

# BOARD MEETING VIRTUAL & IN PERSON

\*Following the Committee meeting  
being held prior.



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](mailto:PublicComment@lacera.com). If you would like to remain anonymous at the meeting without stating your name, please let us know.

**Attention:** Public comment requests must be submitted via email to [PublicComment@lacera.com](mailto:PublicComment@lacera.com).

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

## AGENDA

### A 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, DECEMBER 14, 2022

This meeting will be conducted by the Board of Investments both in person and by teleconference under California Government Code Section 54953(e).

Any person may view the meeting in person at LACERA's offices and online at <https://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. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of November 9, 2022

#### III. PUBLIC COMMENT

(Written Public Comment - You may submit written public comments by email to [PublicComment@lacera.com](mailto: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](mailto: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. EXECUTIVE UPDATE

- A. CHIEF EXECUTIVE OFFICER'S REPORT  
(Memo dated November 29, 2022)
- B. CHIEF INVESTMENT OFFICER'S REPORT  
(Presentation dated December 14, 2022)

V. CONSENT ITEMS

- A. Recommendation as submitted by Steven P. Rice, Chief Counsel: 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 other public agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days as part of hybrid meetings also in person, so long as the State of Emergency remains in effect, and direct staff to comply with the agenda and public comment requirements of Section 54953(e)(3). Action taken by each Board will only apply to that Board and its Committees. (Memo dated November 28, 2022)
- B. Recommendation as submitted by Herman Santos, Chair, Public/Private Committee: That the Board approve the Growth Functional Category Biennial Structure Review. (Memo dated November 23, 2022)
- C. Recommendation that the Board approve attendance of Trustees at RFK Compass Investors Program in Miami, Florida on February 26-28, 2023, and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated November 28, 2022) (Placed on the agenda at the request of Trustee Santos)
- D. Recommendation as submitted by Laura Guglielmo, Assistant Executive Officer and Roberta Van Nortrick, Acting Division Manager, Administrative Services: That the Board of Retirement review and approve the FY 2022-2023 Mid-Year Budget Amendments for the LACERA Administrative Budget. (Memo dated November 18, 2022)

## VI. NON-CONSENT ITEMS

- A. Recommendation as submitted by Jonathan Grabel, Chief Investment Officer, Scott Zdrazil, Principal Investment Officer, Jude Pérez, Principal Investment Officer, Esmeralda del Bosque, Acting Principal Investment Officer, Krista Powell, Investment Officer, Cindy Rivera, Senior Investment Analyst and Magdalia Armstrong, Senior Investment Analyst: That the Board approve revised Investment Beliefs and insert the revised Investment Beliefs into LACERA's Investment Policy Statement. (Memo dated November 29, 2022)
- B. Recommendation as submitted by Santos H. Kreimann, Chief Executive Officer and Ted Granger, Interim Chief Financial Officer: 1. Adopt the economic assumptions identified in Appendix A on pages 61-82 of the draft 2022 Investigation of Experience for Retirement Benefit Assumption Report (2022 Experience Study), as submitted by the plan actuary (Milliman). 2. Adopt the economic actuarial methods and the demographic assumptions recommended by LACERA staff and Milliman. 3. Delegate authority to the Chief Executive Officer working in concert with LACERA's Interim Chief Financial Officer, Chief Investment Officer, and Chief Counsel to ensure the actuarial assumptions adopted by the Board of Investments, as more fully detailed in Appendix A of the 2022 Experience Study report, are incorporated in Milliman's calculation of plan liabilities presented in the upcoming 2022 Actuarial Valuation of Retirement Benefits report. (Memo dated December 5, 2022))
- C. Recommendation as submitted by Carly Ntoya, Ph.D., Human Resources Director: That the Board 1) Approve the proposed classification and compensation changes for implementation for the existing Accounting Officer II, LACERA; Accounting Officer I, LACERA; Senior Accountant, LACERA; Accountant, LACERA; and Accounting Technician I, LACERA, including submission to the Board of Supervisors (BOS); 2) Approve the proposed classification and compensation changes for implementation for the creation of new Senior Investment Accountant, LACERA; Investment Accountant, LACERA; and Accountant II, LACERA classifications, including submission to the Board of Supervisors; and 3) Approve that the Accounting Technician II, LACERA classification be deleted from the Ordinance, including submission to the Board of Supervisors. (Memo dated November 28, 2022)

VI. NON-CONSENT ITEMS (Continued)

- D. Recommendation as Santos H. Kreimann, Chief Executive Officer:  
That the Boards review and approve the 2023 meeting calendar and consider rescheduling meeting dates that conflict with a holiday and/or the potential of a lack of quorum. (Memo dated November 28, 2022)

VII. REPORTS

- A. Annual Update and Review of LACERA Towards Inclusion, Diversity, and Equity (LACERA T.I.D.E.)  
Jonathan Grabel, Chief Investment Officer  
Dale Johnson, Investment Officer  
Cheryl Lu, Investment Officer  
Ronald Senkandwa, Investment Officer  
Cindy Rivera, Senior Investment Analyst  
(Memo dated December 2, 2022)
- B. LACERA Investment Cost Report – Fiscal Year 2022  
Calvin Chang, Senior Investment Analyst  
Noah Damsky, Senior Investment Analyst  
Terra Elijah, Senior Investment Analyst  
(Memo dated December 2, 2022)
- C. LACERA Quarterly Performance Book  
Jude Pérez, Principal Investment Officer  
(For Information Only) (Memo dated December 1, 2022)
- D. OPEB Quarterly Performance Book  
Jude Pérez, Principal Investment Officer  
(For Information Only) (Memo dated December 1, 2022)
- E. Legal Projects  
Christine Roseland, Senior Staff Counsel  
(For Information Only) (Memo dated October 31, 2022)
- F. 2022 Year-End Legislative Report  
Barry W. Lew, Legislative Affairs Officer  
(For Information Only) (Memo dated November 23, 2022)

VII. REPORTS (Continued)

- G. FY 2021-2022 Final Budget Control Report  
Laura Guglielmo, Assistant Executive Officer  
(For Information Only) (Memo dated November 17, 2022)
- H. Tier I Merit Salary Adjustment and Tier II Step Advancement  
Santos H. Kreimann, Chief Executive Officer  
(For Information Only) (Memo dated November 23, 2022)
- I. Los Angeles County's Compliance with Requirements for Rehired Retirees – Fiscal Year Ended June 30, 2021  
Richard P. Bendall, Chief Audit Executive and the Audit Committee  
(For Information Only) (Memo dated November 30, 2022)
- J. Principles For Responsible Investment Signatory Ballot  
Scott Zdrazil, Principal Investment Officer  
(For Information Only) (Memo dated November 9, 2022)
- K. AB 2449 Teleconference Meeting Procedures  
Steven P. Rice, Chief Counsel  
(For Information Only) (Memo dated December 5, 2022)
- L. Albourne Self-Assessment  
James Walsh, Stephen Kennedy, Tom Cawkwell, Mark White  
Albourne America LLC  
(For Information Only) (Memo dated December 2, 2022)
- M. StepStone Group Private Equity Self-Evaluation  
Jose Fernandez, Natalie Walker, Daniel Krikorian  
StepStone Group LP  
(For Information Only) (Memo dated November 22, 2022)
- N. StepStone Group Real Estate Self-Evaluation  
Margaret McKnight, Thomas Hester, Kristen Moore, James Maina  
StepStone Real Estate  
(For Information Only) (Memo dated November 29, 2022)
- O. Meketa Investment Group Self-Evaluation  
Tim Filla, Aysun Kilic, Leandro Festino, Imran Zahid, Meketa Investment Group  
(For Information Only) (Memo dated December 14, 2022)

VII. REPORTS (Continued)

- P. Monthly Trustee Travel & Education Reports for October 2022  
Ted Granger, Interim Chief Financial Officer  
(Public memo dated November 21, 2022)  
(Confidential memo dated November 21, 2022 – Includes Pending Travel)  
Quarterly Trustee Travel & Education Reports – 1st Quarter Fiscal Year 2023 (Public memo dated November 21, 2022)  
Quarterly Staff Travel Report- 1st Quarter Fiscal Year 2023  
(Public memo dated November 21, 2022)
- Q. 2022 Fiduciary Counsel Annual Self-Assessments and DEI Report.  
Steven P. Rice, Chief Counsel  
(For Information Only) (Memo dated November 28, 2022) (Privileged and Confidential Attorney-Client Communication/Attorney Work Product)
- R. November 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 November 28, 2022)
- S. Semi-Annual Report on Approved Engagements  
Barry W. Lew, Legislative Affairs Officer  
(For Information Only) (Memo dated November 25, 2022)

VIII. 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.)

IX. 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.)

X. GOOD OF THE ORDER

(For information purposes only)



## XI. EXECUTIVE SESSION

- 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. Waterfall Illiquid Credit Strategy Dedicated Managed Account  
Vache Mahseredjian, Principal Investment Officer  
Chad Timko, Senior Investment Officer  
Krista Powell, Investment Officer  
Quoc Nguyen, Investment Officer  
(Memo dated November 23, 2022)
  2. ACCEL-KKR Capital Partners VII, L.P.  
Christopher J. Wagner, Principal Investment Officer  
Cheryl Lu, Investment Officer  
(Memo dated November 22, 2022)
  3. TIAA-CREF Global Agriculture LLC  
James Rice, Principal Investment Officer  
Pushpam Jain, Investment Officer  
(Memo dated November 24, 2022)
  4. Correction To Slide in November 9, 2022 Credit and Real Assets & Inflation Hedges Manager Recommendations Presentation (Agenda Item X.A.1)  
Vache Mahseredjian, Principal Investment Officer  
(For Information Only) (Memo dated November 30, 2022)

## XII. ADJOURNMENT

*\*Although the meeting is scheduled for 9:00 a.m., it can start anytime thereafter, depending on the length of the Committee meeting preceding it.*

*Documents subject to public disclosure that relate to an agenda item for an open session of the Board of Retirement that are distributed to members of the Board of Retirement 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 Retirement Trustees 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.*

*Requests for reasonable modification or accommodation of the telephone public access and Public Comments 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](mailto:PublicComment@lacera.com), but no later than 48 hours prior to the time the meeting is to commence.*

# 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, NOVEMBER 9, 2022

*This meeting was conducted both in person and by teleconference under California Government Code Section 54953(e).*

PRESENT: Herman Santos, Chair (By Teleconference)

David Green, Vice Chair (By Teleconference)

Shawn Kehoe, Secretary (By Teleconference) (Joined the meeting at 9:03 a.m.)

Joseph Kelly (In-Person)

Keith Knox (In-Person)

Onyx Jones (In-Person)

Patrick Jones (By Teleconference)

Gina Sanchez (In-Person)

ABSENT: Elizabeth Greenwood

### STAFF ADVISORS AND PARTICIPANTS

Jonathan Grabel, Chief Investment Officer

Steven P. Rice, Chief Counsel

Luis Lugo, Deputy Chief Executive Officer

Ted Granger, Interim Chief Financial Officer

Vache Mahseredjian, Principal Investment Officer

STAFF ADVISORS AND PARTICIPANTS (Continued)

James Rice, Principal Investment Officer

Jude Pérez, Principal Investment Officer

Chad Timko, Senior Investment Officer

Mel Tsao, Senior Investment Analyst

John Kim, Investment Officer

Quoc Nguyen, Investment Officer

Krista Powell, Investment Officer

Noah Damsky, Senior Investment Analyst

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)

James Walsh, Partner

Mark White, Partner

StepStone Group LP (Private Equity Consultants)

Jose Fernandez, Partner

Natalie Walker, Partner

Dan Krikorian, Vice President

Milliman,

Nick Collier, Milliman Actuary

Craig Glyde, Milliman Actuary

Latham & Watkins,

Manny Abascal, Partner

I. CALL TO ORDER

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

II. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of October 12, 2022

Mr. Green made a motion, Mr. Kelly seconded, to approve the minutes of the regular meeting of October 12, 2022. The motion passed (roll call) with Messrs. P. Jones, Green, Knox, Kelly, Santos, Mses. Sanchez and O. Jones voting yes. Mr. Kehoe and Ms. Greenwood were absent from the vote.

III. PUBLIC COMMENT (Mr. Kehoe joined the meeting at 9:03 a.m.)

There were no requests from the public to speak.

IV. EXECUTIVE UPDATE

A. CHIEF EXECUTIVE OFFICER'S REPORT  
(Memo dated October 24, 2022)

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

B. CHIEF INVESTMENT OFFICER'S REPORT  
(Presentation dated November 9, 2022)

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

## V. CONSENT ITEMS

Mr. Knox made a motion, Mr. Green seconded, to approve consent item, V.A. The motion passed (roll call) with Messrs. P. Jones, Kehoe, Green, Knox, Santos, Mses. Sanchez and O. Jones voting yes and Mr. Kelly voting no. Mr. Kehoe and Ms. Greenwood were absent from the vote.

- A. Recommendation as submitted by Steven P. Rice, Chief Counsel: 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 other public agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days as part of hybrid meetings also in person, so long as the State of Emergency remains in effect, and direct staff to comply with the agenda and public comment requirements of Section 54953(e)(3). Action taken by each Board will only apply to that Board and its Committees. (Memo dated October 26, 2022)

Mr. Kelly made a motion, Ms. Sanchez seconded, to approve consent items, V.B. and V.C. The motion passed (roll call) with Messrs. P. Jones, Kehoe, Green, Knox, Kelly, Santos, Mses. Sanchez and O. Jones voting yes. Ms. Greenwood was absent from the vote.

- B. Recommendation as submitted by Gina Sanchez, Chair, Corporate Governance Committee: That the Board approve a revised Corporate Governance Committee Charter. (Memo dated October 14, 2022)
- C. Recommendation that the Board approve attendance of Trustees at the 2023 Infrastructure Investor Global Summit in Berlin, Germany on March 20 – 23, 2023, and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated October 23, 2022) (Placed on the agenda at the request of Trustee Santos)



## VI. REPORTS

- A. Pension Plan Actuarial Assumption Review  
Luis A. Lugo, Deputy Chief Executive Officer  
Ted Granger, Interim Chief Financial Officer  
Nick Collier, Milliman Actuary  
Craig Glyde, Milliman Actuary  
(Memo dated October 28, 2022)

Mr. Granger and Messrs. Collier and Glyde of Milliman provided a presentation and answered question from the Board. This item was received and filed.

- B. LACERA Master OPEB Trust Unitized Fund Structure Update  
Jude Pérez, Principal Investment Officer  
John Kim, Investment Officer  
Mel Tsao, Senior Investment Analyst  
(For Information Only) (Memo dated November 1, 2022)

This item was received and filed.

- C. Semi-Annual Interest Crediting for Reserves as of June 30, 2022 (AUDITED)  
Ted Granger, Interim Chief Financial Officer  
(For Information Only) (Memo dated October 31, 2022)

This item was received and filed.

- D. Project Update: Agenda and Meeting Management Solution  
Luis A. Lugo, Deputy Chief Executive Officer  
(For Information Only) (Memo dated October 14, 2022)

This item was received and filed.

- E. Legal Projects  
Christine Roseland, Senior Staff Counsel  
(For Information Only) (Memo dated October 31, 2022)

This item was received and filed.

VI. REPORTS (Continued)

- F. Monthly Travel & Education Reports – September 2022  
Ted Granger, Interim Chief Financial Officer

Monthly Trustee Travel & Education Reports for September 2022  
(Public memo dated October 19, 2022)  
(Confidential memo dated October 19, 2022 – Includes Pending Travel)

This item was received and filed.

- G. October 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 October 24, 2022)

This item was received and filed.

VII. ITEMS FOR STAFF REVIEW

There were no requests for items for staff review.

VIII. ITEMS FOR FUTURE AGENDAS

There was nothing to report.

- IX. GOOD OF THE ORDER  
(For information purposes only)

There was nothing to report.

X. EXECUTIVE SESSION

- 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)

X. EXECUTIVE SESSION (Continued)

1. Credit and Real Assets & Inflation Hedges Manager Recommendations

Vache Mahseredjian, Principal Investment Officer

Chad Timko, Senior Investment Officer

Quoc Nguyen, Investment Officer

Krista Powell, Investment Officer

James Rice, Principal Investment Officer

Noah Damsky, Senior Investment Analyst

(Memo dated October 28, 2022)

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

The Board took action in connection with two manager mandates, which will be reported out at a future date in accordance with the Brown Act.

2. Real Assets Investment Update – Item 1

James Rice, Principal Investment Officer

Pushpam Jain, Investment Officer

(For Information Only) (Memo dated October 24, 2022)

The Board received an information only report that, in October 2022, LACERA approved a co-investment commitment of \$5 million alongside Cibus Enterprise Fund II, a Board of Investments approved manager. The commitment is compliant with LACERA's real assets co-investment guidelines.

3. Real Assets Investment Update – Item 2

James Rice, Principal Investment Officer

Pushpam Jain, Investment Officer

(For Information Only) (Memo dated October 11, 2022)

X. EXECUTIVE SESSION (Continued)

The Board received an information only report that, in October 2022, LACERA approved a co-investment commitment of \$10 million alongside Cibus Enterprise Fund II, a Board of Investments approved manager. The commitment is compliant with LACERA's real assets co-investment guidelines.

- 4. Private Equity Investment Update – Item 1  
Derek Kong, Investment Officer  
Calvin Chang, Senior Investment Analyst  
(For Information Only) (Memo dated October 24, 2022)

The Board received an information only report that, on June 22, 2022, LACERA approved a secondary purchase commitment of up to €71.4 million, or \$75.5 million at the time of commitment, in a special purpose vehicle managed by Adelis Equity Partners, an institutional quality manager. The secondary purchase is compliant with LACERA's private equity secondary investment guidelines.

- 5. Private Equity Investment Update – Item 2  
Derek Kong, Investment Officer  
Calvin Chang, Senior Investment Analyst  
(For Information Only) (Memo dated October 24, 2022)

The Board received an information only report that, on August 19, 2022, LACERA approved a \$20 million co-investment commitment alongside Access Holdings, a manager approved for GTB II, which is a LACERA separate account vehicle managed by Morgan Stanley. The commitment is compliant with LACERA's private equity co-investment guidelines.

X. EXECUTIVE SESSION (Continued)

6. Private Equity Investment Update – Item 3  
Didier Acevedo, Investment Officer  
Calvin Chang, Senior Investment Analyst  
(For Information Only) (Memo dated October 10, 2022)

The Board received an information only report that, on August 30, 2022, LACERA approved a \$75 million co-investment commitment alongside Insight Partners, a Board of Investments consultant-approved manager.

The commitment is compliant with LACERA's private equity co-investment guidelines.

- B. Conference with Legal Counsel – Existing Litigation  
Significant Exposure to Litigation  
(Pursuant to Paragraph (1) of Subdivision (d) of California Government Code Section 54956.9)

1. LACERA v. County of Los Angeles, et al.,  
Los Angeles Superior Court, Case No. 21STCP03475  
(Memo dated October 27, 2022)

There was nothing to report.

2. In re Revlon, Inc. Bankruptcy  
Aimco CLO 10 Ltd, et al. v. Revlon, Inc., et al. Adversary  
Proceeding (LACERA named as a Plaintiff)  
U.S. District Court, Southern District of New York,  
Case No. 22-01167-DSJ  
(For Information Only) (Memo dated October 31, 2022)

There was nothing to report.



XI. ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 11:26 a.m. in memory of Evelyn Gutierrez, a retiree who served on the Quality and Productivity Commission, was a director on the boards of the Retired Employees of Los Angeles County and the Library Foundation and volunteered with the Friends of the East Los Angeles Library. Ms. Gutierrez passed away unexpectedly on October 4, 2022.

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SHAWN KEHOE, SECRETARY

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HERMAN SANTOS, CHAIR



November 29, 2022

TO: Each Trustee,  
Board of Retirement  
Board of Investments

FROM: Santos H. Kreimann *SHK*  
Chief Executive Officer

SUBJECT: **CHIEF EXECUTIVE OFFICER'S REPORT – DECEMBER 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**

On November 21, 2022, the LACERA Advisory team (SPARK) met and identified proposed Strategic Priorities and Objectives. The final draft of the Strategic Plan will then be presented for review by the Trustees as part of the February Board of Retirement (BOR) offsite.

### **Board of Retirement Board Offsite**

The Board of Retirement Offsite will be held at the end of February 2023 in person. Day one of the offsite will focus on LACERA's strategic planning efforts and gaining Trustee insights. Day two of the offsite will focus on the RHC Program and other educational topics. Details to follow.

### **Welcome New Board Member**

The Board of Supervisors approved Supervisor Hahn's appointment of Ms. Greenwood at its November 8, 2022, meeting. Trustee Greenwood's term will be effective December 1, 2022 through December 31, 2023.

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

At its March 2022 Board of Retirement meeting, the Board approved a 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 has provided all Trustees access to the site, and will begin providing training and obtaining trustee feedback for the pre-meeting testing. Testing will continue for the in-meeting management (voting, public comment, speaker queue, livestreaming, archive materials/recording) and

public interface through December. Staff will be incorporating trustee feedback and continue testing and training through December. Staff are planning to go live in January 2023.

### **Member Services Call Center**

Our two Core Benefits classes are near completion of their training and will be assigned to Member Services and Benefits Divisions beginning December 12, 2022. Both classes have completed their classroom work and all 23 trainees have successfully passed examinations. This is a significant accomplishment and allows them to begin working with members on the phone and processing retirement benefits. At this point of development, the RBS I's are working under close observation and coaching by Supervisors.

By mid-to-late December each Specialist will have two months' experience working with our members on the phone and 12 weeks of retirement processing as part of the Core Benefits Training program. When the Specialists are released to the divisions everyone will have a common core training experience of classroom instruction, examinations, retirement benefit processing, and service to our members on the phone. The next phase occurs after release to the divisions where the trainees will specialize in providing front line service to our membership or resolving complex benefit calculations to see that LACERA collects correct contributions and accurately pays the promised benefit.

We are adjusting staff schedules to fine tune our Member Services hybrid workforce to create more opportunities for greater collaboration when working onsite.

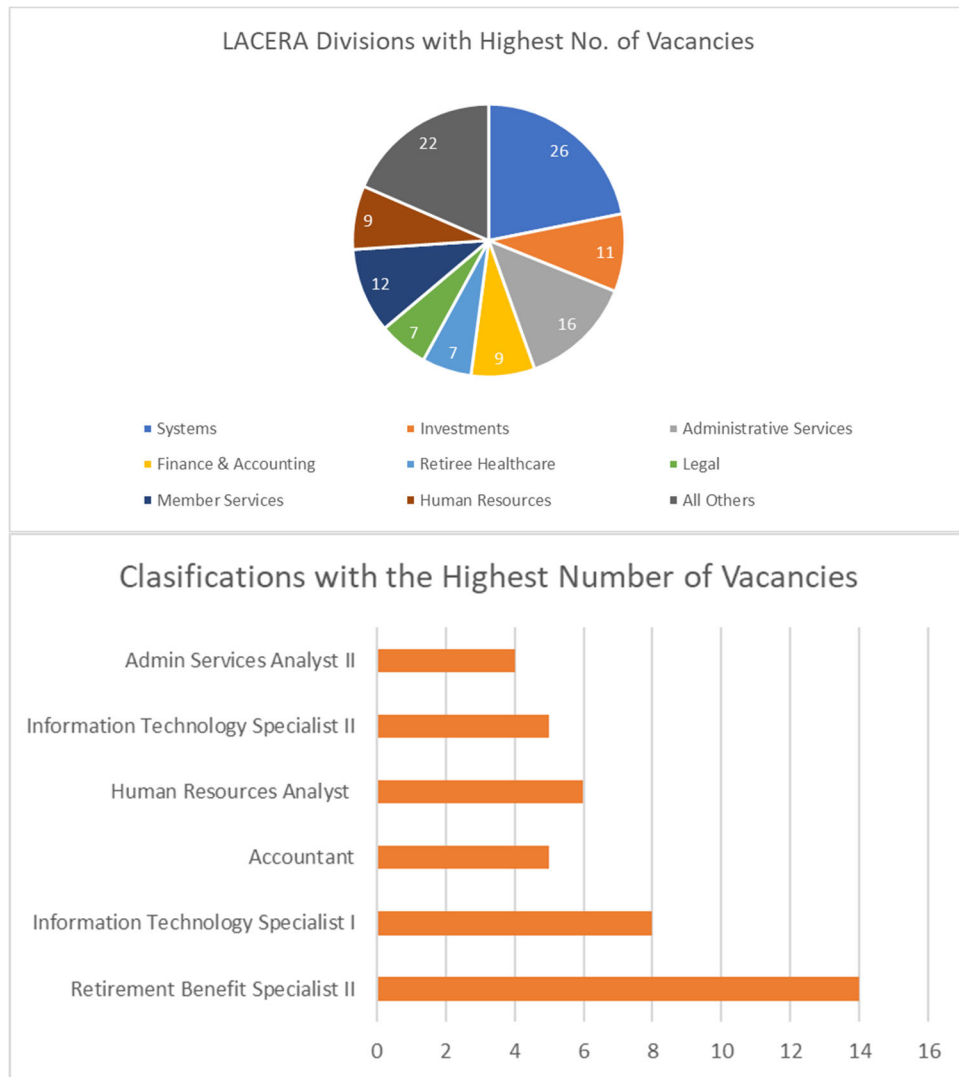
### **Recruitment Updates**

#### *Vacancies and Hiring*

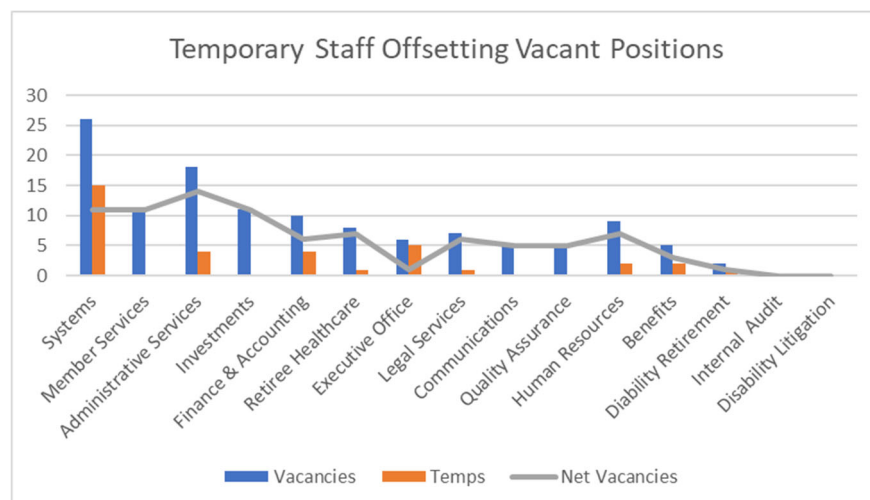
There are eleven (11) vacancies in Investments (24% vacancy rate) and below is a summary of the recruitment status of these positions. We are in the process of working with EFL Associates, an outside recruitment firm, to assist with securing a pool of candidates for the Deputy Chief Investment Officer. The recruitment for the Senior Investment Officer – Real Estate position continues.

Classification	# of Vacancies	LACERA Priority	Recruitment Stage
Deputy Chief Investment Officer	1	Tier 0	Outsourced Recruitment
Senior Investment Officer (SIO)	2	Tier 0	9 – Division Interviews
Finance Analyst III (FA III)	3	Tier 0	9 – Division Interviews
Finance Analyst II (FA II)	2	Tier 1	Not Started
Principal Investment Officer	1	Tier 2	Not Started
Senior Investment Officer	1	Tier 2	Not Started
Executive Administrative Asst	1	Tier 3	Not Started

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*

The recruitments/assessments for the following classifications are currently in development in partnership with the various hiring divisions:

- Retirement Systems Specialist
- Division Manager

Human Resources has completed the contracting process with EFL Associates for the executive recruitment of the Deputy Chief Investment Officer and Chief Financial Officer positions. Alliance Resource Consulting has been selected to assist with the recruitment of the Chief, Information Technology Officer, and Information Security Officer positions. These recruitments are forthcoming.

### *Recruiting & Assessment*

Open recruitment for the following legal positions yielded a limited number of candidates with minimal experience in the public pension field. As such, we plan to use an outside search firm to help recruit for these specialized positions. Staff will be working with General Counsel to prepare the firm selection criteria and update the job bulletins to be used in our recruitment efforts.

- Staff Counsel (Investments)
- Staff Counsel (Benefits)
- The assessment process is nearing completion for Retirement Benefits Specialist I. The examinations for the Human Resources Analyst, Senior Human Resources Analyst, and Senior Human Resources Assistant examinations closed. The Senior Human Resources Assistant written examination is pending. The review of the applications for the Senior Human Resources Analyst position has been completed and interview invites are pending. The Human Resources Analyst applications are still under review.

### *New Lists Promulgated*

The recruitment for the Financial Analyst III - Corporate Governance position continues. Additional candidates are in the assessment phase and those that pass will be added to the eligibility register (list).

### *Hiring*

Recent and upcoming hiring and selection activities are reflected below as follows:



Classification	# of Positions	Division	Status
Accountant	3	FASD	Starting December 1
Finance Analyst II	1	Investments	Started November 1
Accountant	2	FASD	Started November 1 and November 16
Administrative Services	2	Procurement and Supply Clerk	Started November 1
Communications	1	Media Artist	Started November 1

Internal promotion to Finance Analyst II (Portfolio Analytics) was made.

### CEO Dashboard Update

We have updated the CEO Dashboard with a revised Membership Count. This new count is synchronized with the data that will appear in the Annual report. The membership count is now broken down into three main categories: Active, Inactive, and Retired. The Active and Inactive (which reflects terminated County employees) are further broken down into Vested and Non-Vested members. For Active members, this simply represents a breakdown of where members are in their eligibility journey. For the Inactive category this represents deferred vested members who have not yet retired, and non-vested members who may in the future be eligible for a benefit (ex. Someone who may be eligible for a benefit due to required minimum distribution rules after age 70 or 72). This reflects a more accurate accounting of members. This project has taken us quite a bit of effort, and we would like to thank staff from Benefits, Financial Accounting Services Division, Investments, Systems, and LACERA's actuary for their assistance in making this update.

To make room for this update we have combined information from two charts into a new "Total Retirements Compared by Type" chart that shows retirements for the current fiscal year broken down by type: General / Safety.

### UHC - Providence Medical Group Contract Termination

During the week of November 15<sup>th</sup>, the RHC Call Center received several calls from LACERA retirees indicating they received notification that their medical group (Providence) was terminating their contract with United Healthcare (UHC) effective January 1, 2023.

The termination of Providence Medical Group impacts both active and retired members. However, more specific to LACERA, UHC stated that we have approximately 624 total retirees and/or dependents that would be impacted. All individuals impacted were provided alternate primary care providers in their area. As a plan to maintain Continuity of Care, members were informed that if they were in the middle of treatment, *in some situations*, the participant may be able to continue seeing their current provider for a specific period after the provider leaves the network. These individuals were informed to contact UHC. A sample of the letter mailed to impacted members is attached for your

reference. Per UHC, negotiations will continue through the end of the year, in hopes of coming to an agreement.

Although the alternate provider may not be the member's provider of choice, because there are other providers available to the impacted members, LACERA's 6-month waiting period will apply if the member wishes to change medical plans. The County's Department of Human Resources (DHR) also imposes the waiting period when handling similar medical group health plan changes.

SHK  
CEO report December 2022.doc

## Attachments

November 9, 2022

«FIRST\_NAME» «LAST\_NAME»  
«Mbr\_Street»  
«Mbr\_City» «Mbr\_State» «Mbr\_Zip»

Questions?  
We're here to help.  
Toll-free 1-800-624-8822  
TTY 711  
M-F 7:00 a.m. – 8:00 p.m. PT

RE: Signature Value HMO Network - Provider Network Change

Dear UnitedHealthcare of California member,

We're writing to let you know about an important change in your network. Starting January 1, 2023, Providence Affiliated Physicians-St Joseph will no longer be part of the UnitedHealthcare network. This change includes your primary care (PCP) and other providers or facilities in Providence Affiliated Physicians-St Joseph.

**We're here to help.**

We know that the relationship between you and your PCP is a very important one. We're sorry for any inconvenience this may cause. Please know that we're here to help you through this change, so you can continue getting the care you need.

**You have options.**

You will need to have a new primary care provider on file with the plan. You have options when selecting a new PCP.

**1. Use the PCP we found for you.**

We've matched your information with providers in your area and found one that may fit your needs.

Prospect Medical Group/Central  
Grace L. Imbastari, MD  
2617 E Chapman Ave #205  
Orange, CA 92869  
714-538-6822

**If you think this provider is a good choice for you, you don't need to do anything.** We'll put this provider's name on file as your new PCP starting January 1, 2023. We'll also send you a new member ID card with this provider's name on it by December 30, 2022.

**2. Choose your own PCP.**

You can choose any primary care provider from your plan's network at any time. To choose a new medical group and PCP to be effective on January 1, 2023, please call us no later than December 14th. Please call us toll-free at 1-800-624-8822, TTY 711, 7:00 a.m. to 8:00 p.m. PT Monday through Friday. We're happy to help you find one that fits your needs. You can also visit [myuhc.com](https://myuhc.com) to search for a PCP.

What if I'm in the middle of getting treatment?

In some situations, you may be able to continue seeing your provider for a specific period of time at your plan's network cost after they leave the network. This is called Continuity of Care. You may qualify for Continuity of Care for completion of the following conditions:

- An acute condition
- A serious chronic condition
- Pregnancy
- Caring for a newborn between birth and age 36 months
- A maternal mental health condition
- A terminal illness
- Surgery or other procedure

Please call us as soon as possible, to see if you qualify. You will need authorization (approval) to continue getting treatment. If you have any questions, would like a description of UnitedHealthcare's Continuity of Care process, or want to appeal a denial, please call our Customer Service department. Please see your Evidence of Coverage for more information.

You can also access this information online at [myuhc.com](https://myuhc.com) by following these simple steps:

1. Scroll down and click on "Popular Forms"
2. Scroll down and click on "California Plan Continuity of Care forms"
3. Select the preferred language version

After your completed form is reviewed you will be notified of the outcome.

If UnitedHealthcare approves your request for continued care, you will not be responsible for payment of covered, authorized services except for any applicable cost share. If you should receive a bill from a provider in error, please forward it to UnitedHealthcare Claims Department, P.O. Box 30968, Salt Lake City, UT 84130.

#### **Important Statement From California Department of Managed Health Care**

If you have been receiving care from a health care provider, you may have a right to keep your provider for a designated time period. Please contact UnitedHealthcare's customer service department, and if you have further questions, you are encouraged to contact the Department of Managed Health Care, which protects consumers, by telephone at its toll-free number 1-888-466-2219, or at a TDD number for the hearing and speech impaired at 1-877-688-9891, or online at [www.dmhca.gov](https://www.dmhca.gov).

**Remember, we are here to help you through this change.**

If you have any questions, please call us toll-free at 1-800-624-8822, TTY 711, 7:00 a.m. to 8:00 p.m. PT Monday through Friday.

Sincerely,

The UnitedHealthcare Team



# CEO DASHBOARD



December 7, 2022



# Striving for Excellence

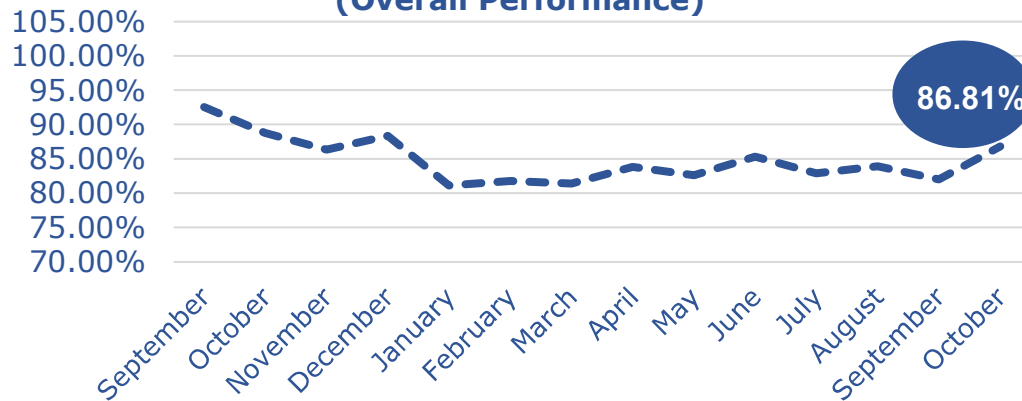
Service Metrics Reported on a Fiscal Year Basis (July 1) Through: **October 2022**

 <b>WORKSHOP ATTENDANCE</b> <b>2,102</b> Year-to-Date: 5,910	 <b>OUTREACH EVENTS</b> <b>20</b> Year-to-Date: 82	 <b>WORKSHOP SATISFACTION</b> <b>N/A</b> Mo. To Mo. Change N/A	 <b>MSC SATISFACTION</b> <b>N/A</b> Mo. To Mo. Change N/A	 <b>MEMBER SERVICES CALL CENTER</b> <b>11,733</b> 3 Month Average 11,164
----------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------

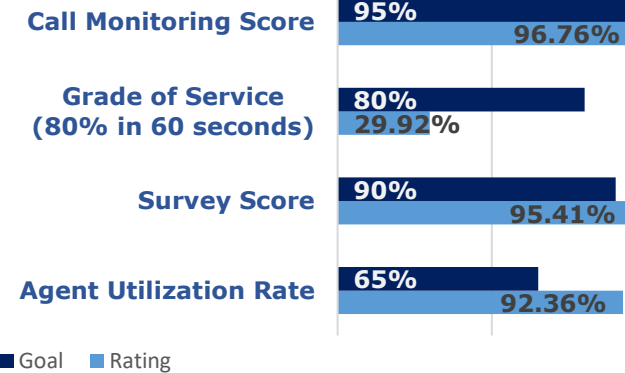
## Member Services

### Key Performance Indicator (Overall Performance)

Goal: 100%

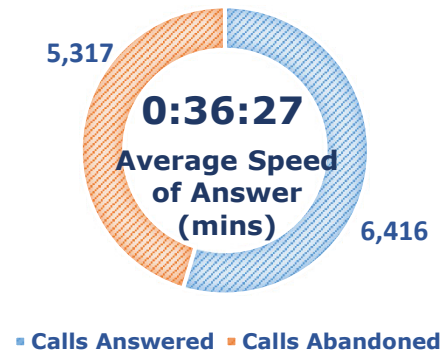


### Key Performance Indicator (Components)



### Top Calls

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



### Emails

**579**  
Avg. Response Time (ART)

**24:00 hours**

**Secure Message**  
**1,007**

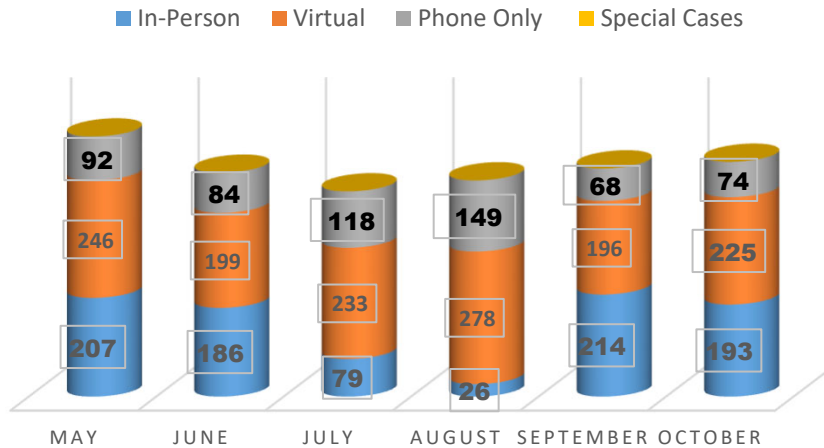


# Striving for Excellence

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

## Member Services

### Member Service Center Appointments

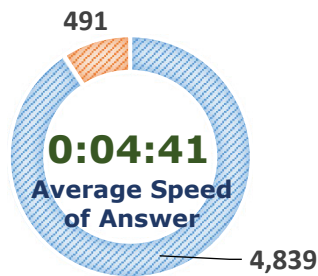


COMING SOON

## Retiree Healthcare



Total RHC Calls: 5,330



■ Calls Answered ■ Calls Abandoned

### Top Calls

1. Medical/Dental Enrollments

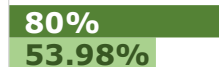
2. Medicare Part B Inquiries

3. General Inquiries

Call Monitoring Score



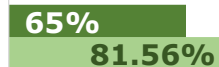
Grade of Service  
(80% in 60 seconds)



Survey Score



Agent Utilization Rate



■ Goal ■ Rating



Emails 355

Avg. Response Time (ART) 5 Days



Secure Messages 397





# Striving for Excellence

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

## Applications 979

In Process  
As Of  
10/31/2022

950 Pending on: 9/30/2022

84 Received

296 Year-to-Date

0 Re-Opened

0 Year-to-Date

48 To Board - Initial

198 Year-to-Date

7 Closed

14 Year-to-Date

## Appeals 71

In Process  
As Of  
10/31/2022

75 Pending on: 9/30/2022

0 Received

3 Year-to-Date

3 Admin Closed/Rule 32

5 Year-to-Date

1 Referee Recommended

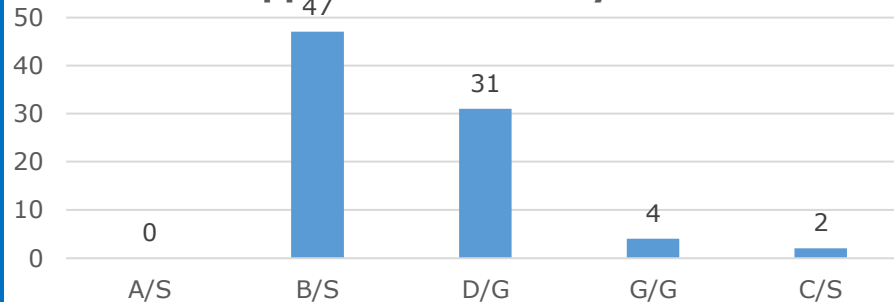
2 Year-to-Date

0 Revised/Reconsidered for Granting

2 Year-to-Date

Disability

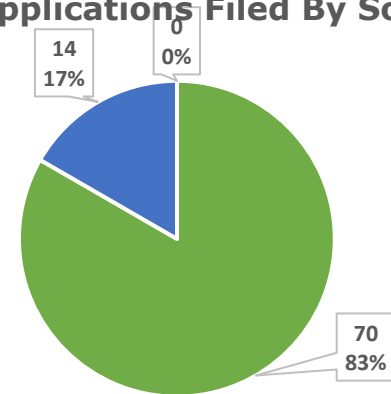
### Applications Filed By Plan



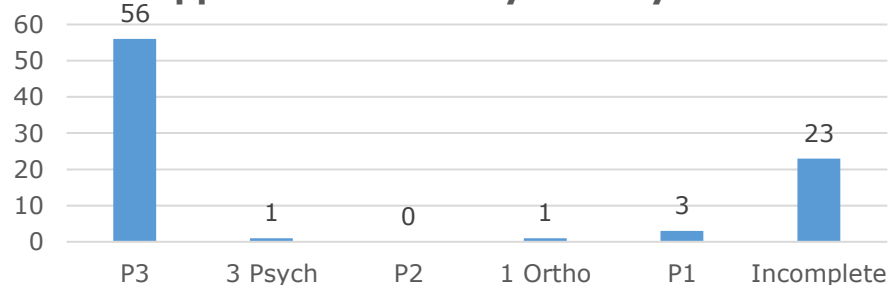
A/S: Plan A Safety - B/S: Plan B Safety - D/G: Plan D General  
G/G: Plan G General - C/S: Plan C Safety

### Applications Filed By Source

- Employee
- Employer
- Survivor

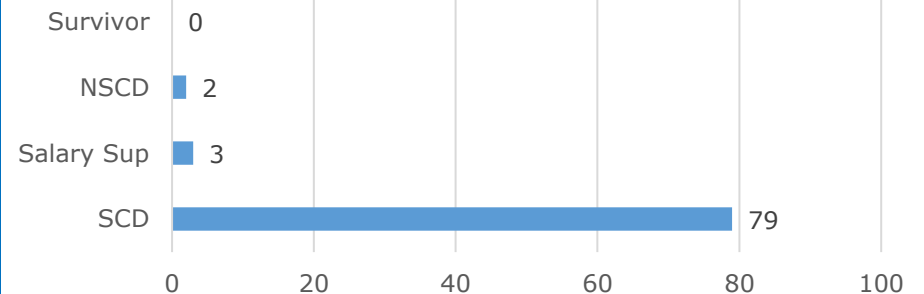


### Applications Filed By Priority Level



Priority Level

### Applications Filed By Type

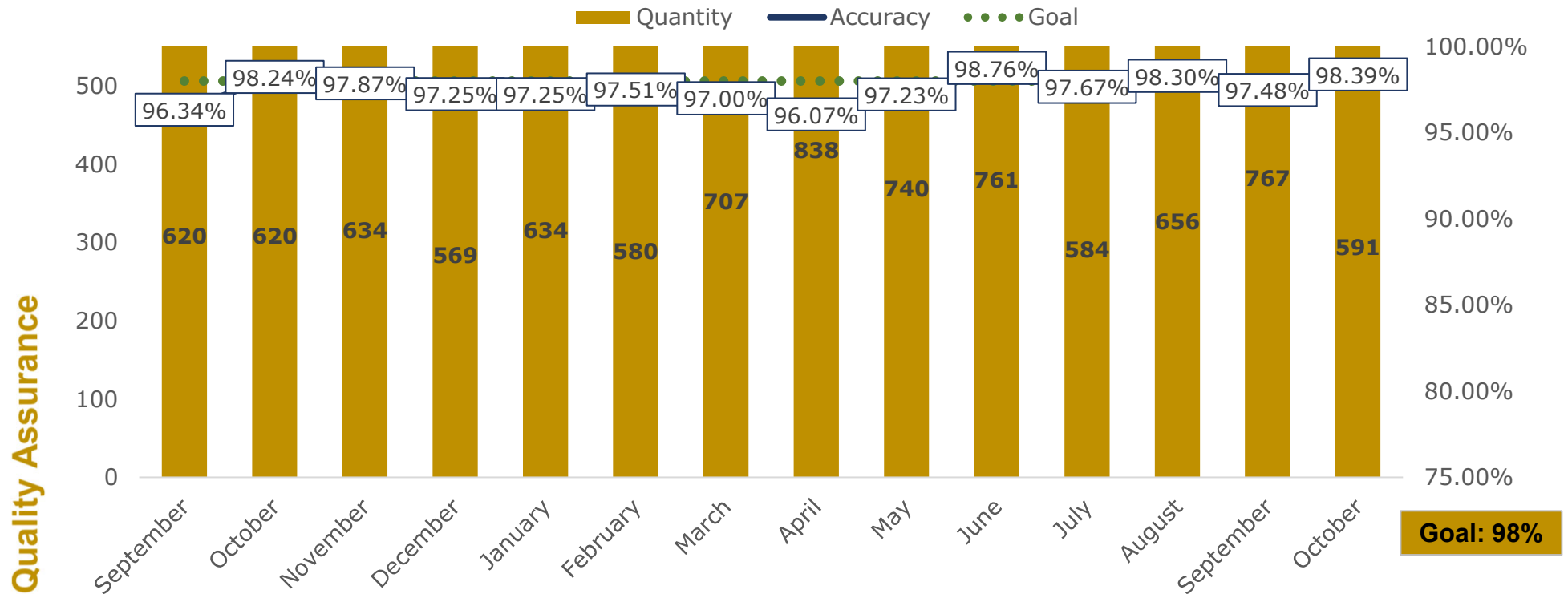




## Striving for Excellence in Quality

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

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



**October**

**98.39%**



### Retirement Elections

**293**

Samples

**98.39%**

Accuracy

### Payment Contracts

**208**

Samples

**97.88%**

Accuracy

### Data Entry

**90**

Samples

**98.89%**

Accuracy

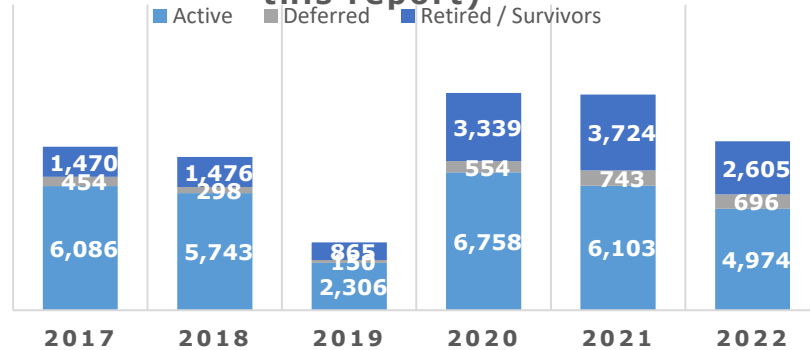


## Service On-Line for All

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

Serving Members Through LACERA.com and MyLACERA

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

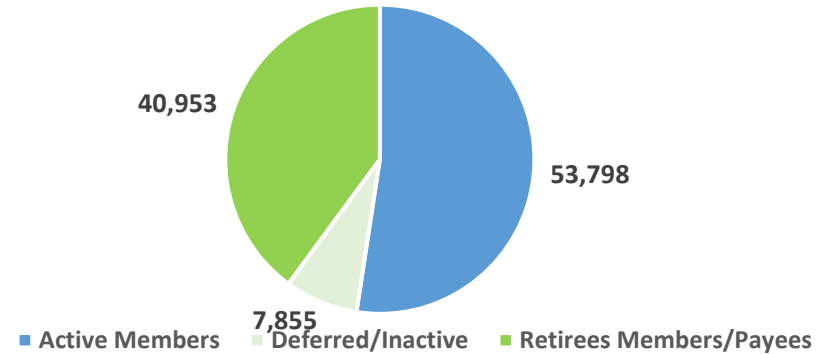


**Total Registered Members**

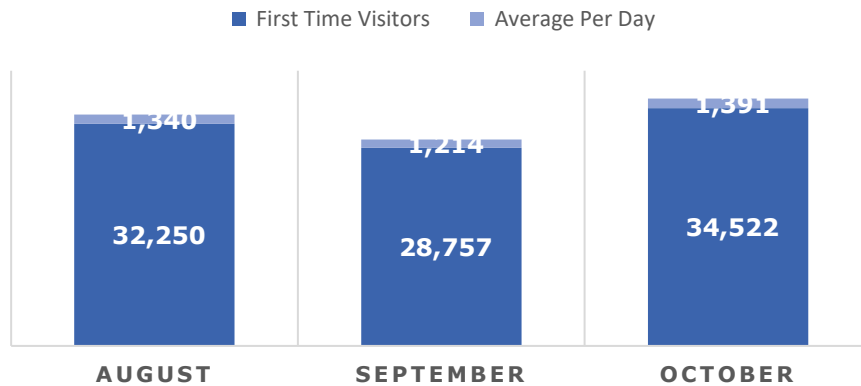
**102,606**

**55%**

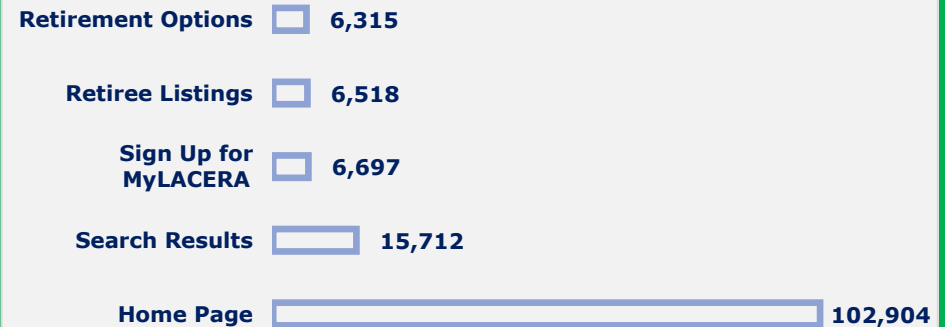
**Total Registrations By Member Type**



**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	6,315	27%	My LACERA	6,697	15%
View Pre-Retirement Workshops	2,810	N/A	Pre-Retirement Workshops	2,810	20%
Start my retirement planning	3,811	15%	Careers	3,252	-36%
Learn about service credit	2,016	1%	Investments	2,094	5%
Add or update my beneficiary	814	-90%	Annual Reports	1,526	-3%
<b>Busiest Day of the Month:</b>	<b>Thursday, 10/27/2022</b>		Forms and Publications	245	11%



