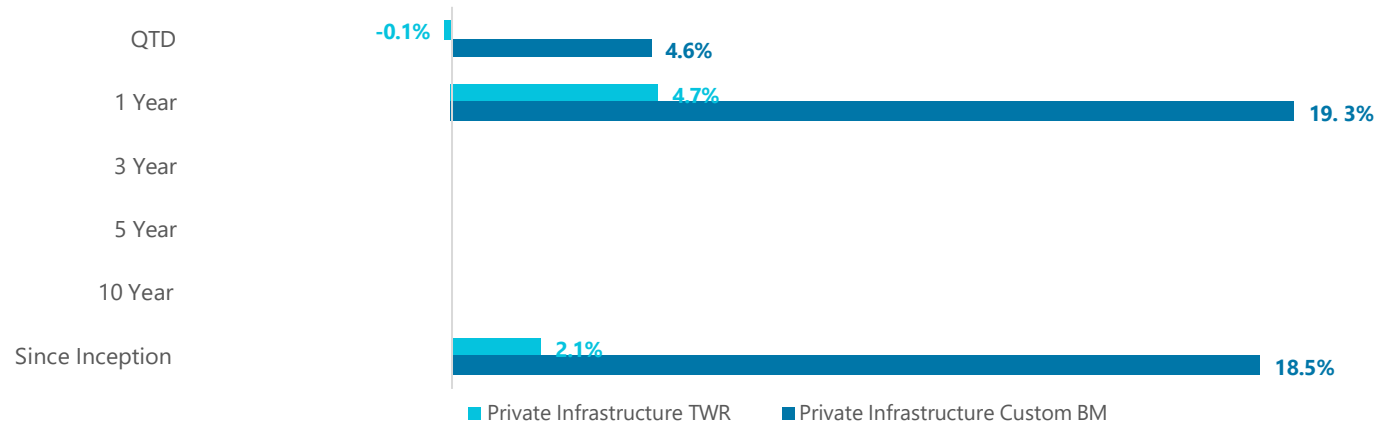
Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022

Time-Weighted Returns (net)¹

Private Natural Resources & Commodities



Private Infrastructure



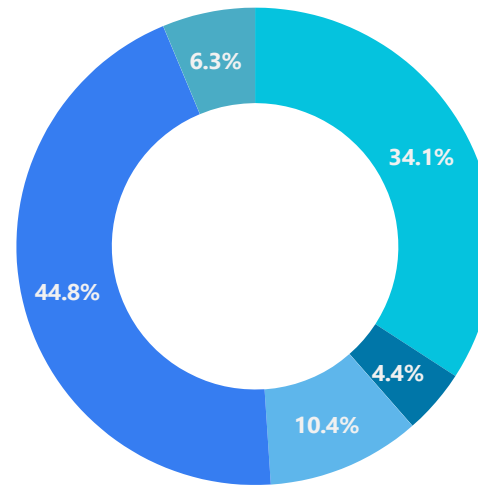
1. Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Performance by Strategy

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022

By Strategy¹



- Infrastructure Core
- Infrastructure Core Plus/Value Add
- Infrastructure Opportunistic
- Natural Resources
- Special Situations

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Infrastructure Core	4	906.8	455.5	1.3	460.9	462.2	6.7	0.00x	1.01x	5.6%	1.16
Infrastructure Core Plus/Value Add	2	261.4	64.5	4.7	59.3	64.1	(0.4)	0.08x	0.99x	-0.8%	0.92
Infrastructure Opportunistic	4	432.0	146.8	0.0	140.5	140.5	(6.3)	0.00x	0.96x	-5.7%	0.95
Natural Resources	6	950.0	611.6	43.1	604.2	647.3	35.6	0.07x	1.06x	11.5%	1.09
Special Situations	2	200.0	204.3	113.4	85.0	198.4	(6.0)	0.56x	0.97x	-1.0%	0.78
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

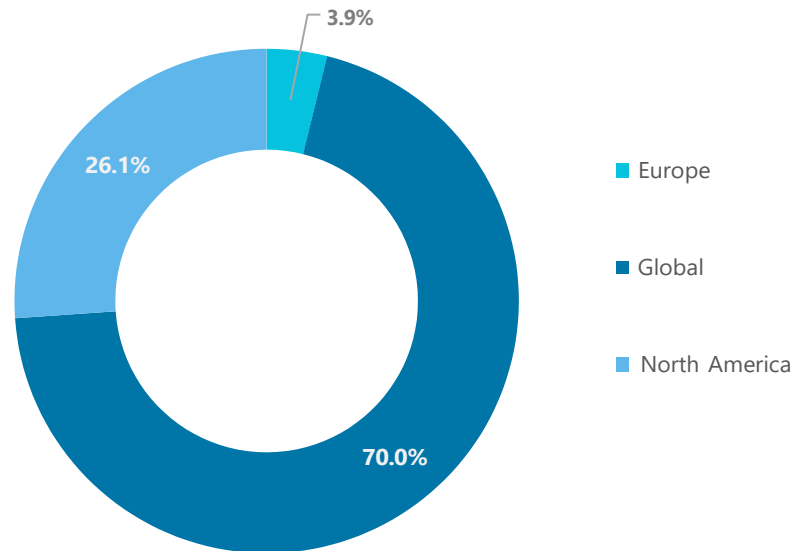
1. Based on best available cash flow adjusted market values.

Performance by Geography

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022

By Geography¹



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Europe	1	104.5	57.3	4.7	52.1	56.9	(0.4)	0.08x	0.99x	-0.8%	0.92
Global	11	2,068.2	948.2	43.1	945.5	988.6	40.4	0.05x	1.04x	12.1%	1.10
North America	6	577.5	477.4	114.7	352.2	466.9	(10.4)	0.24x	0.98x	-1.6%	0.91
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

1. Based on best available cash flow adjusted market values.

Performance by Vintage Year

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year¹

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
2004	1	50.0	50.0	91.4	0.0	91.4	41.4	1.83x	1.83x	31.1%	1.40
2011	1	300.0	--	--	--	--	--	--	--	--	--
2014	2	450.0	434.4	57.0	362.8	419.8	(14.6)	0.13x	0.97x	-1.4%	0.84
2020	3	321.4	166.9	4.7	165.8	170.5	3.6	0.03x	1.02x	2.4%	0.96
2021	6	672.0	365.0	1.9	360.5	362.4	(2.6)	0.01x	0.99x	4.2%	1.10
2022	5	956.8	278.5	0.0	280.4	280.4	1.9	0.00x	1.01x	1.1%	1.17
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

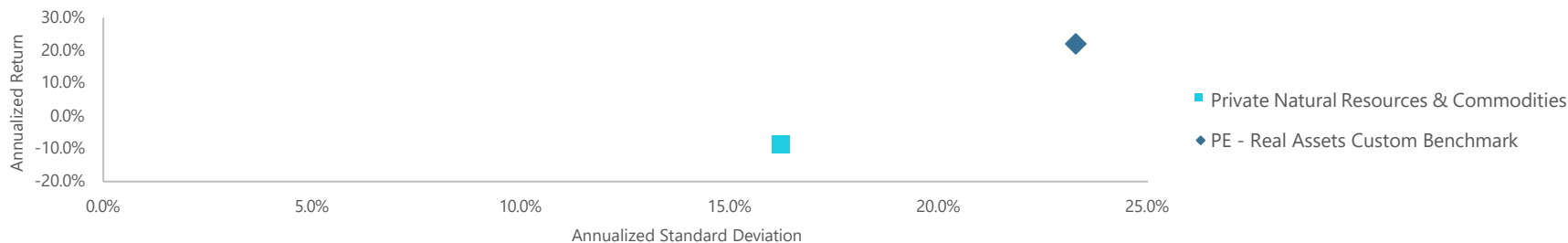
1. Based on best available cash flow adjusted market values.

Risk vs. Return

Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022

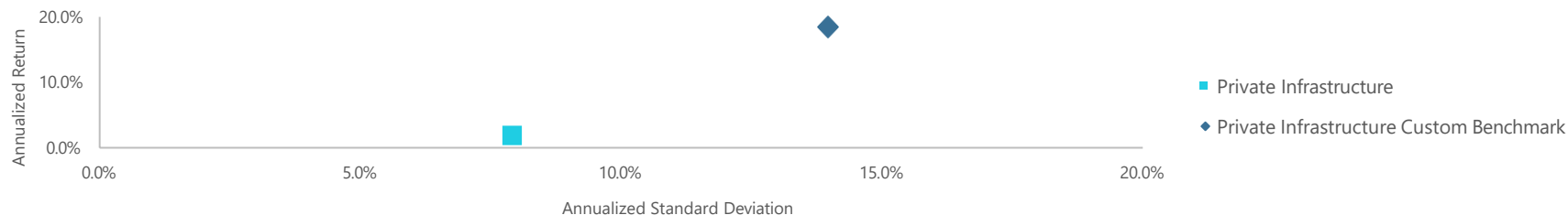
Since Inception (Annualized)¹

Private Natural Resources & Commodities



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Natural Resources & Commodities	-8.4%	16.2%				
PE - Real Assets Custom Benchmark	22.1%	23.3%	(0.50)	(1.27)	0.00	24.0%

Private Infrastructure



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Infrastructure	2.1%	7.9%				
Private Infrastructure Custom Benchmark	18.5%	14.0%	0.28	(0.98)	0.00	16.8%

1. Composite risk statistics are relative to the custom benchmark.

Annual Cash Flow Activity

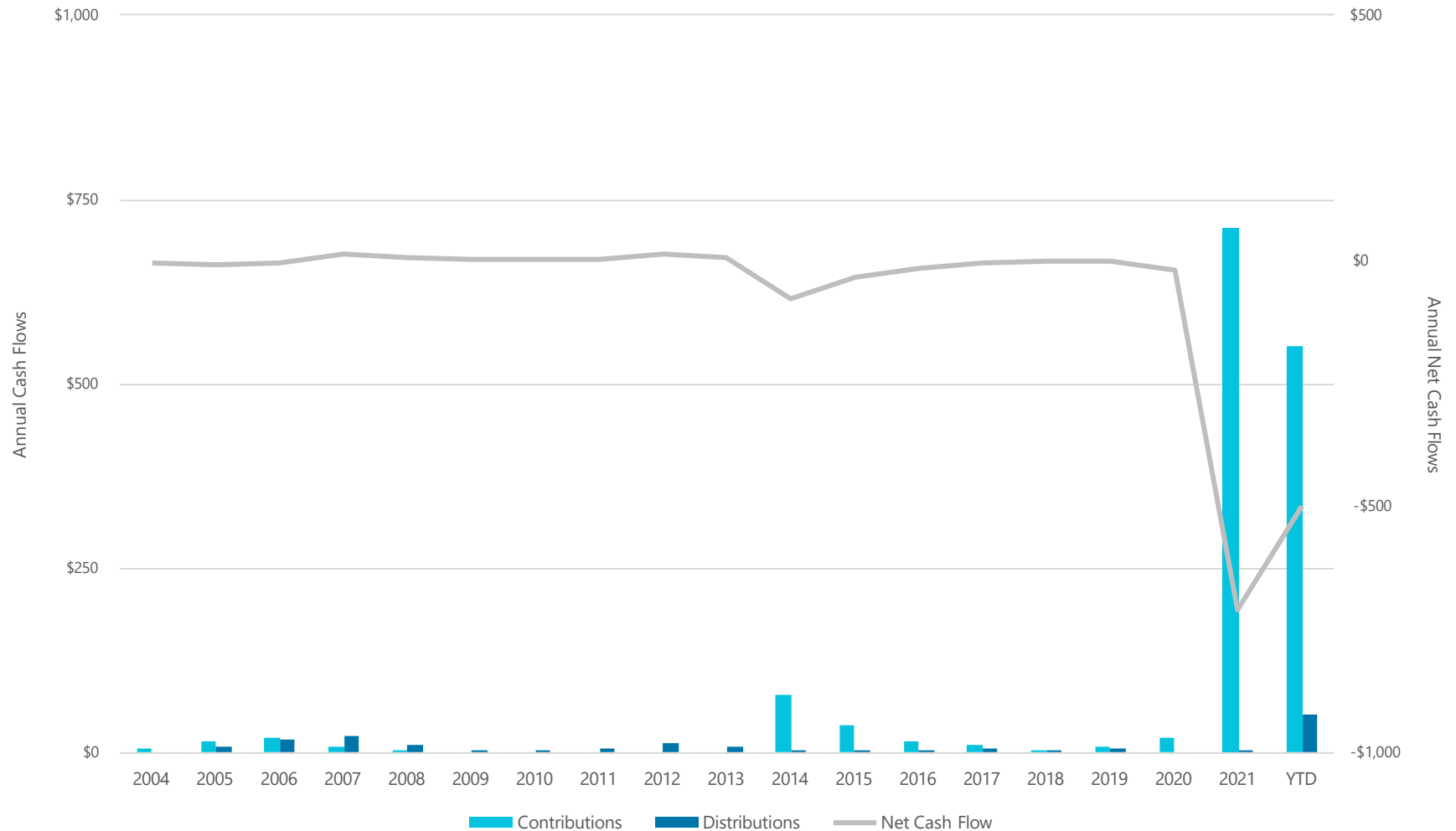
Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



Summary

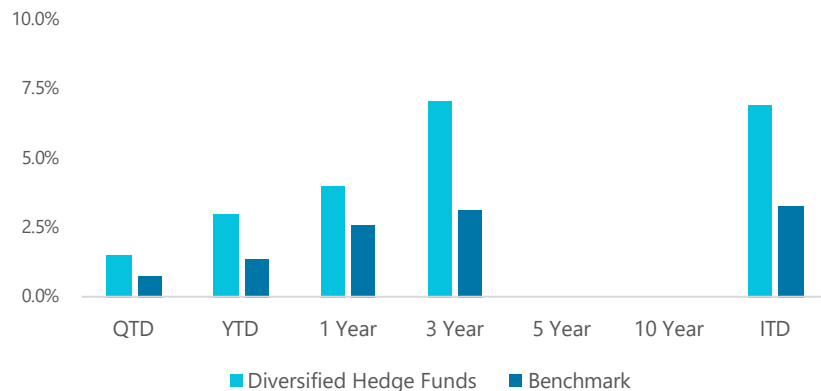
Diversified Hedge Funds

for the quarter ended June 30, 2022



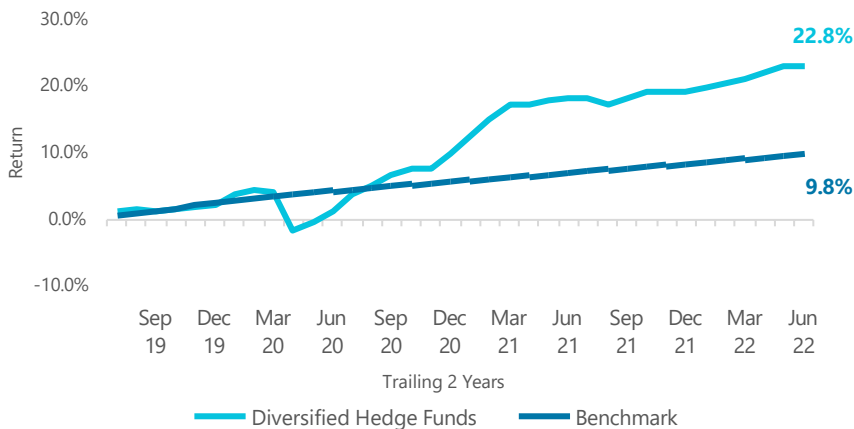
Los Angeles County Employees Retirement Association

Performance (net all)



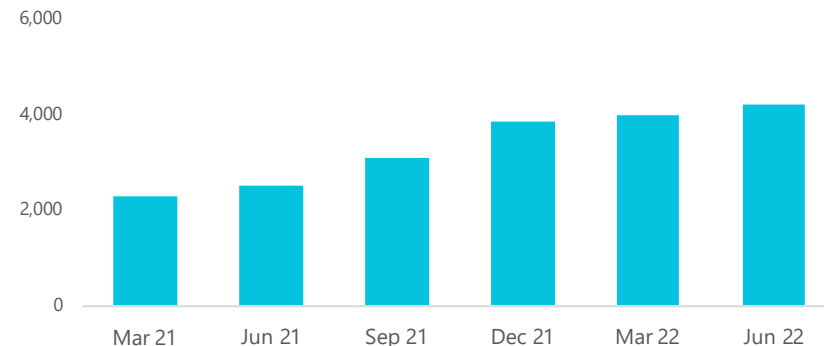
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Benchmark	0.7%	1.4%	2.6%	3.2%	--	--	3.3%
Excess	0.8%	1.6%	1.4%	3.9%	--	--	3.6%

Cumulative Return

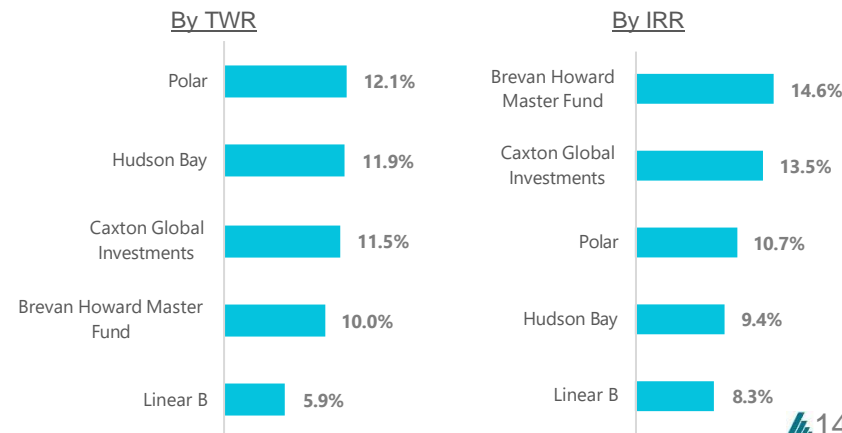


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	4,001	2,526	1,545
Net Cash Flow	134	1,515	2,173
Gain/Loss	61	155	478
Ending Market Value	4,196	4,196	4,196



Top Performing Investments (since inception)

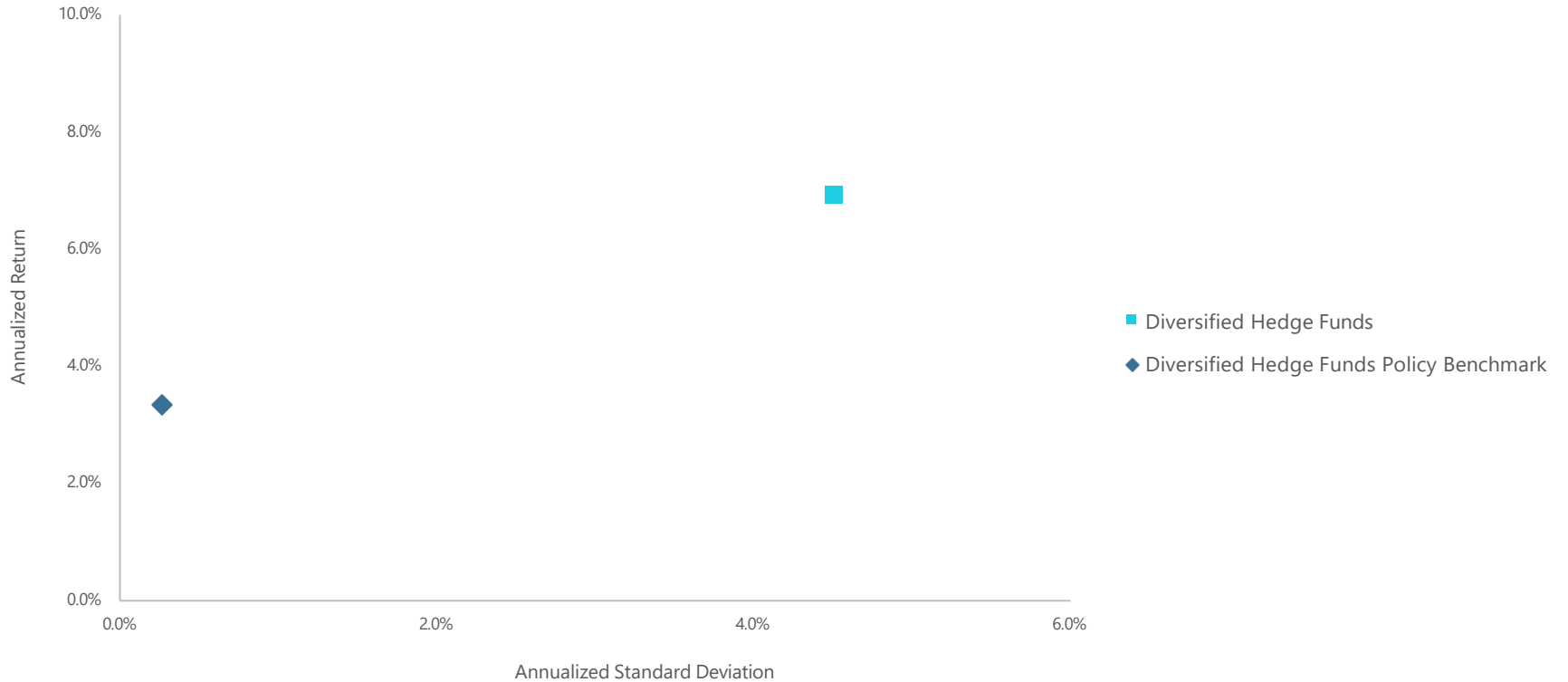


Risk vs. Return

Diversified Hedge Funds

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Diversified Hedge Funds	6.9%	4.5%				
Diversified Hedge Funds Policy Benchmark	3.3%	0.3%	1.33	0.78	(9.47)	4.6%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

Diversified Hedge Funds

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net All Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	100.0%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
LACERA HF Direct	92.2%	3,869	3,759	1.6%	3.2%	4.3%	6.9%	--	--	5.0%
Custom Hedge Fund Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	4.1%
AM Asia Strategies	5.2%	220	229	-3.9%	-2.6%	-2.6%	--	--	--	-2.6%
Brevan Howard Master Fund	14.9%	625	566	10.5%	14.0%	12.3%	--	--	--	10.0%
Capula GRV	14.5%	608	543	2.6%	5.9%	5.8%	5.8%	--	--	5.9%
Caxton Global Investments	6.9%	289	273	5.9%	12.9%	12.9%	--	--	--	11.5%
DK Institutional Partners	11.6%	486	495	-1.8%	-1.2%	-1.2%	5.9%	--	--	5.2%
HBK Multi-Strategy	13.1%	549	558	-1.5%	-1.3%	2.5%	5.3%	--	--	4.9%
Hudson Bay	15.1%	632	631	0.2%	0.1%	3.7%	--	--	--	11.9%
Polar	10.9%	459	464	-1.1%	-0.6%	-0.3%	--	--	--	12.1%
HF Emerging Managers Program	6.7%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Custom Hedge Fund Benchmark				0.7%	1.4%	--	--	--	--	2.6%
Stable Asset Management	6.7%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Stable Fund Investments	6.7%	281	190	1.3%	0.2%	--	--	--	--	0.2%
Amundsen	1.5%	62	62	-1.4%	-8.4%	--	--	--	--	-5.2%
Clear Sky	1.7%	72	0	2.9%	--	--	--	--	--	2.9%
Linear B	1.6%	68	48	4.3%	5.4%	--	--	--	--	5.9%
Sparta	1.2%	51	51	0.3%	2.4%	--	--	--	--	1.8%
Trutino	0.7%	28	29	-1.9%	2.1%	--	--	--	--	-5.2%

emerging manager program

Emerging Manager Program

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Growth					
Global Equity					
Corner Cap	76.6	-10.6%	-6.6%	9.9%	--
Global Equity Policy Benchmark		-15.8%	-16.5%	6.0%	--
Private Equity					
J.P. Morgan Emerging Managers Program	87.9	1.7%	7.1%	27.8%	26.3%
J.P. Morgan Emerging Managers Program II	99.6	-0.1%	5.3%	20.3%	25.5%
J.P. Morgan Emerging Managers Program III	121.7	0.8%	25.4%	40.2%	40.2%
J.P. Morgan Emerging Managers Program IV	172.5	-0.1%	20.8%	18.1%	--
Total Private Equity Custom Benchmark		-4.8%	8.4%	15.5%	17.3%
Non-Core Private Real Estate					
Cityview Bay Area Fund II	78.0	2.3%	9.6%	3.0%	5.1%
Cityview Western Fund I, L.P	152.5	5.6%	23.7%	13.4%	-37.9%
CVBAF II Union City Co-Invest	23.5	1.9%	12.4%	0.5%	1.7%
Non-Core Private RE Policy Benchmark		7.7%	30.3%	13.4%	12.0%
Real Assets & Inflation Hedges					
Core Private Real Estate					
Cityview Core I.M.A	211.1	0.1%	15.2%	3.4%	6.4%
Core Private RE Policy Benchmark		7.1%	27.4%	10.7%	9.4%
Risk Reduction & Mitigation					
Hedge Funds					
Stable Asset Management	281.3	1.3%	--	--	--
Custom Hedge Fund Benchmark		0.7%	--	--	--

risk reports

Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	12.89
Benchmark Risk	12.15
Active Risk	1.38
Portfolio Beta	1.06
Effective Duration	1.74

Contribution to Risk

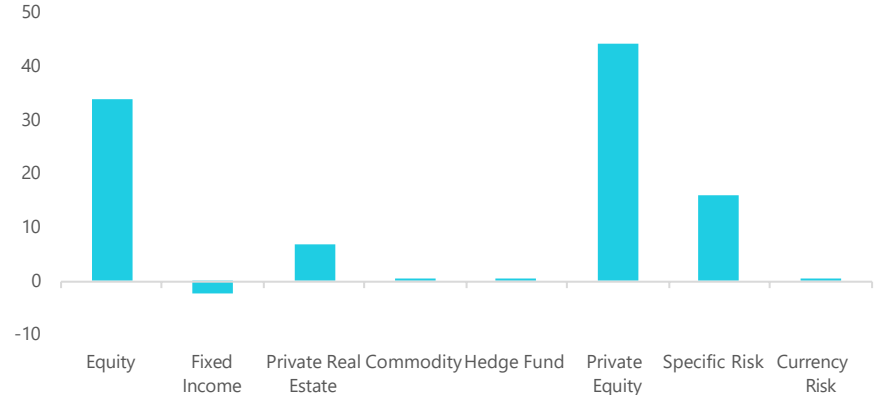


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Total Fund	67,383	100.0%	12.89	12.89	100.00
Growth	34,694	51.5%	20.26	10.31	79.94
Credit	7,726	11.5%	4.63	0.40	3.12
Real Assets and Inflation Hedges	12,617	18.7%	13.84	2.28	17.65
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.11	0.82
Overlays and Hedges	676	1.0%	34.55	-0.20	(1.54)

Risk Decomposition

Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
Total Risk	12.89	100.00	1.00	1.38	100.00	1.00
Local Market Risk	12.39	96.09	1.00	1.38	99.88	0.99
Common Factor Risk	12.36	95.88	1.00	1.16	83.92	0.91
Equity	9.65	74.86	0.95	0.47	34.05	0.59
Fixed Income	0.46	3.53	0.35	-0.03	-2.22	-0.15
Private Real Estate	1.34	10.42	0.69	0.10	7.04	0.36
Commodity	0.10	0.75	0.38	0.00	0.18	0.03
Hedge Fund	0.00	0.01	0.01	0.01	0.52	0.07
Private Equity	0.81	6.32	0.25	0.61	44.36	0.67
Specific Risk	0.03	0.21	0.05	0.22	15.96	0.40
Currency Risk	0.50	3.91	0.53	0.00	0.12	0.01

Active Risk from Risk Factors



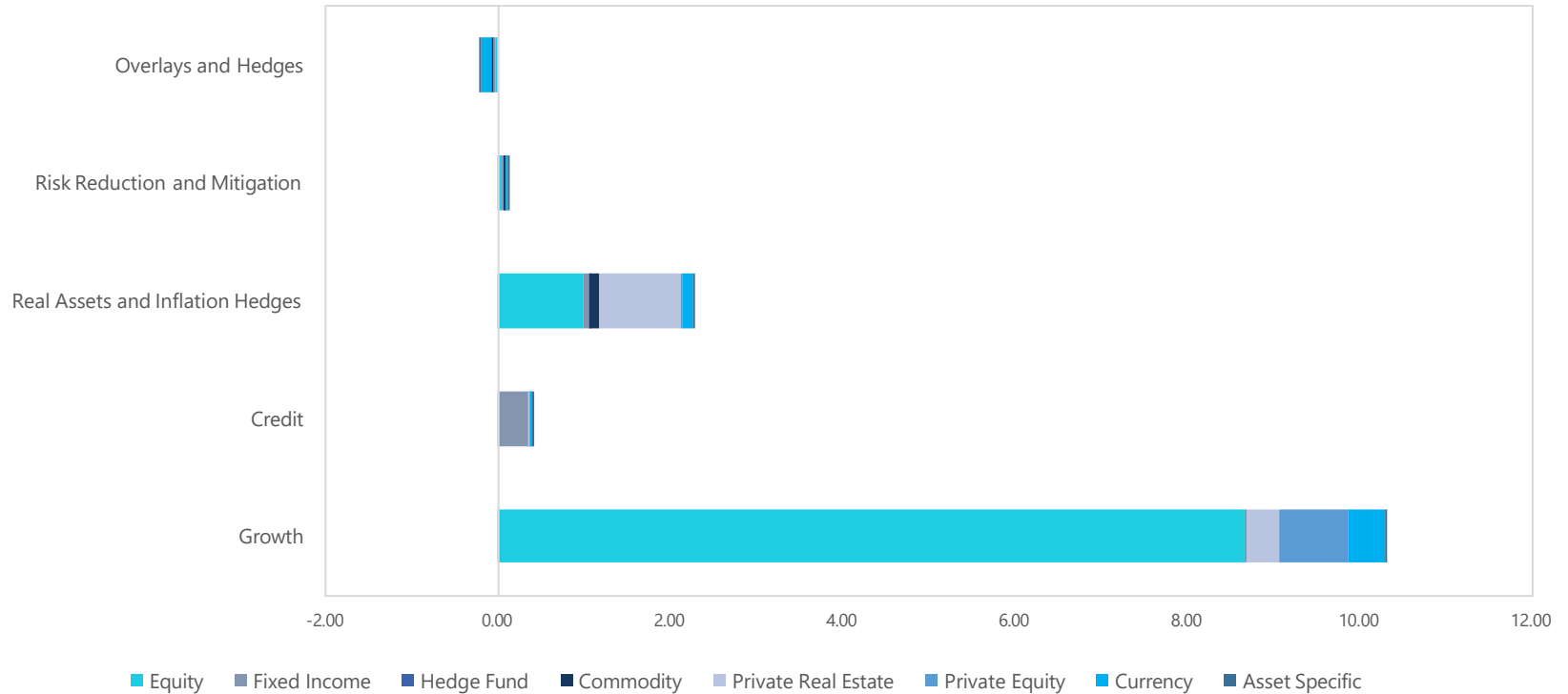
Risk Contribution Breakdown

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Risk Type

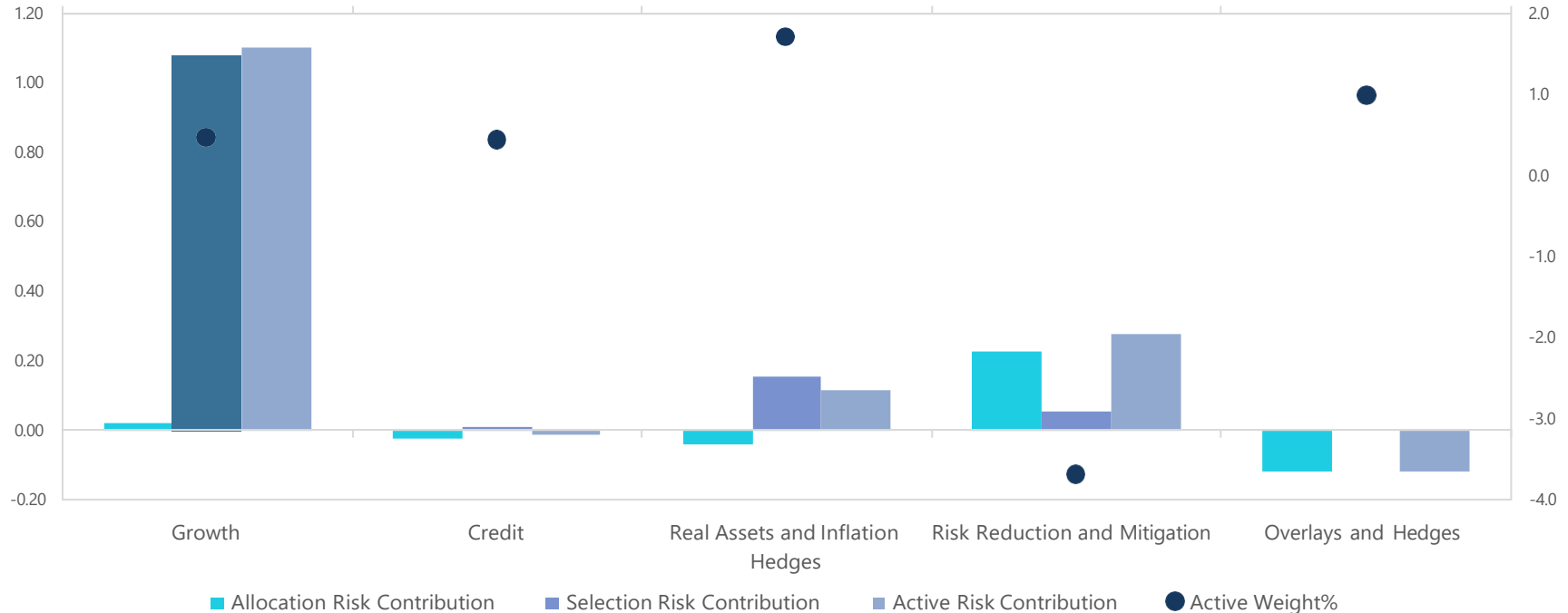


Functional Category	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific	Eff Weight%
Total Fund	67,383	100.0%	12.89	100.00	12.89	9.65	0.46	0.10	1.34	0.81	0.50	0.03	103.6%
Growth	34,694	51.5%	20.26	79.94	10.31	8.66	0.03	0.00	0.38	0.79	0.43	0.02	51.8%
Credit	7,726	11.5%	4.63	3.12	0.40	0.02	0.33	0.00	0.02	0.01	0.04	0.00	11.5%
Real Assets and Inflation Hedges	12,617	18.7%	13.84	17.65	2.28	0.99	0.07	0.11	0.95	0.02	0.13	0.00	20.2%
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.82	0.11	0.03	0.03	0.01	0.00	0.00	0.03	0.00	17.3%
Overlays and Hedges	676	1.0%	34.55	(1.54)	-0.20	-0.04	-0.01	-0.03	0.00	0.00	-0.12	0.00	2.9%

Allocation Selection

for the quarter ended June 30, 2022

Active Total Risk

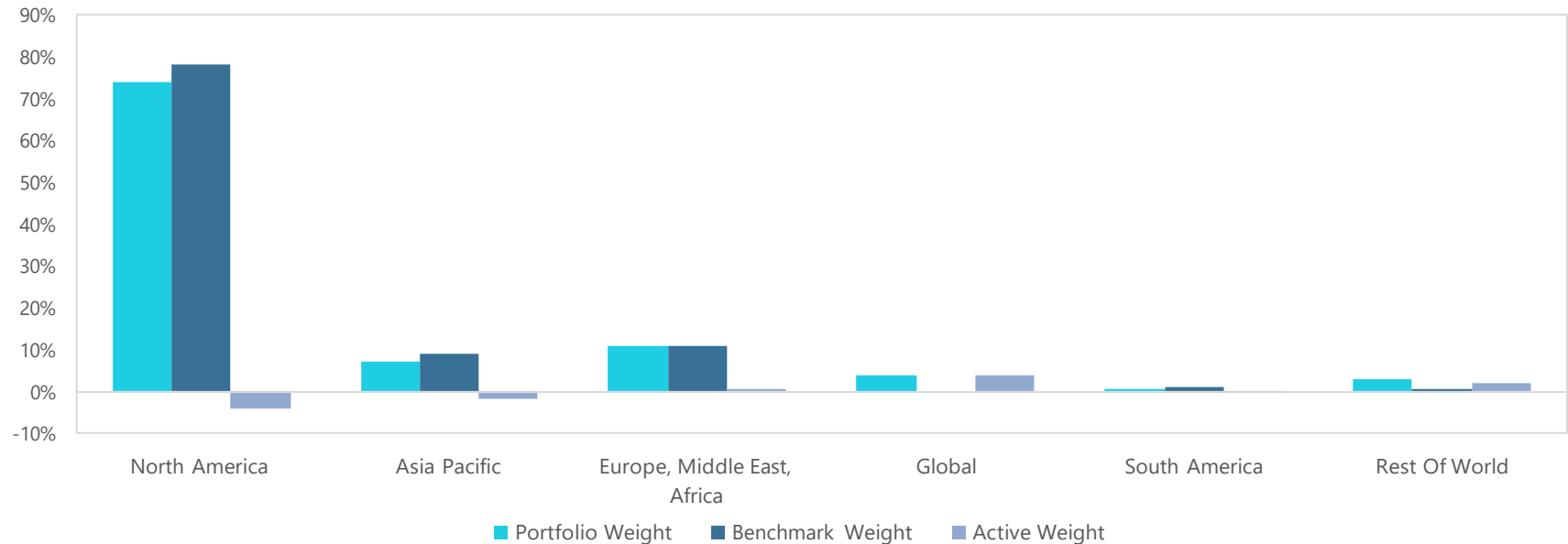


Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
Active Total Risk				0.07			1.30	1.37
Growth	0.49	7.19	0.60	0.02	2.24	0.94	1.08	1.10
Credit	0.47	8.57	-0.57	-0.02	2.07	0.05	0.01	-0.01
Real Assets and Inflation Hedges	1.72	6.30	-0.34	-0.04	1.86	0.44	0.15	0.12
Risk Reduction and Mitigation	-3.68	12.73	-0.49	0.23	1.32	0.23	0.05	0.28
Overlays and Hedges	1.00	42.83	-0.27	-0.12	0.00	0.00	0.00	-0.12

Portfolio Allocation

for the quarter ended June 30, 2022

By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	12.89	1.38	100.00	0.01
North America	74.14%	78.35%	-4.21%	13.23	1.28	92.81	0.03
Asia Pacific	7.23%	8.91%	-1.68%	15.45	0.09	6.20	-0.02
Europe, Middle East, Africa	10.80%	10.79%	0.01%	20.18	0.21	15.26	0.02
Global	3.95%	0.00%	3.95%	6.40	-0.17	-12.02	-0.04
South America	0.78%	1.04%	-0.26%	26.27	0.07	5.08	-0.02
Rest Of World	3.10%	0.91%	2.19%	6.62	-0.10	-7.34	-0.05

Stress Tests

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Top 10 Best Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.09%	4.12%	3,054,699,403
2003 Iraq War	1.87%	2.04%	1,394,117,492
1997-1998 Asian Financial Crisis	1.66%	1.33%	1,239,081,388
1995 US Dollar Rally	1.55%	1.50%	1,157,093,547
1999 Brazilian Real Crisis (Peak)	1.21%	1.14%	906,904,701
2010 Peripheral European Bond Crisis (Oct.26 to Nov.1	1.20%	1.22%	895,230,888
1994 Mexican Peso Crisis	0.60%	0.63%	451,546,508
2011 Egyptian Unrest	0.37%	0.33%	273,465,516
1998 LTCM Collapse	-1.19%	-1.16%	(888,384,639)
2011 Japanese Earthquake	-1.27%	-1.27%	(950,795,977)

Stress Tests

for the quarter ended June 30, 2022

Top 10 Worst Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-31.87%	-33.25%	(23,821,346,931)
2008 - 2009 Global Financial Crisis	-26.19%	-27.43%	(19,573,890,669)
2008 Lehman Bust	-24.19%	-25.31%	(18,084,969,086)
2000-2003 Tech Crash & Recession	-19.80%	-20.59%	(14,801,674,578)
1987 Market Crash (Aug. to Nov.)	-10.34%	-10.33%	(7,730,205,537)
2007-2008 Equity Slow Grind	-9.35%	-9.79%	(6,991,539,316)
2011 US Debt Ceiling Act	-8.38%	-8.74%	(6,261,858,907)
1998 Russian Financial Crisis	-7.55%	-7.89%	(5,640,036,103)
2001 Sept 11	-6.62%	-6.92%	(4,950,361,913)
2006 Emerging Market Crash	-5.48%	-5.47%	(4,093,577,998)

manager scorecards



Los Angeles County Employees Retirement Association

PUBLIC MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms	
			1 to 5 (with 5 the best)	S+, S, or S-	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)	
			SCORE	SCORE	SCORE	SCORE	SCORE	
Manager	Market Value (in \$ millions)	% of Total Fund	Risk-Adjusted Return	ER				
GROWTH	GLOBAL EQUITY							
	ACADIAN DEVELOPED MARKETS	531.5	0.8%	5		3	B	3
	BTC EURO TILTS	482.7	0.7%	5		4	B	3
	CAPITAL GROUP DEVELOPED MARKETS	343.0	0.5%	3		2	B	3
	CEVIAN CAPITAL II - ACTIVIST	358.9	0.5%	3		4	B	1
	CORNERCAP US SC - EMP	76.6	0.1%	5		1	A	3
	FRONTIER US SMID GROWTH	241.7	0.3%	2		2	B	1
	GENESIS EMERGING MARKETS	490.9	0.7%	1		3	A	3
	GLOBAL ALPHA IE SC - EMP	162.1	0.2%	3		3	B	3
	JANA JSI FUND V - ACTIVIST	118.4	0.2%	2		2	B	1
	JPMAM STRATEGIC BETA NON-U.S.	532.5	0.8%	*	3	2	B	3
	JPMAM STRATEGIC BETA U.S.	3,900.9	5.5%	*	3	2	B	3
	LAZARD EMERGING MARKETS	374.3	0.5%		2	3	B	1
	SSGA MSCI ACWI IMI	13,119.5	18.6%	*	3	—	B	5
SYMPHONY FINANCIAL - ACTIVIST	203.5	0.3%		4	2	B	3	
SYSTEMATIC US SMALL CAP VALUE	173.6	0.2%		4	2	A	3	
CREDIT	HIGH YIELD							
	BEACH POINT	272.7	0.4%	5	●	3	B	3
	BRIGADE CAP MGMT	632.0	0.9%	5	●	2	B	3
	PINEBRIDGE INVESTMENTS	432.0	0.6%	*	3	4	B	3
	BANK LOANS							
	BAIN CAPITAL CREDIT	406.6	0.6%		4	2	B	1
	CREDIT SUISSE BANK LOANS	1,102.5	1.6%	*	3	3	B	5
	CRESCENT CAPITAL	488.8	0.7%		3	2	B	3
	EMERGING MARKET DEBT							
	ABERDEEN ASSET MANAGEMENT	355.6	0.5%		1	3	B	3
ASHMORE INVESTMENT MANAGEMENT	330.1	0.5%		1	3	B	3	
REAL ASSETS & INFLATION HEDGES	NATURAL RESOURCES & COMMODITIES							
	CREDIT SUISSE COMMODITY	551.2	0.8%		4	3	A	3
	DWS NATURAL RESOURCES	933.6	1.3%		2	2	A	5
	NEUBERGER BERMAN/GRESHAM	541.4	0.8%		3	3	A	3
	PIMCO COMMODITY PLUS	212.8	0.3%		4	3	C	1
	INFRASTRUCTURE							
	DWS INFRASTRUCTURE	2,668.3	3.8%		1	2	A	5
	TIPS							
	BLACKROCK TIPS	1,930.6	2.7%		3	3	B	5

PUBLIC MARKETS MANAGER SCORECARD

2nd Quarter 2022

		Performance	Organization & Operations	ESG	Partnership	Fees & Terms
		1 to 5 <i>(with 5 the best)</i>	S+, S, or S- <i>(with S+ the best)</i>	1 to 5 <i>(with 5 the best)</i>	A, B, or C <i>(with A the best)</i>	1 to 5 <i>(with 5 the best)</i>
		SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund	Risk-Adjusted Return	ER		

RISK REDUCTION & MITIGATION	INVESTMENT GRADE BONDS								
	ALLSPRING/WELLS	1,685.7	2.4%	4	●	S	3	B	5
	BTC US DEBT INDEX FUND	2,997.8	4.3%	5	●	S+	—	B	5
	PUGH CAPITAL MGMT	860.7	1.2%	2	●	S	1	A	3
CASH	SSGA CASH	757.3	1.1%	* 3	●	S+	—	A	5
	OVERLAYS & HEDGES	OVERLAYS							
PARAMETRIC CASH OVERLAY		525.0	0.7%	—		S	—	A	5
HEDGES									
BTC PASSIVE CURRENCY HEDGE	167.4	0.2%	—		S+	—	B	5	

	Exceeds 3-Year Net Excess Return
	Meets 3-Year Net Excess Return
	Below 3-Year Net Excess Return

For Organization and Partnership	
	Downgrade from the prior quarter
	Upgrade from the prior quarter

Footnotes

- Pillar methodologies in refinement and may evolve over time

Category Descriptions

Performance

- Quarterly score based on Sharpe and Information Ratios, which provide insight into a manager’s risk-adjusted performance and performance relative to its benchmark, respectively
- ‘*’ denotes a manager with an inception date of less than 3 years, resulting in a neutral score of 3
- Circle icons reflect trailing 3-year net excess returns against the manager’s benchmark above or below a specified range

Organization & Operations

- Includes factors such as organization, professional staff, diversity & inclusion, investment philosophy & process, risk management, legal & compliance framework
- ‘S’ stands for Satisfactory