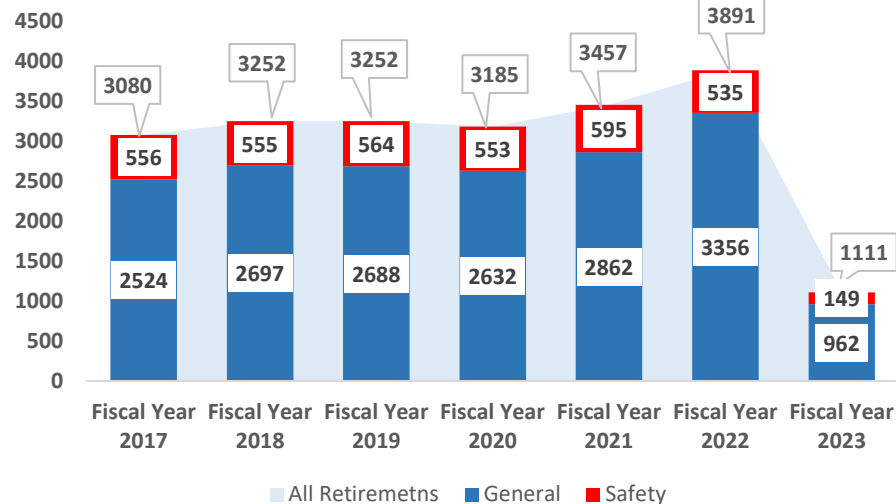
# Member Snapshot

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

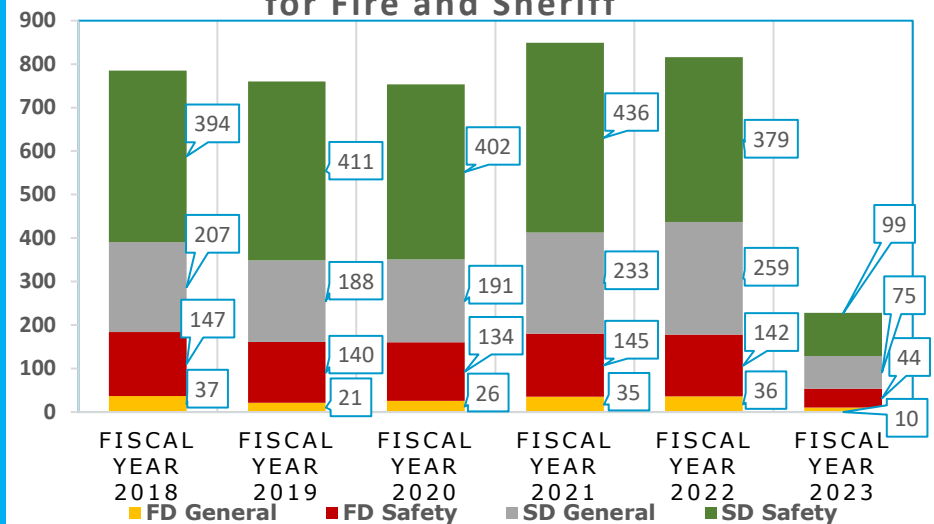
Membership Count as of: 11/15/22

PLAN		ACTIVE		INACTIVE		RETIRED				Totals by Plan/Type
		Vested	Non-Vested	Vested	Non-Vested	Service	SCD - Disability	NSCD - Disability	Survivors	
General	PLAN A	54	-	15	32	12,443	1,007	179	4,129	17,859
	PLAN B	14	-	5	3	583	44	8	72	729
	PLAN C	16	-	5	8	369	40	8	66	512
	PLAN D	35,137	141	4,535	3,405	17,895	1,915	441	1,875	65,344
	PLAN E	13,616	69	2,948	109	15,038	-	-	1,554	33,334
	PLAN G	16,453	17,923	1,347	5,994	191	20	4	16	41,948
	TOTAL GENERAL	65,290	18,133	8,855	9,551	46,519	3,026	640	7,712	159,726
Safety	PLAN A	1	-	2	2	1,896	2,501	28	1,646	6,076
	PLAN B	7,878	91	577	233	3,249	4,230	56	389	16,703
	PLAN C	2,181	2,642	105	442	11	11	-	2	5,394
	TOTAL SAFETY	10,060	2,733	684	677	5,156	6,742	84	2,037	28,173
TOTAL ALL TYPES		75,350	20,866	9,539	10,228	51,675	9,768	724	9,749	187,899

Total Retirements Compared by Type



General vs. Safety Retirements for Fire and Sheriff





## Member Snapshot

### Average Monthly Benefit Allowance Distribution 11/21/2022

	General	Safety	Total	%
<b>\$0 to \$3,999</b>	30,208	1,501	31,709	51.0%
<b>\$4,000 to \$7,999</b>	14,232	3,445	17,677	28.5%
<b>\$8,000 to \$11,999</b>	4,049	4,281	8,330	13.4%
<b>\$12,000 to \$15,999</b>	1,122	2,135	3,257	5.2%
<b>\$16,000 to \$19,999</b>	369	437	806	1.3%
<b>\$20,000 to \$23,999</b>	111	137	248	0.4%
<b>\$24,000 to \$27,999</b>	30	41	71	0.1%
<b>&gt; \$28,000</b>	23	5	28	0.0%
<b>Totals</b>	50,144	11,982	62,126	100%

### Average Monthly Benefit Amount:

\$ **4,721.00**

#### Healthcare Program

(Mo. Ending:10/31/2022)

	Employer	Member
Medical	\$200.2	\$14.6
Dental	\$15.7	\$1.5
Part B	\$31.2	\$0.0
<b>Total</b>	<b>\$247.1</b>	<b>\$16.1</b>

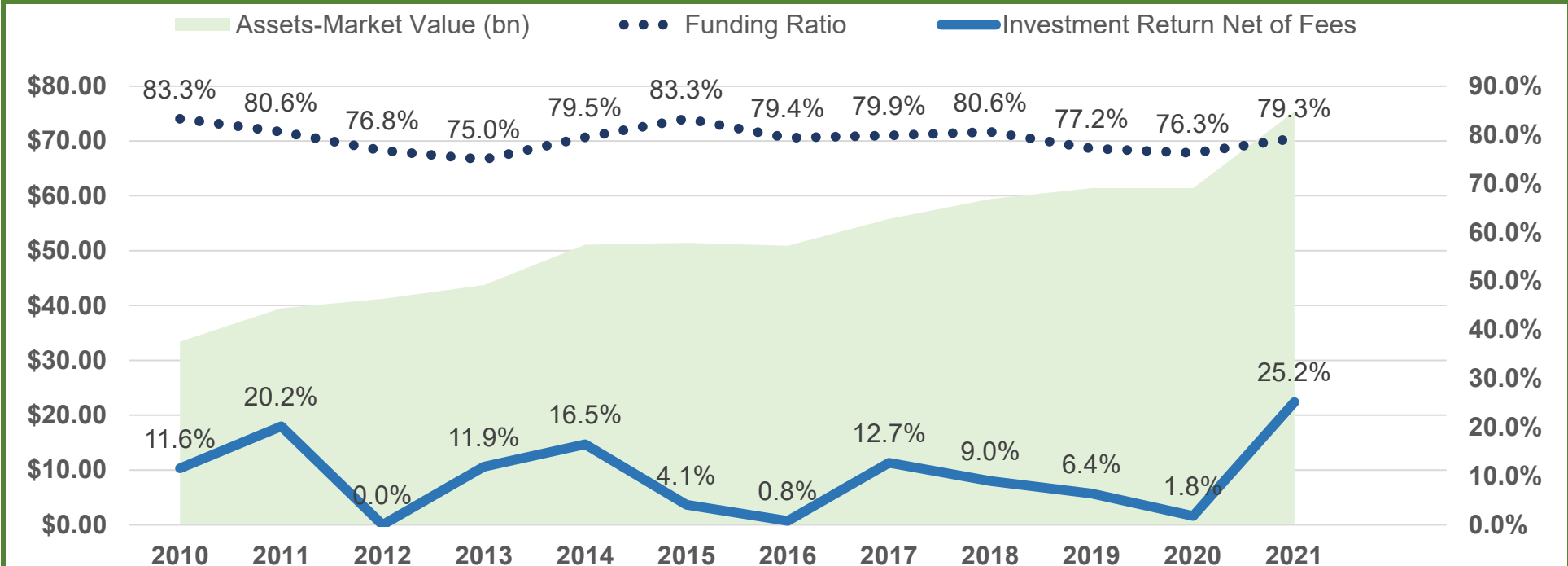
#### Health Care Enrollments

(Mo. Ending:10/31/2022)

Medical	54,539
Dental	56,279
Part B	37,398
LTC	517
<b>Total</b>	<b>148,733</b>

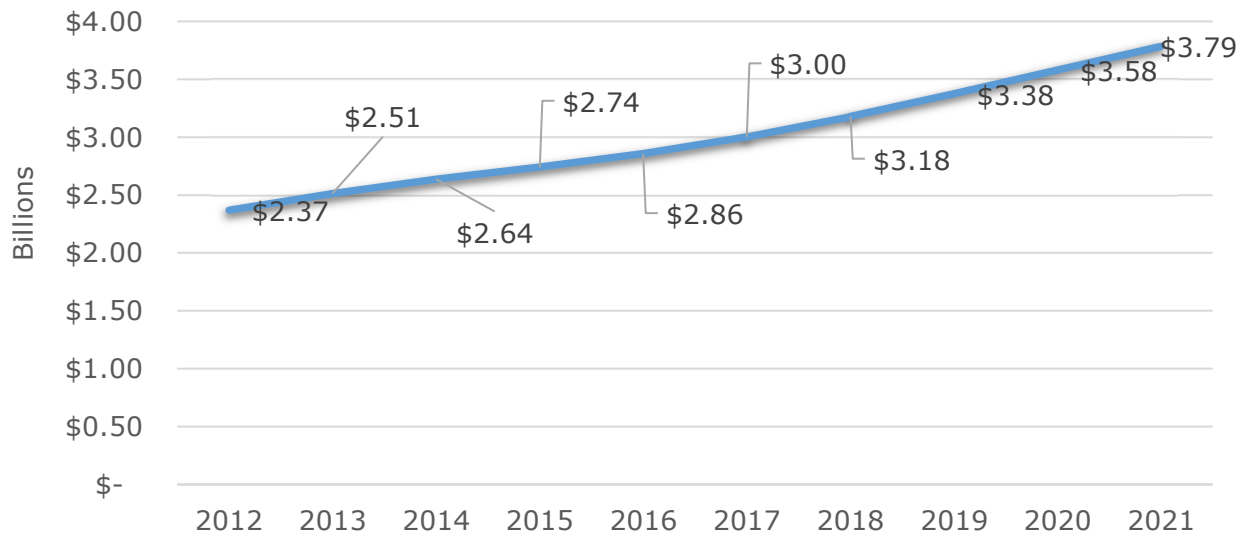
## KEY FINANCIAL METRICS

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)

	Employer	Member
Annual Add	\$2.0b	\$761.0m
% of Payroll	24.46%	7.87%

### Contributions (as of 6/30/21)

(Net of Fees)

<b>5 YR:</b>	10.8%	<b>10 YR:</b>	8.6%
--------------	-------	---------------	------

### Retired Members Payroll

(As of 10/31/2022)

Monthly Payroll	\$352.88m
Payroll YTD	\$1.4b
New Retired Payees Added	273
Seamless %	94.87%
New Seamless Payees Added	1,209
Seamless YTD	95.20%
By Check %	2.00%
By Direct Deposit %	98.00%

## QUIET PERIOD LIST

Last Update 11/30/2022

### ADMINISTRATIVE/OPERATIONS

RFP/RFQ/RFI Name	Issuing Division	Date Issued	Status*	Quiet Period for Respondents*
<b>Search for Classification &amp; Compensation Study Services (HR)</b>	Human Resources	5/24/2021	Bid Review	<ul style="list-style-type: none"> <li>• Koff and Associates</li> <li>• Magnova Consultant</li> <li>• Grant Thornton</li> <li>• Reward Strategy Group</li> </ul>
<b>Search for Classification &amp; Compensation Study Services (RHC)</b>	Human Resources	5/24/2021	Bid Review	<ul style="list-style-type: none"> <li>• Koff and Associates</li> <li>• Magnova Consultant</li> <li>• Grant Thornton</li> <li>• Reward Strategy Group</li> </ul>
<b>Investments Operational Due Diligence</b>	Internal Audit	5/20/2022	Contract Development	<ul style="list-style-type: none"> <li>• KPMG</li> </ul>
<b>External Financial Auditor</b>	Internal Audit	11/03/2022	Solicitation Process	No bids at this time.
<b>Prepaid Debit Card Services</b>	Benefits	6/15/2022 Posted on ISD's solicitation website August 2022	Bid review	<ul style="list-style-type: none"> <li>• US Bank</li> <li>• Conduent</li> </ul>
<b>Business Continuity Professional Services</b>	Administrative Services	8/17/2022	Selection Process	<ul style="list-style-type: none"> <li>• BDO</li> <li>• BDA Global</li> <li>• Riskconnect</li> <li>• MHA Consulting</li> <li>• Treuvizion Consulting Corp.</li> </ul>

\*Subject to change

### INVESTMENTS QUIET PERIOD FOR SEARCH RESPONDENTS

None at this time

Date	Conference
<b>December, 2022</b>	
5-7	2022 SuperReturn Africa Cape Town, South Africa
6-7	Infrastructure Investor America Forum Conference New York, NY
14-15	National Association of Corporate Directors (NACD) Master Class Scottsdale, AZ
<b>January, 2023</b>	
22-24	NCPERS (National Conference on Public Employee Retirement Systems) Legislative Conference Washington, D.C.
30-February 1	IFEBP (International Foundation of Employment Benefit Plans) Health Benefits Conference Clearwater Beach, FL
<b>March, 2023</b>	
1-3	Pacific Pension Institute (PPI) Winter Roundtable La Jolla, CA
4-7	CALAPRS (California Association of Public Retirement Systems) General Assembly Meeting Monterey, CA
6-8	Council of Institutional Investors (CII) Spring Conference Washington D.C.
14-16	AHIP (America's Health Policy and Markets Forum Washington D.C.
20-23	2023 Infrastructure Investor Global Summit Berlin, Germany
22-23	PREA (Pension Real Estate Association) Spring Conference Seattle, WA
29-31	CALAPRS (California Association of Public Retirement Systems) Advanced Principles of Pension Governance for Trustees at UCLA Los Angeles, CA
<b>April, 2023</b>	
17-21	Investment Strategies & Portfolio Management Wharton School, University of Pennsylvania
23-26	CRCEA (California Retired County Employees Association) Spring Conference Ontario, CA



Date	Conference
24-25	IFEBP (International Foundation of Employment Benefit Plans) Health Care Mgmt. Conference Miami, FL
24-25	IFEBP (International Foundation of Employment Benefit Plans) Investments Institute New Orleans, LA
<b>May, 2023</b>	
9-12	SACRS Spring Conference San Diego, CA
20-21	NCPERS (National Conference on Public Employee Retirement Systems) Trustee Educational Seminar (TEDS) New Orleans, LA
20-21	NCPERS (National Conference on Public Employee Retirement Systems) Accredited Fiduciary (NAF) Program New Orleans, LA
21-24	NCPERS (National Conference on Public Employee Retirement Systems) Annual Conference & Exhibition (ACE) New Orleans, LA
21-24	Government Finance Officers Association (GFOA) Annual Conference Portland, OR
22-23	IFEBP (International Foundation of Employment Benefit Plans) Washington Legislative Update Washington D.C.
<b>June, 2023</b>	
13-15	AHIP (America's Health Insurance Plans) 2023 Portland, OR
<b>July, 2023</b>	
19-21	Pacific Pension Institute (PPI) Summer Roundtable San Francisco, CA
<b>September, 2023</b>	
11-13	Council of Institutional Investors (CII) Fall Conference Long Beach, CA
<b>October, 2023</b>	
1-4	IFEBP (International Foundation of Employment Benefit Plans) Annual Employee Benefits Conference Boston, MA
8-11	National Association of Corporate Directors (NACD) Summit 2023 Fort Washington, MD

Date	Conference
18-20	PREA (Pension Real Estate Association) Annual Institutional Investor Conference Boston, MA
22-25	NCPERS (National Conference on Public Employee Retirement Systems) FALL (Financial, Actuarial, Legislative & Legal) Conference Las Vegas, NV
25-27	Pacific Pension Institute (PPI) Asia Roundtable Tokyo, Japan
<b>November, 2023</b>	
7-10	SACRS Fall Conference Rancho Mirage, CA

# Chief Investment Officer Monthly Report

Board of Investments  
December 14, 2022



Jonathan Grabel   
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

# Table of Contents

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

# Market Environment

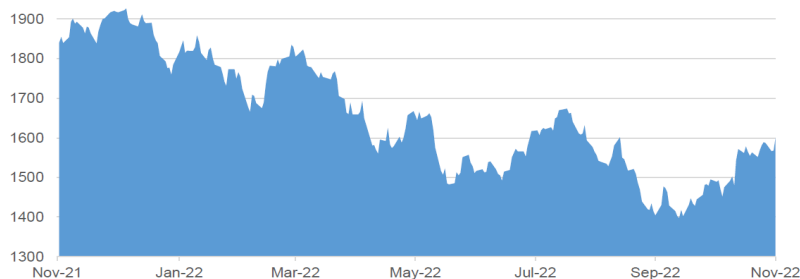


# Global Market Performance as of November 30, 2022

## MSCI ACWI IMI Index (Global Equity Market)\*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
7.6	3.2	-15.1	-11.8	6.5	6.1	8.6

### MSCI ACWI IMI Index 1-Year Performance



## Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
5.2	3.3	-14.2	-10.8	10.3	10.3	13.0

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



## MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
14.8	-1.8	-19.0	-17.4	0.1	-0.4	2.1

### MSCI Emerging Markets 1-Year Performance



## Barclays U.S. Aggregate Bond Index\*\*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
3.7	-2.1	-12.6	-12.8	-2.6	0.2	1.1

### Russell 3000 1-Year Performance



\*Global Equity Policy Benchmark - MSCI ACWI IMI Index

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

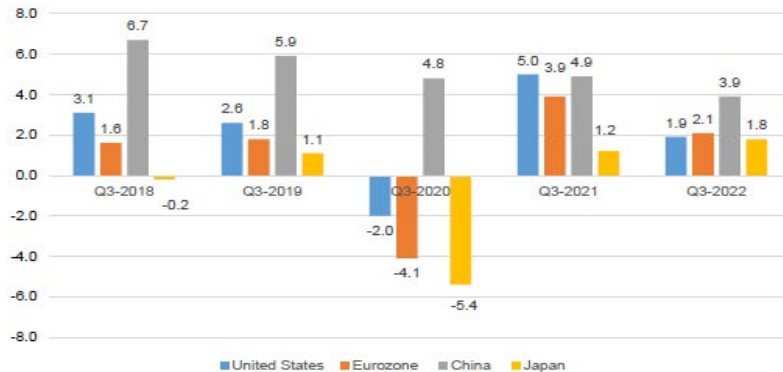
Source: Bloomberg



# Key Macro Indicators\*

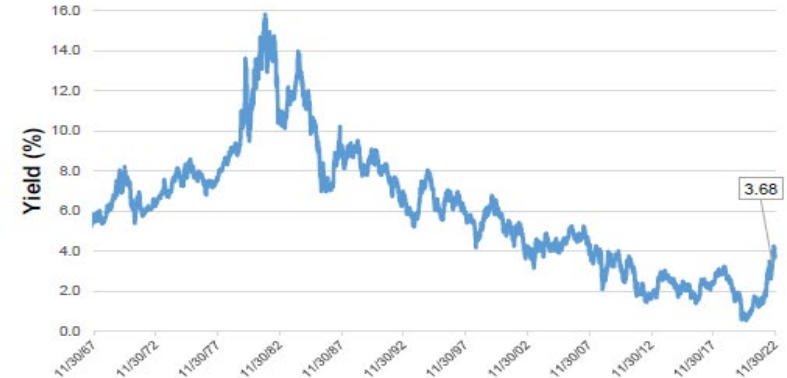
## GDP Growth of Major Economies<sup>1</sup>

Real GDP Growth YoY (%) - Last Five Years



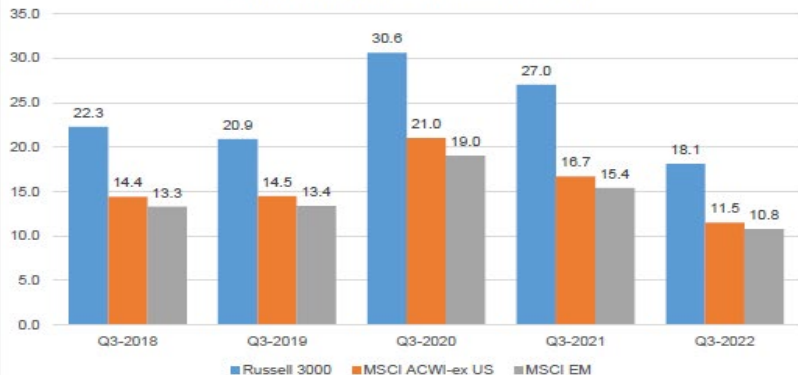
## 10-Year Treasury Yield<sup>2</sup>

Historical 10-Year Treasury Yield



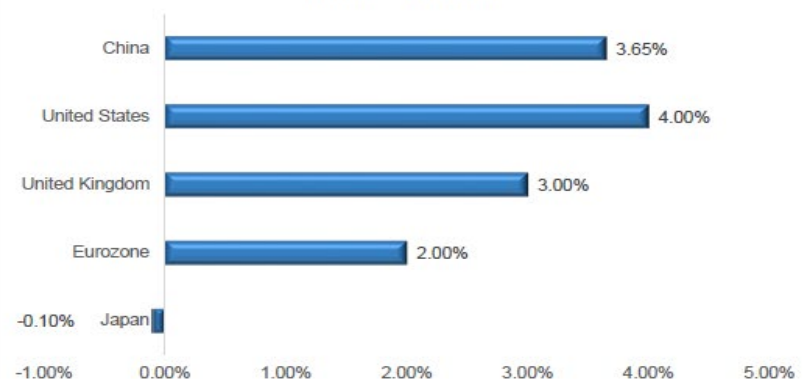
## World Equity Valuation<sup>3</sup>

Price-to-Earnings - Last Five Years



## Central Bank Rates<sup>4</sup> (as of 11/30/2022)

Central Bank Rates



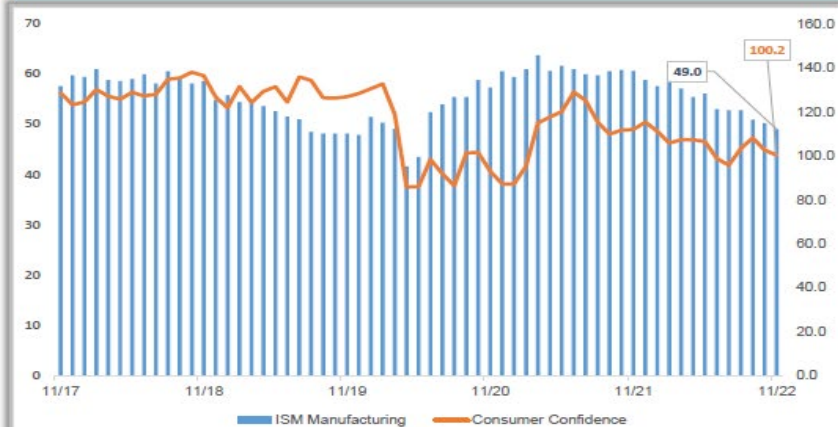
\*The information on the "Key Macro Indicators" charts is the best available data as of 11/30/22 and may not reflect the current market and economic environment.

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



# Key Macro Indicators\*

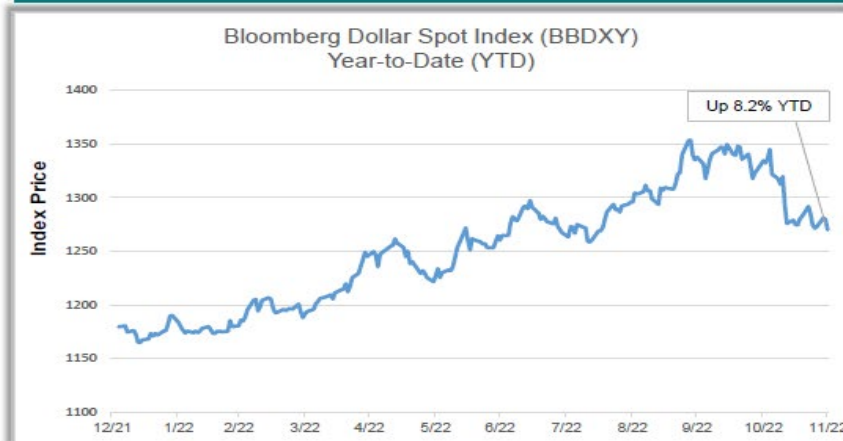
## Consumer Confidence & ISM Manufacturing<sup>1</sup>



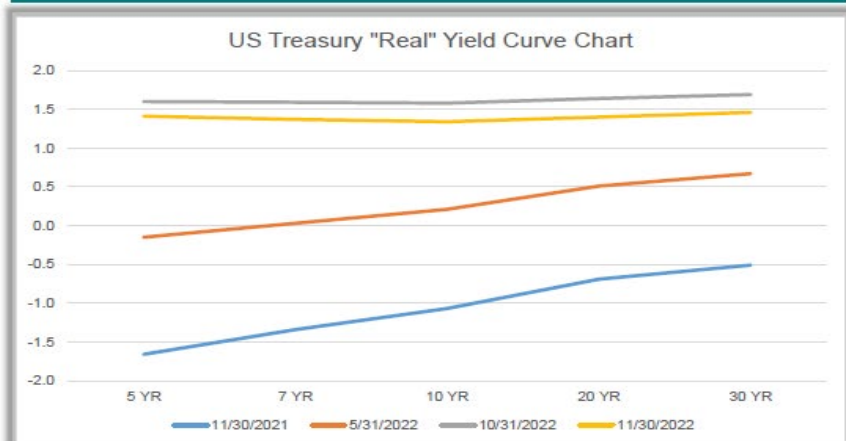
## U.S. Inflation, Unemployment, & Labor Force Participation<sup>2</sup>



## Performance of US Dollar vs. Leading Global Currencies<sup>3</sup>



## U.S. Treasury "Real" Yield Curve<sup>4</sup>



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 11/30/22 and may not reflect the current market and economic environment.





# Market Themes and Notable Items to Watch

## Recent Themes

- On November 2<sup>nd</sup>, the Federal Reserve announced a 0.75% interest rate hike while citing elevated inflation
- Federal Reserve Chair Jerome Powell said on November 30<sup>th</sup> that smaller interest rate increases are likely ahead
  - He additionally cautioned that monetary policy is likely to remain restrictive for some time until positive signs of progress emerge regarding inflation
- The U.S. 10-year Treasury yield ended November at 3.68%, up from 1.52% at the end of 2021 and 0.93% at the end of 2020
- Global equities (MSCI All Country World Investable Market Index) gained 7.6% in November and are now down 15.1% 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, and governance
  - PwC annual director survey finds about half (48%) of corporate directors would like to replace one board member; 19% would replace two or more
- Covid-19
  - Covid variants, cases, transmission, vaccines
  - Economic and consumer behavior implications

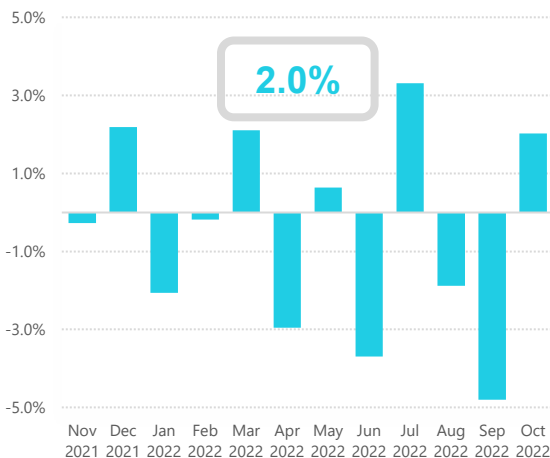
# Portfolio Performance & Risk Updates



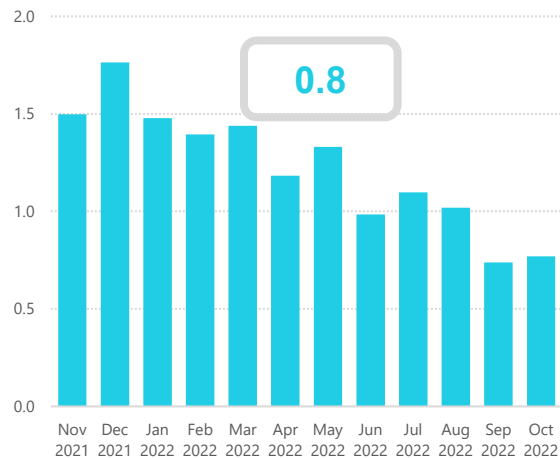
# Total Fund Summary

as of October 2022

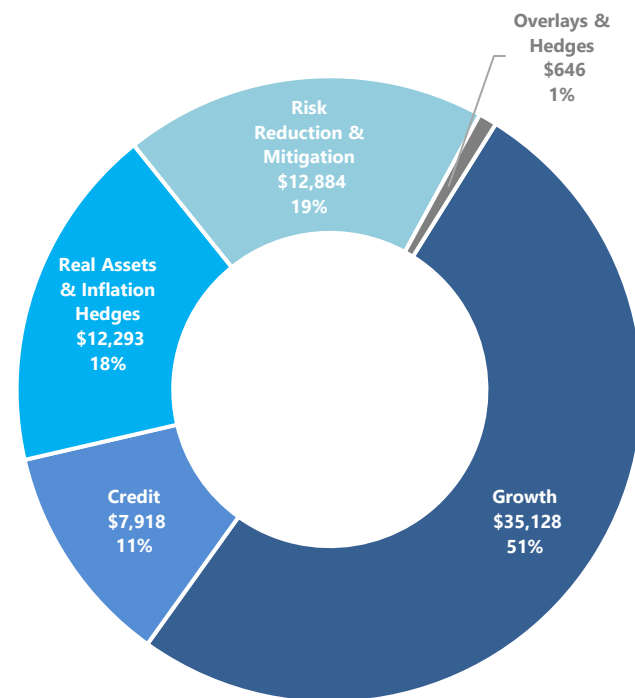
## Monthly Return (net)



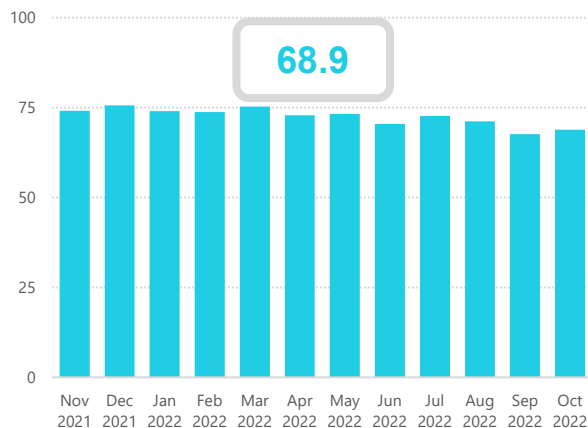
## Sharpe Ratio (3-year annualized)



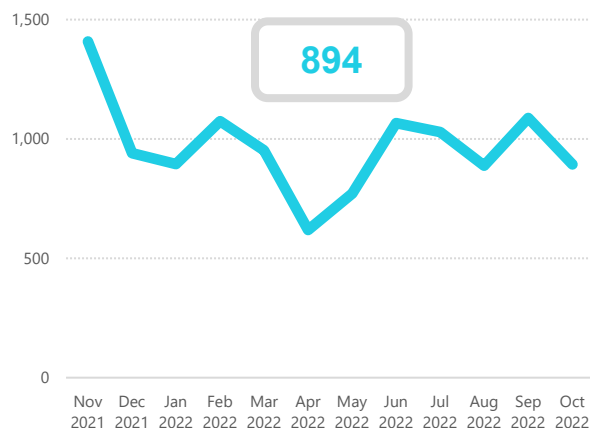
## Asset Allocation (\$ millions)



## Total Market Value (\$ billions)



## Cash (\$ millions)

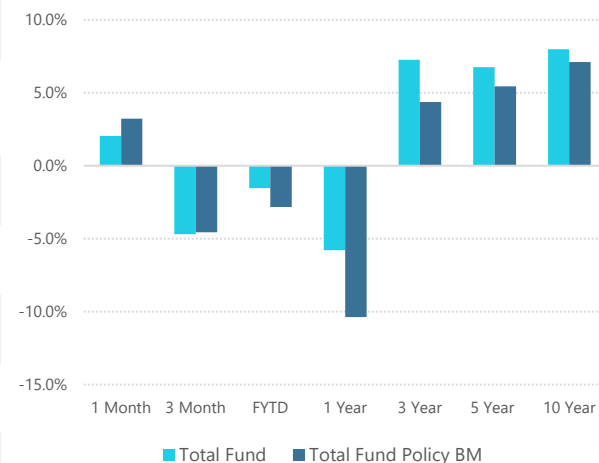


# Historical Net Performance

## as of October 2022

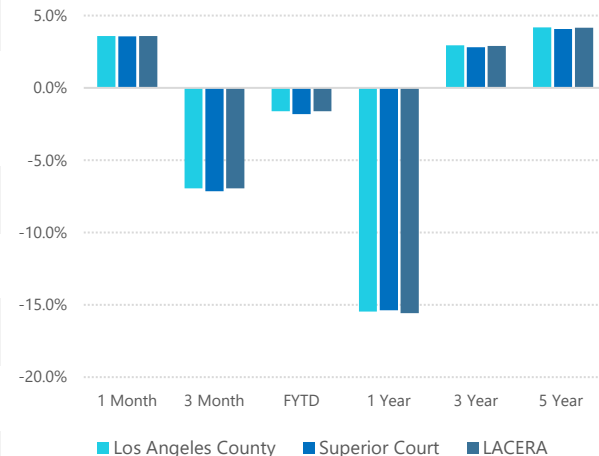
### LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>Total Fund</b>	<b>68,869</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2.0%</b>	<b>-4.7%</b>	<b>-1.5%</b>	<b>-5.8%</b>	<b>7.3%</b>	<b>6.8%</b>	<b>8.0%</b>
Total Fund Policy BM				3.2%	-4.6%	-2.8%	-10.4%	4.4%	5.4%	7.1%
7% Annual Hurdle Rate				0.6%	1.7%	2.3%	7.0%	7.0%	7.0%	7.0%
<b>Growth</b>	<b>35,128</b>	<b>51.0%</b>	<b>53.0%</b>	<b>3.8%</b>	<b>-5.4%</b>	<b>-1.3%</b>	<b>-9.5%</b>	<b>11.0%</b>		
Growth Policy BM				6.1%	-4.7%	-2.9%	-14.6%	7.5%		
<b>Credit</b>	<b>7,918</b>	<b>11.5%</b>	<b>11.0%</b>	<b>0.2%</b>	<b>-1.3%</b>	<b>-0.4%</b>	<b>-6.1%</b>	<b>2.7%</b>		
Credit Policy BM				-1.7%	-1.1%	-2.6%	-10.7%	-0.3%		
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,293</b>	<b>17.9%</b>	<b>17.0%</b>	<b>1.5%</b>	<b>-3.5%</b>	<b>-0.6%</b>	<b>8.0%</b>	<b>8.0%</b>		
Real Assets & Inflation Hedges Policy BM				3.1%	-3.7%	-0.1%	6.6%	8.3%		
<b>Risk Reduction &amp; Mitigation</b>	<b>12,884</b>	<b>18.7%</b>	<b>19.0%</b>	<b>-1.7%</b>	<b>-6.8%</b>	<b>-5.3%</b>	<b>-12.3%</b>	<b>-1.8%</b>		
Risk Reduction & Mitigation Policy BM				-1.8%	-7.3%	-5.7%	-13.3%	-2.8%		
<b>Overlays &amp; Hedges</b>	<b>646</b>	<b>0.9%</b>		<b>21.0%</b>	<b>11.2%</b>					



### OPEB Master Trust<sup>1</sup>

	Market Value (\$ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
<b>OPEB MASTER TRUST</b>	<b>2,464</b>			<b>3.6%</b>	<b>-6.9%</b>	<b>-1.6%</b>	<b>-15.5%</b>	<b>2.9%</b>	<b>4.2%</b>
Los Angeles County	2,398	97.3%	—	3.6%	-6.9%	-1.6%	-15.5%	2.9%	4.2%
Superior Court	55	2.2%	—	3.6%	-7.1%	-1.8%	-15.4%	2.8%	4.1%
LACERA	11	0.4%	—	3.6%	-6.9%	-1.6%	-15.6%	2.9%	4.2%
<b>OPEB Growth</b>	<b>1,175</b>	<b>47.7%</b>	<b>47.5%</b>	<b>6.2%</b>	<b>-7.4%</b>	<b>-0.8%</b>	<b>-20.0%</b>	<b>5.0%</b>	<b>5.3%</b>
OPEB MT Growth Policy BM				6.2%	-7.2%	-1.3%	-20.5%	4.6%	4.9%
<b>OPEB Credit</b>	<b>472</b>	<b>19.1%</b>	<b>19.0%</b>	<b>1.4%</b>	<b>-2.1%</b>	<b>1.1%</b>	<b>-8.7%</b>	<b>-0.7%</b>	<b>--</b>
OPEB MT Credit Policy BM				0.7%	-2.0%	0.3%	-9.6%	-0.5%	--
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>486</b>	<b>19.7%</b>	<b>20.0%</b>	<b>3.0%</b>	<b>-10.9%</b>	<b>-4.9%</b>	<b>-11.1%</b>	<b>2.6%</b>	<b>--</b>
OPEB MT RA & IH Policy BM				1.9%	-3.8%	-0.5%	-7.4%	3.9%	--
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>330</b>	<b>13.4%</b>	<b>13.5%</b>	<b>-1.0%</b>	<b>-6.5%</b>	<b>-4.7%</b>	<b>-12.5%</b>	<b>-2.8%</b>	<b>0.3%</b>
OPEB MT RR & M Policy BM				-1.9%	-8.6%	-6.7%	-14.4%	-3.6%	-0.2%
Operational Cash	0	0.0%							

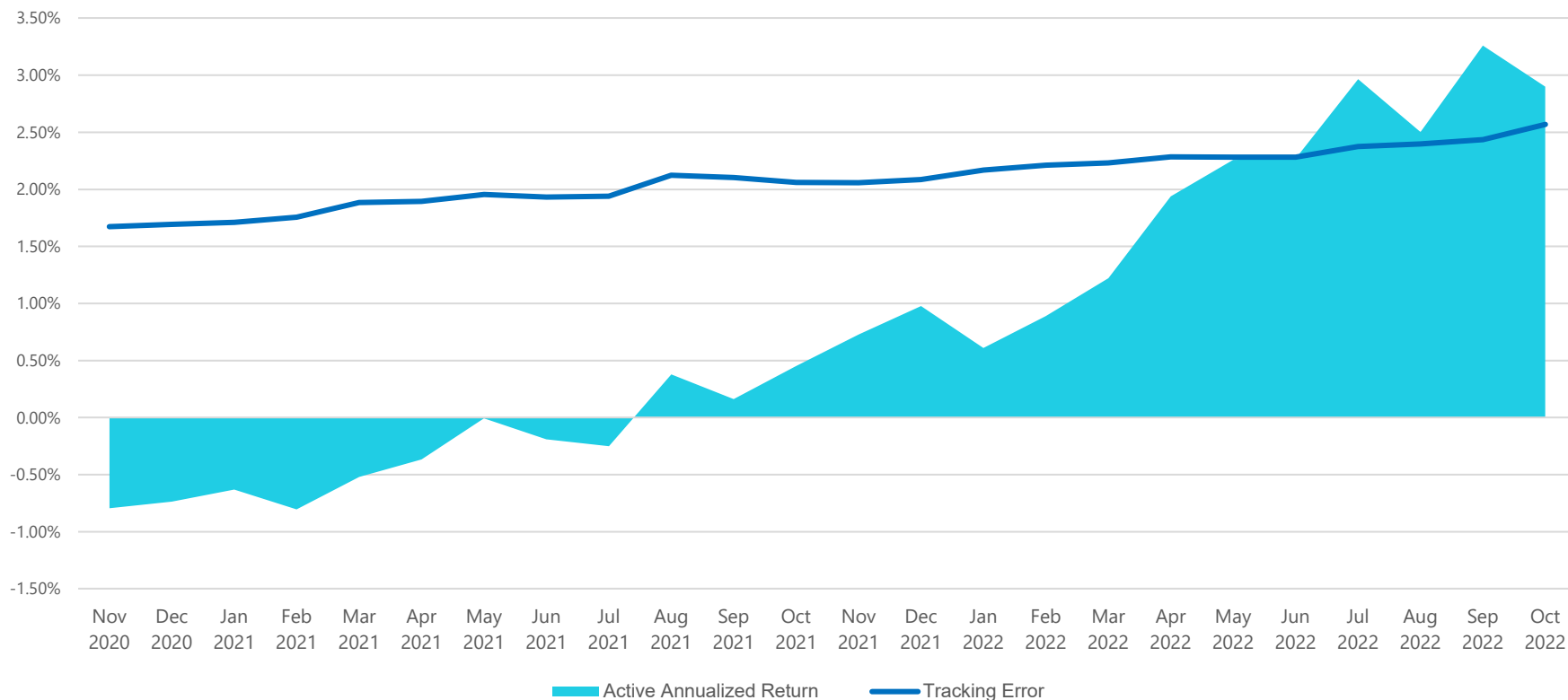


1. Market value differences between the sub-trusts and functional composites are due to operational cash.

# Performance Based Risk

## as of October 2022

Active Return vs. Tracking Error<sup>1,2,3</sup>



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Oct 2022	7.3%	4.4%	2.9%	2.6%

1. Rolling 36 months.

2. Active return equals the difference in return between a portfolio and its benchmark.

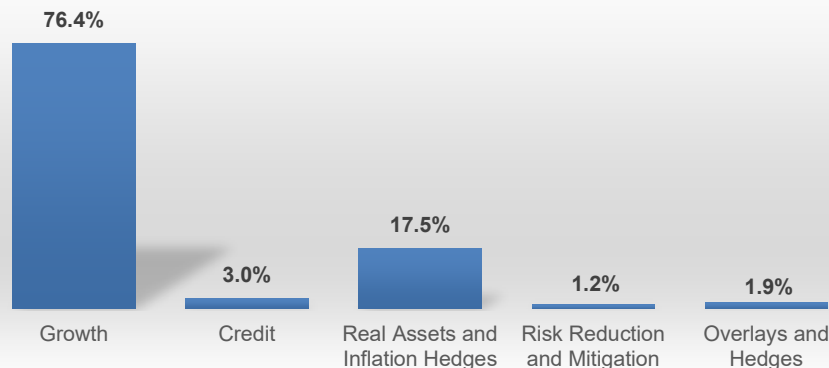
3. Tracking error (or active risk) measures the volatility of active returns.