ESG

- Evaluates the extent to which material ESG factors are identified, assessed, and incorporated into risk/return analysis and portfolio construction
- ‘—’ denotes passive index funds and cash where ESG scores are not relevant and/or reflect strategies that do not incorporate active decisions, including ESG considerations, in portfolio construction
- ‘+’ denotes mandates where ESG scores are currently under review

Partnership

- Blended score based on:
 - Value added services – e.g., providing education, distributing research, and performing analytics on portfolio
 - Client service – e.g., responsiveness, timeliness, competency, and approach
 - Size of LACERA’s investment relative to the firm’s assets under management

Fees & Terms

- Compared to a benchmark of median fees by asset category and/or investment structure

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
GLOBAL/LARGE BUYOUT							
Advent International Group	134.6	0.2%	*	S+	3	C	4
Blackstone Management	259.9	0.4%	1	S-	4	C	5
CVC Capital Partners	500.5	0.7%	5	S	4	A	4
Green Equity Investors	377.7	0.5%	5	S+	3	B	4
Hellman & Friedman	492.4	0.7%	3	S+	3	B	4
MBK	224.0	0.3%	1	S	4	A	2
Silver Lake Partners	598.3	0.8%	4	S+	3	B	5
Thoma Bravo LLC	140.5	0.2%	*	S+	3	B	3
Vista Equity Partners	916.2	1.3%	2	S-	3	A	2
MID-MARKET BUYOUT							
Accel-KKR Capital Partners	182.9	0.3%	*	S+	4	A	3
BlackFin Capital Partners	19.4	0.0%	*	S	3	B	3
Carlyle Group	283.3	0.4%	2	S+	4	B	4
Clearlake Capital	469.1	0.7%	5	S+	4	A	4
GHO Capital	17.9	0.0%	*	S	3	B	3
Gilde Partners	90.7	0.1%	5	S	2	C	5
Harvest Partners	110.3	0.2%	5	S	1	C	3
Marlin Equity	30.5	0.0%	1	S-	2	C	3
Novacap	10.5	0.0%	*	S	3	B	3
Onex Partners	335.5	0.5%	3	S	4	A	5
PAI	106.3	0.2%	*	S-	2	B	4
Revelstoke	130.8	0.2%	*	S	4	A	2
Riverside Capital	107.7	0.2%	2	S	3	C	3
Siris Capital Group	140.1	0.2%	2	S	3	A	4
Sterling Partners	113.2	0.2%	5	S	3	A	4
STG Partners	28.9	0.0%	*	S	3	A	3
Triton	124.7	0.2%	*	S-	3	C	5
TSG	0.0	0.0%	*	S+	3	C	2
Veritas Capital	9.7	0.0%	*	S+	3	A	3
Vinci Partners	55.7	0.1%	*	S	4	B	5
Webster Equity Partners	38.9	0.1%	*	S	3	B	3
Wynnchurch Capital	28.7	0.0%	*	S+	3	C	3
SMALL BUYOUT							
AE Industrial Partners	141.8	0.2%	*	S+	3	A	3
Atlantic Street Capital	57.9	0.1%	*	S	3	A	3
Clarion	15.4	0.0%	*	S+	2	B	4
Excellere Partners	96.7	0.1%	4	S-	3	A	3
Incline Equity Partners	30.8	0.0%	5	S-	2	C	4
Insignia Capital Partners	193.9	0.3%	5	S	1	B	5
Juggernaut Capital Partners	245.7	0.3%	3	S	3	A	4
Lightyear Capital	255.3	0.4%	3	S-	2	A	5
Livingbridge	53.3	0.1%	1	S+	4	A	3
Montefiore Investment	10.3	0.0%	*	S+	4	B	4
One Rock Capital Partners	175.3	0.2%	2	S	3	A	4
Palladium Equity Partners	96.4	0.1%	1	S-	4	C	2

PRIVATE EQUITY



Los Angeles County Employees Retirement Association

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
GROWTH EQUITY							
Australis Partners	102.0	0.1%	1	S-	4	B	5
Great Hill Partners	0.0	0.0%	*	S	4	A	4
JMI Equity	4.4	0.0%	2	S	3	C	2
RedBird Capital Partners	180.8	0.3%	*	S	4	A	3
Summit Partners	78.1	0.1%	5	S+	4	A	4
TA Associates	120.3	0.2%	*	S+	4	B	4
Technology Crossover Ventures	6.0	0.0%	4	S	2	B	3
VENTURE CAPITAL							
BlueRun Ventures	103.8	0.1%	1	S	2	A	2
Canaan Partners	160.2	0.2%	5	S+	3	A	4
GGV Capital	593.4	0.8%	2	S	3	A	3
Institutional Venture Partners	240.5	0.3%	3	S	1	C	5
Joy Capital	77.2	0.1%	*	S-	2	B	4
Lilly Asia Ventures	141.3	0.2%	3	S	4	B	2
Sinovation Ventures	92.2	0.1%	1	S-	2	C	2
Storm Ventures LLC	264.8	0.4%	4	S	3	A	4
Union Square	202.4	0.3%	5	S-	1	B	5
SPECIAL SITUATIONS							
Alchemy Partners	30.7	0.0%	*	S	3	B	4
Black Diamond	135.2	0.2%	1	S	3	B	4
Centerbridge	130.9	0.2%	5	S	4	A	2
FUND OF FUNDS							
Gateway	1,027.8	1.5%	5	S	3	B	4
MS GTB Capital Partners	281.6	0.4%	1	S	4	A	2
J.P. Morgan	495.6	0.7%	3	S+	+	B	4

PRIVATE EQUITY
(continued)

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance 1 to 5 <i>(with 5 the best)</i>	Organization & Operations S+, S, or S- <i>(with S+ the best)</i>	ESG 1 to 5 <i>(with 5 the best)</i>	Partnership A, B, or C <i>(with A the best)</i>	Fees & Terms 1 to 5 <i>(with 5 the best)</i>
			SCORE	SCORE	SCORE	SCORE	SCORE
manager	(in \$ millions)	Total Fund					
COMMINGLED FUNDS							
AERMONT Real Estate Fund IV	29.0	0.0%	2	S	4	B	3
AEW Value Investors Asia III	43.0	0.1%	1	S	4	B	4
AG Asia Realty Fund IV	74.0	0.1%	*	S-	2	B	3
AG Europe Realty Fund II	58.0	0.1%	4	S-	2	B	3
Bain Capital Real Estate Fund I	97.0	0.1%	5	S	3	B	3
Bain Capital Real Estate Fund II	37.0	0.1%	*	S	3	B	3
CapMan Nordic Real Estate Fund II	45.0	0.1%	4	S	3	A	3
CapMan Nordic Real Estate Fund III	16.0	0.0%	*	S	3	A	3
Capri Urban Investors	1.0	0.0%	3	S-	1	C	3
CityView Bay Area Fund II	80.0	0.1%	1	S	3	B	3
CityView Southern California Fund II	1.0	0.0%	3	S	3	B	3
CityView Western Fund I, L.P.	168.0	0.2%	4	S	3	B	3
Core Property Index Fund	126.0	0.2%	*	S	2	A	5
Europa Fund IV	11.0	0.0%	1	S	3	A	2
Heitman Asia-Pacific Property Investors	39.0	0.1%	2	S	3	B	4
Invesco Real Estate Asia Fund	165.0	0.2%	3	S	4	B	5
Prologis European Logistics Fund (PELF)	221.0	0.3%	5	S	4	B	1
RREEF Core Plus Industrial Fund (CPIF)	287.0	0.4%	5	S-	3	B	5
Starwood Capital Hospitality Fund	21.0	0.0%	1	S	2	C	3
TPG Real Estate Partners III	46.0	0.1%	*	S	3	C	3
SEPARATE ACCOUNTS							
Cityview Core I.M.A.	211.0	0.3%	1	S	3	B	1
Clarion I.M.A.	252.0	0.4%	5	S	4	B	4
Clarion Takeover Core IMA	372.0	0.5%	*	S	4	B	4
Clarion Takeover Value IMA	60.0	0.1%	*	S	4	B	3
Clarion Takeover Value IMA Vintage 2012	6.0	0.0%	*	S	4	B	4
Heitman I.M.A.	400.0	0.6%	4	S	3	B	4
RREEF Core/High Return I.M.A. III	907.0	1.3%	1	S-	3	C	5
RREEF Takeover I.M.A.	681.0	1.0%	4	S-	3	C	4
Stockbridge I.M.A.	630.0	0.9%	4	S	3	B	4
Stockbridge High I.M.A. Vintage 2014	109.0	0.2%	*	S	3	B	5
Stockbridge Value I.M.A. Vintage 2014	23.0	0.0%	*	S	3	B	3

REAL ESTATE

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

HEDGE FUNDS & ILLIQUID CREDIT

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
HEDGE FUNDS							
AM Asia	220.0	0.3%	4	S-	2	A	5
Brevan Howard	625.2	0.9%	4	S+	2	A	2
Capula GRV	607.5	0.9%	5	S-	1	A	3
Caxton	289.5	0.4%	5	S	3	B	3
DK Institutional Partners	486.3	0.7%	3	S	1	B	3
HBK Multistrategy	549.2	0.8%	3	S	1	B	3
Hudson Bay	632.1	0.9%	5	S	1	B	3
Polar	459.2	0.7%	4	S	2	B	4
Stable	281.3	0.4%	*	S	2	A	5
ILLIQUID CREDIT							
Barings	51.2	0.1%	5	S	3	A	5
Beach Point	465.3	0.7%	5	S	1	A	3
Glendon	130.4	0.2%	1	S	1	A	2
Magnetar	839.7	1.2%	*	S	2	A	3
Napier Park	804.6	1.1%	*	S	2	A	4
Oaktree	140.5	0.2%	1	S	2	B	2
PIMCO Tac Opps	494.9	0.7%	4	S-	1	C	3
Quadrant	56.8	0.1%	3	S	1	B	5
Silver Rock	0.0	0.0%	*	S	2	A	4
Tennenbaum	6,601.5	9.4%	2	S	2	B	5

For Organization and Partnership	
	Downgrade from the prior quarter
	Upgrade from the prior quarter

Footnotes

- Pillar methodologies in refinement and may evolve over time

Category Descriptions

Performance

- Quarterly score based on risk-adjusted performance metrics over time
- '*' denotes a manager with an inception date of less than 3 years

Organization & Operations

- Includes factors such as organization, professional staff, investment philosophy & process, risk management, legal & compliance framework, diversity & inclusion
- 'S' stands for Satisfactory

ESG

- Evaluates the extent to which material ESG factors are identified, assessed, and incorporated into risk/return analysis and portfolio construction
- '+' denotes mandates where ESG scores are currently under review

Partnership

- Assesses the quality of investment manager relationships both quantitatively and qualitatively

Fees & Terms

- Compares various fees and terms within each asset category, strategy and/or investment structure

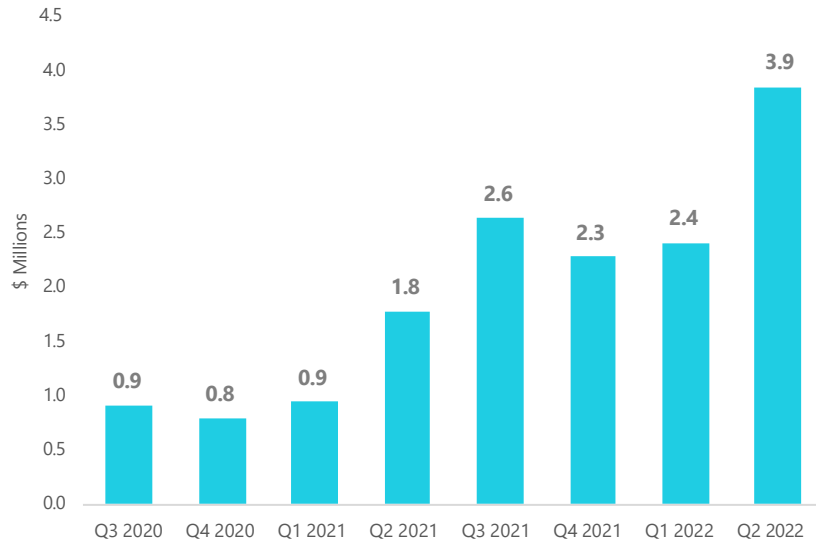
appendix

Summary

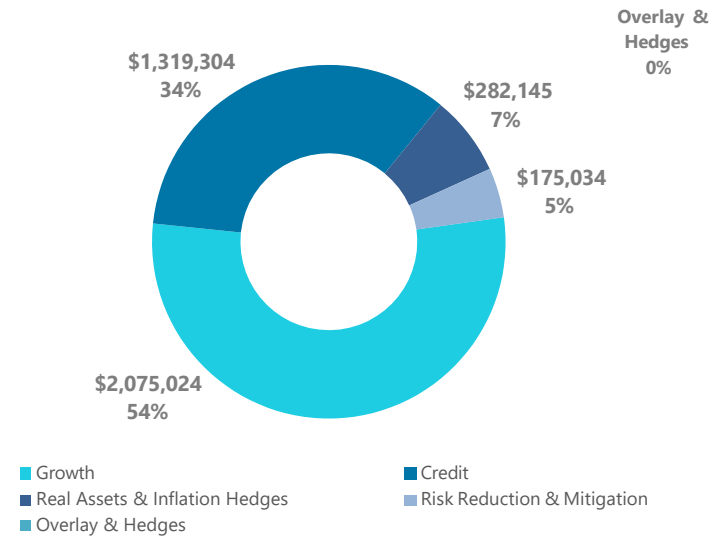
Securities Lending Income

for the quarter ended June 30, 2022

Earnings by Quarter



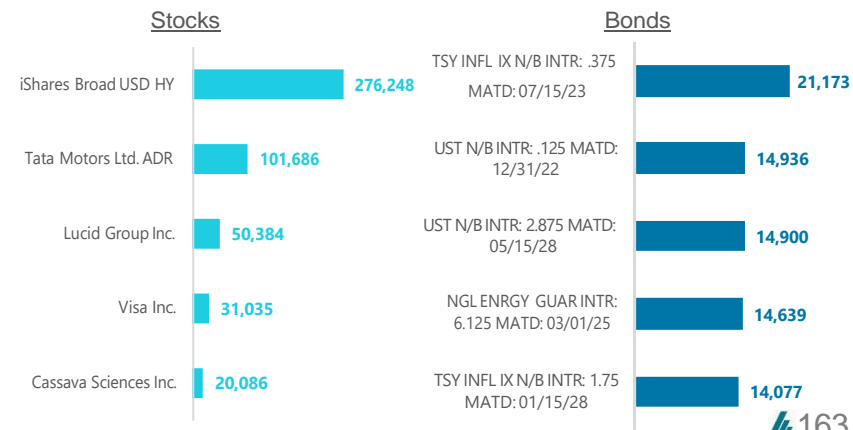
Earnings by Functional Category



Top Earning Funds

	% of Total Fund		Cash Earnings	Non-Cash Earnings
	Earnings	Total Earnings		
SSGA MSCI ACWI IMI	41.5%	1,599,914	827,780	772,134
BlackRock HY ETF	26.4%	1,018,673	584,969	433,705
JPMAM Strategic Beta US	6.1%	233,766	99,758	134,007
BlackRock TIPS	4.9%	188,389	101,248	87,141
Pinebridge Investments	4.1%	159,248	155,091	4,157

Top Earning Securities



Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Growth

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Active			
Acadian Asset Management	\$571.5	\$537,583	37.6
BTC Europe Alpha Tilts	\$517.1	\$451,188	34.9
Capital Guardian	\$376.7	\$326,669	34.7
Cevian Capital	\$382.7	\$1,029,512	107.6
CornerCap	\$80.1	\$105,806	52.8
Frontier Capital Management	\$260.8	\$488,934	75.0
Genesis Investment Management	\$511.1	\$806,379	63.1
Global Alpha	\$174.1	\$310,435	71.3
JANA Partners ²	\$120.0	\$300,000	100.0
Lazard Asset Management	\$380.4	\$608,106	63.9
Parametric GE Market Cap	\$910.7	\$60,774	2.7
Parametric GE Region	\$834.8	\$55,706	2.7
Symphony Financial	\$194.3	\$364,337	75.0
Systematic	\$181.9	\$250,148	55.0
Subtotal:	\$5,496.3	\$5,695,576	41.5
Factor-Based			
JPMAM Strategic Beta Non-US	\$567.0	\$48,553	3.4
JPMAM Strategic Beta US	\$4,135.7	\$354,151	3.4
Subtotal:	\$4,702.7	\$402,703	3.4
Passive			
SSGA MSCI ACWI IMI	\$13,916.6	\$274,478	0.8
Subtotal:	\$13,916.6	\$274,478	0.8

1. Reflects estimated investment management fees.
2. Based on committed capital of \$120 million.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Credit

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Liquid Credit			
Aberdeen Standard Investments	\$379.2	\$358,378	37.8
Ashmore Investment Management	\$330.1	\$407,716	49.4
Bain Capital	\$406.6	\$562,012	55.3
Beach Point Capital	\$286.1	\$321,828	45.0
Brigade Capital Management	\$659.5	\$670,810	40.7
Credit Suisse Bank Loan	\$1,130.1	\$558,524	19.8
Crescent Capital Group	\$501.3	\$582,578	46.5
Pinebridge	\$454.6	\$375,058	33.0
Subtotal:	\$4,147.4	\$3,836,903	37.0
Illiquid Credit			
Beach Point Capital - Fund II	\$13.5	\$153,774	457.1
Beach Point Capital - Fund III	\$181.2	\$314,890	69.5
Tennenbaum Capital Partners	\$629.3	\$1,233,939	78.4
Subtotal:²	\$2,492.3	\$1,702,603	27.3

1. Reflects estimated investment management fees.

2. Magnetar and Napier Park market values are included in the subtotal, but the fees are deducted directly from the fund by the manager.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Real Assets & Inflation Hedges

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Natural Resources & Commodities			
Credit Suisse	\$589.7	\$376,327	25.5
DWS Natural Resources	\$1,217.2	\$563,328	18.5
Neuberger Berman/Gresham	\$505.0	\$445,917	35.3
PIMCO	\$454.6	\$424,364	37.3
Subtotal:	\$2,766.5	\$1,809,936	26.2
Infrastructure			
DWS Infrastructure	\$2,691.7	\$1,245,684	18.5
Subtotal:	\$2,691.7	\$1,245,684	18.5
Treasury Inflation-Protected Securities			
BlackRock TIPS	\$1,976.7	\$49,281	1.0
Subtotal:	\$1,976.7	\$49,281	1.0

1. Reflects estimated investment management fees.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Risk Reduction & Mitigation

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Investment Grade Bonds			
Allspring/Wells	\$1,700.3	\$390,042	9.2
Pugh Capital Management	\$934.3	\$300,604	12.9
Subtotal:²	\$7,206.2	\$787,525	4.4
Cash			
SSGA Cash	\$515.5	\$51,549	4.0
Subtotal:	\$515.5	\$51,549	4.0

1. Reflects estimated investment management fees.
2. Includes BTC US Debt Index.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Overlays & Hedges

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Overlays			
Parametric Cash Overlay	\$1,915.6	\$127,826	2.7
Subtotal:	\$1,915.6	\$127,826	2.7
Hedges			
50% Developed Markets Currency Hedge	\$6,809.6	\$254,661	1.5
Subtotal:	\$6,809.6	\$254,661	1.5

1. Reflects estimated investment management fees.

A

ANNUAL RETURN

The total return of a security over a specified period, expressed as an annual rate of interest.

ACTIVE RISK

The expected standard deviation of the differential return between the portfolio and the benchmark. Active total risk arises from active management, and it is the result of active weights (deviations from the benchmark at the asset level) and therefore active exposures; for passively managed portfolios, it is referred to as “total tracking error.”

ACTIVE RISK CONTRIBUTION

Percent contribution to active total risk (or tracking error). The percent of active total risk that an individual asset or risk source contributes. For example, a % CR to Active Total Risk of 10% indicates that 10% of the portfolio’s active total risk is arising from the active position in that particular asset.

B

BASIS POINTS (BPS)

One one-hundredth of one percent. One hundred basis points equal one percent.

BETA

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market; a beta of more than one indicates higher risk than the market.

BRIGADE CUSTOM INDEX

Inception – 3/31/20
50% Bloomberg Barclays Ba to B U.S. High Yield / 50% Credit Suisse Leveraged Loan Index
4/1/20 – Present
Bloomberg Barclays U.S. Corporate High Yield

C

CASH POLICY BM

Inception – 3/31/19
FTSE 6-Month U.S. T-Bill Index
4/1/19 – Present
FTSE 3-Month U.S. T-Bill Index

CORE PRIVATE REAL ESTATE POLICY BM

Inception-9/30/21
NFI ODCE + 50 bps (3-month lag)
10/1/21 – Present
NFI ODCE (3-month lag)

CREDIT POLICY BM

Inception-9/30/21
25% Bloomberg Barclays Ba to B U.S. High Yield / 33% Credit Suisse Leveraged Loan Index / 17% Emerging Markets Debt Custom BM / 25% Illiquid Credit Custom BM
10/1/21 – Present
Based on sub-asset market values
55% Liquid Credit Policy BM / 45% Illiquid Credit Policy BM

D

CUSTOM HEDGE FUND BM

Inception – 3/31/19

FTSE 3-Month U.S. T-Bill Index + 500 bps (1-month lag)

4/1/19 – Present

FTSE 3-Month U.S. T-Bill Index + 250 bps (1-month lag)

DIVERSIFIED HEDGE FUNDS POLICY BM

FTSE 3-Month U.S. T-Bill Index + 250 bps (1-month lag)

DURATION

A measure of the price sensitivity of a bond portfolio to changes in interest rates.

DISTRIBUTED TO PAID-IN (DPI)

A measure of distributions received relative to contributed capital.

E

EAFE CUSTOM INDEX

Inception - 6/30/06

MSCI EAFE (Net)

6/30/06 – Present

MSCI EAFE + Canada (Net)

EMERGING MARKET DEBT (EMD) POLICY BM

50% JP Morgan EMBI Global Diversified /
25% JP Morgan GBI-EM GD / 25% JP
Morgan CEMBI BD

F

FUTURES CONTRACT

Agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price and a stipulated future date.

G

GLOBAL EQUITY POLICY BM

4/1/2019 – 6/31/2019

80% MSCI ACWI IMI Net / 20% MSCI WORLD IMI ex U.S. (100% Currency Hedged)

7/1/2019 – Present

MSCI ACWI IMI Net

GROWTH POLICY BM

Based on sub-asset market values

67% Global Equity Custom BM / 27% Private Equity - Growth Custom BM / 6% Non-Core Private Real Estate Custom BM

H

HIGH YIELD BOND

A bond with a low investment quality and credit worthiness, usually with a rating of BB or less.

I

ILLIQUID CREDIT POLICY BM

7/1/20188 – 9/30/2021

Bloomberg Barclays U.S. Aggregate Index + 250 bps (1-month lag)

10/1/21 – Present

Liquid Credit Policy BM + 150 bps (1-month lag)

INFORMATION RATIO

The excess return (alpha) per unit of active risk (tracking error).

INTERNAL RATE OF RETURN (IRR)

A total rate of return that gives full weight to the size and timing of cash flows over the period measured and fully reflects unrealized gains and losses in addition to realized gains and losses, interest and dividend income.

K

KAPLAN & SCHOAR PUBLIC MARKET EQUIVALENT (KS-PME)

A ratio that benchmarks the performance of a fund against an appropriate public market index while accounting for the timing of a fund's cash flows.

L

LIQUID CREDIT POLICY BM

40% BBG Barc US Corp HY Index / 40% Credit Suisse Leverage Loan Index / 10% JPM EMBI Global Diversified Index / 5% JPM GBI-EM Global Diversified Index / 5% JPM CEMBI Broad Diversified Index

M

MC TO TOTAL TRACKING ERROR

This value represents the change in the active risk of an asset's portfolio or group that would result from a one percent increase in the asset's effective position plus an equal short position in the benchmark.

MSCI EM IMI CUSTOM INDEX

Inception – 12/31/00
MSCI EM (Gross)
12/31/00 – 8/31/08
MSCI EM (Net)
8/31/08 – Present
MSCI EM IMI (Net)

N

NATURAL RESOURCES & COMMODITIES POLICY BM

Inception-9/30/21
50% Bloomberg Commodity Index / 50% S&P Global Large MidCap Commodity and Resources Index
10/1/21 – Present
33% Bloomberg Commodity Index / 67% S&P Global Natural Resources Index

NON-CORE PRIVATE REAL ESTATE POLICY BM

Inception-9/30/21
NFI ODCE + 300 bps (3-month lag)
10/1/21 – Present
NFI ODCE + 225 bps (3-month lag)

P

PRIVATE EQUITY – CREDIT CUSTOM BM

Bloomberg Barclays U.S. Aggregate + 250 bps (3-month lag)

PRIVATE EQUITY – GROWTH POLICY BM

MSCI ACWI IMI Net Index + 200 bps (3-month lag)

PRIVATE EQUITY – REAL ASSETS CUSTOM BM

S&P Global Large MidCap Commodity and Resources Index (3-month lag)

PRIVATE INFRASTRUCTURE CUSTOM BM

Inception-9/30/21
Dow Jones Brookfield Global Infrastructure Index (3-month lag)
10/1/21 – Present
Dow Jones Brookfield Global Composite Infrastructure Index (3-month lag)

R

REAL ASSETS & INFLATION HEDGES POLICY BM

Based on sub-asset market values
35% Core Private Real Estate Custom BM /
24% Natural Resources & Commodities
Custom BM / 24% DJ Brookfield Global
Composite Infrastructure / 17% Bloomberg
Barclays U.S. TSY TIPS

RISK REDUCTION & MITIGATION POLICY BM

Based on sub-asset market values
Inception-9/30/21
79% Bloomberg Barclays Aggregate
/ 17% Diversified Hedge Funds Custom BM /
4% FTSE 3-month Treasury Bill
10/1/21 – Present
62% Bloomberg Barclays Aggregate / 24%
Diversified Hedge Funds Custom BM / 9%
Bloomberg US Treasury: Long / 5% FTSE 3-
month Treasury Bill

S

SHARPE RATIO

Measures the performance of an investment compared to a risk-free asset, after adjusting for its risk. It is the difference between the returns of the investment and the risk-free return, divided by the standard deviation of the investment.

STANDARD DEVIATION

Statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater the degree of dispersion, the greater the risk.

T

TIME-WEIGHTED RATE OF RETURN (TWR)

A measure of the compound rate of growth in a portfolio. Often used to compare the returns of investment managers because it eliminates the distorting effects on growth rates created by inflows and outflows of money.

TOTAL PRIVATE EQUITY BENCHMARK

Inception – 3/31/19
Private Equity Target (Russell 3000 rolling 10
year + 500 bps)
3/31/19 – Present
Composite weighted blend of Private Equity-
Growth Policy BM, Private Equity-Credit
Custom BM, and Private Equity-Real Assets
Custom BM

Y

TOTAL REAL ESTATE BENCHMARK

Inception – 3/31/19

Real Estate Target (NCREIF ODCE Net + 40 bps)

3/31/19 – 9/30/21

Composite weighted blend of Opportunistic Real Estate Custom BM, NPI Income Lagged, and Core & Value-Added Real Estate Custom BM

10/1/21 – Present

Composite weighted blend of Non-Core Private Real Estate BM, NPI Income Lagged, and Core Private Real Estate BM

TOTAL RISK

The total (gross) risk to an asset (or portfolio), which is the standard deviation of the asset's total return distribution, expressed in percent. Total risk is forecasted using MSCI Barra's multiple factor models. The total risk for an asset depends on the asset's exposures to the risk factors, the factor variance/covariance matrix, and the forecast selection risk of the asset.

TOTAL RISK CONTRIBUTION

The percent of total risk that an individual asset or risk source contributes. For example, a % CR to Total Risk of 10% indicates that 10% of the portfolio's total risk is arising from the portfolio's position in that particular asset.

TOTAL VALUE TO PAID-IN (TVPI)

A measure of total value created relative to capital invested.

TRACKING ERROR

The volatility of a manager's excess return. It is measured by subtracting the benchmark return from the manager's return and calculating the standard deviation.

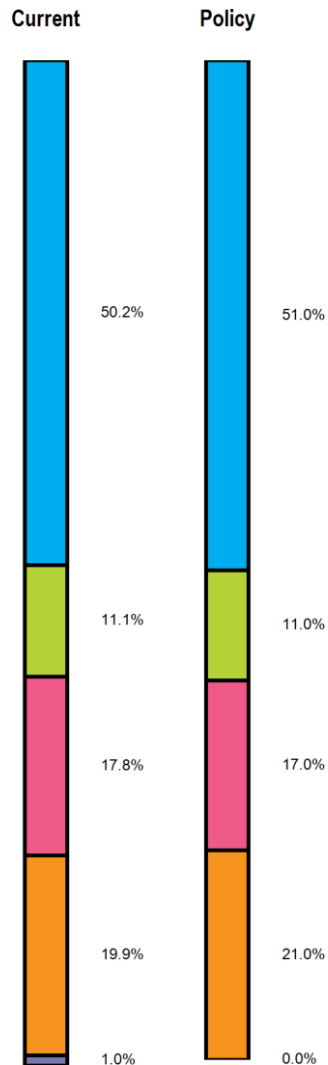
YIELD TO MATURITY

The return a bond earns on the price at which it was purchased if it were held to maturity. It assumes that coupon payments can be reinvested at the yield to maturity.

**Los Angeles County Employees
Retirement Association**

June 30, 2022

Fund Evaluation Report



Allocation vs. Targets and Policy							
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?	
Growth	\$35,330,985,514	50.2%	51.0%	-0.8%	43.0% - 59.0%	Yes	
Global Equity	\$21,342,824,676	30.3%	34.0%	-3.7%	27.0% - 41.0%	Yes	
Private Equity	\$12,901,177,661	18.3%	14.0%	4.3%	9.0% - 17.0%	No	
Non-Core Private Real Estate	\$1,086,983,177	1.5%	3.0%	-1.5%	1.0% - 5.0%	Yes	
Credit	\$7,823,987,780	11.1%	11.0%	0.1%	8.0% - 14.0%	Yes	
Liquid Credit ¹	\$4,581,127,257	6.5%	6.0%	0.5%	3.0% - 9.0%	Yes	
Illiquid Credit ²	\$3,242,840,780	4.6%	5.0%	-0.4%	2.0% - 8.0%	Yes	
Real Assets and Inflation Hedges	\$12,538,842,152	17.8%	17.0%	0.8%	14.0% - 20.0%	Yes	
Core Private Real Estate	\$4,323,248,579	6.1%	6.0%	0.1%	3.0% - 9.0%	Yes	
Natural Resources & Commodities	\$2,957,771,033	4.2%	4.0%	0.2%	2.0% - 6.0%	Yes	
Infrastructure	\$3,327,235,827	4.7%	4.0%	0.7%	1.0% - 6.0%	Yes	
TIPS	\$1,930,586,713	2.7%	3.0%	-0.3%	0.0% - 6.0%	Yes	
Risk Reduction and Mitigation	\$14,020,494,934	19.9%	21.0%	-1.1%	15.0% - 27.0%	Yes	
Investment Grade Bonds	\$5,556,006,783	7.9%	13.0%	-5.1%	7.0% - 19.0%	Yes	
Diversified Hedge Funds	\$4,195,894,599	6.0%	5.0%	1.0%	1.0% - 7.0%	Yes	
Long-Term Government Bonds	\$1,209,945,367	1.7%	2.0%	-0.3%	0.0% - 7.0%	Yes	
Long Treasury Bonds Transition	\$1,991,734,338	2.8%				Yes	
Cash	\$1,066,913,846	1.5%	1.0%	0.5%	0.0% - 3.0%	Yes	
Overlays and Hedges	\$692,470,449	1.0%	0.0%	1.0%	0.0% - 5.0%	Yes	
Cash Overlay	\$525,028,080	0.7%	0.0%	0.7%		Yes	
Currency Hedge	\$167,442,369	0.2%	0.0%	0.2%		Yes	
Total³	\$70,406,780,829	100.0%	100.0%				

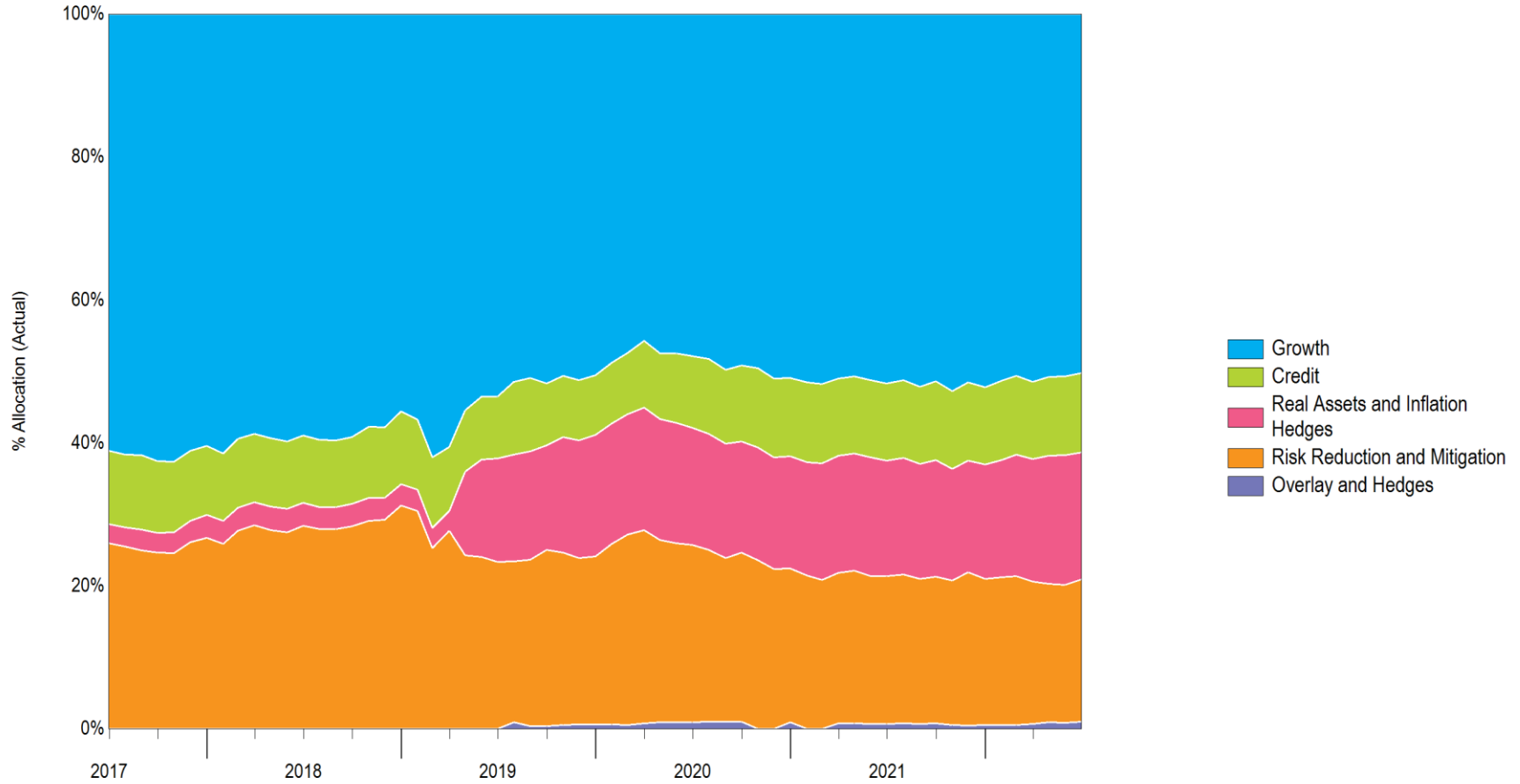
¹ Liquid Credit contains high yield, bank loans, and EM debt.

² Illiquid Credit contains credit hedge funds, real estate debt, private debt strategies and private equity-related debt.

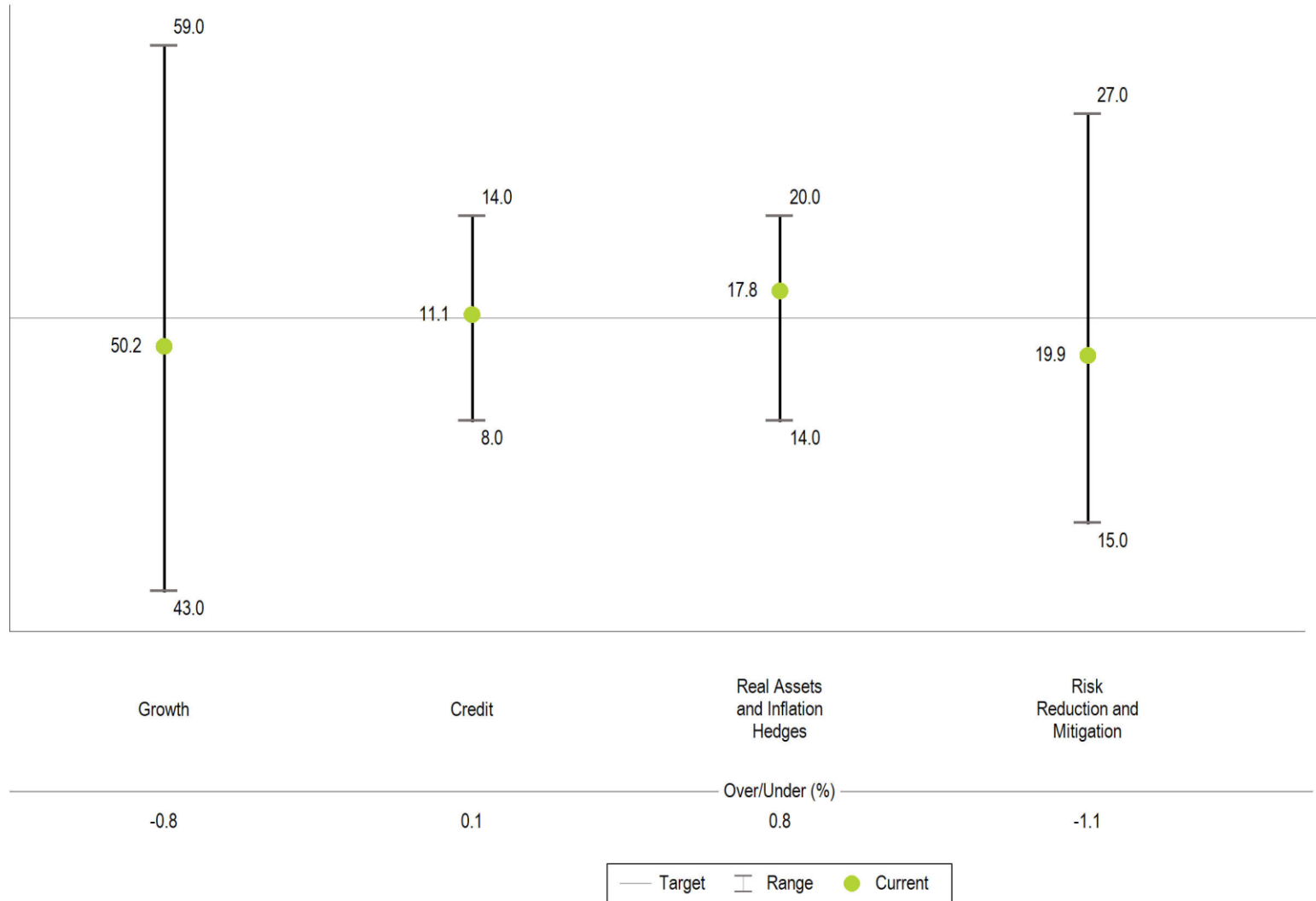
³ Totals may not add up due to rounding.

* The Functional Framework became effective April 1, 2019.

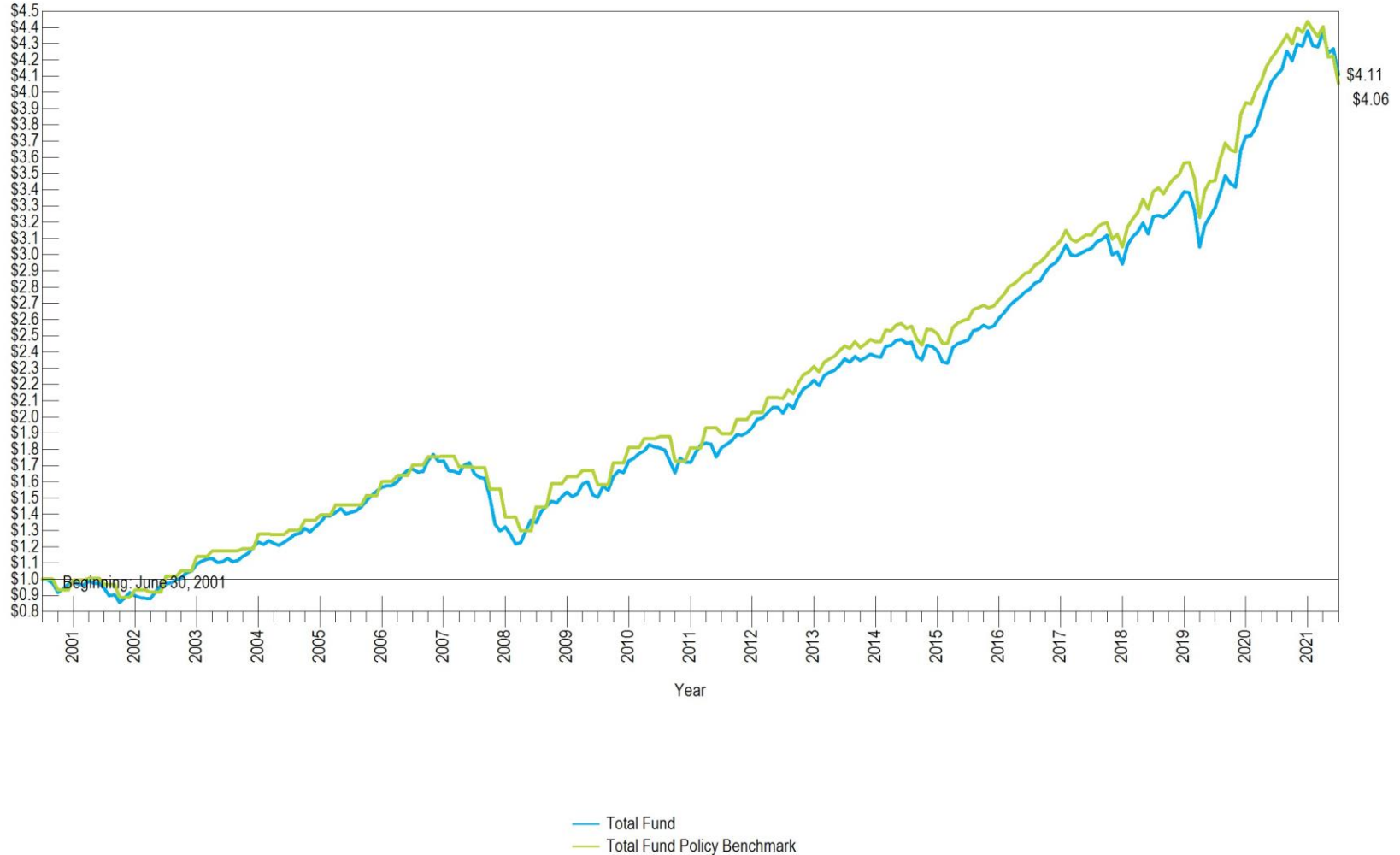
Asset Allocation History
5 Years Ending June 30, 2022



Actual vs. Target



Growth of a Dollar



Asset Class Performance Summary (Net)									
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD ¹ (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund (Net)	70,406,780,829	100.0	-3.7	-5.9	0.1	0.1	8.3	8.1	8.6
<i>Total Fund Policy Benchmark</i>			<u>-3.9</u>	<u>-7.9</u>	<u>-4.6</u>	<u>-4.6</u>	<u>6.2</u>	<u>7.0</u>	<u>7.9</u>
Excess Return			0.2	2.0	4.7	4.7	2.1	1.1	0.7
Growth (Net)	35,330,985,514	50.2	-4.9	-9.4	-2.0	-2.0	12.6	--	--
<i>Growth Custom Blended Benchmark</i>			<u>-5.0</u>	<u>-11.6</u>	<u>-8.1</u>	<u>-8.1</u>	<u>9.6</u>	--	--
Excess Return			0.1	2.2	6.1	6.1	3.0		
Credit (Net)	7,823,987,780	11.1	-3.2	-5.2	-4.2	-4.2	3.1	--	--
<i>Credit Custom Blended Benchmark</i>			<u>-2.8</u>	<u>-5.7</u>	<u>-7.5</u>	<u>-7.5</u>	<u>1.2</u>	--	--
Excess Return			-0.4	0.5	3.3	3.3	1.9		
Real Assets and Inflation Hedges (Net)	12,538,842,152	17.8	-4.9	-1.6	14.3	14.3	7.9	--	--
<i>Real Assets & Inflation Hedges Custom BM</i>			<u>-4.9</u>	<u>-3.2</u>	<u>12.4</u>	<u>12.4</u>	<u>8.7</u>	--	--
Excess Return			0.0	1.6	1.9	1.9	-0.8		
Risk Reduction and Mitigation (Net)	14,020,494,934	19.9	-1.1	-3.4	-7.1	-7.1	0.8	--	--
<i>Risk Reduction and Mitigation Custom Blended Benchmark</i>			<u>-1.1</u>	<u>-3.9</u>	<u>-7.7</u>	<u>-7.7</u>	<u>-0.2</u>	--	--
Excess Return			0.0	0.5	0.6	0.6	1.0		
Overlay and Hedges (Net)	692,470,449	1.0	29.5	73.9	--	--	--	--	--

¹ Fiscal Year begins July 1.

* See Glossary for all custom index definitions.

Trailing Performance

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund (Net)	70,406,780,829	100.0	-3.7	-5.9	0.1	0.1	8.3	8.1	8.6
Total Fund (Gross)			-3.7	-5.9	0.5	0.5	8.8	8.5	8.9
<i>Total Fund Policy Benchmark</i>			<u>-3.9</u>	<u>-7.9</u>	<u>-4.6</u>	<u>-4.6</u>	<u>6.2</u>	<u>7.0</u>	<u>7.9</u>
Excess Return (vs. Net)			0.2	2.0	4.7	4.7	2.1	1.1	0.7
Growth (Net)¹	35,330,985,514	50.2	-4.9	-9.4	-2.0	-2.0	12.6	--	--
Growth (Gross)			-4.8	-9.3	-1.4	-1.4	13.1	--	--
<i>Growth Custom Blended Benchmark</i>			<u>-5.0</u>	<u>-11.6</u>	<u>-8.1</u>	<u>-8.1</u>	<u>9.6</u>	--	--
Excess Return (vs. Net)			0.1	2.2	6.1	6.1	3.0		
Global Equity (Net)	21,342,824,676	30.3	-8.4	-15.1	-15.1	-15.1	6.6	--	--
Global Equity (Gross)			-8.4	-15.1	-15.0	-15.0	6.8	--	--
<i>Global Equity Custom BM</i>			<u>-8.6</u>	<u>-15.8</u>	<u>-16.5</u>	<u>-16.5</u>	<u>6.0</u>	--	--
Excess Return (vs. Net)			0.2	0.7	1.4	1.4	0.6		
Acadian Developed Markets (Net)	531,458,751	0.8	-11.1	-15.9	-17.9	-17.9	4.3	4.5	8.2
Acadian Developed Markets (Gross)			-11.1	-15.9	-17.6	-17.6	4.7	4.9	8.6
<i>EAFE Custom Benchmark</i>			<u>-9.4</u>	<u>-14.7</u>	<u>-16.8</u>	<u>-16.8</u>	<u>1.7</u>	<u>2.7</u>	<u>5.4</u>
Excess Return (vs. Net)			-1.7	-1.2	-1.1	-1.1	2.6	1.8	2.8
BTC Euro Tilts (Net)	482,722,973	0.7	-9.3	-13.7	-14.8	-14.8	2.8	2.9	7.1
BTC Euro Tilts (Gross)			-9.2	-13.6	-14.5	-14.5	3.2	3.3	7.6
<i>MSCI EUROPE</i>			<u>-10.0</u>	<u>-14.5</u>	<u>-17.6</u>	<u>-17.6</u>	<u>1.3</u>	<u>2.2</u>	<u>5.4</u>
Excess Return (vs. Net)			0.7	0.8	2.8	2.8	1.5	0.7	1.7

¹ Includes accounts that are lagged by 3-months and latest available adjusted for cash flows.

	Market Value (M)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Capital Guardian (Net)	343,039,161	0.5	-8.9	-17.2	-28.2	-28.2	1.5	4.4	6.8
Capital Guardian (Gross)			-8.9	-17.1	-28.0	-28.0	1.8	4.8	7.2
<i>EAFE Custom Benchmark</i>			<u>-9.4</u>	<u>-14.7</u>	<u>-16.8</u>	<u>-16.8</u>	<u>1.7</u>	<u>2.7</u>	<u>5.4</u>
Excess Return (vs. Net)			0.5	-2.5	-11.4	-11.4	-0.2	1.7	1.4
Cevian Capital (Net)	358,922,660	0.5	-9.1	-8.6	-7.8	-7.8	6.9	4.2	--
Cevian Capital (Gross)			-9.1	-8.3	-6.7	-6.7	8.1	5.5	--
<i>MSCI EUROPE</i>			<u>-10.0</u>	<u>-14.5</u>	<u>-17.6</u>	<u>-17.6</u>	<u>1.3</u>	<u>2.2</u>	--
Excess Return (vs. Net)			0.9	5.9	9.8	9.8	5.6	2.0	
CornerCap (Net)	76,599,025	0.1	-8.2	-10.6	-6.6	-6.6	10.0	--	--
CornerCap (Gross)			-8.1	-10.5	-6.1	-6.1	10.5	--	--
<i>Russell 2000</i>			<u>-8.2</u>	<u>-17.2</u>	<u>-25.2</u>	<u>-25.2</u>	<u>4.2</u>	--	--
Excess Return (vs. Net)			0.0	6.6	18.6	18.6	5.8		
Frontier Capital Management (Net)	241,739,215	0.3	-11.2	-18.9	-20.2	-20.2	5.6	5.5	10.5
Frontier Capital Management (Gross)			-11.2	-18.7	-19.6	-19.6	6.4	6.3	11.3
<i>Russell 2500</i>			<u>-9.6</u>	<u>-17.0</u>	<u>-21.0</u>	<u>-21.0</u>	<u>5.9</u>	<u>7.0</u>	<u>10.5</u>
Excess Return (vs. Net)			-1.6	-1.9	0.8	0.8	-0.3	-1.5	0.0
Genesis (Net)	490,869,229	0.7	-5.6	-11.9	-32.4	-32.4	-2.8	1.0	2.8
Genesis (Gross)			-5.6	-11.7	-31.9	-31.9	-2.1	1.8	3.6
<i>MSCI EM IMI Custom Index</i>			<u>-7.1</u>	<u>-12.1</u>	<u>-24.8</u>	<u>-24.8</u>	<u>1.1</u>	<u>2.3</u>	<u>3.2</u>
Excess Return (vs. Net)			1.5	0.2	-7.6	-7.6	-3.9	-1.3	-0.4

	Market Value (M)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Global Alpha IE EMP (Net)	162,057,619	0.2	-10.2	-14.1	-21.1	-21.1	2.3	--	--
Global Alpha IE EMP (Gross)			-10.1	-13.9	-20.6	-20.6	3.1	--	--
<i>MSCI EAFE Small Cap</i>			<u>-11.0</u>	<u>-17.7</u>	<u>-24.0</u>	<u>-24.0</u>	<u>1.1</u>	--	--
Excess Return (vs. Net)			0.8	3.6	2.9	2.9	1.2		
Jana Partners (Net)	118,403,558	0.2	-3.4	-8.1	2.2	2.2	17.8	10.4	--
Jana Partners (Gross)			-3.3	-7.7	6.1	6.1	22.6	14.5	--
<i>S&P 500</i>			<u>-8.3</u>	<u>-16.1</u>	<u>-10.6</u>	<u>-10.6</u>	<u>10.6</u>	<u>11.3</u>	--
Excess Return (vs. Net)			4.9	8.0	12.8	12.8	7.2	-0.9	
JPMAM Strategic BETA NON-U.S. (Net)	532,531,030	0.8	-9.2	-13.8	-17.3	-17.3	--	--	--
JPMAM Strategic BETA NON-U.S. (Gross)			-9.2	-13.8	-17.3	-17.3	--	--	--
<i>MSCI ACWI ex USA IMI</i>			<u>-9.0</u>	<u>-14.3</u>	<u>-19.9</u>	<u>-19.9</u>	--	--	--
Excess Return (vs. Net)			-0.2	0.5	2.6	2.6			
JPMAM Strategic BETA U.S. (Net)	3,900,859,589	5.5	-8.4	-16.0	-11.2	-11.2	--	--	--
JPMAM Strategic BETA U.S. (Gross)			-8.4	-16.0	-11.2	-11.2	--	--	--
<i>MSCI USA IMI Gross</i>			<u>-8.4</u>	<u>-16.7</u>	<u>-13.7</u>	<u>-13.7</u>	--	--	--
Excess Return (vs. Net)			0.0	0.7	2.5	2.5			
Lazard Emerging Markets (Net)	374,271,022	0.5	-2.7	-9.3	-26.9	-26.9	2.2	3.5	--
Lazard Emerging Markets (Gross)			-2.6	-9.2	-26.5	-26.5	2.9	4.3	--
<i>MSCI Emerging Markets</i>			<u>-6.6</u>	<u>-11.4</u>	<u>-25.3</u>	<u>-25.3</u>	<u>0.6</u>	<u>2.2</u>	--
Excess Return (vs. Net)			3.9	2.1	-1.6	-1.6	1.6	1.3	

	Market Value	% of	1 Mo	QTD	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Parametric GE Market Cap (Net)	133,675,854	0.2	1.5	-3.4	--	--	--	--	--
Parametric GE Market Cap (Gross)			1.5	-3.3	--	--	--	--	--
Parametric GE Region (Net)	79,620,979	0.1	-8.7	-24.6	--	--	--	--	--
Parametric GE Region (Gross)			-8.7	-24.5	--	--	--	--	--
SSGA MSCI ACWI IMI (Net)	13,119,533,799	18.6	-8.5	-15.5	-15.6	-15.6	--	--	--
SSGA MSCI ACWI IMI (Gross)			-8.5	-15.5	-15.6	-15.6	--	--	--
<i>MSCI ACWI IMI Net (DAILY)</i>			<u>-8.6</u>	<u>-15.8</u>	<u>-16.5</u>	<u>-16.5</u>	--	--	--
Excess Return (vs. Net)			0.1	0.3	0.9	0.9			
Symphony Financial Partners (Net)	203,530,654	0.3	-8.4	-14.3	-10.5	-10.5	5.0	9.2	--
Symphony Financial Partners (Gross)			-8.3	-12.7	-6.7	-6.7	8.6	12.1	--
<i>MSCI Japan Small Cap</i>			<u>-4.9</u>	<u>-11.4</u>	<u>-21.5</u>	<u>-21.5</u>	<u>-1.3</u>	<u>-0.2</u>	--
Excess Return (vs. Net)			-3.5	-2.9	11.0	11.0	6.3	9.4	
Systematic Financial Management (Net)	173,566,721	0.2	-7.6	-11.7	-12.2	-12.2	7.4	--	--
Systematic Financial Management (Gross)			-7.5	-11.6	-11.7	-11.7	8.0	--	--
<i>Russell 2000</i>			<u>-8.2</u>	<u>-17.2</u>	<u>-25.2</u>	<u>-25.2</u>	<u>4.2</u>	--	--
Excess Return (vs. Net)			0.6	5.5	13.0	13.0	3.2		

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Private Equity - Growth (Net)	12,901,177,661	18.3	1.1	0.8	30.2	30.2	26.6	--	--
Private Equity - Growth (Gross)			1.3	1.0	32.2	32.2	27.9	--	--
<i>Private Equity - Growth Custom BM</i>			<u>2.2</u>	<u>-5.0</u>	<u>8.4</u>	<u>8.4</u>	<u>15.8</u>	--	--
Excess Return (vs. Net)			-1.1	5.8	21.8	21.8	10.8		
Non-Core Private Real Estate (Net)	1,086,983,177	1.5	-0.3	4.7	23.5	23.5	14.2	13.2	12.0
Non-Core Private Real Estate (Gross)			-0.3	4.8	24.0	24.0	15.6	14.8	14.4
<i>Non-Core Private RE Policy BM</i>			<u>2.5</u>	<u>7.7</u>	<u>30.3</u>	<u>30.3</u>	<u>13.4</u>	<u>12.0</u>	<u>13.1</u>
Excess Return (vs. Net)			-2.8	-3.0	-6.8	-6.8	0.8	1.2	-1.1
Credit (Net)¹	7,823,987,780	11.1	-3.2	-5.2	-4.2	-4.2	3.1	--	--
Credit (Gross)			-3.2	-5.1	-3.8	-3.8	3.6	--	--
<i>Credit Custom Blended Benchmark</i>			<u>-2.8</u>	<u>-5.7</u>	<u>-7.5</u>	<u>-7.5</u>	<u>1.2</u>	--	--
Excess Return (vs. Net)			-0.4	0.5	3.3	3.3	1.9		
Liquid Credit (Net)	4,581,127,257	6.5	-4.8	-7.9	--	--	--	--	--
Liquid Credit (Gross)			-4.8	-7.9	--	--	--	--	--
<i>Liquid Credit Custom BM</i>			<u>-4.5</u>	<u>-7.6</u>	--	--	--	--	--
Excess Return (vs. Net)			-0.3	-0.3					

¹ Includes accounts that are lagged by 1-month, 3-months, and latest available adjusted for cash flows.

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
High Yield (Net)	1,897,508,370	2.7	-6.5	-9.8	-11.8	-11.8	0.2	--	--
High Yield (Gross)			-6.5	-9.7	-11.5	-11.5	0.6	--	--
<i>BBgBarc US High Yield TR</i>			<u>-6.7</u>	<u>-9.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>0.2</u>	--	--
Excess Return (vs. Net)			0.2	0.0	1.0	1.0	0.0		
Beach Point (Net)	272,694,308	0.4	-6.5	-10.4	-13.1	-13.1	-0.1	2.1	--
Beach Point (Gross)			-6.5	-10.3	-12.8	-12.8	0.4	2.7	--
<i>Beach Point Custom BM</i>			<u>-6.7</u>	<u>-9.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>-0.1</u>	<u>1.8</u>	--
Excess Return (vs. Net)			0.2	-0.6	-0.3	-0.3	0.0	0.3	
BlackRock HY ETF (Net)	560,597,149	0.8	-7.0	-9.4	-12.6	-12.6	--	--	--
BlackRock HY ETF (Gross)			-7.0	-9.4	-12.6	-12.6	--	--	--
<i>BBgBarc US High Yield TR</i>			<u>-6.7</u>	<u>-9.8</u>	<u>-12.8</u>	<u>-12.8</u>	--	--	--
Excess Return (vs. Net)			-0.3	0.4	0.2	0.2			
Brigade Capital Management (Net)	631,964,453	0.9	-5.6	-9.3	-9.1	-9.1	2.5	2.8	4.8
Brigade Capital Management (Gross)			-5.6	-9.2	-8.8	-8.8	3.1	3.4	5.5
<i>Brigade Custom Index</i>			<u>-6.7</u>	<u>-9.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>0.2</u>	<u>2.0</u>	<u>3.8</u>
Excess Return (vs. Net)			1.1	0.5	3.7	3.7	2.3	0.8	1.0
Pinebridge Investments (Net)	432,014,889	0.6	-7.2	-10.7	--	--	--	--	--
Pinebridge Investments (Gross)			-7.2	-10.6	--	--	--	--	--
<i>BBgBarc US High Yield TR</i>			<u>-6.7</u>	<u>-9.8</u>	--	--	--	--	--
Excess Return (vs. Net)			-0.5	-0.9					

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Bank Loans (Net)	1,997,927,007	2.8	-2.3	-4.7	-2.8	-2.8	4.3	--	--
Bank Loans (Gross)			-2.2	-4.6	-2.5	-2.5	4.8	--	--
<i>CS Leveraged Loan Index</i>			<u>-2.1</u>	<u>-4.4</u>	<u>-2.7</u>	<u>-2.7</u>	<u>2.0</u>	--	--
Excess Return (vs. Net)			-0.2	-0.3	-0.1	-0.1	2.3		
Bain Capital (Net)	406,584,658	0.6	-1.9	-3.5	-1.2	-1.2	3.1	3.5	--
Bain Capital (Gross)			-1.8	-3.4	-0.6	-0.6	3.7	4.2	--
<i>Bank Loans Custom Index</i>			<u>-2.1</u>	<u>-4.4</u>	<u>-2.7</u>	<u>-2.7</u>	<u>2.4</u>	<u>3.3</u>	--
Excess Return (vs. Net)			0.2	0.9	1.5	1.5	0.7	0.2	
Credit Suisse Bank Loans (Net)	1,102,537,429	1.6	-2.4	-4.8	-3.1	-3.1	--	--	--
Credit Suisse Bank Loans (Gross)			-2.4	-4.7	-2.9	-2.9	--	--	--
<i>CS Leveraged Loan Index</i>			<u>-2.1</u>	<u>-4.4</u>	<u>-2.7</u>	<u>-2.7</u>	--	--	--
Excess Return (vs. Net)			-0.3	-0.4	-0.4	-0.4			
Crescent Capital Group (Net)	488,804,920	0.7	-2.2	-5.4	-4.3	-4.3	3.5	3.7	--
Crescent Capital Group (Gross)			-2.2	-5.3	-3.9	-3.9	4.0	4.2	--
<i>Bank Loans Custom Index</i>			<u>-2.1</u>	<u>-4.4</u>	<u>-2.7</u>	<u>-2.7</u>	<u>2.4</u>	<u>3.3</u>	--
Excess Return (vs. Net)			-0.1	-1.0	-1.6	-1.6	1.1	0.4	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
EM Debt (Net)	685,691,879	1.0	-7.1	-11.8	-23.1	-23.1	-7.0	-2.6	--
EM Debt (Gross)			-7.0	-11.7	-22.8	-22.8	-6.6	-2.1	--
<i>EMD Custom</i>			<u>-5.0</u>	<u>-9.3</u>	<u>-19.0</u>	<u>-19.0</u>	<u>-4.3</u>	<u>-0.8</u>	--
Excess Return (vs. Net)			-2.1	-2.5	-4.1	-4.1	-2.7	-1.8	
Aberdeen Asset Management (Net)	355,615,406	0.5	-6.6	-11.2	-22.2	-22.2	-5.6	-1.9	--
Aberdeen Asset Management (Gross)			-6.6	-11.1	-21.9	-21.9	-5.3	-1.5	--
<i>EMD Custom</i>			<u>-5.0</u>	<u>-9.3</u>	<u>-19.0</u>	<u>-19.0</u>	<u>-4.3</u>	<u>-0.8</u>	--
Excess Return (vs. Net)			-1.6	-1.9	-3.2	-3.2	-1.3	-1.1	
Ashmore Investment Management (Net)	330,076,473	0.5	-7.5	-12.3	-24.1	-24.1	-8.4	-3.3	--
Ashmore Investment Management (Gross)			-7.5	-12.2	-23.7	-23.7	-7.9	-2.7	--
<i>EMD Custom</i>			<u>-5.0</u>	<u>-9.3</u>	<u>-19.0</u>	<u>-19.0</u>	<u>-4.3</u>	<u>-0.8</u>	--
Excess Return (vs. Net)			-2.5	-3.0	-5.1	-5.1	-4.1	-2.5	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Illiquid Credit (Net)	3,242,840,780	4.6	-0.9	-1.0	6.7	6.7	11.2	--	--
Illiquid Credit (Gross)			-0.9	-0.9	7.4	7.4	12.1	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-3.4</u>	<u>-3.4</u>	<u>3.4</u>	--	--
Excess Return (vs. Net)			-0.2	2.5	10.1	10.1	7.8		
Beach Point - Fund III (Net)	180,355,796	0.3	2.3	-3.1	20.3	20.3	15.5	12.4	--
Beach Point - Fund III (Gross)			2.3	-2.4	29.2	29.2	21.5	17.6	--
<i>Opportunistic Custom Index 1 Month Lag</i>			<u>-1.1</u>	<u>-3.3</u>	<u>-2.7</u>	<u>-2.7</u>	<u>3.1</u>	<u>3.5</u>	--
Excess Return (vs. Net)			3.4	0.2	23.0	23.0	12.4	8.9	
Grosvenor OPCRD 2 HFOF (Net)	30,803,931	0.0	2.8	7.9	11.3	11.3	4.8	4.2	--
Grosvenor OPCRD 2 HFOF (Gross)			2.8	7.9	11.3	11.3	4.8	4.2	--
<i>Grosvenor Custom Benchmark</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-3.4</u>	<u>-3.4</u>	<u>3.4</u>	<u>5.3</u>	--
Excess Return (vs. Net)			3.5	11.4	14.7	14.7	1.4	-1.1	
Lake Vineyard (Net)	134,168,533	0.2	0.2	0.6	--	--	--	--	--
Lake Vineyard (Gross)			0.2	0.6	--	--	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.7</u>	<u>-3.5</u>	--	--	--	--	--
Excess Return (vs. Net)			0.9	4.1					
Magnetar Credit Fund (Net)	839,653,954	1.2	1.2	0.5	5.5	5.5	--	--	--
Magnetar Credit Fund (Gross)			1.2	0.5	5.5	5.5	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-3.4</u>	<u>-3.4</u>	--	--	--
Excess Return (vs. Net)			1.9	4.0	8.9	8.9			

	Market Value	% of	1 Mo	QTD	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Napier Park (Net)	804,621,755	1.1	-4.7	-5.1	-1.0	-1.0	--	--	--
Napier Park (Gross)			-4.7	-5.1	-1.0	-1.0	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-3.4</u>	<u>-3.4</u>	--	--	--
Excess Return (vs. Net)			-4.0	-1.6	2.4	2.4			
PIMCO Tac Opps (Net)	282,037,150	0.4	-0.9	-2.8	4.2	4.2	7.4	--	--
PIMCO Tac Opps (Gross)			-0.9	-2.8	4.2	4.2	7.4	--	--
<i>PIMCO Tac Opps Custom BM</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-3.4</u>	<u>-3.4</u>	<u>0.5</u>	--	--
Excess Return (vs. Net)			-0.2	0.7	7.6	7.6	6.9		
Private Equity - Credit (Net)	220,544,662	0.3	0.0	5.4	28.2	28.2	17.6	--	--
Private Equity - Credit (Gross)			0.0	5.4	28.2	28.2	17.6	--	--
<i>PE-Credit Custom Benchmark</i>			<u>-2.6</u>	<u>-5.3</u>	<u>-1.7</u>	<u>-1.7</u>	<u>4.2</u>	--	--
Excess Return (vs. Net)			2.6	10.7	29.9	29.9	13.4		
Real Estate - Credit (Net)	108,637,494	0.2	0.0	0.9	13.0	13.0	10.2	9.7	9.2
Real Estate - Credit (Gross)			0.0	1.2	13.8	13.8	11.1	10.7	10.2
<i>RE Credit BM</i>			<u>-0.7</u>	<u>-3.5</u>	<u>-4.6</u>	<u>-4.6</u>	<u>1.3</u>	<u>2.6</u>	<u>3.9</u>
Excess Return (vs. Net)			0.7	4.4	17.6	17.6	8.9	7.1	5.3
Tennenbaum Capital (Net)	629,812,795	0.9	0.0	1.0	6.6	6.6	6.8	7.2	--
Tennenbaum Capital (Gross)			0.0	1.1	7.3	7.3	7.5	8.0	--
<i>CSFB Leveraged Loan Index 1 Month Lagged</i>			<u>-2.5</u>	<u>-2.3</u>	<u>-0.2</u>	<u>-0.2</u>	<u>2.8</u>	<u>3.4</u>	--
Excess Return (vs. Net)			2.5	3.3	6.8	6.8	4.0	3.8	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Real Assets and Inflation Hedges (Net)¹	12,538,842,152	17.8	-4.9	-1.6	14.3	14.3	7.9	--	--
Real Assets and Inflation Hedges (Gross)			-4.8	-1.6	14.7	14.7	8.3	--	--
<i>Real Assets & Inflation Hedges Custom BM</i>			<u>-4.9</u>	<u>-3.2</u>	<u>12.4</u>	<u>12.4</u>	<u>8.7</u>	--	--
Excess Return (vs. Net)			0.0	1.6	1.9	1.9	-0.8		
Core Private Real Estate (Net)	4,323,248,579	6.1	-0.1	8.4	27.9	27.9	8.4	8.3	8.8
Core Private Real Estate (Gross)			-0.1	8.5	28.5	28.5	9.0	8.9	9.4
<i>Core Private Real Estate Custom BM</i>			<u>2.3</u>	<u>7.2</u>	<u>27.4</u>	<u>27.4</u>	<u>10.7</u>	<u>9.4</u>	<u>10.4</u>
Excess Return (vs. Net)			-2.4	1.2	0.5	0.5	-2.3	-1.1	-1.6
Natural Resources and Commodities (Net)	2,957,771,033	4.2	-10.6	-6.1	18.6	18.6	12.5	8.0	-0.3
Natural Resources and Commodities (Gross)			-10.6	-5.9	19.2	19.2	12.9	8.4	0.1
<i>Natural Resources & Commodities Custom BM</i>			<u>-14.1</u>	<u>-12.4</u>	<u>12.2</u>	<u>12.2</u>	<u>11.2</u>	<u>7.0</u>	<u>-1.5</u>
Excess Return (vs. Net)			3.5	6.3	6.4	6.4	1.3	1.0	1.2
Public Natural Resources and Commodities (Net)	2,239,029,011	3.2	-13.3	-10.2	17.2	17.2	--	--	--
Public Natural Resources and Commodities (Gross)			-13.2	-10.1	17.6	17.6	--	--	--
<i>Natural Resources & Commodities Custom BM</i>			<u>-14.1</u>	<u>-12.4</u>	<u>12.2</u>	<u>12.2</u>	--	--	--
Excess Return (vs. Net)			0.8	2.2	5.0	5.0			
Credit Suisse Commodity (Net)	551,213,253	0.8	-10.2	-4.9	25.9	25.9	15.7	8.9	-0.2
Credit Suisse Commodity (Gross)			-10.2	-4.9	26.2	26.2	16.0	9.2	0.1
<i>Bloomberg Commodity Index TR USD</i>			<u>-10.8</u>	<u>-5.7</u>	<u>24.3</u>	<u>24.3</u>	<u>14.3</u>	<u>8.4</u>	<u>-0.8</u>
Excess Return (vs. Net)			0.6	0.8	1.6	1.6	1.4	0.5	0.6

¹ Includes accounts that are lagged by 3-months and latest available adjusted for cash flows.

Los Angeles County Employees Retirement Association | June 30, 2022

	Market Value (M)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
DWS Natural Resources (Net)	933,602,553	1.3	-16.8	-17.0	6.8	6.8	9.6	--	--
DWS Natural Resources (Gross)			-16.7	-17.0	7.0	7.0	9.8	--	--
<i>S&P Global Large/MidCap Commodities & Resources</i>			<u>-15.4</u>	<u>-15.1</u>	<u>10.2</u>	<u>10.2</u>	<u>10.7</u>	--	--
Excess Return (vs. Net)			-1.4	-1.9	-3.4	-3.4	-1.1		
Neuberger Berman/ Gresham (Net)	541,367,314	0.8	-11.0	-3.7	26.4	26.4	14.6	9.6	0.2
Neuberger Berman/ Gresham (Gross)			-10.9	-3.6	26.8	26.8	15.1	10.0	0.6
<i>Bloomberg Commodity Index TR USD</i>			<u>-10.8</u>	<u>-5.7</u>	<u>24.3</u>	<u>24.3</u>	<u>14.3</u>	<u>8.4</u>	<u>-0.8</u>
Excess Return (vs. Net)			-0.2	2.0	2.1	2.1	0.3	1.2	1.0
PIMCO Commodities (Net)	212,845,891	0.3	-11.0	-5.3	24.5	24.5	15.0	9.3	0.7
PIMCO Commodities (Gross)			-10.9	-5.2	25.0	25.0	15.4	9.7	1.1
<i>Bloomberg Commodity Index TR USD</i>			<u>-10.8</u>	<u>-5.7</u>	<u>24.3</u>	<u>24.3</u>	<u>14.3</u>	<u>8.4</u>	<u>-0.8</u>
Excess Return (vs. Net)			-0.2	0.4	0.2	0.2	0.7	0.9	1.5
Private Natural Resources and Commodities (Net)	718,742,021	1.0	0.0	12.0	23.0	23.0	-9.4	--	--
Private Natural Resources and Commodities (Gross)			0.0	12.5	29.4	29.4	-7.8	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	<u>36.9</u>	<u>36.9</u>	<u>19.5</u>	--	--
Excess Return (vs. Net)			-7.5	-8.9	-13.9	-13.9	-28.9		
Cibus Enterprise II (Net)	4,400,110	0.0							
Cibus Enterprise II (Gross)									
Cibus Fund II (Net)	17,800,890	0.0							
Cibus Fund II (Gross)									

Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Los Angeles County Employees Retirement Association | June 30, 2022

	Market Value	% of	1 Mo	QTD	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Orion Mine Finance Fund III (Net)	107,633,758	0.2	0.0	6.7	--	--	--	--	--
Orion Mine Finance Fund III (Gross)			0.0	6.7	--	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	--	--	--	--	--
Excess Return (vs. Net)			-7.5	-14.2					
Orion Mining Royalty Fund I (Net)	14,815,765	0.0	0.0	1.2	--	--	--	--	--
Orion Mining Royalty Fund I (Gross)			0.0	1.2	--	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	--	--	--	--	--
Excess Return (vs. Net)			-7.5	-19.7					
PE - Real Assets & Inflation Hedges (Net)	84,962,573	0.1	0.0	7.8	25.0	25.0	-8.9	--	--
PE - Real Assets & Inflation Hedges (Gross)			0.0	12.3	30.2	30.2	-7.5	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	<u>36.9</u>	<u>36.9</u>	<u>19.5</u>	--	--
Excess Return (vs. Net)			-7.5	-13.1	-11.9	-11.9	-28.4		
TIAA-CREF Global Agriculture (Net)	211,318,013	0.3	0.0	16.8	--	--	--	--	--
TIAA-CREF Global Agriculture (Gross)			0.0	16.8	--	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	--	--	--	--	--
Excess Return (vs. Net)			-7.5	-4.1					
TIAA-CREF Global Agriculture II (Net)	277,810,912	0.4	0.0	12.4	--	--	--	--	--
TIAA-CREF Global Agriculture II (Gross)			0.0	12.4	--	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>7.5</u>	<u>20.9</u>	--	--	--	--	--
Excess Return (vs. Net)			-7.5	-8.5					

Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Los Angeles County Employees Retirement Association | June 30, 2022

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Infrastructure (Net)	3,327,235,827	4.7	-5.9	-6.5	4.1	4.1	7.6	--	--
Infrastructure (Gross)			-5.9	-6.5	4.3	4.3	7.8	--	--
<i>DJ Brookfield Global Infrastructure Comp TR</i>			<u>-7.7</u>	<u>-6.9</u>	<u>2.8</u>	<u>2.8</u>	<u>4.5</u>	--	--
Excess Return (vs. Net)			1.8	0.4	1.3	1.3	3.1		
Public Infrastructure (Net)	2,668,259,087	3.8	-7.2	-8.0	3.2	3.2	7.4	--	--
Public Infrastructure (Gross)			-7.2	-7.9	3.4	3.4	7.6	--	--
<i>DJ Brookfield Global Infrastructure Comp TR</i>			<u>-7.7</u>	<u>-6.9</u>	<u>2.8</u>	<u>2.8</u>	<u>4.5</u>	--	--
Excess Return (vs. Net)			0.5	-1.1	0.4	0.4	2.9		
DWS Infrastructure (Net)	2,668,259,087	3.8	-7.2	-8.0	3.2	3.2	7.5	--	--
DWS Infrastructure (Gross)			-7.2	-7.9	3.4	3.4	7.7	--	--
<i>DJ Brookfield Global Infrastructure Comp TR</i>			<u>-7.7</u>	<u>-6.9</u>	<u>2.8</u>	<u>2.8</u>	<u>4.5</u>	--	--
Excess Return (vs. Net)			0.5	-1.1	0.4	0.4	3.0		
Private Infrastructure (Net)	658,976,740	0.9	-0.5	-0.2	4.7	4.7	--	--	--
Private Infrastructure (Gross)			-0.6	-0.2	4.4	4.4	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	<u>19.3</u>	<u>19.3</u>	--	--	--
Excess Return (vs. Net)			-7.0	-4.8	-14.6	-14.6			
Antin Mid Cap (Net)	16,768,254	0.0	-2.4	1.2	--	--	--	--	--
Antin Mid Cap (Gross)			-2.4	1.2	--	--	--	--	--
<i>DJ Brookfield Global Infrastructure Comp TR</i>			<u>-7.7</u>	<u>-6.9</u>	--	--	--	--	--
Excess Return (vs. Net)			5.3	8.1					

Private natural resources and infrastructure funds reflect early-stage life cycle performance.

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Axium Infrastructure (Net)	192,820,968	0.3	0.0	1.8	--	--	--	--	--
Axium Infrastructure (Gross)			0.1	1.9	--	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	--	--	--	--	--
Excess Return (vs. Net)			-6.5	-2.8					
DIF CIF III (Net)	7,193,354	0.0							
DIF CIF III (Gross)									
DIF Infrastructure VI (Net)	66,357,798	0.1	-2.4	1.9	56.6	56.6	--	--	--
DIF Infrastructure VI (Gross)			-2.4	1.7	52.8	52.8	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	<u>19.3</u>	<u>19.3</u>	--	--	--
Excess Return (vs. Net)			-8.9	-2.7	37.3	37.3			
Grain Communications Opportunity III (Net)	26,761,196	0.0	0.0	-7.6	-14.6	-14.6	--	--	--
Grain Communications Opportunity III (Gross)			0.0	-7.6	-14.6	-14.6	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	<u>19.3</u>	<u>19.3</u>	--	--	--
Excess Return (vs. Net)			-6.5	-12.2	-33.9	-33.9			
Grain Spectrum Holdings III (Net)	47,330,184	0.1	0.0	-0.1	-0.5	-0.5	--	--	--
Grain Spectrum Holdings III (Gross)			0.0	-0.1	-0.5	-0.5	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	<u>19.3</u>	<u>19.3</u>	--	--	--
Excess Return (vs. Net)			-6.5	-4.7	-19.8	-19.8			

Private natural resources and infrastructure funds reflect early-stage life cycle performance.

	Market Value	% of	1 Mo	QTD	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
KKR DCIF (Net)	199,904,423	0.3	0.0	0.0	--	--	--	--	--
KKR DCIF (Gross)			0.0	0.0	--	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	--	--	--	--	--
Excess Return (vs. Net)			-6.5	-4.6					
Pan European Infrastructure Fund III (Net)	52,149,517	0.1	-2.4	-3.4	6.3	6.3	--	--	--
Pan European Infrastructure Fund III (Gross)			-2.4	-3.4	6.3	6.3	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	<u>19.3</u>	<u>19.3</u>	--	--	--
Excess Return (vs. Net)			-8.9	-8.0	-13.0	-13.0			
Partners Grp Direct Infra 2020 (Net)	49,691,047	0.1	0.0	2.2	--	--	--	--	--
Partners Grp Direct Infra 2020 (Gross)			-0.8	1.4	--	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>6.5</u>	<u>4.6</u>	--	--	--	--	--
Excess Return (vs. Net)			-6.5	-2.4					
TIPS (Net)	1,930,586,713	2.7	-3.0	-6.3	-4.8	-4.8	3.1	--	--
TIPS (Gross)			-3.0	-6.3	-4.8	-4.8	3.1	--	--
<i>BBgBarc US TIPS TR</i>			<u>-3.2</u>	<u>-6.1</u>	<u>-5.1</u>	<u>-5.1</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			0.2	-0.2	0.3	0.3	0.0		
Blackrock TIPS (Net)	1,930,586,713	2.7	-3.0	-6.3	-4.8	-4.8	3.1	--	--
Blackrock TIPS (Gross)			-3.0	-6.3	-4.8	-4.8	3.1	--	--
<i>BBgBarc US TIPS TR</i>			<u>-3.2</u>	<u>-6.1</u>	<u>-5.1</u>	<u>-5.1</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			0.2	-0.2	0.3	0.3	0.0		

Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Los Angeles County Employees Retirement Association | June 30, 2022

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Risk Reduction and Mitigation (Net)¹	14,020,494,934	19.9	-1.1	-3.4	-7.1	-7.1	0.8	--	--
Risk Reduction and Mitigation (Gross)			-1.1	-3.4	-7.1	-7.1	0.8	--	--
<i>Risk Reduction and Mitigation Custom Blended Benchmark</i>			<u>-1.1</u>	<u>-3.9</u>	<u>-7.7</u>	<u>-7.7</u>	<u>-0.2</u>	--	--
Excess Return (vs. Net)			0.0	0.5	0.6	0.6	1.0		
Investment Grade Bonds (Net)	5,556,006,784	7.9	-1.7	-4.8	-10.6	-10.6	-0.7	1.1	2.1
Investment Grade Bonds (Gross)			-1.7	-4.8	-10.6	-10.6	-0.7	1.2	2.2
<i>BBgBarc US Aggregate TR</i>			<u>-1.6</u>	<u>-4.7</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-1.0</u>	<u>0.9</u>	<u>1.5</u>
Excess Return (vs. Net)			-0.1	-0.1	-0.3	-0.3	0.3	0.2	0.6
Allspring/Wells (Net)	1,685,703,424	2.4	-1.5	-4.7	-10.4	-10.4	-0.4	1.2	2.1
Allspring/Wells (Gross)			-1.5	-4.7	-10.3	-10.3	-0.3	1.3	2.2
<i>BBgBarc US Aggregate TR</i>			<u>-1.6</u>	<u>-4.7</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-1.0</u>	<u>0.9</u>	<u>1.5</u>
Excess Return (vs. Net)			0.1	0.0	-0.1	-0.1	0.6	0.3	0.6
BTC US Debt Index (Net)	2,997,763,303	4.3	-1.6	-4.6	-10.2	-10.2	-0.9	0.9	1.6
BTC US Debt Index (Gross)			-1.6	-4.6	-10.2	-10.2	-0.9	0.9	1.7
<i>BBgBarc US Aggregate TR</i>			<u>-1.6</u>	<u>-4.7</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-1.0</u>	<u>0.9</u>	<u>1.5</u>
Excess Return (vs. Net)			0.0	0.1	0.1	0.1	0.1	0.0	0.1
Member Home Loan Program (MHLP) (Net)	11,870,167	0.0	0.4	1.2	5.2	5.2	5.3	8.0	5.2
Member Home Loan Program (MHLP) (Gross)			0.4	1.3	5.5	5.5	5.5	8.3	5.5
Pugh Capital Management (Net)	860,669,936	1.2	-1.5	-4.8	-10.6	-10.6	-0.8	1.0	1.7
Pugh Capital Management (Gross)			-1.5	-4.8	-10.5	-10.5	-0.6	1.1	1.9
<i>BBgBarc US Aggregate TR</i>			<u>-1.6</u>	<u>-4.7</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-1.0</u>	<u>0.9</u>	<u>1.5</u>
Excess Return (vs. Net)			0.1	-0.1	-0.3	-0.3	0.2	0.1	0.2

¹ Includes accounts that are lagged by 1-month.

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Long-Term Government Bonds (Net)	1,209,945,367	1.7	-1.0	-11.4	--	--	--	--	--
Long-Term Government Bonds (Gross)			-1.0	-11.4	--	--	--	--	--
<i>Bloomberg U.S. Treasury: Long</i>			<u>-1.5</u>	<u>-11.9</u>	--	--	--	--	--
Excess Return (vs. Net)			0.5	0.5					
Blackrock Long Treasury Bonds (Net)	1,209,945,367	1.7	-1.0	-11.4	--	--	--	--	--
Blackrock Long Treasury Bonds (Gross)			-1.0	-11.4	--	--	--	--	--
<i>Bloomberg U.S. Treasury: Long</i>			<u>-1.5</u>	<u>-11.9</u>	--	--	--	--	--
Excess Return (vs. Net)			0.5	0.5					
Long Treasury Bonds Transition (Net)	1,991,734,338	2.8							
Long Treasury Bonds Transition (Gross)									
Long Treasury Bonds Transition (Net)	1,991,734,338	2.8							
Long Treasury Bonds Transition (Gross)									
Diversified Hedge Fund Portfolio (Net)	4,195,894,599	6.0	-0.2	1.5	4.0	4.0	7.1	--	--
Diversified Hedge Fund Portfolio (Gross)			-0.2	1.5	4.0	4.0	7.1	--	--
<i>Diversified Hedge Funds Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	<u>3.2</u>	--	--
Excess Return (vs. Net)			-0.5	0.8	1.4	1.4	3.9		

Los Angeles County Employees Retirement Association | June 30, 2022

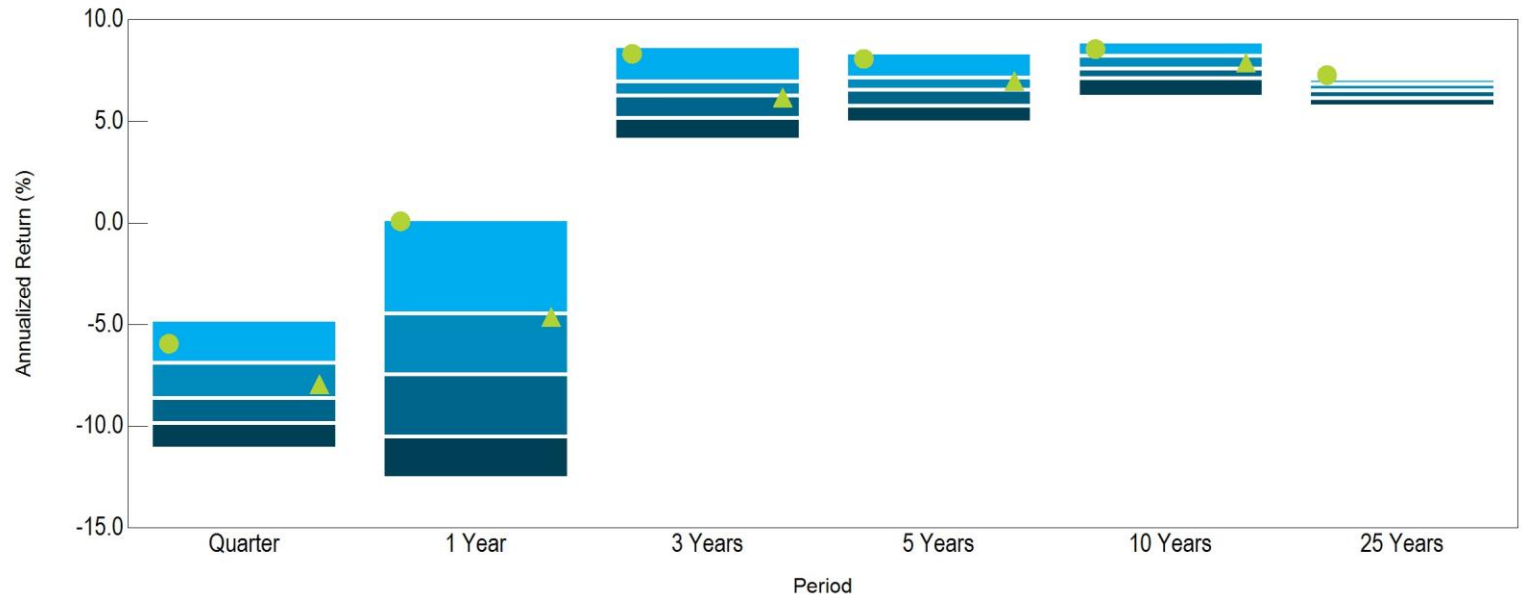
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
LACERA HF Direct (Net)	3,869,076,094	5.5	-0.3	1.6	4.3	4.3	6.9	--	--
LACERA HF Direct (Gross)			-0.3	1.6	4.3	4.3	6.9	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	<u>3.2</u>	--	--
Excess Return (vs. Net)			-0.6	0.9	1.7	1.7	3.7		
AM Asia Strategies Fund (Net)	220,006,397	0.3	-1.1	-3.9	-2.6	-2.6	--	--	--
AM Asia Strategies Fund (Gross)			-1.1	-3.9	-2.6	-2.6	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	--	--	--
Excess Return (vs. Net)			-1.4	-4.6	-5.2	-5.2			
Brevan Howard Master Fund (Net)	625,223,881	0.9	1.1	10.5	12.3	12.3	--	--	--
Brevan Howard Master Fund (Gross)			1.1	10.5	12.3	12.3	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	--	--	--
Excess Return (vs. Net)			0.8	9.8	9.7	9.7			
Capula GRV (Net)	607,535,276	0.9	0.4	2.6	5.8	5.8	5.8	--	--
Capula GRV (Gross)			0.4	2.6	5.8	5.8	5.8	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	<u>3.2</u>	--	--
Excess Return (vs. Net)			0.1	1.9	3.2	3.2	2.6		
Caxton Global Investments (Net)	289,496,702	0.4	1.0	5.9	12.9	12.9	--	--	--
Caxton Global Investments (Gross)			1.0	5.9	12.9	12.9	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	--	--	--
Excess Return (vs. Net)			0.7	5.2	10.3	10.3			