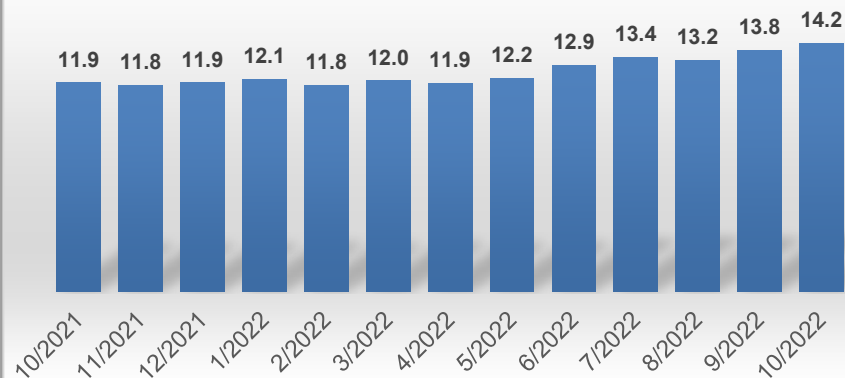
# Total Fund Forecast Risk\*

as of October 2022

%Contribution to Total Risk



Total Risk



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
<b>Total Fund</b>			<b>14.2</b>	<b>13.4</b>
<b>Growth</b>	<b>51.1%</b>	<b>76.4%</b>	<b>21.5</b>	<b>20.2</b>
Global Equity	31.6%	39.8%	18.8	19.2
Private Equity	18.0%	33.5%	29.8	28.1
Non-Core Private Real Estate	1.5%	3.2%	44.6	20.2
<b>Credit</b>	<b>11.5%</b>	<b>3.0%</b>	<b>4.9</b>	<b>5.5</b>
Liquid Credit	6.6%	2.2%	6.3	5.5
Illiquid Credit	4.9%	0.8%	4.2	5.5
<b>Real Assets &amp; Inflation Hedges</b>	<b>18.0%</b>	<b>17.5%</b>	<b>15.3</b>	<b>14.7</b>
Core Private Real Estate	6.6%	7.3%	22.3	20.2
Natural Resources & Commodities	3.4%	3.2%	17.7	21.5
Infrastructure	5.3%	6.5%	18.9	19.0
TIPS	2.7%	0.5%	6.4	6.5
<b>Risk Reduction and Mitigation</b>	<b>18.4%</b>	<b>1.2%</b>	<b>5.6</b>	<b>5.6</b>
Investment Grade Bonds	7.1%	0.5%	6.3	6.2
Diversified Hedge Funds	6.0%	0.5%	3.8	0.2
Long-Term Government Bonds	4.0%	0.1%	13.0	12.9
Cash	1.3%	0.0%	-	-
<b>Overlays and Hedges</b>	<b>1.1%</b>	<b>1.9%</b>	<b>-</b>	<b>-</b>

\*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 6/30/2022

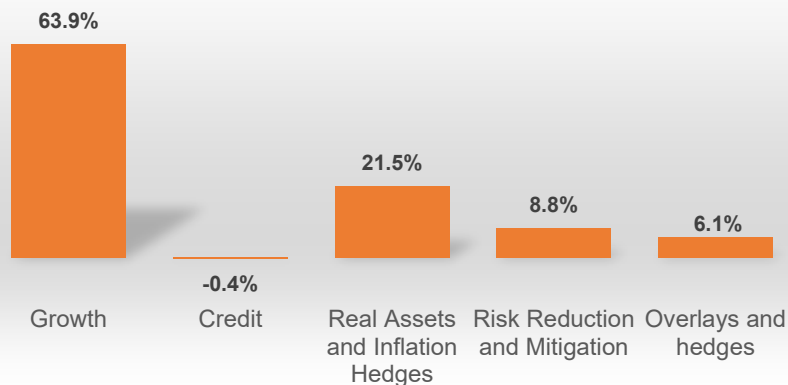
\*\*BMK Risk stands for Benchmark Risk



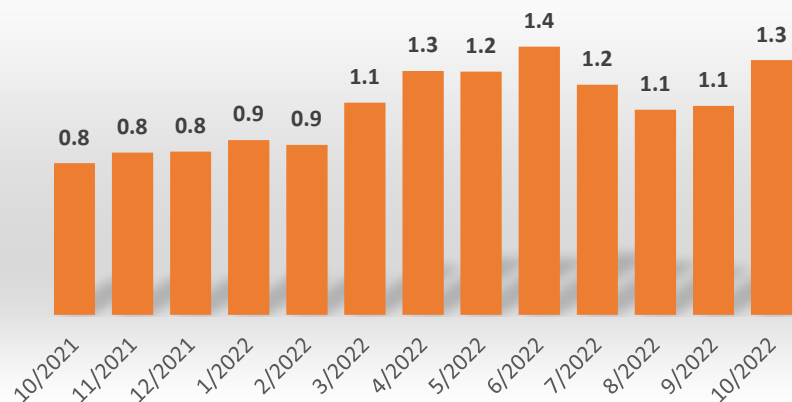
# Total Fund Forecast Active Risk\*

as of October 2022

## Active Risk Contribution



## Active Risk



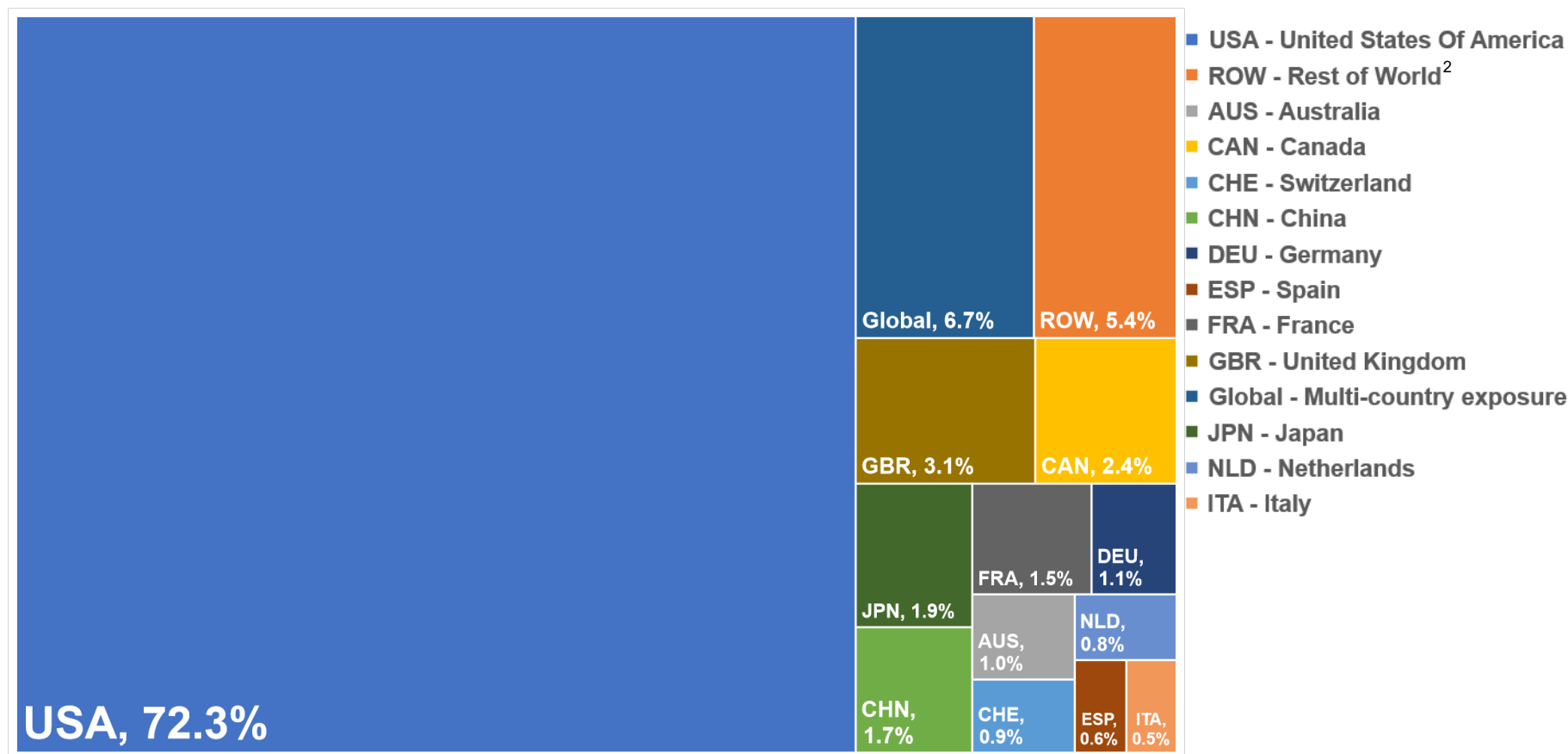
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
<b>Total Fund</b>			<b>1.31</b>	<b>-0.03</b>	<b>1.34</b>
<b>Growth</b>	<b>51.1%</b>	<b>-1.93%</b>	<b>0.84</b>	<b>-0.09</b>	<b>0.93</b>
Global Equity	31.6%				
Private Equity	18.0%				
Non-Core Private Real Estate	1.5%				
<b>Credit</b>	<b>11.5%</b>	<b>0.45%</b>	<b>-0.01</b>	<b>-0.03</b>	<b>0.02</b>
Liquid Credit	6.6%				
Illiquid Credit	4.9%				
<b>Real Assets &amp; Inflation Hedges</b>	<b>18.0%</b>	<b>0.99%</b>	<b>0.28</b>	<b>-0.03</b>	<b>0.31</b>
Core Private Real Estate	6.6%				
Natural Resources & Commodities	3.4%				
Infrastructure	5.3%				
TIPS	2.7%				
<b>Risk Reduction and Mitigation</b>	<b>18.4%</b>	<b>-0.58%</b>	<b>0.12</b>	<b>0.04</b>	<b>0.07</b>
Investment Grade Bonds	7.1%				
Diversified Hedge Funds	6.0%				
Long-Term Government Bonds	4.0%				
Cash	1.3%				
<b>Overlays and Hedges</b>	<b>1.1%</b>	<b>1.06%</b>	<b>0.08</b>	<b>0.08</b>	<b>-</b>

\*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 6/30/2022



# Geographic Exposures by AUM\* - Total Fund

as of October 2022 ex-overlays and hedges



\*AUM = assets under management

<sup>1</sup> \*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 6/30/2022

<sup>2</sup> "ROW - Rest of World" is sum of countries with weight below 0.5%

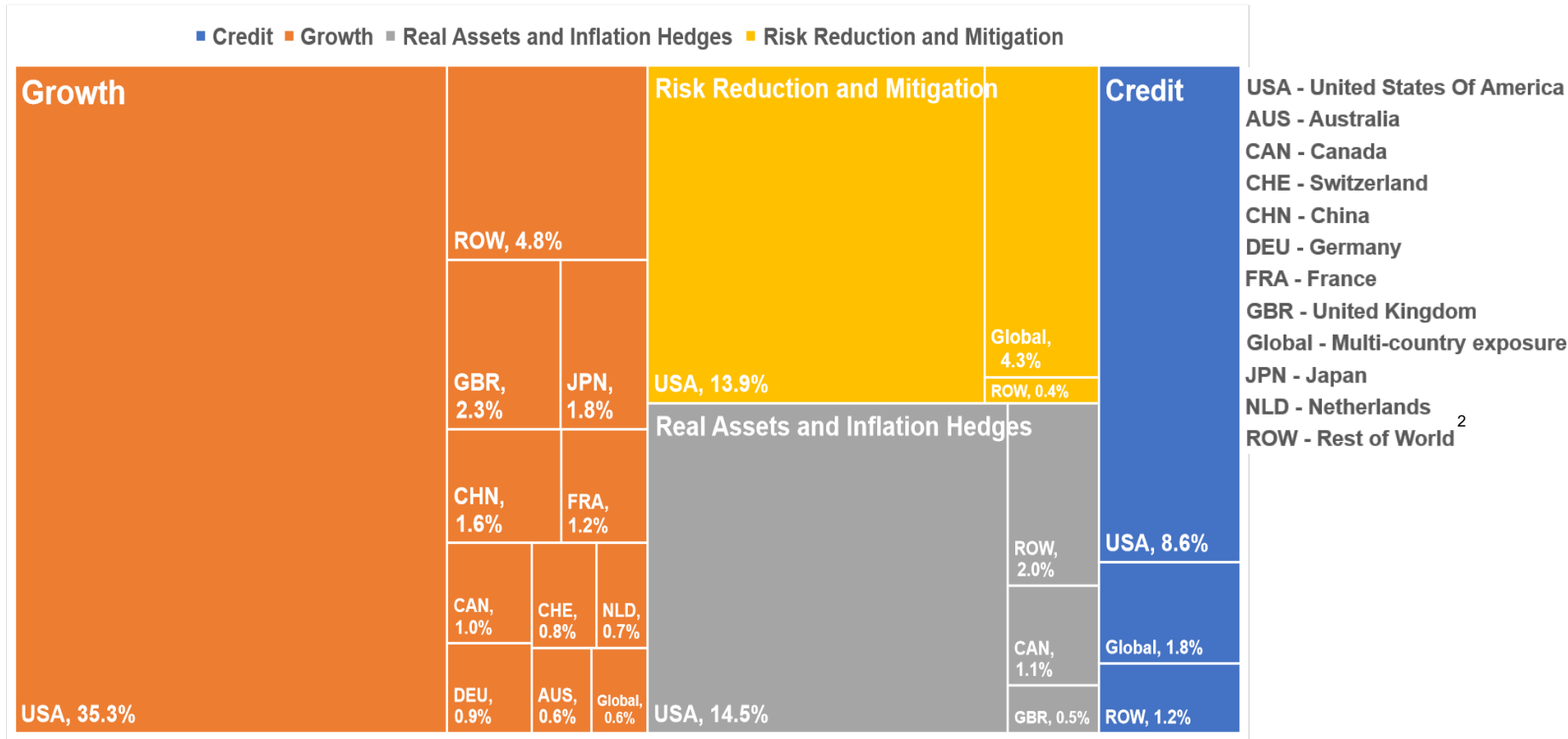
<sup>3</sup> Geographic exposure is based on the domicile country of a given security/asset





# Geographic Exposures by AUM\* - Asset Categories

## as of October 2022 ex-overlays and hedges



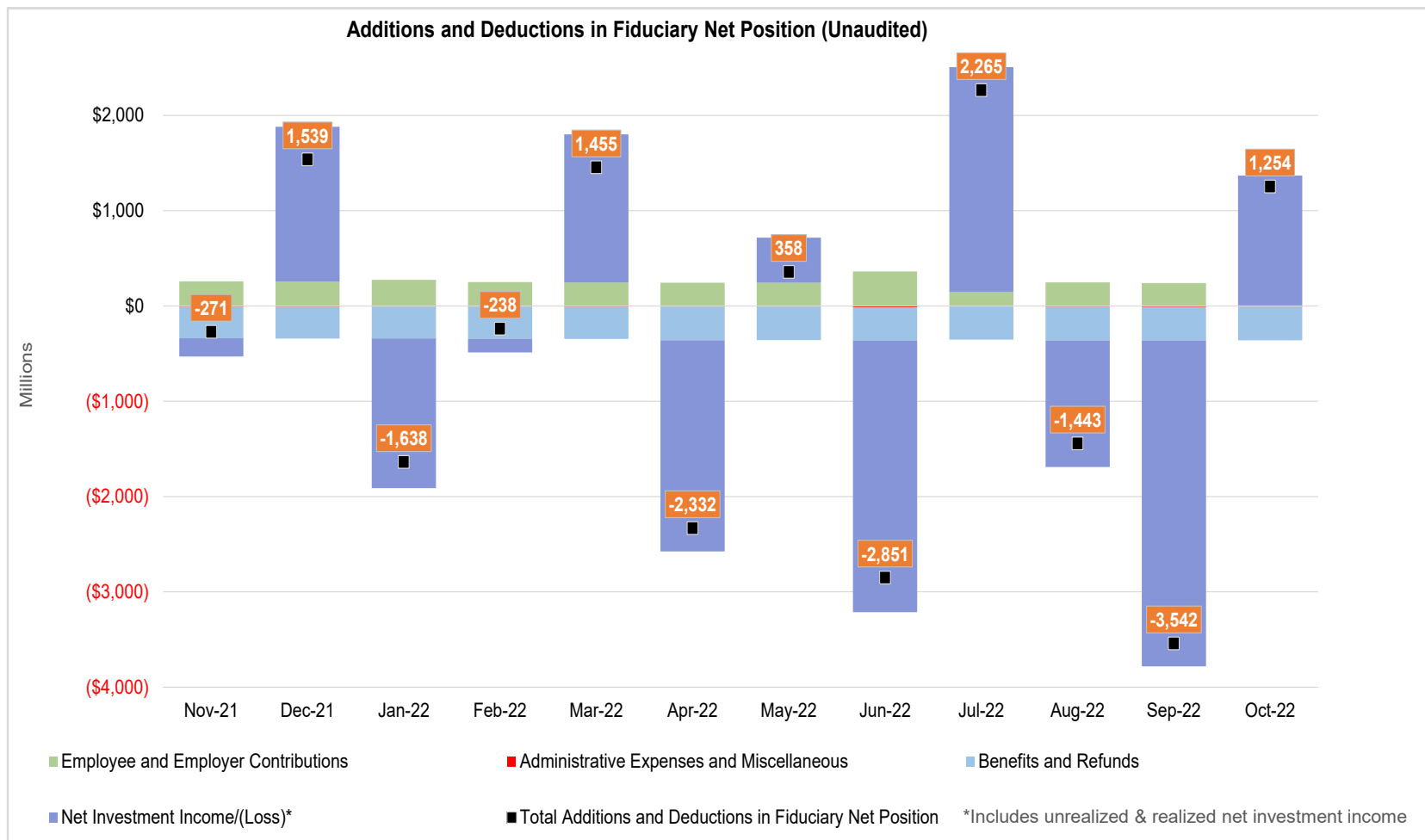
\*AUM = assets under management

<sup>1</sup> \*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 6/30/2022

<sup>2</sup> "ROW - Rest of World" is sum of countries with weight below 0.5%

<sup>3</sup> 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	2	2	(\$1.5 billion)



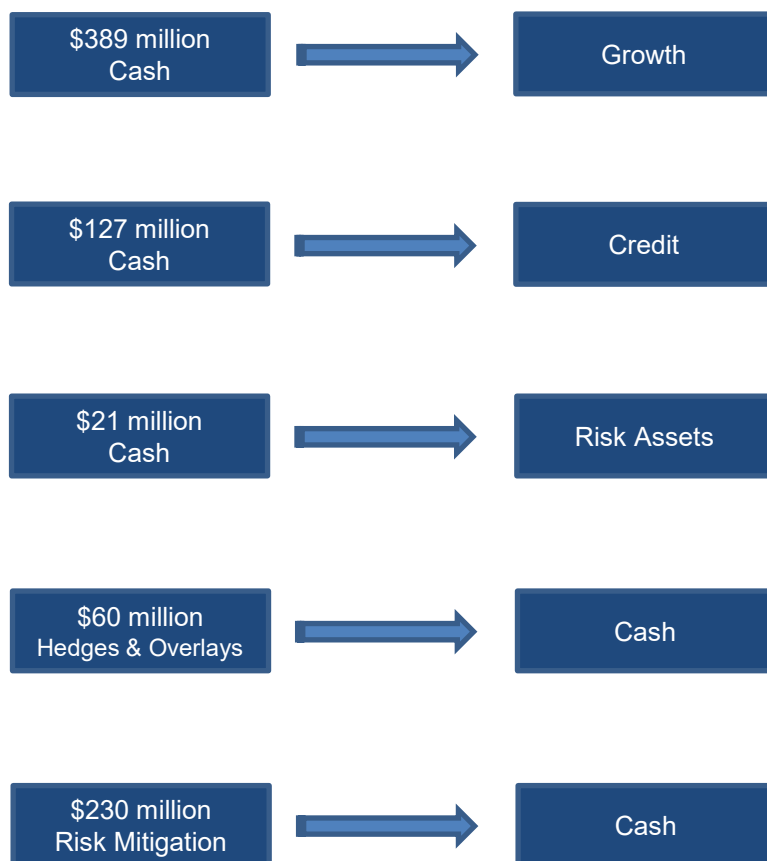
# Portfolio Structural Updates



# Portfolio Structural Updates

## Portfolio Movements

### Rebalancing Activity



## Hedges & Overlays

### Monthly Activity

Program	Oct Return	Oct Gain/(Loss)	Inception* Gain/(Loss)
Currency Hedge**	0.0%	\$59.7 Million	\$1.4 Billion
Cash/Rebalance Overlay***	4.9%	\$118.2 Million	\$174.4 Million

## Current Search Activity

There are no active public searches at this time.

The quiet period list will be updated when the next public search is released.

\*Currency and overlay program inception dates are 8/2010 & 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.



# 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
- Annual Work Plan and Strategic Initiatives development is underway

## Operational Updates

- Annual contract compliance review underway
- Preparation for operational due diligence review

## 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
  - 2 – Financial Analyst-III
    - 2 searches in progress
  - 3 – Financial Analyst-II
  - 1 – Financial Analyst-I

## Manager/Consultant Updates

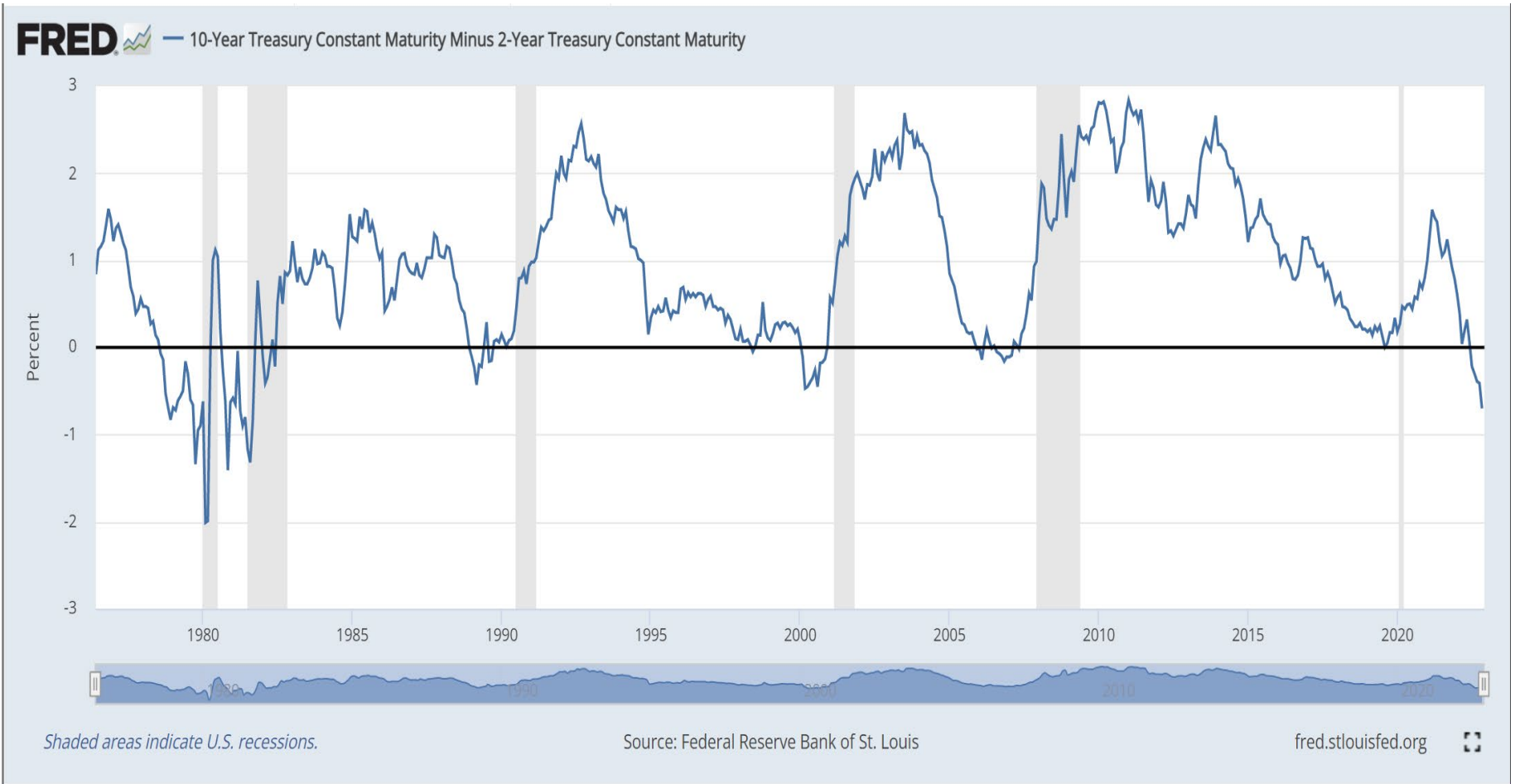
Lazard - Growth – Informed LACERA of the sudden passing of a portfolio manager. Responsibilities will be assumed by existing portfolio managers. If warranted, Lazard may add additional resources to the team.

# Commentary



# Staff Chart of the Month

## 10-year Treasury minus two-year Treasury yield



Time Period: June 1, 1976 to November 30, 2022



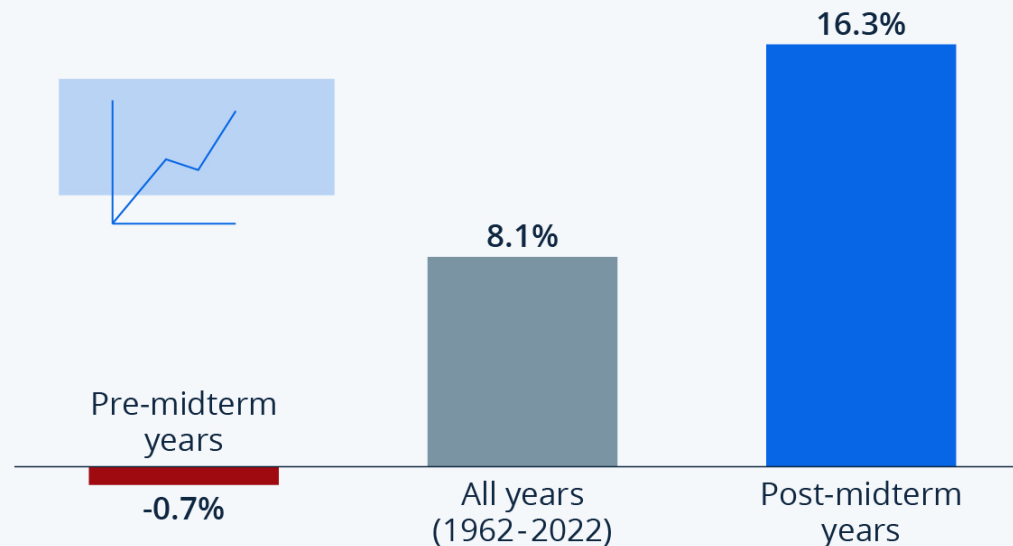


# Staff Chart of the Month

## US Stocks Rally Post Midterms (1962-2022)

### The Midterms Are Over, Let the Stock Rally Begin!

Average price return of the S&P 500 in  
the 12 months ending Oct. 31 since 1962



Sources: Yahoo Finance, U.S. Bank



statista

November 28, 2022

TO: Each Trustee,  
Board of Retirement  
Board of Investments

FROM: Steven P. Rice, *SPR*  
Chief Counsel

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

SUBJECT: Approval of the Use of Teleconference Meeting Technology Under AB 361 and Government Code Section 54953(e), including as Part of Hybrid Board and Committee Meetings

## **RECOMMENDATION**

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 other public agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days as part of hybrid meetings also in person, so long as the State of Emergency remains in effect, and direct staff to comply with the agenda and public comment requirements of Section 54953(e)(3). Action taken by each Board will only apply to that Board and its Committees.

Pursuant to the action of both Boards at the joint meeting on September 23, 2022, starting with the November 2022 Board and Committee meetings, teleconference meetings, if approved, will be agendized as hybrid meetings where trustees may attend by teleconference or in person in the boardroom at LACERA's offices at 300 N. Lake Avenue, Pasadena, California 91101, with adequate provision being made for public comment via teleconference, in person, and in writing and for public attendance via teleconference and in person.

## **LEGAL AUTHORITY**

Under Article XVI, Section 17 of the California Constitution, the Boards have plenary authority and exclusive fiduciary responsibility for the fund's administration and investments. This authority includes the ability of each Board to manage their own Board and Committee meetings and evaluate legal options for such meetings, such as whether to invoke teleconferencing of meetings under AB 361 and Government Code Section 54953(e) of the Brown Act to protect the health and safety of Trustees, staff, and the

public. The Boards previously took this action at their meetings since October 2021. Findings made under this memo will be effective for meetings during the next 30 days, so long as the State of Emergency remains in effect.

## **DISCUSSION**

### ***A. Summary of Law.***

On September 16, 2021, the Governor signed AB 361 which enacted new Government Code Section 54953(e) of the Brown Act to put in place, effective immediately and through December 31, 2023, new teleconferencing rules that may be invoked by local legislative bodies, such as the LACERA Boards, upon making certain findings and following certain agenda and public comment requirements.

Specifically, Section 54953(e)(3) provides that the Boards may hold teleconference meetings without the need to comply with the more stringent procedural requirements of Section 54953(b)(3) if a state of emergency under Section 8625 of the California Emergency Services Act impacts the safety of in person meetings or state or local officials have imposed or recommended social distancing rules, provided that the Board makes the following findings by majority vote:

(A) The Board has considered the circumstances of the state of emergency; and

(B) Any of the following circumstances exist:

- (i) The state of emergency continues to directly impact the ability of the Trustees to meet safely in person; or
- (ii) State or local officials continue to impose or recommend measures to promote social distancing.

If each Board makes the required findings, that Board and its Committees may hold teleconference meetings for the next 30 days without the need to comply with the regular rules of Section 54953(b)(3) provided that: agendas are prepared and posted under the Brown Act; members of the public are allowed to access the meeting via a call-in option or an internet-based service option; and the agenda provides an opportunity for public comment in real time and provides notice of the means of accessing the meeting for public comment. Upon making the required findings, the Boards have discretion to hold meetings either entirely by teleconference or as hybrid meetings with individual trustees and the public able to attend either by teleconference or in person.

### ***B. Information Supporting the Required Findings and Process if the Boards Determine to Invoke Section 54953(e).***

The Governor's State of Emergency for the COVID-19 pandemic as declared in the Proclamation of a State of Emergency dated March 4, 2020 remains active. The

Proclamation was issued under the authority of Section 8625 of the California Emergency Services Act. It is unclear when the State of Emergency will end, although over the past year the Governor actively terminated many emergency provisions. See, e.g., Order No. N-21-21, issued November 10, 2021, Order No. N-04-22, issued February 25, 2022. Very recently, the Governor terminated additional COVID provisions. See Order No. N-11-22, issued June 17, 2022. In the press release for the June 17 Order, the Governor's Office stated that, after June 30, 2022, "only 5 percent of the COVID-19 related executive order provisions issued throughout the pandemic will remain in place."

On October 17, 2022, the Governor announced that the COVID State of Emergency will end on February 28, 2023. However, the State of Emergency remains in effect until then. The Governor's press release stated that one of the purposes of deferring the end of pandemic until 2023 was to "provid[e] state and local partners the time needed to prepare for this phaseout and set themselves up for success afterwards." Among the transition items reasonably interpreted as included for local agencies such as LACERA is a phaseout of teleconference meetings.

The Los Angeles County Department of Public Health still maintains guidance, even if not a requirement, to "Keep your distance. Use two arms lengths as your guide (about 6 feet) for social distancing with people you don't live with." <http://publichealth.lacounty.gov/acd/ncorona2019/reducingrisk/>. The County Public Health Department also maintains guidance for employers: "Reduce indoor crowding. A few example strategies to decrease crowding include, but are not limited to: • Host larger meetings outdoors or virtually. • Reduce occupancy and spread-out seating in meeting rooms and other small spaces such as locker rooms, weight rooms, restrooms, and saunas. Ensure good ventilation . . . • Establish procedures to prevent crowding among persons waiting to enter or exit a large event. Limiting attendance, establishing unidirectional foot traffic patterns, reservations, online waiting lists, timed entry or exit, and using staff to help direct traffic and limit access if the area becomes too crowded can help. " <http://publichealth.lacounty.gov/acd/ncorona2019/bestpractices/>.

Despite this County Health Department guidance, the Board of Supervisors recently resumed in person meetings on September 27, 2022. The County provides enhanced air filtration, limits attendance, and provides a designated media area. All persons in attendance must be masked. Telephonic public comment and livestreaming are still be provided. The LACERA Boards are not required to follow the Board of Supervisors' decision with regard to how meetings are conducted, but the County's change in practices is instructive.

The City of Pasadena (City), where LACERA's offices are located and Board and Committee meetings are held, has substantially revised its guidance to give more

flexibility. The City still offers guidance that businesses recognize that COVID-19 continues to pose a risk to communities, and it is important for employers to continue to take steps to reduce the risk of COVID-19 transmission among their workers and visitors.

<https://www.cityofpasadena.net/economicdevelopment/covid-19-business-resources/>.

Earlier guidance promoting physical distancing by business in certain circumstances also remains posted on the City's COVID web page as a reference. As of the date of this memo, the City Council continues to hold its meetings by videoconference/teleconference, although some council members attend in person in the council chambers. At its November 21, 2022 meeting, the City Council voted to extend the video and teleconference meeting process through December 21, 2022.

The Centers for Disease Control and Prevention (CDC) recently updated its guidance, but the CDC still advises the public that they can "Prevent the Spread of COVID-19." Among the methods cited by CDC is "Keeping a Safe Distance Helps Stop COVID-19: Stay away from people who are sick. Stay away from people who have COVID-19. Stay away from people with COVID-19 even if they don't feel sick. Stay away from crowds. Stay away from inside places with lots of people." <https://www.cdc.gov/coronavirus/2019-ncov/easy-to-read/prevent-getting-sick/how-covid-spreads.html>.

Under these circumstances, the Boards may reasonably conclude and find that teleconferencing under Section 54953(e) is appropriate for Board and Committee meetings, including on a hybrid basis, during the next 30 days, so long as the State of Emergency remains in effect, because (1) the State of Emergency continues to impact the ability of the Trustees to meet safely in person, or (2) the County and other authorities continue to recommend measures to promote a safe workplace, including physical distancing, as required by the statute. Either finding is sufficient under Section 54953(e) to support continued teleconference meetings.

If each Board makes these findings and directs teleconferencing under Section 54953(e), procedures exist and will be implemented to ensure compliance with the agenda and public comment requirements of the statute, as stated above. As required by the Boards' September 23, 2022 action, hybrid in person and teleconference meetings will be implemented in accordance with procedures required by the Brown Act.

Finally, due to a reduction in transmission levels, LACERA management continues to support hybrid office/telework procedures.

## **CONCLUSION**

Based on the above information, staff recommends that, under AB 361 and Government Code Section 54953(e)(3) of the Brown Act, the Board of Retirement and Board of

Re: Approval of Teleconference Meetings

November 28, 2022

Page 5 of 5

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 as part of hybrid meetings also in person, so long as the State of Emergency remains in effect, 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.

If the required findings are made, teleconference technology will be used as part of hybrid Board and Committee meetings conducted by teleconference and in person at LACERA's Pasadena offices, so long as permissible under applicable law.

c:	Santos H. Kreimann	Luis A. Lugo	JJ Popowich
	Jonathan Grabel	Laura Guglielmo	Carly Ntoya

November 23, 2022

TO: Trustees – Board of Investments

FROM: Equity: Public/Private Committee

Christopher J. Wagner   
Principal Investment Officer

Esmeralda V. del Bosque   
Acting Principal Investment Officer

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **GROWTH FUNCTIONAL CATEGORY BIENNIAL STRUCTURE REVIEW**

### **RECOMMENDATION**

Approve the Growth Functional Category Biennial Structure Review.

### **BACKGROUND**

On November 9, 2022, LACERA presented the Growth Functional Category Biennial Structure Review (“Growth Structure Review”) (**Attachment**) to the Equity: Public/Private Committee. The Growth Structure Review covered the global equity and private equity asset categories. While opportunistic real estate is also part of the Growth functional category, it is included in the Real Assets and Inflation Hedges Structure Review.

The Growth Structure Review included four recommendations:

1. Committing approximately 4-5% of the Trust’s assets annually over the next two years to private equity opportunities
2. Extending the private equity policy target range for co-investments/fund-of-funds/secondaries from 10-25% to 10-30%
3. Consolidating (with no changes) the CIO delegated authority across the private equity program into a sub-section in the Private Equity Investments Guidelines
4. Reaffirming the Global Equity Investment Guidelines

The Committee voted unanimously to advance the Growth Structure Review to the Board of Investments for approval.

### **OPTIONS AVAILABLE TO THE BOARD**

The Growth Structure Review covers the Growth functional category comprised of global equity and private equity, but not opportunistic real estate. If the Board does not approve the Growth Structure Review, staff will consult with the Committee and propose an alternative or include the Board’s direction in revised documents.

## **DELIBERATIONS AND OPINIONS EXPRESSED BY THE COMMITTEE**

Some of the opinions expressed by Committee members and Trustees during its discussion include the following:

A Committee member inquired about the global equity target allocation. Staff clarified that the 32% target allocation for global equity (shown on slide 11 of the presentation) is from the latest Strategic Asset Allocation (“SAA”) approved in 2021, whereas the 35% pertains to the prior SAA approved in 2018. Additionally, staff was asked to provide the percentage of the global equity portfolio that is passively indexed. Staff shared that the target allocation to passive strategies is approximately 60%.

In response to a question from a Committee member, the Private Equity Advisor (“PEA”) stated that despite underperformance in many emerging markets, staff and PEA will continue to evaluate opportunities ex-China. Strong fiscal policies and exports tied to the U.S. dollar in many emerging markets have mitigated currency volatility resulting from the strengthening U.S. dollar. The staff and PEA affirmed that while challenges exist to making fund commitments in the \$250-\$500 million range, the increase is warranted by the growth of the Fund, ability to negotiate economics, and a desire to manage the number of relationships.

Finally, in response to a question from a Trustee, it was noted that following an RFP approval process, staff has used the MSCI BarraOne risk analysis tool for the total Fund and asset class analysis.

## **RISKS OF ACTION AND INACTION**

Board approval of the Growth Structure Review authorizes LACERA to commit 4-5% of Trust assets annually to private equity investments during the 2023-2024 calendar years.

If the Board does not approve the Growth Structure Review, private equity investments and strategy initiatives could be delayed.

## **CONCLUSION**

LACERA, in consultation with the Meketa Investment Group (LACERA’s general consultant) and the StepStone Group (LACERA’s private equity consultant), proposed the Growth Structure Review, the primary planning document for the Growth functional category. The Equity: Public/Private Committee reviewed and advanced the document for approval at its November 2022 meeting. Approval of the Growth Functional Category Biennial Structure Review is recommended.

Attachment

Noted and Reviewed:



---

Jonathan Gabel  
Chief Investment Officer





October 28, 2022

TO: Trustees – Equity: Public/Private Committee

FROM: Christopher J. Wagner   
Principal Investment Officer

Esmeralda V. del Bosque   
Acting Principal Investment Officer

FOR: November 9, 2022 Equity: Public/Private Committee Meeting

SUBJECT: **GROWTH FUNCTIONAL CATEGORY BIENNIAL STRUCTURE REVIEW**

### **RECOMMENDATION**

Advance the Growth Functional Category Biennial Structure Review and the proposed modifications/affirmations as recommended on slide 36 of the attached presentation to the Board of Investments for approval.

### **BACKGROUND**

This Growth structure review combines the global equity and private equity asset categories. While non-core private real estate is also part of Growth, its structure review was included in the Real Estate Structure Review at the December 2021 Real Assets Committee meeting.

The benefit of a consolidated structure review at the functional level is to affirm each functional category's specific role in the Fund. For example, Growth's role is to be the primary driver of long-term total returns for the Fund.

Staff has prepared the Growth Functional Category Biennial Structure Review (**Attachment A**) for evaluation by the Equity: Public/Private Committee and ultimately for approval by the Board of Investments ("Board"). The structure review identifies key themes and outlines upcoming initiatives for LACERA's Growth portfolio for the 2023-2024 calendar years. Additionally, the structure review is a means to establish an appropriate deployment strategy for private equity in the 2023-2024 calendar years and ensure appropriate diversification to private equity investment strategies (i.e., Buyouts, Venture Capital, and Co-Investments/Fund-of-Funds).

## GLOBAL EQUITY

Since the last structure review, the Board has approved multiple recommendations to closely align the global equity portfolio with broader global equity and total Fund strategic initiatives. These include an assessment of the manager search process, the implementation of a global equity cash overlay program, the transfer of the non-U.S. currency hedging program to the new Overlay and Hedges functional category, analysis of activist managers, and approval to run a separate account emerging manager program (“EMP” or “Program”). These actions will align the global equity portfolio closer to the benchmark and should reduce portfolio volatility.

As shown in the presentation, the global equity portfolio has exhibited positive risk-adjusted returns relative to the benchmark and noticeably improved annualized performance since the 2020 structure review.

At the October Board meeting, Trustees approved increasing the allocation range to the EMP and hired two separate account managers to build out the Program. Once the two EMP managers are funded, a review of the active manager portfolio will be conducted to evaluate underlying strategies and exposures. Meketa has reviewed the global equity component of the Growth structure review. Their comments are in **Attachment B**.

## PRIVATE EQUITY

The primary purpose of this structure review for private equity is to establish an appropriate deployment strategy that maintains the target allocation for the 2023-2024 calendar years, identify key investment themes, outline upcoming initiatives, and ensure appropriate diversification to private equity investment strategies (i.e., Buyouts, Venture Capital, and Co-Investments/Secondaries/Fund-of-Funds).

StepStone calculated a potential annual commitment pace for the 2022-2027 period. Using projections based on StepStone’s investment-pacing model, LACERA should commit approximately 4-5% of the Trust’s assets to private equity opportunities annually over the next two calendar years. The percentage of assets committed could vary as a result of variability in the economy, the private equity marketplace, fund availability, constraints to allocation access, and fluctuations in the total plan assets denominator. Note that the private equity commitment pace was adjusted from a dollar target to a percentage target based on Trustee feedback at the last structure review.

In calculating the projected commitment pace, StepStone made several assumptions about the rate of contributions and distributions to the Fund, economic growth rates, fund durations, and LACERA’s commitments by strategy. As the economy and market are subject to change, staff views the pacing model as a planning tool and the number of

commitments during the year will depend on market conditions, the availability of high-quality opportunities, and LACERA's overall exposure to private equity.

The in-house Co-Investment/Secondary program has grown to \$1.1 billion in market value (8% of the portfolio). Combined with externally managed programs of a similar strategy, the sub-asset class market value stands at \$2.7 billion (21% of the portfolio). The current target allocation range is 10-25% of the portfolio. With up to 30% of annual commitments targeted for the in-house program, and given its mitigated j-curve, the market value is projected to reach 28% of the Fund in 2024. Accordingly, staff proposes extending the target allocation range to 10-30%.

Throughout calendar years 2023-2024, staff and StepStone will look for quality opportunities (both re-ups and new) in each private equity investment strategy. In addition, staff will look to increase fund commitment sizes to the \$250-\$500 million range to strengthen key relationships. Stepstone's assessment of the private equity component of the Growth structure review is in **Attachment C**.

## CONCLUSION

As identified in the structure review, there is one proposed change to the private equity portfolio structure which is extending the target allocation range to Co-Investments/Secondaries/Fund-of-Funds from 10-25% to 10-30%. Staff also recommends adopting the proposed deployment strategy and incorporating the proposed edits (highlighted in green) to the Private Equity Investment Guidelines. For global equity, staff recommends re-affirming the Global Equity Investment Guidelines including recent Board action to increase the EMP target allocation range from 0-5% to 0-10%. Once the global equity EMP is funded, a review of the active portfolio will be conducted, and any recommendations presented to the Board.

## Attachments

Noted and Reviewed:



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Jonathan Grabel  
Chief Investment Officer

# **Growth Functional Category Biennial Structure Review**

**Equity: Public/Private Committee  
November 9, 2022**



**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**

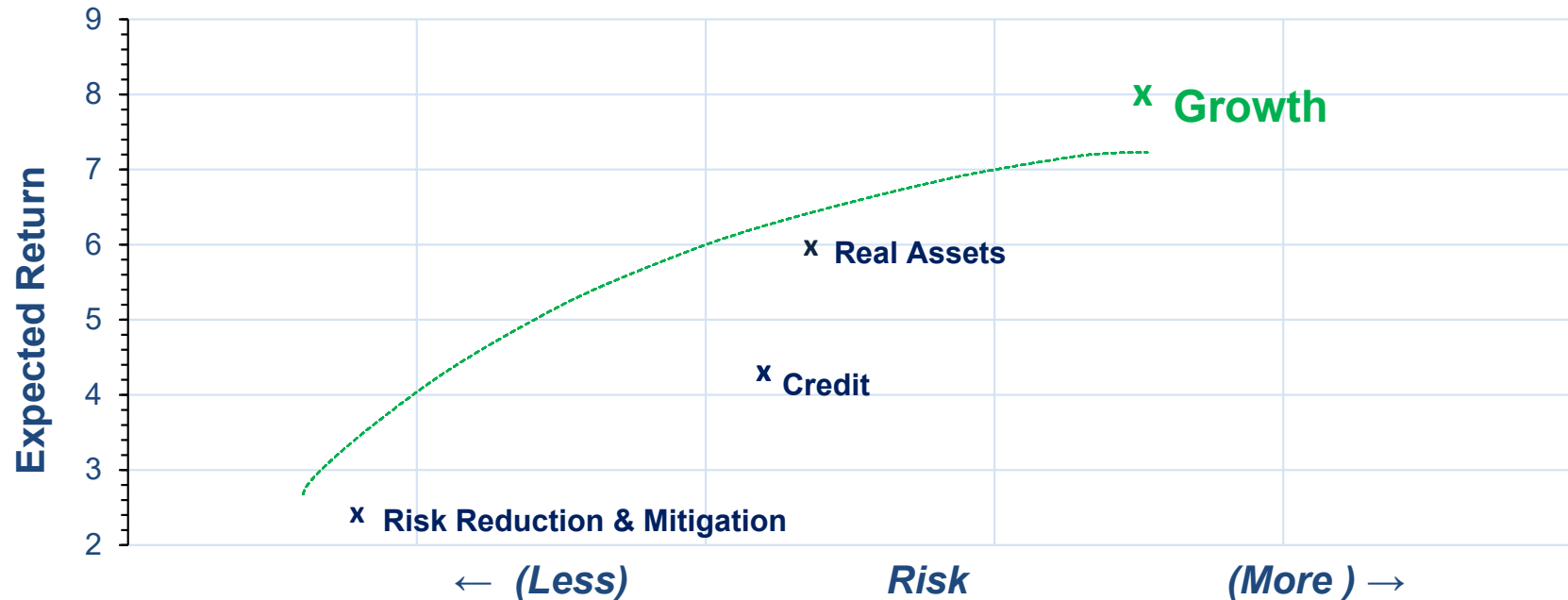


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# Role of Growth

- Provides global market beta exposure to growth assets
- Seeks risk-adjusted returns to higher performing private capital assets



**Growth<sup>1</sup>**

Growth investments are the primary driver of long-term total Fund returns.

**Global Equities**

Within the Growth category, public equity is primarily expected to provide global market beta exposure with alpha (excess returns) as a secondary consideration.

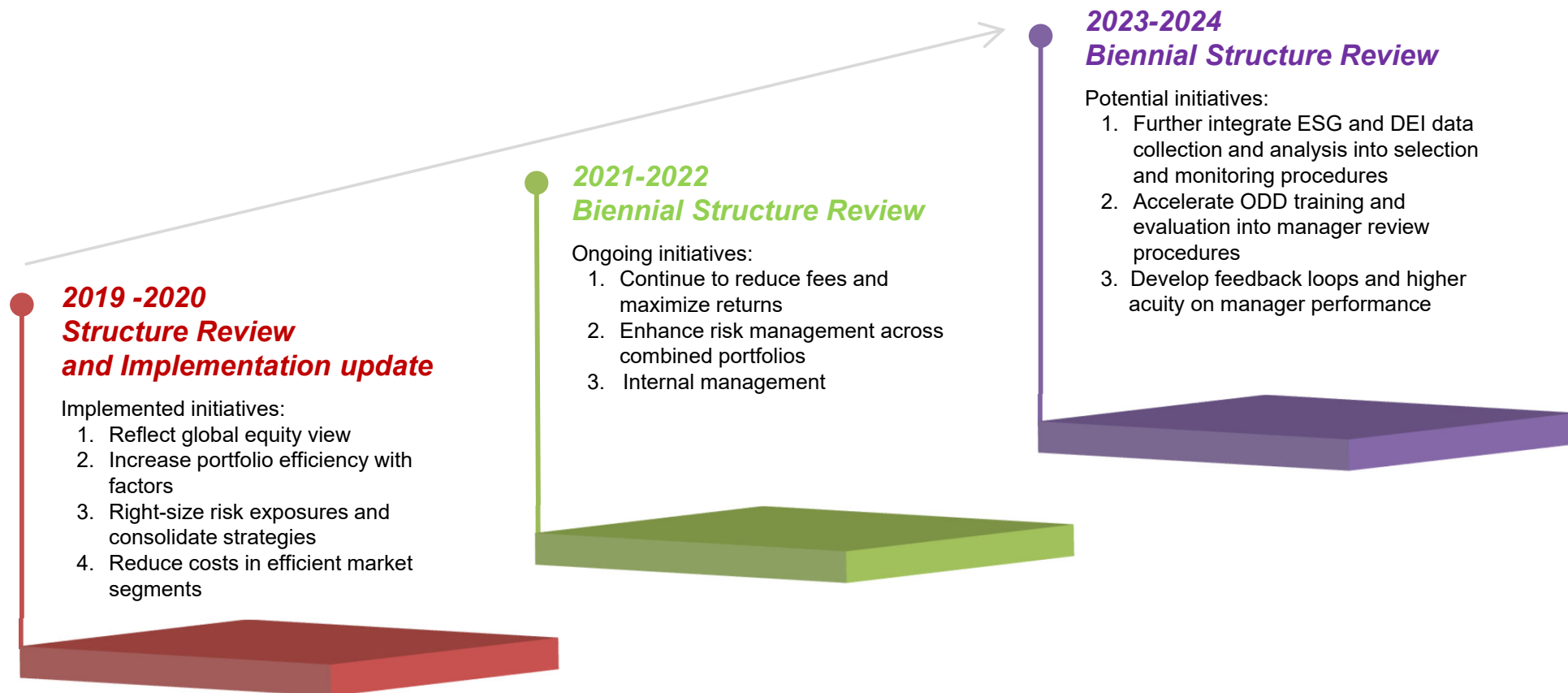
**Private Equity**

Within the Growth category, private equity is expected to generate the highest performance at an acceptable level of risk.

Data in the chart is from the 2021 Board-approved asset allocation study. Picture is an illustration, not actual experience.

<sup>1</sup> Non-Core Private Real Estate sub-asset category was reviewed as part of the Real Assets and Inflation Hedges Structure Review at the December 2021 committee meeting.

# Structure Review – Background



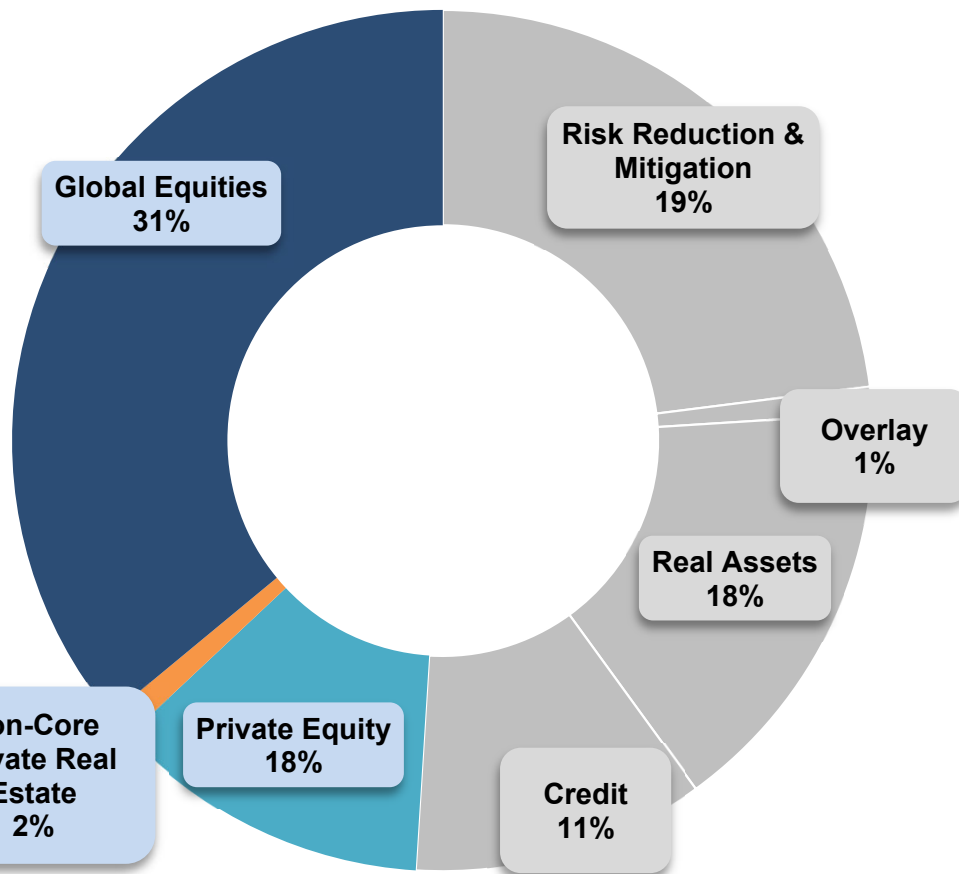
# Growth Portfolio Composition

## Total Fund Asset Allocation\*

as of August 31, 2022 (\$ in millions)

	% of Total	Target	Target Ranges	vs Target (%)	vs Target (\$)
<b>Total Growth</b>	<b>50.2%</b>	<b>53.0%</b>	<b>+/- 7%</b>	<b>-2.8%</b>	<b>-\$1,982</b>
Global Equity	31.0%	32.0%	+/- 7%	-1.0%	-\$742
Private Equity	17.7%	17.0%	+3/-5%	0.7%	\$467
Non-Core Private Real Estate	1.6%	4.0%	+/-2%	-2.4%	-\$1,707

- Growth allocation increased by 6% since last Strategic Asset Allocation Study
  - Private equity target allocation increased by 7% while global equity decreased by 3%
- Growth is underweight its target by 2.8%, or almost \$2 billion
  - Partially driven by recent market sell-off in growth assets



\* Private equity valuation reflect latest available and are adjusted for cash flows.