	Market Value (\$)	% of Assets	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
DK Institutional Partners (Net)	486,348,041	0.7	-1.5	-1.8	-1.2	-1.2	5.9	--	--
DK Institutional Partners (Gross)			-1.5	-1.8	-1.2	-1.2	5.9	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	<u>3.2</u>	--	--
Excess Return (vs. Net)			-1.8	-2.5	-3.8	-3.8	2.7		
HBK Multistrategy (Net)	549,161,751	0.8	-1.2	-1.5	2.5	2.5	5.3	--	--
HBK Multistrategy (Gross)			-1.2	-1.5	2.5	2.5	5.3	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	<u>3.2</u>	--	--
Excess Return (vs. Net)			-1.5	-2.2	-0.1	-0.1	2.1		
Hudson Bay Fund (Net)	632,062,125	0.9	-0.2	0.2	3.7	3.7	--	--	--
Hudson Bay Fund (Gross)			-0.2	0.2	3.7	3.7	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	--	--	--
Excess Return (vs. Net)			-0.5	-0.5	1.1	1.1			
Polar (Net)	459,241,922	0.7	-1.4	-1.1	-0.3	-0.3	--	--	--
Polar (Gross)			-1.4	-1.1	-0.3	-0.3	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	<u>2.6</u>	<u>2.6</u>	--	--	--
Excess Return (vs. Net)			-1.7	-1.8	-2.9	-2.9			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Hedge Fund Emerging Managers Program (Net)	281,334,684	0.4	1.5	1.3	--	--	--	--	--
Hedge Fund Emerging Managers Program (Gross)			1.5	1.3	--	--	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	--	--	--	--	--
Excess Return (vs. Net)			1.2	0.6					
Stable Asset Management (Net)	281,334,684	0.4	1.5	1.3	--	--	--	--	--
Stable Asset Management (Gross)			1.5	1.3	--	--	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	--	--	--	--	--
Excess Return (vs. Net)			1.2	0.6					
Stable Fund Investments (Net)	281,334,684	0.4	1.5	1.3	--	--	--	--	--
Stable Fund Investments (Gross)			1.5	1.3	--	--	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.3</u>	<u>0.7</u>	--	--	--	--	--
Excess Return (vs. Net)			1.2	0.6					
Cash (Net)	1,066,913,846	1.5	0.3	0.7	1.5	1.5	1.3	1.6	1.1
Cash (Gross)			0.3	0.7	1.5	1.5	1.4	1.7	1.1
<i>Cash Custom BM</i>			<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>0.6</u>	<u>1.1</u>	<u>0.7</u>
Excess Return (vs. Net)			0.2	0.5	1.3	1.3	0.7	0.5	0.4
SSGA Cash (Net)			0.1	0.2	0.2	0.2	--	--	--
SSGA Cash (Gross)			0.1	0.2	0.2	0.2	--	--	--
<i>Cash Custom BM</i>			<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	--	--	--
Excess Return (vs. Net)			0.0	0.0	0.0	0.0			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Overlay and Hedges (Net)	692,470,449	1.0	29.5	73.9	--	--	--	--	--
Overlay and Hedges (Gross)			29.6	74.0	--	--	--	--	--
Cash Overlay (Net)	525,028,080	0.7	10.9	17.2	64.7	64.7	--	--	--
Cash Overlay (Gross)			10.9	17.2	65.4	65.4	--	--	--
Cash Overlay (Net)	525,028,080	0.7	10.9	17.2	64.7	64.7	--	--	--
Cash Overlay (Gross)			10.9	17.2	65.4	65.4	--	--	--
<i>Total Overlay Policy BM</i>			<u>-6.1</u>	<u>-11.5</u>	<u>-11.8</u>	<u>-11.8</u>	--	--	--
Excess Return (vs. Net)			17.0	28.7	76.5	76.5			
Currency Hedge (Net)	167,442,369	0.2	1.6	3.6	--	--	--	--	--
Currency Hedge (Gross)			1.6	3.6	--	--	--	--	--
Currency Hedge (Net)	167,442,369	0.2	1.6	3.6	--	--	--	--	--
Currency Hedge (Gross)			1.6	3.6	--	--	--	--	--

InvMetrics Public DB > \$1B Net Return Comparison
Ending June 30, 2022



	Quarter		1 Year		3 Years		5 Years		10 Years		25 Years	
Return (Rank)												
5th Percentile	-4.8		0.2		8.7		8.4		8.9		7.1	
25th Percentile	-6.9		-4.4		7.0		7.2		8.2		6.8	
Median	-8.6		-7.4		6.3		6.6		7.6		6.6	
75th Percentile	-9.8		-10.5		5.2		5.8		7.1		6.2	
95th Percentile	-11.1		-12.5		4.1		5.0		6.2		5.7	
# of Portfolios	64		63		62		62		57		30	
● Total Fund	-5.9	(11)	0.1	(6)	8.3	(8)	8.1	(12)	8.6	(8)	7.3	(1)
▲ Total Fund Policy Benchmark	-7.9	(41)	-4.6	(29)	6.2	(53)	7.0	(30)	7.9	(45)	--	(--)

Benchmark History

As of June 30, 2022

Total Fund		
10/1/2021	Present	51% Growth Custom Blended Benchmark / 11% Credit Custom Blended Benchmark / 17% Real Assets & Inflation Hedges Custom BM / 21% Risk Reduction and Mitigation Custom Blended Benchmark
10/1/2019	9/30/2021	35% Global Equity Custom BM / 10% PE-Credit Custom Benchmark / 2% Non-Core Private RE Policy BM / 3% Bloomberg U.S. High Yield / 4% Credit Suisse Leveraged Loans / 2% EMD Custom / 3% Illiquid Credit Custom BM / 7% Core Private Real Estate Custom BM / 4% Natural Resources & Commodities Custom BM / 3% DJ Brookfield Global Infrastructure Comp TR / 3% Bloomberg U.S. TIPS Index / 19% Bloomberg US Aggregate TR / 4% Diversified Hedge Funds Custom BM / 1% Citigroup 3-Month U.S. Treasury Bill Index
1/1/2019	9/30/2019	41% Global Equity Custom BM / 10% PE-Credit Custom Benchmark / 1% Non-Core Private RE Policy BM / 4% Bloomberg U.S. High Yield / 3% Credit Suisse Leveraged Loans / 1% EMD Custom / 2% Illiquid Credit Custom BM / 8% Core Private Real Estate Custom BM / 3% Natural Resources & Commodities Custom BM / 2% DJ Brookfield Global Infrastructure Comp TR / 2% Bloomberg U.S. TIPS Index / 19% Bloomberg US Aggregate TR / 3% Diversified Hedge Funds Custom BM / 1% Citigroup 3-Month U.S. Treasury Bill Index
10/1/2018	12/31/2018	22.7% Russell 3000 / 18.7% Custom MSCI ACWI IMI Net 50% Hedge / 27.8% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 5.0% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
7/1/2018	9/30/2018	23.1% Russell 3000 / 20.3% Custom MSCI ACWI IMI Net 50% Hedge / 26.6% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 4.2% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
1/1/2018	6/30/2018	22.4% Russell 3000 / 21.0% Custom MSCI ACWI IMI Net 50% Hedge / 26.6% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 4.2% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
10/1/2017	12/31/2017	23.5% Russell 3000 / 21.9% Custom MSCI ACWI IMI Net 50% Hedge / 25.4% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.4% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
7/1/2017	9/30/2017	23.7% Russell 3000 / 21.7% Custom MSCI ACWI IMI Net 50% Hedge / 25.4% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.4% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
4/1/2017	6/30/2017	24.1% Russell 3000 / 21.3% Custom MSCI ACWI IMI Net 50% Hedge / 25.4% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.4% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
1/1/2017	3/31/2017	24.4% Russell 3000 / 21.0% Custom MSCI ACWI IMI Net 50% Hedge / 25.4% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.4% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
10/1/2016	12/31/2016	23.8% Russell 3000 / 21.6% Custom MSCI ACWI IMI Net 50% Hedge / 25.4% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.4% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
7/1/2016	9/30/2016	24.5% Russell 3000 / 21.4% Custom MSCI ACWI IMI Net 50% Hedge / 25.1% Bloomberg US Universal TR / 10% Private Equity Target / 11% Real Estate Target / 3.2% Hedge Fund Custom Index / 2.8% Bloomberg Commodity Index TR USD / 2% FTSE T-Bill 6 Months TR
10/1/2015	6/30/2016	3% Bloomberg Commodity Index TR USD / 25.5% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 22.5% Bloomberg US Universal TR / 11% Private Equity Target / 23% Custom MSCI ACWI IMI Net 50% Hedge / 3% 3-month U.S. T-Bill Index + 5% (1M-lag)

4/1/2015	9/30/2015	3% Bloomberg Commodity Index TR USD / 25% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 22.5% Bloomberg US Universal TR / 11% Private Equity Target / 23.5% Custom MSCI ACWI IMI Net 50% Hedge / 3% 3-month U.S. T-Bill Index + 5% (1M-lag)
1/1/2015	3/31/2015	3% Bloomberg Commodity Index TR USD / 25.5% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 22.5% Bloomberg US Universal TR / 11% Private Equity Target / 23% Custom MSCI ACWI IMI Net 50% Hedge / 3% 3-month U.S. T-Bill Index + 5% (1M-lag)
10/1/2014	12/31/2014	3% Bloomberg Commodity Index TR USD / 25% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 23% Bloomberg US Universal TR / 11% Private Equity Target / 24% Custom MSCI ACWI IMI Net 50% Hedge / 2% 3-month U.S. T-Bill Index + 5% (1M-lag)
1/1/2014	9/30/2014	3% Bloomberg Commodity Index TR USD / 24% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 23% Bloomberg US Universal TR / 11% Private Equity Target / 25% Custom MSCI ACWI IMI Net 50% Hedge / 2% 3-month U.S. T-Bill Index + 5% (1M-lag)
10/1/2013	12/31/2013	3% Bloomberg Commodity Index TR USD / 24% Russell 3000 / 10% Real Estate Target / 2% FTSE T-Bill 6 Months TR / 24% Bloomberg US Universal TR / 10% Private Equity Target / 26% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
4/1/2013	9/30/2013	3% Bloomberg Commodity Index TR USD / 24% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 24% Bloomberg US Universal TR / 10% Private Equity Target / 26% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
1/1/2013	3/31/2013	3% Bloomberg Commodity Index TR USD / 23% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 24% Bloomberg US Universal TR / 10% Private Equity Target / 27% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
10/1/2012	12/31/2012	3% Bloomberg Commodity Index TR USD / 24% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 24% Bloomberg US Universal TR / 10% Private Equity Target / 26% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
1/1/2012	9/30/2012	3% Bloomberg Commodity Index TR USD / 24% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 27% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
10/1/2011	12/31/2011	3% Bloomberg Commodity Index TR USD / 23% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 28% Custom MSCI ACWI IMI Net 50% Hedge / 1% 3-month U.S. T-Bill Index + 5% (1M-lag)
4/1/2011	9/30/2011	3% Bloomberg Commodity Index TR USD / 23% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 29% Custom MSCI ACWI IMI Net 50% Hedge
1/1/2011	3/31/2011	3% Bloomberg Commodity Index TR USD / 22% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 30% Custom MSCI ACWI IMI Net 50% Hedge
10/1/2010	12/31/2010	3% Bloomberg Commodity Index TR USD / 23% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 29% Custom MSCI ACWI IMI Net 50% Hedge
7/1/2010	9/30/2010	3% Bloomberg Commodity Index TR USD / 26% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 26% Custom MSCI ACWI IMI Net 50% Hedge
4/1/2010	6/30/2010	3% Bloomberg Commodity Index TR USD / 26% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 26% MSCI ACWI ex USA IMI
1/1/2010	3/31/2010	3% Bloomberg Commodity Index TR USD / 29% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 26% Bloomberg US Universal TR / 7% Private Equity Target / 23% MSCI ACWI ex USA IMI
4/1/2009	12/31/2009	2% Bloomberg Commodity Index TR USD / 30% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 28% Bloomberg US Universal TR / 7% Private Equity Target / 21% MSCI ACWI ex USA IMI
10/1/2008	3/31/2009	2% Bloomberg Commodity Index TR USD / 30% Russell 3000 / 10% NCREIF Property Index - 25 bps / 2% FTSE T-Bill 6 Months TR / 1.96% Bloomberg US High Yield BA/B TR / 26.04% Bloomberg US Aggregate TR / 7% Private Equity Target / 21% MSCI ACWI ex USA IMI
3/1/2001	9/30/2008	100% LACERA TF Blended Benchmark

Bank Loans Custom Index: Credit Suisse Leveraged Loan Index.

Beach Point Custom BM: BBg Barc US Corporate High Yield Index

Brigade Custom Index: BBg Barc US Corporate High Yield Index.

Cash Custom BM: FTSE 3-month Treasury Bill.

Core & Value-Added Real Estate Custom BM: NFI ODCE + 50 bps (3-month lag).

Custom Liquid Credit BM: 40% BBg Barc US Corporate High Yield Index / 40% Credit Suisse Leveraged Loans / 10% JP Morgan EMBI GD / 5% JP Morgan GBI – EM GD / 5% JP Morgan CEMBI BD.

Diversified Hedge Funds Custom BM: FTSE 3-Month U.S. Treasury Bill Index + 250 bps (1-month lag).

EAFE Custom Index: MSCI EAFE + Canada (Net).

EMD Custom: 50% JP Morgan EMBI + 25% JP Morgan GBI-EM GD + 25% JP Morgan CEMBI BD.

Global Equity Custom BM: MSCI ACWI IMI Index

Grosvenor Custom BM: 100% Illiquid Credit Custom BM.

Growth Custom Blended BM: ~74.5% Global Equity Custom BM/ 21.3% Private Equity- Growth Custom BM/ 4.3% Opportunistic Real Estate Custom BM.

Hedge Fund Custom Index: 100% Diversified Hedge Funds Custom BM.

Illiquid Credit Custom BM: Custom Liquid Credit BM + 150 bps (1-month lag).

MSCI EM IMI Custom Index: MSCI EM IMI (Net)

Natural Resources & Commodities Custom BM: 50% Bloomberg Commodity Index / 50% S&P Global Large MidCap Commodity and Resources Index.

Opportunistic Real Estate Custom BM: NFI ODCE + 300 bps (3-month lag).

PE – Credit Custom Benchmark: BBgBarc US Agg Index + 250bps (3-month lag).

Private Equity - Growth Custom BM: MSCI ACWI IMI Index + 200 bps (3-month lag).

PE – Real Assets Custom BM: S&P Global LargeMidCap Commodity and Resources (3-month lag).

Real Assets and Inflation Hedges Custom Blended BM: ~41.2% Core & Value-Added Real Estate Custom BM/ 23.5% Natural Resources & Commodities Custom BM / 17.6% DJ Brookfield Global Infrastructure / 17.6% BBg Barc US TSY TIPS.

Risk Reduction and Mitigation Custom Blended BM: ~79.2% BBg Barc Agg / 16.7% Diversified Hedge Funds Custom BM / 4.2% FTSE 3-month Treasury Bill.

Securitized Custom Index: Barclays Securitized Bond Index + 400 bps.

Opportunistic Custom Index 1-Month Lag: 50% Barclays U.S. High Yield Index / 50% Credit Suisse Leveraged Loan Index (1-month lag).

50% FX Hedge Index: 50% MSCI World ex US IMI FX Hedged index 50% Zero Return.

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Total Fund Performance, Risk, and ESG

Board of Investments Offsite
September 14, 2022

Dale Johnson, Investment Officer
John Kim, Investment Officer
Terra Elijah, Investment Analyst



LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION



Table of Contents

1. Total Fund Performance
2. Total Fund Risk
3. ESG & Climate Risk

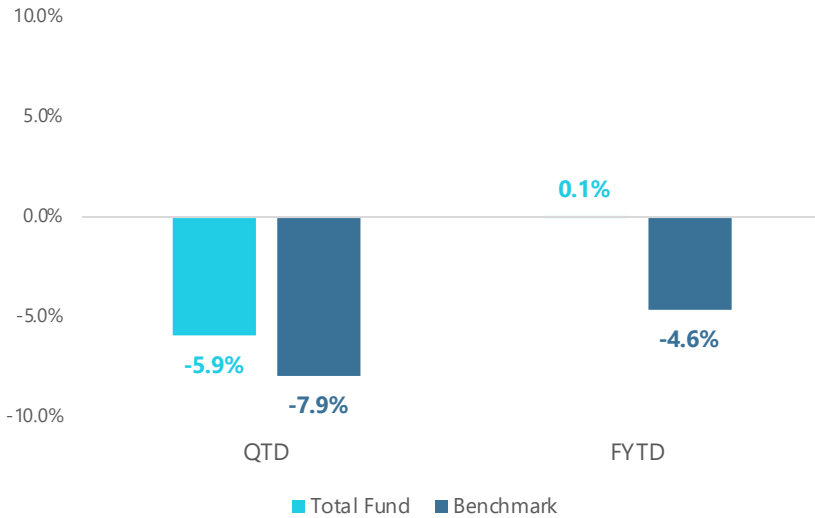
Total Fund Performance



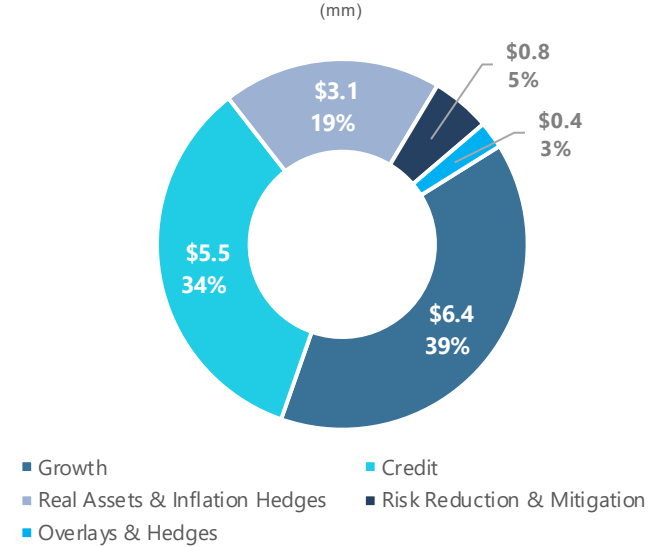
Quarterly Snapshot

for the quarter ended June 30, 2022

Performance (net)



Public Markets Fees¹



Ending Market Value

70,407

↓ -6%
from prior quarter

Sharpe Ratio²

0.9

↓ -30%
from prior quarter

Batting Average³

41%

↓ -19%
from prior quarter

Standard Deviation²

8.6

↑ 5%
from prior quarter

Tracking Error²

2.3

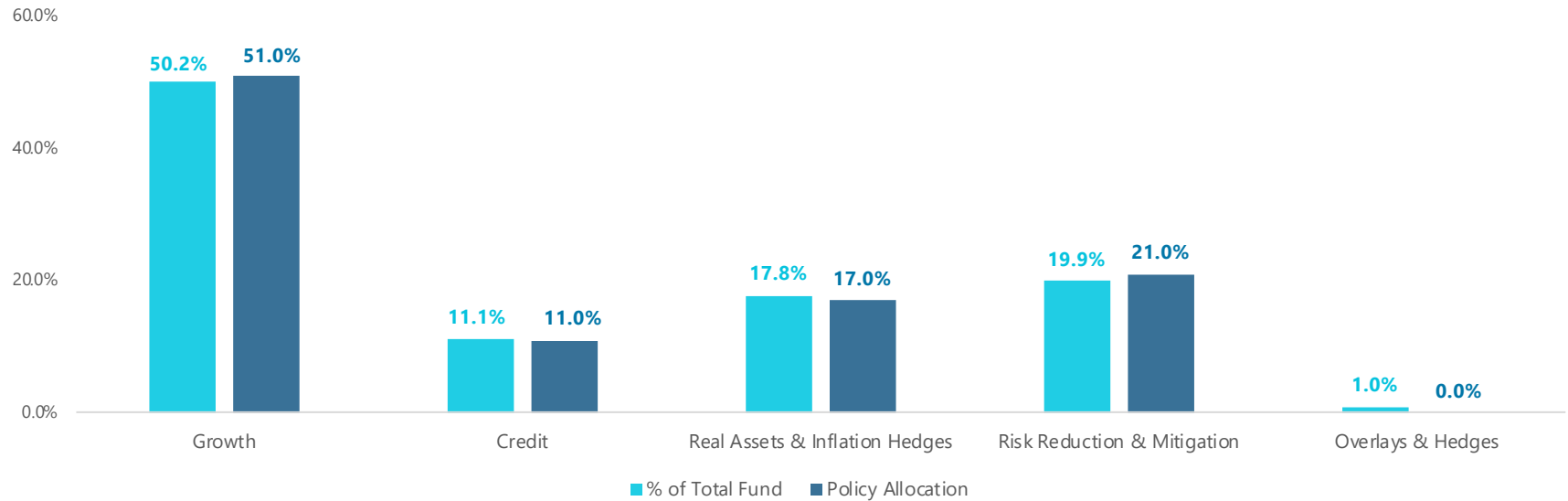
↑ 2%
from prior quarter

1. Reflects estimated investment management fees only.
2. 3 Year Annualized.
3. Percentage of managers that outperformed the benchmark for the quarter.

Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

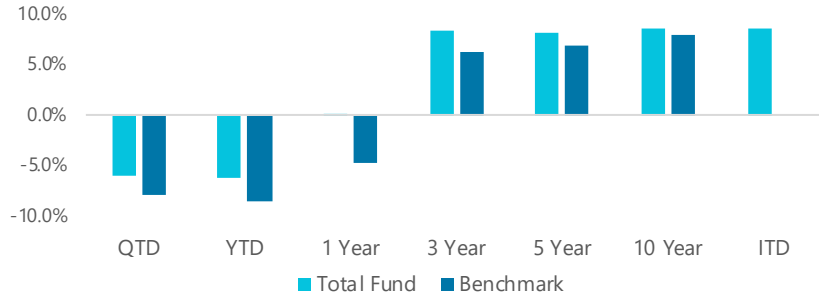


	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Over/Under (%)	Over/Under (mm)
Total Fund	70,407	100.0%	100.0%		
Growth	35,331	50.2%	51.0%	-0.8%	-576
Credit	7,824	11.1%	11.0%	0.1%	79
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	0.8%	570
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-1.1%	-765
Overlays & Hedges	692	1.0%	0.0%	1.0%	692

Performance Summary

for the quarter ended June 30, 2022

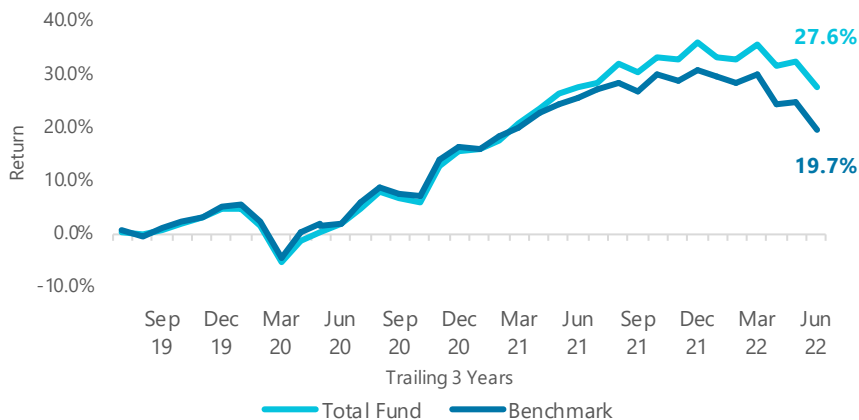
Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Benchmark	-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Excess	2.0%	2.4%	4.7%	2.3%	1.2%	0.7%	--

	FY22	FY21	FY20	FY19	FY18
Total Fund	0.1%	25.2%	1.8%	6.4%	9.0%
Benchmark	-4.6%	23.1%	2.0%	8.6%	7.8%

Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Growth	-9.4%	-2.0%	-2.0%	12.6%
Growth Policy Benchmark	-11.6%	-8.1%	-8.1%	9.5%
Excess	2.2%	6.1%	6.1%	3.1%
Credit	-5.2%	-4.2%	-4.2%	3.1%
Credit Policy Benchmark	-5.7%	-7.5%	-7.5%	1.2%
Excess	0.5%	3.3%	3.3%	1.9%
Real Assets & Inflation Hedges	-1.6%	14.3%	14.3%	7.9%
RA & IH Policy Benchmark	-3.2%	12.4%	12.4%	8.7%
Excess	1.6%	1.9%	1.9%	-0.7%
Risk Reduction & Mitigation	-3.4%	-7.1%	-7.1%	0.8%
RR & M Policy Benchmark	-3.9%	-7.7%	-7.7%	-0.1%
Excess	0.5%	0.6%	0.6%	0.9%
Overlays & Hedges	73.9%	--	--	--

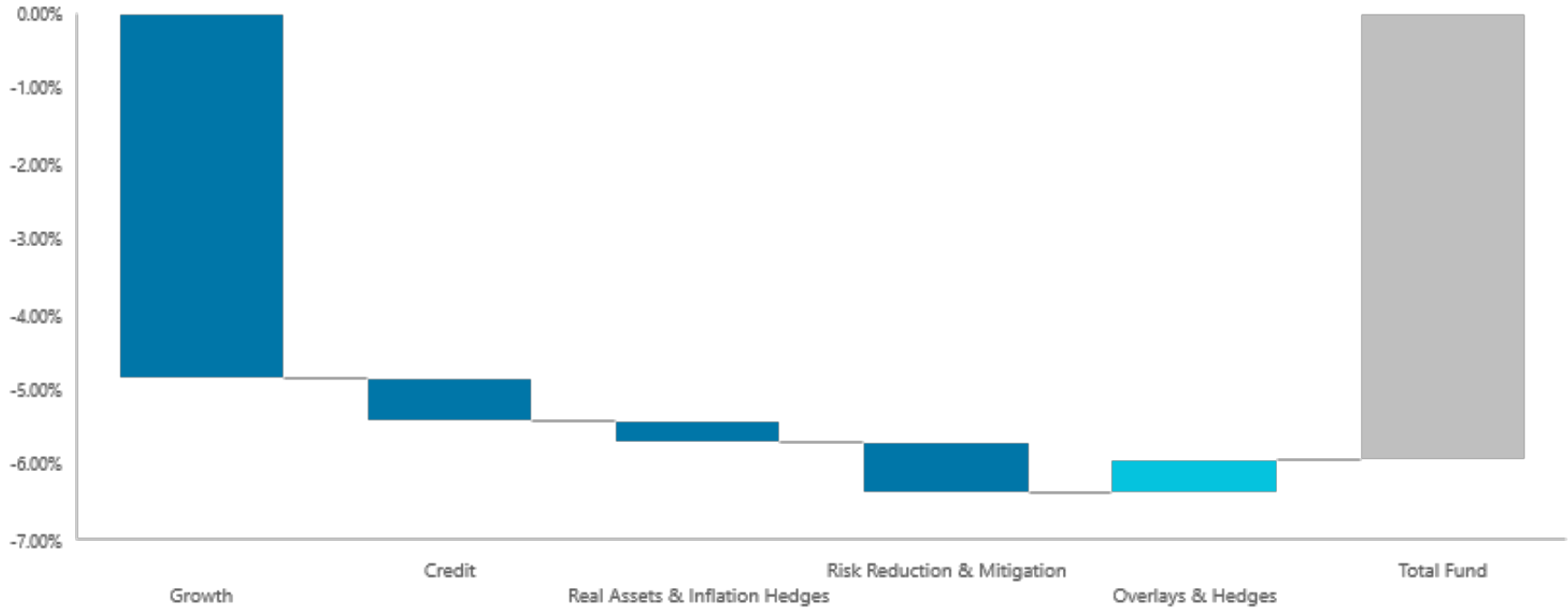
Peer Ranking (gross)

	QTD	1 Year	3 Year	5 Year	10 Year					
Total Fund	-5.9%	27	0.5%	18	8.8%	18	8.5%	19	8.9%	28
60/40 Portfolio	-11.5%	95	-13.9%	96	3.5%	87	4.7%	86	6.0%	88
S&P 500 Index	-16.1%	100	-10.6%	83	10.6%	7	11.3%	4	13.0%	4
5th Percentile	-3.9%		4.9%		11.6%		10.5%		10.3%	
25th Percentile	-5.8%		-1.9%		8.5%		5.3%		9.1%	
50th Percentile	-7.2%		-3.6%		7.5%		7.4%		8.3%	
75th Percentile	-9.1%		-9.2%		5.6%		6.1%		7.5%	
95th Percentile	-11.9%		-13.8%		0.2%		2.0%		3.9%	

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return

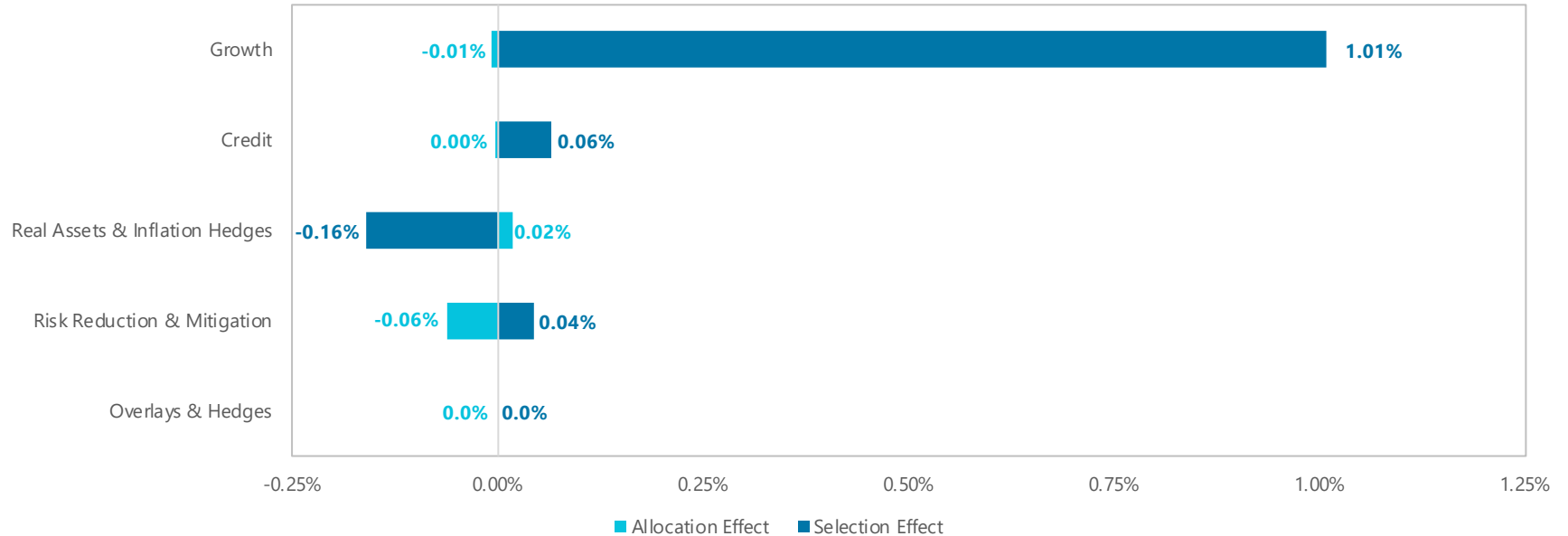


Functional Category		Contributors		Detractors	
Growth	-4.86%	Real Estate - Real Assets	0.45%	SSGA MSCI ACWI IMI	-3.20%
Credit	-0.57%	Private Equity - Growth	0.15%	JPMAM Strategic Beta US	-0.99%
Real Assets & Inflation Hedges	-0.29%	Brevan Howard Master Fund	0.08%	BTC Passive Currency Hedge	-0.95%
Risk Reduction & Mitigation	-0.65%	Parametric RA & IH Overlay	0.07%	BTC US Debt Index Fund	-0.32%
Overlays & Hedges	0.43%	Real Estate - Growth	0.07%	DWS Natural Resources	-0.30%
Total Fund	-5.94%				

Return Attribution

for the quarter ended June 30, 2022

QTD Performance Attribution¹



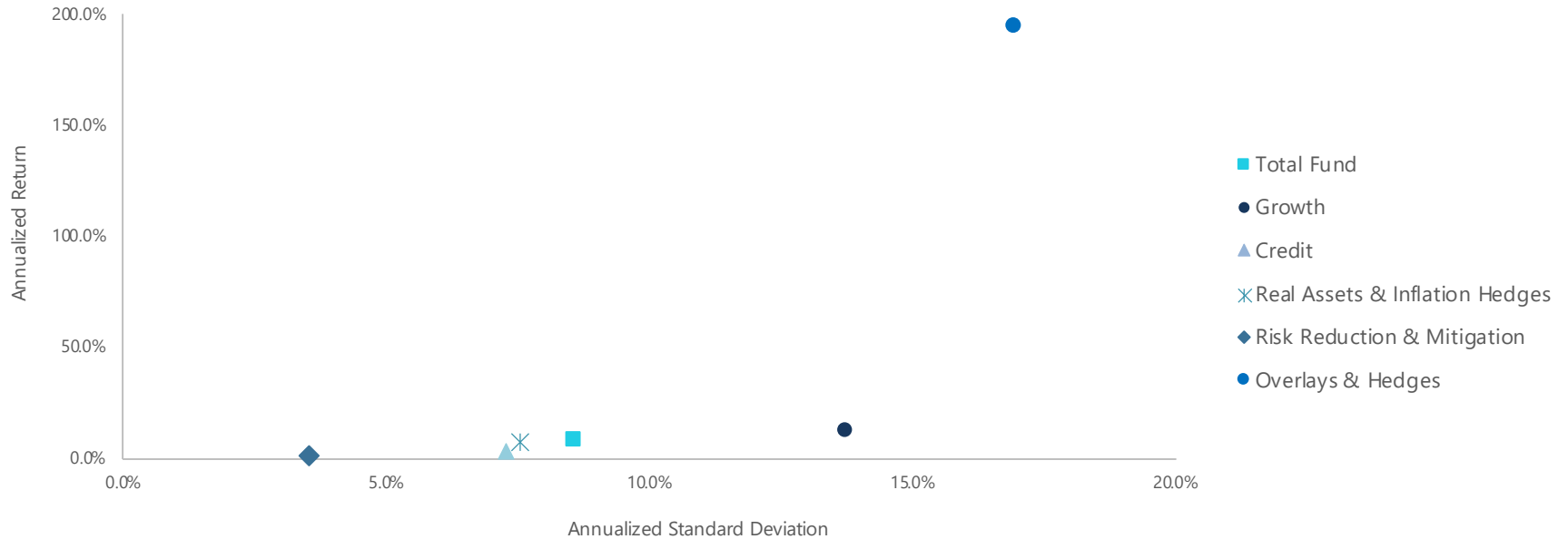
	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Total Fund	70,407	100.0%	100.0%	-5.9%	-7.9%	0.00%	0.96%	1.97%
Growth	35,331	50.2%	51.0%	-9.4%	-11.6%	-0.01%	1.01%	1.13%
Credit	7,824	11.1%	11.0%	-5.2%	-5.7%	0.00%	0.06%	0.05%
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	-1.6%	-3.2%	0.02%	-0.16%	0.29%
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-3.4%	-3.9%	-0.06%	0.04%	0.03%
Overlays & Hedges	692	1.0%	0.0%	73.9%	--	--	--	--

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Total Fund	8.5%	8.6%	0.92	0.99	0.96	2.3%
Growth	12.8%	13.7%	0.90	0.60	0.95	4.0%
Credit	3.6%	7.3%	0.44	0.64	1.00	2.8%
Real Assets & Inflation Hedges	7.8%	7.5%	0.95	(0.29)	0.95	2.2%
Risk Reduction & Mitigation	1.6%	3.5%	0.24	1.13	0.94	0.8%
Overlays & Hedges	195.6%	16.9%				

1. Functional composites risk statistics are since inception.



Performance Detail

for the quarter ended June 30, 2022

Annualized Net Returns

	% of Total Fund	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	100.0%	70,407	75,209	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Total Fund Policy Benchmark				-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Growth	50.2%	35,331	38,682	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Growth Policy Benchmark				-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Global Equity	30.3%	21,343	25,137	-15.1%	-19.8%	-15.1%	6.6%	--	--	7.2%
Global Equity Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	--	--	6.6%
Private Equity - Growth	18.3%	12,901	12,457	0.8%	9.1%	30.2%	26.6%	--	--	24.1%
PE - Growth Policy Benchmark				-5.0%	1.3%	8.4%	15.7%	--	--	12.8%
Non-Core Private Real Estate	1.5%	1,087	1,088	4.7%	12.9%	23.5%	14.2%	13.2%	12.0%	4.7%
Non-Core Private RE Policy Benchmark				7.7%	16.6%	30.3%	13.4%	12.0%	13.1%	11.6%
Credit	11.1%	7,824	8,111	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Credit Policy Benchmark				-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Liquid Credit	6.5%	4,581	4,977	-7.9%	-10.9%	--	--	--	--	-10.7%
Liquid Credit Policy Benchmark				-7.6%	-11.0%	--	--	--	--	-10.7%
Illiquid Credit	4.6%	3,243	3,135	-1.0%	-0.7%	6.7%	11.2%	--	--	10.9%
Illiquid Credit Policy Benchmark				-3.5%	-5.0%	-3.4%	3.4%	--	--	4.5%
Real Assets & Inflation Hedges	17.8%	12,539	12,933	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
RA & IH Policy Benchmark				-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Core Private Real Estate	6.1%	4,323	4,079	8.4%	15.9%	27.9%	8.4%	8.3%	8.8%	7.3%
Core Private RE Policy Benchmark				7.1%	15.3%	27.4%	10.7%	9.4%	10.4%	7.2%
Natural Resources & Commodities	4.2%	2,958	3,796	-6.1%	11.4%	18.6%	12.5%	8.0%	-0.3%	-1.0%
Nat Res & Comm Policy Benchmark				-12.4%	4.7%	12.2%	11.2%	7.0%	-1.5%	-2.2%
Infrastructure	4.7%	3,327	2,999	-6.5%	-3.6%	4.1%	7.6%	--	--	8.9%
DJ Brookfield Global Infrastr Comp TR				-6.9%	-2.7%	2.8%	4.5%	--	--	5.7%
TIPS	2.7%	1,931	2,059	-6.3%	-8.6%	-4.8%	3.1%	--	--	3.7%
Bloomberg U.S. Treasury: U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.7%
Risk Reduction & Mitigation	19.9%	14,020	14,969	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
RR & M Policy Benchmark				-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Investment Grade Bonds	7.9%	5,556	8,649	-4.8%	-10.4%	-10.6%	-0.7%	1.1%	2.1%	5.3%
BBG BC Aggregate Bond Index				-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	4.8%
Diversified Hedge Funds	6.0%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
Long-Term Government Bonds	1.7%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Bloomberg U.S. Treasury: Long				-11.9%	-21.3%	--	--	--	--	-22.1%
Long Treasury Bonds Transition	2.8%	1,992	--	--	--	--	--	--	--	-0.4%
Bloomberg U.S. Treasury: Long				--	--	--	--	--	--	-0.3%
Cash	1.5%	1,067	953	0.7%	0.9%	1.5%	1.3%	1.6%	1.1%	1.8%
Cash Policy Benchmark				0.1%	0.2%	0.2%	0.6%	1.1%	0.7%	1.4%
Overlays & Hedges	1.0%	692	513	73.9%	174.0%	--	--	--	--	195.6%
Cash Overlay	0.7%	525	448	17.2%	59.5%	64.7%	--	--	--	-5.2%
Total Overlay Policy BM				-11.5%	-15.5%	-11.9%	--	--	--	4.2%
Currency Hedge	0.2%	167	65	3.6%	4.6%	--	--	--	--	5.2%
50% FX Hedge Custom Benchmark				3.6%	4.7%	--	--	--	--	5.3%

Total Fund Risk





Risk Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	12.89
Benchmark Risk	12.15
Active Risk	1.38
Portfolio Beta	1.06
Effective Duration	1.74

Contribution to Risk

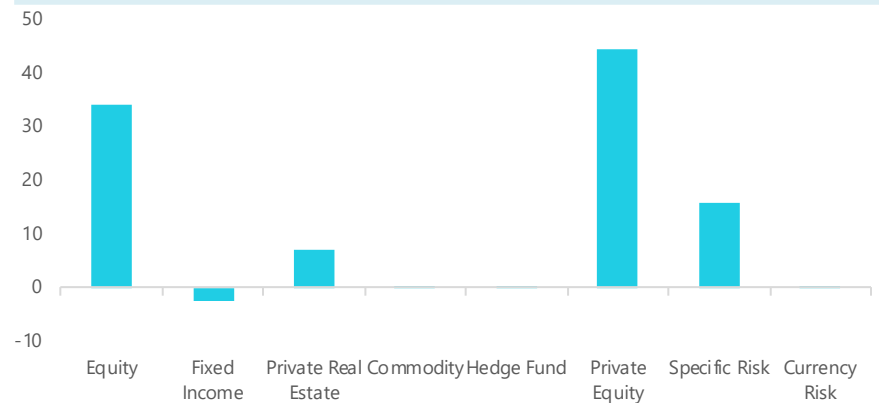


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Total Fund	67,383	100.0%	12.89	12.89	100.00
Growth	34,694	51.5%	20.26	10.31	79.94
Credit	7,726	11.5%	4.63	0.40	3.12
Real Assets and Inflation Hedges	12,617	18.7%	13.84	2.28	17.65
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.11	0.82
Overlays and Hedges	676	1.0%	34.55	-0.20	(1.54)

Risk Decomposition

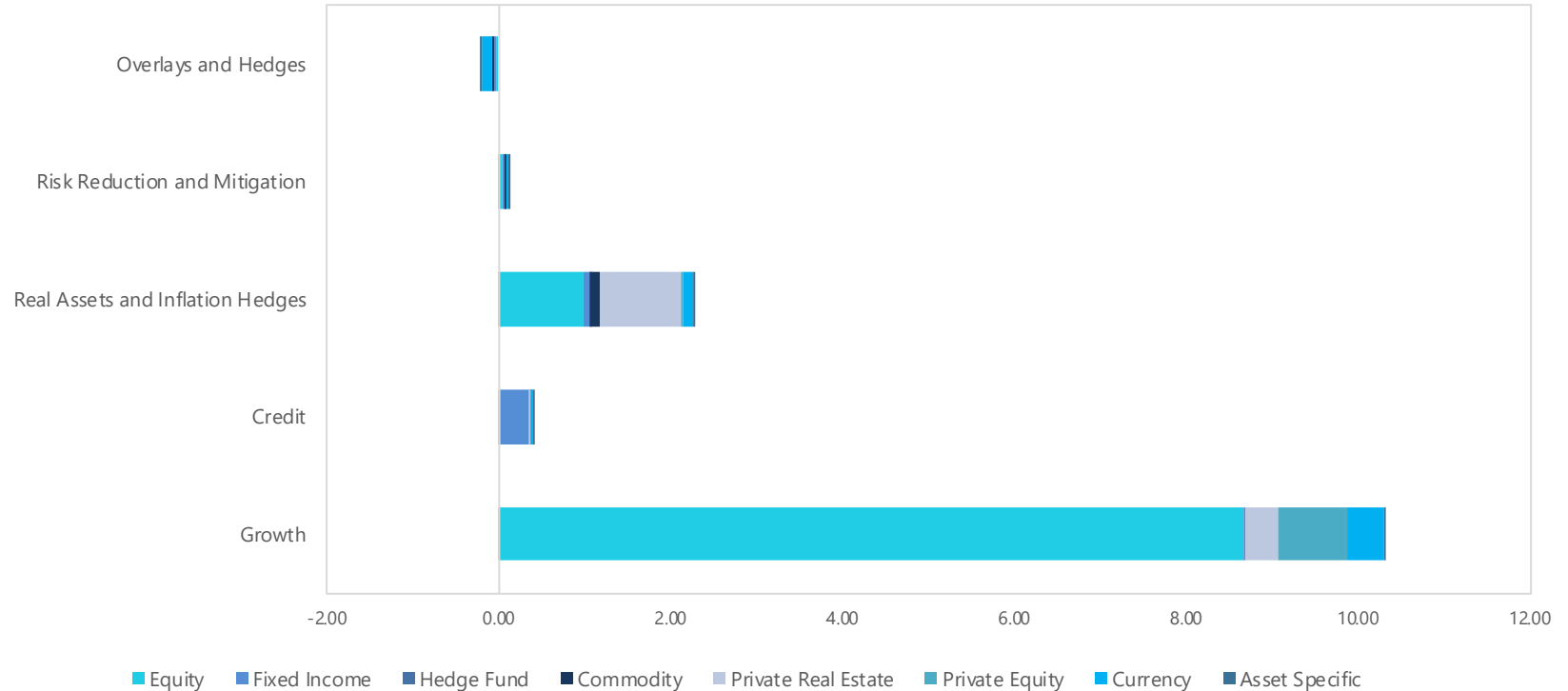
Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
Total Risk	12.89	100.00	1.00	1.38	100.00	1.00
Local Market Risk	12.39	96.09	1.00	1.38	99.88	0.99
Common Factor Risk	12.36	95.88	1.00	1.16	83.92	0.91
Equity	9.65	74.86	0.95	0.47	34.05	0.59
Fixed Income	0.46	3.53	0.35	-0.03	-2.22	-0.15
Private Real Estate	1.34	10.42	0.69	0.10	7.04	0.36
Commodity	0.10	0.75	0.38	0.00	0.18	0.03
Hedge Fund	0.00	0.01	0.01	0.01	0.52	0.07
Private Equity	0.81	6.32	0.25	0.61	44.36	0.67
Specific Risk	0.03	0.21	0.05	0.22	15.96	0.40
Currency Risk	0.50	3.91	0.53	0.00	0.12	0.01

Active Risk from Risk Factors



Risk Contribution Breakdown

for the quarter ended June 30, 2022

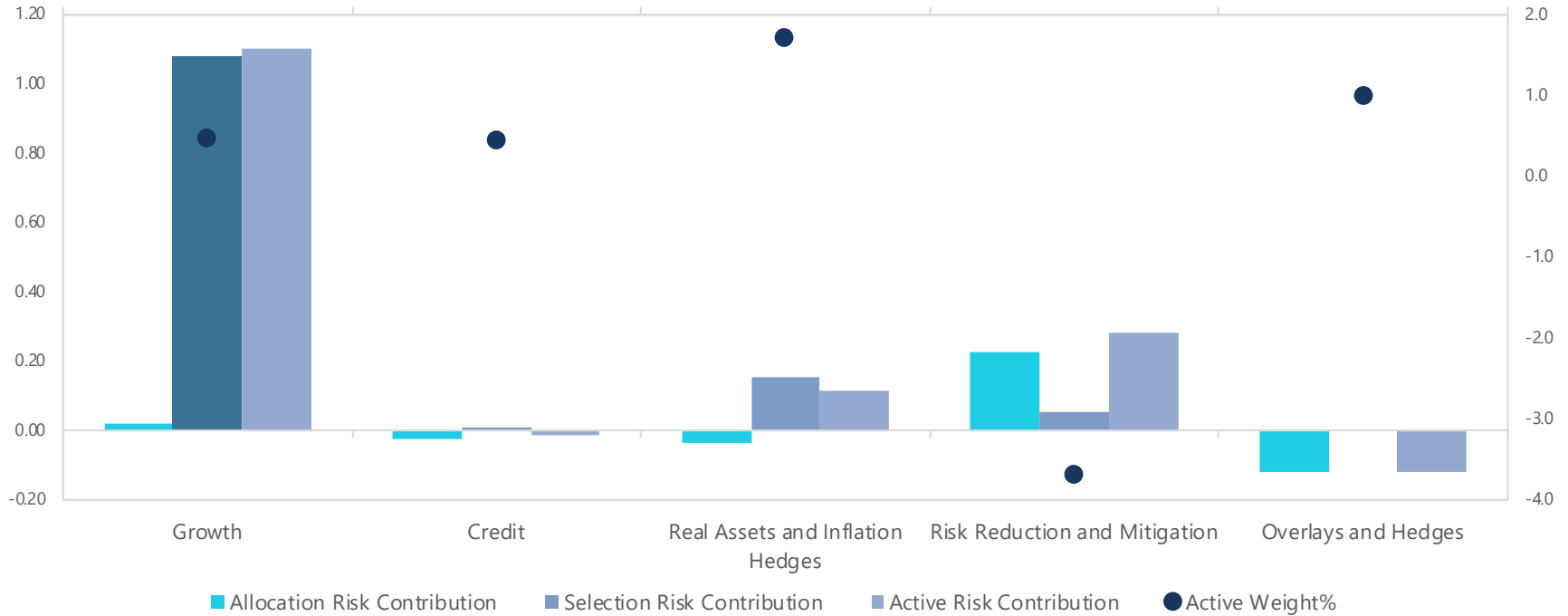


Functional Category	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific	Eff Weight%
Total Fund	67,383	100.0%	12.89	100.00	12.89	9.65	0.46	0.10	1.34	0.81	0.50	0.03	103.6%
Growth	34,694	51.5%	20.26	79.94	10.31	8.66	0.03	0.00	0.38	0.79	0.43	0.02	51.8%
Credit	7,726	11.5%	4.63	3.12	0.40	0.02	0.33	0.00	0.02	0.01	0.04	0.00	11.5%
Real Assets and Inflation Hedges	12,617	18.7%	13.84	17.65	2.28	0.99	0.07	0.11	0.95	0.02	0.13	0.00	20.2%
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.82	0.11	0.03	0.03	0.01	0.00	0.00	0.03	0.00	17.3%
Overlays and Hedges	676	1.0%	34.55	(1.54)	-0.20	-0.04	-0.01	-0.03	0.00	0.00	-0.12	0.00	2.9%

Risk Allocation Selection

for the quarter ended June 30, 2022

Active Total Risk

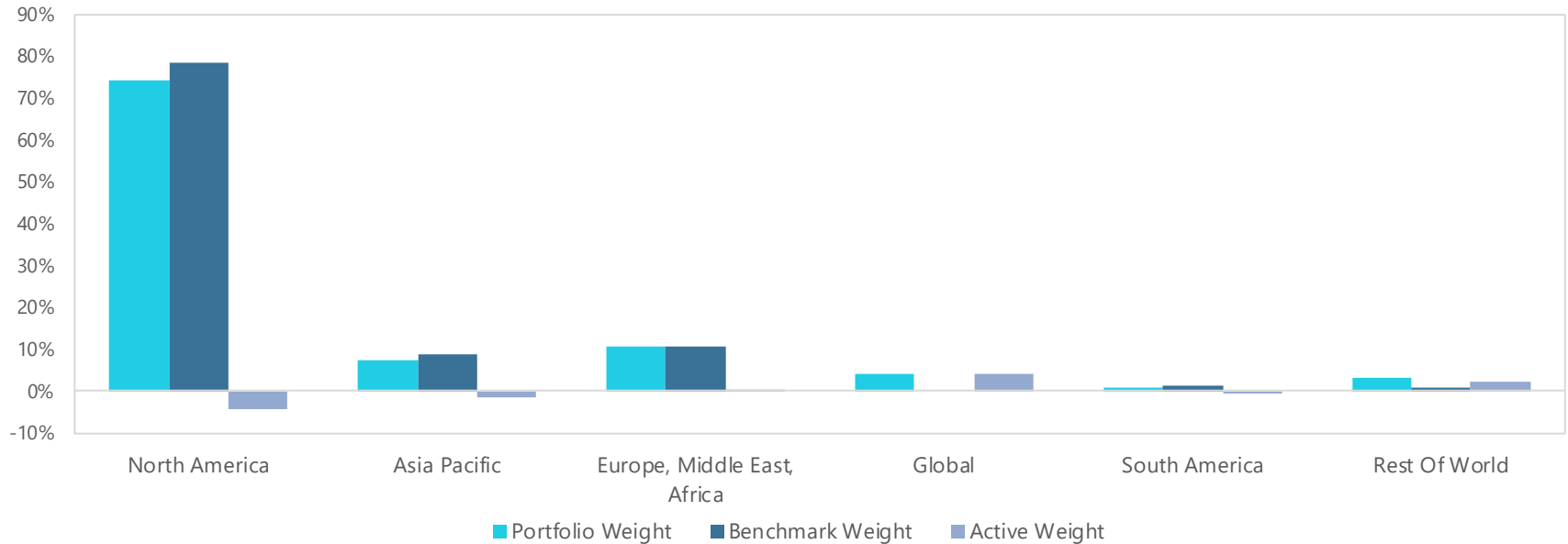


Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
Active Total Risk				0.07			1.30	1.37
Growth	0.49	7.19	0.60	0.02	2.24	0.94	1.08	1.10
Credit	0.47	8.57	-0.57	-0.02	2.07	0.05	0.01	-0.01
Real Assets and Inflation Hedges	1.72	6.30	-0.34	-0.04	1.86	0.44	0.15	0.12
Risk Reduction and Mitigation	-3.68	12.73	-0.49	0.23	1.32	0.23	0.05	0.28
Overlays and Hedges	1.00	42.83	-0.27	-0.12	0.00	0.00	0.00	-0.12

Risk Regional Allocation

for the quarter ended June 30, 2022

By Region



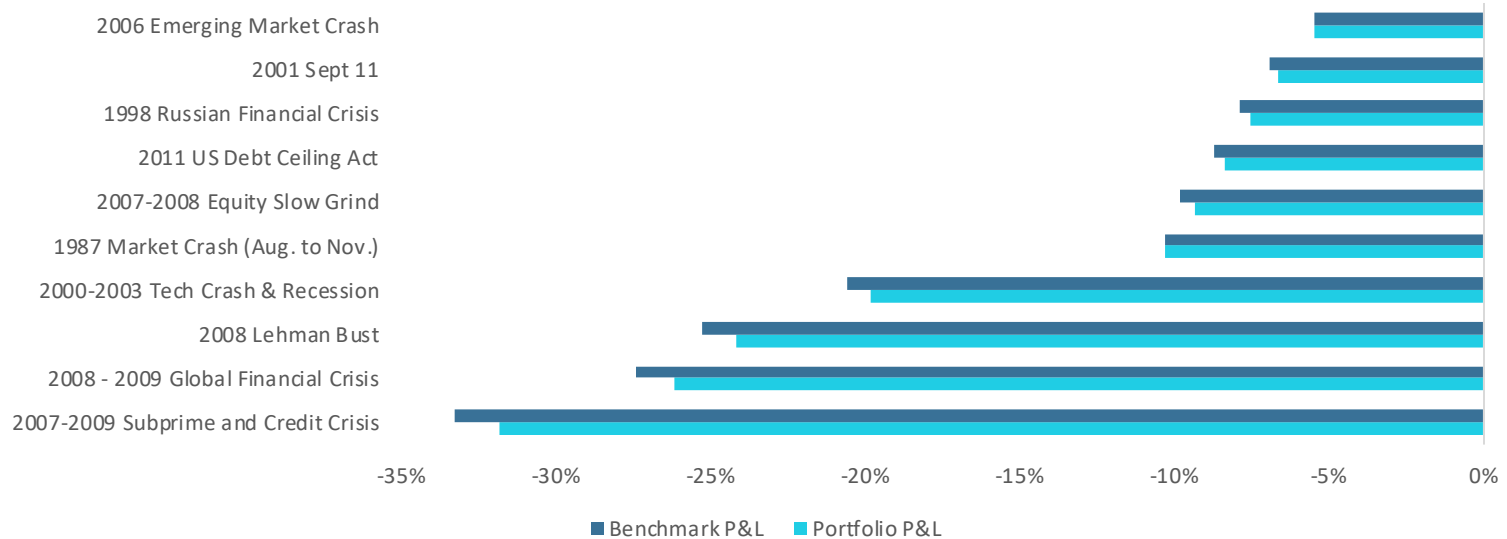
Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	12.89	1.38	100.00	0.01
North America	74.14%	78.35%	-4.21%	13.23	1.28	92.81	0.03
Asia Pacific	7.23%	8.91%	-1.68%	15.45	0.09	6.20	-0.02
Europe, Middle East, Africa	10.80%	10.79%	0.01%	20.18	0.21	15.26	0.02
Global	3.95%	0.00%	3.95%	6.40	-0.17	-12.02	-0.04
South America	0.78%	1.04%	-0.26%	26.27	0.07	5.08	-0.02
Rest Of World	3.10%	0.91%	2.19%	6.62	-0.10	-7.34	-0.05



Stress Tests

for the quarter ended June 30, 2022

Top 10 Worst Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-31.87%	-33.25%	(23,821,346,931)
2008 - 2009 Global Financial Crisis	-26.19%	-27.43%	(19,573,890,669)
2008 Lehman Bust	-24.19%	-25.31%	(18,084,969,086)
2000-2003 Tech Crash & Recession	-19.80%	-20.59%	(14,801,674,578)
1987 Market Crash (Aug. to Nov.)	-10.34%	-10.33%	(7,730,205,537)
2007-2008 Equity Slow Grind	-9.35%	-9.79%	(6,991,539,316)
2011 US Debt Ceiling Act	-8.38%	-8.74%	(6,261,858,907)
1998 Russian Financial Crisis	-7.55%	-7.89%	(5,640,036,103)
2001 Sept 11	-6.62%	-6.92%	(4,950,361,913)
2006 Emerging Market Crash	-5.48%	-5.47%	(4,093,577,998)

ESG & Climate Risk



Public Markets ESG & Climate Profile

Environmental, social, and governance factors may present financial risks and opportunities to generating economic returns.

LACERA accesses third-party vendor data to monitor fund exposures and inform ongoing assessments of external asset managers.

- ❖ Evaluate ESG and climate profile at various levels of the Total Fund
- ❖ Compare ESG and climate profile of similar mandates by strategy
- ❖ Complement qualitative assessments of external managers' ESG integration processes

Less data available for private market mandates but may be modelled or directly reported by some private market managers

Table: Snapshots of Asset Classes and Mandates Where Data Is More Readily Available

Functional Asset Category/Sub-Functional Asset Category	Overall ESG Score ¹	Carbon Footprint ²	Climate Value at Risk (%) ³
Growth/Global Public Equity	6.3	164.5	-9.7
MSCI All-Country World Investible Market Index - Net	6.4	173.1	-12.2

Functional Asset Category/Manager	Overall ESG Score	Carbon Footprint	Climate Value at Risk (%)
Credit/High Yield Manager	5.0	287.9	-15.4
Credit/High Yield Manager	4.6	529.5	-22.1
Bloomberg Barclays U.S. Corporate High Yield Index	4.7	309.3	-15.7

Functional Asset Category/Manager	Overall ESG Score	Carbon Footprint	Climate Value at Risk (%)
Real Assets & Inflation Hedges/Infrastructure Manager	7.1	564.8	-14.5
DowJones Brookfield Global Infrastructure Index	7.2	442.3	-13.4

Source: MSCI ESG Analytics

¹ Overall ESG Score reflects aggregated portfolio company ESG score

² Carbon footprint measures Scope 1 and 2 emissions intensity in metric tons/USD million sales

³ Climate Value at Risk - Potential economic value impact of climate-related physical risks and regulatory constraints, combined with upside of technology opportunities in modelling to limit global temperature rise to within 2C consistent with the Paris Agreement goals

September 1, 2022

FOR INFORMATION ONLY

TO: Trustees – Board of Investments
FROM: Jude Pérez, Principal Investment Officer
FOR: September 14, 2022 Board of Investments Meeting
SUBJECT: **OPEB QUARTERLY PERFORMANCE BOOK**

Attached is the OPEB Master Trust quarterly performance book as of June 30, 2022. The report includes both performance and risk sections utilizing data from our platform providers, Solovis and MSCI BarraOne, respectively.

Noted and Reviewed:



Jonathan Grabel
Chief Investment Officer

Attachments



Los Angeles County Employees Retirement Association

Investments Division

OPEB MASTER TRUST

PERFORMANCE REPORT

For the quarter ended
June 30, 2022

An aerial photograph of Los Angeles at sunset. The city skyline is visible in the background, with the sun setting behind the mountains, creating a warm orange and pink glow. The foreground shows residential buildings, palm trees, and a river or canal.

review

Table of Contents

01 OPEB TRUST

02 RISK REPORTS

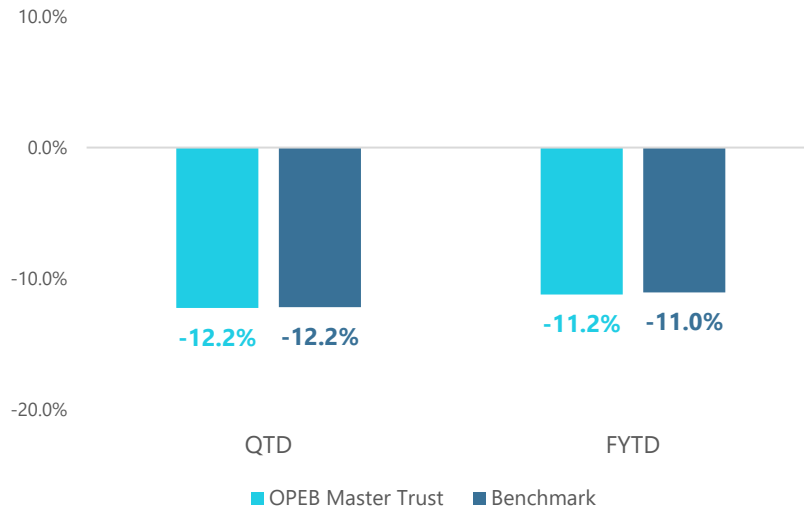
03 APPENDIX

opeb trust

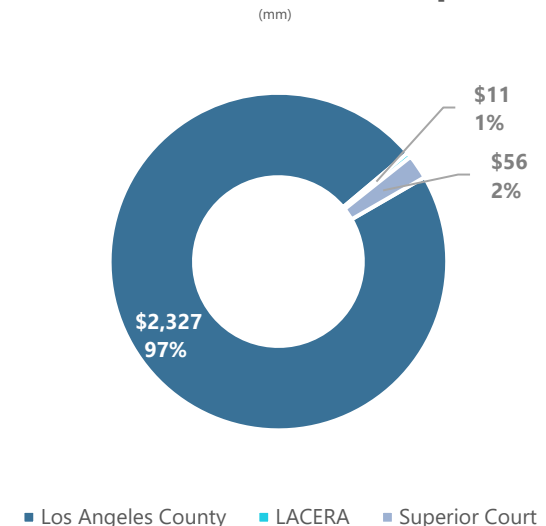
Quarterly Snapshot

for the quarter ended June 30, 2022

Performance (net)



Sub-Trust Ownership



Ending Market Value

2,394

↓ -9%
from prior quarter

Sharpe Ratio¹

0.3

↓ -55%
from prior quarter

Batting Average²

38%

↓ -38%
from prior quarter

Standard Deviation¹

13.4

↑ 7%
from prior quarter

Tracking Error¹

0.3

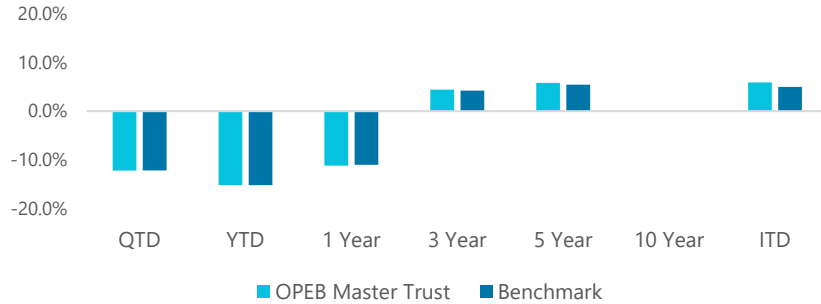
↑ 3%
from prior quarter

1. 3-year annualized.
2. Percentage of managers that outperformed the benchmark for the quarter.

Summary

for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
OPEB Master Trust	-12.2%	-15.2%	-11.2%	4.4%	5.8%	--	5.9%
Benchmark	-12.2%	-15.2%	-11.0%	4.2%	5.4%	--	5.0%
Excess	-0.1%	0.0%	-0.2%	0.2%	0.3%	--	0.9%
Sub-Trusts							
Los Angeles County	-12.2%	-15.2%	-11.2%	4.4%	5.8%	--	5.4%
LACERA	-12.3%	-15.3%	-11.3%	4.4%	5.8%	--	5.4%
Superior Court	-12.2%	-15.0%	-11.0%	4.4%	5.6%	--	6.6%

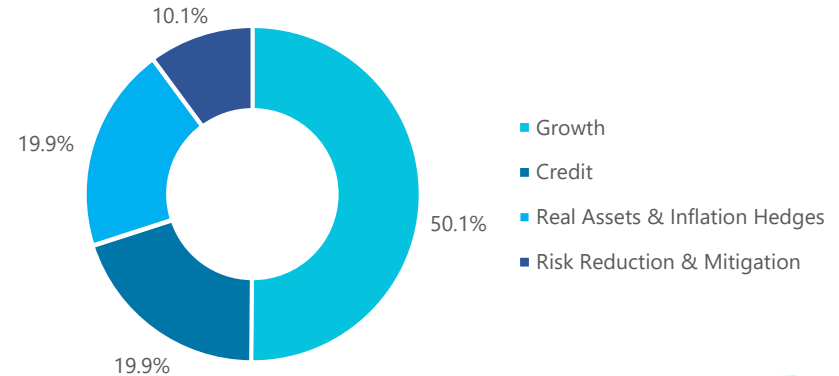
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year	5 Year
OPEB Growth	-15.7%	-16.3%	-16.3%	6.2%	7.0%
OPEB Growth Policy Benchmark	-15.8%	-16.5%	-16.5%	6.0%	6.7%
Excess	0.1%	0.2%	0.2%	0.3%	0.3%
OPEB Credit	-7.2%	-9.8%	-9.8%	-0.6%	--
OPEB Credit Policy Benchmark	-7.2%	-9.7%	-9.7%	-0.2%	--
Excess	0.0%	0.0%	0.0%	-0.4%	--
OPEB Real Assets & Inflation Hedges	-12.0%	0.5%	0.5%	5.9%	--
OPEB RA & IH Policy Benchmark	-12.1%	0.2%	0.2%	5.6%	--
Excess	0.0%	0.3%	0.3%	0.2%	--
OPEB Risk Reduction & Mitigation	-3.7%	-8.2%	-8.2%	-0.5%	1.4%
OPEB RR & M Policy Benchmark	-3.7%	-8.3%	-8.3%	-0.6%	1.2%
Excess	0.0%	0.1%	0.1%	0.1%	0.2%

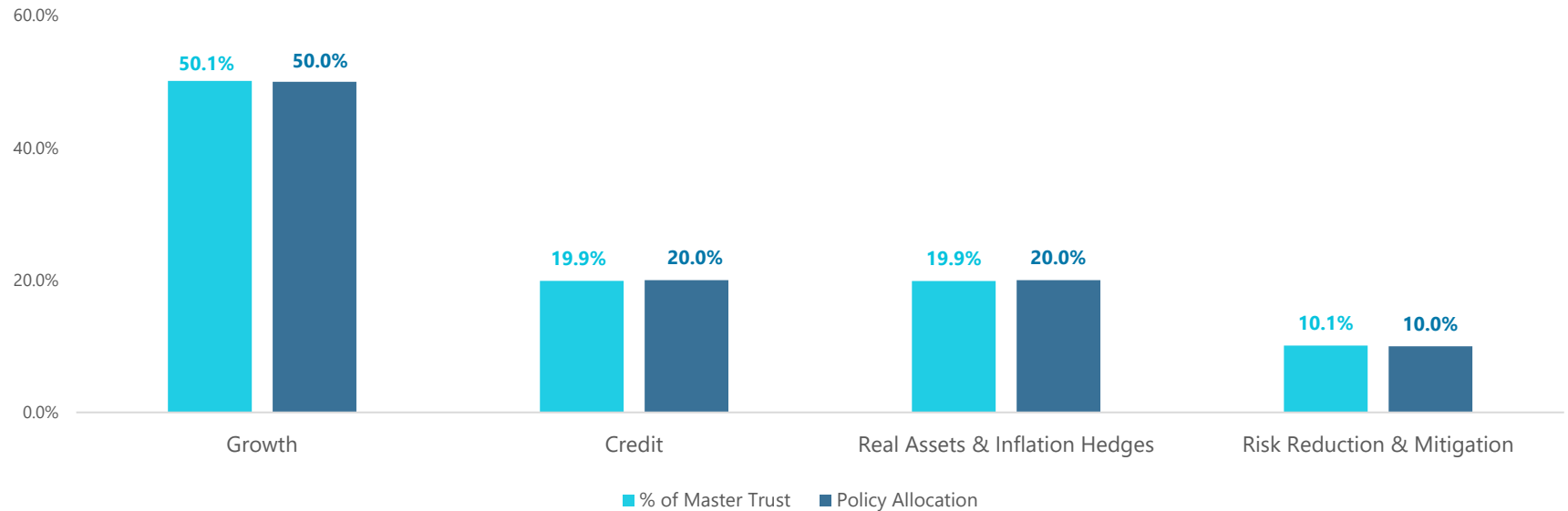
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy



	Ending Market Value (mm)	% of Master Trust	Policy Allocation	Over / Under (%)	Over / Under (mm)
OPEB Master Trust	2,394	100.0%	100.0%		
Growth	1,200	50.1%	50.0%	0.1%	3
Credit	476	19.9%	20.0%	-0.1%	-2
Real Assets & Inflation Hedges	475	19.9%	20.0%	-0.1%	-3
Risk Reduction & Mitigation	242	10.1%	10.0%	0.1%	3
Operational Cash	0	0.0%			

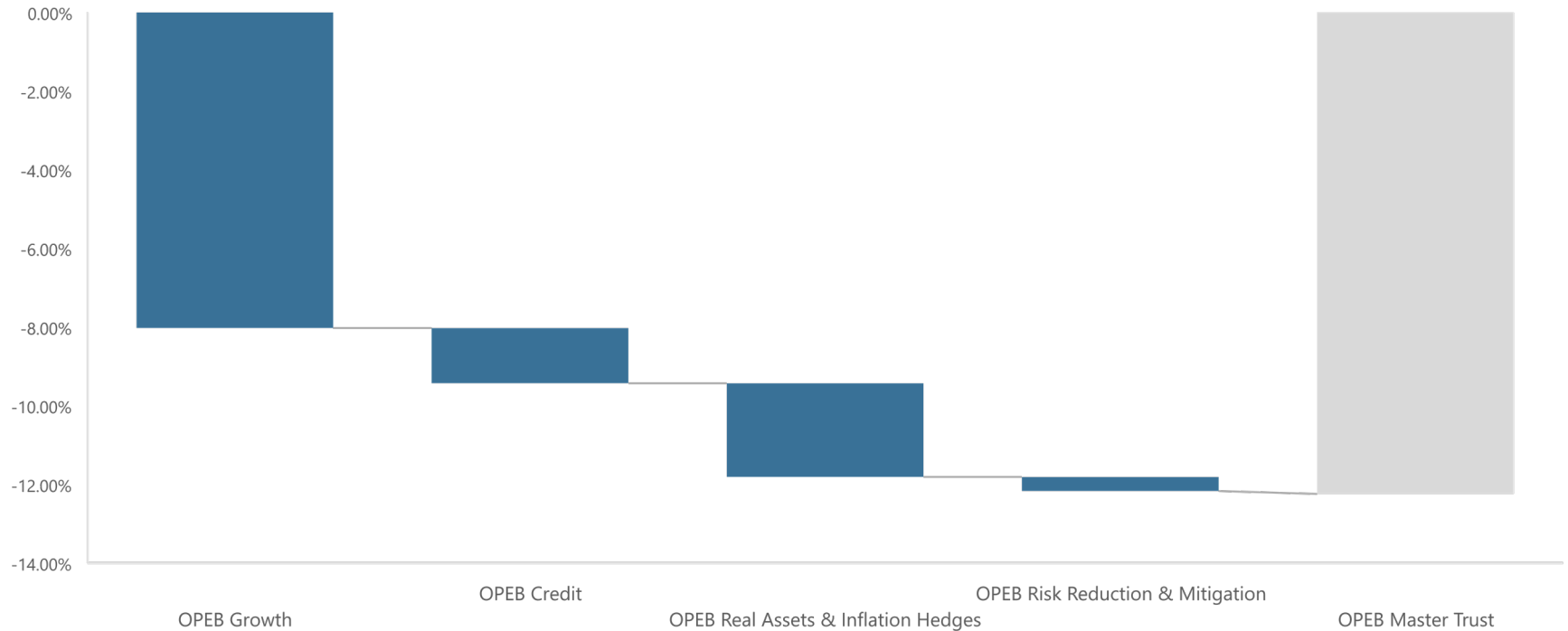
Contribution to Return

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Contribution to Return



Functional Category		Contributors		Detractors	
OPEB Growth	-8.02%	OPEB SSGA Cash	0.00%	OPEB Global Equities	-8.04%
OPEB Credit	-1.40%			OPEB BTC REITs	-1.83%
OPEB Real Assets & Inflation Hedges	-2.39%			OPEB BTC High Yield Bonds	-0.59%
OPEB Risk Reduction & Mitigation	-0.36%			OPEB BlackRock Bank Loans	-0.44%
OPEB Master Trust	-12.24%			OPEB BTC IG Bonds	-0.36%

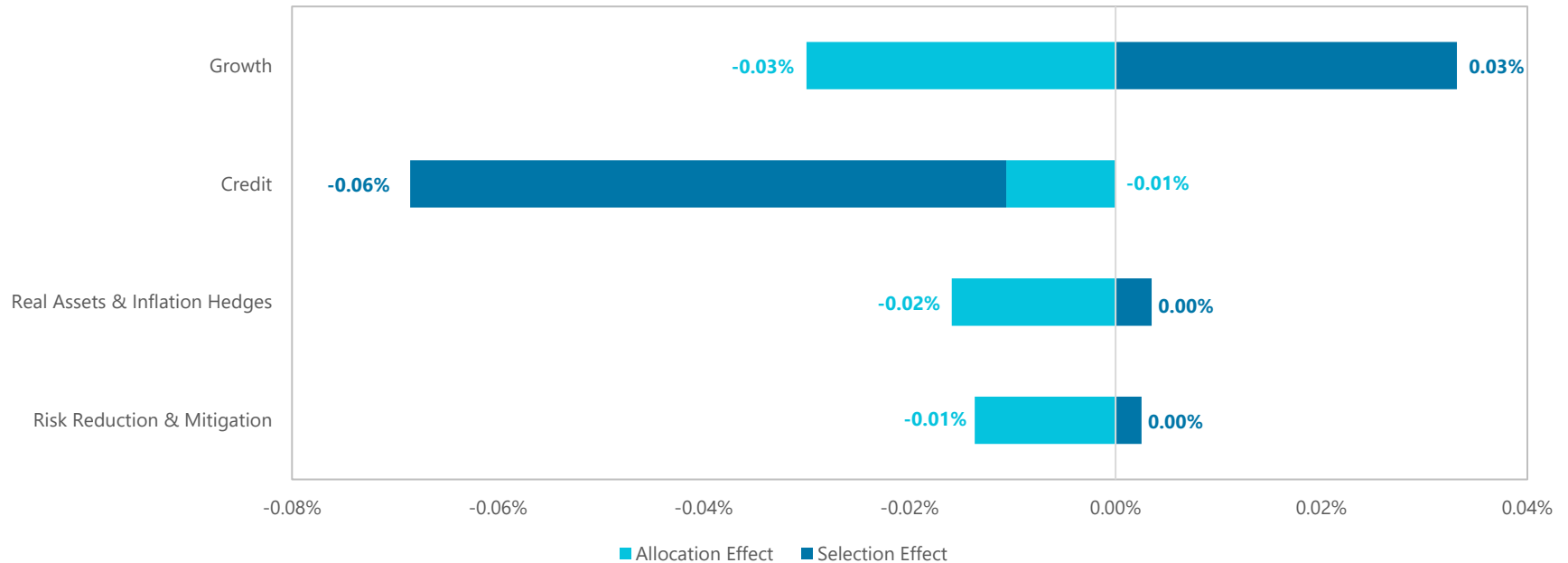
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



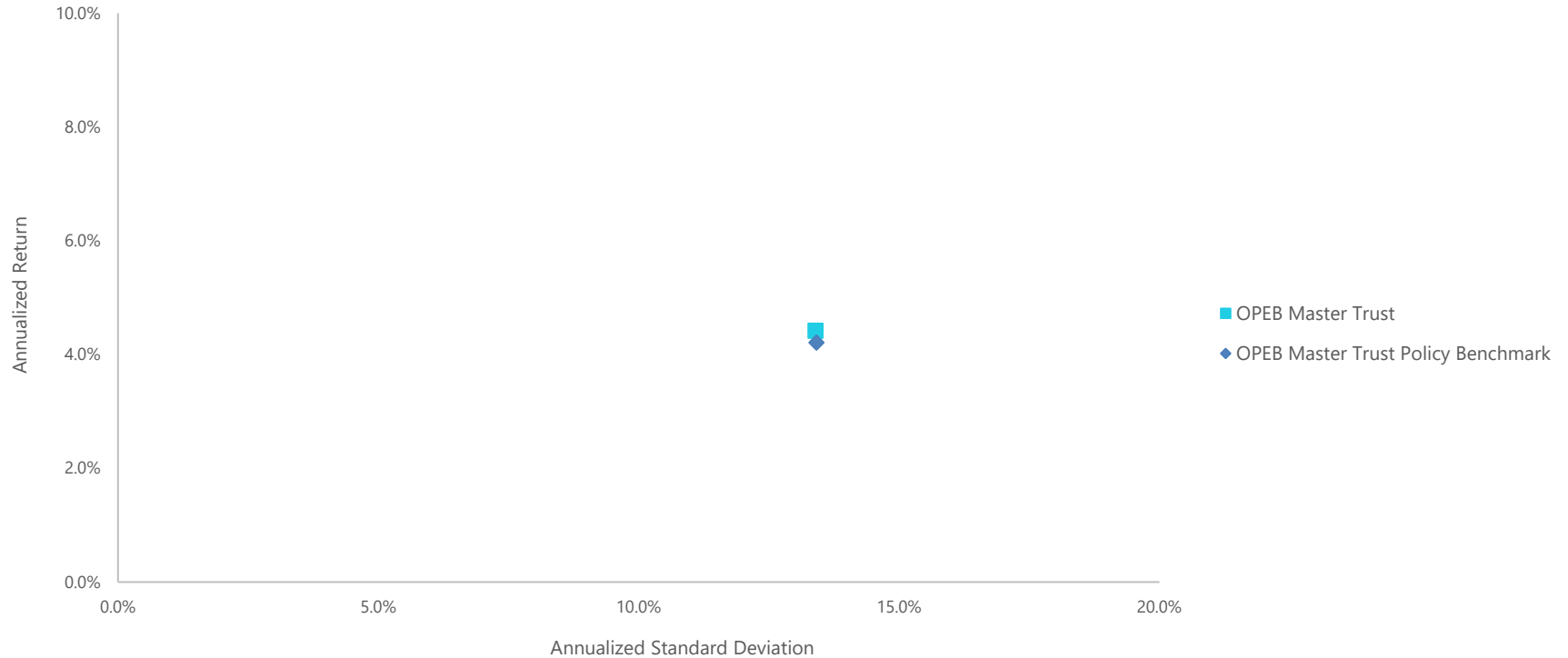
	Ending Market Value (mm)	% of Master Trust	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
OPEB Master Trust	2,394	100.0%	100.0%	-12.2%	-12.2%	-0.07%	-0.02%	-0.03%
Growth	1,200	50.1%	50.0%	-15.7%	-15.8%	-0.03%	0.03%	0.00%
Credit	476	19.9%	20.0%	-7.2%	-7.2%	-0.01%	-0.06%	-0.01%
Real Assets & Inflation Hedges	475	19.9%	20.0%	-12.0%	-12.1%	-0.02%	0.00%	-0.02%
Risk Reduction & Mitigation	242	10.1%	10.0%	-3.7%	-3.7%	-0.01%	0.00%	-0.01%
Operational Cash	0	0.0%						

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
OPEB Master Trust	4.4%	13.4%				
OPEB Master Trust Policy Benchmark	4.2%	13.4%	0.34	0.69	1.00	0.3%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Total Fund	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
OPEB Master Trust	100.0%	2,394	2,618	-12.2%	-15.2%	-11.2%	4.4%	5.8%	--	5.9%
OPEB Master Trust Policy Benchmark				-12.2%	-15.2%	-11.0%	4.2%	5.4%	--	5.0%
Sub-Trusts										
Los Angeles County	97.2%	2,327	2,545	-12.2%	-15.2%	-11.2%	4.4%	5.8%	--	5.4%
LACERA	0.5%	11	10	-12.3%	-15.3%	-11.3%	4.4%	5.8%	--	5.4%
Superior Court	2.3%	56	63	-12.2%	-15.0%	-11.0%	4.4%	5.6%	--	6.6%
OPEB Growth	50.1%	1,200	1,335	-15.7%	-20.3%	-16.3%	6.2%	7.0%	--	8.9%
OPEB Growth Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	6.7%	--	8.7%
OPEB Global Equities	50.1%	1,200	1,335	-15.7%	-20.3%	-16.3%	6.2%	7.0%	--	6.7%
MSCI ACWI IMI Net				-15.8%	-20.4%	-16.5%	6.0%	6.7%	--	6.4%
OPEB Credit	19.9%	476	512	-7.2%	-9.8%	-9.8%	-0.6%	--	--	0.9%
OPEB Credit Policy Benchmark				-7.2%	-10.3%	-9.7%	-0.2%	--	--	1.3%
Liquid Credit										
OPEB BlackRock Bank Loans	10.0%	239	256	-4.5%	-4.8%	-3.4%	1.6%	--	--	2.1%
S&P/LSTA Leverage Loan				-4.5%	-4.6%	-2.8%	2.1%	--	--	2.6%
OPEB BTC EM Debt LC	3.9%	94	102	-8.6%	-14.4%	-19.3%	-6.2%	--	--	-2.7%
JPM GBI-EM Global Diversified				-8.6%	-14.5%	-19.3%	-5.8%	--	--	-2.3%
OPEB BTC High Yield Bonds	6.0%	143	154	-10.0%	-14.2%	-12.9%	-0.3%	--	--	1.6%
BBG BARC US Corp HY				-9.8%	-14.2%	-12.8%	0.2%	--	--	2.0%
OPEB Real Assets & Inflation Hedges	19.9%	475	519	-12.0%	-9.9%	0.5%	5.9%	--	--	5.6%
OPEB RA & IH Policy Benchmark				-12.1%	-10.2%	0.2%	5.6%	--	--	5.5%
OPEB BTC Commodities	3.9%	93	107	-5.8%	19.0%	24.8%	14.5%	--	--	8.8%
Bloomberg Commodity Index Total Return				-5.7%	18.4%	24.3%	14.3%	--	--	8.7%
OPEB BTC REITS	10.1%	241	263	-18.1%	-21.2%	-6.5%	2.3%	--	--	4.1%
DJ US SELECT REAL ESTATE SECURITIES				-18.1%	-21.1%	-6.4%	2.5%	--	--	4.3%
OPEB BTC TIPS	5.9%	141	149	-6.1%	-8.9%	-5.2%	3.1%	--	--	3.6%
Bloomberg U.S. Treasury; U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.5%
OPEB Risk Reduction & Mitigation	10.1%	242	251	-3.7%	-8.2%	-8.2%	-0.5%	1.4%	--	1.3%
OPEB RR & M Policy Benchmark				-3.7%	-8.3%	-8.3%	-0.6%	1.2%	--	1.1%
OPEB BTC Investment Grade Bonds	8.1%	193	201	-4.7%	-10.2%	-10.2%	-0.9%	--	--	1.3%
BBG BARC Agg				-4.7%	-10.3%	-10.3%	-0.9%	--	--	1.2%
OPEB SSGA Cash	2.0%	49	51	0.2%	0.2%	0.2%	0.9%	1.5%	--	1.0%
OPEB Cash Policy Benchmark				0.1%	0.2%	0.2%	0.7%	1.2%	--	0.7%

risk reports

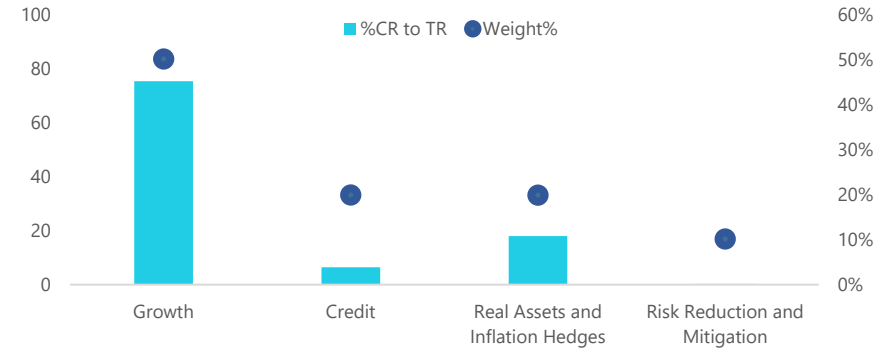
Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	11.94
Benchmark Risk	12.60
Active Risk	0.88
Portfolio Beta	0.95
Effective Duration	1.46

Contribution to Risk

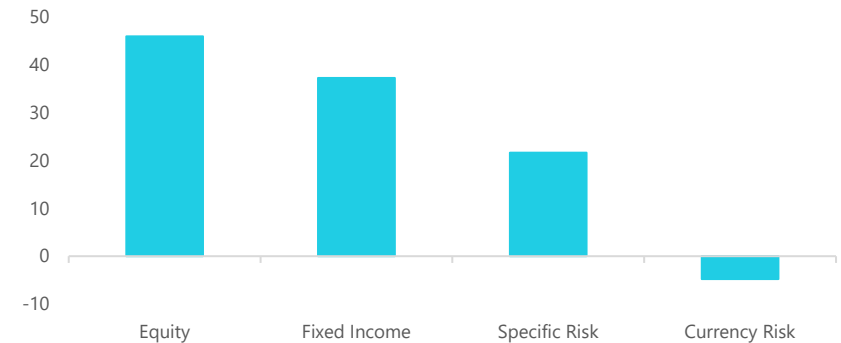


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Total Fund	2,394	100.0%	11.94	11.94	100.00
Growth	1,200	50.1%	18.17	9.00	75.36
Credit	476	19.9%	4.87	0.77	6.43
Real Assets and Inflation Hedges	475	19.9%	12.19	2.14	17.95
Risk Reduction and Mitigation	242	10.1%	4.20	0.03	0.26

Risk Decomposition

Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
Total Risk	11.94	100.00	1.00	0.88	100.00	1.00
Local Market Risk	11.30	94.66	1.00	0.92	104.76	0.98
Common Factor Risk	11.26	94.27	0.99	0.73	83.14	0.87
Equity	10.48	87.77	0.99	0.40	45.91	0.77
Fixed Income	0.78	6.49	0.62	0.33	37.23	0.75
Specific Risk	0.05	0.40	0.06	0.19	21.62	0.47
Currency Risk	0.64	5.34	0.57	-0.04	-4.76	-0.24

Active Risk from Risk Factors



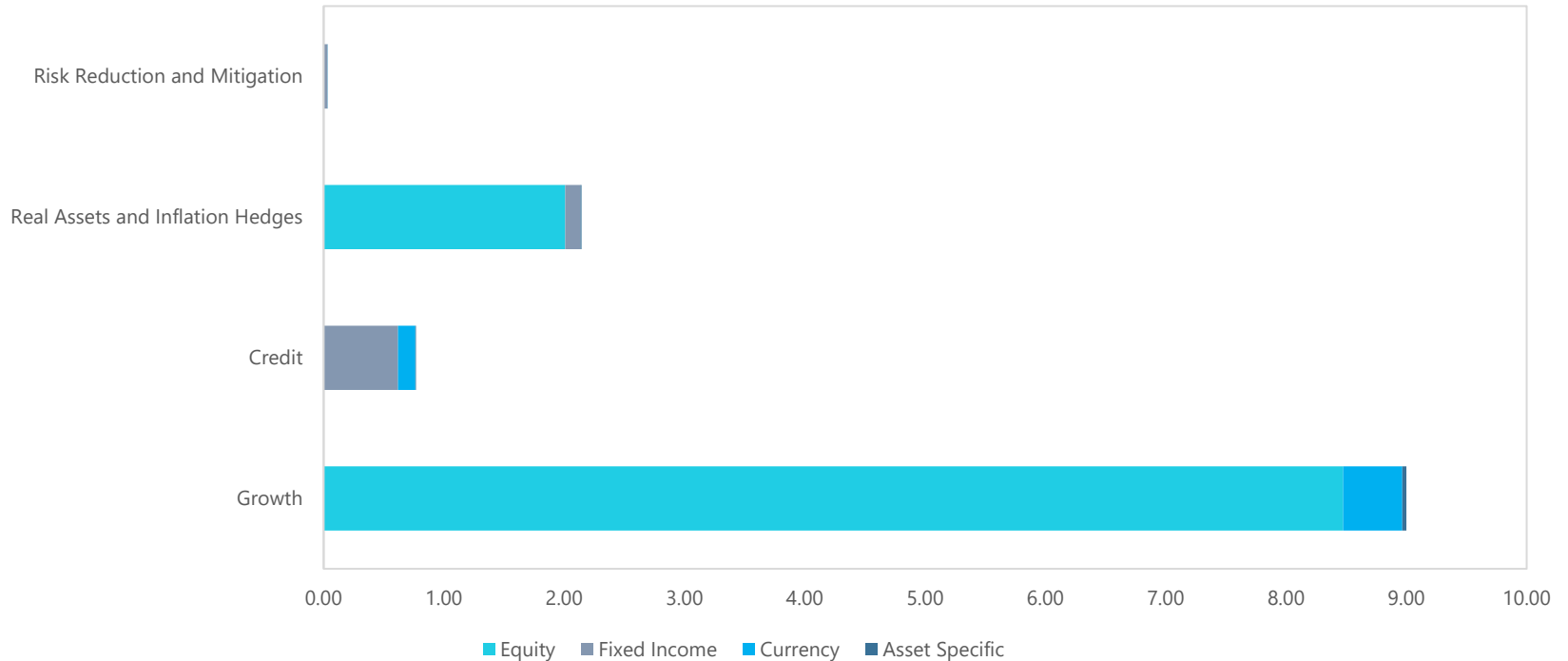
Risk Contribution Breakdown

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Risk Type



Functional Category	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Currency	Asset Specific
Total Fund	2,394	100.0%	11.94	100.00	11.94	10.48	0.78	0.64	0.05
Growth	1,200	50.1%	18.17	75.36	9.00	8.47	0.00	0.49	0.03
Credit	476	19.9%	4.87	6.43	0.77	0.00	0.62	0.14	0.01
Real Assets and Inflation Hedges	475	19.9%	12.19	17.95	2.14	2.01	0.13	0.00	0.01
Risk Reduction and Mitigation	242	10.1%	4.20	0.26	0.03	0.00	0.03	0.00	0.00

Allocation Selection

for the quarter ended June 30, 2022

Active Total Risk

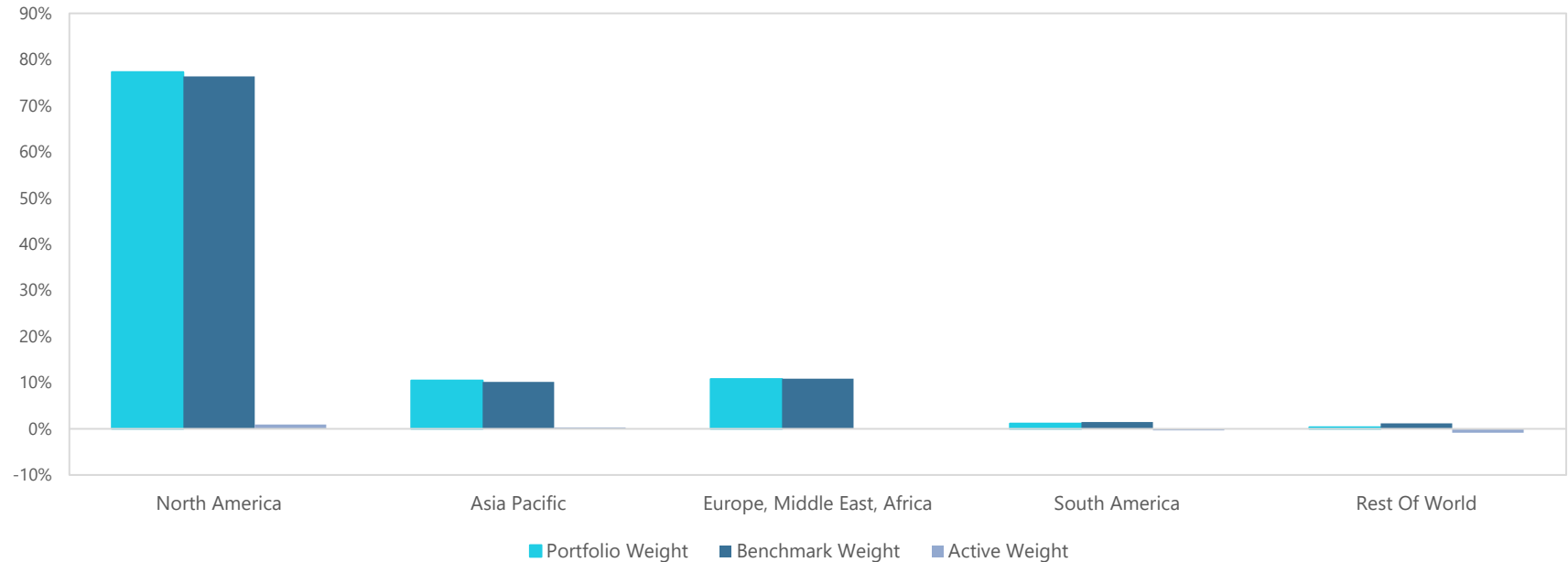


Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
Active Total Risk				0.00			0.87	0.88
Growth	0.12	6.18	-0.54	0.00	0.08	0.70	0.03	0.03
Credit	-0.10	8.85	0.63	-0.01	2.35	0.68	0.32	0.31
Real Assets and Inflation Hedges	-0.14	6.32	-0.30	0.00	3.11	0.85	0.52	0.53
Risk Reduction and Mitigation	0.10	13.04	0.72	0.01	0.22	0.04	0.00	0.01