# Growth Portfolio Composition - Sector Exposures\*

LACERA Weights					
Sector	Global Equity	Private Equity	Growth Total	Benchmark Weight	Difference
Communication Services	6.9%	5.0%	6.2%	7.3%	-1.1%
Consumer Discretionary	10.9%	11.6%	11.2%	11.2%	0.0%
Consumer Staples	7.3%	4.4%	6.2%	7.3%	-1.1%
Energy	4.6%	0.9%	3.2%	4.9%	-1.7%
Financials	14.6%	7.6%	11.9%	14.4%	-2.4%
Health Care	12.7%	12.6%	12.7%	12.7%	0.0%
Industrials	10.2%	12.4%	11.0%	10.4%	0.6%
Information Technology	19.3%	38.2%	26.5%	19.8%	6.6%
Materials	4.7%	4.2%	4.5%	5.2%	-0.7%
Real Estate	3.2%	0.4%	2.1%	3.6%	-1.5%
Utilities	2.7%	0.2%	1.8%	3.2%	-1.4%
Others <sup>1</sup>	2.9%	2.5%	2.8%	0.0%	2.8%
Total	100%	100%	100%	100%	0%

## Sector Exposure Commentary

- In the private equity portfolio, Information Technology is overweight versus its benchmark by 1840 bps; the sector has driven outperformance in the aggregate equity portfolio
- Private equity staff will continue to decline technology investments deemed not differentiated or accretive to the portfolio

\* Growth portfolio excluding non-core private real estate. As of June 2022.

<sup>1</sup> "Others" include proxied commingled assets plus cash held.

# Growth Performance

Net-of-Fees (%) <sup>1</sup>	3-Month	YTD	1 -Year	3 -Year	Since Inception	Inception Date
<b>GROWTH</b>	(3.8)	(9.5)	(6.2)	13.4	12.5	Apr-2019
Growth Custom BM	(5.0)	(12.8)	(11.4)	10.0	9.9	
Excess Return	1.2	3.3	5.2	3.4	2.6	
<b>GLOBAL EQUITY</b>	(5.4)	(17.3)	(14.9)	8.5	7.8	Apr-2019
Global Equity Custom BM	(5.6)	(17.8)	(16.2)	8.0	7.3	
Excess Return	0.2	0.5	1.3	0.5	0.5	
<b>PRIVATE EQUITY - GROWTH</b>	(1.6)	6.1	12.3	24.2	21.9	Jan-2019
Private Equity - Growth Custom BM	(5.5)	(6.4)	(5.7)	13.7	9.8	
Excess Return	3.9	12.5	18.0	10.5	12.1	
<b>NON-CORE PRIVATE REAL ESTATE</b>	4.1	17.9	20.0	15.9	4.8	Jan-1996
Non-Core Private Real Estate Policy BM	6.0	20.5	30.9	14.3	11.7	
Excess Return	(1.9)	(2.6)	(10.9)	1.6	(6.9)	

## *Commentary*

- Growth has outperformed its benchmark since adopting the functional framework
  - Strong relative performance provided by private equity
  - Global equity outperformed its benchmark
- Short-term private equity performance measured against a public benchmark is less meaningful

<sup>1</sup> Net-of-fee returns as of August 2022; Private equity and non-core private real estate composite and benchmark returns are reported on a 3-month lag.

## ***Confluence of Inter-related Economic Factors Signal Ongoing Volatility***

---

- Recessionary signs include contracting GDP, inverted yield curve, declining consumer confidence, leading economic indicators turn negative, rising CPI
- Interest rates – Fed aggressively tightening to combat inflation; mortgage rates near 7%

## ***Increased Geopolitical Risks and Uncertainties***

---

- Fears mount that war in Ukraine will become a broader military conflict
- European economies near recession, vulnerable to energy costs
- Sluggish Chinese economy amid conflicts with U.S. over trade, Taiwan, and human rights
- Potential greater dispersion of social, political, and economic outcomes

## ***Investment Themes***

---

- Cognizant of economic turbulence, adhere to global market diversification objectives
- Evaluate investment opportunities with a lens towards economic resilience
- Further integration of ESG, DEI, and ODD metrics to enhance risk management capabilities

# Environmental, Social, and Governance Factors

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## *Environmental, Social, and Governance (ESG) Guiding Framework*

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- Advance Investment Beliefs by incorporating ESG in investment process
- Advocate practices in line with Corporate Governance and Stewardship Principles
- Pursue a total Fund approach to evaluate ESG risks and opportunities in every asset class

## *Summary of Current Efforts*

---

- Upfront and ongoing ESG assessment of each mandate
- Use ESG analytics to evaluate investment merits and reporting in public markets where data is available
- Assess climate related exposures and risks in public markets
- Active proxy voting and strategic engagements in public markets on board diversity and climate risks

## *Upcoming Initiatives*

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- Build out total fund view of climate risks and opportunities including data gathering and modeling in private equity
- Engage a select number of private equity GPs on board diversity at portfolio companies

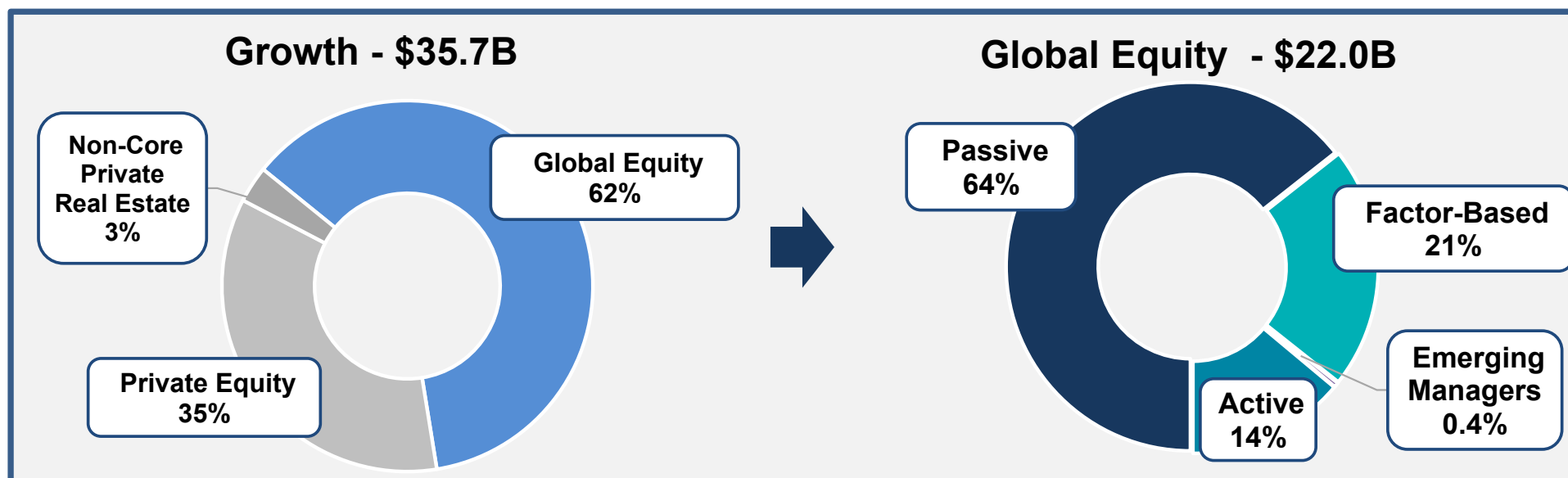
# Global Equity



# Role and Objectives of Global Equity

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

**Global Equity:** To provide global market beta exposure with alpha (excess return) as a secondary consideration



(% of total Fund)	Policy Range	Target Allocation	Actual Allocation
Global Equity	25-39%	32%	31.0%

## Breakdown by Strategies (% of Global Equity)

	Policy Range	Target Allocation	Actual Allocation
Passive	40-80%	60%	64.4%
Factor-Based	0-30%	15%	21.3%
Active	10-40%	25%	14.3%
Emerging Managers	0-5%		0.4%

- The most recent Strategic Asset Allocation reduced target allocation to global equity from 35% to 32%
- Actual allocation underweight target (-1%)
- The Board increased the global equity emerging manager program ("EMP") target range from 0-5% to 0-10% at the October 2022 meeting

# Portfolio Structure: Sub-Asset Strategy

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Sub-strategy exposures are within Board-approved guidelines

Region	Policy Range	LACERA	MSCI ACWI IMI <sup>1</sup>	Difference
U.S.	+/- 5%	60.8%	60.8%	0.0%
Non-U.S. Developed Markets	+/- 5%	29.1%	27.7%	1.4%
Emerging Markets	+/- 5%	10.1%	11.4%	-1.4%

Market Capitalization	Policy Range	LACERA	MSCI ACWI IMI	Difference
Large Cap	+/- 5%	75.4%	78.8%	-3.4%
Mid Cap	+/- 5%	11.0%	10.5%	0.4%
Small Cap	+/- 5%	13.7%	10.6%	3.0%

Emerging Manager Program	Policy Range	Actual Allocation		
Emerging Managers	0-5%	0.4%		

Per investment guidelines, active managers are given a range across region and market capitalization versus their respective benchmarks, which explain the differences circled above.

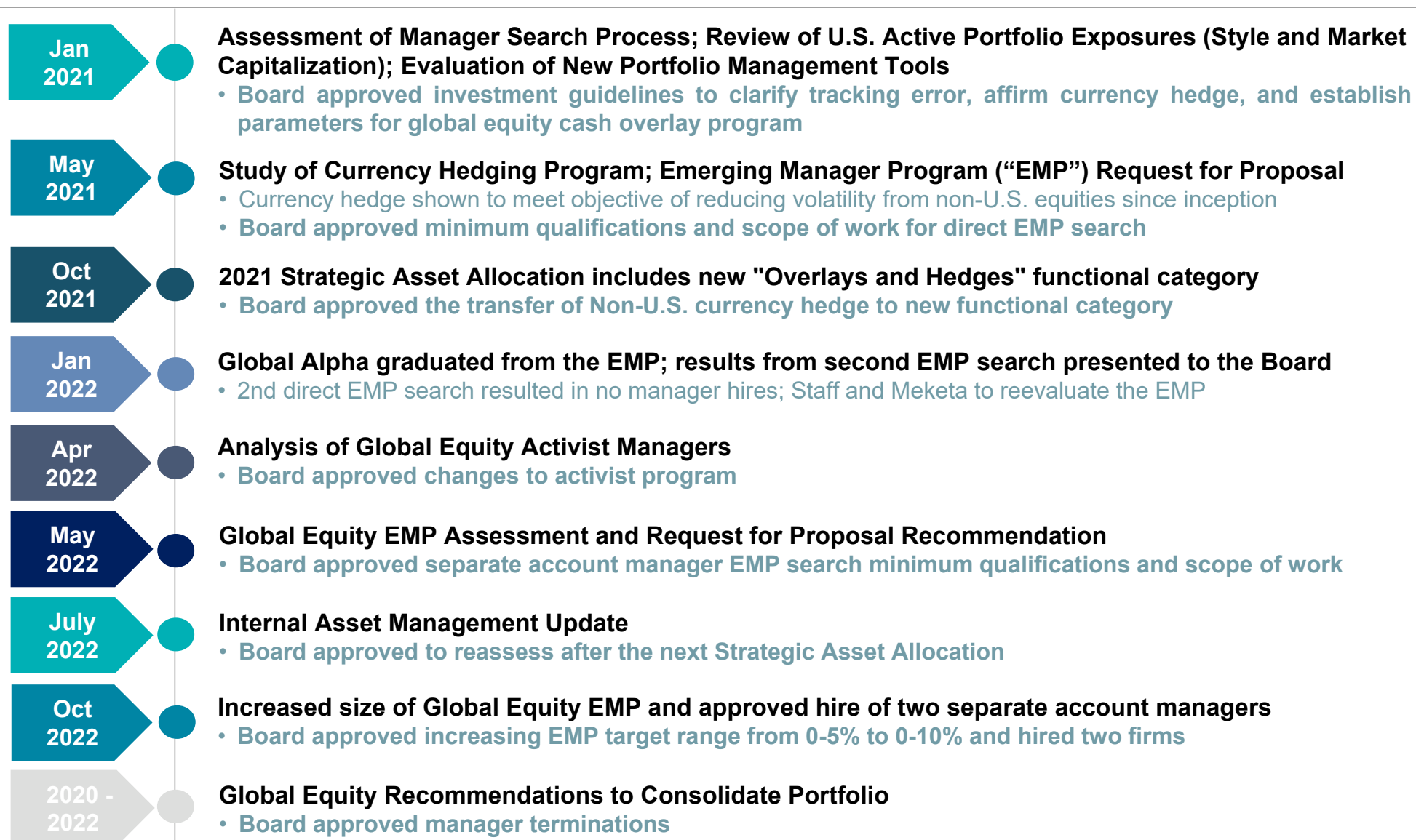
As of August 2022.

<sup>1</sup> Morgan Stanley Capital International, All Country World Index, Investable Market Index.

# Changes Since 2020 Structure Review

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

**Board approved actions since last Structure Review have made the portfolio more consistent with broader initiatives<sup>1</sup>**



<sup>1</sup> Board approvals highlighted in bold.



# Performance Comparison

## 2020 vs 2022

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Improvement in portfolio relative returns since last structure review

### Performance as of September 30, 2020

Global Equity Portfolio	Annualized Return (%)		
	YTD 2020	1-Year	Since April 2019
Global Equity (Net)	-0.1	8.6	8.4
Benchmark <sup>1</sup>	0.5	9.6	8.5
<b>Difference:</b>	<b>-0.6</b>	<b>-1.0</b>	<b>-0.1</b>

### Performance as of August 31, 2022

Global Equity Portfolio	YTD 2022	Annualized Return (%)		
		1-Year	2-Year	Since April 2019
Global Equity (Net)	-17.3	-14.9	5.7	7.8
Benchmark <sup>1</sup>	-17.8	-16.2	4.4	7.3
<b>Difference:</b>	<b>0.5</b>	<b>1.3</b>	<b>1.3</b>	<b>0.5</b>

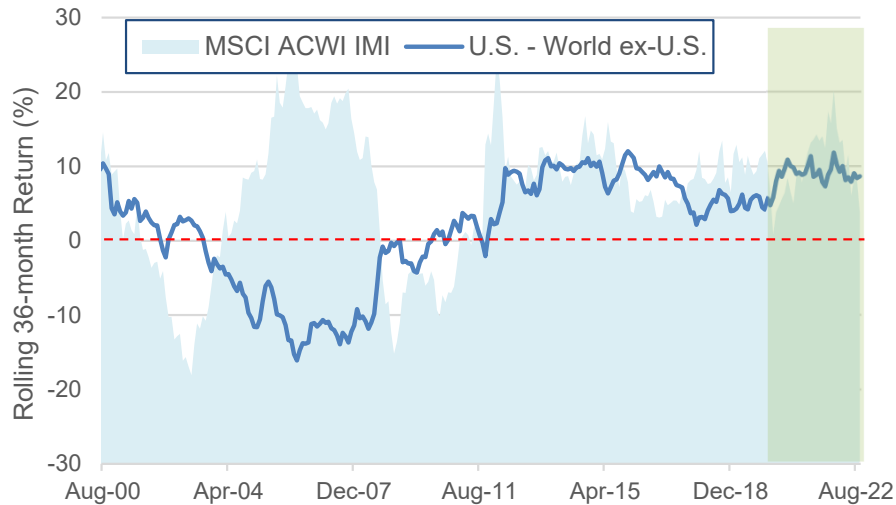
## Board-approved changes to enhance risk-adjusted returns

- Manager consolidation
- Implementation of overlay program to reduce tracking error
- EMP graduation and improvement of structure

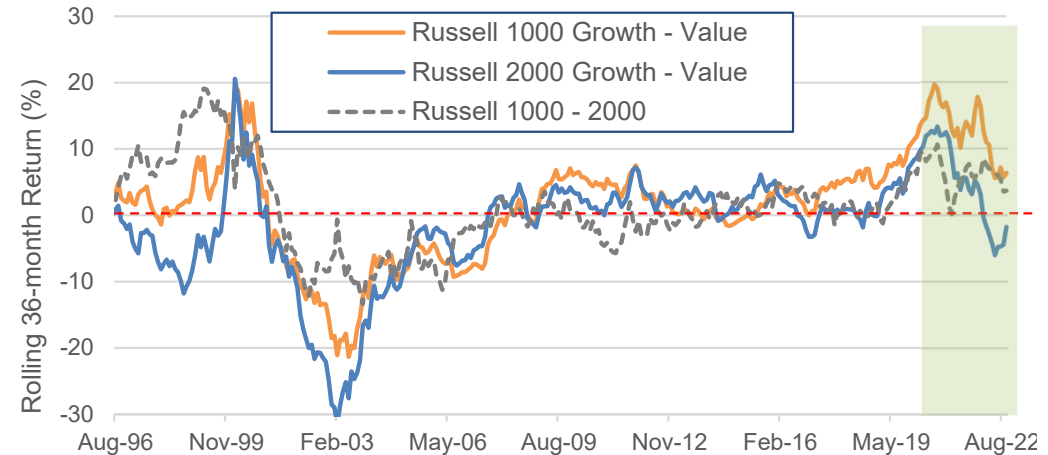
<sup>1</sup> The benchmark for global equity portfolio since July 2019 is the MSCI ACWI IMI Index. The benchmark from April 2019 to June 2019 was 80% MSCI ACWI IMI and 20% MSCI World ex-U.S. IMI currency hedged. Total Fund transitioned to functional category in April 2019. As a result, global equity portfolio inception date is April 2019.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Global Market: U.S. vs. Developed Markets



## U.S. Market: Large vs. Small and Growth vs. Value<sup>1</sup>



The market environment in the last two years is characterized by:

- U.S. stocks outperformed non-U.S. stocks
- Within the U.S. market:
  - Large cap stocks continue to outperform small cap stocks, with episodic reversals of small cap outperformance
  - A reversal of growth outperformance after historical highs, with value leading recently
- Within the non-U.S. markets:
  - Developed markets are negatively impacted by the war in Ukraine and energy crisis
  - Emerging markets lagged more than developed

<sup>1</sup> Russell 1000 index represents the top 1,000 U.S. stocks by market cap and is a proxy for large cap stocks. Russell 2000 index represents the 2,000 smallest cap U.S. stocks and is a proxy for small cap stocks.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Global equity has outperformed its benchmark since adopting the functional framework

Global Equity Portfolio	Returns (%)						Risk Metrics				
	3-Mo.	YTD 2022	1-Year	2-Year	3-Year	Since April 2019	Tracking Error (%)	Information Ratio	Sharpe Ratio	Up Capture	Down Capture
Global Equity	-5.4	-17.3	-14.9	5.7	8.5	7.8	0.97	0.58	0.39	100.2	98.4
Benchmark <sup>1</sup>	-5.6	-17.8	-16.2	4.4	8.0	7.3	--	--	0.35	--	--
<b>Difference</b>	<b>0.2</b>	<b>0.5</b>	<b>1.3</b>	<b>1.3</b>	<b>0.5</b>	<b>0.5</b>					

As of August 2022.

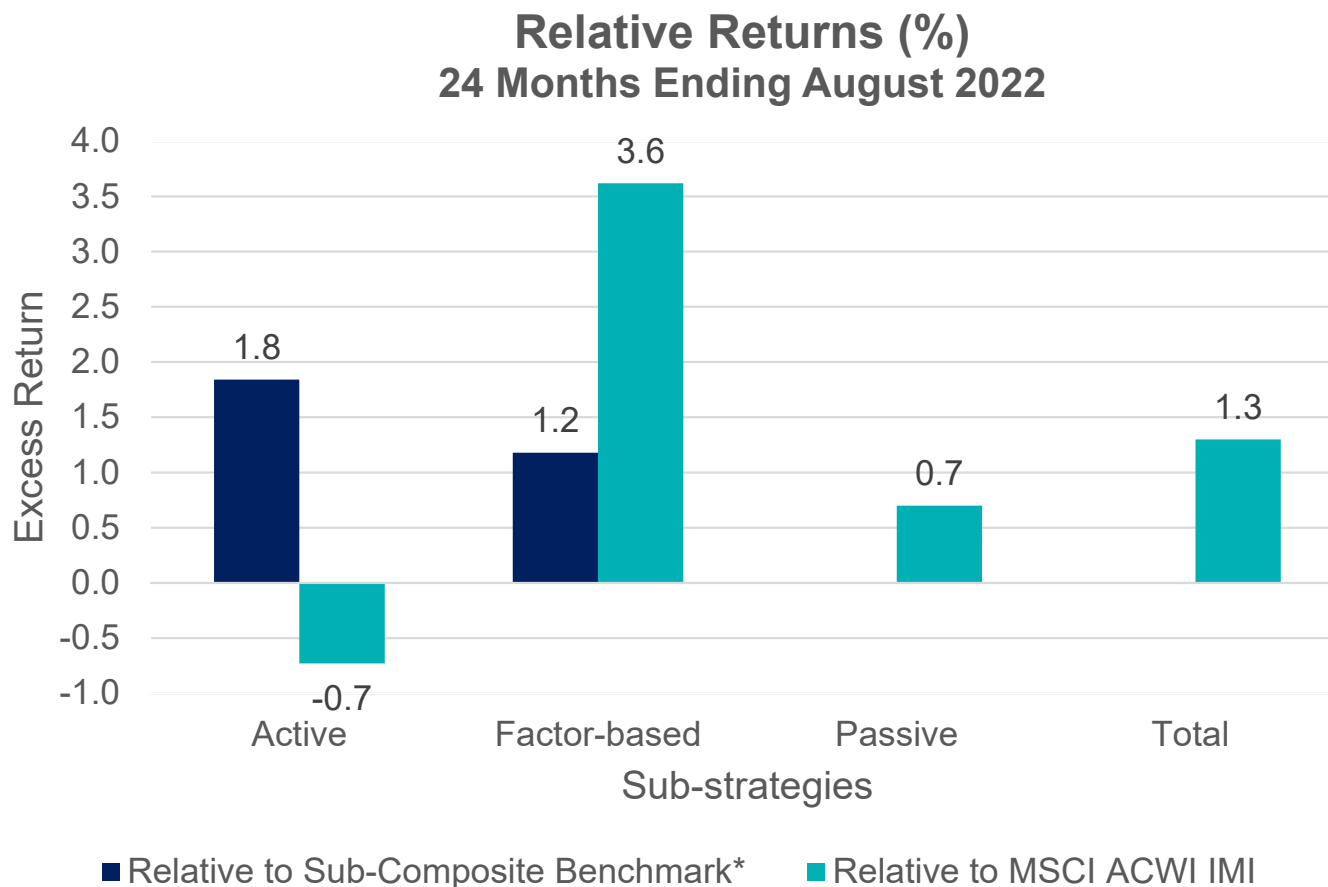
See Appendix H – Glossary of Terms for definitions

- Despite its short history, the portfolio has exhibited positive risk-adjusted returns as indicated by the information and Sharpe ratios
  - Portfolio benefited from reduced tracking error during significant market volatility
- Most active managers outperformed as tilt to quality and value stocks was rewarded
- Within non-U.S., emerging market managers underperformed mainly due to geopolitical events


<sup>1</sup> The benchmark for global equity portfolio since July 2019 is the MSCI ACWI IMI Index. The benchmark from April 2019 to June 2019 is 80% MSCI ACWI IMI and 20% MSCI World ex-U.S. IMI currency hedged. Total Fund transitioned to functional category in April 2019. As a result, global equity portfolio inception date is April 2019.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Sub-strategy return drivers versus benchmarks



### Relative Return Commentary

 **Versus Sub-Composite Benchmark**

+ **Active:** Positive stock selection

+ **Factor:** Model overweight to value and quality

 **Versus MSCI ACWI IMI**

- **Active:** Non-U.S. overweight detracted as U.S. outperformed

+ **Factor:** Model overweight to U.S. stocks

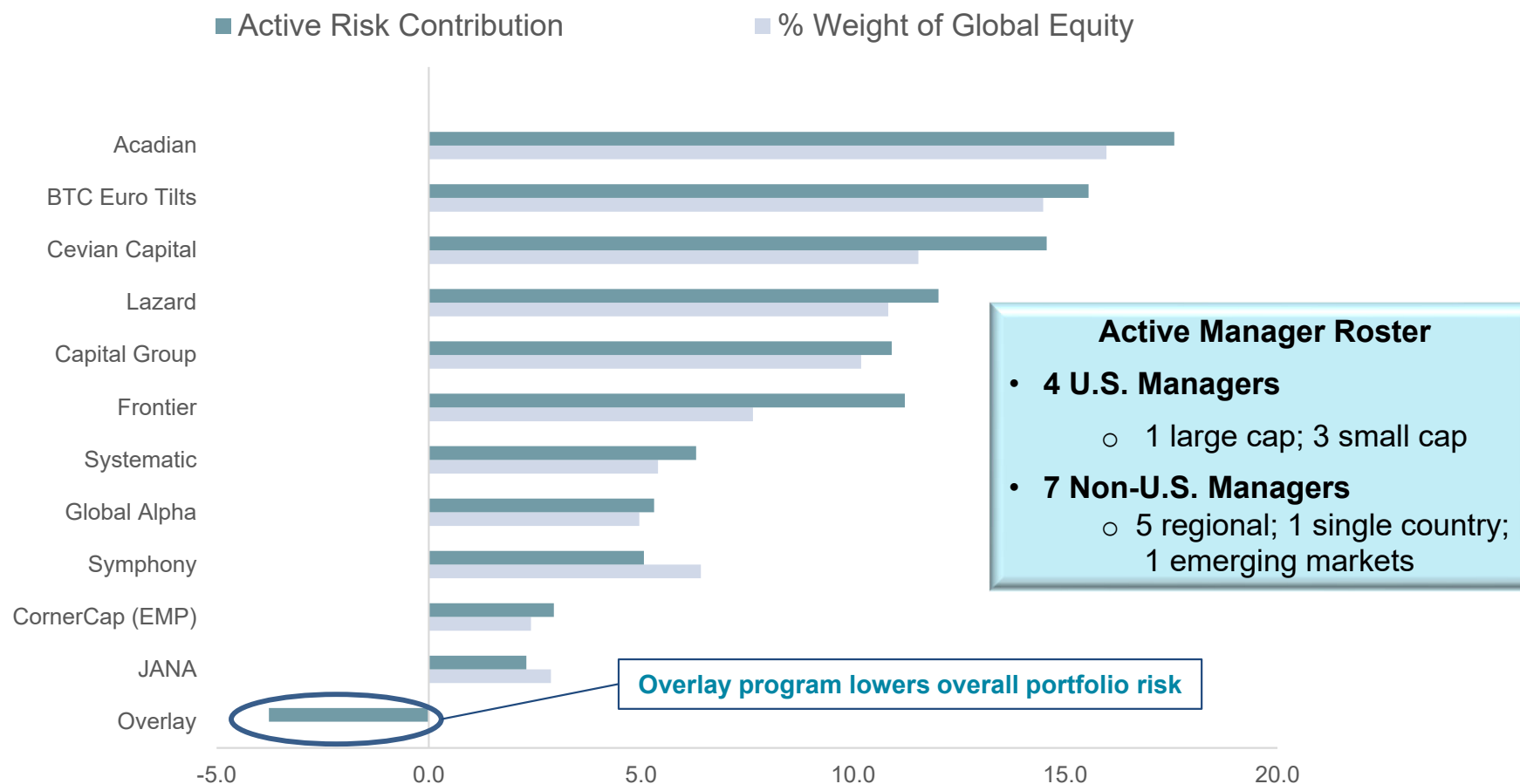
+ **Passive:** Exposure to India and earned income on tax reclaims

\* Sub-composite benchmark computed for Active and Factor-based where the manager index is weighted according to its corresponding portfolio allocation.

# Risk: Active Managers

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Each manager's active risk contribution relative to portfolio weight<sup>1</sup>



**Once EMP is funded, a review of the active manager portfolio will be conducted to evaluate sub-asset class and regional exposures**

<sup>1</sup> Refer to Appendix H – Glossary of Terms – for risk definitions.

Source: MSCI BarraOne. As of August 2022. JANA data is on a quarter lag. Cevian data is proxied.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Overlay program has been additive since inception

### Global Equity Cash Overlay Exposures As of August 2022

In Millions (\$)

	Year-to-Date Gain/(Loss)	Inception * Gain/(Loss)
Region	\$24.7	\$27.8
Market Capitalization	-\$7.1	\$29.2
<b>Total</b>	<b>\$17.6</b>	<b>\$57.0</b>

### Board-approved overlay implemented in 2021:

Used to rebalance regional  
and market capitalization weights  
back to target when +/-1%  
over/underweight

Aligns portfolio exposures closer  
to benchmark, reducing tracking  
error

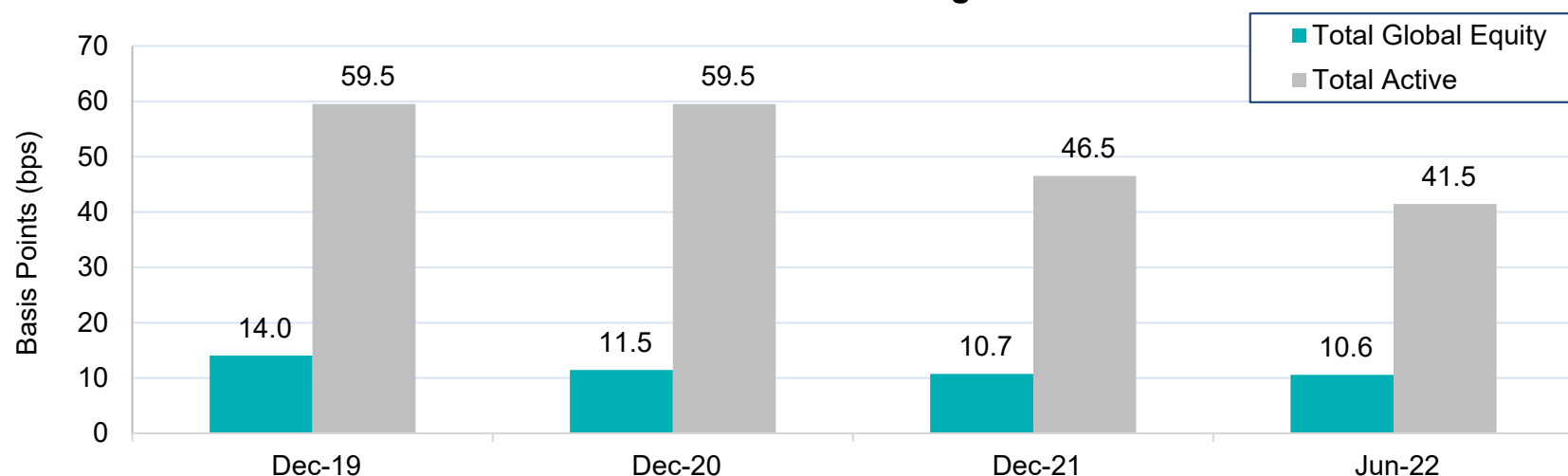
\* LACERA total Fund Cash Overlay Program inception date is July 2019.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## Improved Fee Savings Over Time

- Continuous effort to improve portfolio net-of-fee performance
- As of June 2022, reduced overall annual fees for global equity by **approximately \$1.3 million or 0.9 bps annualized** compared to 2020
  - Primarily from fee reductions within active strategies (~ 18 bps annualized)
- Sources of fee savings come from:
  - Investment manager terminations for poor performance and organizational risks
  - Transition of assets away from strategies that are inconsistent with LACERA strategic initiatives
  - Negotiations with managers to reduce investment management fees
- Additional savings expected in the future as terminated managers exit portfolio

**Effective Annualized Fee Change Over Time**



as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%

## What has Worked:



### *Changes to Structure*

Manager consolidation, implementation of overlay program, adoption of risk tools for portfolio monitoring, and reduced tracking error

### *Active Management*

Broad-based outperformance of active and factor-based managers across the U.S. and non-U.S.

## Areas for Refinement:



### *Review of Active Portfolio*

Review of active managers once EMP is ramped up to further improve upon risk-adjusted returns

### *Portfolio Risk Exposures*

Continue to align regional and market capitalization exposures across U.S. and non-U.S. segments

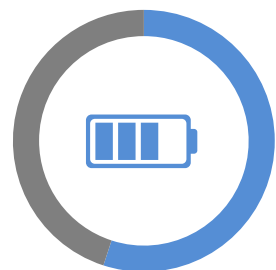


as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Global Equity	\$22.0	61.6%	31.0%



## Completed

- Completed initiatives identified from the last structure review
- Assessed global equity emerging manager program (“EMP”) and completed searches
- Reviewed internal management
- Implemented overlay program
- Consolidated investment managers



## In-Process

- Continued integration of risk analytics into manager oversight
- Annual contract compliance review
- Further integration of DEI and ESG into investment process



## Upcoming

- On-boarding of EMP Separate Account Managers
- Review of active portfolio after EMP is funded
- Portfolio risk analysis study

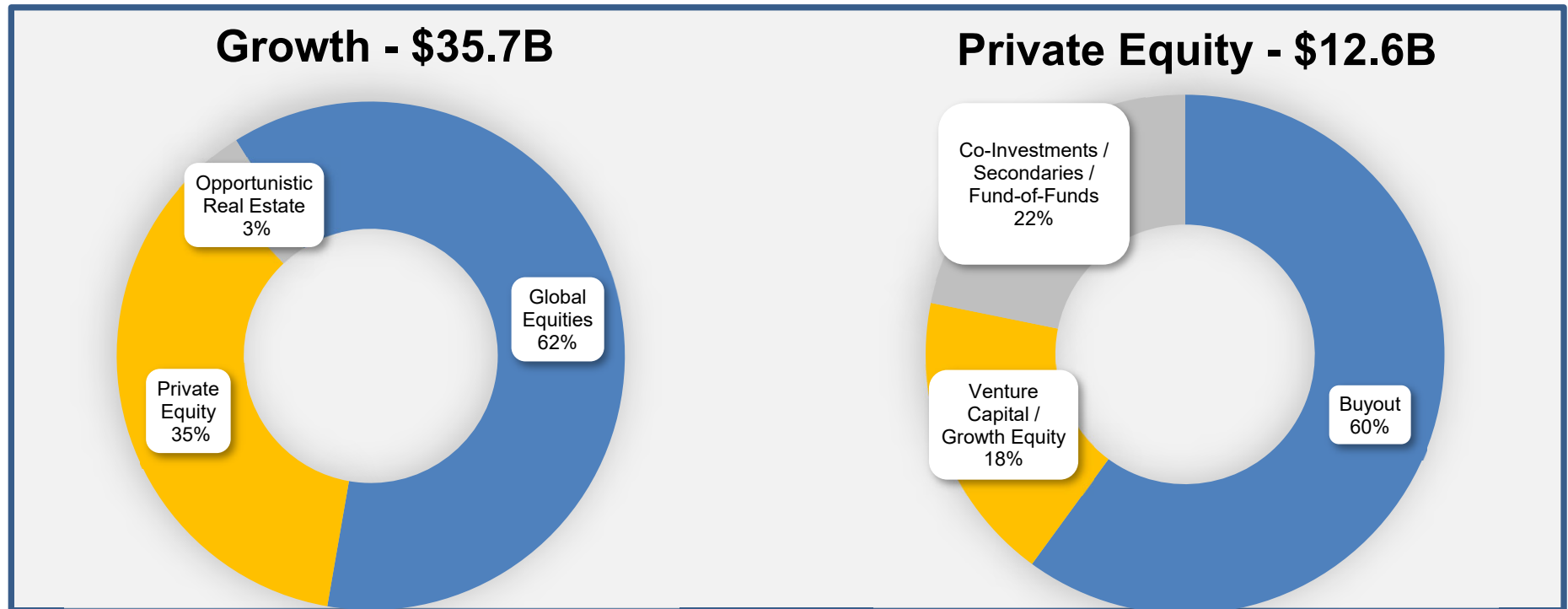
# Private Equity





# Role and Objectives of Private Equity<sup>1</sup>

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%



- Growth investments are the primary driver of long-term total Fund returns
- Within the Growth category, private equity is expected to generate the highest performance at an acceptable level of risk
- The target return for private equity is 200 basis points over the MSCI ACWI IMI<sup>2</sup> Index, net of all fees

<sup>1</sup> Private equity market value data as of June 30, 2022. Global equity value as of August 31, 2022.

<sup>2</sup> Morgan Stanley Capital International, All Country World Index, Investable Market Index.



# Portfolio Structure by Investment Strategy

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

As of 6/30/2022

Strategy	Active GPs*	Investments	Market Value	Outstanding Commitments	Exposure	% of NAV	Current Range	Proposed Range
Buyouts	49	99	\$7,548	\$2,851	\$10,399	60%	50-85%	50-85%
VC/Growth Equity	20	58	\$2,284	\$554	\$2,838	18%	15-30%	15-30%
Co-Invest / FoF / Secondaries	7	11	\$1,676	\$296	\$1,972	13%	10-25%	10-30%
In-house Co-Investment / Secondary Program	7	10	\$1,067	\$271	\$1,338	8%		
<b>Grand Total</b>	<b>80</b>	<b>178</b>	<b>\$12,576</b>	<b>\$3,972</b>	<b>\$16,547</b>	<b>100%</b>		

\* Four GPs appear in multiple strategies.

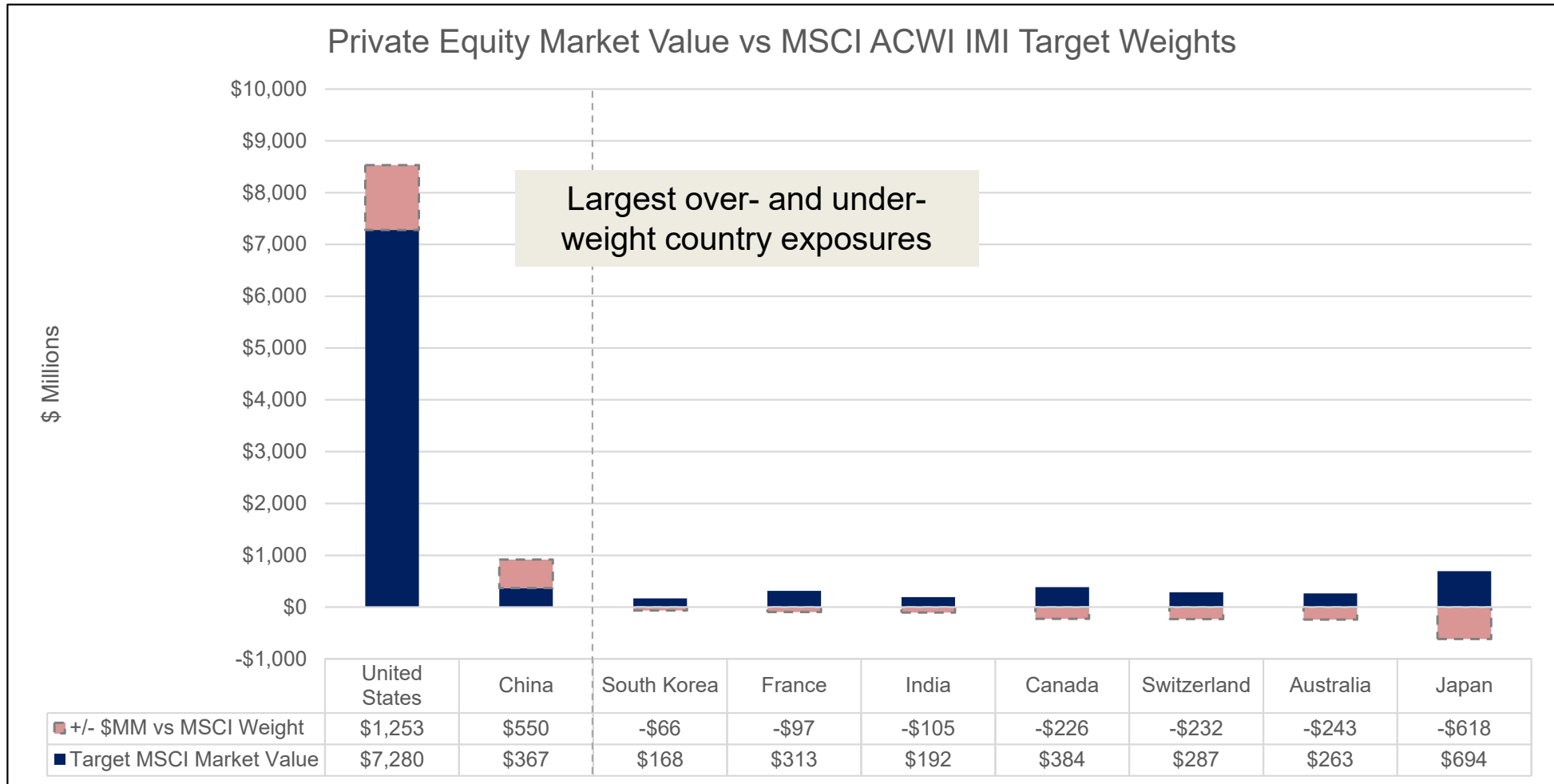
## Portfolio Structure Commentary

- All investment strategies are within range
- The combined market value of the in-house and externally managed Co-investment/Fund-of-Fund/Secondary strategy totals \$2.7 billion or 21% of the portfolio's NAV
  - At approximately 30% of annual commitments, and with no j-curve spacing out the deployment, capital allocated to the strategy is projected to reach 28% of NAV by year-end 2024
  - Staff proposes to extend the target allocation range from 10-25% to 10-30%
- International exposure stands at 29% within target range of 20-45%
  - Emerging Markets exposure stands at 11.4% within the target range of 0-15%, led by China with \$916.5 million in market value
- As one of the active components of the Growth portfolio, staff will continue to identify equity exposures that are either unavailable, mispriced, or difficult to find in the public markets



# Portfolio Structure – Select Country Exposures Relative to MSCI ACWI IMI Index<sup>1,2,3</sup>

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%



Relative to MSCI ACWI IMI index, the portfolio is overweight a combined \$1.8 billion to U.S. and China; increased exposure, especially to Australasian region, could prove beneficial

<sup>1</sup> Based on June 30, 2022, values determined by portfolio company headquarter location.

<sup>2</sup> Morgan Stanley Capital International, All Country World Index, Investable Market Index.

<sup>3</sup> Select countries reflect two largest over-exposures and seven largest under-exposures.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

## *LACERA private equity has exceeded its performance objectives across 1, 3, 5, and 10-year periods<sup>3</sup>*

- Given the j-curve effect<sup>4</sup> in early years of private equity funds, the 5-Year and 10-Year performance numbers carry greater weight
- In the 5-Year period, private equity outperformed its policy benchmark by 1280 bps
- In the 10-Year period, private equity outperformed the benchmark by 740 bps

Year	LACERA IRR	MSCI ACWI + 200 bps
1	12.2%	-14.5%
3	24.8%	8.0%
5	21.5%	8.7%
10	18.1%	10.7%

<sup>1</sup> Based on June 30, 2022 values.

<sup>2</sup> PE IRR is a dollar-weighted return which calculates the rate of return that will set the present values of all cash flows to the value of the initial investment. This methodology differs from global equity's time-weighted return which measures the compound rate of growth in a portfolio.

<sup>3</sup> Performance numbers include Special Situations and Energy funds that are now in Credit and Real Assets.

<sup>4</sup> The j-curve in private equity is a trendline that depicts an initial decrease in value during ownership as the GP invests in the business followed by a substantial improvement.

# Private Equity Co-Investment and Secondary Program Performance

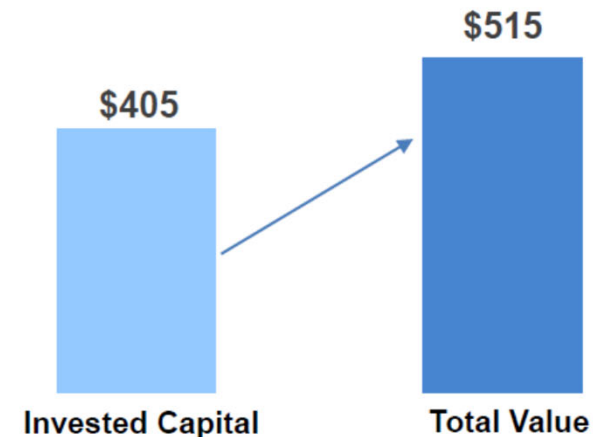
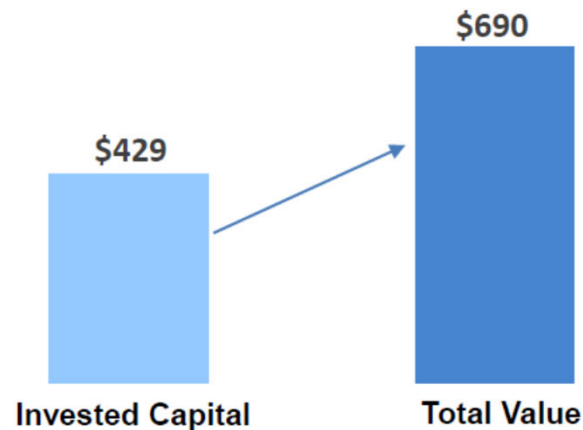
as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

*Both strategies have outperformed LACERA's private equity performance (24.8% net IRR) since 2019<sup>2,3</sup>*

(\$ in millions)

As of June 30, 2022

Performance – All Investments Since Program Inception					
Co-Investments			Secondaries		
46.5%	1.6x	0.09x <sup>1</sup>	25.7%	1.3x	0.28x
Net IRR	Net TVPI	Net DPI	Net IRR	Net TVPI	Net DPI



<sup>1</sup> Co-Investment net DPI is pro forma for distributions received in the subsequent quarter.

<sup>2</sup> In-house co-investment and secondary program launched in 2019.

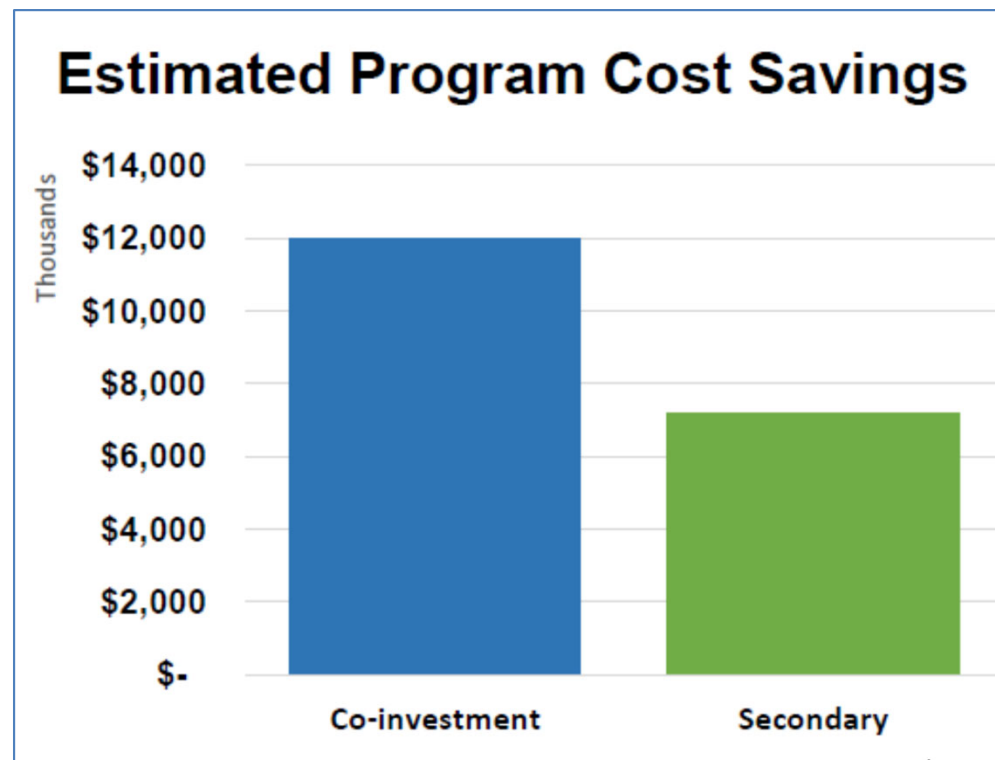
<sup>3</sup> PE Total LACERA PE performance – 1.48x TVPI, 27% net IRR, and 0.13x DPI, inclusive of co-investments and secondaries.



# Private Equity Co-Investment and Secondary Program Cost Benefits

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

*Program has saved ~\$20M in management fees compared to traditional 2% management fee structure for primary fund commitments<sup>1</sup>*



<sup>1</sup> Co-investments and Secondary investments since inception through June 30, 2022.