Portfolio Allocation

for the quarter ended June 30, 2022

By Region

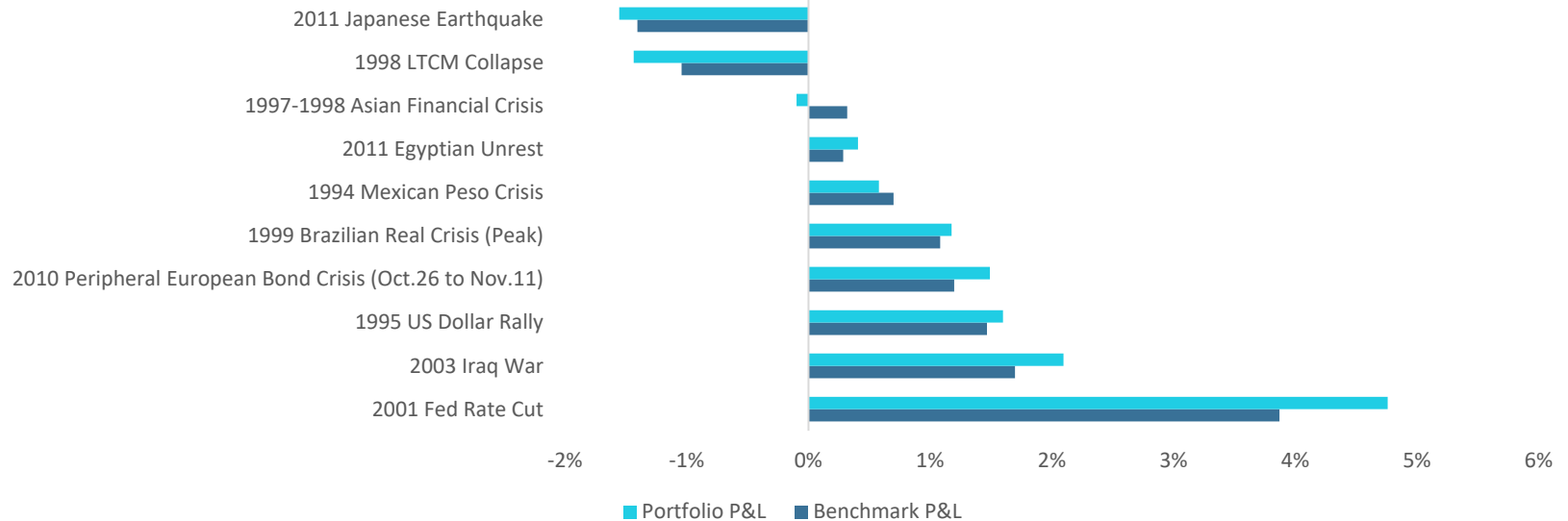


Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	11.94	0.88	100.00	0.01
North America	77.28%	76.34%	0.94%	11.48	0.90	103.18	0.06
Asia Pacific	10.47%	10.16%	0.31%	14.47	0.03	3.89	0.06
Europe, Middle East, Africa	10.79%	10.85%	-0.07%	17.25	-0.01	-1.65	0.05
South America	1.12%	1.46%	-0.34%	19.12	-0.01	-1.21	0.05
Rest Of World	0.35%	1.19%	-0.84%	9.18	-0.04	-4.21	0.05

Stress Tests

for the quarter ended June 30, 2022

Top 10 Best Stress Scenarios

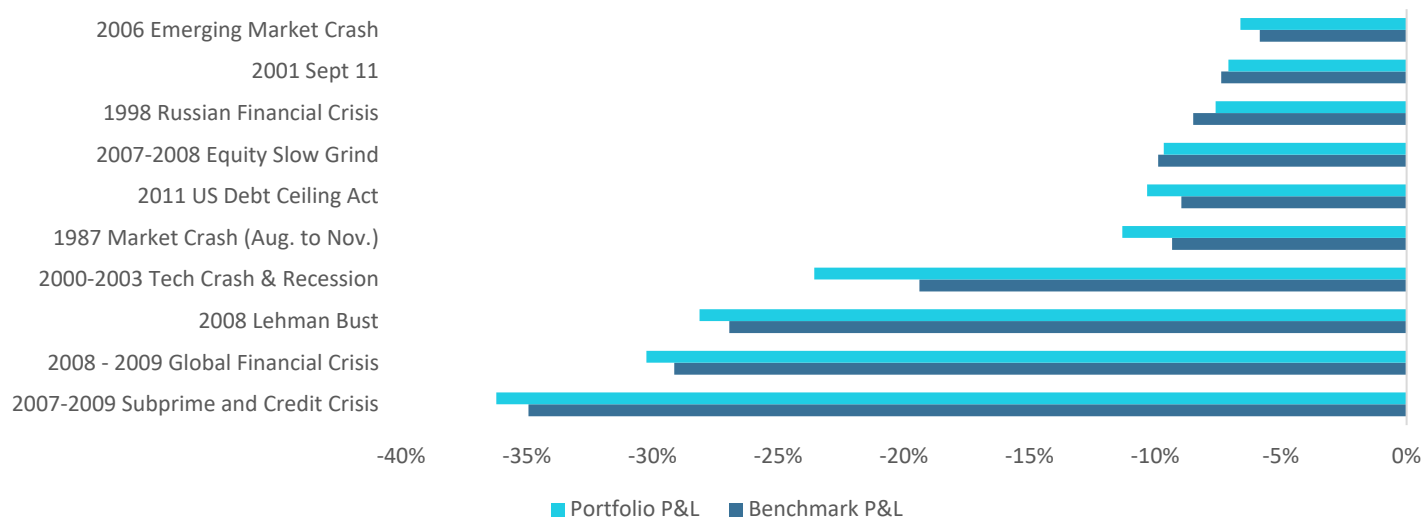


Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.76%	3.87%	124,124,576
2003 Iraq War	2.09%	1.70%	54,628,592
1995 US Dollar Rally	1.60%	1.47%	41,681,673
2010 Peripheral European Bond Crisis (Oct.26 to Nov.11)	1.49%	1.20%	38,865,462
1999 Brazilian Real Crisis (Peak)	1.18%	1.08%	30,670,404
1994 Mexican Peso Crisis	0.58%	0.70%	15,092,700
2011 Egyptian Unrest	0.41%	0.28%	10,591,924
1997-1998 Asian Financial Crisis	-0.10%	0.32%	(2,566,038)
1998 LTCM Collapse	-1.44%	-1.04%	(37,453,153)
2011 Japanese Earthquake	-1.55%	-1.41%	(40,548,845)

Stress Tests

for the quarter ended June 30, 2022

Top 10 Worst Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-36.22%	-34.94%	(944,529,833)
2008 - 2009 Global Financial Crisis	-30.24%	-29.13%	(788,706,073)
2008 Lehman Bust	-28.13%	-26.95%	(733,723,008)
2000-2003 Tech Crash & Recession	-23.57%	-19.38%	(614,660,564)
1987 Market Crash (Aug. to Nov.)	-11.31%	-9.33%	(295,039,101)
2011 US Debt Ceiling Act	-10.32%	-8.96%	(269,277,974)
2007-2008 Equity Slow Grind	-9.66%	-9.89%	(251,914,283)
1998 Russian Financial Crisis	-7.60%	-8.49%	(198,130,869)
2001 Sept 11	-7.09%	-7.38%	(184,858,693)
2006 Emerging Market Crash	-6.61%	-5.84%	(172,362,084)

appendix

A

ANNUAL RETURN

The total return of a security over a specified period, expressed as an annual rate of interest.

ACTIVE RISK

The expected standard deviation of the differential return between the portfolio and the benchmark. Active total risk arises from active management, and it is the result of active weights (deviations from the benchmark at the asset level) and therefore active exposures; for passively managed portfolios, it is referred to as “total tracking error.”

ACTIVE RISK CONTRIBUTION

Percent contribution to active total risk (or tracking error). The percent of active total risk that an individual asset or risk source contributes. For example, a % CR to Active Total Risk of 10% indicates that 10% of the portfolio’s active total risk is arising from the active position in that particular asset.

B

BASIS POINTS (BPS)

One one-hundredth of one percent. One hundred basis points equal one percent.

BETA

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market; a beta of more than one indicates higher risk than the market.

D

DURATION

A measure of the price sensitivity of a bond portfolio to changes in interest rates.

F

FUTURES CONTRACT

Agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price and a stipulated future date.

H

HIGH YIELD BOND

A bond with a low investment quality and credit worthiness, usually with a rating of BB or less.

I

INFORMATION RATIO

The excess return (alpha) per unit of active risk (tracking error).

INTERNAL RATE OF RETURN (IRR)

A total rate of return that gives full weight to the size and timing of cash flows over the period measured and fully reflects unrealized gains and losses in addition to realized gains and losses, interest and dividend income.

M

MC TO TOTAL TRACKING ERROR

This value represents the change in the active risk of an asset's portfolio or group that would result from a one percent increase in the asset's effective position plus an equal short position in the benchmark.

O

OPEB CASH POLICY BM

Inception – 9/30/21
FTSE 6 M Treasury Bill Index
10/1/21 – Present
FTSE 3 M Treasury Bill Index

OPEB MT CREDIT POLICY BM

Inception – 9/30/21
50% S&P/LSTA Leverage Loan Index / 30%
BBG BARC US Corp HY Index / 20% JPM
GBI-EM Global Diversified Index
10/1/21 – Present
100% OPEB MT Liquid Credit Policy BM

OPEB MT LIQUID CREDIT POLICY BM

46% Credit Suisse Leverage Loan Index /
38% BBG BARC US Corp HY Index / 8%
JPM EMBI Global Diversified Index / 4% JPM
GBI-EM Global Diversified Index / 4% JPM
CEMBI Broad Diversified Index

OPEB MT GROWTH POLICY BM

MSCI ACWI IMI Net

OPEB MT POLICY BM

Inception – 6/30/18
80% MSCI ACWI IMI Net / 20% FTSE 6 M
Treasury Bill Index
7/1/18 – Present
50% OPEB MT Growth Policy BM / 20%
OPEB MT Credit Policy BM / 20% OPEB MT
RA & IH Policy BM / 10% OPEB BM RR & M
Policy BM

OPEB MT RA & IH POLICY BM

50% DJ US SELECT REAL ESTATE
SECURITIES INDEX / 30% BBG BARC US
Treasury TIPS Index / 20% Bloomberg
Commodity Index Total Return

OPEB MT RR & M POLICY BM

Inception – 6/30/18
FTSE 6 M Treasury Bill Index
7/1/18 – 9/30/21
80% BBG BARC Agg / 20% FTSE 6 M
Treasury Bill Index
10/1/21 – Present
80% BBG BARC Agg / 20% FTSE 3 M
Treasury Bill Index

S

SHARPE RATIO

Average return earned in excess of the risk-free rate per unit of total risk.

STANDARD DEVIATION

Statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater the degree of dispersion, the greater the risk.

T

TIME-WEIGHTED RETURN (TWR)

A measure of the compound rate of growth in a portfolio. Often used to compare the returns of investment managers because it eliminates the distorting effects on growth rates created by inflows and outflows of money.

TOTAL RISK

The total (gross) risk to an asset (or portfolio), which is the standard deviation of the asset's total return distribution, expressed in percent. Total risk is forecasted using MSCI Barra's multiple factor models. The total risk for an asset depends on the asset's exposures to the risk factors, the factor variance/covariance matrix, and the forecast selection risk of the asset.

TOTAL RISK CONTRIBUTION

The percent of total risk that an individual asset or risk source contributes. For example, a % CR to Total Risk of 10% indicates that 10% of the portfolio's total risk is arising from the portfolio's position in that particular asset.

Y

YIELD TO MATURITY

The return a bond earns on the price at which it was purchased if it were held to maturity. It assumes that coupon payments can be reinvested at the yield to maturity.

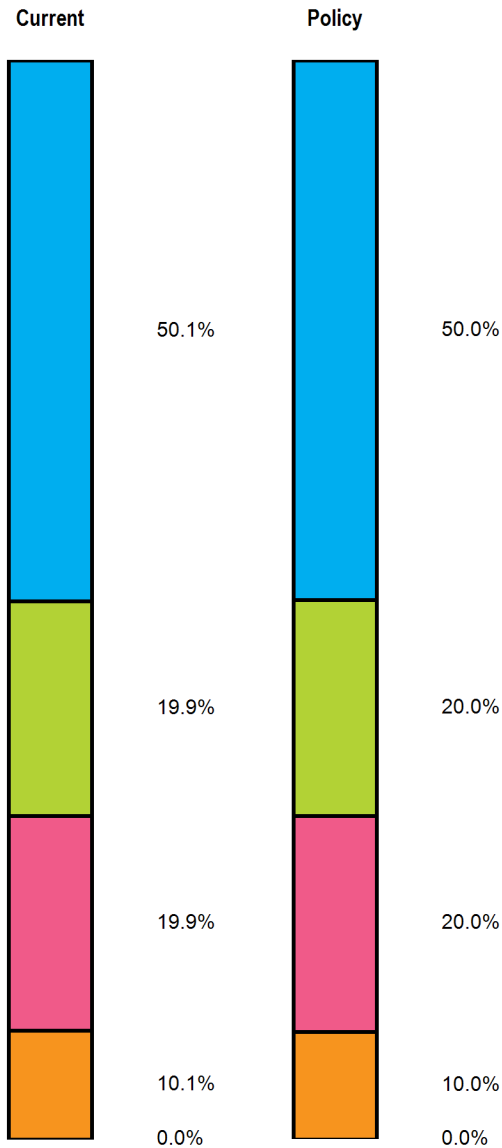
MEKETA

INVESTMENT GROUP

OPEB Master Trust

June 30, 2022

Fund Evaluation Report

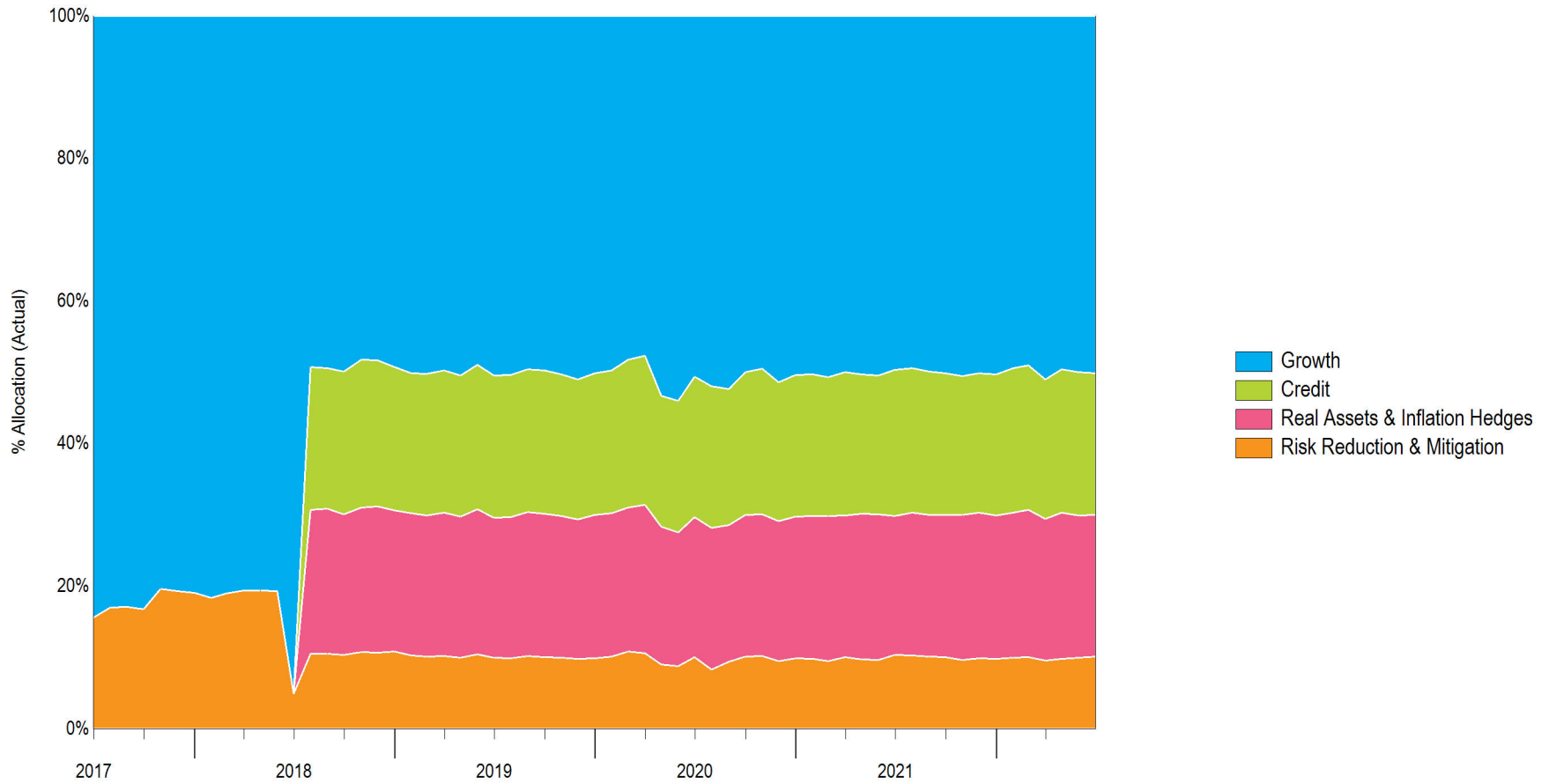


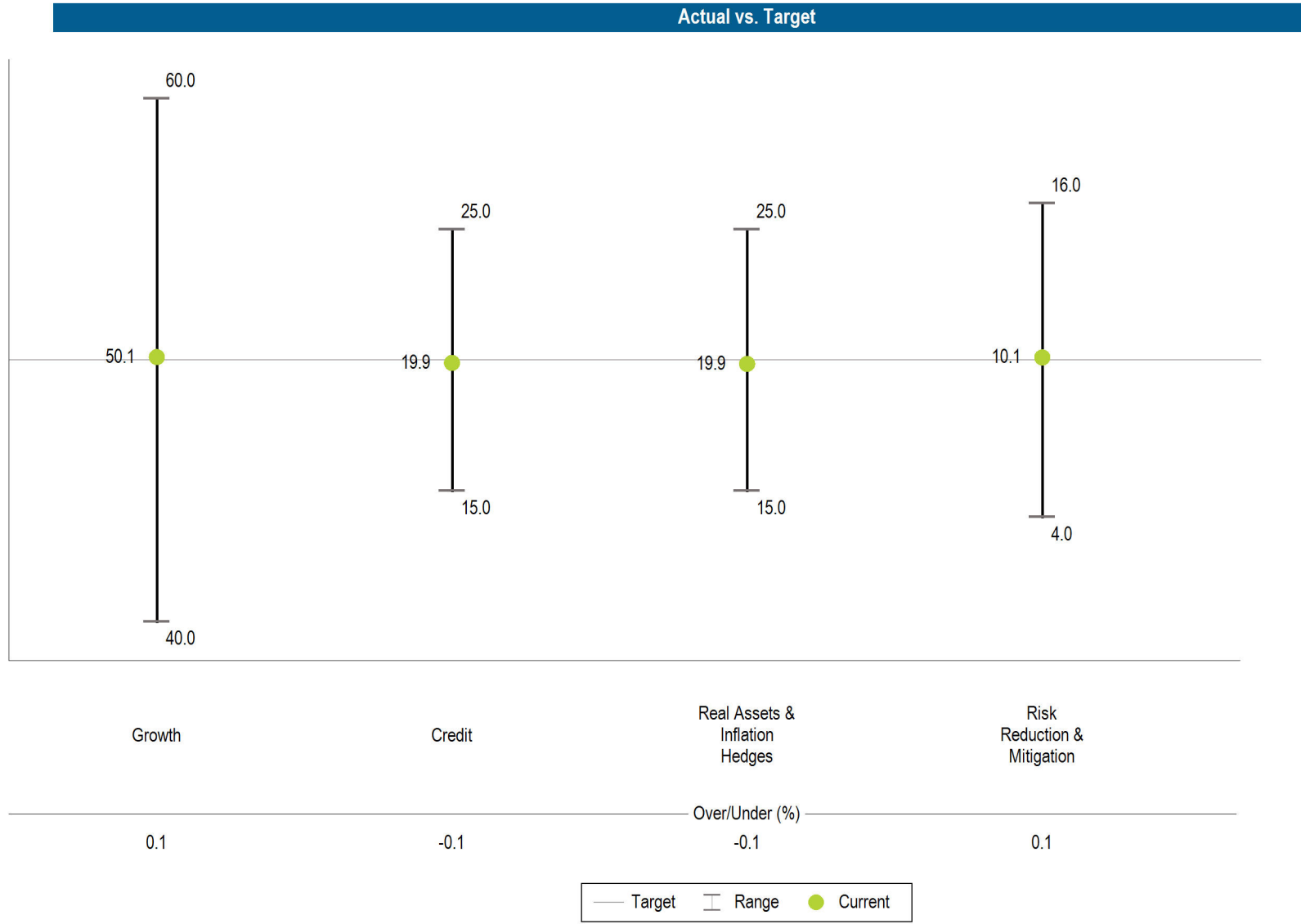
Allocation vs. Target						
	Current Balance	Current Allocation	Policy	Policy Range	Within IPS Range?	
Growth	\$1,199,698,795	50.1%	50.0%	40.0% - 60.0%	Yes	
Global Equity	\$1,199,698,795	50.1%	50.0%	40.0% - 60.0%	Yes	
Private Equity	\$0	0.0%	0.0%	0.0% - 5.0%	Yes	
Credit	\$476,248,209	19.9%	20.0%	15.0% - 25.0%	Yes	
Liquid Credit	\$476,248,209	19.9%	20.0%	15.0% - 25.0%	Yes	
Illiquid Credit	\$0	0.0%	0.0%	0.0% - 5.0%	Yes	
Real Assets & Inflation Hedges	\$475,332,777	19.9%	20.0%	15.0% - 25.0%	Yes	
Real Estate	\$241,130,700	10.1%	10.0%	6.0% - 14.0%	Yes	
Natural Resources	\$0	0.0%	0.0%	0.0% - 2.0%	Yes	
Commodities	\$92,737,291	3.9%	4.0%	2.0% - 6.0%	Yes	
Infrastructure	\$0	0.0%	0.0%	0.0% - 2.0%	Yes	
TIPS	\$141,464,786	5.9%	6.0%	2.0% - 10.0%	Yes	
Risk Reduction & Mitigation	\$241,955,544	10.1%	10.0%	4.0% - 16.0%	Yes	
Investment Grade Bonds	\$193,282,241	8.1%	8.0%	4.0% - 12.0%	Yes	
Long-Term Government Bonds	\$0	0.0%	0.0%	0.0% - 5.0%	Yes	
Cash	\$48,626,845	2.0%	2.0%	0.0% - 4.0%	Yes	
Operational Cash²	\$454,014	0.0%	0.0%			
Total¹	\$2,394,033,263	100.0%	100.0%			

¹Total market value includes cash held at the participant level.

² includes unsettled trade activity.

Asset Allocation History 5 Years Ending June 30, 2022





Trailing Net Performance

	Market Value ¹ (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Total Fund (Net)	2,394,033,263	100.0	-12.2	-11.2	-11.2	4.4	5.8
Total Fund (Gross)			-12.2	-11.2	-11.2	4.5	5.8
<i>Custom OPEB Master Trust BM</i>			<u>-12.2</u>	<u>-11.1</u>	<u>-11.1</u>	<u>4.2</u>	<u>5.4</u>
Excess Return (vs. Net)			0.0	-0.1	-0.1	0.2	0.4
Growth (Net)	1,199,698,795	50.1	-15.7	-16.3	-16.3	6.2	7.0
Growth (Gross)			-15.7	-16.3	-16.3	6.3	7.0
OPEB Global Equity (Net)	1,199,698,795	50.1	-15.7	-16.3	-16.3	6.2	7.0
OPEB Global Equity (Gross)			-15.7	-16.3	-16.3	6.3	7.0
<i>MSCI ACWI IMI Net (DAILY)</i>			<u>-15.8</u>	<u>-16.5</u>	<u>-16.5</u>	<u>6.0</u>	<u>6.7</u>
Excess Return (vs. Net)			0.1	0.2	0.2	0.2	0.3
Credit (Net)	476,248,209	19.9	-6.8	-9.4	-9.4	-0.5	--
Credit (Gross)			-7.2	-9.7	-9.7	-0.5	--
Liquid Credit (Net)	476,248,209	19.9	-7.2	--	--	--	--
Liquid Credit (Gross)			-7.2	--	--	--	--
<i>OPEB Liquid Credit BM</i>			<u>-7.2</u>	--	--	--	--
Excess Return (vs. Net)			0.0				
OPEB BTC Bank Loans (Net)	238,853,571	10.0	-4.5	-3.4	-3.4	1.6	--
OPEB BTC Bank Loans (Gross)			-4.9	-3.8	-3.8	1.4	--
<i>S&P/LSTA Leveraged Loan TR</i>			<u>-4.5</u>	<u>-2.8</u>	<u>-2.8</u>	<u>2.1</u>	--
Excess Return (vs. Net)			0.0	-0.6	-0.6	-0.5	

Fiscal Year begins July 1.

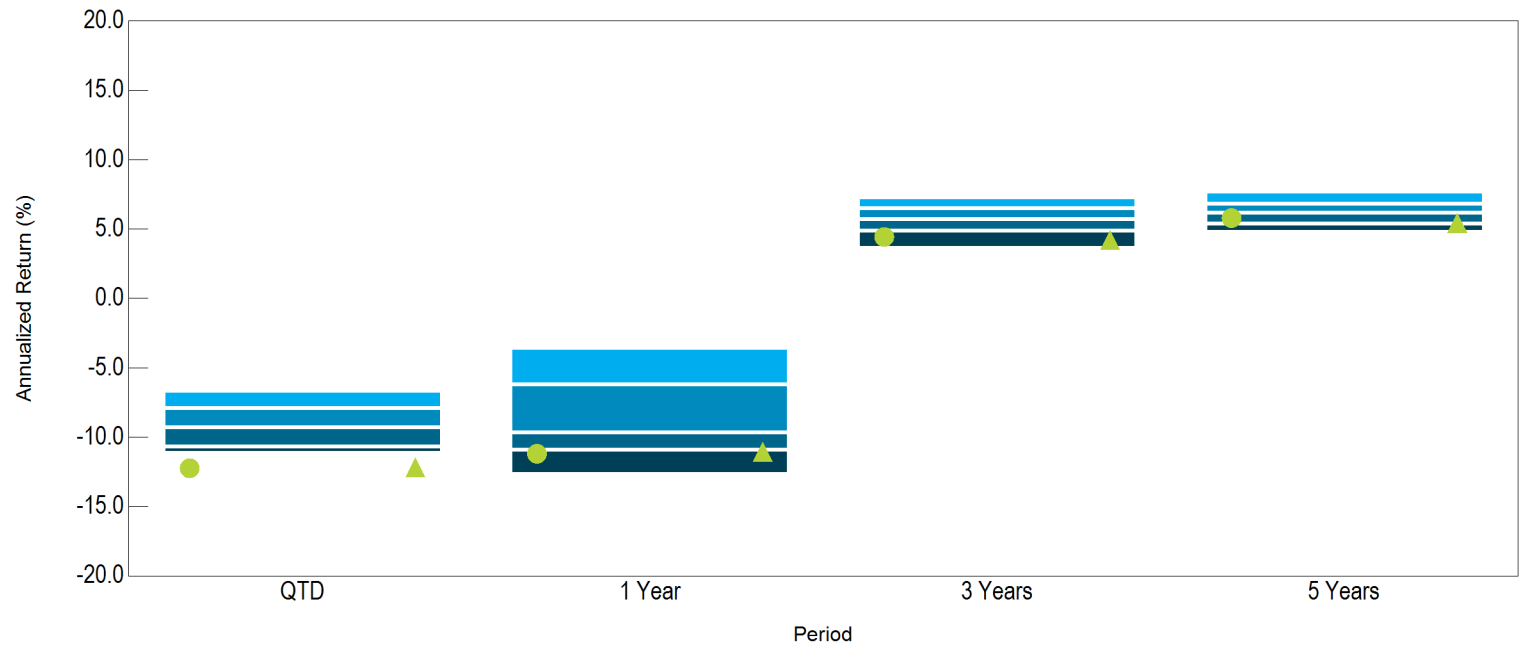
¹Total market value includes cash held at the participant level.

The OPEB Master Trust started in February 2013

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
OPEB BTC EM Debt LC (Net)	94,456,953	3.9	-8.6	-19.3	-19.3	-6.2	--
OPEB BTC EM Debt LC (Gross)			-8.6	-19.2	-19.2	-6.1	--
<i>JPM GBI-EM Global Diversified Index</i>			<u>-8.6</u>	<u>-19.3</u>	<u>-19.3</u>	<u>-5.8</u>	--
Excess Return (vs. Net)			0.0	0.0	0.0	-0.4	
OPEB BTC High Yield Bonds (Net)	142,937,686	6.0	-10.0	-12.8	-12.8	-0.3	--
OPEB BTC High Yield Bonds (Gross)			-10.0	-12.7	-12.7	-0.2	--
<i>BBgBarc US High Yield TR</i>			<u>-9.8</u>	<u>-12.8</u>	<u>-12.8</u>	<u>0.2</u>	--
Excess Return (vs. Net)			-0.2	0.0	0.0	-0.5	
Real Assets & Inflation Hedges (Net)	475,332,777	19.9	-12.0	0.5	0.5	5.9	--
Real Assets & Inflation Hedges (Gross)			-12.0	0.5	0.5	5.9	--
OPEB BTC Commodities (Net)	92,737,291	3.9	-5.8	24.8	24.8	14.5	--
OPEB BTC Commodities (Gross)			-5.7	24.3	24.3	14.4	--
<i>Bloomberg Commodity Index TR USD</i>			<u>-5.7</u>	<u>24.3</u>	<u>24.3</u>	<u>14.3</u>	--
Excess Return (vs. Net)			-0.1	0.5	0.5	0.2	
OPEB BTC REITs (Net)	241,130,700	10.1	-18.1	-6.5	-6.5	2.4	--
OPEB BTC REITs (Gross)			-18.1	-6.4	-6.4	2.7	--
<i>DJ US Select REIT TR USD</i>			<u>-18.1</u>	<u>-6.4</u>	<u>-6.4</u>	<u>2.6</u>	--
Excess Return (vs. Net)			0.0	-0.1	-0.1	-0.2	
OPEB BTC TIPS (Net)	141,464,786	5.9	-6.1	-5.1	-5.1	3.1	--
OPEB BTC TIPS (Gross)			-6.1	-5.1	-5.1	3.1	--
<i>BBgBarc US TIPS TR</i>			<u>-6.1</u>	<u>-5.1</u>	<u>-5.1</u>	<u>3.1</u>	--
Excess Return (vs. Net)			0.0	0.0	0.0	0.0	

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Risk Reduction & Mitigation (Net)	241,955,544	10.1	-3.7	-8.2	-8.2	-0.5	1.4
Risk Reduction & Mitigation (Gross)			-3.7	-8.2	-8.2	-0.5	1.4
OPEB BTC Investment Grade Bonds (Net)	193,282,241	8.1	-4.7	-10.2	-10.2	-0.9	--
OPEB BTC Investment Grade Bonds (Gross)			-4.7	-10.2	-10.2	-0.9	--
<i>BBgBarc US Aggregate TR</i>			<u>-4.7</u>	<u>-10.3</u>	<u>-10.3</u>	<u>-1.0</u>	--
Excess Return (vs. Net)			0.0	0.1	0.1	0.1	
OPEB Cash (Net)	48,626,845	2.0	0.2	0.2	0.2	0.9	1.5
OPEB Cash (Gross)			0.2	0.2	0.2	0.9	1.5
<i>Custom Cash BM</i>			<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	<u>0.7</u>	<u>1.2</u>
Excess Return (vs. Net)			0.1	0.0	0.0	0.2	0.3
Operational Cash (Net)	454,014	0.0					
Operational Cash (Gross)							

InvMetrics Public DB \$1-5B (net) USD Return Comparison



Return (Rank)

5th Percentile	-6.7		-3.6		7.3		7.7	
25th Percentile	-7.9		-6.1		6.5		6.9	
Median	-9.2		-9.6		5.7		6.2	
75th Percentile	-10.6		-10.9		4.9		5.4	
95th Percentile	-11.1		-12.6		3.6		4.8	
# of Portfolios	40		40		39		39	
● Total Fund	-12.2	(99)	-11.2	(79)	4.4	(90)	5.8	(66)
▲ Custom OPEB Master Trust BM	-12.2	(99)	-11.1	(77)	4.2	(92)	5.4	(75)

Benchmark History
As of June 30, 2022

Total Fund

10/01/2021	Present	Custom OBEP Master Trust BM
2/28/2013	09/30/21	Custom OPEB Master Trust BM
2/01/2014	6/30/2018	80% MSCI ACWI IMI Net / 20% FTSE 6M T-Bill Index
2/01/2013	1/31/2014	FTSE 6M T-Bill Index

Custom OPEB Total Fund:50% Custom OBEP MT Growth, 20% Custom OBEP MT Credit Pool, 10% Custom OBEP MT RR & M Pool, 20% Custom OBEP MT RA & IH Pool.

WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE"RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.


CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM", "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

FOR INFORMATION ONLY

September 6, 2022

TO: Trustees – Board of Investments

FROM: Scott Zdrzil 
Principal Investment Officer

FOR: September 14, 2022, Board of Investments Meeting

SUBJECT: **PRINCIPLES FOR RESPONSIBLE INVESTMENT BOARD NOMINATION WINDOW**

The Principles for Responsible Investment (PRI), to which LACERA is a signatory, has opened a nomination window for its 2022 annual board elections. The PRI board is comprised of eleven individuals, including seven asset owner representatives who are elected to staggered three-year terms. PRI is soliciting nominations for one asset owner position with a deadline of September 16, 2022.

In consultation with the Chair of the Corporate Governance Committee as per LACERA's *Corporate Governance and Stewardship Principles*, LACERA is recommending that LACERA not put forward a nominee at this time in order to support PRI's stated aim for a more geographically inclusive board. Although all asset owner signatories are eligible to put forward nominees, PRI has specifically highlighted that it is encouraging nominees from signatories based in emerging market signatories to lend further balance and diversity in board members and facilitate broader regional input into PRI's governing board. LACERA, consistent with our *Corporate Governance and Stewardship Principles*, has supported encouraging a diverse mix of backgrounds on the PRI board, including diverse geographic market representation, to strengthen its global reach. LACERA has voted in support of greater emerging market participation in PRI board elections.

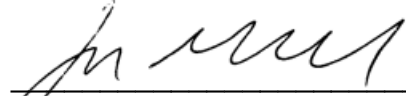
LACERA continues to actively collaborate and demonstrate leadership within PRI to support shared objectives. LACERA's Chief Investment Officer serves on PRI's Asset Owner Advisory Committee, staff have participated on a Private Equity Advisory Committee and a regional North American coordinating committee, and staff have led roundtable discussions on diversity, equity, and inclusion and spoken at PRI events.

This notification is being provided to the Board of Investments to keep Trustees apprised of nominating windows at affiliated associations, per LACERA's policy and practice.

Each Trustee, Board of Investments
September 6, 2022
Page 2 of 2

More information about PRI's governance and upcoming board elections is available online at: <https://www.unpri.org/about-us/governance/2022-pri-board-annual-elections>

Noted and Reviewed:



Jonathan Grabel
Chief Investment Officer

FOR INFORMATION ONLY

August 24, 2022

TO: Trustees – Board of Investments

FROM: Scott Zdrzil ^{Sc}
Principal Investment Officer

FOR: September 14, 2022, Board of Investments Meeting

SUBJECT: **INTERNATIONAL CORPORATE GOVERNANCE NETWORK (ICGN)
ANNUAL GENERAL MEETING BALLOT**

Please find attached LACERA's member ballot for the annual meeting of the International Corporate Governance Network (ICGN) scheduled for September 6, 2022. The ballot included approval of the minutes of the 2021 annual general meeting, approval to receive annual report, approval to receive annual financial reports, ratification of auditors, election of ICGN Nomination Committee members, and the election of ICGN board members.

In adherence to LACERA's *Corporate Governance and Stewardship Principles* policy, staff reviewed the voting items to apply votes consistent with LACERA's governance principles and consulted with the Chair of the Corporate Governance Committee to execute LACERA's ballot in advance of the voting deadline.

Attachment

Noted and Reviewed:



Jonathan Grabel
Chief Investment Officer

**International Corporate Governance Network
2022 Annual General Member Meeting
Copy of Submitted Votes**

Member: 1 vote(s)
No. of Shares Held

To vote all your shares on a resolution, simply select your vote below. You may also just vote some of your shares by tapping the relevant link provided.

Resolution 1

To receive the Minutes of the 2021 Annual General Meeting.

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 2

To receive the ICGN Annual Review.

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 3

To receive the ICGN Financial Statements for the year ended 31 December 2021.

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 4

To approve the appointment of the auditor for the 2022 financial statements.

Voted "For" successfully.
1 vote(s)

Resolution 5.1

To approve the recommendation of the ICGN Board to appoint the following individuals to the ICGN Nomination Committee 2022-23: Richard Bennett

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 5.2

To approve the recommendation of the ICGN Board to appoint the following individuals to the ICGN Nomination Committee 2022-23: Deborah Gilshan

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 5.3

To approve the recommendation of the ICGN Board to appoint the following individuals to the ICGN Nomination Committee 2022-23: George Iguchi

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 5.4

To approve the recommendation of the ICGN Board to appoint the following individuals to the ICGN Nomination Committee 2022-23: Carola van Lamoen

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 5.5

To approve the recommendation of the ICGN Board to appoint the following individuals to the ICGN Nomination Committee 2022-23: Anne Molyneux

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.1

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Debby Blakey

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.2

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Ian Burger

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.3

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Christine Chow

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.4

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Michael Herskovich

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.5

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Seiji Kawazoe

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.6

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Dan Konigsburg

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.7

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Robert Lewenson

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.8

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Luz Rodriguez

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.9

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Paul Schneider

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.10

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Susanne Stormer

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.11

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Jenn-Hui Tann

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

Resolution 6.12

To approve the recommendation of the ICGN Nomination Committee to appoint the following individuals to the ICGN Board 2022-23: Theresa Taylor

Voted "For" successfully.
1 vote(s)

[Cancel Vote](#)

FOR INFORMATION ONLY

August 24, 2022

TO: Trustees – Board of Investments

FROM: Scott Zdrzil 
Principal Investment Officer

FOR: September 14, 2022, Board of Investments Meeting

**SUBJECT: SUSTAINABILITY ACCOUNTING STANDARDS BOARD (SASB)
ALLIANCE CONVERSION TO IFRS SUSTAINABILITY ALLIANCE**

This memo is being provided to apprise Trustees that LACERA's affiliation to the Sustainability Accounting Standards Board (SASB) Investor Alliance and Investor Advisory Group, as approved by the Board of Investments on August 14, 2019, is being automatically transferred to the successor entity, the International Financial Reporting Standards (IFRS) Sustainability Alliance. This development follows the IFRS' incorporation of the SASB Standards into a newly-established International Sustainability Standards Board (ISSB) as of August 1, 2022, as previously anticipated and reported to the Board of Investments, including in a presentation with former SASB Executive Director and current Special Adviser to the IFRS, Janine Guillot, at the April 2022 meeting of the Board of Investments Corporate Governance Committee.

Background

By way of background, the SASB Standards identify financially material, industry-specific environmental, social, and governance (ESG) factors in 77 industries that may impact enterprise value, as informed by companies, investors, and empirical research. LACERA affiliated to SASB's Investor Alliance in 2019 to participate in collaborative efforts to encourage portfolio companies to use SASB guidance to report ESG data and increase the quality and availability of comparable, consistent, and investment-useful ESG information in the market. In doing so, LACERA aimed to expand investment-useful, timely, reliable, and comparable data on companies' key performance metrics, consistent with LACERA's *Corporate Governance and Stewardship Principles*.

In recent years, the market adoption and use of SASB Standards has notably grown. As of 2021, for example, over half of the Standards and Poor's Global 1200 Index constituent companies used SASB Standards on a voluntary basis to guide their corporate disclosures. In early 2022, SASB along with the IFRS and other parties announced an intent to consolidate ESG reporting frameworks into a newly established ISSB under the IFRS structure, per above, to harmonize reporting guidance across markets. The IFRS has created the IFRS Sustainability Alliance as the successor entity to the SASB Investor Alliance in light of its productive results, growth, and members' continuing interest.

Affiliation Benefits and Costs

LACERA's affiliation to the IFRS Alliance successor entity continues to provide the same resources and benefits as LACERA has had as a participant in the SASB Investor Alliance, including:

- Collaboration to expand adoption and incorporation of the SASB standards;
- Best practice sharing on the use and application of the SASB standards among asset owners, asset managers, companies, and regulators; and
- Education on standards development, application and integration into the investment process, global policy developments, and academic research.

There are no formal obligations of LACERA as an IFRS Alliance affiliate. LACERA's dues remain the same with the successor entity as well, at \$8,500 per year.

Through ongoing participation in the successor entity, LACERA continues to be joined by over 300 global asset owners, asset managers, companies, and market participants, including CalPERS, CalSTRS, Texas TRS, New York State Teachers, BlackRock, State Street, Standard and Poors, and others. LACERA also continues to be listed as an Alliance member on the IFRS Alliance website (see current members at the following: <https://www.ifrssustainabilityalliance.org/fsa/member-organizations/>). Chief Investment Officer Jonathan Grabel and Principal Investment Officer Scott Zdrzil continue to serve as ongoing contact points and liaisons to the Alliance. LACERA staff anticipates continuing to provide periodic updates on the IFRS ISSB as part of the Corporate Governance Committee's regular course of oversight and authority.

Noted and Reviewed:




Jonathan Grabel
Chief Investment Officer

FOR INFORMATION ONLY

August 30, 2022

TO: Each Trustee
Board of Retirement
Board of Investments

FROM: Barry W. Lew 
Legislative Affairs Officer

FOR: September 7, 2022 Board of Retirement Meeting
September 14, 2022 Board of Investments Meeting

SUBJECT: **Monthly Status Report on Legislation**

Attached is the monthly report on the status of legislation that staff is monitoring or on which LACERA has adopted a position.

Reviewed and Approved:



Steven P. Rice, Chief Counsel

Attachments

LACERA Legislative Report Index
LACERA Legislative Report

cc: Santos H. Kreimann
Luis Lugo
JJ Popowich
Laura Guglielmo
Steven P. Rice
Jon Gabel
Scott Zdrasil
Tony Roda, Williams & Jensen
Shari McHugh, McHugh Koepke & Associates
Naomi Padron, McHugh Koepke & Associates

LACERA Legislative Report
 2021-22 Legislative Session
 Status as of August 30, 2022

PUBLIC RETIREMENT	AUTHOR	TITLE	PAGE
AB 551	Rodriguez (D)	Disability Retirement: Covid-19: Presumption	1
AB 826	Irwin (D)	Compensation and Compensation Earnable	1
AB 1667	Cooper (D)	State Teachers' Retirement System: Administration	1
AB 1722	Cooper (D)	Public Employees' Retirement: Safety Members	2
AB 1824	Public Employment and Retirement Cmt.	Public Employees' Retirement	2
AB 1971	Cooper (D)	County Employees Retirement Law of 1937	2
AB 2443	Cooley (D)	Judges' Retirement System II: Benefits	3
AB 2493	Chen (R)	County Employees' Retirement Disallowed Compensation	3
HR 2954	Neal (D)	Strong Retirement	3
HR 6241	Thompson M (D)	Use of Retirement Funds	3
S 1703	Grassley (R)	Retirement Plan Administration	4
S 1770	Cardin (D)	Retirement Provisions	4
PUBLIC INVESTMEENT			
SB 1173	Gonzalez (D)	Public Retirement Systems: Fossil Fuels: Divestment	4
SB 1328	McGuire (D)	Investments and Contracts: Russia and Belarus	4
WORKERS COMPENSATION			
AB 334	Mullin (D)	Workers Compensation: Skin Cancer	5
AB 1751	Daly (D)	Workers' Compensation: COVID-19: Critical Workers	5
SB 213	Cortese (D)	Workers Compensation: Hospital Employees	5
SB 284	Stern (D)	Workers' Compensation: Firefighters and Peace Officers	6
SB 335	Cortese (D)	Workers' Compensation: Liability	6
BROWN ACT			
AB 1944	Lee (D)	Local Government: Open and Public Meetings	6
AB 2449	Rubio (D)	Open Meetings: Local Agencies: Teleconferences	7
AB 2647	Levine (D)	Local Government: Open Meetings	7
SB 1100	Cortese (D)	Open Meetings: Orderly Conduct	7
PUBLIC RECORDS ACT			
AB 343	Fong (R)	California Public Records Act Ombudsperson	8
AB 386	Cooper (D)	Public Employees Retirement: Investments: Confidential	8
SOCIAL SECURITY			
HR 82	Davis R (R)	Government Pension Offset Repeal	8
HR 2337	Neal (D)	Noncovered Employment	9
HR 5723	Larson (D)	Social Security System Benefits	9
S 1302	Brown S (D)	Pension Offset	9
HEALTHCARE			
HR 4148	Malinowski (D)	First Responders Medicare Option	9
S 2236	Brown S (D)	Medicare Buy In Option for First Responders	10

PUBLIC RETIREMENT

CA AB 551	<p>AUTHOR: Rodriguez [D] TITLE: Disability Retirement: Covid-19: Presumption INTRODUCED: 02/10/2021 LAST AMEND: 06/28/2022 DISPOSITION: Pending SUMMARY: Establishes a disability retirement presumption that is applicable to the members of various public employee retirement systems who are employed in certain firefighter, public safety officer, and health care job classifications, among others, who test positive for COVID-19, as specified. Extends the operation of the provisions until specified date. STATUS: 08/29/2022 In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY for concurrence. 08/29/2022 In ASSEMBLY. Assembly Rule 77.2 suspended. 08/29/2022 Re-referred to ASSEMBLY Committee on PUBLIC EMPLOYMENT AND RETIREMENT.</p>
CA AB 826	<p>AUTHOR: Irwin [D] TITLE: Compensation and Compensation Earnable INTRODUCED: 02/16/2021 LAST AMEND: 08/03/2022 DISPOSITION: Pending SUMMARY: Relates to the bill, which would apply only in Ventura County. Provides that compensation and compensation earnable include flexible benefits plan allowances paid by a county or a district on behalf of its employees as part of a cafeteria plan, as specified, if certain conditions are met. STATUS: 08/23/2022 In ASSEMBLY. Assembly Rule 77.2 suspended. 08/23/2022 Re-referred to ASSEMBLY Committee on PUBLIC EMPLOYMENT AND RETIREMENT. BOR_Position: Watch 09/01/2021 IBLC_Recommendation: Watch 08/12/2021 Staff_Recommendation: Watch</p>
CA AB 1667	<p>AUTHOR: Cooper [D] TITLE: State Teachers' Retirement System: Administration INTRODUCED: 01/19/2022 LAST AMEND: 08/25/2022 DISPOSITION: Pending SUMMARY: Prescribes various requirements and duties in connection with audits of public agencies by the Teachers' Retirement Board. Requires the board to provide written notice of an intended audit to the affected public agency and to the exclusive representative of the members affected by the audit. Requires this notice to apprise the public agency and the exclusive representative of the purpose and scope of the intended audit. STATUS: 08/29/2022 In SENATE. Read third time. Passed SENATE. *****To</p>

ASSEMBLY for concurrence.