# BarraOne Private Equity Risk Summary<sup>1</sup>

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

*Staff has commenced review of BarraOne risk data to understand its potential benefits and limitations*

## Growth

Risk Summary		Asset Class Contribution to Risk					
Statistic	Value	Asset Class	Mkt Value	Weight (%)	Total Risk	Risk Contribution	%CR to TR
Total Risk	20.64	Total	36,182,275,423	100.00	20.64	20.64	100.00
Benchmark Risk	19.35	Global Equity	22,712,544,271	62.77	18.27	10.83	52.49
Active Risk	1.99	Non-Core Private Real Estate	1,048,318,394	2.90	37.13	0.63	3.06
Portfolio Beta	1.06	Private Equity	12,421,412,758	34.33	29.10	9.17	44.45

Private equity comprises 34% of the Growth category market value and 44% of its Total Risk

## Private Equity

Risk Summary	
Statistic	Value
Total Risk	29.10
Benchmark Risk	26.87
Active Risk	4.42
Portfolio Beta	1.07



The Benchmark Risk (26.87) comprises the majority of private equity's Total Risk number (29.10); Active Risk factors include Equity, Private Equity, and Selection Risk

<sup>1</sup> Data as of July 31, 2022.

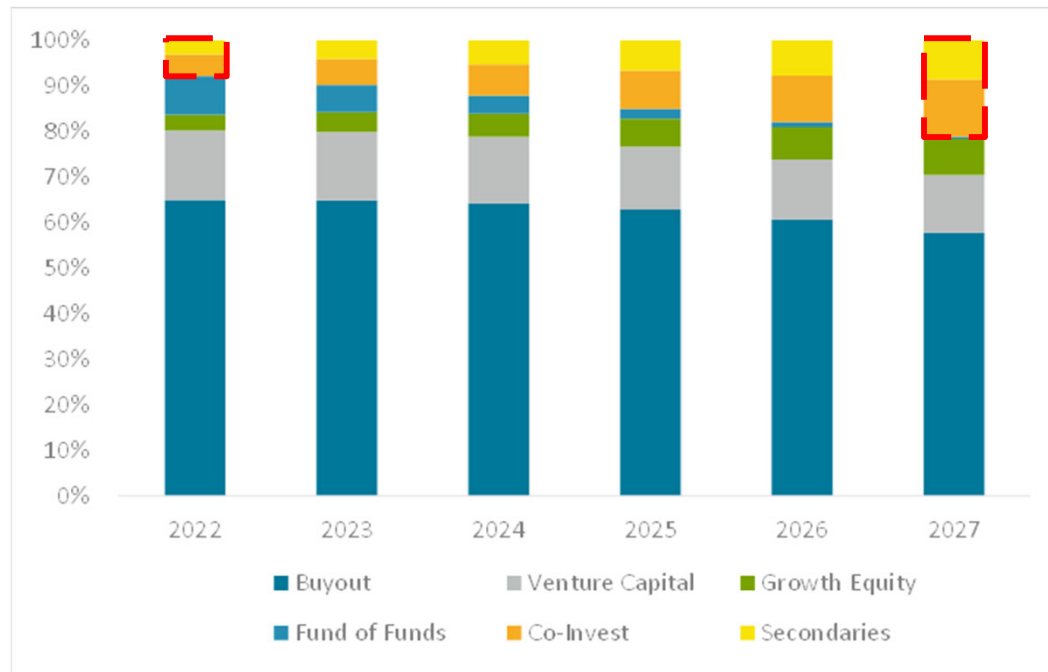


# Private Equity: Pacing and Commitment Schedule

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

	Current Allocation	Expected Allocation end of 2024	SAA Target
Allocation Target as % of Total Fund	17.7%	16%	17%

- Implementation: Commit 4-5% of Total Plan assets annually<sup>1</sup>
- Goals: Maintain target allocation with consistent vintage year, strategy, and manager diversification; modulate deployment, as needed, being cognizant of market environment; increase fund size commitments to \$250-\$500 million range



## In-house Co-Investment and Secondary Program Exposure

- Co-Investments and Secondaries currently comprise 8% of the portfolio
- By targeting 30% of annual deployment to these categories, they are projected to grow to 21% of the portfolio by 2027
- This progression will reduce fees, mitigate j-curves, and advance intentionality in investing positively impacting performance

<sup>1</sup> See Appendix E for StepStone's Private Equity Model Assumptions.

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%

## What has Worked:



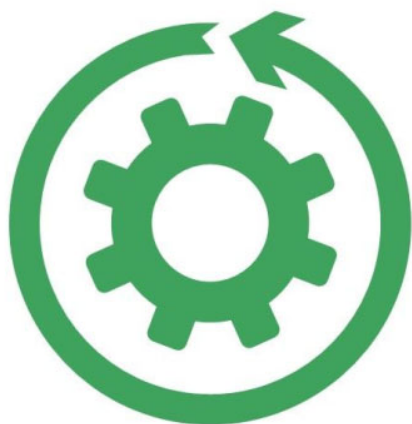
### ***U.S., Technology, and VC Exposure***

U.S. technological innovations have transformed global society, generating exceptional performance

### ***In-house Co-Investment and Secondary***

Early performance continues to impress; stronger GP relationships; more insightful GP assessments

## Areas for Refinement:



### ***Portfolio Design***

Better diversify sector and geography exposure to mitigate expected economic volatility

### ***Strengthen Influence on Fees / Maximize Returns***

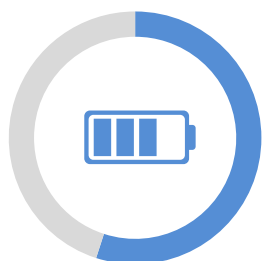
Continue to explore alternative structures which can lower the cost of investing in private equity and maximize sources of returns

as of August 2022	Market Value (in \$ billion)	% of Growth	% of total Fund
Private Equity	\$12.6	35.2%	17.7%



## Completed

- Refined In-House Co-Investment and Secondary Parameters
- Completed RFP for private equity consultant
- Completed RFP for manager of the Emerging Manager Program
- Finalized Manager Scorecards across the private equity portfolio
- Enhanced fund operational due diligence process



## In-Process

- Integrating BarraOne risk analytics into due diligence framework
- Refine and codify operational procedures
- Continue to increase capabilities and integrate ODD into processes



## Upcoming

- Assess merits of a secondary sale (\$500-\$1,000 million range)
- Staff Investment Committee process standardization
- Commit larger investments (\$250-\$500 million per fund) to strengthen key relationships

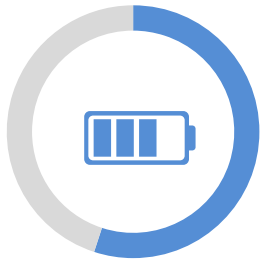
# Growth: Next Steps





## Completed

- Began utilization of MSCI BarraOne risk management platform for Growth portfolio



## In-Process

- Onboarding of private equity and global equity EMPs
- Assessing optimal active management strategy across Growth
- Reducing costs to maximize returns
- Further integration of DEI and ESG into investment process
- Build out total fund climate exposure analysis



## Upcoming

- Continued focus on using risk management tools to review sector and country exposures across Growth portfolio
- Staff Investment Committee process standardization

## Staff proposes advancing the Growth Functional Category Biennial Structure Review including the following:

### Growth

- Advance recommendation to commit approximately 4-5% of the Trust's assets to private equity opportunities annually over the next two calendar years
- Advance proposal to extend the private equity target allocation range for Co-Investments / Fund-of-Funds / Secondaries from 10-25% to 10-30%
- Advance consolidation of CIO Authority across the Private Equity Program into a new section in Appendix B – Private Equity Investment Guidelines entitled CIO Delegated Authority
- Reaffirm Global Equity Investment Guidelines (Appendix A) including recent Board action to increase EMP target allocation from 0-5% to 0-10%

# Appendices







## Appendix A – Global Equity Investment Guidelines

	Target	
Performance	Meet or exceed the MSCI ACWI IMI Index	
Tracking Error	1.0% – 2.5% over 7-year	
	Target Allocation	Target Allocation Range
Passive (Index)	60%	40 – 80%
Factor-based	15%	0 – 30%
Active	25%	10 – 40%
Emerging Managers		0 – 10% <sup>1</sup>

Market	Parameter	Target Allocation Range Relative to Benchmark
Capitalization	Large	+/- 5%
	Mid	+/- 5%
	Small	+/- 5%
Region	United States	+/- 5%
	Developed ex U.S.	+/- 5%
	Emerging	+/- 5%

<sup>1</sup> Board approved increasing EMP target allocation range from 0-5% to 0-10% at October 2022 BOI meeting.



## Appendix A – Global Equity Investment Guidelines (Cont.)

	Description
<b>Cash Overlay</b>	If market capitalization or regions deviate +/-1% relative to benchmark, the Cash Overlay program may be used to rebalance market exposures back to target. Rebalancing will not be used for tactical allocation or market timing.
<b>Currency Hedge Program<sup>1</sup></b>	50% passive currency hedge (to U.S. Dollar) on the Non-U.S. developed markets foreign currency exposure in accordance with weights of the MSCI World-ex US IMI Index.

Restricted Investment Type	Description
<b>Tobacco</b>	Investment managers should refrain from purchasing tobacco securities when the same investment goals concerning risk, return, and diversification can be achieved through the purchase of another security.
<b>Sudan</b>	Investment managers should refrain from purchasing securities where the company has been identified as doing business in Sudan or with the government of Sudan, when the same investment goals concerning risk, return, and diversification can be achieved through the purchase of another security.
<b>Iran</b>	Investment managers should refrain from purchasing securities where the company has been identified as doing business in Iran's energy sector or with the government of Iran, when the same investment goals concerning risk, return, and diversification can be achieved through the purchase of another security.

<sup>1</sup> The currency hedge program was transferred to the new "Overlays and Hedges" functional category as per 2021 Strategic Asset Allocation.



# Appendix B1 – Private Equity Investment Guidelines: Program Parameters

Limit	Minimum	Maximum	Notes
Investment Size	\$5 Million	10% of LACERA's MV plus undrawn commitments	
Single Partnership		50% of total commitments from all LPs	Does not apply to separate accounts
General Partner		10% of LACERA's MV plus undrawn commitments	Applies to aggregate across multiple funds

	Parameter	Target Allocation Ranges <sup>1</sup>
Sub-Asset Class	Buyouts	50–85%
	Venture Capital/Growth Equity	15–30%
	Co-Inv/FoF/Sec <sup>3</sup>	10–30%
Geography	Non-United States	20–45%
	Emerging Markets	0–15%

<sup>1</sup> LACERA allows staff and the PEA(s) some latitude outside of the ranges. In the short term, LACERA does not wish to have staff, or its PEA(s), constrained by the designated ranges; i.e., fulfilling target allocations will not drive the investment recommendation process. LACERA will invest consistently over time to gain the proper exposures.

<sup>2</sup> Reports shall include information on general market environment and expected opportunities, portfolio composition, performance summary, and recent activity

<sup>3</sup> Staff and PEA propose extending range for Co-Investment/FoF/Secondaries from 10-25% to 10-30%.



# Appendix B2 – Private Equity Investment Guidelines: Co-Investment and Secondary Program

	Co-Investment Parameters	Secondary Purchase Parameters
<b>Sourcing</b>	<ul style="list-style-type: none"><li>Co-investments offered by Board-approved managers so long as the manager is currently managing capital on behalf of LACERA<sup>1</sup>; or</li><li>Co-investments alongside a Board-approved discretionary PE manager, PE consultant, or their approved managers</li></ul>	<ul style="list-style-type: none"><li>A private equity fund in which LACERA is an existing investor; or</li><li>A private equity fund or vehicle that is managed by a manager of the same institutional quality as those LACERA has previously committed to</li></ul>
<b>Investment Size</b>	\$130 million maximum	\$130 million maximum <sup>2</sup>
<b>Geography</b>	Global with non-U.S. investments subject to: <ul style="list-style-type: none"><li>Maximum \$130 million investment size</li><li>Total PE portfolio international exposure target allocation range of 20-45% applies (includes primary funds, co-investments and secondaries)</li></ul>	
<b>Deal Types</b>	Buyout and growth capital <sup>3</sup> transactions only	
<b>Annual Capital Deployment</b>	Up to 30% of annual private equity target allocation	
<b>Advisory Confirmation</b>	Third party confirms LACERA's due diligence was satisfactorily followed	Third party secondary advisor confirms valuation
<b>Investment Limitations</b>		<ul style="list-style-type: none"><li>10% of LACERA's PE portfolio market value plus unfunded commitments at the time of purchase</li></ul>

<sup>1</sup> Includes funds approved by the CIO through LACERA's private equity fund re-up procedure.

<sup>2</sup> Excludes amounts rolled over from primary funds in conjunction with a continuation vehicle secondary transaction.

<sup>3</sup> Growth capital includes high growth pre-EBITDA companies with a liquidity event expected in the next two years.

# Appendix B2 – Private Equity Investment Guidelines: Co-Investment and Secondary Program (cont'd)

	Secondary Sale Guidelines
<b>Secondary Disposition Guidelines</b>	<ul style="list-style-type: none"> <li>• All sales must provide strategic, tactical, and/or economic benefits that assist LACERA in meeting its investment goals</li> <li>• The program will consider selling undesired holdings that include both mature secondaries and hybrid secondaries               <ul style="list-style-type: none"> <li>○ Sell determinations will fall under the following criteria:                   <ul style="list-style-type: none"> <li>▪ <i>Poor Performing</i>: Poor performing assets that have little to no potential to materially improve the future performance of the private equity program</li> <li>▪ <i>Tail Ends</i>: Mature assets that have provided a significant portion of their potential performance, whether attractive or poor, and the remainder of the assets have little to no potential to materially improve the future performance of the private equity program. These assets will typically have little value remaining in the capital account and/or few holdings remaining in the fund</li> <li>▪ <i>Non-strategic</i>: Assets that have an investment focus that is no longer a strategic part of LACERA's investment objectives and there is little to no potential to materially improve the future performance of the private equity program</li> <li>▪ <i>Strategic</i>: Assets that can help improve the overall purchase prices and returns associated with the secondary sale</li> </ul> </li> </ul> </li> <li>• The secondary sale program will opportunistically consider the sale of single limited partnership interests and portions of partnership interests as well as portfolios of multiple limited partnership interests. Portfolio sales will be considered when the aggregated benefit to the private equity program is more attractive than individual dispositions</li> </ul>



# Appendix B3 – Private Equity Investment Guidelines:

## Avoided Transaction Types

Prohibited Investment Type	Description	Notes
Hostile Takeovers	LACERA avoids investment strategies that primarily involve hostile takeovers, defined as acquisitions opposed by the board of directors of the target company.	
Privatization	<p>LACERA does not aim to promote privatization of public jobs through its private equity investment program. It is highly unlikely that LACERA would invest in private equity investments that are dependent on privatization strategies.</p> <p>When performing due diligence prior to making the initial investment in a domestic partnership, staff and/or PEA, as applicable, will use reasonable efforts to ascertain the following:</p> <ol style="list-style-type: none"><li>1. Whether the partnership's current investment strategy includes the privatization of jobs held by LACERA members, and</li><li>2. Whether previous partnerships operated by the general partners, if any, have invested in companies dependent upon privatization of jobs held by LACERA members.</li></ol>	Staff and/or PEA will seek guidance from the Board before investing in a domestic partnership if the due diligence establishes privatization.



# Appendix B4 – Private Equity Investment Guidelines: Reporting Requirements

	Report <sup>1</sup>	Responsible Parties	Audience	Frequency
1	Portfolio Performance	Staff and Private Equity Advisor ("PEA")	Board	Annually
2	Status of Co-Investments and Secondaries	Staff	Board	Annually
3	Portfolio Performance and Investment Analysis	Custodian Bank and General Partners	Staff	Quarterly

<sup>1</sup> Reports shall include information on general market environment and expected opportunities, portfolio composition, performance summary, and recent activity.



# Appendix B5 – Private Equity Investment Guidelines:

## CIO Delegated Authority

	CIO Delegated Authority <sup>1</sup>
<b>CIO Authority for Follow-on Funds</b>	<p>The CIO is authorized to approve capital commitments in follow-on-funds up to \$250 million per fund or up to a 25% fund ownership increase compared to LACERA's ownership percentage in the predecessor fund, provided:</p> <ol style="list-style-type: none"><li>LACERA's prior investments in each predecessor fund greater than three years old (based on the fund's inception or commencement of operations date) exceeds the benchmark net IRR and net MOIC median returns for the fund's sub-asset class strategy, and</li><li>There have been no material changes in the investment strategy or key persons, and</li><li>LACERA's private equity consultant concurs with the investment</li></ol> <p>The Board will receive written notification of all such actions from staff</p>
<b>CIO Authority for Secondary Sales</b>	<ul style="list-style-type: none"><li>The CIO is authorized to approve the secondary sale of limited partnership interests that fall within LACERA's disposition guidelines</li><li>The CIO is authorized to approve the disposition of limited partnership interests with aggregate NAV (determined at the time of disposition) of up to \$500 million per year</li></ul>
<b>CIO Authority for Secondary Purchases</b>	<p>The CIO has the authority to approve secondary investments in vehicles or funds which are consistent with the criteria set forth in these guidelines, and at valuations deemed attractive by staff and a Board-approved secondary advisor</p>
<b>CIO Authority for Co-Investments</b>	<p>The CIO has the authority to approve co-investments in accordance with the co-investment program investment guidelines</p>

<sup>1</sup> CIO Delegated Authority consolidates language from other sections of the Structure Review into one section.



## Appendix C – Global Equity Portfolio Liquidity Analysis

~97% of the global equity portfolio is highly liquid

### Liquidity Breakdown

As of August 2022

	Portfolio Weight (%)	Estimated Days to Liquidate
<b>Highly Liquid</b>	<b>96.9</b>	<b>0.5</b>
Moderately Liquid	0.3	25
Less Liquid	0.3	41
Illiquid	2.5 <sup>1</sup>	>60
Total	100.0	<b>34</b>

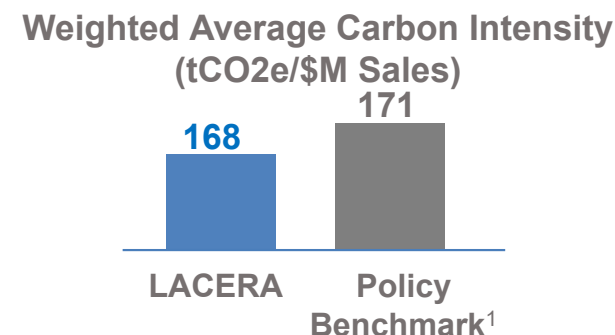
<sup>1</sup> ~70% of the illiquid position is from a manager that will be liquidated.

Source: FactSet. Calculation is based on 20% sell threshold and average stock volume, and the estimated number of days to liquidate is theoretical at a point in time.

# Appendix D – Global Equity Climate Analysis

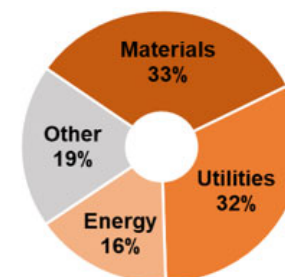
## LACERA Equities Portfolio Less Carbon Intensive Than Benchmark

- Active strategies underweight carbon intensive securities
- Higher carbon intensity in LACERA's passive index fund



## Concentrated Exposures: 3 Sectors Represent 81% of Carbon Footprint

- Materials, Utilities, and Energy represent 13% of portfolio weight



Carbon Footprint by Sector  
Scope 1 & 2 Emissions

## Estimated 11.6% of Portfolio Value at Risk from Climate-related Risks

- Scenario analyses model impacts from policies, regulations, and weather-related events<sup>2</sup>

## LACERA Engages High Emitters to Reduce Exposures

- Climate Action 100+ initiative engages 166 companies representing 50% of LACERA's equities portfolio Scope 1 & 2 carbon footprint to reduce emissions and climate risks



<sup>1</sup> MSCI All Country World IMI Index (ACWI).

<sup>2</sup> Climate Value at Risk evaluates impact of 2-degree scenario for policy risks and average physical risks.

Source: LACERA analysis of MSCI Data Analytics. As of August 2022.

# Appendix E – Private Equity Allocation Model Assumptions

- StepStone pacing model driven by five independent variables<sup>(1)</sup>:
  - Rate of contributions
  - Rate of distributions
  - Annual growth or return by sub-sector
  - Life of fund in years
  - Annual commitments by sub-sector
- StepStone’s preliminary pacing model utilizes the following assumptions for LACERA’s portfolio:
  - Total Portfolio Value: ~\$70 billion<sup>(2)</sup>
  - Actuarial Rate of Return (net): 7.0%<sup>(3)</sup>
  - Target Private Equity (% of Total FMV): 17% (range of 12% - 20%)
- StepStone modeled three scenarios based on the PE Weighted Average Return<sup>(4)</sup>:
  - Low Case Net IRR of 8.0%
  - Base Case Net IRR of 10.8%
  - High Case Net IRR of 13.6%
- Blended 10-year sub-sector exposures on new commitments<sup>(5)</sup>:
  - Buyout: 50%
  - Venture Capital: 10%
  - Growth Equity: 10%
  - Co-investments: 15%
  - Secondaries: 15%

(1) Any return contained herein is hypothetical and is not a guarantee of future performance. The returns set forth herein do not constitute a forecast; rather they are indicative of the internal transaction analysis regarding outcome potentials. Any returns set forth herein are based on StepStone’s belief about the returns that may be achievable on investments that the Partnership intends to pursue. Such returns are based on current view in relation to future events and financial performance of potential investments and various models, estimations and “base case” assumptions made, including estimations and assumptions about events that have not occurred. Actual events and conditions may differ materially from the assumptions used to establish returns and there is no guarantee that the assumptions will be applicable to the Partnership’s investments

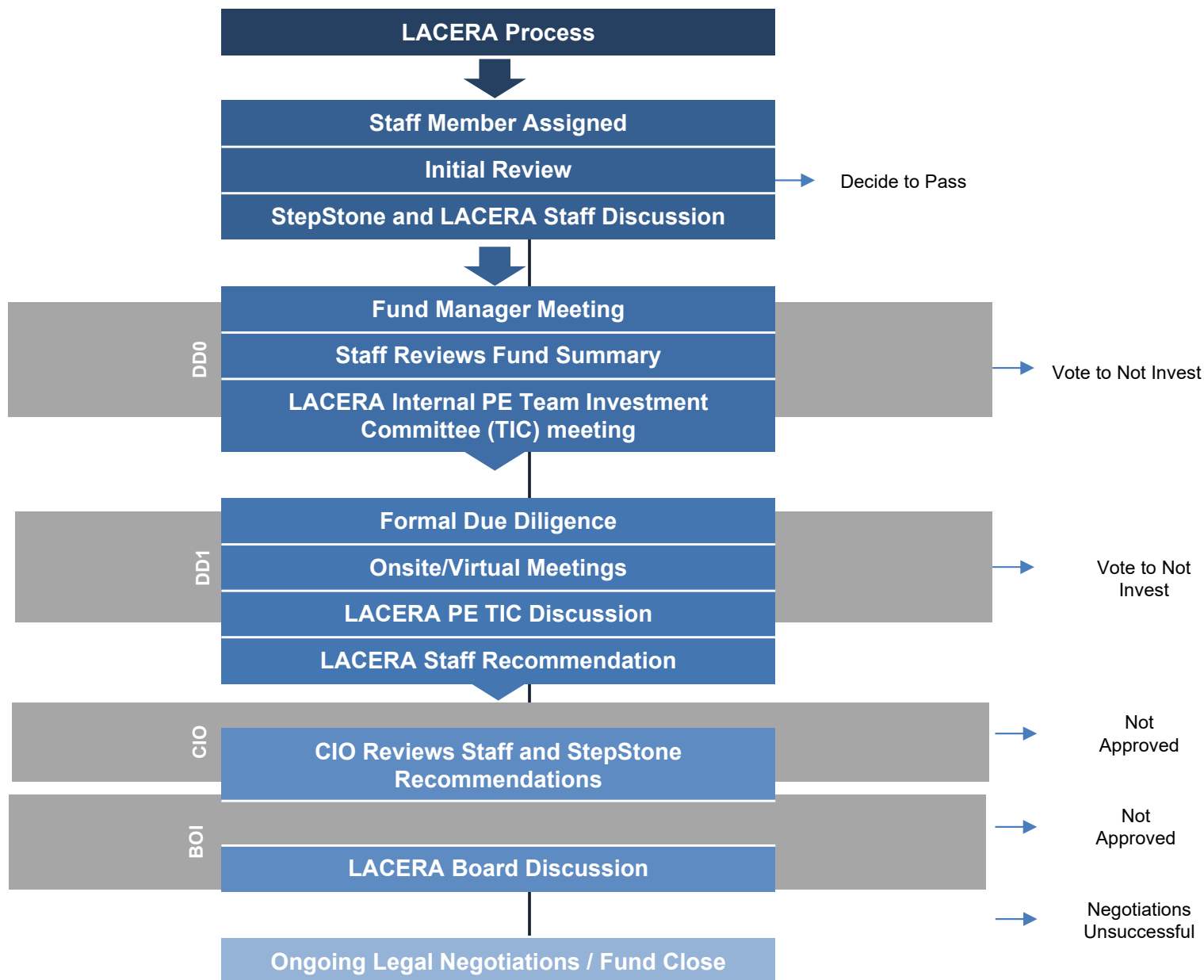
(2) Total Portfolio Value for Q2 2022 of US\$70.4 billion as provided by LACERA

(3) The Actuarial Assumed Rate of Return as adopted by the LACERA Board of Investments

(4) Low Case Net IRR reflects Meketa’s assumption for 10-Yr Composite PE returns. High Case Net IRR reflects StepStone’s blended return assumptions by sub-sector. Base Case Net IRR reflects the Midpoint of Meketa and StepStone.

(5) As provided by LACERA

# Appendix F – Private Equity Investment Process



# Appendix G1 – Private Equity Commitments:

## 2021 Commitments

Board Date	Fund Name	Commitment (\$MM)
1/13/21	LAV Fund VI, L.P.	\$62
1/13/21	LAV Fund VI Opportunities, L.P.	\$31
1/13/21	Novacap TMT VI, L.P.	\$75
1/13/21	Co-Investment	\$20
1/13/21	Co-Investment	\$30
2/10/21	Co-Investment	\$20
3/10/21	Excellere Capital Fund IV, L.P.	\$100
4/14/21	Co-Investment	\$15
4/14/21	Co-Investment	\$20
4/14/21	Co-Investment	\$20
4/14/21	TA Associates XIV	\$110
4/14/21	TA Associates Special Opportunities Fund II, L.P.	\$30
4/14/21	Lightyear Capital V, L.P.	\$100
4/14/21	Hellman & Friedman X, L.P.	\$150
4/14/21	Veritas Middle Market Fund	\$100
5/19/21	GHO Capital III, L.P.	\$100
5/19/21	Secondary	\$66
6/9/21	Co-Investment	\$36
7/14/21	Webster Equity Partners V, L.P.	\$125
8/11/21	Co-Investment	\$40
8/11/21	Co-Investment	\$15
8/11/21	Summit Partners Growth Equity Fund XI, L.P.	\$100
9/8/21	STG Allegro, L.P.	\$75
9/8/21	Atlantic Street Capital V, L.P.	\$150
9/8/21	Co-Investment	\$40
10/13/21	Clearlake Capital Partners VII, L.P.	\$200
11/17/21	Revelstoke Capital Partners III, L.P.	\$100
12/8/21	Co-Investment	\$7
1/12/22	Accel-KKR Growth Capital CV Fund IV, L.P.	\$100
2/9/22	Secondary	\$70
2/9/22	Co-Investment	\$40
5/11/22	Secondary	\$125
6/8/22	Secondary	\$85
<b>Total</b>		<b>\$2,147</b>

# Appendix G2 – Private Equity Commitments:

## 2022 YTD Commitments

Board Date	Fund Name	Commitment (\$MM)
1/12/22	TSG9	\$100
1/12/22	Great Hill Partners VIII	\$100
2/9/22	Emerging Manager Program	\$400
2/9/22	Thoma Bravo XV / Discover IV	\$150
2/9/22	Storm Ventures VII	\$50
3/9/22	AE Industrial III, L.P.	\$100
3/9/22	Green Equity Investors IX, L.P.	\$150
3/9/22	Jade Equity Investors II, L.P.	\$50
3/9/22	The Veritas Capital Fund VIII, L.P.	\$100
4/13/22	Silver Lake VII	\$200
4/13/22	Advent GPE X	\$130
4/13/22	Co-Investment	\$50
4/13/22	Co-Investment	\$45
7/13/22	Primary Venture Partners IV / Primary Select III	\$50
7/13/22	Co-Investment	\$30
11/9/22	Co-Investment	\$20
11/9/22	Co-Investment	\$75
11/9/22	Secondary	\$70
<b>Total YTD</b>		<b>\$1,870</b>

## Appendix G3 – Private Equity Commitments: 2021-2022 Re-Ups Not Done

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*LACERA did not re-up into the following managers*

- Joy Capital
- Sinovation Ventures
- Riverside Capital
- Clarion Capital

## Appendix G4 – Private Equity Commitments: Emerging Manager Graduates

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***The following managers graduated from the Emerging Manager Program managed by JP Morgan into the Core portfolio during 2021-2022***

- No graduates



# Appendix G5 – Private Equity Commitments:

## Private Equity 2023-2024 Potential Re-Ups

INVESTMENTS	COMMITMENT DATE	VINTAGE YEAR	STRATEGY	COMMITMENT (\$MM)	CUMULATIVE CONTRIBUTIONS (\$MM)	PERCENT COMMITTED
BRV Aster Fund III, L.P.	2/1/19	2021	Venture Capital - Early Stage	\$50	\$21	42%
Canaan XII, L.P.	5/15/20	2021	Venture Capital - Early Stage	\$100	\$31	31%
CVC Capital Partners VIII, L.P.	6/11/20	2021	Buyout - Global	\$227	\$44	20%
GGV Capital VIII Plus, L.P.	10/30/20	2021	Venture Capital - Balanced	\$18	\$7	38%
GGV Capital VIII, L.P.	10/30/20	2021	Venture Capital - Balanced	\$72	\$26	37%
GGV Discovery III, L.P.	10/30/20	2021	Venture Capital - Balanced	\$30	\$10	34%
Hellman & Friedman Capital Partners IX, L.P.	9/28/18	2019	Buyout - Global	\$150	\$139	93%
Juggernaut Capital Partners IV, L.P.	3/27/18	2018	Buyout - Small	\$125	\$74	59%
LAV Biosciences Fund VI Opportunities, L.P.	1/22/21	2021	Venture Capital - Balanced	\$20	\$13	66%
LAV Biosciences Fund VI, L.P.	1/22/21	2021	Venture Capital - Balanced	\$40	\$24	60%
Lightyear Fund V, L.P.	3/20/20	2021	Buyout - Mid	\$100	\$36	36%
One Rock Capital Partners Fund III, L.P.	4/6/20	2021	Buyout - Mid	\$150	\$46	30%
Onex Partners V, L.P.	7/11/17	2018	Buyout - Large	\$200	\$144	72%
PAI Europe VII, L.P.	12/8/17	2019	Buyout - Large	\$171	\$89	52%
RedBird Capital Partners Series 2019, L.P.	10/4/19	2019	Growth Equity	\$150	\$167	111%
Siris Partners IV, L.P.	10/25/18	2019	Buyout - Mid	\$100	\$64	64%
STG VI, L.P.	9/30/20	2021	Buyout - Mid	\$85	\$28	32%
Summit Partners Europe GE Fund III, S.C.S.P.	3/18/20	2020	Growth Equity	\$40	\$13	33%
TA XIV, L.P.	5/27/21	2021	Growth Equity	\$110	\$30	27%
Triton Fund V, L.P.	10/2/18	2019	Buyout - Mid	\$171	\$88	52%
Vinci Capital Partners III, L.P.	4/15/19	2019	Buyout - Mid	\$75	\$30	40%



# Appendix H – Glossary of Terms

Term	Definition
<b>Active Risk</b>	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.”
<b>Active Risk Contribution</b>	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>Cap</b>	Abbreviation for capitalization. Market capitalization or market cap refers to the total market value of a company represented in dollar amount.
<b>CPI</b>	The Consumer Price Index (CPI) measures the monthly change in prices paid by U.S. consumers. The Bureau of Labor Statistics (BLS) calculates the CPI as a weighted average of prices for a basket of goods and services representative of aggregate U.S. consumer spending.
<b>Downside Capture</b>	Measure of an investment’s performance during down markets, calculated as the strategy’s returns divided by the returns of the benchmark index during the down market. A lower down market capture ratio means an investment was less negatively impacted during market downturns.
<b>GDP</b>	Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country’s borders in a specific time period.
<b>Information Ratio</b>	The portfolio’s excess return over its benchmark divided by its tracking error.
<b>MSCI ACWI IMI</b>	Morgan Stanley Capital International All Country World Investable Market Index is the benchmark for global equity.
<b>ODD</b>	Operational Due Diligence captures the process of assessing a manager’s internal operations to protect investors from losses related to operational failures.
<b>Sharpe Ratio</b>	Measures risk-adjusted performance of an investment compared to a risk-free asset.
<b>Standard Deviation</b>	Volatility of monthly returns that measures the average deviation from the mean.
<b>Tracking Error</b>	Tracking error is 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.
<b>Upside Capture</b>	Measure of an investment’s performance during up markets, calculated as returns divided by the returns of the benchmark index during the up market. A high up capture ratio means an investment outperformed the index during up markets.



INVESTMENT GROUP

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Carlsbad, CA 92008760.795.3450  
Meketa.com

## MEMORANDUM

**TO:** Equity: Public/Private Committee  
**FROM:** Tim Filla, Aysun Kilic, Leo Festino, and Imran Zahid  
**CC:** Jon Grabel, CIO - LACERA  
**DATE:** November 9, 2022  
**RE:** Growth Functional Category Structure Review – Global Equity

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The purpose of this memo is for Meketa Investment Group to formalize its support for staff's recommendations regarding global equity within the growth functional category structure review.

### Evaluation of Recommendation

Staff performed a comprehensive review of global equity within the growth functional category structure review. The most notable items contained in the review are the strong relative and risk adjusted performance metrics along with the continuous improvement on additional fee savings in the portfolio. The purpose of the structure review is to also look for opportunities for further enhancements within global equity. While there are no proposed changes to the global equity portfolio structure in this review, staff is seeking affirmation from the Board of Investments of the Global Equity Investment Guidelines including the recently approved range change for the Emerging Manager Program.

At the October Board of Investments meeting, the Board approved two emerging manager separate account managers and increased the range of the Emerging Manager Program from 0-5% to 0-10%. Based on those actions, staff will conduct a future review of the active portion of the global equity portfolio once the separate account managers have built out their portfolios. Meketa agrees with the approach outlined by staff. Once there is sufficient data on holdings and exposures within the emerging manager program, LACERA will have a better view of both the risks and the alpha opportunities within the active portion of global equity and that will provide a better occasion for recommending any further enhancements to the active portfolio.

If you have any questions, please feel free to reach us at 760-795-3450. We look forward to speaking with you soon.

TF/AK/LF/IZ/sf



StepStone Group  
4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
Phone +1 858.558.9700

October 28, 2022

Board of Investments  
Los Angeles County Employees Retirement Association ("LACERA")  
300 N Lake Avenue, Suite 850  
Pasadena, CA 91101-6130

Re: 2023-2024 Structure Review - Private Equity

Dear Board Members,

Since 2016, StepStone Group ("StepStone") has worked closely with LACERA's Board of Investments and staff to develop and review LACERA's annual private equity investment plans and Biennial Structure Reviews. In 2018 and 2020, StepStone and staff collaborated on LACERA's 2019-2020 and 2021-2022 Biennial Structure Reviews. In 2021, the Trustees approved a new Strategic Asset Allocation ("SAA") which included a target private equity allocation of 17%, up from 10% in the prior SAA.

StepStone updated its pacing model using a 17% target private equity allocation and market values as of June 30, 2022. The target pacing was developed with the goal of maintaining LACERA's target Private Equity allocation range of 12-20% in the long term, recognizing that market conditions can lead to interim deviations from the target. Based on our analysis, StepStone recommends LACERA make annual private equity commitments of approximately 4-5% of the Trust's assets in 2023 and 2024. Further, due to the anticipated growth of the in-house Co-investment/Secondary program, combined with existing exposure to externally managed programs of a similar strategy, StepStone believes it is prudent to extend the target allocation range of the Co-investment/Secondary/Fund-of-Funds sub-sector from 10-25% to 10-30%.

In our prior Structure Review letters, we stressed the importance of maintaining a flexible investment pace to invest more or less according to market conditions and opportunities. While a consistent annual investment pace is important to maintain proper vintage year diversification, LACERA should not feel forced to invest a specific amount every year if not enough high-quality opportunities are available and should have the flexibility to invest more if there are more high-quality opportunities in a given year than could be accommodated with a fixed allocation target. We believe this to be especially true in the current market environment, as highlighted by staff in the 2023-2024 Structure Review.

StepStone will review this recommendation each year, and as necessary when market conditions warrant, to ensure it continues to align with LACERA's overall investment goals.

StepStone Group

**To the knowledge of StepStone, (i) this recommendation does not take into account the interest of StepStone or any StepStone Entity (as defined in the Advisory Services Agreement between LACERA and StepStone), (ii) neither StepStone nor any StepStone Entity will receive any benefit from this recommendation other than compensation paid by LACERA to StepStone pursuant to the Advisory Services Agreement, and (iii) there are no conflicts of interest among StepStone and its affiliates in connection with the recommendation herein.**

November 28, 2022

TO: Each Trustee,  
Board of Investments

FOR: Board of Investments Meeting of December 14, 2022

SUBJECT: RFK Compass Investors Program - Miami, Florida on February 26-28, 2023

The 2023 RFK Compass Investors Program will be held in Miami, Florida on February 26-28, 2023. The conference will bring together investors, activist, and scholars for meaningful discussions.

The main conference highlights include the following:

- The Pushback on ESG – Where do we go from here?
- Leveraging Public Markets as an Entry Point for Private Investments
- Differentiating the Key to Success: How Emerging Managers are Breaking Through the Noise

Following are approximate conference and travel costs:

**Registration:** \$800.00

**Hotel:** \$325.00 daily rate (plus taxes and fees)

**Additional Travel Days:** 2

**Airfare:** \$600.00 - \$3,800.00

**Ground Transportation:** \$60.00 per day

**Per Diem & Incidentals:** \$69.00 per day  
(The registration fee includes most meals)

**Approximate Cost Per Traveler:** \$3,500- \$6,500.00

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.

**IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:**

Approve attendance of Trustees at the RFK Compass Investors Program in Miami, Florida on February 26-28, 2023, and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies.

Attachment

LE



**RFK Compass Fall Investors Conference**  
**Sunday, February 26 – Tuesday, February 28, 2023**  
**Eden Roc Miami Beach | Miami, FL**

**Preliminary Agenda**

**SUNDAY, FEBRUARY 26**

**4:00 PM**                      **Registration opens – *The Promenade***

**6:00 PM**                      **Cocktail Reception - *Eden Roc Garden***

**Remarks** from **Marvin Rosen**, Shareholder, Greenberg Traurig and  
Co-Chair, RFK Compass Investors Conference

**7:00 PM**                      **Networking Dinner (*Seating is pre-assigned. RSVP is required*)**

**Welcome Remarks** from **Kerry Kennedy**, President, Robert F. Kennedy Human  
Rights

**Fireside Chat with A. J. Hernandez**, Director of Emerging Managers, New  
York State Common Retirement Fund and **Marvin Rosen**, Shareholder,  
**Greenberg Traurig and Co-Chair, RFK Compass Investors Conference**



**RFK Compass Fall Investors Conference**  
**Sunday, February 26 – Tuesday, February 28, 2023**  
**Eden Roc Miami Beach | Miami, FL**

## Preliminary Agenda

### MONDAY, FEBRUARY 27

- 9:00 AM**                      **Welcome Remarks - Pompeii Ballroom**  
**Sancia Dalley**, SVP, Investor Engagement, Robert F. Kennedy Human Rights and Co-Chair of the RFK Compass Investor Conference
- 9:15 AM**                      **Panel: The Pushback on ESG - Where do we go from here?**
- 9:50 AM**                      **Fireside Chat: Disrupting the Status Quo**
- 10:25 AM**                      **Panel: Navigating Change as Investors in Private Markets - Perspectives from GPs Across the Sector Spectrum**
- 11:10 AM**                      **Networking Break - Promenade Room**
- 11:30 AM**                      **Panel: Differentiating the Key to Success: How Emerging Managers are Breaking Through the Noise (Part I)**
- 12:50 PM**                      *Transition to Lunch*
- 1:10 PM**                      **Luncheon Keynote Fireside Chat on The State of Software Investing - Spa Garden (seating is pre-assigned)**
- 2:30 PM**                      *Transition to Pompeii Ballroom*
- 2:45 PM**                      **Panel Discussion: The Credit Landscape Today - Risks, Returns and Opportunities - Pompeii Ballroom**





**RFK Compass Fall Investors Conference**  
**Sunday, February 26 – Tuesday, February 28, 2023**  
**Eden Roc Miami Beach | Miami, FL**

**Preliminary Agenda**

- 3:35 PM**                      **Fireside Chat: Leveraging Public Markets as an Entry Point for Private Investments**
- 4:10 PM**                      **Panel: Reups and Allocations - How LPs are Navigating this Cycle**
- 5:15 PM**                      **Day 1 Closing Reflections & Announcement**
- 5:45 PM**                      **Networking Cocktails - *Spa Terrace***
- 6:30 PM**                      **Networking Dinner & Fireside Chat - *seating is pre-assigned.***
- 8:30 PM**                      **Dinner concludes**





**RFK Compass Fall Investors Conference**  
**Sunday, February 26 – Tuesday, February 28, 2023**  
**Eden Roc Miami Beach | Miami, FL**

## Preliminary Agenda

### TUESDAY, FEBRUARY 28

**7:45 AM** **Invite-Only: Meet the Emerging Manager Breakfast Roundtable - Promenade Room**

*This breakfast is invite-only and open to emerging manager funds and LPs only.*

Sponsored by:



**7:45-8:45 AM** **Networking Breakfast - Spa Garden**

**9:00 AM** **Conference Co-Chair's Remarks**  
**Sancia Dalley, SVP Investors Engagement, Robert F. Kennedy Human Rights**

**9:05 AM** **Fireside Chat: Diversifying Capital for Public-Private Partnerships**

**9:40 AM** **Panel: Differentiation the Key to Success: How Emerging Managers are breaking through the noise – Part II**

**10:30 AM** **Panel Discussion: The Ever-Changing Real Estate Market - A Discussion on Trends, Opportunities and Societal Impact**




**RFK Compass Fall Investors Conference**  
**Sunday, February 26 – Tuesday, February 28, 2023**  
**Eden Roc Miami Beach | Miami, FL**

**Preliminary Agenda**

<b>11:20 AM</b>	<b>Networking Break - Promenade Room</b>
<b>11:40 AM</b>	<b>Fireside Chat: Leading on DEI - A Conversation with Institutional Investors</b>
<b>12:10 PM</b>	<b>Panel: What's Ahead for Private Equity in 2023 – Risks and Opportunities</b>
<b>1:00 PM</b>	<b>Luncheon Fireside Chat (<i>Spa Garden</i>)</b>
<b>2:30 PM</b>	<b>Closing Remarks</b> <b>Sancia Dalley, SVP Investors Engagement, Robert F. Kennedy Human Rights</b>

November 18, 2022

TO: Each Trustee  
Board of Retirement  
Board of Investments

FROM: Laura Guglielmo   
Assistant Executive Officer

Roberta Van Nortrick   
Acting Division Manager, Administrative Services

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

**SUBJECT: FY 2022-2023 PROPOSED MID-YEAR BUDGET AMENDMENT**

## **RECOMMENDATION**

That the Board of Retirement and Board of Investments review and approve the FY 2022-2023 Mid-Year Budget Amendments for the LACERA Administrative Budget. No changes are recommended for the Retiree Health Care Benefits Program Budget.

## **SUMMARY**

In June, the Board of Retirement and the Board of Investments adopted LACERA's Fiscal Year 2022-2023 Administrative Budget totaling \$127,766,680. The Administrative Budget includes two major account categories, Salaries and Employee Benefits (S&EB) with an adopted budget of \$98.4M and Services and Supplies (S&S) with an adopted budget of \$29.4M.

LACERA's Budget Policy, attached, anticipates the need for adjustments and requires LACERA's Executive Management to conduct a mid-year review by December 1<sup>st</sup> to assess and evaluate the adequacy of the personnel and other resources and make recommendations to the JOGC for adjustments if necessary. JOGC recommendations would then be considered for adoption by the Boards. On November 16, 2022 the JOGC met to review and consider the 2022-23 Mid-Year Budget amendments proposed by staff, but no action was taken for lack of quorum. Staff recommendations are therefore provided directly to the Boards for review and adoption.

LACERA's Executive Management has completed its review and makes recommendations to transfer appropriations within the Administrative Budget as summarized in the table below. Proposed increases to Services & Supplies (S&S) totaling \$2.98M would be completely offset by savings identified in Salaries & Employee Benefits (S&EB). While the Budget Policy grants the CEO limited authority to transfer allocations, he is limited to transferring \$1.0 million between major accounts, thus Board action is

required. Executive Management does not recommend any changes to the Retiree Healthcare and Other Post-Employment Benefits (OPEB) Trust Budgets at this time.

<b>Administrative Budget</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Mid-Year Adjustment Amount</b>	<b>Proposed Amended Budget</b>	<b>% Change</b>
Salaries & Employee Benefits	\$98,387,160	(\$2,979,600)	\$95,507,560	-3.0%
Services & Supplies	\$29,279,700	\$2,979,600	\$32,359,300	10.1%
<b>Operating Budget Total</b>	<b>\$127,666,860</b>	<b>\$0</b>	<b>\$127,866,860</b>	<b>0.0%</b>

Divisional Breakdown Below:

<b>PROPOSED BUDGET AMENDMENTS BY DIVISION</b>				
<b>Division</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Mid-Year Adjustment Amount</b>	<b>Proposed Amended Budget</b>	<b>% Change</b>
Administrative Services	\$15,071,615	(\$81,739)	\$14,989,876	-0.5%
Benefits	\$12,019,386	\$0	\$12,019,386	0.0%
Board of Retirement	\$236,500	\$55,000	\$291,500	23.3%
Board of Investments	\$458,000	\$40,000	\$498,000	8.7%
Communications	\$3,219,975	\$203,000	\$3,422,975	6.3%
Disability Litigation	\$2,407,817	\$0	\$2,407,817	0.0%
Disability Retirement	\$10,939,793	\$0	\$10,939,793	0.0%
Executive Office	\$5,451,099	(\$56,947)	\$5,394,151	-1.0%
Financial & Accounting Services	\$5,120,014	(\$193,536)	\$4,926,478	-3.8%
Human Resources	\$6,029,537	(\$190,000)	\$5,839,537	-3.2%
Internal Audit	\$3,307,122	\$161,374	\$3,468,496	4.9%
Investment Office	\$18,239,154	(\$896,966)	\$17,342,188	-4.9%
Legal Services	\$9,359,650	\$1,097,546	\$10,457,195	11.7%
Member Services	\$10,622,731	(\$143,317)	\$10,479,414	-1.3%
Quality Assurance	\$3,443,785	(\$525,417)	\$2,918,368	-15.3%
Systems	\$21,840,682	\$531,003	\$22,371,686	2.4%
<b>TOTAL</b>	<b>\$127,766,860</b>	<b>\$0</b>	<b>\$127,766,860</b>	<b>0.0%</b>

Additional detail, including changes by line item, are provided in Exhibit A, attached.

### **Services and Supplies Proposed Adjustments**

Executive Management recommends increased appropriations to several line items within the Administrative Budget, as detailed below. The largest increases include \$1.5 million for additional outside legal counsel and \$750,000 for the renovation of the 7<sup>th</sup> floor at LACERA Headquarters. The renovation was originally scheduled to be completed in FY 2021-22 and \$1.3 million was budgeted. However, due to significant delays, funds were not expended. Staff anticipated that half of the original funds would be spent in FY 2021-22 but were not. As a consequence, an additional \$750,000 is required on top of the \$750,000 budgeted in the current Fiscal Year.

<b>Proposed Changes to Services &amp; Supplies (S&amp;S)</b>			
<b>Division</b>	<b>Item Description</b>	<b>Proposed Change to Budget</b>	<b>Explanation</b>
Administrative Services	7th Floor Renovation	\$750,000	Funds were not expended in FY 21-22 and are required to pay for design, furniture, and labor costs associated with the renovation.
Administrative Services	Insurance	(\$128,000)	Actual premium costs were higher than anticipated for Fiduciary, Earthquake and Employment Practices Liability, but less than anticipated for Cyber Liability, Umbrella, Crime, and Business Package Insurance, for an overall net savings of \$128,000 or 10.3%.
Board of Investments	Offsite Meeting	\$40,000	Venue costs exceeded previous year estimates
Board of Retirement	Offsite Meeting	\$55,000	Venue costs are expected to align with BOI offsite experience.

Division	Item Description	Proposed Change to Budget	Explanation
Communications	Postage & Special Supplies	\$203,000	Unanticipated costs for postage (\$48,000) and specialized services (\$155,000) associated with the Strategic Plan Member Survey and use of outside services to develop 13 videos for member education.
Executive Offices	Information Security Professional & Specialized Services	\$139,000	A new software subscription (\$115,000) and additional funding for security assessment testing (\$24,000) is recommended to keep pace with modern security threats.
Investments	Travel & Transportation	\$51,000	Greater opportunity to conduct due diligence as businesses return to post-pandemic normal.
Legal Services	Outside Counsel	\$1,500,000	Legal expenses higher than anticipated.
Systems	Professional & Specialized Services	\$120,000	Unanticipated costs for AWS services provided through ISD (\$100,000) and increased costs for payroll services provided through the Auditor Controller (\$20,000)
Systems	LAN Software/License	\$100,000	Unplanned project to support the modernization and streamlining of Human Resources procedures.
Systems	Equipment Maintenance	\$150,000	Upgrade of the Uninterruptible Power Supply (UPS) originally planned and budgeted in FY 21-22 but deferred.