CA AB 1722

AUTHOR: Cooper [D]
TITLE: Public Employees' Retirement: Safety Members
INTRODUCED: 01/27/2022
DISPOSITION: To Governor
SUMMARY:

Relates to the Public Employees' Retirement Law which, until January 1, 2023, provides a state safety member of the Public Employees' Retirement System who retires for industrial disability a retirement benefit equal to the greatest amount resulting from 3 possible calculations. Deletes the termination of these provisions on January 1, 2023, thereby making them operative in perpetuity. Appropriates funds.

STATUS:

08/27/2022 Enrolled.

CA AB 1824

AUTHOR: Public Employment and Retirement Cmt
TITLE: Public Employees' Retirement
INTRODUCED: 02/07/2022
LAST AMEND: 08/01/2022
DISPOSITION: To Governor
SUMMARY:

Relates to the Teachers' Retirement Law, the State Teachers' Retirement System and the Defined Benefit Program of the State Teachers' Retirement Plan. Relates to the Cash Balance Benefit Program which provides a retirement plan for the benefit of participating employees who provide creditable service for less than 50% of full time. Revises the description of trustee service. Specifies that termination of creditable services does not include retired member activities or retired participant activities.

STATUS:

08/23/2022 *****To GOVERNOR.

Comments:

Omnibus bill containing SACRS 2022 legislative proposals.

BOR_Position: Support 05/05/2022

IBLC_Recommendation: Support 04/06/2022

Staff_Recommendation: Support

CA AB 1971

AUTHOR: Cooper [D]
TITLE: County Employees Retirement Law of 1937
INTRODUCED: 02/10/2022
LAST AMEND: 06/30/2022
DISPOSITION: To Governor
SUMMARY:

Authorizes a person who is retired and receiving a retirement benefit from a county system to serve as a nonsalaried member without reinstatement for service on a part-time board or commission, as specified. Prohibits a retired person acting in this capacity from acquiring benefits, service credit, or retirement rights with respect to the service, but would authorize the receipt of any per diem that is authorized to all members of the board or commission.

STATUS:

08/29/2022 *****To GOVERNOR.

Comments:

Omnibus bill containing SACRS 2022 legislative proposals.

BOR_Position: Support 06/01/2022
IBLC_Recommendation: Support 05/05/2022
Staff_Recommendation: Support

CA AB 2443

AUTHOR: Cooley [D]
TITLE: Judges' Retirement System II: Benefits
INTRODUCED: 02/17/2022
LAST AMEND: 08/24/2022
DISPOSITION: Pending
SUMMARY:

Establishes the Judges' Retirement System II, which provides retirement and other benefits to its members and is administered by the Board of Administration of the Public Employees' Retirement System.

STATUS:

08/25/2022 In SENATE. Read second time. To third reading.

CA AB 2493

AUTHOR: Chen [R]
TITLE: County Employees' Retirement Disallowed Compensation
INTRODUCED: 02/17/2022
LAST AMEND: 08/17/2022
DISPOSITION: Pending
SUMMARY:

Requires a retirement system established under the County Employees Retirement Law, upon determining that the compensation reported for a sworn peace officer or firefighter is disallowed compensation, to require the employer, as defined, to discontinue reporting the disallowed compensation.

STATUS:

08/18/2022 In SENATE. Read second time. To third reading.

BOR_Position: Neutral 07/06/2022

IBLC_Recommendation: Neutral 06/01/2022

Staff_Recommendation: Neutral

US HR 2954

SPONSOR: Neal [D]
TITLE: Strong Retirement
INTRODUCED: 05/04/2021
LAST AMEND: 03/29/2022
DISPOSITION: Pending
SUMMARY:

Secures a Strong Retirement Act of 2021.

STATUS:

03/30/2022 In SENATE. Read second time.

03/30/2022 To SENATE Committee on FINANCE.

Comments:

Would gradually raise the age for mandatory distributions to age 75 by 2032.

US HR 6241

SPONSOR: Thompson M [D]
TITLE: Use of Retirement Funds
INTRODUCED: 12/09/2021
DISPOSITION: Pending
SUMMARY:

Amends the Internal Revenue Code of 1986 to provide for rules for the use of retirement funds in connection with federally declared disasters.

STATUS:

	12/09/2021	INTRODUCED.
	12/09/2021	To HOUSE Committee on WAYS AND MEANS.
US S 1703	SPONSOR:	Grassley [R]
	TITLE:	Retirement Plan Administration
	INTRODUCED:	05/19/2021
	DISPOSITION:	Pending
	SUMMARY:	
		Amends the Internal Revenue Code of 1986 to increase retirement savings, to improve retirement plan administration.
	STATUS:	
	05/19/2021	INTRODUCED.
	05/19/2021	In SENATE. Read second time.
	05/19/2021	To SENATE Committee on FINANCE.
US S 1770	SPONSOR:	Cardin [D]
	TITLE:	Retirement Provisions
	INTRODUCED:	05/20/2021
	DISPOSITION:	Pending
	SUMMARY:	
		Amends the Internal Revenue Code of 1986 to reform retirement provisions.
	STATUS:	
	05/20/2021	INTRODUCED.
	05/20/2021	In SENATE. Read second time.
	05/20/2021	To SENATE Committee on FINANCE.

PUBLIC INVESTMENT

CA SB 1173	AUTHOR:	Gonzalez [D]
	TITLE:	Public Retirement Systems: Fossil Fuels: Divestment
	INTRODUCED:	02/17/2022
	LAST AMEND:	04/21/2022
	DISPOSITION:	Pending
	SUMMARY:	
		Prohibits the boards of the Public Employees' Retirement System and the State Teachers' Retirement System from making new investments or renewing existing investments of public employee retirement funds in a fossil fuel company. Suspends the above described liquidation provision upon a good faith determination by the board that certain conditions materially impact normal market mechanisms for pricing assets.
	STATUS:	
	06/02/2022	To ASSEMBLY Committees on PUBLIC EMPLOYMENT AND RETIREMENT and JUDICIARY.
	Comments:	
		Did not meet deadline to pass policy committee. Will not move forward.
CA SB 1328	AUTHOR:	McGuire [D]
	TITLE:	Investments and Contracts: Russia and Belarus
	INTRODUCED:	02/18/2022
	LAST AMEND:	05/19/2022
	DISPOSITION:	Pending
	SUMMARY:	
		Prohibits the boards of specified state and local public retirement systems from making additional or new investments in prohibited companies, as defined,

domiciled in Russia or Belarus, as defined, companies that the United States government has designated as complicit in the aggressor countries', as defined, war in Ukraine, or companies that supply military equipment to the aggressor countries, and to liquidate the investments of the board in those companies, as specified.

STATUS:

06/09/2022 To ASSEMBLY Committees on PUBLIC EMPLOYMENT AND RETIREMENT and ACCOUNTABILITY AND ADMINISTRATIVE REVIEW.

Comments:

Did not meet deadline to pass policy committee. Will not move forward.

WORKERS COMPENSATION

CA AB 334	AUTHOR: Mullin [D] TITLE: Workers Compensation: Skin Cancer INTRODUCED: 01/27/2021 DISPOSITION: To Governor SUMMARY: Relates to existing law which provides that skin cancer developing in active lifeguards, for purposes of workers' compensation, is presumed to arise out of and in the course of employment, unless the presumption is rebutted. Expands the scope of this provision to certain peace officers of the Department of Fish and Wildlife and the Department of Parks and Recreation. STATUS: 08/27/2022 Enrolled.
CA AB 1751	AUTHOR: Daly [D] TITLE: Workers' Compensation: COVID-19: Critical Workers INTRODUCED: 02/01/2022 LAST AMEND: 08/25/2022 DISPOSITION: Pending SUMMARY: Extends specified workers' compensation provisions relating to COVID-19 until specified date. Expands the above-described provisions applicable to firefighters and police officers to include active firefighting members of a fire department at the State Department of State Hospitals, the State Department of Developmental Services, the Military Department, and the Department of Veterans Affairs and to officers of a state hospital under the jurisdiction of the State Department of State Hospitals. STATUS: 08/25/2022 In SENATE. Read third time and amended. Senate Rule 29.3 suspended. To third reading.
CA SB 213	AUTHOR: Cortese [D] TITLE: Workers Compensation: Hospital Employees INTRODUCED: 01/12/2021 LAST AMEND: 05/05/2022 DISPOSITION: Pending SUMMARY: Defines injury for a hospital employee who provides direct patient care in an acute care hospital, to include infectious diseases, cancer, musculoskeletal injuries, post traumatic stress disorder, and respiratory diseases. Includes the novel coronavirus 2019, among other conditions, in the definitions of infectious

and respiratory diseases. Creates rebuttable presumptions that these injuries that develop or manifest in a hospital employee who provides direct patient care in an acute care hospital.

STATUS:

06/22/2022 In ASSEMBLY Committee on INSURANCE: Heard, remains in Committee.

CA SB 284

AUTHOR: Stern [D]
TITLE: Workers' Compensation: Firefighters and Peace Officers
INTRODUCED: 02/01/2021
LAST AMEND: 08/18/2022
DISPOSITION: To Governor
SUMMARY:

Relates to existing Law which provides that injury includes post-traumatic stress that develops during a period in which the injured person is in the service of the department or unit. Makes that provision applicable to active firefighting members of the State Department of State Hospitals, the State Department of Developmental Services, and the Military Department, and the Department of Veterans Affairs, including security officers of the Department of Justice when performing assigned duties.

STATUS:

08/22/2022 In ASSEMBLY. Read third time. Passed ASSEMBLY. *****To SENATE for concurrence. (71-0)

CA SB 335

AUTHOR: Cortese [D]
TITLE: Workers' Compensation: Liability
INTRODUCED: 02/08/2021
LAST AMEND: 03/10/2021
DISPOSITION: Pending
SUMMARY:

Reduces the time periods after the date the claim form is filed with an employer in which the injury is presumed compensable and the presumption is rebuttable only by evidence discovered subsequent to the time period for certain injuries or illnesses, including hernia, heart trouble, pneumonia, or tuberculosis, among others, sustained in the course of employment of a specified member of law enforcement or a specified first responder.

STATUS:

07/13/2021 In ASSEMBLY Committee on INSURANCE: Failed passage.

BROWN ACT

CA AB 1944

AUTHOR: Lee [D]
TITLE: Local Government: Open and Public Meetings
INTRODUCED: 02/10/2022
LAST AMEND: 05/25/2022
DISPOSITION: Pending
SUMMARY:

Requires the agenda to identify any member of the legislative body that will participate in the meeting remotely. Requires an updated agenda reflecting all of the members participating in the meeting remotely to be posted, if a member of the legislative body elects to participate in the meeting remotely after the agenda is posted.

STATUS:

06/22/2022 In SENATE Committee on GOVERNANCE AND FINANCE:

Not heard.

Comments:

Did not meet deadline to pass policy committee. Will not move forward.

BOR_Position: Support 05/05/2022

IBLC_Recommendation: Support 04/06/2022

Staff_Recommendation: Support

CA AB 2449

AUTHOR: Rubio [D]

TITLE: Open Meetings: Local Agencies: Teleconferences

INTRODUCED: 02/17/2022

LAST AMEND: 08/08/2022

DISPOSITION: To Governor

SUMMARY:

Revises and recasts teleconferencing provisions and, until specified date, authorizes a local agency to use teleconferencing without complying with the teleconferencing requirements that each teleconference location be identified in the notice and agenda and that each teleconference location be accessible to the public if at least a quorum of the members of the legislative body participates in person from a singular physical location clearly identified on the agenda that is open to the public.

STATUS:

08/25/2022 In ASSEMBLY. Assembly Rule 77 suspended.

08/25/2022 In ASSEMBLY. ASSEMBLY concurred in SENATE amendments. To enrollment. (67-2)

CA AB 2647

AUTHOR: Levine [D]

TITLE: Local Government: Open Meetings

INTRODUCED: 02/18/2022

LAST AMEND: 08/04/2022

DISPOSITION: To Governor

SUMMARY:

Requires a local agency to make certain writings distributed to the members of the governing board available for public inspection at a public office or location that the agency designates and list the address of the office or location on the agenda for all meetings of the legislative body of the agency unless the local agency meets certain requirements, including the local agency immediately posts the writings on the local agency's internet website in a position and manner that makes it clear.

STATUS:

08/25/2022 Enrolled.

CA SB 1100

AUTHOR: Cortese [D]

TITLE: Open Meetings: Orderly Conduct

INTRODUCED: 02/16/2022

LAST AMEND: 06/06/2022

DISPOSITION: Enacted

SUMMARY:

Authorizes the presiding member of the legislative body conducting a meeting to remove an individual for disrupting the meeting. Requires removal to be preceded by a warning to the individual by the presiding member of the legislative body or their designee that the individual's behavior is disrupting the meeting and that the individual's failure to cease their behavior may result in their removal.

STATUS:08/22/2022
08/22/2022Signed by GOVERNOR.
Chapered by Secretary of State. Chapter No. 2022-171

PUBLIC RECORDS ACT

CA AB 343

AUTHOR: Fong [R]
TITLE: California Public Records Act Ombudsperson
INTRODUCED: 01/28/2021
LAST AMEND: 06/15/2022
DISPOSITION: Pending
SUMMARY:

Requires the California Public Records Act Ombudsperson to create a process through which a person whose information is contained in a record being reviewed may intervene to assert their privacy and confidentiality rights, and would otherwise require the ombudsperson to maintain the privacy and confidentiality of records, as provided.

STATUS:

06/21/2022 From SENATE Committee on JUDICIARY: Do pass to Committee on GOVERNMENTAL ORGANIZATION. (11-0)

CA AB 386

AUTHOR: Cooper [D]
TITLE: Public Employees Retirement: Investments: Confidential
INTRODUCED: 02/02/2021
LAST AMEND: 06/29/2021
DISPOSITION: Pending
SUMMARY:

Exempts from disclosure under the California Public Records Act specified records regarding an internally managed private loan made directly by the Public Employees' Retirement Fund. Provides that these records would include quarterly and annual financial statements of the borrower or its constituent owners, unless the information has already been publicly released by the keeper of the information. Prescribes specified exceptions to this exemption from disclosure.

STATUS:07/13/2021 In SENATE Committee on JUDICIARY: Failed passage.
07/13/2021 In SENATE Committee on JUDICIARY: Reconsideration granted.

SOCIAL SECURITY

US HR 82

SPONSOR: Davis R [R]
TITLE: Government Pension Offset Repeal
INTRODUCED: 01/04/2021
DISPOSITION: Pending
SUMMARY:

Amends the Social Security Act; repeals the Government pension offset and windfall elimination provisions.

STATUS:01/04/2021 INTRODUCED.
01/04/2021 To HOUSE Committee on WAYS AND MEANS.
BOR_Position: Support 05/05/2021
IBLC_Recommendation: Support 04/15/2021
Staff_Recommendation: Support

US HR 2337 **SPONSOR:** Neal [D]
TITLE: Noncovered Employment
INTRODUCED: 04/01/2021
DISPOSITION: Pending
SUMMARY:
Amends Title II of the Social Security Act to provide an equitable Social Security formula for individuals with noncovered employment and to provide relief for individuals currently affected by the Windfall Elimination Provision.
STATUS:
04/01/2021 INTRODUCED.
04/01/2021 To HOUSE Committee on WAYS AND MEANS.
BOR_Position: Support 09/01/2021
IBLC_Recommendation: Support 08/12/2021
Staff_Recommendation: Support

US HR 5723 **SPONSOR:** Larson [D]
TITLE: Social Security System Benefits
INTRODUCED: 10/26/2021
DISPOSITION: Pending
SUMMARY:
Protects our Social Security system and improve benefits for current and future generations.
STATUS:
10/26/2021 In HOUSE Committee on WAYS AND MEANS: Referred to Subcommittee on SOCIAL SECURITY.

US S 1302 **SPONSOR:** Brown S [D]
TITLE: Pension Offset
INTRODUCED: 04/22/2021
DISPOSITION: Pending
SUMMARY:
Amends Title II of the Social Security Act to repeal the government pension offset and windfall elimination provisions.
STATUS:
04/22/2021 INTRODUCED.
04/22/2021 In SENATE. Read second time.
04/22/2021 To SENATE Committee on FINANCE.
BOR_Position: Support 09/01/2021
IBLC_Recommendation: Support 08/12/2021
Staff_Recommendation: Support

HEALTHCARE

US HR 4148 **SPONSOR:** Malinowski [D]
TITLE: First Responders Medicare Option
INTRODUCED: 06/24/2021
DISPOSITION: Pending
SUMMARY:
Amends Title XVIII of the Social Security Act to provide an option for first responders age 50 to 64 who are separated from service due to retirement or disability to buy into Medicare.
STATUS:
06/24/2021 INTRODUCED.
06/24/2021 To HOUSE Committee on WAYS AND MEANS.

06/24/2021 To HOUSE Committee on ENERGY AND COMMERCE.
06/25/2021 In HOUSE Committee on ENERGY AND COMMERCE:
Referred to Subcommittee on HEALTH.

US S 2236

SPONSOR: Brown S [D]
TITLE: Medicare Buy In Option for First Responders
INTRODUCED: 06/24/2021
DISPOSITION: Pending
SUMMARY:

Amends Title XVIII of the Social Security Act to provide an option for first responders age 50 to 64 who are separated from service due to retirement or disability to buy into Medicare.

STATUS:

06/24/2021 INTRODUCED.
06/24/2021 In SENATE. Read second time.
06/24/2021 To SENATE Committee on FINANCE.

Copyright (c) 2022 State Net. All rights reserved.

FOR INFORMATION ONLY

September 2, 2022

TO: Trustees,
Board of Investments

FROM: Christine Roseland *CR*
Senior Staff Counsel

FOR: September 14, 2022 Board of Investments Meeting

SUBJECT: **Legal Projects**

Attached is the monthly report on the status of Board-directed investment-related projects handled by the Legal Division as of September 2, 2022.

Attachment

c: Santos H. Kreimann
Luis A. Lugo
Jonathan Grabel
Esmeralda Del Bosque
Vache Mahseredjian
Jude Perez
Jim Rice
Christopher Wagner
Scott Zdrazil
Steven Rice
John Harrington
Earl Buehner
Margo McCabe
Lisa Garcia



LACERA Legal Division
Board of Investments Projects
Monthly Status Report - Pending as of September 2, 2022



	Project/ Investment	Description	Amount	Board Approval Date	Completion Status	% Complete	Notes
HEDGE FUNDS	Varde Global Illiquid Credit Strategy	Subscription	\$775,000,000	February 9, 2022	Completed	100%	Completed.
	Stable Asset Management	Investment Management Agreement for Illiquid Credit Emerging Manager Program	\$750,000,000	August 10, 2022	In Progress	10%	Legal negotiations in process.
OPEB	Hamilton Lane	Investment Management Agreement	\$500,000,000	August 10, 2022	In Progress	10%	Legal negotiations in process.
PORTFOLIO ANALYTICS	State Street Bank and Trust Co.	Global Custody and Commercial Banking Services Agreement for LACERA's Pension Plan and OPEB Master Trust	\$72,000,000,000	August 10, 2022	In Progress	25%	Legal negotiations in process.
PRIVATE EQUITY	Hamilton Lane	Investment Management Agreement	\$400,000,000	February 9, 2022	In Progress	95%	Legal negotiations in process.
	Primary Venture Partners IV, L.P. and Primary Select III, L.P.	Subscription	\$50,000,000	July 13, 2022	Completed	100%	Completed.
REAL ESTATE	Blackstone Real Estate Partners X	Subscription	\$300,000,000	August 10, 2022	In Progress	60%	Legal negotiations in process.
	Brookfield Strategic Real Estate Partners IV	Subscription	\$300,000,000	August 10, 2022	In Progress	60%	Legal negotiations in process.



August 26, 2022

TO: Each Trustee,
Board of Retirement

FROM: Ted Granger 
Interim Chief Financial Officer

FOR: September 7, 2022 Board of Retirement Meeting

SUBJECT: **2023 STAR COLA PROGRAM**

RECOMMENDATION

- (1) That the Board of Retirement make public at its meeting on September 7, 2022, the cost of the ad-hoc and permanent STAR COLA Program in 2023 at an 80% benefit level. The projected cost for the ad-hoc STAR COLA award is \$231,000, while the cost for awarding a permanent STAR COLA is \$2,467,000 as determined by LACERA's consulting actuary, Milliman; and
- (2) Direct staff to place this item on the Board of Retirement's October agenda to decide at that time whether or not to award a STAR COLA for Program Year 2023, and if awarded, determine whether the STAR COLA benefits will be ad-hoc or permanent.

EXECUTIVE SUMMARY

Overview

LACERA members in General Plans B, C, and D and Safety Plan B who retired on or before March 31, 1991 (and survivors of members who retired during that period) are eligible effective January 2023 for a retirement benefit increase under the Supplemental Targeted Adjustment for Retirees (STAR) cost-of-living adjustment (COLA) Program (STAR COLA Program or STAR Program). For this select group of retirees and survivors, their COLA Accumulation accounts (also referred to as the COLA Bank accounts) exceed the 20% threshold required if the Board of Retirement is to authorize STAR COLA Program benefits. This means the value of their original pension benefit has eroded by more than 20% over time due to actual inflation exceeding the statutory COLA. The Board of Retirement can adopt STAR Program benefits on an ad-hoc or permanent basis to become effective January 1, 2023. Members participating in PEPRA Plans General G and Safety C, and Legacy Safety Plan A are not currently eligible for STAR COLA Program benefits; those members in non-contributory Plan E are not eligible for STAR COLA Program benefits.

These additional retiree benefits are paid by LACERA from the STAR Reserve account held by LACERA. Per the Board of Investment's Retirement Benefit Funding Policy (Funding Policy), the STAR Reserve account is included in valuation assets by the

actuary, but potential future STAR Program benefits are not included in the liabilities, so granting STAR Program benefits will increase the valuation liabilities and consequently, the employers' contribution rate will also increase. If the permanent STAR COLA is approved, the impact on the employer contribution rate will be an increase of 0.01% of pay or less in future years, first effective in fiscal year 2024-2025.

The Board of Retirement most recently awarded a STAR COLA for Program Year 2009 and made that award on a permanent basis. Since that time, COLA Accumulation accounts increased in some years, but had not exceeded the 20% amount which would have made STAR COLA benefits available until 2022 (and only for the members described above). Once the Board of Retirement approved the annual statutory 2022 COLA (April 1st COLA), staff reviewed the COLA Accumulation account balances and determined there is STAR Program award eligibility for Program Year 2023. The Board of Retirement can make the STAR Program award on an ad-hoc or permanent basis.

Milliman's Report

The Government Code requires that LACERA's consulting actuary, Milliman, provide an analysis which includes the cost of funding the STAR COLA Program award. Milliman's report, which is included as Attachment I, provides a detailed analysis of the STAR COLA and should be referred to in conjunction with this memo. LACERA's staff report is meant to provide an overview of the STAR COLA Program history.

LEGAL ANALYSIS

As discussed in detail later in this memo, Government Code Section 31874.3 allows LACERA to provide ad-hoc or permanent STAR Program benefits that, according to the terms of the Program, protect the purchasing power of retirement benefits. The Board of Retirement is not required to approve STAR benefits, even when the required loss of purchasing power has occurred; the decision is in the discretion of the Board.

Pursuant to Government Code Section 7507, a local agency such as LACERA's Board of Retirement, when considering changes in retirement benefits, such as providing ad-hoc or permanent STAR Program benefits, and before such changes are authorized, must engage an enrolled actuary to provide a statement of actuarial impact upon future annual costs and any additional accrued liability. Section 7507 also requires that a decision to provide either ad-hoc or permanent STAR Program benefits in 2023 can be made only if the future annual cost of the benefit, as determined by an enrolled actuary, is disclosed at a public meeting at least two weeks prior to the adoption of the benefit increase. Further, Government Code Section 31874.3(c) provides that, before the Board of Retirement approves permanent STAR benefits, the cost of the benefits must be determined by a qualified actuary and the Board shall, with the actuary's advice, provide for full funding of the benefits. The required actuarial cost analysis is presented in this memo.

DISCUSSION

COLA

Sections 31870 and 31870.1 of the Government Code provide for a maximum annual COLA to be applied to retirement allowances, optional death allowances, or annual death allowances payable to or on account of any member. COLA maximum increases are 3.0% for Plan A retirees and survivors; 2.0% for Legacy Plans B, C, and D and PEPRA Plans C and G; and up to 2.0% for certain Plan E retirees and survivors¹. These Government Code sections also provide for an accumulation of the annual percentage difference between the consumer price index (CPI) for the Los Angeles-Long Beach-Anaheim area and the maximum cost-of-living increase allowed for each retirement Plan. The accumulated percentage carryover is known as the COLA Accumulation or COLA Bank.

COLA Accumulation

The CPI percentage change from January through December for the prior calendar year is compared to the maximum allowable cost-of-living percentage increase payable to retired LACERA members under Sections 31870 and 31870.1. In years where the change in CPI is greater than the maximum COLA increase, the difference between these two percentages is accumulated annually for each retiree based upon retirement date. In years where the change in CPI is less than the maximum COLA increase, the actual COLA awarded may be increased above the CPI amount, up to the maximum COLA increase, with a corresponding reduction in the COLA Bank account. The accumulation of differences from each year reflects how much purchasing power has been lost from a retiree's original retirement benefit. By law, the Board of Retirement may provide STAR COLA Program increases once the COLA Bank accounts have exceeded a 20% balance.

CALCULATION ILLUSTRATION

The illustration included below is intended to show an example of how the annual CPI increase impacts the COLA Bank account resulting in the ability to award a STAR COLA. *Section 1* is the scenario where the CPI change is 6.6% while the Plan D maximum allowable COLA is 2.0%. The COLA Award is applied with rounding (to the nearest 0.5%) at 6.5% for the April 1st COLA, while the Plan D COLA statutory maximum limits the final COLA amount to 2.0%.

In *Section 2* below, the original CPI is used to determine the amount that is applied to the COLA Bank account. For this example, the COLA Bank receives a 4.6% increase by deducting the maximum 2.0% COLA Award from the original CPI of 6.6%.

The COLA Bank account is reviewed and updated in *Section 3*. The beginning balance of the COLA Bank is 18.5% and the remaining 4.6% amount of the CPI increases the COLA Bank, resulting in a 23.1% COLA Bank balance after the annual 2.0% April 1st COLA has

¹ Effective June 4, 2002, Plan E members and their survivors were eligible for COLA. The portion of the COLA percentage received by each Plan E member is a ratio of the member's service credit earned on and after June 4, 2002 to total service credit.

been applied. When the COLA Bank account exceeds 20%, a STAR COLA award can be considered by the Board of Retirement.

Below in *Section 4* of the illustration, the COLA Bank balance of 23.1% is reviewed and the excess above the 20% balance is determined to be 3.1%. In this example, the 3.1% calculated is the possible STAR COLA award. Once the Board of Retirement approves the STAR COLA award, the COLA Bank account balance is reduced by 3.1% to 20% (if the STAR COLA is awarded on a permanent basis). In future years, any additional amounts added to the Accumulation account which cause it to exceed the 20% level, make this COLA Bank account eligible for another STAR COLA award.

Section 5 below shows the impact on the COLA Bank balance if the STAR COLA award is granted by the Board of Retirement on an ad-hoc basis. In this example, COLA Bank account will remain at 23.1%. For the next STAR Program year, this COLA Bank account will be eligible for a STAR COLA award and any additional amounts, due to increases in the CPI, will be added to the COLA Bank balance.

**COLA Accumulation (Bank) Account Illustration
STAR COLA Award Application**

<i>SECTION 1</i>	2021 CPI	2022 COLA Award Rounding	2022 COLA Award Plan Maximum
Plan D	6.6%	6.5%	2.0%
<i>SECTION 2</i>	2021 CPI	2022 COLA Award Plan Maximum	COLA Bank Increase
	6.6%	2.0%	+4.6%
<i>SECTION 3</i>	COLA Bank Begin Balance	COLA BANK Increase	COLA Bank Balance
	18.5%	+4.6%	23.1%
<i>SECTION 4</i>	COLA Bank Balance	2023 STAR COLA Award - (Permanent)	COLA Bank End Balance*
	23.1%	-3.1%	20.0%
<i>SECTION 5</i>	COLA Bank Balance	2023 STAR COLA Award - (Ad-Hoc)	COLA Bank End Balance**
	23.1%	0.0%	23.1%

* This reduction in the COLA BANK balance will occur if the STAR COLA is awarded on a permanent basis.

** No reduction in the COLA BANK balance will occur if the STAR COLA is awarded on an ad-hoc basis.

STAR COLA Program

The Board of Retirement initiated the STAR COLA Program in 1990 to restore members' purchasing power that had been eroded by inflation in excess of the protection provided by the statutory COLA. Retirees and survivors in Legacy Plans A, B, C, D and PEPRAs Plans C and G are eligible for STAR COLA Program benefits should their COLA Accumulation accounts exceed a 20% balance. Non-contributory members in Plan E are not eligible for STAR COLA Program benefits.

STAR COLA Program Awards

Beginning in 1990 and through 2000, the STAR Program existed as an ad-hoc benefit designed to provide contributory plan members protection against rising inflation beyond the protection provided by the statutory COLA, and successfully restored LACERA retiree purchasing power to the then maximum allowable 75% level.

On September 4, 2000, the California Governor signed into law a provision, Section 31874.3 of the Government Code, allowing the Board of Retirement to raise the purchasing power protection to a maximum of 80% and allowed the ability to make permanent the STAR COLA Program benefits using excess earnings². This change provided the Board of Retirement with the flexibility to continue the STAR Program as an ad-hoc benefit or the opportunity to make permanent the STAR COLA benefits using excess earnings. Now and in future years, the Board of Retirement will be required to adopt ad-hoc benefits on an annual basis if the Board wishes to continue the benefits while the permanent method will require no further Board action.

Purchasing Power Example Calculation

The retirement benefit has decreased below 80% of its original purchasing power when the COLA Accumulation accounts exceed the 20% threshold. For example, a 23.1% COLA Accumulation balance means that the member has 76.9% of the purchasing power compared to when the member retired (e.g., $100.0\% - 23.1\% = 76.9\%$). When the member's purchasing power falls below 80.0%, the Board can award a STAR COLA to restore the purchasing power to an 80.0% level (e.g., $76.9\% + 3.1\% = 80.0\%$).

STAR COLA History

On October 9, 2008, the Board of Retirement made permanent the 2009 STAR COLA benefits at an 80% level as authorized in CERL and had already made STAR Program benefits permanent for prior years.

For STAR Program Years 2010 through 2022, minimal increases in the CPI percentage caused COLA Accumulation accounts to remain below the 20% threshold for providing

² Excess Earnings are actual cash earnings from the investment portfolio earned during the previous year that remain unspent after paying for costs to administer the system, costs to invest the portfolio, paying interest to the member and employer accounts, and satisfying the 1% contingency reserve requirement in Government Code Sections 31592 and 31592.2.

STAR Program benefits. As such, no STAR COLA benefits have been provided since 2009. During these years, the Board of Retirement approved annual statutory COLAs below or at the retirement plan maximums, providing some protection against diminished purchasing power.

Recently, CPI increases for STAR Program Years 2019 through 2021 exceeded the maximum allowable statutory COLA for some plans, causing increases in the COLA Accumulation accounts, however, the ending COLA Accumulation account balances remained at less than 20% until Program Year 2023.

The chart below summarizes the STAR COLA history. Please note that not all retirees in all plans received a STAR COLA award each year; STAR COLA is only awarded to retirees where the COLA Accumulation account exceeds a 20% balance. The Board of Retirement has consistently approved the STAR COLA Program awards on a permanent basis.

STAR COLA Awards				
Program Year	Eligibility for STAR	BOR Award	Permanent	Maximum Level
1990-2000	Yes	Yes	Yes*	75%
2001-2004	Yes	Yes	Yes	80%
2005	No	N/A	N/A	80%
2006-2009	Yes	Yes	Yes	80%
2010-2022	No	N/A	N/A	80%
2023	Yes	TBD	TBD	80%

* Beginning in 2001, STAR COLA awards became permanent prospectively.

Program Year 2023

The 2021 CPI increase exceeded the maximum allowable COLA, causing some retiree COLA Accumulation account balances to go above 20% after the April 2022 statutory COLA award. This results in a potential STAR COLA for STAR Program Year 2023. Attachment II identifies the retiree groups who have experienced diminished purchasing power making them eligible for the STAR COLA award. Only members in General Plans B, C and D and Safety Plan B who retired from 1977 to March 31, 1991 are eligible for STAR Program benefits. Currently, no other retired members or survivors are eligible.

Since the Board previously granted STAR Program benefits on a permanent basis, all retirees and their eligible survivors currently receiving STAR Program benefits continue receiving those benefits without further action.

STAR COLA Method: Ad-Hoc or Permanent

Government Code provisions allow the Board of Retirement to award additional benefits to address the inflation experienced by retirees using one of the following approaches:

Ad-Hoc STAR COLA

Provide an ad-hoc 2023 STAR Program benefit for those contributory plan members whose purchasing power has fallen below 80% due to inflation, thus providing a temporary benefit for the 2023 calendar year. Ad-hoc benefits are awarded on a calendar year basis and the Board of Retirement must approve these benefits each year if these benefits are to be paid in future years. Ad-hoc STAR Program benefits are not included in the calculation of future statutory COLA awards.

Permanent STAR COLA

Make permanent the 2023 STAR Program for those contributory plan members whose purchasing power has fallen below 80% due to inflation. While this protects only those retirees and survivors who have already lost 20% of their purchasing power, it does ensure that the STAR is part of the member's retirement allowance and is payable for life. In other words, the permanent STAR Program benefit becomes a part of the base allowance upon which future annual statutory COLA increases will be calculated. Permanent benefits do not require Board of Retirement approval in subsequent years.

2023 STAR COLA Program Cost Analysis

LACERA's consulting actuary, Milliman, provided their letter dated August 25, 2022, which is included as Attachment I. Milliman's letter provides cost and technical information for LACERA's STAR COLA and should be read in conjunction with this memo, which provides an overview of the STAR COLA Program and history. Attachments to Milliman's letter include costs for the 2023 Program Year and projections in anticipation of *future* STAR COLA awards that have not yet occurred. The table below provides the cost for Program Year 2023 as calculated by Milliman using both the ad-hoc and the permanent benefit approaches.

STAR COLA Program Cost

	2023 Annual Cost	Lifetime Cost
Ad-hoc Benefit: STAR Program at 80%	\$231,000	
Permanent Benefit: STAR Program at 80%		\$2,467,000

Should the Board of Retirement decide to approve the permanent STAR COLA Program award, it will provide the greatest possible cost-of-living benefit to those members who have suffered at least a 20% decline in purchasing power. The permanent STAR Program is more valuable to the affected members than the ad-hoc STAR Program since the permanent STAR Program is an everlasting benefit (as long as member or survivor is alive) and is also included in the base allowance used to calculate the statutory annual COLA benefit in future years.

Meaning of 'Permanent STAR Program'

California Government Code Section 31874.3(c) allows the Board of Retirement to make permanent the STAR COLA benefit for the eligible retirees and survivors. In other words, making permanent the STAR Program makes a member's cost-of-living accumulation that exceeds 20% a lasting part of the member's benefit. The value of the permanent STAR COLA to be provided, as calculated by the actuary, cannot exceed the value of excess earnings accumulated in the STAR Reserve because the benefits must be prefunded under the statute. The current value of the STAR Reserve is sufficient to pay for either the ad-hoc or permanent 2023 STAR COLA Program.

This means that all current retirees and survivors eligible to participate in the 2023 STAR Program will have their 2023 STAR Program benefit added to their base allowance and their COLA Accumulation will be reduced to 20%. Except for 2005 and 2010 through 2022, when no members were eligible for a STAR benefit, the Board of Retirement made permanent the 2001 through 2009 STAR Programs. STAR Program benefits for 2001 through 2004 and 2006 through 2009 were permanently added to the participant's base allowance and the respective COLA Accumulations were set to 20%.

However, future increases in the CPI that exceed COLA plan maximums and cause the member's COLA Accumulation to exceed 20%, will require Board action to make permanent such future increases and be contingent upon the availability of the STAR Program Reserve to fund the benefit increase. At this time, the Board of Retirement may only make permanent the current level of benefits payable to eligible 2023 STAR Program participants. Staff will present potential *future* STAR Program awards to the Board of Retirement which will require Board action in *future* years.

Funding the 2023 Program

The STAR Program's funding derived from excess earnings as determined by LACERA's Board of Investments. During the period 1994 through 1998, the Retirement System Funding Agreement required the Board of Investments to allocate all excess earnings using a 75%-25% allocation formula between the Employer Reserves and the STAR Reserve, respectively. Under this agreement the STAR Program received significant funding and has a balance of approximately \$614.0 million for the fiscal period ended June 30, 2022. The STAR Program Reserve balance is sufficient to fund the \$2.467 million needed to make permanent the 2023 STAR Program at the 80% benefit level for all future periods. Should the Board award a permanent STAR COLA, the amount will be transferred to the Employer Reserve to pay STAR COLA Program benefits leaving a balance of approximately \$611.5 million in the STAR Program Reserve.

If the Board approves an ad-hoc STAR Program award at a cost of \$0.231 million, the STAR Reserves balance is sufficient to fund this annual benefit.

Per the Board of Investment's Funding Policy, the actuary includes STAR Reserve assets within total valuation assets. STAR Reserve assets will be reduced when benefits are awarded and paid. The actuary does not include potential STAR COLA liabilities until they

are awarded. This methodology causes a new liability to appear when STAR COLA benefits are granted, increasing the valuation liabilities and consequently the employers' contribution rate. When the actuary prepares the June 30, 2023 Actuarial Valuation of Retirement Benefits report, the impact to the employer's contribution will be calculated and included. The actuary is projecting that the employers' contribution rate will increase for the fiscal year beginning July 1, 2024 and in future years. The estimated impact will be a 0.01% of pay increase or less for employer contributions.

Beginning in 1990 when the Funding Policy first established the STAR Reserve, excess earnings were used to increase the STAR Reserve balance, while over time STAR COLA awards caused decreases in the STAR Reserve. The Funding Policy prescribes the semi-annual interest credit process where realized earnings are measured for the six-month period, and interest credits are applied to the Employee and Employer Reserves. Per the Funding Policy, the STAR Reserve is not eligible to receive an interest credit allocation.

Pension fund reserves is an accounting concept that shows how the fund's net position can be divided among various categories including employees, employers, and other classifications designated for specific use. LACERA assets, including balances in the STAR Reserve and the Employer and Employee Reserves, are part of LACERA's investment portfolio which produces investment income. The STAR Reserve balance was \$154 million in 1990, increased to \$1.023 billion in 1999 due to excess earning contributions, and from that time, has been reduced by STAR COLA benefits to a balance of \$614.011 million as of June 30, 2022. LACERA's pension fund net position in 1990 was \$9.4 billion and is approximately \$70.4 billion as of June 30, 2022. During that period of over 30 years, LACERA's investment portfolio contained STAR COLA assets contributing to LACERA's investment earnings and growing the fund's net position. Increases in LACERA's assets reduce employer contribution rates.

Public Notice Requirement

Government Code Sections 7507 and 31874.3 require the Board of Retirement to secure the services of an enrolled actuary to provide a statement of the actuarial impact upon the future annual plan costs. Section 7507 also requires that the actuarial cost information be presented at a public meeting at least two weeks prior to authorizing a benefit increase. The letter from LACERA's consulting actuary, Milliman, has been prepared and included as Attachment I to satisfy this requirement. On page 1, Milliman's letter states that these potential cost increases represent less than 0.01% of the Future Annual Costs as defined in California Government Code Section 7507.

Conclusion

Certain LACERA retirees are eligible for a STAR COLA Program benefit for the first time since 2009. The recent CPI increases have caused some COLA Accumulation accounts to exceed the 20% threshold. These members have experienced a decline in purchasing power of their monthly retirement allowance which permits the Board of Retirement to authorize a STAR COLA award beginning January 1, 2023. The Board of Retirement has

Re: 2023 STAR COLA Program

August 26, 2022

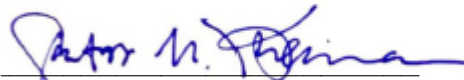
Page 10 of 10

the option of granting the STAR benefit on a year-to-year basis using the ad-hoc methodology or by choosing the permanent option which makes the additional the benefit a perpetual part of the members' retirement benefit.

It is therefore recommended that the Board of Retirement make public at its meeting on September 7, 2022 the cost of the ad-hoc and permanent STAR COLA Program in 2023 at an 80% benefit level. The projected cost for the ad-hoc STAR COLA Program is \$231,000, while the cost for the 2023 permanent STAR COLA Program is \$2,467,000 as determined by Milliman, LACERA's consulting actuary. In addition, the Board of Retirement should direct staff to place this item on the Board of Retirement's October agenda to decide at that time whether or not to award a STAR COLA for Program Year 2023, and if awarded, determine that the STAR COLA benefits will be ad-hoc or permanent.

Attachments

REVIEWED AND APPROVED:



Santos H. Kreimann
Chief Executive Officer

08/26/2022

Date

SK:TG
2023 STAR COLA.BOR Memo_FINAL_8.26.doc

c: Board of Investments, LACERA

Luis Lugo

Jonathan Grabel

JJ Popowich

Steven P. Rice

Laura Guglielmo



1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
USA

Tel +1 206 624 7940

milliman.com

August 25, 2022

Board of Retirement
Los Angeles County Employees Retirement Association
300 North Lake Avenue, Suite 820
Pasadena, CA 91101-4199

Re: STAR COLA for 2023

Dear Trustees of the Board:

As requested, we have valued the Supplemental Target Adjustment for Retirees (STAR) COLA program as of January 1, 2023. As of April 2022, Accumulation Accounts are greater than 20% (the threshold for providing STAR benefits) for retirees in General Plans B, C, and D and Safety Plan B who retired on or before March 31, 1991. These retirees are therefore eligible for a STAR COLA in 2023, upon Board of Retirement (Board) approval.

The values shown in the following table assume that the Board approves the STAR COLA for 2023 only, on an ad-hoc or a permanent basis, and do not reflect any additional STAR benefits that may be granted in the future. The STAR COLA will be an amount sufficient to restore retirement benefits to 80% of their original purchasing power for those retirees whose benefits currently have less than 80% of their original purchasing power. (80% of the original purchasing power is determined as an Accumulation Account value equaling 20%.) These potential cost increases represent less than 0.01% of the Future Annual Costs as defined in California Government Code Section 7507.

STAR COLA (effective January 1, 2023)	2023 Payment / Transfer from STAR Reserve
Ad Hoc Increase Payment	\$ 231,000
Permanent Increase Transfer	\$ 2,467,000

The ad hoc STAR COLA, as defined in Subsection 31874.3(b), is a temporary benefit provided for one year only and is not part of the member's retirement allowance. Future statutory COLA increases would not apply to this benefit because it is not part of the member's retirement allowance. To continue the ad hoc STAR COLA payments for any future year the Board must approve it on an annual basis.

Making the STAR COLA permanent under Subsection 31874.3(c) means that it becomes a permanent component of the member's retirement allowance and cannot be revoked in the future. Once a STAR COLA has been made permanent, it continues for the life of the member (and the beneficiary, if applicable). As any permanent STAR COLA increases become part of the member's retirement allowance, these payments are eligible for future statutory COLA increases.