### **Salaries and Employee Benefit Changes**

While there are no proposed changes to position authority, increased appropriations for Agency Temporary Staffing totaling approximately \$1.8 million are recommended.



Management further recommends decreasing appropriations in Permanent Salaries/County Temporary by approximately \$3.0 million and Variable Benefits by approximately \$1.8 million based on our recently updated Hiring Plan, which will be shared with the Operations Oversight Committee and the Board of Investments in December.

<b>S&amp;EB Category</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Mid-Year Adjustment Amount</b>	<b>Proposed Amended Budget</b>	<b>% Change</b>
Permanent /County Temporary	\$52,935,020	(\$2,995,814)	\$49,939,206	-5.7%
Agency Temporary	\$5,908,400	\$1,776,900	\$7,685,300	30.1%
Total Variable Benefits	\$32,823,693	(\$1,760,686)	\$31,063,007	-5.40%
<b>TOTAL</b>		<b>(\$2,979,600)</b>		

The proposed decrease in Permanent Salaries and the corresponding Variable Benefits more accurately reflects LACERAs current hiring plan. While Executive Management is anxious to substantially reduce our vacancy levels, Human Resources staff capacity to meet the recruitment and other-employment related needs of the organization are limited. Management recently updated its Hiring Plan to provide a more realistic timeframe for filling vacant positions. Based on this data, the Budget Unit identified the salary savings available to apply toward our other needs. The updates to the hiring plan will also necessitate increasing appropriations for Agency Temporary Staffing.

Based on the current hiring plan, Systems, Legal and Human Resources Divisions all require adjustments to their Agency Temporary allocations, with the Systems Division requiring the most significant adjustment of \$1,667,200.

<b>Proposed Adjustments to Temporary Staffing Allocations by Division</b>				
<b>Division</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Mid-Year Adjustment Amount</b>	<b>Proposed Amended Budget</b>	<b>% Change</b>
Human Resources	\$95,300	\$49,000	\$144,300	51.4%
Legal Services	\$135,900	\$60,700	\$196,600	44.7%
Systems	\$2,909,100	\$1,667,200	\$4,576,300	57.3%
<b>TOTAL</b>		<b>\$1,776,900</b>		

### **Budget to Actuals**

As part of its review and assessment of the FY 2022-23 Budget, Management reviewed actual expenditures through the first quarter of the fiscal year compared to the budget.

<b>FY 2022-23 Budget to First Quarter Actual</b>				
<b>Administrative Budget</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Year-to Date 09/30/22</b>	<b>Over/(Under) Budget</b>	<b>% Variance</b>
Salaries & Employee Benefits	\$98,387,160	\$17,527,949	(\$80,859,211)	-82.2%
Services & Supplies	\$29,379,700	\$7,473,681	(\$21,906,019)	-74.6%
<b>Operating Budget Total</b>	<b>\$127,766,860</b>	<b>\$25,001,630</b>	<b>(\$102,765,230)</b>	<b>-80.4%</b>

<b>FY 2022-23 Budget to First Quarter Actual</b>				
<b>Retiree Healthcare</b>	<b>FY 2022-2023 Approved Budget</b>	<b>Year-to Date 09/30/22</b>	<b>Over/(Under) Budget</b>	<b>% Variance</b>
Salaries & Employee Benefits	\$5,172,923	\$1,944,632	(\$3,228,291)	-62.4%
Services & Supplies	\$6,150,699	\$1,356,464	(\$4,794,235)	-77.9%
<b>RHC Budget Total</b>	<b>\$11,323,622</b>	<b>\$3,301,096</b>	<b>(\$8,022,526)</b>	<b>-70.8%</b>

Additional detail of expenditures by Division is provided in Exhibit B.

### **CONCLUSION**

The proposed amendments to the Administrative Budget would transfer approximately \$2.98 million from S&EB to S&S and results in a total amended budget of net zero. LACERA's Budget Policy limits the CEO to transfer appropriations across major accounts to \$1.0 million. Therefore, staff recommends that the Board of Retirement and Board of Investments approve the proposed budgetary adjustments to the Administrative Budget as presented. No adjustments are recommended for the Retiree Healthcare Budget at this time.

Attachments





## LACERA BUDGET POLICY

**Responsible Manager:** Laura Guglielmo, Assistant Executive Officer

**Original Effective Date:** 05/20/2009

**Last Updated:** 06/09/2022

**Mandatory Review:** Annually

**Approval Level:** Board of Retirement and Board of Investments

### 1. PURPOSE

This document sets forth the fiscal policy to ensure LACERA's budgeting practices are in accordance with prudent fiscal management for the allocation and utilization of resources to meet the organization's mission and vision. The policy also serves to increase the transparency of our budgeting process, which ensures stakeholders and members have insight into how we manage their funds and meet fiduciary obligations. LACERA's budget encompasses three components: The Administrative Budget, the Retiree Healthcare (RHC) Budget, and the Other Post-Employment Benefits (OPEB) Trust.

The objective of this policy is to set out the budgeting principles and timeline for the preparation of the budget and the process and responsibilities for the review, approval, and implementation of all three components of the budget.

### 2. LEGAL AUTHORITY

[Government Code Section 31580.2](#) of the County Employees Retirement Law requires a budget covering the entire expense for the administration of the retirement system, shall be adopted by the Boards annually, and shall be charged against the earnings of the retirement fund. The expense incurred in any year may not exceed twenty-one hundredths of one percent (0.21%) of the accrued actuarial liability of the retirement system.

[Government Code Section 31596.1](#) provides that the expenses of investing its moneys, securing custodial bank services, securing actuarial services for the annual valuation and triennial experience study, and securing attorney services to assist with investment matters shall not be considered a cost of administering the system. As such, these costs are not included in the Administrative Budget and are identified as "non-administrative expenses."

Section 31596.1 also provides that the cost of internal legal representation secured by the Board of Retirement and Board of Investments under Government Code Section 31529.1 for services previously performed by County Counsel are not administrative costs. [Section 31529.1](#) provides that such legal representation is limited to one-hundredth of 1 percent of system assets in any budget year, except that investment legal expenses under [Government Code Section 31607](#) are not limited. Government Code Section 31580.2(b) provides that expenditures for computer software, computer hardware, and computer technology consulting services in support of these computer products.

Government Code [Sections 31691](#) and [31694](#) provide that the expenses of administering the RHCBP program and OPEB Trust may not be made from assets of the retirement fund. Therefore, such costs should be part of the pension system's administrative budget.

### **3. SCOPE**

This Policy applies to the development, preparation, and implementation of all three components of LACERA's budget in accordance with County Employees Retirement Law (CERL).

Any exceptions to this Policy must be approved by the Board of Retirement and Board of Investments.

### **4. DEFINITIONS**

**Administrative Budget:** LACERA's annual Administrative Budget consists of two components: Salaries and Employee Benefits, and Services and Supplies.

**Appropriation:** Funds set aside for specific purposes outlined in the Adopted Budget.

**Budget:** The annual financial plan that outlines the resources and revenue needed to achieve LACERA's work plan to meet its mission and vision.

**Fiscal Year:** LACERA's fiscal year begins on July 1 and concludes on June 30<sup>th</sup>. LACERA shall follow a naming convention referencing the fiscal year ending date, for example, FY23 for the fiscal year ending June 30, 2023.

**Information Technology Coordination Council (ITCC):** Oversight body responsible for significant technology and system recommendations for incorporation into the Proposed Budget. Established to ensure the efficient and effective use of technology, collaboration across the organization, and to ensure that strategic plan goals are achieved.

**Non-Administrative Expenses:** Expenses excluded from the Administrative Budget as specified in Government Code Section 31596.1.

**Other Post-Employment Benefits (OPEB) Trust:** Trust funds established by Los Angeles County, LACERA and the Superior Court to pre-fund their Retiree Healthcare Benefit Program.

**Retiree Healthcare Benefits Program (RHCBP) Budget:** The RHCBP Budget reflects the resources and revenue required to administer retiree healthcare benefits to eligible members. These costs are funded through a monthly administrative fee via healthcare premiums, charged to program participants, or the plan sponsor if the member's benefit is fully subsidized.

**Statutory Appropriation Limit:** The limit of the Boards' authority to appropriate funds to administer the retirement system established by Government Code Section 31580.2. Currently twenty-one hundredths (.21) of one percent, of the Actuarial Accrued Liability of the retirement fund.

**Unallocated Statutory Appropriation Balance:** The difference between the funds appropriated to meet the organization's operational needs and the statutory appropriation limit established by Government Code Section 31580.2.

## **5. POLICY STATEMENT**

This document sets forth the fiscal policy for the administration of LACERA's budget to ensure that the budgeting practices of the organization maintain a fiscally sustainable balanced budget that recognizes the fiduciary duty owed to our members. LACERA's budget encompasses three components: The Administrative Budget, the Retiree Healthcare (RHC) Program Budget and the Other Post-Employment Benefits (OPEB) Trust.

The objective of this policy is to set out the principles and timeline for the preparation of the budget and the process and responsibilities for the preparation, review, approval, and implementation of all three components of the budget.

### **5.1 Administrative Budget**

The Administrative Budget reflects the resources needed to achieve the organization's work plan, strategic goals, and operational activities in support of pension administration and investment of plan assets required to deliver retirement benefits for LACERA members and beneficiaries. It consists of two primary components: Salaries and Employee Benefits (S&EB) and Services and Supplies (S&S).

S&EB costs consist of ongoing personnel costs for the organization, including salaries for permanent and temporary staff, overtime, and variable benefits. Variable benefits include retirement costs (pension, 457, and 401K plan costs), health insurance, OPEB contributions and other employee benefits.

S&S costs reflect the daily operational needs of the organization. Some examples include building expenses (rent, maintenance, insurance), information technology needs, professional and specialized services, legal fees, office supplies and equipment, education, travel, and insurance.

## **5.2 Retiree Healthcare (RHC) Benefits Program Budget**

The Retiree Healthcare Benefits Program provides health care benefits to LACERA membership on behalf of our Plan Sponsors. The insurance premiums are born solely by the participants of the plan, or the Plan Sponsor if the employee is eligible for such benefit. LACERA trust funds are not used for premium payments or for the administration of the Program. The direct costs and variable overhead costs associated with the administration of the RHC Benefits Program are charged to our members and plan sponsors via an administrative fee. These administrative fees are added to the monthly premium costs and are not included in the Administrative Budget.

There are four categories of expenses for the RHC Benefits Program:

- Direct Costs of Salaries and Employee Benefits
- Direct Services and Supplies
- Indirect Salaries and Employee Benefits
- Indirect Services and Supplies.

Indirect Salaries and Employee Benefits and Indirect Services and Supplies reflect the program's pro-rata share of internal LACERA support functions such as Administrative Services, Information Technology and Human Resources.

## **5.3 Other Post-Employment Benefits (OPEB) Trust Budget**

The County of Los Angeles (County), LACERA, and the Superior Court (Court) utilize an OPEB Trust to pre-fund the Retiree Healthcare Program benefits. In FY 2012-2013, the County and LACERA established a trust to fund their program and the Court established its trust in FY 2016-17. Each agency's trust funds are reported separately in their financial statements. The Board of Investments of LACERA serves as the trustee and investment manager for the trusts.

The Trust Agreements stipulate that “... *the Trustee (LACERA) shall be entitled to payment or reimbursement of all of its reasonable and appropriate expenses incurred in administering or investing the Trust...*” As such, LACERA seeks payment directly from the County and the Court to fund the OPEB Trust. To avoid the OPEB Trust assets being co-mingled with retirement fund assets, LACERA maintains separate accounting of the costs associated with administering the OPEB Trust.

There are four categories of expenses of the OPEB Trust: Direct Costs of Salaries and Employee Benefits; Direct Services and Supplies; Indirect Salaries and Employee Benefits; and Indirect Services and Supplies. These expenses are allocated between the County, LACERA and the Court based on an agreed upon methodology. At the close of each fiscal year, actual costs are reconciled, and variances are credited or debited to each entity.

## **6. PROCESS**

The budget process consists of activities that encompass the development, implementation, and evaluation of the annual financial plan for the allocation of resources to support and accomplish goals and strategic initiatives.

### **6.1 Budget Preparation and Development**

It is the responsibility of LACERA management to develop and prepare an annual budget in accordance with responsible fiscal management for the allocation and utilization of resources to meet the organization’s mission, vision, and values.

### **6.2 Criteria**

LACERA Management develops the annual proposed budget reflecting the enterprise priorities established through the LACERA Strategic Plan. Criteria used by the organization to prioritize resources for the budget include, but are not limited to:

- Alignment with the Strategic Plan
- Mitigating risk
- Compliance with legally mandated requirements
- Technological advancements to support staff and improve service and offerings to our members
- Identifying opportunities for cost efficiencies
- Identifying opportunities to improve service to members
- Staff development and succession planning

- Direction of the LACERA Board of Retirement and/or Board of Investments

### 6.3 Alignment with Strategic Plan

The first step in developing a budget is to consider what the organization expects to achieve in the upcoming fiscal year. The organization's Strategic Plan lays out its strategic goals, objectives, and action plans toward achieving the organization's mission, vision, and values. Those goals and objectives identify responsibilities, timelines, and the metrics that will be used to determine if the goal or objective has been met. As part of the budget development process, it is the responsibility of LACERA Trustees and Management to ensure that the organization's budget, or financial plan, allocates the appropriate resources to achieve its strategic goals and objectives within the specified time frame.

### 6.4 Annual Budget Development and Approval Calendar

<i>Date</i>	<i>Activity</i>
By November 30	<ul style="list-style-type: none"> <li>• Executive Office and Management will review Strategic Plan initiatives for alignment with the upcoming Fiscal Year budget development cycle.</li> <li>• Administrative Services Division will provide each Division Manager a budget package with instructions for completing their proposed budget for the upcoming fiscal year, a budget preparation timetable with specific deadlines, and a schedule of meeting dates with the Budget Unit and a schedule of meeting dates with the Executive Office.</li> </ul>
December	The Budget Unit with a representative from Human Resources, meets with Division Managers to provide guidance in the development of their budget requests.
By January 15	Division Managers will submit their proposed budget to the Budget Unit.
By February 15	The Executive Office will meet with each Division Manager to discuss the Division's needs and provide direction to the Division Managers and Budget Unit.
February	Audit Committee review of Internal Audit Proposed Budget
By Mid-April	The Budget Unit will prepare and distribute the preliminary Administrative, RHC, and OPEB Trust Budgets to all Trustees and Division Managers.

April and May	<ul style="list-style-type: none"> <li>• Present preliminary budget to JOGC for review and input</li> <li>• Conduct budget hearings with all Trustees for final direction to staff</li> </ul>
By June 30	Board of Retirement and Board of Investment approve final budget

## 6.5 Budget Adoption

The Board of Retirement and Board of Investment (“Boards”) have the joint responsibility to approve the enterprise-wide budget and resource allocations for all funds by June 30. The Boards have created the Joint Organizational Governance Committee (JOGC), to provide oversight over the budget preparation. The Preliminary Budget is presented to the JOGC in April for its review. Staff incorporates direction from the JOGC and the JOGC’s recommendations are presented to both Boards during annual Budget Hearings in May. Staff incorporates additional Board direction into a Proposed Budget. The Boards independently take action to approve and adopt a Final Adopted Budget by June 30th.

## 6.6 Budget Appropriation

The Final Adopted Budget reflects the funds appropriated, or set aside, for specific purposes. For LACERA, funds are appropriated for two primary purposes, Salaries and Employee Benefits, and Services and Supplies. Government Code Section 31580.2 states the annual budget for administrative expenses of a retirement system established under CERL may not exceed twenty-one hundredths (.21) of one percent of the Actuarial Accrued Liability (AAL) of the retirement system. Each year, LACERA’s statutory appropriation limit is identified in the Adopted Budget.

To the extent funding appropriated as part of the budget is less than the statutory appropriations limit, the Boards may, take specific action at any point during the fiscal year, to appropriate additional funds, not to exceed the maximum amount established by statute. LACERA’s budgeting process includes a Mid-Year Budget Adjustment proposal to facilitate changes in priorities, goals, or economic conditions. The difference between the funds appropriated to meet the organization’s operational needs and the statutory appropriation limit shall be referred to as the “Unallocated Statutory Appropriation Balance.”

## **6.7 Budget Monitoring and Reporting**

Budget Unit staff monitor and analyze Division and enterprise-wide expenditures throughout the year, consult with Division Managers to identify planned expenditures and project full year under/over expenditures by Division and compare those estimates against the Adopted Budget. Significant budgetary variances are discussed and explained.

Budget Control Reports are prepared and provided to all Trustees and Management Staff on an outlined schedule within the fiscal year. These reports include year to date expenditures and projected expenditures compared to the budget. Budget adjustments impacting staffing levels or exceeding the CEO's authority shall be approved by the Boards.

This budget monitoring and control activity occurs concurrently while the Proposed Budget for the upcoming fiscal year is being developed.

## **6.8 Mid-Year Budget Review**

By December 1, LACERA Executive Management will assess and evaluate the adequacy of the personnel and other resources included in the Final Adopted Budget and make recommendations to the JOGC for adjustments, if necessary. JOGC recommendations shall be considered for approval by the Boards.

## **6.9 Mid-Year and Year-End Adjustments Within the Administrative Budget**

As part of LACERA's budget monitoring and reporting activities, it may become necessary to amend the Final Adopted Budget. Amendments may take the form of transferring appropriations between line items within a major account, transferring appropriations between major accounts, or increasing total appropriations within the statutory limits established by Government.

## **6.10 Transferring Appropriations**

LACERA's Administrative Budget has two major accounts, Salaries and Employee Benefits (S&EB), and Services and Supplies (S&S).

Within each major account are several line items with individual appropriations. The CEO has the authority to transfer appropriations not to exceed \$1 million across major accounts and has full discretion and authority to transfer appropriations between line items within each major account. The



CEO shall notify all Trustees of such actions at the next meeting of the Board and as part of the routine Budget Control Reporting.

#### **6.11 Pre-funding OPEB with Budgetary Savings**

LACERA participates in the OPEB Trust as a “contributing employer” and funds its employees’ program benefits on a pay-as-you-go basis, funding actual monthly premium costs. It also makes a quarterly contribution to paydown the future OPEB liability at a rate equal to that of Los Angeles County. It is LACERA’s objective to fund these program benefits within the working lifetime of the program beneficiaries so as maintain intergenerational equity. To achieve intergenerational equity more quickly, some or all year-end budgetary savings may at the discretion of the LACERA CEO be used to make an additional OPEB contribution by June 30 of the year in which the funds were budgeted. Such additional OPEB contributions may be up to but may not exceed that year’s budgeted OPEB contribution.

#### **6.12 Increasing Total Appropriations**

Should unanticipated expenditures be required during the fiscal year beyond the total Adopted Budget amount, the Unappropriated Statutory Appropriation Balance is available. This balance represents the difference between the total statutory appropriation limit established under CERL and the Final Adopted Budget. To utilize these unappropriated funds, both Boards must approve a budget amendment, increasing the total annual appropriation.

### **7. Audit Committee Oversight of Internal Audit**

LACERA’s Internal Audit Division provides independent and objective assurance services and consulting services to assist the organization achieve its mission by improving our effectiveness of governance, risk management and control processes. To protect its independence, the Internal Audit Division reports to the Audit Committee of the Boards with functional reporting to the Chief Executive Officer. The Audit Committee reviews and approves Internal Audit’s Proposed Budget in February, which is then incorporated into LACERA’s Administrative Proposed Budget reviewed by the JOGC in April.

### **8. HISTORY**

#### **8.1 Approvals**

**8.1.1** Updated and approved by the Board of Retirement and Board of Investments on June 1, 2022 and June 9, 2022, respectively.

Prior versions are superseded and of no effect as of the stated approval date.

## **8.2 Current Status**

Annual review scheduled for June 2023.

## **8.3 Versions**

**8.3.1** This policy was last updated on May 20, 2009

**8.3.2** This policy was last approved by the Board of Retirement on June 1, 2022 and Board of Investments on June 9, 2022

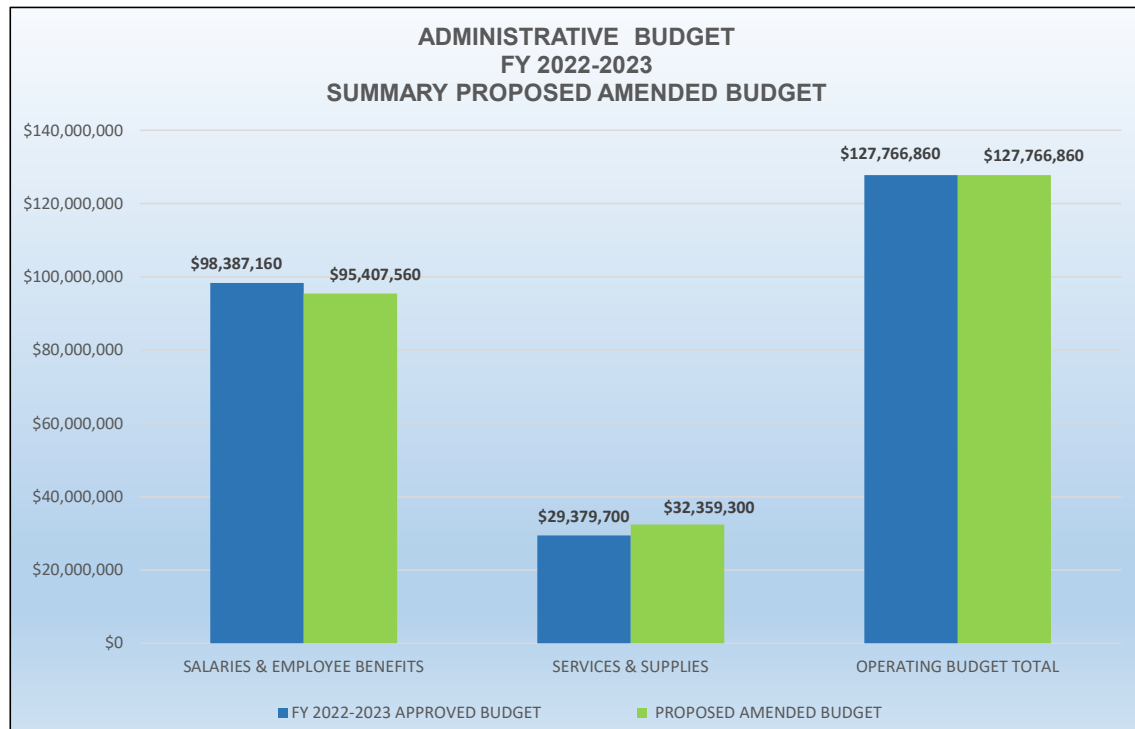
# **EXHIBIT A**

## Exhibit A

### FY 2022-2023 PROPOSED MID-YEAR BUDGET AMENDMENT FINANCIAL SUMMARIES

ADMINISTRATIVE BUDGET	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
SALARIES & EMPLOYEE BENEFITS	\$98,387,160	(\$2,979,600)	\$95,407,560	-3.0%
SERVICES & SUPPLIES	\$29,379,700	\$2,979,600	\$32,359,300	10.1%
<b>OPERATING BUDGET TOTAL</b>	<b>\$127,766,860</b>	<b>\$0</b>	<b>\$127,766,860</b>	<b>0.0%</b>

\* All amounts rounded to the nearest dollar.



## PROPOSED AMENDED BUDGET BY DIVISION

DIVISION	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
Administrative Services	\$15,071,615	(\$81,739)	\$14,989,876	-0.5%
Benefits	12,019,386	0	12,019,386	0.0%
Board of Retirement	236,500	55,000	291,500	23.3%
Board of Investments	458,000	40,000	498,000	8.7%
Communications	3,219,975	203,000	3,422,975	6.3%
Disability Litigation	2,407,817	0	2,407,817	0.0%
Disability Retirement	10,939,793	0	10,939,793	0.0%
Executive Office	5,451,099	(56,947)	5,394,151	-1.0%
Financial & Accounting Services	5,120,014	(193,536)	4,926,478	-3.8%
Human Resources	6,029,537	(190,000)	5,839,537	-3.2%
Internal Audit	3,307,122	161,374	3,468,496	4.9%
Investment Office	18,239,154	(896,966)	17,342,188	-4.9%
Legal Services	9,359,650	1,097,546	10,457,195	11.7%
Member Services	10,622,731	(143,317)	10,479,414	-1.3%
Quality Assurance	3,443,785	(525,417)	2,918,368	-15.3%
Systems	21,840,682	531,003	22,371,686	2.4%
<b>TOTAL</b>	<b>\$127,766,860</b>	<b>\$0</b>	<b>\$127,766,860</b>	<b>0.0%</b>

\* All amounts rounded to the nearest dollar.

## PROPOSED AMENDED BUDGET BY S&EB CATEGORY

S&EB CATEGORY	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
<b><u>SALARIES &amp; OTHER PAYS</u></b>				
Permanent / County Temporary	\$52,924,020	(\$2,995,814)	\$49,928,206	-5.7%
Agency Temporary	5,908,400	1,776,900	7,685,300	30.1%
LACERA Intern Program	288,000	0	288,000	0.0%
Stipends	65,000	0	65,000	0.0%
Overtime	1,088,800	0	1,088,800	0.0%
Bilingual Bonus	22,800	0	22,800	0.0%
Transportation Allowance	7,200	0	7,200	0.0%
Rideshare Allowance	70,300	0	70,300	0.0%
Sickleave Buyback	68,800	0	68,800	0.0%
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$60,443,320</b>	<b>(\$1,218,914)</b>	<b>\$59,224,406</b>	<b>-2.0%</b>
<b><u>VARIABLE BENEFITS</u></b>				
Retirement	12,520,797	(493,286)	12,027,511	-3.9%
FICA Contribution	937,475	(44,520)	892,955	-4.7%
County Subsidy - Insurance	3,686,450	(376,655)	3,309,795	-10.2%
Options Plan	4,888,781	(151,872)	4,736,909	-3.1%
Life Insurance	22,772	(93)	22,679	-0.4%
Health Insurance Temps	325,317	0	325,317	0.0%
Flexible Benefit Plan	22,263	(11,395)	10,868	-51.2%
Thrift Plan / Horizons	2,144,074	(122,784)	2,021,290	-5.7%
Savings Plan	1,625,730	(106,682)	1,519,048	-6.6%
Pension Savings Plan	36,645	0	36,645	0.0%
Megaflex	6,613,389	(453,398)	6,159,991	-6.9%
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$32,823,693</b>	<b>(\$1,760,686)</b>	<b>\$31,063,007</b>	<b>-5.4%</b>
<b>OPEB CONTRIBUTION</b>	<b>\$1,775,147</b>	<b>\$0</b>	<b>\$1,775,147</b>	<b>0.0%</b>
<b>OTHER BENEFITS</b>	<b>\$3,345,000</b>	<b>\$0</b>	<b>\$3,345,000</b>	<b>0.0%</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$37,943,840</b>	<b>(\$1,760,686)</b>	<b>\$36,183,154</b>	<b>-4.6%</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$98,387,160</b>	<b>(\$2,979,600)</b>	<b>\$95,407,560</b>	<b>-3.0%</b>

\* All amounts rounded to the nearest dollar.

## PROPOSED AMENDED BUDGET BY S&S CATEGORY

S&S CATEGORY	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
Auto Expenses	\$133,500	\$0	\$133,500	0.0%
Communications	535,000	0	535,000	0.0%
Transportation & Travel	605,100	51,100	656,200	8.4%
Postage	1,021,400	48,000	1,069,400	4.7%
Stationery & Forms	653,300	155,000	808,300	23.7%
Office Supplies & Equipment	845,700	0	845,700	0.0%
Insurance	1,248,900	(128,300)	1,120,600	-10.3%
Equipment Maintenance	258,300	150,000	408,300	58.1%
Equipment Rents & Leases	287,000	0	287,000	0.0%
Building Costs	7,211,300	750,000	7,961,300	10.4%
Parking Fees	437,000	0	437,000	0.0%
Professional & Specialized Services	4,272,700	258,800	4,531,500	6.1%
Bank Services	200,500	0	200,500	0.0%
Legal Fees & Services	1,571,000	1,500,000	3,071,000	95.5%
Disability Fees & Services	3,145,300	0	3,145,300	0.0%
Computer Services & Support	5,018,600	100,000	5,118,600	2.0%
Educational Expenses	1,253,000	0	1,253,000	0.0%
Miscellaneous	682,100	95,000	777,100	13.9%
<b>TOTAL</b>	<b>\$29,379,700</b>	<b>\$2,979,600</b>	<b>\$32,359,300</b>	<b>10.1%</b>

\* All amounts rounded to the nearest dollar.

## **EXHIBIT B**

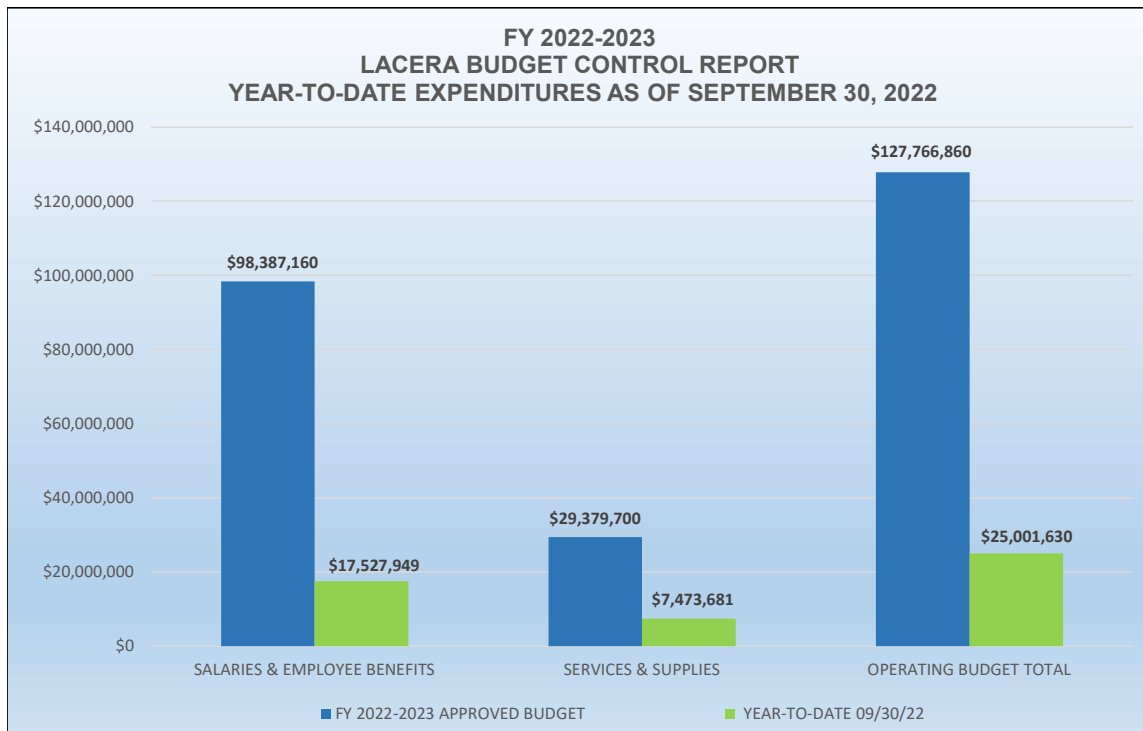


## Exhibit B

**FY 2022-2023**  
**LACERA BUDGET CONTROL REPORT**  
**BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

ADMINISTRATIVE BUDGET	FY 2022-2023 APPROVED BUDGET	YEAR-TO-DATE 09/30/22	OVER/(UNDER) BUDGET	% VARIANCE
SALARIES & EMPLOYEE BENEFITS	\$98,387,160	\$17,527,949	(\$80,859,211)	-82.2%
SERVICES & SUPPLIES	\$29,379,700	\$7,473,681	(\$21,906,019)	-74.6%
<b>OPERATING BUDGET TOTAL</b>	<b>\$127,766,860</b>	<b>\$25,001,630</b>	<b>(\$102,765,230)</b>	<b>-80.4%</b>

\* All amounts rounded to the nearest dollar.



**FY 2022-2023**  
**LACERA BUDGET CONTROL REPORT**  
**BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**  
**SUMMARY BY DIVISION**

DIVISION	FY 2022-2023 APPROVED BUDGET	YEAR-TO- DATE 09/30/22	OVER/(UNDER) BUDGET	% VARIANCE
Administrative Services	\$15,071,615	\$3,118,124	(\$11,953,491)	-79.3%
Benefits	12,019,386	2,534,310	(9,485,076)	-78.9%
Board of Retirement	236,500	8,981	(227,519)	-96.2%
Board of Investments	458,000	121,499	(336,501)	-73.5%
Communications	3,219,975	551,880	(2,668,095)	-82.9%
Disability Litigation	2,407,817	493,728	(1,914,089)	-79.5%
Disability Retirement	10,939,793	2,275,344	(8,664,449)	-79.2%
Executive Office	5,451,099	1,006,248	(4,444,851)	-81.5%
Financial & Accounting Services	5,120,014	712,673	(4,407,341)	-86.1%
Human Resources	6,029,537	699,483	(5,330,054)	-88.4%
Internal Audit	3,307,122	531,832	(2,775,290)	-83.9%
Investment Office	18,239,154	2,902,596	(15,336,558)	-84.1%
Legal Services	9,359,650	1,899,519	(7,460,131)	-79.7%
Member Services	10,622,731	1,949,387	(8,673,344)	-81.6%
Quality Assurance	3,443,785	572,083	(2,871,702)	-83.4%
Systems	21,840,682	5,623,945	(16,216,737)	-74.3%
<b>TOTAL</b>	<b>\$127,766,860</b>	<b>\$25,001,630</b>	<b>(\$102,765,230)</b>	<b>-80.4%</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**LACERA BUDGET CONTROL REPORT**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$52,924,019	\$10,221,988	(\$42,702,031)
AGENCY TEMPORARY	5,908,400	1,163,489	(4,744,911)
LACERA INTERN PROGRAM	288,000	1,021	(286,979)
STIPENDS	65,000	8,567	(56,433)
OVERTIME	1,088,800	267,186	(821,614)
BILINGUAL BONUS	22,800	2,700	(20,100)
TRANSPORTATION ALLOWANCE	7,200	1,500	(5,700)
RIDESHARE ALLOWANCE	70,300	1,010	(69,290)
SICKLEAVE BUYBACK	68,800	33,864	(34,936)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$60,443,319</b>	<b>\$11,701,324</b>	<b>(\$48,741,995)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	12,520,797	2,112,991	(10,407,806)
FICA CONTRIBUTION	937,475	166,463	(771,012)
COUNTY SUBSIDY - INSURANCE	3,686,450	342,704	(3,343,746)
OPTIONS PLAN	4,888,781	608,994	(4,279,787)
LIFE INSURANCE	22,772	3,039	(19,733)
HEALTH INSURANCE TEMPS	325,317	45,021	(280,296)
FLEXIBLE BENEFIT PLAN	22,263	3,853	(18,410)
THRIFT PLAN / HORIZONS	2,144,074	308,084	(1,835,990)
SAVINGS PLAN	1,625,730	214,101	(1,411,629)
PENSION SAVINGS PLAN	36,645	4,687	(31,958)
MEGAFLEX	6,613,389	840,957	(5,772,432)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$32,823,693</b>	<b>\$4,650,894</b>	<b>(\$28,172,799)</b>
<b>OPEB CONTRIBUTION</b>	<b>1,775,147</b>	<b>442,642</b>	<b>(1,332,505)</b>
<b>OTHER BENEFITS</b>	<b>3,345,000</b>	<b>733,088</b>	<b>(2,611,912)</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$37,943,840</b>	<b>\$5,826,624</b>	<b>(\$32,117,216)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$98,387,160</b>	<b>\$17,527,949</b>	<b>(\$80,859,211)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**LACERA BUDGET CONTROL REPORT**

**SUMMARY OF SERVICES AND SUPPLIES  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER / (UNDER) BUDGET</b>
AUTO EXPENSES	\$133,500	(\$14,823)	(\$148,323)
COMMUNICATIONS	535,000	138,853	(396,147)
TRANSPORTATION & TRAVEL	605,100	54,906	(550,194)
POSTAGE	1,021,400	404,333	(617,067)
STATIONERY & FORMS	653,300	72,039	(581,261)
OFFICE SUPPLIES & EQUIPMENT	845,700	80,242	(765,458)
INSURANCE	1,248,900	373,983	(874,917)
EQUIPMENT MAINTENANCE	258,300	67,109	(191,191)
EQUIPMENT RENTS & LEASES	287,000	44,051	(242,949)
BUILDING COSTS	7,211,300	1,426,158	(5,785,142)
PARKING FEES	437,000	79,370	(357,630)
PROFESSIONAL & SPECIALIZED SERVICES	4,272,700	615,627	(3,657,073)
BANK SERVICES	200,500	(99,542)	(300,042)
LEGAL FEES & SERVICES	1,571,000	681,195	(889,805)
DISABILITY FEES & SERVICES	3,145,300	679,332	(2,465,968)
COMPUTER SERVICES & SUPPORT	5,018,600	2,695,702	(2,322,898)
EDUCATIONAL EXPENSES	1,253,000	83,554	(1,169,446)
MISCELLANEOUS	682,100	91,590	(590,510)
<b>TOTAL</b>	<b>\$29,379,700</b>	<b>\$7,473,681</b>	<b>(\$21,906,019)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**BOARD OF RETIREMENT**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>TRANSPORTATION AND TRAVEL</b>				
9181	TRANSPORTATION	\$11,000	\$469	(\$10,531)
9182	TRAVEL	82,500	5,617	(76,883)
	TOTAL	93,500	6,086	(87,414)
<b>EDUCATIONAL EXPENSES</b>				
9961	MEMBERSHIPS	44,000	0	(44,000)
9962	REGISTRATION FEES	30,000	1,570	(28,430)
9963	EDUCATIONAL MATERIALS	12,000	1,324	(10,676)
	TOTAL	86,000	2,894	(83,106)
<b>MISCELLANEOUS</b>				
9983	OFF-SITE BOARD MEETING EXPENSE	45,000	0	(45,000)
9984	FOOD/BEVERAGES	12,000	0	(12,000)
	TOTAL	57,000	0	(57,000)
<b>GRAND TOTAL</b>		<b>\$236,500</b>	<b>\$8,981</b>	<b>(\$227,519)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**BOARD OF INVESTMENTS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$22,000	\$1,852	(\$20,148)
9182	TRAVEL	220,000	38,070	(181,930)
	TOTAL	242,000	39,923	(202,077)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	85,000	1,515	(83,485)
9962	REGISTRATION FEES	60,000	6,689	(53,311)
9963	EDUCATIONAL MATERIALS	5,000	778	(4,222)
	TOTAL	150,000	8,982	(141,018)
	<b>MISCELLANEOUS</b>			
9983	OFF-SITE BOARD MEETING EXPENSE	60,000	72,594	12,594
9984	FOOD/BEVERAGES	6,000	0	(6,000)
	TOTAL	66,000	72,594	6,594
	<b>GRAND TOTAL</b>	<b>\$458,000</b>	<b>\$121,499</b>	<b>(\$336,501)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**ADMINISTRATIVE SERVICES DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$2,638,546	\$467,748	(\$2,170,798)
AGENCY TEMPORARY	473,400	79,235	(394,165)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	49,400	476	(48,924)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	6,900	930	(5,970)
SICKLEAVE BUYBACK	7,300	4,142	(3,158)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,175,546</b>	<b>\$552,531</b>	<b>(\$2,623,015)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	590,795	104,188	(486,607)
FICA CONTRIBUTION	41,833	7,374	(34,459)
COUNTY SUBSIDY - INSURANCE	119,980	9,771	(110,209)
OPTIONS PLAN	739,774	69,433	(670,341)
LIFE INSURANCE	1,795	207	(1,588)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	22,263	3,853	(18,410)
THRIFT PLAN / HORIZONS	91,729	13,695	(78,034)
SAVINGS PLAN	28,457	4,511	(23,946)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	78,976	17,340	(61,636)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,715,602</b>	<b>\$230,373</b>	<b>(\$1,485,229)</b>
OPEB CONTRIBUTION	88,501	22,435	(66,066)
OTHER BENEFITS	166,766	36,548	(130,218)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,970,869</b>	<b>\$289,356</b>	<b>(\$1,681,513)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$5,146,415</b>	<b>\$841,887</b>	<b>(\$4,304,528)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**ADMINISTRATIVE SERVICES DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$10,000	\$0	(\$10,000)
9103	GAS	1,000	345	(655)
9105	LICENSE FEES	500	23	(477)
9106	SPECIAL ORDER - AUTOMOBILE	100,000	(17,230)	(117,230)
	TOTAL	111,500	(16,862)	(128,362)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	1,100	79	(1,021)
9182	TRAVEL	6,900	0	(6,900)
	TOTAL	8,000	79	(7,921)
	<b>POSTAGE</b>			
9201	POSTAGE METER	330,000	300,000	(30,000)
9204	CALLER BOX SERVICE ANNUAL FEE	1,400	1,423	23
	TOTAL	331,400	301,423	(29,977)
	<b>STATIONERY AND FORMS</b>			
9264	MISC STATIONERY & FORMS	3,800	0	(3,800)
	TOTAL	3,800	0	(3,800)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	26,000	1,976	(24,024)
9305	SAFETY AND HEALTH SUPPLIES	50,000	3,798	(46,202)
9306	COMPUTER SUPPLIES	75,000	12,917	(62,083)
9307	STANDARD STOCK	125,000	6,590	(118,410)
9337	OFFICE FURNISHINGS	50,000	3,003	(46,997)
9352	ERGONOMIC ITEMS	1,000	810	(190)
	TOTAL	327,000	29,095	(297,905)
	<b>INSURANCE</b>			
9381	FIDUCIARY INSURANCE	372,800	(145)	(372,945)
9382	UMBRELLA POLICY	26,300	16,106	(10,194)
9384	EARTHQUAKE/FLOOD	74,000	76,204	2,204
9386	CRIME INSURANCE POLICY	26,000	0	(26,000)
9387	BUSINESS PACKAGE	66,000	51,633	(14,367)
9388	EMPLOYMENT PRACTICE LIABILITY INSURANCE	123,300	222,213	98,913
9390	CYBER LIABILITY INSURANCE	552,000	0	(552,000)
9391	TERRORISM INSURANCE	8,500	7,973	(527)
	TOTAL	1,248,900	373,983	(874,917)



# FISCAL YEAR 2022-2023

## ADMINISTRATIVE SERVICES DIVISION

### DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	<b>EQUIPMENT MAINTENANCE</b>			
9401	FAX MACHINES	\$1,000	\$0	(\$1,000)
9423	TIME CLOCK MAINTENANCE	300	0	(300)
9426	SECURITY SYSTEM (PANIC BUTTONS)	2,000	0	(2,000)
	TOTAL	3,300	0	(3,300)
	<b>EQUIPMENT RENTS AND LEASES</b>			
9452	MAILING EQUIPMENT	42,000	9,828	(32,172)
9463	PRODUCTION COPIERS - LEASES	245,000	34,224	(210,776)
	TOTAL	287,000	44,051	(242,949)
	<b>BUILDING COSTS</b>			
9476	BUILDING OPERATIONAL COSTS	6,151,300	1,391,228	(4,760,072)
9477	OVERTIME HVAC/LIGHTING	135,000	15,078	(119,922)
9480	FACILITIES MAINTENANCE	175,000	8,354	(166,646)
9481	RENOVATION PROJECTS	750,000	11,497	(738,503)
	TOTAL	7,211,300	1,426,158	(5,785,142)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9552	BUSINESS CONTINUITY SERVICES	50,000	0	(50,000)
9553	ARCHIVE/ OFF-SITE STORAGE	50,000	0	(50,000)
9677	SHREDDING SERVICE	25,000	4,317	(20,683)
9685	COURIER SERVICE	25,000	2,526	(22,474)
9686	FURNITURE OFF-SITE STORAGE	18,000	1,505	(16,495)
9688	UNIVERSAL MAIL DELIVERY SERVICE	8,000	2,585	(5,415)
9689	NEXT DAY MAIL DELIVERY SERVICE	65,000	12,538	(52,462)
9723	BROKERAGE SERVICES FEE	125,000	92,000	(33,000)
	TOTAL	366,000	115,471	(250,529)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	3,000	197	(2,803)
9962	REGISTRATION FEES	10,000	0	(10,000)
9963	EDUCATIONAL MATERIALS	500	198	(302)
	TOTAL	13,500	395	(13,105)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	10,000	2,444	(7,556)
9990	RIDESHARE	3,500	0	(3,500)
	TOTAL	13,500	2,444	(11,056)
	<b>GRAND TOTAL</b>	<b>\$9,925,200</b>	<b>\$2,276,237</b>	<b>(\$7,648,963)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**BENEFITS DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$6,706,995	\$1,519,209	(\$5,187,786)
AGENCY TEMPORARY	154,900	26,534	(128,366)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	398,100	127,315	(270,785)
BILINGUAL BONUS	3,600	750	(2,850)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	16,300	0	(16,300)
SICKLEAVE BUYBACK	12,000	7,506	(4,494)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$7,291,895</b>	<b>\$1,681,314</b>	<b>(\$5,610,581)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,642,863	324,153	(1,318,710)
FICA CONTRIBUTION	115,549	25,393	(90,156)
COUNTY SUBSIDY - INSURANCE	170,239	17,377	(152,862)
OPTIONS PLAN	1,396,465	199,792	(1,196,673)
LIFE INSURANCE	8,257	1,244	(7,013)
HEALTH INSURANCE TEMPS	175,669	23,253	(152,416)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	241,475	47,867	(193,608)
SAVINGS PLAN	49,184	7,638	(41,546)
PENSION SAVINGS PLAN	18,302	3,082	(15,220)
MEGAFLEX	201,319	35,729	(165,590)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$4,019,322</b>	<b>\$685,527</b>	<b>(\$3,333,795)</b>
OPEB CONTRIBUTION	224,962	69,376	(155,586)
OTHER BENEFITS	423,908	92,903	(331,005)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$4,668,192</b>	<b>\$847,806</b>	<b>(\$3,820,386)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$11,960,086</b>	<b>\$2,529,120</b>	<b>(\$9,430,966)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**BENEFITS DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$1,300	\$57	(\$1,243)
9182	TRAVEL	5,200	257	(4,943)
	TOTAL	6,500	314	(6,186)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	3,400	0	(3,400)
	TOTAL	3,400	0	(3,400)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9516	RECORD SEARCHES	1,000	0	(1,000)
9572	PENSION BENEFIT INFORMATION	15,000	0	(15,000)
9674	MEMBER VERIFICATION	25,000	4,650	(20,350)
	TOTAL	41,000	4,650	(36,350)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	2,400	225	(2,175)
9962	REGISTRATION FEES	5,000	0	(5,000)
9963	EDUCATIONAL MATERIALS	200	0	(200)
	TOTAL	7,600	225	(7,375)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	800	0	(800)
	TOTAL	800	0	(800)
	<b>GRAND TOTAL</b>	<b>\$59,300</b>	<b>\$5,189</b>	<b>(\$54,111)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**COMMUNICATIONS**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,242,896	\$229,406	(\$1,013,490)
AGENCY TEMPORARY	56,200	3,033	(53,167)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	4,800	434	(4,366)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,000	0	(1,000)
SICKLEAVE BUYBACK	3,500	1,207	(2,293)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,308,396</b>	<b>\$234,080</b>	<b>(\$1,074,316)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	311,053	50,027	(261,026)
FICA CONTRIBUTION	19,751	3,557	(16,194)
COUNTY SUBSIDY - INSURANCE	88,526	8,095	(80,431)
OPTIONS PLAN	140,031	21,620	(118,411)
LIFE INSURANCE	190	33	(157)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	37,263	5,011	(32,252)
SAVINGS PLAN	26,079	3,481	(22,598)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	117,440	13,669	(103,771)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$740,334</b>	<b>\$105,492</b>	<b>(\$634,842)</b>
OPEB CONTRIBUTION	41,689	11,067	(30,622)
OTHER BENEFITS	78,556	17,216	(61,340)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$860,578</b>	<b>\$133,776</b>	<b>(\$726,802)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,168,975</b>	<b>\$367,855</b>	<b>(\$1,801,120)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**COMMUNICATIONS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$500	\$0	(\$500)
9182	TRAVEL	4,000	0	(4,000)
	TOTAL	4,500	0	(4,500)
	<b>POSTAGE</b>			
9205	NEWSLETTER POSTAGE	185,000	55,236	(129,764)
9207	ANNUAL BENEFITS STATEMENT POSTAGE	90,000	0	(90,000)
9210	MISCELLANEOUS MAILINGS	25,000	47,674	22,674
	TOTAL	300,000	102,910	(197,090)
	<b>STATIONERY AND FORMS</b>			
9233	DISABILITY RETIREMENT APPEAL	5,000	0	(5,000)
9235	PLANS BROCHURES	80,000	0	(80,000)
9237	SURVIVOR - BROCHURES	2,500	0	(2,500)
9239	WITHDRAWAL/RECIPROCITY - BROCHURES	3,500	0	(3,500)
9240	ANNUAL REPORT	55,000	0	(55,000)
9242	ANNUAL BENEFITS STATEMENT	110,000	0	(110,000)
9246	FORMS	25,000	0	(25,000)
9249	LACERA CALENDARS	8,000	0	(8,000)
9253	NEW MEMBER WELCOME PACKAGE	10,000	0	(10,000)
9255	PRE-RET GUIDE	25,000	8,892	(16,108)
9256	POSTSCRIPT PRINTING	80,000	27,073	(52,927)
9259	RETIREEES - INSERTS	6,000	0	(6,000)
9261	SPOTLIGHT PRINTING	68,000	26,256	(41,744)
9262	SURVEY	1,500	0	(1,500)
9263	UNANTICIPATED PROJECTS	36,000	9,606	(26,394)
9265	SPECIALIZED MAILINGS	20,000	0	(20,000)
9266	DIRECT DEPOSIT BROCHURES	3,000	0	(3,000)
9267	Q & A BROCHURES	7,000	22	(6,978)
9268	TRANSFER BROCHURES	3,000	0	(3,000)
9269	DISABILITY RETIREMENT PACKETS	15,000	0	(15,000)
9274	STATIONERY	40,000	190	(39,810)
9280	ANNUAL BENEFIT STATEMENT PDF/CD'S	16,000	0	(16,000)
9281	ESTIMATE PACKAGE	2,000	0	(2,000)
9282	NEW RETIREE PACKAGE	3,000	0	(3,000)
9283	POWER OF ATTORNEY	15,000	0	(15,000)
9285	RETIREMENT UNIVERSITY	5,000	0	(5,000)
9286	COMMUNITY PROPERTY GUIDE	5,000	0	(5,000)
	TOTAL	649,500	72,039	(577,461)

**FISCAL YEAR 2022-2023**

**COMMUNICATIONS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	\$6,000	\$833	(\$5,167)
	TOTAL	6,000	833	(5,167)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9627	NEWSLETTER MAILINGS	30,000	7,573	(22,427)
9628	HR CONFERENCE/FORUM	2,000	0	(2,000)
9719	CAMPAIGNS	10,000	0	(10,000)
9720	REBRANDING	5,000	0	(5,000)
	TOTAL	47,000	7,573	(39,427)
	<b>COMPUTER SERVICES &amp; SUPPORT</b>			
9837	MACINTOSH CONSULTING & SUPPORT	2,500	670	(1,830)
9840	MACINTOSH SOFTWARE PACKAGE	1,500	0	(1,500)
9855	MACINTOSH EQUIPMENT	10,000	0	(10,000)
	TOTAL	14,000	670	(13,330)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	400	0	(400)
9962	REGISTRATION FEES	25,000	0	(25,000)
9963	EDUCATIONAL MATERIALS	4,000	0	(4,000)
	TOTAL	29,400	0	(29,400)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	600	0	(600)
	TOTAL	600	0	(600)
	<b>GRAND TOTAL</b>	<b>\$1,051,000</b>	<b>\$184,025</b>	<b>(\$866,975)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**DISABILITY LITIGATION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,371,867	\$310,017	(\$1,061,850)
AGENCY TEMPORARY	9,800	0	(9,800)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	6,600	0	(6,600)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	900	0	(900)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,389,167</b>	<b>\$310,017</b>	<b>(\$1,079,150)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	335,810	65,693	(270,117)
FICA CONTRIBUTION	22,636	4,651	(17,985)
COUNTY SUBSIDY - INSURANCE	96,904	13,265	(83,639)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	67,188	11,217	(55,971)
SAVINGS PLAN	74,414	12,479	(61,935)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	235,076	38,623	(196,453)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$832,028</b>	<b>\$145,927</b>	<b>(\$686,101)</b>
OPEB CONTRIBUTION	46,014	12,652	(33,362)
OTHER BENEFITS	86,707	19,003	(67,704)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$964,749</b>	<b>\$177,582</b>	<b>(\$787,167)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,353,917</b>	<b>\$487,599</b>	<b>(\$1,866,318)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**DISABILITY LITIGATION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$1,100	\$0	(\$1,100)
9103	GAS	1,500	113	(1,387)
9105	LICENSE FEES	300	0	(300)
	TOTAL	2,900	113	(2,787)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	1,100	0	(1,100)
9182	TRAVEL	5,400	0	(5,400)
	TOTAL	6,500	0	(6,500)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	2,000	0	(2,000)
	TOTAL	2,000	0	(2,000)
	<b>LEGAL FEES AND SERVICES</b>			
9772	OUTSIDE LEGAL COUNSEL	5,000	0	(5,000)
9775	ON-LINE LEGAL/MEDICAL RESEARCH	0	579	579
9777	LITIGATION SUPPORT	500	0	(500)
	TOTAL	5,500	579	(4,921)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	3,500	0	(3,500)
9962	REGISTRATION FEES	3,000	50	(2,950)
9963	EDUCATIONAL MATERIALS	30,000	5,387	(24,613)
	TOTAL	36,500	5,437	(31,063)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	500	0	(500)
	TOTAL	500	0	(500)
	<b>GRAND TOTAL</b>	<b>\$53,900</b>	<b>\$6,129</b>	<b>(\$47,771)</b>

\* All amounts rounded to the nearest dollar.



**FISCAL YEAR 2022-2023**

**DISABILITY RETIREMENT**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$4,134,839	\$954,651	(\$3,180,188)
AGENCY TEMPORARY	129,000	9,415	(119,585)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	165,300	15,814	(149,486)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	4,500	0	(4,500)
SICKLEAVE BUYBACK	6,000	1,784	(4,216)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$4,439,639</b>	<b>\$981,664</b>	<b>(\$3,457,975)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,104,267	214,782	(889,485)
FICA CONTRIBUTION	69,674	15,372	(54,302)
COUNTY SUBSIDY - INSURANCE	443,933	53,505	(390,428)
OPTIONS PLAN	290,522	39,153	(251,369)
LIFE INSURANCE	1,504	166	(1,338)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	136,789	25,966	(110,823)
SAVINGS PLAN	106,043	20,449	(85,594)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	522,297	99,989	(422,308)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$2,675,028</b>	<b>\$469,382</b>	<b>(\$2,205,646)</b>
OPEB CONTRIBUTION	138,688	46,757	(91,931)
OTHER BENEFITS	261,338	57,275	(204,063)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$3,075,055</b>	<b>\$573,414</b>	<b>(\$2,501,641)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$7,514,693</b>	<b>\$1,555,077</b>	<b>(\$5,959,616)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**DISABILITY RETIREMENT**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$1,500	\$0	(\$1,500)
9182	TRAVEL	6,500	0	(6,500)
	TOTAL	8,000	0	(8,000)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	5,800	331	(5,469)
	TOTAL	5,800	331	(5,469)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9673	PHOTOCOPIES OF DOCUMENTS	215,000	37,637	(177,363)
9695	JOB ANALYST	15,000	0	(15,000)
	TOTAL	230,000	37,637	(192,363)
	<b>LEGAL FEES AND SERVICES</b>			
9772	OUTSIDE LEGAL COUNSEL	25,000	2,966	(22,034)
	TOTAL	25,000	2,966	(22,034)
	<b>DISABILITY FEES AND SERVICES</b>			
9802	HEARING OFFICER FEES	150,000	17,830	(132,170)
9803	MEDICAL FEES	2,800,000	655,118	(2,144,882)
9804	COURT REPORTER	25,000	3,010	(21,990)
9805	INVESTIGATIVE SERVICES	20,000	3,373	(16,627)
9806	DATABASE SEARCHES	300	1	(299)
9807	MEDICAL ADVISOR	150,000	0	(150,000)
	TOTAL	3,145,300	679,332	(2,465,968)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	200	0	(200)
9962	REGISTRATION FEES	10,000	0	(10,000)
9963	EDUCATIONAL MATERIALS	500	0	(500)
	TOTAL	10,700	0	(10,700)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	300	0	(300)
	TOTAL	300	0	(300)
	<b>GRAND TOTAL</b>	<b>\$3,425,100</b>	<b>\$720,266</b>	<b>(\$2,704,834)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**EXECUTIVE OFFICE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$2,065,815	\$369,432	(\$1,696,383)
AGENCY TEMPORARY	1,129,700	245,627	(884,074)
LACERA INTERN PROGRAM	0		0
STIPENDS	65,000	8,567	(56,433)
OVERTIME	25,600	2,078	(23,522)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,400	0	(1,400)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,287,515</b>	<b>\$625,703</b>	<b>(\$2,661,812)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	435,949	73,453	(362,496)
FICA CONTRIBUTION	36,566	6,360	(30,206)
COUNTY SUBSIDY - INSURANCE	185,499	20,506	(164,993)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	62,245	10,586	(51,659)
SAVINGS PLAN	86,032	14,228	(71,804)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	369,135	55,279	(313,856)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,175,425</b>	<b>\$180,413</b>	<b>(\$995,012)</b>
OPEB CONTRIBUTION	69,290	13,818	(55,472)
OTHER BENEFITS	130,567	28,615	(101,952)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,375,283</b>	<b>\$222,846</b>	<b>(\$1,152,437)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$4,662,799</b>	<b>\$848,549</b>	<b>(\$3,814,250)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**EXECUTIVE OFFICE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$4,000	\$39	(\$3,961)
9103	GAS	6,500	1,189	(5,311)
9105	LICENSE FEES	1,800	461	(1,339)
	TOTAL	12,300	1,689	(10,611)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	3,000	106	(2,894)
9182	TRAVEL	19,000	2,069	(16,931)
	TOTAL	22,000	2,174	(19,826)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	3,500	285	(3,215)
	TOTAL	3,500	285	(3,215)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9672	IMPROVEMENT PROJECTS	80,000	0	(80,000)
9714	SECURITY ASSESSMENT & MONITORING	75,000	0	(75,000)
9716	PUBLIC & MEDIA RELATIONS	125,000	3,295	(121,705)
9724	STRATEGIC PLANNING	321,000	141,825	(179,175)
9725	SOFTWARE SUBSCRIPTION SERVICES	95,000	0	(95,000)
	TOTAL	696,000	145,120	(550,880)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	15,000	6,099	(8,901)
9962	REGISTRATION FEES	24,000	0	(24,000)
9963	EDUCATIONAL MATERIALS	5,000	1,297	(3,703)
	TOTAL	44,000	7,396	(36,604)
	<b>MISCELLANEOUS</b>			
9982	EMPLOYEE RECOGNITION PROGRAM	2,000	500	(1,500)
9984	FOOD/BEVERAGES	2,500	534	(1,966)
9986	MISCELLANEOUS	6,000	0	(6,000)
	TOTAL	10,500	1,034	(9,466)
	<b>GRAND TOTAL</b>	<b>\$788,300</b>	<b>\$157,699</b>	<b>(\$630,601)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**FINANCIAL AND ACCOUNTING SERVICES DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$2,346,649	\$435,647	(\$1,911,002)
AGENCY TEMPORARY	778,100	89,069	(689,031)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	65,300	20,892	(44,408)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	7,500	80	(7,420)
SICKLEAVE BUYBACK	12,000	3,054	(8,946)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,209,549</b>	<b>\$548,742</b>	<b>(\$2,660,807)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	563,475	100,835	(462,640)
FICA CONTRIBUTION	41,272	7,044	(34,228)
COUNTY SUBSIDY - INSURANCE	57,864	4,582	(53,282)
OPTIONS PLAN	559,291	64,798	(494,493)
LIFE INSURANCE	1,841	227	(1,614)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	122,442	15,969	(106,473)
SAVINGS PLAN	18,543	2,019	(16,524)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	69,410	6,903	(62,507)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,434,138</b>	<b>\$202,377</b>	<b>(\$1,231,761)</b>
OPEB CONTRIBUTION	78,710	21,567	(57,143)
OTHER BENEFITS	148,317	32,505	(115,812)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,661,165</b>	<b>\$256,448</b>	<b>(\$1,404,717)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$4,870,714</b>	<b>\$805,190</b>	<b>(\$4,065,524)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**FINANCIAL AND ACCOUNTING SERVICES DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$3,200	\$58	(\$3,142)
9182	TRAVEL	18,600	5,680	(12,920)
	TOTAL	21,800	5,738	(16,062)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	5,000	0	(5,000)
	TOTAL	5,000	0	(5,000)
	<b>BANK SERVICES</b>			
9753	BANK CHARGES - STATE STREET	200,500	(99,542)	(300,042)
	TOTAL	200,500	(99,542)	(300,042)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	6,500	915	(5,585)
9962	REGISTRATION FEES	10,000	0	(10,000)
9963	EDUCATIONAL MATERIALS	2,500	371	(2,129)
	TOTAL	19,000	1,286	(17,714)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	3,000	0	(3,000)
	TOTAL	3,000	0	(3,000)
	<b>GRAND TOTAL</b>	<b>\$249,300</b>	<b>(\$92,517)</b>	<b>(\$341,817)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**HUMAN RESOURCES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,948,338	\$296,427	(\$1,651,911)
AGENCY TEMPORARY	95,300	21,590	(73,710)
LACERA INTERN PROGRAM	288,000	1,021	(286,979)
STIPENDS	0	0	0
OVERTIME	3,800	201	(3,599)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,700	0	(1,700)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$2,337,138</b>	<b>\$319,239</b>	<b>(\$2,017,899)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	488,260	77,596	(410,664)
FICA CONTRIBUTION	31,106	4,523	(26,583)
COUNTY SUBSIDY - INSURANCE	219,239	20,027	(199,212)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	71,958	11,011	(60,947)
SAVINGS PLAN	88,995	12,362	(76,633)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	388,148	38,944	(349,204)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,287,706</b>	<b>\$164,464</b>	<b>(\$1,123,242)</b>
OPEB CONTRIBUTION	65,350	16,763	(48,587)
OTHER BENEFITS	123,142	26,988	(96,154)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,476,198</b>	<b>\$208,214</b>	<b>(\$1,267,984)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$3,813,337</b>	<b>\$527,454</b>	<b>(\$3,285,883)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023****HUMAN RESOURCES****DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>TRANSPORTATION AND TRAVEL</b>				
9181	TRANSPORTATION	\$1,200	\$0	(\$1,200)
9182	TRAVEL	8,200	0	(8,200)
	TOTAL	9,400	0	(9,400)
<b>OFFICE SUPPLIES AND EQUIPMENT</b>				
9302	SPECIAL ORDERS/MINOR EQUIP	7,000	996	(6,004)
	TOTAL	7,000	996	(6,004)
<b>PARKING FEES</b>				
9491	GATEWAY PLAZA	435,000	79,370	(355,630)
9492	MUSIC CENTER	2,000	0	(2,000)
	TOTAL	437,000	79,370	(357,630)
<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>				
9504	PAYROLL SERVICES	200,000	(4,794)	(204,794)
9510	FINGERPRINTING SERVICES	3,000	832	(2,168)
9511	SECURITY SERVICES - SHERIFF	16,000	0	(16,000)
9512	PAYROLL ENV, DUPLICATE W2'S - AUD	300	15	(285)
9513	PERSONNEL SRVCS - HUMAN RESOURCES	45,000	6,500	(38,500)
9547	HUMAN RESOURCES CONSULTING	125,000	975	(124,025)
9694	BACKGROUND CHECKS	3,000	0	(3,000)
9700	OHS PHYSICALS	1,000	0	(1,000)
9711	REQUEST FOR ACCOMMODATIONS	35,000	375	(34,625)
9718	LEAVE CASE MANAGEMENT PROGRAM	47,500	12,820	(34,680)
9721	ORGANIZATIONAL PROGRAMS	200,000	19,516	(180,484)
	TOTAL	675,800	36,239	(639,561)
<b>COMPUTER SERVICES &amp; SUPPORT</b>				
9838	MISC SOFTWARE PACKAGES	55,000	21,603	(33,397)
	TOTAL	55,000	21,603	(33,397)
<b>EDUCATIONAL EXPENSES</b>				
9961	MEMBERSHIPS	6,000	2,590	(3,410)
9962	REGISTRATION FEES	15,000	0	(15,000)
9963	EDUCATIONAL MATERIALS	6,000	99	(5,901)
9966	DEPARTMENTAL TRAINING	250,000	0	(250,000)
9967	TUITION REIMBURSEMENT PROGRAM	75,000	15,862	(59,138)
9968	MOU TRAINING ALLOCATION	100,000	0	(100,000)
9969	MENTORING PROGRAM	35,000	0	(35,000)
9970	FORUM	22,000	0	(22,000)
	TOTAL	509,000	18,551	(490,449)



**FISCAL YEAR 2022-2023**

**HUMAN RESOURCES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>MISCELLANEOUS</b>				
9981	RECRUITMENT	\$490,000	\$15,113	(\$474,887)
9986	MISCELLANEOUS	2,500	0	(2,500)
9989	WEB DAY	5,500	157	(5,343)
9991	MANAGEMENT OFFSITE	25,000	0	(25,000)
TOTAL		523,000	15,270	(507,730)
<b>GRAND TOTAL</b>		<b>\$2,216,200</b>	<b>\$172,029</b>	<b>(\$2,044,171)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**INTERNAL AUDIT SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,486,653	\$320,310	(\$1,166,343)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	5,000	453	(4,547)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,500	0	(1,500)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,493,153</b>	<b>\$320,763</b>	<b>(\$1,172,390)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	376,954	73,422	(303,532)
FICA CONTRIBUTION	26,266	5,565	(20,701)
COUNTY SUBSIDY - INSURANCE	101,167	13,966	(87,201)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	76,648	10,546	(66,102)
SAVINGS PLAN	78,736	11,592	(67,144)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	285,870	42,793	(243,077)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$945,642</b>	<b>\$157,884</b>	<b>(\$787,758)</b>
OPEB CONTRIBUTION	49,864	16,140	(33,724)
OTHER BENEFITS	93,962	20,593	(73,369)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,089,467</b>	<b>\$194,617</b>	<b>(\$894,850)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,582,622</b>	<b>\$515,380</b>	<b>(\$2,067,242)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**INTERNAL AUDIT SERVICES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,000	\$0	(\$2,000)
9182	TRAVEL	15,000	0	(15,000)
	TOTAL	17,000	0	(17,000)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	1,500	201	(1,299)
	TOTAL	1,500	201	(1,299)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9541	AUDITS	650,000	15,751	(634,249)
9702	AUDIT COMMITTEE CONSULTANT	25,000	0	(25,000)
	TOTAL	675,000	15,751	(659,249)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	8,000	500	(7,500)
9962	REGISTRATION FEES	20,000	0	(20,000)
9963	EDUCATIONAL MATERIALS	2,500	0	(2,500)
	TOTAL	30,500	500	(30,000)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	500	0	(500)
	TOTAL	500	0	(500)
	<b>GRAND TOTAL</b>	<b>\$724,500</b>	<b>\$16,453</b>	<b>(\$708,047)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**INVESTMENT OFFICE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$10,325,037	\$1,937,320	(\$8,387,717)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	1,000	0	(1,000)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	7,200	1,500	(5,700)
RIDESHARE ALLOWANCE	5,000	0	(5,000)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$10,338,237</b>	<b>\$1,938,820</b>	<b>(\$8,399,417)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	2,171,090	296,956	(1,874,134)
FICA CONTRIBUTION	207,799	31,385	(176,414)
COUNTY SUBSIDY - INSURANCE	941,649	71,299	(870,350)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	468,453	49,198	(419,255)
SAVINGS PLAN	592,845	59,709	(533,136)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	2,249,381	241,478	(2,007,903)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$6,631,219</b>	<b>\$750,025</b>	<b>(\$5,881,194)</b>
OPEB CONTRIBUTION	346,317	52,630	(293,687)
OTHER BENEFITS	652,582	143,019	(509,563)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$7,630,116</b>	<b>\$945,674</b>	<b>(\$6,684,442)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$17,968,354</b>	<b>\$2,884,494</b>	<b>(\$15,083,860)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**INVESTMENT OFFICE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$1,000	\$0	(\$1,000)
9103	GAS	1,000	0	(1,000)
9105	LICENSE FEES	400	0	(400)
	TOTAL	2,400	0	(2,400)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	16,400	337	(16,063)
9182	TRAVEL	107,500	0	(107,500)
	TOTAL	123,900	337	(123,563)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	3,500	0	(3,500)
	TOTAL	3,500	0	(3,500)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	100,000	11,150	(88,850)
9962	REGISTRATION FEES	20,000	650	(19,350)
9963	EDUCATIONAL MATERIALS	20,000	5,730	(14,270)
	TOTAL	140,000	17,530	(122,470)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	1,000	235	(765)
	TOTAL	1,000	235	(765)
	<b>GRAND TOTAL</b>	<b>\$270,800</b>	<b>\$18,102</b>	<b>(\$252,698)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**LEGAL SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$4,143,932	\$695,450	(\$3,448,482)
AGENCY TEMPORARY	135,900	21,103	(114,797)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	18,400	3,812	(14,588)
BILINGUAL BONUS	2,400	0	(2,400)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	2,500	0	(2,500)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$4,303,132</b>	<b>\$720,366</b>	<b>(\$3,582,766)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	963,704	142,552	(821,152)
FICA CONTRIBUTION	74,542	11,393	(63,149)
COUNTY SUBSIDY - INSURANCE	563,880	47,856	(516,024)
OPTIONS PLAN	0	0	0
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	159,193	20,490	(138,703)
SAVINGS PLAN	166,677	23,204	(143,473)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	800,118	84,096	(716,022)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$2,728,113</b>	<b>\$329,591</b>	<b>(\$2,398,522)</b>
OPEB CONTRIBUTION	138,993	31,250	(107,743)
OTHER BENEFITS	261,912	57,401	(204,511)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$3,129,019</b>	<b>\$418,242</b>	<b>(\$2,710,777)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$7,432,150</b>	<b>\$1,138,608</b>	<b>(\$6,293,542)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**LEGAL SERVICES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$2,000	\$0	(\$2,000)
9103	GAS	2,000	237	(1,763)
9105	LICENSE FEES	400	0	(400)
	TOTAL	4,400	237	(4,163)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	4,800	40	(4,760)
9182	TRAVEL	13,000	(485)	(13,485)
	TOTAL	17,800	(445)	(18,245)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	(102)	(6,102)
	TOTAL	6,000	(102)	(6,102)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9543	LEGISLATIVE CONSULTING	252,000	63,750	(188,250)
9673	PHOTOCOPIES OF DOCUMENTS	300	14	(286)
	TOTAL	252,300	63,764	(188,536)
	<b>LEGAL FEES AND SERVICES</b>			
9771	ATTORNEY FEES AWARDS	40,000	0	(40,000)
9772	OUTSIDE LEGAL COUNSEL	1,500,000	677,650	(822,350)
9777	LITIGATION SUPPORT	500	0	(500)
	TOTAL	1,540,500	677,650	(862,850)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	15,000	4,422	(10,578)
9962	REGISTRATION FEES	19,000	0	(19,000)
9963	EDUCATIONAL MATERIALS	70,500	15,384	(55,116)
	TOTAL	104,500	19,806	(84,694)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	2,000	0	(2,000)
	TOTAL	2,000	0	(2,000)
	<b>GRAND TOTAL</b>	<b>\$1,927,500</b>	<b>\$760,911</b>	<b>(\$1,166,589)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**MEMBER SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$6,063,633	\$1,209,128	(\$4,854,505)
AGENCY TEMPORARY	37,000	0	(37,000)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	174,000	46,302	(127,698)
BILINGUAL BONUS	16,800	1,950	(14,850)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	10,000	0	(10,000)
SICKLEAVE BUYBACK	15,000	7,536	(7,464)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$6,316,433</b>	<b>\$1,264,917</b>	<b>(\$5,051,516)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,582,192	265,982	(1,316,210)
FICA CONTRIBUTION	103,012	19,557	(83,455)
COUNTY SUBSIDY - INSURANCE	114,487	9,357	(105,130)
OPTIONS PLAN	1,299,871	158,499	(1,141,372)
LIFE INSURANCE	6,956	788	(6,168)
HEALTH INSURANCE TEMPS	149,648	21,768	(127,880)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	262,570	37,668	(224,902)
SAVINGS PLAN	31,675	4,727	(26,948)
PENSION SAVINGS PLAN	16,628	1,605	(15,023)
MEGAFLEX	125,832	23,691	(102,141)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$3,692,871</b>	<b>\$543,643</b>	<b>(\$3,149,228)</b>
OPEB CONTRIBUTION	203,383	55,927	(147,456)
OTHER BENEFITS	383,245	83,992	(299,253)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$4,279,499</b>	<b>\$683,562</b>	<b>(\$3,595,937)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$10,595,931</b>	<b>\$1,948,479</b>	<b>(\$8,647,452)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.



**FISCAL YEAR 2022-2023**

**MEMBER SERVICES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$3,500	\$0	(\$3,500)
9182	TRAVEL	4,500	700	(3,800)
	TOTAL	8,000	700	(7,300)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	5,000	196	(4,804)
	TOTAL	5,000	196	(4,804)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	1,200	0	(1,200)
9962	REGISTRATION FEES	10,000	0	(10,000)
9963	EDUCATIONAL MATERIALS	100	0	(100)
	TOTAL	11,300	0	(11,300)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	1,500	13	(1,487)
9992	FACILITIES RENTAL	1,000	0	(1,000)
	TOTAL	2,500	13	(2,487)
	<b>GRAND TOTAL</b>	<b>\$26,800</b>	<b>\$909</b>	<b>(\$25,891)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**QUALITY ASSURANCE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,952,360	\$348,982	(\$1,603,378)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	21,500	112	(21,388)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	2,200	0	(2,200)
SICKLEAVE BUYBACK	1,000	0	(1,000)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,977,060</b>	<b>\$349,094</b>	<b>(\$1,627,966)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	476,075	85,005	(391,070)
FICA CONTRIBUTION	35,080	5,652	(29,428)
COUNTY SUBSIDY - INSURANCE	139,942	15,742	(124,200)
OPTIONS PLAN	26,858	16	(26,842)
LIFE INSURANCE	222	19	(203)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	71,861	10,171	(61,690)
SAVINGS PLAN	74,756	12,477	(62,279)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	365,150	47,959	(317,191)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,189,944</b>	<b>\$177,040</b>	<b>(\$1,012,904)</b>
OPEB CONTRIBUTION	65,485	18,322	(47,163)
OTHER BENEFITS	123,397	27,044	(96,353)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,378,826</b>	<b>\$222,406</b>	<b>(\$1,156,420)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$3,355,885</b>	<b>\$571,500</b>	<b>(\$2,784,385)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**QUALITY ASSURANCE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,500	\$0	(\$2,500)
9182	TRAVEL	9,500	0	(9,500)
	TOTAL	12,000	0	(12,000)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	1,000	33	(967)
	TOTAL	1,000	33	(967)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9715	COST EFFECTIVE MANAGEMENT (CEM)	50,000	0	(50,000)
	TOTAL	50,000	0	(50,000)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	9,000	550	(8,450)
9962	REGISTRATION FEES	15,000	0	(15,000)
9963	EDUCATIONAL MATERIALS	500	0	(500)
	TOTAL	24,500	550	(23,950)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	400	0	(400)
	TOTAL	400	0	(400)
	<b>GRAND TOTAL</b>	<b>\$87,900</b>	<b>\$583</b>	<b>(\$87,317)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**SYSTEMS DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$6,496,459	\$1,128,259	(\$5,368,200)
AGENCY TEMPORARY	2,909,100	667,883	(2,241,217)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	150,000	49,297	(100,703)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	8,900	0	(8,900)
SICKLEAVE BUYBACK	12,000	8,635	(3,365)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$9,576,459</b>	<b>\$1,854,075</b>	<b>(\$7,722,385)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,478,309	238,348	(1,239,961)
FICA CONTRIBUTION	112,388	18,638	(93,750)
COUNTY SUBSIDY - INSURANCE	443,141	37,357	(405,784)
OPTIONS PLAN	435,969	55,683	(380,286)
LIFE INSURANCE	2,007	354	(1,653)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	274,260	38,690	(235,570)
SAVINGS PLAN	203,294	25,224	(178,070)
PENSION SAVINGS PLAN	1,715	0	(1,715)
MEGAFLEX	805,236	94,462	(710,774)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$3,756,321</b>	<b>\$508,756</b>	<b>(\$3,247,565)</b>
OPEB CONTRIBUTION	217,901	53,939	(163,962)
OTHER BENEFITS	410,601	89,987	(320,614)
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$4,384,821</b>	<b>\$652,683</b>	<b>(\$3,732,138)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$13,961,282</b>	<b>\$2,506,757</b>	<b>(\$11,454,525)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

# FISCAL YEAR 2022-2023

## SYSTEMS DIVISION

### DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
<b>COMMUNICATIONS</b>				
9121	MOBILE DEVICES SERVICE & EQUIPMENT	\$150,000	\$34,288	(\$115,712)
9124	ENTERPRISE INTERNET CONNECTION	165,000	38,202	(126,798)
9125	TELEPHONE CONNECTION	120,000	63,950	(56,050)
9130	REMOTE SUPPORT	15,000	0	(15,000)
9133	TELEPHONE SYSTEM SUPPLIES & MODIFICATIONS	15,000	0	(15,000)
9135	TELEPHONE SYSTEM MAINTENANCE	70,000	2,413	(67,587)
	TOTAL	535,000	138,853	(396,147)
<b>TRANSPORTATION AND TRAVEL</b>				
9181	TRANSPORTATION	1,600	0	(1,600)
9182	TRAVEL	2,600	0	(2,600)
	TOTAL	4,200	0	(4,200)
<b>POSTAGE</b>				
9208	MONTHLY RETIREE CHECK MAILING	390,000	0	(390,000)
	TOTAL	390,000	0	(390,000)
<b>OFFICE SUPPLIES AND EQUIPMENT</b>				
9302	SPECIAL ORDERS/MINOR EQUIP	11,000	11,475	475
9332	COMPUTER MONITORS	80,000	0	(80,000)
9336	COMPUTER PRINTER	10,000	0	(10,000)
9344	COMPUTER ACCESSORIES	13,000	562	(12,438)
9345	COMPUTER PERIPHERALS	30,000	1,044	(28,956)
9347	STORAGE MEDIA	15,000	0	(15,000)
9348	BOARD MEMBER TECH SUPPORT	50,000	4,187	(45,813)
9353	DIVISIONAL IT SUPPLIES/EQUIPMENT	130,000	20,617	(109,383)
9354	REMOTE WORKFORCE EQUIPMENT	130,000	10,488	(119,512)
	TOTAL	469,000	48,373	(420,627)
<b>EQUIPMENT MAINTENANCE</b>				
9411	AUDIOVISUAL MAINTENANCE	40,000	0	(40,000)
9412	KEY CARD SECURITY SYSTEM (DAS)	25,000	49,928	24,928
9414	LAN HARDWARE MAINTENANCE	75,000	0	(75,000)
9419	ON-SITE PRINTER MAINTENANCE	20,000	244	(19,756)
9424	EQUIP MAINT - UPS - SERVER ROOM	20,000	7,922	(12,078)
9436	EQUIP MAINT - AIR CONDITIONING	30,000	5,976	(24,024)
9438	AUDIOVISUAL ENHANCEMENTS	25,000	0	(25,000)
9439	SURVEILLANCE SYSTEM	5,000	0	(5,000)
9442	FIRE SUPPRESSION SYSTEM	5,000	0	(5,000)
9443	GENERATOR SYSTEM	10,000	3,039	(6,961)
	TOTAL	255,000	67,109	(187,891)

# FISCAL YEAR 2022-2023

## SYSTEMS DIVISION

### DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>				
9502	EDP CHARGES - ISD	\$99,500	\$1,397	(\$98,103)
9509	AUDITOR CONTROLLER - PAYROLL SERVICES	86,100	0	(86,100)
9550	ADVANCED WORKFLOW CONCEPTS	140,000	0	(140,000)
9574	KNOWLEDGE & DOC MGMT PROJECTS	300,000	0	(300,000)
9680	IRON MOUNTAIN MEDIA STORAGE	30,000	5,879	(24,121)
9681	RETIREE PAYROLL PRINTING	244,000	18,285	(225,715)
9692	HOTSITE SERVICES	20,000	17,038	(2,962)
9717	CLOUD MIGRATION	200,000	109,716	(90,284)
9722	MAINFRAME SERVICES	120,000	37,108	(82,892)
	TOTAL	1,239,600	189,422	(1,050,178)
<b>COMPUTER SERVICES &amp; SUPPORT</b>				
9831	LAN SOFTWARE & LIC - NEW	1,265,000	229,766	(1,035,234)
9832	LAN SOFTWARE & LIC - EXISTING	1,854,600	1,723,171	(131,429)
9833	MAINFRAME SOFTWARE & LIC - EXISTING	1,100,000	289,012	(810,988)
9843	LAN NETWORK HARDWARE - NEW	150,000	385,042	235,042
9853	TELECOM SOFTWARE AND LICENSES	0	1,056	1,056
9879	CO-LOCATION	200,000	39,217	(160,783)
9882	BOARDROOM OPERATION MGMT SYSTEMS (I & II)	100,000	6,165	(93,835)
9923	PUBLIC BROADCAST AND/OR STREAMING	30,000	0	(30,000)
9930	TELEPHONE SYSTEM UPDATES	250,000	0	(250,000)
	TOTAL	4,949,600	2,673,430	(2,276,170)
<b>EDUCATIONAL EXPENSES</b>				
9961	MEMBERSHIPS	1,500	0	(1,500)
9962	REGISTRATION FEES	30,000	0	(30,000)
9963	EDUCATIONAL MATERIALS	5,000	0	(5,000)
	TOTAL	36,500	0	(36,500)
<b>MISCELLANEOUS</b>				
9986	MISCELLANEOUS	500	0	(500)
	TOTAL	500	0	(500)
<b>GRAND TOTAL</b>		<b>\$7,879,400</b>	<b>\$3,117,187</b>	<b>(\$4,762,213)</b>

\* All amounts rounded to the nearest dollar.

**FISCAL YEAR 2022-2023**

**RETIREE HEALTH CARE BENEFITS PROGRAM**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$3,006,805	\$665,443	(\$2,341,362)
AGENCY TEMPORARY	149,800	26,273	(123,527)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	121,800	47,239	(74,561)
BILINGUAL BONUS	4,800	750	(4,050)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	3,600	0	(3,600)
SICKLEAVE BUYBACK	10,000	4,128	(5,872)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,296,805</b>	<b>\$743,834</b>	<b>(\$2,552,971)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	702,460	136,991	(565,469)
FICA CONTRIBUTION	42,868	9,562	(33,306)
COUNTY SUBSIDY - INSURANCE	77,259	6,340	(70,919)
OPTIONS PLAN	480,282	74,870	(405,412)
LIFE INSURANCE	1,571	321	(1,250)
HEALTH INSURANCE TEMPS	121,229	3,550	(117,679)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	111,791	19,035	(92,756)
SAVINGS PLAN	43,690	5,988	(37,702)
PENSION SAVINGS PLAN	47,226	1,416	(45,810)
MEGAFLEX	146,891	23,367	(123,524)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,775,266</b>	<b>\$281,440</b>	<b>(\$1,493,826)</b>
OPEB CONTRIBUTION	100,853	19,358	(81,495)
OTHER BENEFITS	0	0	0
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,876,120</b>	<b>\$300,798</b>	<b>(\$1,575,322)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$5,172,923</b>	<b>\$1,044,632</b>	<b>(\$4,128,291)</b>

\* All amounts rounded to the nearest dollar.

\*\* Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/22, except Agency Temporary and Rideshare Allowance which are through 09/30/22.

**FISCAL YEAR 2022-2023**

**RETIREE HEALTH CARE BENEFITS PROGRAM**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$1,500	\$77	(\$1,423)
9182	TRAVEL	23,200	447	(22,753)
	TOTAL	24,700	523	(24,177)
	<b>POSTAGE</b>			
9212	SPECIAL RETIREE MAILINGS	300,000	1,540	(298,460)
	TOTAL	300,000	1,540	(298,460)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	4,500	783	(3,717)
	TOTAL	4,500	783	(3,717)
	<b>OPERATIONAL COSTS</b>			
9482	RENT	203,800	50,519	(153,281)
9483	DEPARTMENTAL OVERHEAD	4,337,199	1,084,300	(3,252,899)
	TOTAL	4,540,999	1,134,819	(3,406,180)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9541	AUDITS	141,100	0	(141,100)
9545	HEALTH CARE CONSULTING	750,000	123,600	(626,400)
9573	OPEB VALUATION	338,300	90,075	(248,225)
	TOTAL	1,229,400	213,675	(1,015,725)
	<b>BANK SERVICES</b>			
9753	BANK CHARGES - STATE STREET	21,500	4,802	(16,698)
	TOTAL	21,500	4,802	(16,698)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	4,000	321	(3,679)
9962	REGISTRATION FEES	15,000	0	(15,000)
9963	EDUCATIONAL MATERIALS	300	0	(300)
	TOTAL	19,300	321	(18,979)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	300	0	(300)
	TOTAL	300	0	(300)
	<b>GRAND TOTAL</b>	<b>\$6,140,699</b>	<b>\$1,356,464</b>	<b>(\$4,784,235)</b>

\* All amounts rounded to the nearest dollar.





# **FY 2022-2023 Mid-Year Budget Review**



# Budget Policy

LACERA's Budget Policy (rev. 2021) requires annual review and anticipates the need for adjustments

## CEO Authority

- Transfers of up to \$1M across major accounts (between S&EB and S&S)

## JOGC Role

- Review & recommend action for BOR/BOI

## BOR/BOI Role

- Must approve any transfers outside of CEO authority
- Must approve any position changes (N/A today)
- Must approve any additional appropriation within CERL limit (N/A today)



# FY 2022-23 Administrative Budget

## Proposed Mid-Year Adjustment Summary

Administrative Budget	FY 2022-2023 Approved Budget	Mid-Year Adjustment Amount	Proposed Amended Budget	% Change
Salaries & Employee Benefits	\$98,387,160	(\$2,979,600)	\$95,407,560	-3.00%
Services & Supplies	\$29,279,700	\$2,979,600	\$32,259,300	10.10%
<b>Operating Budget Total</b>	<b>\$127,666,860</b>	<b>\$0</b>	<b>\$127,666,860</b>	<b>0.00%</b>

# Proposed Budget Adjustments By Division



DIVISION	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED AMOUNT	% CHANGE
Administrative Services	\$15,071,615	(\$81,739)	\$14,989,876	-0.5%
Board of Retirement	\$236,500	\$55,000	\$291,500	23.3%
Board of Investments	\$458,000	\$40,000	\$498,000	8.7%
Communications	\$3,219,975	\$203,000	\$3,422,975	6.3%
Disability Litigation	\$2,407,817	\$0	\$2,407,817	0.0%
Disability Retirement	\$10,939,793	\$0	\$10,939,793	0.0%
Executive Office	\$5,451,099	(\$56,947)	\$5,394,151	-1.0%
Financial & Accounting Services	\$5,120,014	(\$193,536)	\$4,926,478	-3.8%

# Proposed Budget Adjustments By Division



DIVISION	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED AMOUNT	% CHANGE
Human Resources	\$6,029,537	(\$190,000)	\$5,839,537	-3.2%
Internal Audit	\$3,307,122	\$161,374	\$3,468,496	4.9%
Investment Office	\$18,239,154	(\$896,966)	\$17,342,188	-4.9%
Legal Services	\$9,359,650	\$1,097,546	\$10,457,195	11.7%
Member Services	\$10,622,731	(\$143,317)	\$10,479,414	-1.3%
Quality Assurance	\$3,443,785	(\$525,417)	\$2,918,368	-15.3%
Systems	\$21,840,682	\$531,003	\$22,371,686	2.4%
<b>TOTAL</b>	<b>\$127,766,860</b>	<b>\$0</b>	<b>\$127,766,860</b>	<b>0.0%</b>



# Significant Adjustments – Services & Supplies (S&S)

## Administrative Services – Renovation Costs

- 7<sup>th</sup> Floor Renovation for FASD & Systems staff  
Original budget in FY 21/22 = \$1.3 M – Project Delayed  
FY 22/23 budget was \$750,000 – assumed project would start in FY 21/22  
Total Project Need = \$1.3 M in FY 22/23

## Legal Services

- Outside Legal Counsel increase of \$1.5 M

## Technology (Systems & Information Security)

- UPS Upgrade (\$150,000) budgeted in FY 21/22 and deferred
- AWS Cost increase (\$100,000)
- HR Automation Project (\$100,000)
- Information Security Software & Assessment (\$139,000)

# Proposed Adjustment to Salaries & Employee Benefits (S&EB)



S&EB CATEGGORY	FY 2022-2023 APPROVED BUDGET	MID-YEAR ADJUSTMENT	PROPOSED AMENDED BUDGET	% CHANGE
Salaries & Other Pay	\$60,443,320	(\$1,218,914)	\$59,224,406	-2.0%
Variable Benefits	\$32,823,693	(\$1,760,686)	\$31,063,007	-5.4%
OPEB Contribution	\$1,775,147	\$0	\$1,775,147	0.0%
Other Benefits	\$3,345,000	\$0	\$3,345,000	0.0%
<b>Total Salaries &amp; Other Benefits</b>	<b>\$98,387,160</b>	<b>(\$2,979,600)</b>	<b>\$95,407,560</b>	<b>-3.0%</b>

# **Budget to Actual Data First Quarter Year to Date**





## FY 2022-23 Budget to First Quarter Actual

### Administrative Budget

Administrative Budget	FY 2022-2023 Approved Budget	Year-to Date 09/30/22	Over/(Under) Budget	% Variance
Salaries & Employee Benefits	\$98,387,160	\$17,527,949	(\$80,859,211)	-82.2%
Services & Supplies	\$29,379,700	\$7,473,681	(\$21,906,019)	-74.6%
<b>Operating Budget Total</b>	<b>\$127,766,860</b>	<b>\$25,001,630</b>	<b>(\$102,765,230)</b>	<b>-80.4%</b>



## FY 2022-23 Budget to First Quarter Actual

### Retiree Healthcare Budget

Retiree Healthcare	FY 2022-2023 Approved Budget	Year-to Date 09/30/22	Over/(Under) Budget	% Variance
Salaries & Employee Benefits	\$5,172,923	\$1,944,632	(\$3,228,291)	-62.4%
Services & Supplies	\$6,150,699	\$1,356,464	(\$4,794,235)	-77.9%
<b>RHC Budget Total</b>	<b>\$11,323,622</b>	<b>\$3,301,096</b>	<b>(\$8,022,526)</b>	<b>-70.8%</b>

## **Recommendation:**

**That the JOGC review and recommend that the Board of Retirement and Board of Investment approve the proposed changes to the 2022-2023 administrative budget.**


# THANK YOU!



## QUESTIONS


November 29, 2022


TO: Trustees – Board of Investments

FROM: Jonathan Grabel   
Chief Investment Officer

Scott Zdrazil   
Principal Investment Officer

Jude Pérez   
Principal Investment Officer

Esmeralda del Bosque   
Acting Principal Investment Officer

Krista Powell   
Investment Officer

Cindy Rivera   
Senior Investment Analyst

Magdalia Armstrong   
Senior Investment Analyst

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **INVESTMENT BELIEFS**

### **RECOMMENDATION**

Approve revised Investment Beliefs and insert the revised Investment Beliefs into LACERA's Investment Policy Statement.

### **BACKGROUND**

LACERA adopted a Statement of Investment Beliefs in 2016. The Board of Investments (Board) incorporated the Investment Beliefs into the body of LACERA's Investment Policy Statement (IPS) in 2018 to frame the core policy guiding LACERA's investment program. The Board initiated a review of the Investment Beliefs as part of the Investment Divisions Strategic Work Plan, as reviewed by the Board in January 2022, to consider prospective refinements to the Investment Beliefs that would reflect any Fund and organizational changes since their initial adoption, as well as to enable periodic Trustee review.

### **PROCESS**

LACERA has conducted an iterative review process to solicit and incorporate input from Trustees and LACERA's general investment consultant, Meketa Investment Group. The Board discussed and provided input at Board Offsite meetings in 2022 and 2021. Trustees were surveyed to obtain feedback, and the results were discussed amongst Trustees, staff, and Meketa. The proposed revisions presented for Trustee consideration today are intended to reflect feedback from Trustees at the September 2022 offsite meeting, as well as collaborative review and input from Meketa.

This recommendation is being presented at the December Board meeting in order to provide timely consideration and continuity by the Trustees who provided input at the September 2022 Board offsite and related Trustee surveys.

Included for Trustee review are the following attachments:

- Attachment 1: Presentation deck including a side-by-side comparison of the current investment belief language and proposed revisions highlighted in green font for each section, including explanations of the proposed refinements.
- Attachment 2: Redlined copy of proposed changes to the Investment Beliefs, as excerpted from the Investment Policy Statement.
- Attachment 3: Clean copy of the proposed Investment Beliefs, reflecting refined language and excerpted from the IPS.
- Attachment 4: Full copy of the current IPS, as adopted by the Board in August 2021, with the current Investment Beliefs starting on page 4.
- Attachment 5: Memo from Meketa Investment Group concurring with staff's recommendation.

If approved by the Board, the clean copy of the proposed language refinements (Attachment 3) will be inserted into the IPS to replace the existing Investment Beliefs language.

### **CONCLUSION**

Staff recommends approval of the revised Investment Beliefs to be incorporated into LACERA's IPS.

#### **Attachments**

Noted and Reviewed:



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Jonathan Grabel  
Chief Investment Officer

# Investment Beliefs

## Board of Investments Meeting December 14, 2022



Tim Filla – Senior Vice President (Meketa Investment Group)  
Krista Powell – Investment Officer (LACERA)  
Cindy Rivera – Senior Investment Analyst (LACERA)  
Magdalia Armstrong – Senior Investment Analyst (LACERA)

**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**

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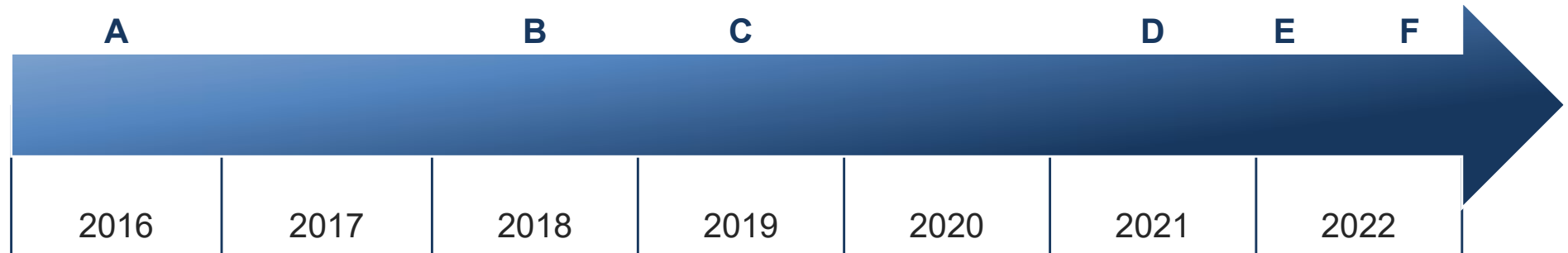
# Recommendation

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## Recommendation

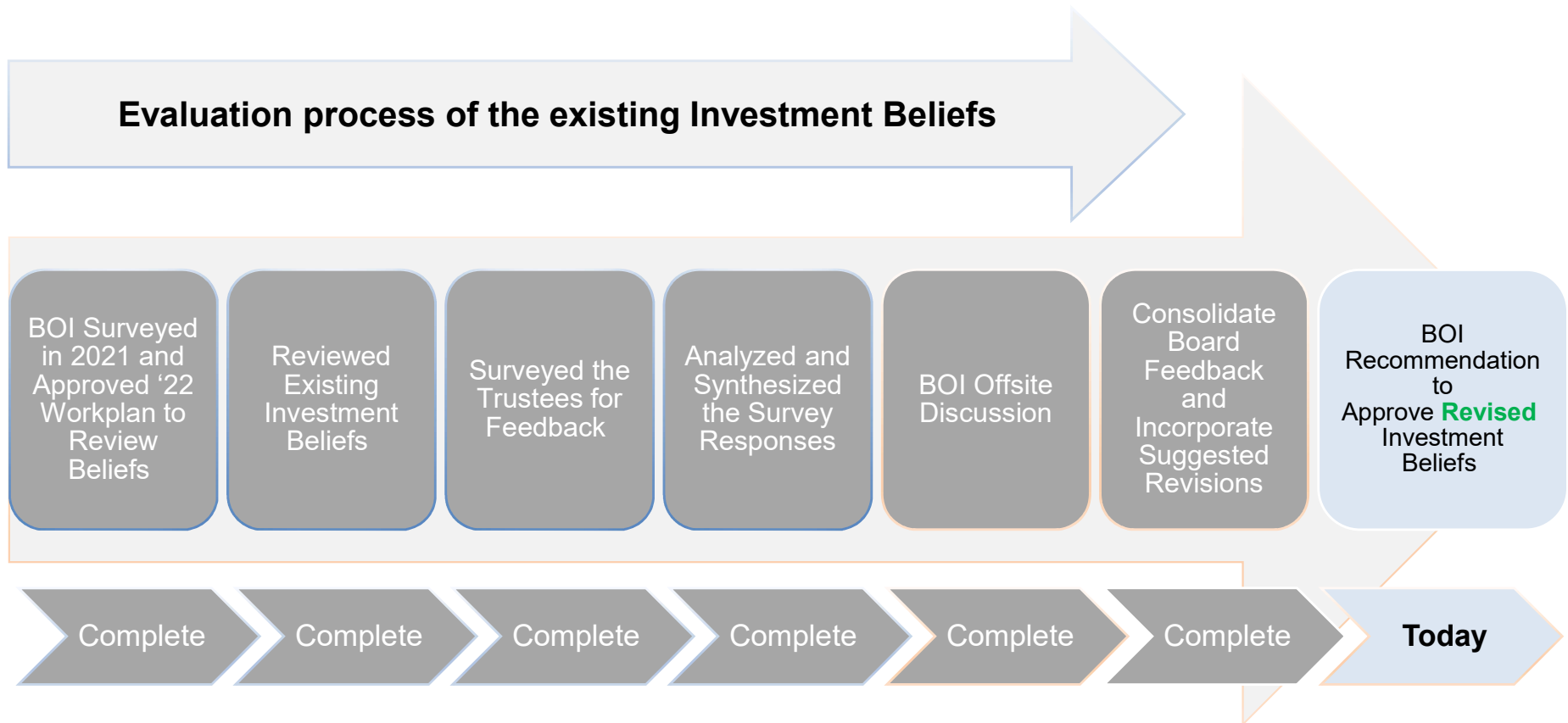
Approve revised Investment Beliefs and insert the revised Investment Beliefs into LACERA's Investment Policy Statement.