This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

Under Subsection 31874.3(c), the Board can only make a STAR COLA increase permanent up to the amount determined at the time the action is approved. Therefore, the projected future STAR COLA increases effective January 1, 2024 and later, as shown in the exhibit at the end of this letter, are for informational purposes only and cannot be made permanent at this time.

In the attachment to this letter, we have provided 10-year projections of estimated STAR COLA increases and transfers under the ad hoc and permanent increase options. These attachments also show the estimated number of retirees and survivors projected to be eligible for a STAR COLA benefit in each future year.

STAR COLA and the Accumulation Account

Under the STAR COLA, each retiree and beneficiary in Legacy Plans A, B, C, and-D and PEPRA Plans C and G whose benefit has lost more than 20% of its value is eligible to receive, upon Board approval, an increased benefit payment effective January 1 of the following year. Retirees and beneficiaries in Legacy Plan E are not eligible for the STAR COLA.

The loss of value is measured by the Accumulation Account which is calculated each year by LACERA staff by adjusting the prior year's Accumulation Account by the difference between the actual COLA granted and the prior year's inflation as measured by the Los Angeles-Long Beach-Anaheim, CA Consumer Price Index – All Urban Consumers.

For December 2020 to December 2021, the increase in CPI was 6.6%. Since the increase in CPI is greater than the maximum statutory COLA of 3.0% for Plan A and 2.0% for all other plans, all retirees had an increase in their Accumulation Account in 2022. The following table shows the groups of STAR COLA eligible retirees that have an Accumulation Account balance greater than 20% after application of the 2021 CPI increase and payment of the 2022 statutory COLA, as well as the STAR COLA they are eligible for if it is approved by the Board. There are no retirees of Legacy Plans A or PEPRA Plans C and G that are eligible for a STAR COLA at this time.

Retirement Dates (Legacy Plans B, C, and D)	Accumulation Account	2023 STAR COLA
On or before March 31, 1990	23.10%	3.10%
April 1, 1990 through March 31, 1991	20.50%	0.50%

As an example of how the STAR COLA works, consider a General Plan D member who retired in March of 1990. As of April, 2021 this member had an Accumulation Account of 18.5%. This member received the statutory 2.0% COLA in April of 2022. Since the actual COLA given was less than the CPI of 6.6%, the difference of 4.6% is added to their Accumulation Account, resulting in a new value of 23.1% as of April 2022. Since this member's benefit has lost more than 20% of its original value (i.e., the Accumulation Account is greater than 20.0%), they are eligible for a STAR COLA benefit in 2023. Accordingly, if a STAR COLA is adopted effective January 1, 2023, this member will receive a STAR COLA increase equal to 3.1% of their current retirement allowance.

The member's Accumulation Account will remain at 23.1% unless a permanent STAR COLA is approved, in which case it is adjusted back to 20.0% to reflect the permanent increase in the member's retirement allowance.

Funding

If the permanent STAR COLA is approved under Subsection 31874.3(c), it is required to be prefunded to provide for the increase in future benefit payments. The present value of the 2023 permanent STAR COLA increase is \$2,418,000. Therefore, under the permanent increase scenario, this amount would be transferred from the STAR Reserve to the Employer Reserve. As of June 30, 2021, the STAR Reserve was \$614.0 million; therefore, the current STAR Reserve has a sufficient balance to facilitate this transfer.

The ad-hoc 2023 STAR COLA increase is estimated to cost \$231,000. If this option is approved, we anticipate this amount will be paid from the STAR Reserve.

LACERA's funding policy allows the inclusion of the STAR Reserve in Valuation Assets even though there is no liability included in the valuation for future STAR COLA increases that may be provided. To the extent that the STAR Reserve is reduced as a result of transfers to the Employer Reserve the employer contribution rate will increase. In the June 30, 2021 actuarial valuation, we estimated that if the entire STAR Reserve was excluded from Valuation Assets, the employer contribution rate would increase by approximately 0.49% of payroll effective July 1, 2022. Under both the ad hoc and permanent STAR COLA scenarios for 2023 described in this letter, the estimated impact on the employer contribution rate would be estimated to be a 0.01% or less increase as a percent of payroll.

Projections

We have also attached projections for future STAR COLA increases assuming continued application of the program. These projections are for informational purposes only. For these projections, we have assumed the continued approval of the STAR COLA program by the Board each year at the 80% level, under the following two scenarios:

- 2.75% annual increases in the CPI (the valuation assumption) for 2022 and all future years, and
- 6.60% annual increase in the CPI in 2022, followed by annual CPI increases of 2.75%. This scenario reflects that actual inflation has materially exceeded the assumption in the first half of 2022. The 6.6% is equal to the prior year's inflation and provides an estimate of the potential impact of higher-than-assumed inflation on future STAR COLA benefits, although the actual 2022 inflation is likely to be different.

The attachments show both the expected annual benefits under the ad hoc approach and the estimated transfer amounts to the fund the STAR COLA each year under the permanent approach. The projected benefit payments paid to members each year under the permanent approach is not shown but would be slightly higher than the amounts shown under the ad hoc approach, due to the future statutory COLA increases being applied to the STAR COLA payment under the permanent approach. The transfer amounts are expected to be made from

the STAR Reserve to the Employer Reserve as of the December 31 prior to the calendar year of the STAR COLA increase. These attachments also show the estimated number of retirees and survivors projected to be eligible for a STAR COLA benefit in each future year. The projected number of eligible retirees and survivors is the same under the ad hoc or permanent approach.

Data, assumptions, and methods

The COLA Accumulation Accounts are as of April 1, 2022 and any STAR COLA increases are assumed to be effective as of January 1, 2023. We have assumed that no interest will be credited to the STAR Reserve consistent with LACERA's interest crediting procedures.

Certification

Except as noted elsewhere in this report, all data, methods and assumptions are the same as described and used in the June 30, 2021 actuarial valuation report. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by LACERA's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Actuarial computations presented in this report are for purposes of estimating expected benefit payments and funding amounts under the LACERA STAR COLA program. These calculations have been made on a basis consistent with our understanding of that program. Determinations for purposes other than described may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. These results were developed using models intended for actuarial valuations that use standard actuarial techniques.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

The calculations included in this report are subject to the same risk factors as discussed in the June 30, 2021 actuarial valuation and in the Risk Assessment report based on the June 30, 2021 actuarial valuation. Please refer to those reports for a detailed descriptions of the primary risks to LACERA.

Milliman's work is prepared solely for the internal business use of LACERA. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not

This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

intend to benefit or create a legal duty to any third-party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) LACERA may provide a copy of Milliman's work, in its entirety, to LACERA's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit LACERA.
- (b) LACERA may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal, investment, or accounting counsel.

The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States, published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

If you have any further questions regarding this report, please let us know.

Sincerely,

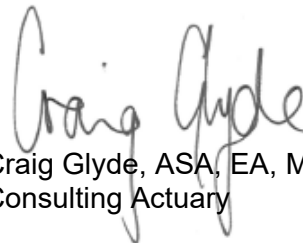


Nick Collier, ASA, EA, MAAA
Consulting Actuary

NC/CG/va

Attachments

cc: Ted Granger
Santos Kreimann
Claro Lanting
Ervin Wu



Craig Glyde, ASA, EA, MAAA
Consulting Actuary

LACERA
10-year projection of STAR COLA Benefits
STAR COLA approved each year
to restore benefit to 80% of original value
(if 2022 actual CPI increase is 2.75%)

Calendar Year	Actual CPI	Count of Eligible Retirees & Survivors	Ad-hoc Increase	Permanent Increase Transfers
2022	2.75%			
2023	2.75%	374	\$ 231,000	\$ 2,467,000
2024	2.75%	357	300,000	763,000
2025	2.75%	341	367,000	748,000
2026	2.75%	327	433,000	732,000
2027	2.75%	312	498,000	715,000
2028	2.75%	299	561,000	697,000
2029	2.75%	359	632,000	782,000
2030	2.75%	1,840	1,003,000	3,870,000
2031	2.75%	1,755	1,503,000	5,183,000
2032	2.75%	1,920	1,992,000	5,103,000

1. Estimate based on June 30, 2021 valuation
2. Actual results will vary

LACERA
10-year projection of STAR COLA Benefits
STAR COLA approved each year
to restore benefit to 80% of original value
(if 2022 actual CPI increase is 6.60%)

Calendar Year	Actual CPI	Count of Eligible Retirees & Survivors	Ad-hoc Increase	Permanent Increase Transfers
2022	6.60%			
2023	2.75%	374	\$ 231,000	\$ 2,467,000
2024	2.75%	450	681,000	4,715,000
2025	2.75%	2,278	1,145,000	5,055,000
2026	2.75%	2,190	1,691,000	5,915,000
2027	2.75%	2,809	2,252,000	6,066,000
2028	2.75%	2,695	2,981,000	7,702,000
2029	2.75%	2,579	3,690,000	7,528,000
2030	2.75%	3,375	4,616,000	9,552,000
2031	2.75%	3,225	5,566,000	9,820,000
2032	2.75%	3,076	6,474,000	9,533,000

1. Estimate based on June 30, 2021 valuation
2. Actual results will vary

This work product was prepared solely for LACERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

STAR COLA Accumulation Chart
Percentages as of January 1, 2023

Retirement Date			General Plans B, C, D and Safety Plan B		
			COLA % Accumulation April 1, 2022	STAR Benefit Adjustment in 2023	COLA % Accumulation January 1, 2023
Before 4/1/77			-	-	-
4/1/1977	-	3/31/1978	23.1	3.1	20.0
4/1/1978	-	3/31/1979	23.1	3.1	20.0
4/1/1979	-	3/31/1980	23.1	3.1	20.0
4/1/1980	-	3/31/1981	23.1	3.1	20.0
4/1/1981	-	3/31/1982	23.1	3.1	20.0
4/1/1982	-	3/31/1983	23.1	3.1	20.0
4/1/1983	-	3/31/1984	23.1	3.1	20.0
4/1/1984	-	3/31/1985	23.1	3.1	20.0
4/1/1985	-	3/31/1986	23.1	3.1	20.0
4/1/1986	-	3/31/1987	23.1	3.1	20.0
4/1/1987	-	3/31/1988	23.1	3.1	20.0
4/1/1988	-	3/31/1989	23.1	3.1	20.0
4/1/1989	-	3/31/1990	23.1	3.1	20.0
4/1/1990	-	3/31/1991	20.5	0.5	20.0
4/1/1991	-	3/31/1992	15.9	*	15.9
4/1/1992	-	3/31/1993	15.3	*	15.3
4/1/1993	-	3/31/1994	15.3	*	15.3
4/1/1994	-	3/31/1995	15.3	*	15.3
4/1/1995	-	3/31/1996	15.3	*	15.3
4/1/1996	-	3/31/1997	15.3	*	15.3
4/1/1997	-	3/31/1998	15.3	*	15.3
4/1/1998	-	3/31/1999	15.3	*	15.3
4/1/1999	-	3/31/2000	15.3	*	15.3
4/1/2000	-	3/31/2001	15.0	*	15.0
4/1/2001	-	3/31/2002	13.3	*	13.3
4/1/2002	-	3/31/2003	13.2	*	13.2
4/1/2003	-	3/31/2004	11.5	*	11.5
4/1/2004	-	3/31/2005	11.5	*	11.5
4/1/2005	-	3/31/2006	9.1	*	9.1
4/1/2006	-	3/31/2007	7.9	*	7.9
4/1/2007	-	3/31/2008	7.9	*	7.9
4/1/2008	-	3/31/2009	7.9	*	7.9
4/1/2009	-	3/31/2010	7.9	*	7.9
4/1/2010	-	3/31/2011	7.9	*	7.9
4/1/2011	-	3/31/2012	7.9	*	7.9
4/1/2012	-	3/31/2013	7.9	*	7.9
4/1/2013	-	3/31/2014	7.9	*	7.9
4/1/2014	-	3/31/2015	7.9	*	7.9
4/1/2015	-	3/31/2016	7.9	*	7.9
4/1/2016	-	3/31/2017	7.9	*	7.9
4/1/2017	-	3/31/2018	7.9	*	7.9
4/1/2018	-	3/31/2019	6.3	*	6.3
4/1/2019	-	3/31/2020	5.1	*	5.1
4/1/2020	-	3/31/2021	4.6	*	4.6
4/1/2021	-	3/31/2022	4.6	*	4.6

* Not eligible for STAR COLA increase in 2023.

Note: Plan E members are not eligible for the STAR COLA Program benefits.



2023 STAR COLA Program

September 7, 2022

Board of Retirement Meeting

Discussion Topics



Key Concepts

- **STAR COLA Award Method:**
 - Ad-Hoc
 - Permanent
- **STAR COLA Example**
 - **General Plan D Member Award**
- **STAR Program Funding**
 - History
 - 2023 Funding

STAR COLA

Retirement Payments

Cost of Living

COLA Accumulation

▶ STAR COLA

The Supplemental Targeted Adjustment for Retirees (STAR) is a cost-of-living adjustment (COLA) program designed to ease the effects of inflation for retirees and eligible survivors whose allowance has lost more than 20 percent of its purchasing power since retirement. The STAR COLA program is available for contributory plan retirees and their beneficiaries only; Plan E retirees are not eligible.



01 STAR COLA Method

Ad-Hoc or Permanent

STAR COLA Method



Government Code provisions allow the Board of Retirement to award additional benefits to address the inflation experienced by retirees using one of the following approaches:

Ad-Hoc STAR COLA

- Temporary benefit for the current calendar year
- Not included in the calculation of future statutory April 1st COLA awards
- COLA Accumulation account balance not reduced, remains above 20% and future amounts are added
- Board of Retirement must approve these benefits each year in future years
- Benefits paid from STAR COLA Reserve

Permanent STAR COLA

- Permanent benefit for the current calendar year and future years
- STAR Benefit increases base allowance and is included in the calculation of future statutory April 1st COLA awards
- COLA Accumulation account balance is reduced to 20% level
- Board of Retirement does not need to approve these benefits each year in future years
- Benefits funded by one-time transfer from STAR Reserve and paid from Employer Reserves



02 STAR COLA Example

Plan D Member Award

STAR COLA Example



STEP

1

General Plan D Member
Retired in March 1990

STEP

2

April 1, 2021 Accumulation Account
Balance of 18.5%

STEP

3

Statutory COLA for Plan D Members
CPI was 6.6% and Statutory COLA was 2.0%

STAR COLA Example



STEP

4

Accumulation Account increased by 4.6%
Difference between CPI of 6.6% and Statutory COLA of 2.0%

STEP

5

Accumulation Account value, from 18.5% to 23.1%
As of April 2022

STEP

6

Accumulation Account greater than 20.0%
Member's benefit lost more than 20% of original value

STAR COLA Example



STEP

7

Accumulation Account new value 23.1%
Eligible for STAR COLA benefit in 2023

STEP

8

STAR COLA Award (upon BOR Approval)
Increase benefit 3.1%, effective January 1, 2023
Ad-Hoc Award – Paid for 2023 Only, Permanent Award – Paid for Lifetime

STEP

9

Accumulation Account Balance
Ad-Hoc Award – remain at 23.1%, Permanent Award – reduce to 20.0%



03 STAR Program Funding

History and 2023 Funding

STAR Program Funding



History

Excess Earnings

- **1994 County issued Pension Obligation Bonds**
- **As a result, LACERA's funded ratio exceeded 100% in subsequent years**
- **During the period 1994-1998, Retirement Benefit Funding Policy required the Board of Investments to allocate all excess earnings:**
 - **75% to Employer Reserves (County Contribution Credit Reserve)**
 - **25% to STAR Reserve**

STAR Reserve

- **Highest balance in 1999 due to excess earnings contributions: \$1.023 billion**
- **STAR benefits paid from STAR COLA Reserve for the 1990-2008 Program Years**
- **Current balance as of June 30, 2022: \$614.011 million (same as prior year)**
- **Ad-Hoc STAR Program cost: \$0.231 million**
- **Permanent STAR Program cost: \$2.467 million**

STAR Program Funding



2023 Funding

STAR Reserve

- **STAR COLA Program cost paid from STAR Reserve**
 - Permanent award: amount transferred from STAR Reserve to the Employer Reserves
 - Ad-Hoc award: benefits paid from STAR Reserve
- **STAR Reserve:**
 - Balance included in Valuation Assets
 - STAR COLA benefits not included in Liabilities*
- **STAR COLA Award:**
 - Reduces Valuation Assets
 - Increases Valuation Liabilities
 - Increases employer contribution rate 0.01%

* The valuation liabilities do not account for STAR COLAs that may be granted in the future. STAR COLA benefits previously approved by the BOR are included in the liabilities.

Pension Plan Reserves

As of June 30, 2021 and 2020

(Dollars in Thousands)

	2021	2020
Member Reserves	\$24,646,373	\$23,481,576
Employer Reserves	29,026,898	25,818,509
STAR Reserve	614,011	614,011
Contingency Reserve	147,104	—
Total Reserves at Book Value	\$54,434,386	\$49,914,096
Unrealized Investment Portfolio Appreciation	\$18,577,640	\$8,596,312
Total Reserves at Fair Value¹	\$73,012,026	\$58,510,408

¹Total Reserves at Fair Value equals the Fiduciary Net Position Restricted for Benefits as presented in the Basic Financial Statements.

Thank You!



2023 STAR COLA

Questions?

**FOR INFORMATION ONLY**

August 22, 2022

TO: Each Trustee
Board of Retirement
Board of Investments

FROM: Ted Granger 
Interim Chief Financial Officer

FOR: September 7, 2022 Board of Retirement Meeting
September 14, 2022 Board of Investments Meeting

SUBJECT: **MONTHLY TRAVEL & EDUCATION REPORT – JULY 2022**

Attached for your review is the Trustee Travel & Education Report. This report includes all events (i.e., attended and canceled) from the beginning of the fiscal year through July 2022. Staff travel and education reports are provided to the Chief Executive Office monthly and to the Boards quarterly.

REVIEWED AND APPROVED:



Santos H. Kreimann
Chief Executive Officer

TG/EW/gj

Attachments

c: L. Lugo
J. Popowich
L. Guglielmo
J. Grabel
S. Rice
R. Van Nortrick



TRUSTEE TRAVEL AND EDUCATION REPORT
FOR FISCAL YEAR 2022 - 2023
JULY 2022

Attendee	Purpose of Travel - Location	Event Dates	Travel Status
Vivian Gray			
X	- Edu - TLF Annual Convening 2022 - Cambridge MA	07/18/2022 - 07/20/2022	Canceled
David Green			
A	1 Edu - PPI 2022 Summer Roundtable - Canada, Vancouver	07/13/2022 - 07/15/2022	Attended
Patrick Jones			
A	1 Edu - Leading in Artificial Intelligence: Exploring Technology and Policy - Harvard Kennedy School - Cambridge MA	07/17/2022 - 07/22/2022	Attended
Onyx Jones			
A	1 Edu - SACRS Public Pension Investment Management Program - San Francisco CA	07/17/2022 - 07/20/2022	Attended
V	- Edu - The World to Africa Webinar - VIRTUAL	07/27/2022 - 07/27/2022	Attended
Herman Santos			
A	1 Edu - PPI 2022 Summer Roundtable - Canada, Vancouver	07/13/2022 - 07/15/2022	Attended

Category Legend:

A - Pre-Approved/Board Approved

B - Educational Conferences and Administrative Meetings in CA where total cost is no more than \$2,000 per Trustee Travel Policy; Section III.A

C - Second of two conferences and/or meetings counted as one conference per Trustee Education Policy Section IV.C.2 and Trustee Travel Policy Section IV.

V - Virtual Event

X - Canceled events for which expenses have been incurred.

Z - Trip was Canceled - Balance of \$0.00



Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

**For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101**

**FOR INFORMATION ONLY**

August 22, 2022

TO: Trustees
Board of Retirement
Board of Investments

FROM: Ted Granger *TG*
Interim Chief Financial Officer

FOR: September 7, 2022 Board of Retirement Meeting
September 14, 2022 Board of Investments Meeting

SUBJECT: **4TH QUARTER TRUSTEE TRAVEL & EDUCATION REPORTS**

Attached for your review, is the Trustee Travel & Education Report which includes expenses paid and submitted for reimbursement for events between July 1, 2021 to June 30, 2022. In addition, the Trustee Cancellation & Credit Expenditures Report which includes credits and expenses associated with trip cancellations, for Fiscal Years 2020-2021, and 2021-2022 are attached for your reference.

REVIEWED AND APPROVED:

Santos H. Kreimann
Chief Executive Officer

TG/EW/gj

Attachments

c: L. Lugo
J. Popowich
L. Guglielmo
J. Gabel
S. Rice
R. Van Nortrick



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Alan Bernstein													
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York NY - 08/22/2021 - 08/24/2021	Attended	\$3,684.58	\$685.00	\$529.83	\$1,922.40	\$348.35	\$0.00	\$0.00	\$0.00	\$0.00	\$157.00	\$42.00
	2 Edu - 2021 SuperReturn North America - Boston MA - 10/04/2021 - 10/05/2021	Attended	\$3,196.31	\$110.88	\$1,128.00	\$1,786.79	\$145.64	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.00
	3 Edu - Latin America US Real Estate Meeting - South Beach FL - 11/29/2021 - 11/30/2021	Attended	\$4,927.75	\$200.00	\$1,402.76	\$3,033.80	\$137.84	\$16.35	\$0.00	\$0.00	\$0.00	\$122.00	\$15.00
B	- Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$837.86	\$120.00	\$0.00	\$578.86	\$0.00	\$0.00	\$0.00	\$11.00	\$0.00	\$103.00	\$25.00
	- Edu - 2022 SACRS Spring Conference - Rancho Mirage CA - 05/10/2022 - 05/13/2022	Attended	\$1,013.79	\$120.00	\$571.19	\$0.00	\$0.00	\$179.60	\$0.00	\$0.00	\$0.00	\$143.00	\$0.00
V	- Edu - NACD Women in the Workforce: Beyond Diversity, Equity, and Inclusion - VIRTUAL - 04/20/2022 - 04/20/2022	Attended	\$30.00	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
X	- Edu - SuperReturn International Berlin - Berlin, Germany - 11/09/2021 - 11/12/2021	Canceled	\$375.02	\$375.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Alan Bernstein:			\$14,065.31	\$1,640.90	\$3,631.78	\$7,321.85	\$631.83	\$195.95	\$0.00	\$11.00	\$0.00	\$525.00	\$107.00
Vivian Gray													
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York NY - 08/22/2021 - 08/24/2021	Attended	\$3,569.08	\$685.00	\$529.83	\$1,810.81	\$149.44	\$0.00	\$0.00	\$0.00	\$0.00	\$195.00	\$199.00
	2 Edu - The Women's Alliance of Saxena White ~ First Annual Diversity Investing Symposium - Delray Beach FL - 05/05/2022 - 05/05/2022	Attended	\$3,047.47	\$0.00	\$675.74	\$2,115.20	\$0.00	\$144.53	\$0.00	\$0.00	\$0.00	\$97.00	\$15.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Vivian Gray													
A	3 Edu - NCPERS Annual Conference & Exhibition - Washington, DC MD - 05/21/2022 - 05/25/2022	Attended	\$4,143.90	\$1,385.00	\$0.00	\$2,492.71	\$164.19	\$0.00	\$0.00	\$0.00	\$0.00	\$92.00	\$10.00
	4 Edu - NASP Annual Financial Services Conference - Chicago IL - 06/27/2022 - 06/29/2022	Attended	\$3,518.41	\$175.00	\$1,924.33	\$1,149.01	\$89.07	\$0.00	\$0.00	\$0.00	\$0.00	\$166.00	\$15.00
B	- Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$2,065.50	\$120.00	\$1,773.42	\$0.00	\$10.08	\$0.00	\$0.00	\$0.00	\$0.00	\$137.00	\$25.00
	- Admin - SACRS Board of Directors Meeting - Rancho Mirage CA - 12/14/2021 - 12/14/2021	Attended	\$349.44	\$0.00	\$349.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Admin - SACRS Board of Directors and Program Committee Meeting - Berkeley CA - 01/24/2022 - 01/25/2022	Attended	\$1,722.78	\$0.00	\$1,223.52	\$0.00	\$0.00	\$442.26	\$0.00	\$0.00	\$0.00	\$52.00	\$5.00
	- Edu - 2022 CALAPRS - General Assembly - San Diego CA - 03/05/2022 - 03/08/2022	Attended	\$1,982.59	\$0.00	\$1,538.38	\$0.00	\$0.00	\$150.93	\$0.00	\$0.00	\$0.00	\$121.00	\$172.28
	- Admin - SACRS Program Committee Meeting - Long Beach CA - 03/22/2022 - 03/23/2022	Attended	\$46.53	\$0.00	\$0.00	\$0.00	\$0.00	\$10.53	\$0.00	\$0.00	\$0.00	\$31.00	\$5.00
	- Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022	Attended	\$615.50	\$260.00	\$288.10	\$0.00	\$0.00	\$10.53	\$0.00	\$56.87	\$0.00	\$0.00	\$0.00
	- Edu - 2022 SACRS Spring Conference - Rancho Mirage CA - 05/10/2022 - 05/13/2022	Attended	\$1,570.91	\$120.00	\$1,107.28	\$0.00	\$0.00	\$160.88	\$0.00	\$0.00	\$0.00	\$143.00	\$39.75
	- Edu - Pomerantz LP 2022 Corporate Governance Roundtable Event - "The Collective Power to Make Change" - Beverly Hills CA - 06/14/2022 - 06/14/2022	Attended	\$1,271.75	\$0.00	\$948.12	\$0.00	\$0.00	\$14.63	\$0.00	\$70.00	\$178.00	\$51.00	\$10.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Vivian Gray													
B -	Admin - SACRS Board of Directors Meeting - Sonoma CA - 06/21/2022 - 06/21/2022	Attended	\$1,838.65	\$0.00	\$1,339.32	\$0.00	\$380.33	\$0.00	\$0.00	\$0.00	\$0.00	\$104.00	\$15.00
V -	Edu - NASP 32nd Annual Financial Services Virtual Conference - VIRTUAL - 09/22/2021 - 09/24/2021	Attended	\$75.00	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Vivian Gray:			\$25,817.51	\$2,820.00	\$11,697.48	\$7,567.73	\$793.11	\$934.29	\$0.00	\$126.87	\$178.00	\$1,189.00	\$511.03
David Green													
A 1	Edu - 2022 RFK Compass Investors Conference - Hyannis Port MA - 06/14/2022 - 06/15/2022	Attended	\$6,994.12	\$1,000.00	\$1,980.06	\$3,347.21	\$602.85	\$0.00	\$0.00	\$0.00	\$0.00	\$54.00	\$10.00
B -	Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$1,323.44	\$120.00	\$902.79	\$0.00	\$0.00	\$21.95	\$0.00	\$161.70	\$0.00	\$102.00	\$15.00
-	Edu - 2022 PPI Winter Roundtable - Westlake Village CA - 02/23/2022 - 02/25/2022	Attended	\$1,838.72	\$950.00	\$702.06	\$0.00	\$0.00	\$50.66	\$0.00	\$0.00	\$0.00	\$121.00	\$15.00
-	Edu - 2022 CALAPRS - General Assembly - San Diego CA - 03/05/2022 - 03/08/2022	Attended	\$1,673.12	\$250.00	\$1,032.32	\$0.00	\$0.00	\$163.80	\$0.00	\$0.00	\$0.00	\$207.00	\$20.00
-	Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022	Attended	\$1,984.51	\$0.00	\$1,860.72	\$0.00	\$0.00	\$37.79	\$0.00	\$0.00	\$0.00	\$86.00	\$0.00
X -	Edu - 2021 CII Fall Conference - Chicago IL - 09/22/2021 - 09/24/2021	Host Canceled	\$130.33	\$0.00	\$0.00	\$130.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for David Green:			\$13,944.24	\$2,320.00	\$6,477.95	\$3,477.54	\$602.85	\$274.20	\$0.00	\$161.70	\$0.00	\$570.00	\$60.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
James Harris													
B -	Edu - CRCEA 2021 Fall Conference - Long Beach CA - 11/07/2021 - 11/10/2021	Attended	\$269.65	\$130.00	\$139.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for James Harris:			\$269.65	\$130.00	\$139.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Patrick Jones													
B -	Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Attended	\$96.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$96.00	\$0.00	\$0.00	\$0.00
-	Edu - 2022 CALAPRS - General Assembly - San Diego CA - 03/05/2022 - 03/08/2022	Attended	\$1,492.23	\$250.00	\$1,242.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022	Attended	\$260.00	\$260.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022	Attended	\$187.61	\$0.00	\$0.00	\$0.00	\$0.00	\$91.61	\$0.00	\$96.00	\$0.00	\$0.00	\$0.00
-	Edu - Pomerantz LP 2022 Corporate Governance Roundtable Event - "The Collective Power to Make Change" - Beverly Hills CA - 06/14/2022 - 06/14/2022	Attended	\$652.06	\$0.00	\$474.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$178.00	\$0.00	\$0.00
V -	Edu - SACRS Public Pension Investment Management Program - VIRTUAL - 07/13/2021 - 07/22/2021	Attended	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - Harvard Kennedy School Executive Education: Leading Smart Policy Design: A Multisectoral Approach to Economic Decisions - VIRTUAL - 09/21/2021 - 10/12/2021	Attended	\$3,800.00	\$3,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Patrick Jones													
V -	Edu - Duke University Executive Education Program - Corporate Social Responsibility - VIRTUAL - 12/06/2021 - 12/14/2021	Attended	\$1,995.00	\$1,995.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - Harvard Kennedy School Executive Education: Behavioral Insights and Public Policy Program - VIRTUAL - 01/31/2022 - 02/16/2022	Attended	\$3,800.00	\$3,800.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Patrick Jones:			\$12,782.90	\$10,605.00	\$1,716.29	\$0.00	\$0.00	\$91.61	\$0.00	\$192.00	\$178.00	\$0.00	\$0.00
Shawn Kehoe													
X -	Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Canceled	\$23.96	\$0.00	\$23.96	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Canceled	\$120.00	\$120.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Shawn Kehoe:			\$143.96	\$120.00	\$23.96	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Joseph Kelly													
B -	Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Attended	\$45.58	\$0.00	\$0.00	\$0.00	\$3.50	\$10.08	\$0.00	\$32.00	\$0.00	\$0.00	\$0.00
V -	Edu - SACRS Public Pension Investment Management Program - VIRTUAL - 07/13/2021 - 07/22/2021	Attended	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - 2021 Institute of Internal Auditors Los Angeles Conference: Governance, Grit and Gravitas - VIRTUAL - 10/04/2021 - 10/06/2021	Attended	\$120.00	\$120.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - NACD Pacific Southwest / USC Marshall Corporate Directors Symposium - November 2021 - VIRTUAL - 11/10/2021 - 11/10/2021	Attended	\$375.00	\$375.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - NACD Pacific Southwest / USC Marshall Corporate Directors - March 2022 - VIRTUAL - 03/24/2022 - 03/24/2022	Attended	\$375.00	\$375.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - ESG - SEC Proposed Rule on Climate Disclosures: Roles for Internal Audit - VIRTUAL - 04/06/2022 - 04/06/2022	Attended	\$30.00	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - NACD - Future of Water in the Pacific Southwest - VIRTUAL - 04/06/2022 - 04/06/2022	Attended	\$30.00	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Joseph Kelly:			\$1,475.58	\$1,430.00	\$0.00	\$0.00	\$3.50	\$10.08	\$0.00	\$32.00	\$0.00	\$0.00	\$0.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Keith Knox													
V -	Edu - Harvard Business School Audit Committees In A New Era of Governance - VIRTUAL - 07/21/2021 - 07/23/2021	Attended	\$5,700.00	\$5,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - NACD Climate Continuous Learning Cohort Two-Day Program - VIRTUAL - 03/31/2022 - 04/01/2022	Attended	\$2,235.00	\$2,235.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
X -	Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022	Canceled	\$1,646.94	\$0.00	\$1,646.94	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Keith Knox:			\$9,581.94	\$7,935.00	\$1,646.94	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Wayne Moore													
B -	Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Attended	\$141.44	\$0.00	\$0.00	\$0.00	\$0.00	\$13.44	\$0.00	\$128.00	\$0.00	\$0.00	\$0.00
-	Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022	Attended	\$393.85	\$260.00	\$0.00	\$0.00	\$133.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022	Attended	\$142.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14.00	\$0.00	\$128.00	\$0.00	\$0.00	\$0.00
Totals for Wayne Moore:			\$677.29	\$260.00	\$0.00	\$0.00	\$133.85	\$27.44	\$0.00	\$256.00	\$0.00	\$0.00	\$0.00
William Pryor													
A	1 Edu - IFEBP Healthcare Management and Investments Institute Conference - Phoenix AZ - 04/25/2022 - 04/28/2022	Attended	\$3,091.90	\$1,895.00	\$954.60	\$242.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	2 Edu - NCPERS Annual Conference & Exhibition - Washington, DC MD - 05/21/2022 - 05/25/2022	Attended	\$3,060.71	\$0.00	\$0.00	\$3,060.71	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
William Pryor													
B -	Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$330.76	\$120.00	\$210.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V -	Edu - CALAPRS Special Virtual Trustee Round Table - VIRTUAL - 04/29/2022 - 04/29/2022	Attended	\$50.00	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for William Pryor:			\$6,533.37	\$2,065.00	\$1,165.36	\$3,303.01	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Les Robbins													
B -	Edu - CRCEA 2021 Fall Conference - Long Beach CA - 11/07/2021 - 11/10/2021	Attended	\$75.00	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
V -	Edu - CALAPRS Trustees Roundtable - VIRTUAL - 10/29/2021 - 10/29/2021	Attended	\$50.00	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
X -	Edu - AHIP Health Conference - Las Vegas NV - 06/21/2022 - 06/23/2022	Canceled	\$519.28	\$0.00	\$519.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Les Robbins:			\$644.28	\$125.00	\$519.28	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Gina Sanchez													
A	1 Edu - 2022 CII Spring Conference - Washington, DC MD - 03/07/2022 - 03/09/2022	Attended	\$2,111.47	\$0.00	\$802.67	\$925.20	\$231.37	\$0.00	\$0.00	\$0.00	\$48.23	\$94.00	\$10.00
	2 Edu - The Women's Alliance of Saxena White ~ First Annual Diversity Investing Symposium - Delray Beach FL - 05/05/2022 - 05/05/2022	Attended	\$2,010.43	\$0.00	\$963.86	\$718.95	\$155.27	\$22.35	\$0.00	\$150.00	\$0.00	\$0.00	\$0.00
	3 Edu - NCPERS Annual Conference & Exhibition - Washington, DC MD - 05/21/2022 - 05/25/2022	Attended	\$5,043.41	\$1,755.00	\$1,052.95	\$1,695.20	\$300.26	\$0.00	\$0.00	\$0.00	\$0.00	\$220.00	\$20.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Gina Sanchez													
A	4 Edu - Oxford Impact Investing Program in Oxford - United Kingdom, Oxford - 06/27/2022 - 06/30/2022	Attended	\$21,228.86	\$8,740.56	\$1,826.55	\$9,832.67	\$421.08	\$0.00	\$0.00	\$0.00	\$0.00	\$292.00	\$116.00
B	- Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Attended	\$166.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$166.00	\$0.00	\$0.00	\$0.00
	- Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$179.00	\$135.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.00	\$0.00	\$0.00	\$0.00
	- Edu - 2022 PPI Winter Roundtable - Westlake Village CA - 02/23/2022 - 02/25/2022	Attended	\$1,327.16	\$950.00	\$342.00	\$0.00	\$0.00	\$35.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022	Attended	\$274.27	\$260.00	\$0.00	\$0.00	\$0.00	\$14.27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Edu - 2022 Annual Pension Bridge - San Francisco CA - 04/18/2022 - 04/20/2022	Attended	\$1,625.06	\$0.00	\$533.52	\$307.20	\$417.90	\$0.00	\$0.00	\$0.00	\$116.44	\$220.00	\$30.00
	- Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022	Attended	\$143.09	\$0.00	\$0.00	\$0.00	\$32.70	\$14.39	\$0.00	\$96.00	\$0.00	\$0.00	\$0.00
	- Edu - 2022 SACRS Spring Conference - Rancho Mirage CA - 05/10/2022 - 05/13/2022	Attended	\$693.80	\$150.00	\$390.53	\$0.00	\$0.00	\$153.27	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Edu - Pomerantz LP 2022 Corporate Governance Roundtable Event - "The Collective Power to Make Change" - Beverly Hills CA - 06/14/2022 - 06/14/2022	Attended	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$75.00	\$0.00	\$0.00
V	- Edu - 2021 Virtual NACD Summit - VIRTUAL - 10/04/2021 - 10/08/2021	Attended	\$1,995.00	\$1,995.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Gina Sanchez													
V -	Edu - CALAPRS Trustees Roundtable - VIRTUAL - 10/29/2021 - 10/29/2021	Attended	\$50.00	\$50.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - Institutional ESG Investing Conference North America - VIRTUAL - 04/10/2022 - 04/10/2022	Attended	\$102.90	\$102.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Totals for Gina Sanchez:			\$37,025.45	\$14,138.46	\$5,912.08	\$13,479.22	\$1,558.58	\$239.44	\$0.00	\$456.00	\$239.67	\$826.00	\$176.00
Herman Santos													
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York NY - 08/22/2021 - 08/24/2021	Attended	\$2,709.58	\$685.00	\$706.45	\$503.40	\$160.99	\$84.00	\$0.00	\$160.00	\$0.00	\$263.00	\$146.74
	2 Edu - 2022 CII Spring Conference - Washington, DC MD - 03/07/2022 - 03/09/2022	Attended	\$2,604.79	\$0.00	\$1,604.72	\$501.90	\$41.18	\$54.99	\$0.00	\$135.00	\$242.00	\$0.00	\$25.00
	3 Edu - Congress of Private Capital and Entrepreneurial Capital of the Pacific Alliance - Bogota, Colombia - 04/26/2022 - 04/27/2022	Attended	\$5,165.61	\$228.40	\$718.98	\$4,199.17	\$19.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	4 Edu - The Women's Alliance of Saxena White ~ First Annual Diversity Investing Symposium - Delray Beach FL - 05/05/2022 - 05/05/2022	Attended	\$3,362.21	\$0.00	\$607.94	\$2,355.20	\$106.25	\$53.82	\$0.00	\$63.00	\$0.00	\$161.00	\$15.00
B -	Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021	Attended	\$2,012.82	\$0.00	\$1,708.92	\$0.00	\$0.00	\$105.95	\$0.00	\$0.00	\$0.00	\$155.00	\$42.95
-	Edu - PPI Asia Pacific Roundtable - Pasadena CA - 10/27/2021 - 10/29/2021	Attended	\$1,837.24	\$950.00	\$643.32	\$0.00	\$0.00	\$88.92	\$0.00	\$70.00	\$0.00	\$70.00	\$15.00
-	Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021	Attended	\$1,469.91	\$120.00	\$902.79	\$0.00	\$130.62	\$100.80	\$0.00	\$161.70	\$0.00	\$34.00	\$20.00



**4TH QUARTER BOARD
TRUSTEE AND EDUCATION EXPENDITURE REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.	
Herman Santos														
B -	Admin - SACRS Board of Directors Meeting - Rancho Mirage CA - 12/14/2021 - 12/14/2021	Attended	\$355.60	\$0.00	\$174.72	\$0.00	\$0.00	\$75.88	\$0.00	\$0.00	\$0.00	\$95.00	\$10.00	
-	Edu - 2022 PPI Winter Roundtable - Westlake Village CA - 02/23/2022 - 02/25/2022	Attended	\$1,672.06	\$950.00	\$722.06	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
V -	Edu - PPI Roundtable - July 2021 - VIRTUAL - 07/13/2021 - 07/15/2021	Attended	\$175.00	\$175.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
X -	Edu - Global Investors Annual Meeting - New York NY - 12/13/2021 - 12/14/2021	Canceled	\$4.99	\$4.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
-	Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022	Canceled	\$260.00	\$260.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Totals for Herman Santos:			\$21,629.81	\$3,373.39	\$7,789.90	\$7,559.67	\$458.10	\$564.36	\$0.00	\$589.70	\$242.00	\$778.00	\$274.69	
Cnt: 18			Grand Totals:	\$144,591.29	\$46,962.75	\$40,720.67	\$42,709.02	\$4,181.82	\$2,337.37	\$0.00	\$1,825.27	\$837.67	\$3,888.00	\$1,128.72

Category Legend:

- A - Pre-Approved/Board Approved
- B - Educational Conferences and Administrative Meetings in CA where total cost is no more than \$2,000 per Trustee Travel Policy; Section III.A
- C - Second of two conferences and/or meetings counted as one conference per Trustee Education Policy Section IV.C.2 and Trustee Travel Policy Section IV.
- V - Virtual Event
- X - Canceled events for which expenses have been incurred.
- Z - Trip was Canceled - Balance of \$0.00

**TRUSTEE CANCELLATION AND CREDIT EXPENDITURES
REPORT FOR FISCAL YEAR 2021
FOR TRAVEL DURING JULY 2020 - JUNE 2021**

Purpose of Travel - Location - Date - Travel Status	Category	Total Expense	Registration (Reg.)	Lodging	Airfare	Other Misc. Travel Exp.	Chair Pardon	Reg. Credit	Reg. Credit Expiration Date	Airfare Credit	Airfare Credit Expiration Date	Refund Pending
Alan Bernstein												
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Vivian Gray												
Edu - CII & NYU Corporate Governance Bootcamp - VIRTUAL -9/23/2020 - 9/25/2020 - Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Shawn Kehoe												
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Les Robbins												
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	X	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00	12/31/2022	\$0.00		\$0.00
Edu- 2020 SACRS Fall Virtual Conference -VIRTUAL - 11/10/2020 - 11/13/2020 - Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00		\$0.00		\$0.00
Grand Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00		\$0.00		\$0.00

Category Legend:

X - Canceled events for which expenses have been incurred.
Z - Trip was Canceled - Balance of \$0.00

**TRUSTEE CANCELLATION AND CREDIT EXPENDITURES REPORT
FOR FISCAL YEAR 2022
FOR EVENTS DURING JULY 2021 - JUNE 2022**

Purpose of Travel - Location - Date - Travel Status	Category	Total Expense	Registration (Reg.)	Lodging	Airfare	Other Misc. Travel Exp.	Chair Pardon	Reg. Credit	Reg. Credit Expiration Date	Airfare Credit	Airfare Credit Expiration Date	Refund Pending
Alan Bernstein												
Edu - SuperReturn International Berlin - Berlin, Germany - 11/09/2021 - 11/12/2021 - Canceled	X	\$375.02	\$375.02	\$0.00	\$0.00	\$0.00	Yes	\$0.00		\$0.00		\$0.00
Attendee Totals:		\$375.02	\$375.02	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
David Green												
Edu - 2021 CII Fall Conference - Chicago IL - 09/22/2021 - 09/24/2021 - Host Canceled	X	\$130.33	\$0.00	\$0.00	\$130.33	\$0.00	Yes	\$0.00		\$256.80	10/6/2022	\$0.00
Attendee Totals:		\$130.33	\$0.00	\$0.00	\$130.33	\$0.00		\$0.00		\$256.80		\$0.00
Patrick Jones												
Edu - Duke University Executive Education Program - Corporate Social Responsibility - Durham NC - 09/23/2021 - 09/25/2021 - Host Canceled	X	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80	12/31/2023	\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80		\$0.00
Shawn Kehoe												
Edu - 2021 Milken Institute Global Conference - Los Angeles CA - 10/17/2021 - 10/20/2021 - Canceled	X	\$23.96	\$0.00	\$23.96	\$0.00	\$0.00	Yes	\$0.00		\$0.00		\$0.00
Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/2021 - Canceled	X	\$120.00	\$120.00	\$0.00	\$0.00	\$0.00	Yes	\$0.00		\$0.00		\$0.00
Attendee Totals:		\$143.96	\$120.00	\$23.96	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Joseph Kelly												
Edu - Global Investors Annual Meeting - New York NY - 12/13/2021 - 12/14/2021 - Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Keith Knox												
Edu - 2022 Milken Institute Global Conference - Los Angeles CA - 05/01/2022 - 05/04/2022 - Canceled	X	\$1,646.94	\$0.00	\$1,646.94	\$0.00	\$0.00	Yes	\$0.00		\$0.00		\$0.00
Attendee Totals:		\$1,646.94	\$0.00	\$1,646.94	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Les Robbins												
Edu - AHIP Health Conference - Las Vegas NV - 06/21/2022 - 06/23/2022 - Canceled	X	\$519.28	\$0.00	\$519.28	\$0.00	\$0.00		\$400.00	6/30/2023	\$97.96	12/31/2040	\$0.00
Attendee Totals:		\$519.28	\$0.00	\$519.28	\$0.00	\$0.00		\$400.00		\$97.96		\$0.00
Gina Sanchez												
Edu - 2021 CII Fall Conference - Chicago IL - 09/22/2021 - 09/24/2021 - Host Canceled	X	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$282.80	7/27/2022	\$0.00
Attendee Totals:		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$282.80		\$0.00

Herman Santos

Edu - Global Investors Annual Meeting - New York NY - 12/13/2021 - 12/14/2021 - Canceled	X	\$4.99	\$4.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Edu - NASP Southern California "Day of Education in Private Equity Conference" - Los Angeles CA - 03/23/2022 - 03/24/2022 - Canceled	X	\$260.00	\$260.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$260.00
Attendee Totals:		\$264.99	\$264.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$260.00
Grand Totals:		\$3,080.52	\$760.01	\$2,190.18	\$130.33	\$0.00	\$400.00	\$1,254.36	\$260.00

Category Legend:

- X - Canceled events for which expenses have been incurred.
- Z - Trip was Canceled - Balance of \$0.00



Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

**For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101**



Documents not attached are exempt from disclosure under the California Public Records Act and other legal authority.

**For further information, contact:
LACERA
Attention: Public Records Act Requests
300 N. Lake Ave., Suite 620
Pasadena, CA 91101**