# Background



- A** LACERA adopted a standalone Statement of Investment Beliefs
- B** The Investment Beliefs were incorporated into and frame LACERA's updated and restated Investment Policy Statement
- C** The Investment Beliefs help 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 Plan<sup>1</sup> demonstrated how each strategic initiative is rooted in Investment Beliefs
- F** LACERA's BOI Offsite included a review of survey results and a discussion on Investment Beliefs

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



*The following section provides context for recommended revisions for each investment belief and signals **revised language** in green font*

# Proposed Revisions



# I. Strategic Asset Allocation

## BOI Input and Summary of Proposed Language Refinement

- General feedback, the current version did not need too much refinement
- Incorporated language with reference to diversification
- Expanded on inputs of strategic asset allocation

### Current Investment Belief(s)

#### 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.

### Proposed Revisions

#### 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.
- Strategic asset allocation has a greater effect on return variability than asset class investment structure or manager selection.
- Strategic asset allocation is a critical source of investment diversification to optimize growth and mitigate risk across the total Fund.
- Strategic asset allocation must carefully consider plan liabilities, actuarial assumptions, and capital market assumptions.
- Rebalancing the portfolio is a key aspect of prudent long-term strategic asset allocation policy.

## II. Market Dynamics

### BOI Input and Summary of Proposed Language Refinement

- Discussed vagueness of current language and interest in refining for more explanatory power
- Proposed language adds nuance to suggest how market efficiency may vary and is considered to inform portfolio construction and investment allocation decisions

#### Current Investment Belief(s)

##### 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.

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

#### Proposed Revisions

##### Market Dynamics

Capital market efficiencies inform LACERA's strategic asset allocation and portfolio construction.

- The efficiency of financial markets may vary by market segment, geographic region, geopolitical regimes, and across public versus private markets.
- Market transparency, the regulatory environment, behavioral finance factors, and investment time horizons may influence and shape market efficiency.
- LACERA's investment processes should be adequately nimble to prudently capture attractive investment opportunities.

# III. Return

## BOI Input and Summary of Proposed Language Refinement

- Investment beliefs should be forward looking and align with the functional framework
- Taking an “umbrella” approach is favorable when viewing the portfolio holistically

### Current Investment Belief(s)

#### 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.

- 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.

#### Private Markets and Liquidity

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

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

### Proposed Revisions

#### Return

Risk and return are expected to be positively correlated over long-term periods. Returns can be enhanced through active strategies, illiquid investments, and leverage; however, such strategies need to be balanced with LACERA’s risk tolerances, portfolio objectives, and liquidity needs.

- Active strategies will be used when they **are** expected to add value **net-of-fees while adjusting** for risk.
- The total capital allocated to illiquid strategies must be kept at a prudent level.
- Liquid assets serve a critical role to fund benefit payments and rebalance the portfolio.



# IV. Risk

## BOI Input and Summary of Proposed Language Refinement

- The current belief has some confusing and redundant language
- Need to make it more succinct and reduce/eliminate redundant or conflicting language
- Proposed language simplifies the existing language to reflect LACERA's emphasis on IDD\* and ODD\*

Current Investment Belief(s)	Proposed Revisions
<p><b>Risk</b></p> <p>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.</p> <ol style="list-style-type: none"> <li>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.</li> <li>Diversification across different risk factors is necessary for risk reduction.</li> <li>Markets are cyclical; risk premia, volatility, and correlations vary over time.</li> <li>The pattern of returns matters because the volatility levels and the sequence of gains and losses can impact funded status and contribution rates.</li> <li>Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.</li> <li>For LACERA, not taking enough risk is risky; therefore, LACERA will accept a prudent amount of risk to achieve its long-term target returns.</li> <li>LACERA considers the risks of environmental, social, and governance (“ESG”) factors as relevant to its investment process.</li> <li>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.</li> </ol>	<p><b>Risk</b></p> <p>Risk is a broad term used to capture the concept of uncertainty. No single metric adequately conveys risk. LACERA will evaluate risk holistically, incorporating quantitative measures and qualitative assessments in managing its portfolio.</p> <p>Monitoring and managing risk is a key focus for LACERA. Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.</p> <p>Risks confronted by LACERA include, but are not limited to:</p> <ol style="list-style-type: none"> <li>Investment Risks (macroeconomic, volatility, leverage, illiquidity, geography, currency, political, credit, environmental, social, and governance); and</li> <li>Operational Risks (valuation, counterparty, benchmarking, business continuity, talent management, cybersecurity, reputational, fraud, regulatory, and conflicts of interest).</li> </ol>

\* IDD = Investment Due Diligence / ODD = Operational Due Diligence



### BOI Input and Summary of Proposed Language Refinement

- Discussed defining ESG as both financial risk and opportunity in separate subsection
- Trustees emphasized maintaining focus on financial implications of ESG factors (i.e., avoid impact)
- Proposed language reflects IPS language that ESG factors may present financial risk and opportunity
- Adds language to base LACERA's ESG focus in protecting and producing investment returns

#### Current Investment Belief Language

##### ESG

LACERA considers the risks of environmental, social, and governance (ESG) factors as relevant to its investment process.

#### Proposed Revisions

##### Stewardship

LACERA recognizes that environmental, social, and corporate governance factors (ESG) may present financial risks and opportunities for the Fund. LACERA seeks to identify, evaluate, and manage financially relevant ESG factors in its investment process—including portfolio construction, investment due diligence, and stewardship strategies—to safeguard and enhance Fund performance.

### BOI Input and Summary of Proposed Language Refinement

- Discussed adding the importance of contract “terms” to the current language on fees and costs
- Also discussed belief that LACERA should assert its influence to shape fees, costs, and terms
- Proposed language below incorporates terms and reference to LACERA’s ability to exert influence

#### Current Investment Belief(s)

##### 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.

#### Proposed Revisions

##### Terms

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and **each mandate should be structured with the best possible terms available across the total Fund to enhance future outcomes.**

- The breadth of LACERA’s presence in financial markets is an asset to influence terms and fees.**
- Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy.
- Costs, fees, **and terms** should be actively monitored and negotiated to the greatest extent possible.

## VII. Productivity

### BOI Input and Summary of Proposed Language Refinement

- Broaden current “Education” belief to include the role of human capital; consider referencing resources
- Proposed language incorporates the role of people and resources to optimize investment outcomes

Current Investment Belief(s)	Proposed Revisions
<p><b>Education</b></p> <p>In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is fundamental for long-term success.</p>	<p><b>Productivity</b></p> <p>People and resources matter. Constructive talent management, efficient operations and procedures, and a commitment to ongoing education and improvement are essential to optimizing LACERA's investment performance.</p> <ol style="list-style-type: none"><li>Human Capital: Trustees and staff are vital to executing LACERA's investment program. LACERA must cultivate a talented and collaborative workforce that is inclusive of diverse perspectives and backgrounds and demonstrates a steadfast commitment to high ethical conduct.</li><li>Education: In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is fundamental for long-term success.</li><li>Operations: Strong operational processes and sufficient resources can maximize efficiency, mitigate risks, and optimize investment performance.</li></ol>

# Recommendation and Summary

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## Recommendation

- Approve revised Investment Beliefs and insert the revised Investment Beliefs into LACERA's Investment Policy Statement.

## Summary

- This recommendation is being made in consideration of: (i) timeliness relative to the Board Offsite survey and discussion; and (ii) continuity of current Trustees who participated in the Board Offsite survey and discussion
- Meketa and staff collaborated to consolidate Trustee feedback from survey results and the Board Offsite, which inspired the proposed changes
- Below is a summary of considerations regarding the proposed updates to the Investment Beliefs:
  - Reflect the Allocator to Best-in-Class strategic plan
  - Maintain LACERA's core views and principles with language that is timeless
  - Integrate updates to the Fund (e.g., functional framework)
  - Apply a framework that Investment Beliefs should be mission-relevant, principles-based, succinct, and actionable

# 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. Strategic 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. Strategic asset allocation is a critical source of investment diversification to optimize growth and mitigate risk across the total Fund.
- d. Strategic asset allocation must carefully consider plan liabilities, actuarial assumptions, and capital market assumptions.
- e. Rebalancing the portfolio is a key aspect of prudent long-term strategic asset allocation policy.

#### ii. Market ~~Efficiency~~ Dynamics

~~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.~~

Capital market efficiencies inform LACERA's strategic asset allocation and portfolio construction.

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

- a. The efficiency of financial markets may vary by market segment, geographic region, geopolitical regimes, and across public versus private markets.
- b. Market transparency, the regulatory environment, behavioral finance factors, and investment time horizons may influence and shape market efficiency.
- c. LACERA's investment processes should be adequately nimble to prudently capture attractive investment opportunities.

### iii. **Active Versus Passive Management Return**

~~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.~~

Risk and return are expected to be positively correlated over long-term periods. Returns can be enhanced through active strategies, illiquid investments, and leverage; however, such strategies need to be balanced with LACERA's risk tolerances, portfolio objectives, and liquidity needs.

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

- b. The total capital allocated to illiquid strategies must be kept at a prudent level.
- a. ~~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.~~iv. **Risk**

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

- 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.~~

Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.

- e. ~~For LACERA, not taking enough risk is risky; therefore, LACERA will accept a prudent amount of risk to achieve its long-term target returns.~~
- f. ~~LACERA considers the risks of environmental, social, and governance ("ESG") factors as relevant to its investment process.~~
- g. ~~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.~~

Risks confronted by LACERA include, but are not limited to:

- a. Investment Risks (macroeconomic, volatility, leverage, illiquidity, geography, currency, political, credit, environmental, social, and governance); and
- b. Operational Risks (valuation, counterparty, benchmarking, business continuity, talent management, cybersecurity, reputational, fraud, regulatory, and conflicts of interest).

#### **v. Stewardship**

LACERA recognizes that environmental, social, and corporate governance factors (ESG) may present financial risks and opportunities for the Fund. LACERA seeks to identify, evaluate, and manage financially relevant ESG factors in its investment process—including portfolio construction, investment due diligence, and stewardship strategies—to safeguard and enhance Fund performance.

#### **vi. Costs and Fees Terms**

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and cost is the most certain each mandate should be structured with the best possible terms available across the total Fund to enhance future outcomes.

- a. The breadth of LACERA's presence in financial markets is an asset to influence terms and fees.
- b. Consideration of net-of-fees returns is an integral part of a successful long-term investment strategy.
- c. Costs, and fees, and terms should be actively monitored and negotiated to the greatest extent possible.

#### **vii. Productivity**

People and resources matter. Constructive talent management, efficient operations and procedures, and a commitment to ongoing education and improvement are essential to optimizing LACERA's investment performance.

- a. Human Capital: Trustees and staff are vital to executing LACERA's investment program. LACERA must cultivate a talented and collaborative workforce that is inclusive of diverse perspectives and backgrounds and demonstrates a steadfast commitment to high ethical conduct.
- b. Education: In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is fundamental for long-term success.
- c. Operations: Strong operational processes and sufficient resources can maximize efficiency, mitigate risks, and optimize investment performance.

# Investment Policy

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**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.

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- b. Strategic asset allocation has a greater effect on return variability than asset class investment structure or manager selection.
- c. Strategic asset allocation is a critical source of investment diversification to optimize growth and mitigate risk across the total Fund.
- d. Strategic asset allocation must carefully consider plan liabilities, actuarial assumptions, and capital market assumptions.
- e. Rebalancing the portfolio is a key aspect of prudent long-term strategic asset allocation policy.

#### ii. Market Dynamics

Capital market efficiencies inform LACERA's strategic asset allocation and portfolio construction.

- a. The efficiency of financial markets may vary by market segment, geographic region, geopolitical regimes, and across public versus private markets.
- b. Market transparency, the regulatory environment, behavioral finance factors, and investment time horizons may influence and shape market efficiency.
- c. LACERA's investment processes should be adequately nimble to prudently capture attractive investment opportunities.

#### iii. Return



Risk and return are expected to be positively correlated over long-term periods. Returns can be enhanced through active strategies, illiquid investments, and leverage; however, such strategies need to be balanced with LACERA's risk tolerances, portfolio objectives, and liquidity needs.

- a. Active strategies will be used when they are expected to add value net-of-fees while adjusting for risk.
- b. The total capital allocated to illiquid strategies must be kept at a prudent level.
- c. Liquid assets serve a critical role to fund benefit payments and rebalance the portfolio.

#### **iv. Risk**

Risk is a broad term used to capture the concept of uncertainty. No single metric adequately conveys risk. LACERA will evaluate risk holistically, incorporating quantitative measures and qualitative assessments in managing its portfolio. Monitoring and managing risk is a key focus for LACERA. Risk that is not expected to be rewarded over the long-term, or mitigated through diversification, will be minimized.

Risks confronted by LACERA include, but are not limited to:

- a. Investment Risks (macroeconomic, volatility, leverage, illiquidity, geography, currency, political, credit, environmental, social, and governance); and
- b. Operational Risks (valuation, counterparty, benchmarking, business continuity, talent management, cybersecurity, reputational, fraud, regulatory, and conflicts of interest).

#### **v. Stewardship**

LACERA recognizes that environmental, social, and corporate governance factors (ESG) may present financial risks and opportunities for the Fund. LACERA seeks to identify, evaluate, and manage financially relevant ESG factors in its investment process—including portfolio construction, investment due diligence, and stewardship strategies—to safeguard and enhance Fund performance.

#### **vi. Terms**

Investment outcomes are determined by risk, returns, and costs. All three must be managed, and each mandate should be structured with the best possible terms available across the total Fund to enhance future outcomes.

- a. The breadth of LACERA's presence in financial markets is an asset to influence terms and fees.
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- b. Education: In an increasingly complex and dynamic investment universe, continued education on investment concepts and investment strategies within that universe is fundamental for long-term success.
- c. Operations: Strong operational processes and sufficient resources can maximize efficiency, mitigate risks, and optimize investment performance.

# Investment Policy Statement

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



L/CERA

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# 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.

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## **LACERA MISSION STATEMENT**

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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
<b>Growth</b>	<b>53</b>	<b>+/-8</b>	<b>51</b>
Global Equity	32	+/-7	34
Private Equity	17	+3/-5	14
Non-Core Private Real Estate	4	+/-2	3
<b>Credit</b>	<b>11</b>	<b>+/-3</b>	<b>11</b>
Liquid Credit	4	+/-3	6
Illiquid Credit	7	+/-3	5
<b>Real Assets and Inflation Hedges</b>	<b>17</b>	<b>+/-3</b>	<b>17</b>
Core Real Estate	6	+/-3	6
Natural Resources & Commodities	3	+/-2	4
Infrastructure	5	+1/-3	4
TIPS	3	+/-3	3
<b>Risk Reduction and Mitigation</b>	<b>19</b>	<b>+/-6</b>	<b>21</b>
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
<b>Overlays and Hedges</b>	<b>0</b>		<b>0</b>
Cash Overlay	0		0
Currency Hedge	0		0
<b>TOTAL FUND</b>	<b>100.0</b>		<b>100.0</b>

**Table 2: Benchmark Table**

<b>Asset Class</b>	<b>Benchmark</b>
<b>Growth</b>	<b>Custom Blend</b>
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)
<b>Credit</b>	<b>Custom Blend</b>
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)
<b>Real Assets and Inflation Hedges</b>	<b>Custom Blend</b>
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
<b>Risk Reduction and Mitigation</b>	<b>Custom Blend</b>
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
<b>Overlays and Hedges</b>	<b>N/A</b>
Cash Overlay	—
Currency Hedge	—
<b>TOTAL FUND</b>	<b>Custom Blended Policy Benchmark</b>

## 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

<b>General Authorities</b>	<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>
<b>Approval of Variances</b>	<p>Authority to approve temporary variances from asset-level program and investment manager guidelines.</p>
<b>Contract Authorities</b>	<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

<b>Private Equity</b>	<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>
<b>Real Estate</b>	<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>
<b>Real Assets (ex-Real Estate)</b>	<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>
<b>Credit</b>	<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>
<b>Hedge Funds (Including Equity)</b>	<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



# **Corporate Governance and Stewardship Principles**

March 2021

# Corporate Governance and Stewardship Principles

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# About LACERA

The Los Angeles County Employees Retirement Association ("LACERA") administers defined benefit retirement plans and other post-employment benefits for employees of Los Angeles County and certain other districts.

The Los Angeles County Board of Supervisors established LACERA in 1937 under the terms of California's County Employees Retirement Law. LACERA is governed by the California Constitution (Article XVI, Section 17), the California County Employees Retirement Act of 1937, and the California Public Employees' Pension Reform Act of 2013. Today, LACERA serves over 160,000 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 the *Investment Beliefs* that frame its *Investment Policy Statement* and in consideration of actuarial analysis.

LACERA's Board of Investments is responsible for establishing LACERA's investment policy and objectives, as well as exercising oversight of the investment management of the fund.

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## **LACERA MISSION STATEMENT:**

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We Produce, Protect, and Provide  
the Promised Benefits

# Statement of Purpose

LACERA seeks to responsibly steward its investments in a manner that promotes and safeguards the economic interests of LACERA and its members, consistent with LACERA's mission to "produce, protect, and provide the promised benefits." LACERA believes that robust investor rights, strong corporate governance practices and policies at the firms in which it invests, and sound public policies governing financial markets help generate long-term economic performance. LACERA prudently exercises its rights as an investor to support corporate governance practices and financial market policies that promote sustainable, long-term value and enhance LACERA's ability to fulfill its mission.

The fundamental objective of LACERA's *Corporate Governance and Stewardship Principles* (the "Principles") is to safeguard and promote the economic interests of the trust. The *Principles* identify LACERA's core principles of corporate governance and the key stewardship strategies LACERA pursues to advance them. They are intended to further the *Investment Beliefs* that frame LACERA's *Investment Policy Statement* by articulating LACERA's view on sound governance and broader environmental, social, and governance (also known as "ESG") issues.

LACERA seeks to exercise the legal rights it has as an investor and to steward its assets by applying these *Principles*. The *Principles* guide LACERA's proxy votes, engagements with policymakers and portfolio companies, and collaboration with other institutional investors when it shares common objectives (such as actively participating in investor associations). The *Principles* help inform LACERA's investment process, including the evaluation and monitoring of portfolio investments, consistent with the rights and legal obligations of each asset. And the *Principles* outline the legal authority, roles, and responsibilities guiding LACERA's application of the *Principles* and initiatives.

In advocating practices in line with these *Corporate Governance and Stewardship Principles*, LACERA aims to maximize the long-term value of plan holdings.

# Legal Authority

The LACERA Board of Investments has “the sole and exclusive fiduciary responsibility over the assets of” the system, as provided by the California Constitution (Article XVI, Section 17(a)). LACERA exercises its legal rights on corporate governance matters in furtherance of its fiduciary duty under Article XVI, Section 17 of the California Constitution, the County Employees Retirement Law of 1937 (CERL), and other governing laws, regulations, and case authority. The Board’s fiduciary duty has two components:

## A. Duty of Loyalty

Under the duty of loyalty, Board members have the sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. (Article XVI, Section 17(a).) Board members shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. (CERL Section 31595(a).) The Board’s duty to participants and their beneficiaries shall take precedence over any other duty. (Article XVI, Section 17(b).)

## B. Duty of Prudence

Under the duty of prudence, Board members shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims. (Article XVI, Section 17(c); CERL Section 31595(b).) “[T]he Board may, in its discretion, invest or delegate the authority to invest, the assets of the fund 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.” (CERL Section 31595.) Further, the Board “[s]hall diversify the investments of the system so as to minimize risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.” (CERL Section 31595(c).)

The fiduciary obligations of prudence and loyalty to plan participants and beneficiaries compel and guide LACERA’s corporate governance activities and consideration of financially material environmental, social, and governance factors in its investment process. LACERA’s fiduciary duties extend to, but are not limited to, prudently managing its proxy votes, vigilantly monitoring and diligently mitigating risks to the value of its investments, and judiciously determining action in order to assist in the effective administration of the fund and promote the interest of members and their beneficiaries.

# Stewardship Strategies

LACERA's corporate governance and stewardship efforts may include the following strategies:

## A. Proxy Voting

Proxy votes are plan assets, have value, and should be managed in a manner consistent with fiduciary duty and LACERA's interest in long-term value. LACERA exercises its voting rights for the exclusive benefit of LACERA's members and votes proxies in accordance with its *Corporate Governance and Stewardship Principles*.

LACERA seeks to vote all proxies for which it has proxy voting authority. LACERA coordinates with its custodian bank and investment service vendors to maximize its opportunities to responsibly cast proxy votes in line with its fiduciary duty, while recognizing that administrative requirements and practices in certain local markets may affect LACERA's ability to cast proxy votes, such as delayed notification of proxies subsequent to vote deadlines and required powers of attorney in subcustodial chains. At meetings that require share blocking, LACERA evaluates the economic value of casting a proxy vote compared to the risk of limiting trading in the designated security and may opt to refrain from voting in order to preserve LACERA's ability to act in its best economic interests.

LACERA participates in securities lending to earn incremental income, per LACERA's *Securities Lending Program Policy*. In securities lending, the legal rights accorded those shares, including proxy voting, are transferred to the borrower of the securities during the period that the securities are on loan. As a result, LACERA forfeits its right to vote proxies on loaned securities unless those shares have been recalled from the borrower no later than the share's record date.

## B. Corporate Engagement

LACERA advocates its *Investment Beliefs*, *Corporate Governance and Stewardship Principles*, and mission through dialogue and engagement strategies with portfolio companies and external asset managers, which may include exercising legal rights associated with LACERA's investments, such as sponsoring shareowner resolutions.

## C. Public Policy

LACERA represents its interests to policymakers, such as legislators, regulatory agencies, and standards-setting agencies, in line with its *Corporate Governance and Stewardship Principles*.

## D. Investor Collaboration

LACERA collaborates with other public pension funds, asset owners and asset managers, both informally and formally through investor associations such as the Council of Institutional Investors, in order to enhance LACERA's ability to achieve its objectives and advance its *Corporate Governance and Stewardship Principles*.

# Principles

The *Corporate Governance and Stewardship Principles* are organized into five sections. Each section addresses common corporate governance, proxy voting, and broader environmental, social, and governance (“ESG”) issues relevant to LACERA’s investment portfolio and investment partners. The five sections address issues pertaining to boards of directors, investor rights and capital structure, executive compensation and incentives, performance reporting, and environmental and social factors.

The *Corporate Governance and Stewardship Principles* are guided by five core concepts that collectively provide a framework by which LACERA aims to promote sustainable investment returns and responsible stewardship of fund assets:

**Accountability:** Governance structures and practices should be designed to promote accountability to the investors who provide the firm with capital. This extends to both board directors overseeing portfolio companies on investors’ behalf, and external managers entrusted with LACERA’s capital. Accountability helps to ensure that investments are managed in the best interests of investors.

**Integrity:** Integrity and trust are the cornerstone of financial markets and essential for economic stability. Core investor rights and protections are crucial to promoting integrity in financial markets.

**Aligned Interests:** Compensation and incentives should align the interests of the managers of capital and the investors who provide capital. This extends to senior executives at portfolio companies and external asset managers managing capital on LACERA’s behalf.

**Transparency:** Firms should provide investors with clear, comprehensive, and timely disclosures about fundamental elements of the firm’s business, financial activities, and performance.

**Prudence:** Firms should prudently identify, assess, and manage environmental and social factors that may impact the firm’s ability to generate sustainable economic value.

Fiduciary duty guides LACERA’s *Corporate Governance and Stewardship Principles*. LACERA recognizes that sound governance balances the rights of investors providing a firm with capital with the role and responsibility of portfolio company boards to direct and manage the firm.

LACERA recognizes that the application of the *Principles* may vary depending on the specific terms, constraints, and nature of LACERA’s investments in different asset classes. In public markets where LACERA retains voting authority to vote in line with these *Principles*, LACERA evaluates the financial impact of each issue presented on corporate proxies and votes proxies for the exclusive benefit of plan participants and beneficiaries in all instances. LACERA may oppose overly prescriptive or unduly burdensome measures proposed on corporate proxies, or resolutions that may otherwise restrict a firm’s board of directors from acting in the best economic interests of investors.

LACERA also recognizes that the laws, regulations, and customs guiding corporate governance practices vary by market. LACERA seeks to apply its *Corporate Governance and Stewardship Principles* in a universal and consistent manner, while observing and taking into consideration — as applicable and appropriate — local laws, regulations, and customs.



# I. Directors

The board of directors drives the strategic direction and oversight of the firm and its management. LACERA relies upon the directors of portfolio companies to exercise effective oversight and ensure that the firm is managed in the best interests of investors. Directors should understand the firm's long-term business strategy as well as risks that may impact the firm's value, and demonstrate a record of sound stewardship and performance. LACERA advocates policies and practices that encourage directors to be accountable to investors. Accountability ensures that a firm's operations and reporting are managed in the best interests of investors.

## A. Independent Oversight

- 1. Board Independence:** At least two-thirds of the board should be composed of independent directors in order to oversee management on behalf of investors, promote accountability to investors, and avoid potential conflicts of interest.

An independent director is defined as someone who has no material affiliation to the company, its chief executive officer, chairperson, or other executive officers, other than the board seat.

Materiality is defined as any financial, personal, or other relationship that a reasonable person might conclude could potentially influence one's objectivity in a manner that would have a meaningful impact on the individual's ability to satisfy requisite fiduciary standards on behalf of investors. Directors may not be considered independent if they, or a family member, are or have been an employee of the company (or a subsidiary or affiliate thereof) in the last five years; have a 20 percent or greater economic interest in the company; are or have been part of an interlocking director relationship with the CEO; receive direct payments for professional services unrelated to their service as a director in excess of \$10,000 per year; or engage in any related party transaction in excess of \$10,000 per year.

- 2. Board Leadership:** The board should be chaired by an independent director.

- 3. Board Committees:** Each board should establish an audit committee, a nominating and governance committee, and a compensation committee, each composed exclusively of independent directors.

Deference generally should be afforded to boards in determining appropriate oversight structures, such as the establishment and role of additional board committees. LACERA may support proposals to appoint an additional board committee in limited circumstances where a firm's performance, oversight structures, and peer comparisons demonstrate that inadequate board consideration and focus has been accorded to a compelling issue related to firm value.

LACERA may oppose or withhold support from non-independent board nominees or key board leadership positions where the board or key committees lack adequate independence.

## B. Board Quality and Composition

**1. Composition:** The board should be composed of highly talented individuals who are best positioned to oversee the company's strategy for creating and sustaining value. Boards should give consideration to ensuring that directors collectively possess a diverse set of relevant skills, competencies, and attributes to exercise oversight on investors' behalf, including expertise, geographic familiarity, and professional backgrounds relevant to the company's strategic objectives. The board should strive for a suitable mix of tenures to ensure both institutional familiarity and fresh perspectives on the board, as a firm's market environment and business strategies evolve.

The board should establish and disclose policies and processes for ensuring that it identifies and nominates suitable directors from a wide pool of candidates relevant to its business strategy, inclusive of including, but not limited to, diverse gender, racial, and ethnic backgrounds, gender identities, sexual orientations, and disability status. A diverse and inclusive board is better positioned to effectively deliberate and oversee business strategy in investors' interests.

Firms should disclose how the board defines and reflects a relevant and diverse mix of skills and backgrounds in its composition. In assessing board composition, LACERA generally expects to see a compelling link between requisite skill sets and a firm's corporate strategy and a credible track record of inclusivity, consistent with the diverse attributes and backgrounds defined above.

**2. Board Size:** The board should define and disclose in governance documents an appropriate size or range of directors that ensures the board is composed of adequately diverse viewpoints and experience to effectively oversee the firm's business strategy, while not being so large as to diminish the board's operational effectiveness. Modifications to governing documents defining board size and structure should be submitted for investor approval and not be proposed for the purpose of impeding a change in firm control.

**3. Excessive Commitments:** Directors should have adequate time to dedicate to their board service, fulfill their responsibilities, and represent investors' interests. Accordingly, directors should not serve on more than four public company boards. Currently serving chief executive officers should not serve on more than three public boards (including their own).

**4. Tenure and Age Restrictions:** LACERA does not support arbitrary restrictions on director qualifications, such as tenure limits or mandatory retirement ages. Such limitations may impede a firm from benefiting from the expertise of an otherwise highly qualified director.

## C. Director Selection and Elections

**1. Annual Elections:** Each director should be elected annually. Directors should not be elected by classes, or to "staggered" terms.

**2. Vote Standard for Director Elections:** Director nominees in uncontested elections should be elected by a majority of votes cast. In contested director elections, a plurality of votes should determine the election.

- 3. Universal Proxy Card:** In the event of a contested director election, investors should have the right to select and vote for individual director nominees on a consolidated, or “universal,” proxy ballot, regardless of whether the director nominee is put forward by management or a dissident investor.
- 4. Cumulative Voting:** LACERA supports cumulative voting in director elections, in compliance with California Government Code Section 6900.<sup>1</sup>
- 5. Proxy Access:** Long-term investors who have held a significant ownership interest for a reasonable amount of time should have the right to nominate alternative directors for consideration on a firm’s proxy, otherwise known as “proxy access.” Proxy access procedures should have sound safeguards in place to ensure an orderly nominating process and prevent proxy access from being used to effectuate a change in control.
- 6. Ability to Remove Directors:** Investors should have the right to remove directors with or without cause, in order to allow investors to take action when a director is not serving investors’ best interests.

#### D. Board Roles and Responsibilities

- 1. Governance Guidance:** The board should develop, adopt, disclose, and periodically review clearly defined governance guidelines that govern the board’s operations.
- 2. Resources:** The board should have adequate resources and access to information to enable it to execute its responsibilities and duties. Directors should be provided information in advance of meetings. Directors should have full access to senior management and information concerning the firm’s operations. Directors should be familiar with a firm’s operations independent of the chief executive officer and senior management. Directors should have the authority and adequate budget to hire outside experts, if necessary.
- 3. Independent Proceedings:** Directors should work with the chief executive officer to establish board agendas. Independent directors should meet at least annually without management or non-independent directors’ participation.
- 4. Board Communication and Engagement:** Firms should establish reasonable policies that permit effective communication between investors and directors regarding business strategy and corporate governance matters.
- 5. Management Succession Planning:** The board should conduct a regular evaluation of the chief executive officer and plan for business continuity, including establishing and disclosing a succession plan for the chief executive officer and key senior executives.

<sup>1</sup> Section 6900. Cumulative Voting. “Government Body.” Whenever any government body is a shareholder of any corporation, and a resolution is before the shareholders which will permit or authorize cumulative voting for directors, such government body shall vote its shares to permit or authorize cumulative voting. As used in this section, the term “government body” means the state, and any office, department, division, bureau, board, commission or agency thereof, and all counties, cities, districts, public authorities, public agencies and other political subdivisions or public corporations in the state.

**6. Board Self-Evaluation and Refreshment:** Boards should adopt and disclose a process for regular, rigorous, and earnest self-assessment and evaluation. The evaluation process should be conducted under the direction of independent directors and ensure candor, confidentiality, trust, and effective interaction among directors. Board self-evaluation should be tailored to meet the firm's and board's strategic objectives and requirements. In order to promote long-term planning aligned with business needs, the board's self-evaluation process should assess the board's size and operational effectiveness, identify emerging business risks and relevant skills gaps among its composition, and prudently anticipate and proactively plan for board vacancies and refreshment. It should appraise the alignment and adequacy of director education and development, as well as the delineation of management and board powers, while positioning the board to efficaciously exercise oversight in investors' interests.

**7. Charitable and Political Contributions:** Corporate charitable contributions may accrue direct and indirect benefits to a firm and its investors, including goodwill in communities in which it operates and favorable tax treatment. Charitable contributions should not be directed, eliminated, or otherwise restricted by investors.

The board should monitor, assess, and approve all charitable and political contributions (including trade association contributions) made by the firm. Political and charitable contributions should be consistent with the interests of the firm and its investors. The board should clearly define and approve the terms and conditions by which corporate assets may be provided to charitable and political activities, including developing and publicly disclosing guidelines for the approval of such contributions. The board should disclose on an annual basis the amounts and recipients of all monetary and non-monetary contributions made by the firm during the previous fiscal year, including any expenditures earmarked for political or charitable activities that were provided to or through a third party.

**8. Indemnification:** Directors may be provided reasonable and limited protections, including indemnification and limited personal liability for damages resulting from violating duty of care, where the director is found to have acted in good faith and in a manner the director believed to be in the best interests of the firm. Reasonable limitations may ensure the board is positioned to recruit qualified directors.

## **E. Board Performance and Effectiveness**

**1. Performance Evaluation:** The board's performance, and that of individual directors, should be assessed within the context of the board's suitability for and track record of serving and protecting investors' interests. LACERA may withhold support or oppose individual directors, members of a board committee, or the entire board where the track record demonstrates directors' failure to serve investors' best interests. Director and board performance is evaluated in consideration of the following factors:

**1.1. Stewardship and Risk Oversight:** Directors should demonstrate a sound track record of stewardship and risk oversight, including avoiding any material failures of governance, risk oversight, or fiduciary responsibilities at the company. Risk is broadly understood to encompass financial, reputational, and operational risks relevant to a firm's ability to generate sustainable financial returns. Material risks may include, but are not limited to, internal controls related to legal compliance, cyber security, and data privacy, as well as broader risks addressed throughout these *Corporate Governance and Stewardship Principles*, such as risks associated with accounting practices, climate change, and human capital management.

**1.2. Effective Oversight of Management:** Directors should conduct effective oversight of management, including avoiding any failure to replace management as appropriate.

**1.3. Attendance:** Each director should attend at least 75 percent of scheduled board meetings each year, including attendance at assigned committees, absent a compelling, clearly disclosed justification.

**1.4. Board Service:** Directors' track records and performance on other boards may be considered in evaluating director nominees. In particular, a director's failure to effectively exercise oversight on other boards or any egregious actions that raise substantial doubt about the director's ability to fulfill a director's obligations and serve the best interests of investors may prompt opposition to the director's nomination.

**1.5. Ethics:** Directors should demonstrate the utmost integrity and be free of any criminal wrongdoing, breaches of fiduciary responsibilities, or questionable transactions with conflicts of interest.

**1.6. Transparency in Reporting:** Financial reports and material disclosures should be published in a satisfactorily diligent and timely manner.

**1.7. Investor Responsiveness:** Directors should demonstrate accountability and responsiveness to investors. Directors should not unilaterally amend a firm's governing documents in a manner that materially diminishes investor rights or otherwise adversely impacts investors without seeking investor approval. Directors should not adopt a poison pill or make a material change to an existing poison pill without submitting the plan for investor approval within the following 12 months. Directors should take reasonable steps to implement resolutions approved within the previous 12 months by a majority of investors, within the confines of legal and regulatory constraints. Directors should respond to tender offers where a majority of shares have been tendered. There should be no record of abuse against minority investor interests.

**2. Committee Performance:** Each committee should demonstrably fulfill its core duties and the specific responsibilities outlined in its committee charter. LACERA may oppose the committee chair or incumbent directors who have served on committees that have failed to perform their duties in investors' best interests. In cases where governance provisions, such as staggered board elections, impede LACERA from holding designated directors accountable, LACERA may oppose board leadership or other incumbent directors.

Audit Committee members should ensure that non-audit fees are not excessive, no adverse opinion has been rendered on the company's audited financial statements, and the firm has not entered into an inappropriate indemnification agreement that limits legal recourse against the external auditor.

Nominating and Governance Committee members should establish sound governance practices, reasonable and timely responsiveness to investors on governance concerns, and effective board nomination, evaluation, and refreshment practices.

Compensation Committee members should demonstrate a clear and proven track record of aligning executive pay with the firm's strategic objectives and performance, refrain from permitting problematic pay practices, ensure clear disclosures of all key components of pay plan design and practices, and exhibit reasonable and timely responsiveness to investors.

**3. Contested Director Elections:** In assessing director nominees in contested elections, LACERA may consider all relevant factors to identify and support the nominees best suited to enhance sustainable firm value and serve investors' economic interests. Consideration may be given to the long-term financial performance of the firm, its governance profile, and management's track record; nominees' proposed strategies for value creation; the qualifications and suitability of director nominees, including their alignment with LACERA's governance principles; and the dissidents' ownership stake and history of generating sustainable returns at other firms.

LACERA may support requests to reimburse dissident nominees for reasonable, incurred expenses when dissident nominees have presented a compelling case and support for their nomination is warranted.

## II. Investor Rights and Capital Structure

Integrity and trust are the cornerstones of capital markets and essential for economic stability. Core investor rights ensure fair and equitable treatment of investors and help instill investor confidence, thereby facilitating capital formation and economic stability.

LACERA supports core rights and protections at portfolio companies and within financial market policies in order to safeguard its investments and foster a stable investment climate within the broader financial markets in which it invests. Financial rules and regulations should promote fair, orderly, and competitive markets and provide for investor protections. Investor rights extend to key decisions that may fundamentally impact or modify a firm's capital structure, such as share issuances, restructuring, and mergers and acquisitions.

### A. Investor Rights

- 1. Rights Proportionate to Economic Interest:** Investors should have voting rights proportionate to their economic interests. Multiclass ownership structures may entrench certain investors and management, insulating them from acting in the interests of all investors. LACERA therefore supports the principle of "one share, one vote."
- 2. Voting Requirements and Procedures:** Investors should have the right to act on fundamental corporate matters by a simple majority of votes cast. Fundamental matters may include, but are not limited to, amending a firm's governing documents (such as its charter or bylaws) and effecting corporate transactions, such as a merger or acquisition.
  - 2.1 Simple Majority Voting:** Companies should not adopt supermajority voting requirements except when such provisions may protect outside or minority investors from unilateral action being taken by an entity (or entities) with controlling interest or significant insider ownership.
  - 2.2 Voting Procedures:** Voting and tabulation of matters put before investors by proxy or otherwise should be guided by transparent procedures, consistent application of rules, and fairness for all eligible voters. Votes should be counted by an independent tabulator and kept confidential. Voting results should be promptly disclosed once tabulation has been finalized.
  - 2.3 Bundled Voting:** Investors should be able to review and cast votes on unrelated matters as separate and distinct ballot items. Disparate matters should not be presented for investor consideration as a "bundled" voting item. LACERA may oppose bundled proposals that combine supportable voting items with matters that LACERA opposes.
  - 2.4 Broker Non-Votes:** Uninstructed broker votes and abstentions should be counted for quorum purposes only.



### 3. Annual Meetings

**3.1 Quorum Requirements:** Quorum requirements should promote that a broad range of investors are represented at meetings. Quorum requirements should not be unduly low, in either absolute terms or relative to the economic interest of a controlling investor or significant investor, in order to protect investors from unrepresentative action being conducted.

**3.2 Technology:** Investors should have the right to attend an annual meeting of a firm in person. Any use of technology, such as audiocasts or webcasts, should expand and enhance, and not restrict or otherwise impede, investors' ability to participate in an annual meeting, and should afford opportunities for meeting participation equal to those afforded investors attending the meeting in person.

**3.3 Resolutions:** Investors with a reasonable ownership interest in a firm should have the right to put forward a resolution for investors' consideration and vote at the firm's annual meeting.

**3.4 Advance Notice Requirements:** Investors should be able to submit items for formal consideration at an annual meeting, such as proposals or director nominees, as close to the meeting date as reasonably possible and within the broadest timeframe possible, recognizing the need to allow sufficient notice for company, regulatory, and investor review.

**3.5 Transaction of Other Business:** LACERA generally opposes requests for advance approval by proxy of undisclosed business items that may come before an investor meeting for consideration.

**4. Special Meetings:** Investors should be able to call a special meeting to take action on certain matters that may occur between regularly scheduled annual meetings. The right to call a special meeting should require aggregating a minimum of 10 percent ownership interest and be subject to reasonable terms and conditions.

**5. Action by Written Consent:** Investors should have the right to act by written consent on key governance matters under reasonable terms and conditions.

**6. Access to Research:** Investors should have access to competitive, timely, and independent market, investment, and proxy research services of their choosing. Market regulation should support and not impede a competitive market of service providers.

**7. Ownership Disclosure:** Significant ownership interests above 5 percent should be disclosed.

**8. Incorporation:** A firm's country or state of incorporation may significantly impact the firm's financial health, competitive position, governance profile, and the legal rights afforded to investors, as defined by the jurisdiction of incorporation. When selecting a jurisdiction for incorporation (such as in relation to a merger or acquisition or a proposed reincorporation), firms should give due consideration to competitively positioning the firm for financial success while also ensuring sound governance practices and strong legal rights and protections for investors. LACERA may oppose proposals for reincorporation where the business and financial rationale for reincorporation do not outweigh the detrimental impact of a reincorporation on investor rights and governance provisions.



**9. Litigation Rights:** Robust and viable litigation rights enable investors to protect firm value, deter misconduct, and seek recourse in the event of egregious corporate malfeasance or fraud. Corporations should not curtail or otherwise diminish investors' prospective legal recourse through governance provisions, such as exclusive forum designations for legal disputes, mandatory arbitration clauses, or "fee-shifting" provisions by which an investor who unsuccessfully brings legal action must bear the entirety of the corporation's legal costs.

## B. Capital Structure

Finding the optimal mix of equity, long-term debt, and short-term financing is critical to driving economic returns. A firm's capital structure should support the generation of long-term, sustainable returns. The board should determine and drive a firm's capital structure, in coordination with senior management. Capital structure should coordinate and balance multiple factors, including the firm's business profile, strategy, and opportunities for growth; access to and cost of capital; and capital distributions such as the firm's dividend policy.

Investors should be able to vote on matters that may fundamentally modify or impact a firm's capital structure, such as common share issuances, and mergers and acquisitions.

**1. Share Issuances and Authorizations:** Share issuances enable firms to raise funds for financing purposes.

**1.1 Authorization of Common Shares Issuance:** Requests to authorize capital or approve share issuances should specify the quantity of shares for which approval is sought. Requests should be evaluated upon careful consideration of the individual details and merits of each request and according to LACERA's economic interests. Firms should present a compelling purpose for the share issuance, demonstrate a track record of responsibly using authorized shares in investors' interests, and provide for rights and restrictions attached to proposed equity that are aligned with investors' interests. In evaluating requests, the availability of preemptive rights and any risks of authorizing the share issuance, including the dilutive impact of the request, may also be considered. Capital authorization terms should not facilitate an anti-takeover device or otherwise adversely impact investors' interests.

**1.2 Preemptive Rights:** Preemptive rights provide current investors the right to maintain a proportionate interest in a firm by exercising a right to purchase shares proportionate to what they already own in any new issuances of equity. Requests to create or abolish preemptive rights should consider the size of the firm, the characteristics of its investor base, and the liquidity of its equity to ensure that preemptive rights may be pragmatically exercised and do not impose an onerous restriction on capital raising.

**1.3 Preferred Shares Authorization:** Preferred shares, which provide distinct features such as fixed dividend payments or seniority of claims relative to common shares, may be supportable when the purpose of such issuance is in connection with a proposed transaction appearing on the same ballot that merits support. Otherwise, requests for authorization are evaluated in consideration of the request's stated purpose, the firm's past use of authorized preferred shares, and an assessment of the risk of authorizing the share issuance, including the dilutive impact of the request, and should not create or increase shares that carry superior voting rights to common shares. Any conversion rights should define reasonable conversion ratios and not result in excessive dilution of common shares.

**1.4 Blank Check Preferred Shares:** Firms generally should not create classes of shares providing the board with broad discretion to define voting, conversion, dividend distribution, and other rights, absent a compelling rationale and clearly stated restrictions in line with investors' interests. The voting rights of unissued shares should be presented for investor approval and not be subject to board discretion.

**1.5 Blank Check Preferred Share Placements:** Investor approval should be required for the placement of preferred shares with any person or group for other than general corporate purposes to enable investor review of the business purpose, prospective impact on dilution and voting positions, and any adverse impact on existing investors.

**1.6 Reverse Stock Split:** Reverse stock splits, by which multiple shares are exchanged for a lesser amount to increase share price, generally should be accompanied by a proportionate reduction in authorized shares.

**2. Debt Issuance and Borrowing Powers:** Debt issuances and restructuring, amendments to a firm's aggregate limit on the board's ability to borrow money, and other debt-related items should serve a compelling and clearly articulated business purpose, be in line with and supportive of generating sustainable and viable financial returns, and take into reasonable consideration any detrimental impact on existing investors. LACERA evaluates debt-related proposals upon careful consideration of the individual terms and merits of the request.

**3. Capital Allocation and Income Distributions:** A firm should allocate capital, including distribution of income through dividends or share repurchases, in a disciplined and balanced manner that supports the generation of long-term value.

**3.1 Allocation of Income:** Firms should provide adequate justification when seeking investor approval for the allocation of income when the payout ratio appears unbalanced or unsustainable (either inordinately low, such as below 30 percent, or excessive, given the firm's financial position).

**3.2 Stock (Scrip) Dividend Policy:** Firms may provide investors the option to receive dividend payments in the form of common equity in lieu of cash. Such provisions enable a firm to retain cash and may strengthen the position and commitment of long-term investors. In all circumstances, firms should provide a cash option, absent a compelling justification that such an option may be harmful to investors.

**3.3 Share Repurchase Programs:** Open market share repurchase plans should enable investors to participate on equal terms and support balanced and disciplined capital allocation. Requests to authorize share repurchases should have a defined and limited duration, incorporate clear and reasonable terms and conditions, and generally not exceed 10 percent for market repurchases within any single authority, absent a compelling rationale in line with investors' interests and market practice.

**4. Mergers, Acquisitions, and Other Corporate Restructuring:** Mergers and corporate restructuring (including spin-offs, leveraged buyouts, and reorganizations) have major financial implications for investors.

**4.1 Evaluation:** LACERA carefully examines all relevant facts and circumstances of each proposal to determine whether the proposal, in its entirety, is in LACERA's best interests. Assessment of each proposed transaction takes into account multiple factors. The valuation should be reasonable. Market reaction may be considered. The strategic rationale and expected benefits should be sensible, with any projected synergies or financial impact reasonably achievable. Management should have a favorable track record of successful integration of acquisitions or business combinations. The negotiation and deal process should be fair and equitable. There should be no conflicts of interest, such as factors enabling insiders to disproportionately benefit from the proposed transaction. The resulting entity should observe sound corporate governance practices. The risks of not completing the transaction or corporate restructuring may be considered. Sufficient information should be provided to enable investors to make an informed decision.

**4.2 Appraisal Rights:** Investors should be afforded appraisal rights by which they may seek a judicial review of the terms of certain corporate transactions in order to determine fair market value.

**5. Anti-Takeover Measures:** Investors should be afforded the reasonable opportunity to deliberate and decide on the merits of takeover bids and acquisitions. Practices and provisions, including corporate bylaws, charters, laws, and statutes, that may impede or deter a corporate transaction that is otherwise in investors' interests, may take a variety of forms and generally should be submitted for investor review and approval.

**5.1 Poison Pills:** The board should not enact or amend a poison pill without investor approval. LACERA generally supports the redemption of existing poison pills, except in unique circumstances where a carefully designed, short-term plan may enable a firm to negotiate more favorable terms with a potential bidder. Such plans should require a minimum 20 percent ownership threshold to trigger, provide for limited and reasonable duration, exclude provisions by which only continuing directors may remove the pill, and otherwise provide adequate investor protections so that the plan will not unduly impede a bid that is otherwise in investors' interests.

**5.2 Net Operating Loss (NOL) Protective Amendments:** Protective amendments with the stated purpose of preserving a company's net operating losses for a tax benefit, such as under the terms of Section 382 of the Internal Revenue Code, should balance the anticipated benefit to investors of preserving the tax value and the risk of potential abuse of such provisions as an anti-takeover measure. Because NOL protective amendments may serve as a poison pill, the board should submit related items for investor review and approval. Such provisions should only be used under limited, clearly justified circumstances and include adequate protections, such as an appropriate ownership threshold and clearly defined and reasonable duration limits.

**5.3 Greenmail:** Greenmail, by which a firm repurchases shares of a potential acquirer at an above-market price to deter a takeover, should be prohibited.

**5.4 Other Anti-Takeover Measures:** LACERA generally opposes provisions that impose onerous restrictions or impediments on prospectively beneficial takeover bids, taking into account the specific terms and circumstances of such provisions to determine the provision's alignment with LACERA's economic interests. LACERA supports firms opting out of related anti-takeover laws and statutes, where legally permitted.

Fair price provisions that require an investor seeking to purchase control of a firm to pay a defined fair price should not impose onerous requirements that may deter a competitive bid from being considered by investors.

Firms should opt out of control share acquisition statutes that void the voting rights of an investor surpassing certain ownership thresholds; control share cash-out provisions requiring an investor above a specified ownership threshold to purchase shares from remaining investors at the highest acquiring price if remaining investors exercise their right to sell their shares; and freeze-out provisions requiring an investor who meets a defined ownership threshold to wait a specified period of time before gaining control of the firm.

Disgorgement provisions, by which an investor who acquires ownership interest above a specified threshold must pay the firm any profits realized from the sale of the firm's equity purchased within a defined time period prior to exceeding the defined ownership threshold, should be avoided.

Firms should not provide designated investors (such as the government of a related, formerly state-owned enterprise) "golden shares" that provide for exceptional veto power or voting rights regarding specific corporate proposals.

**6. Related-Party Transactions:** Investors should have the right to approve significant related-party transactions. Investor approval helps to protect investors against self-dealing. Firms should provide clear information regarding such transactions — including all fees, a compelling rationale for the service or services provided, and the assessment of independent directors and an independent financial advisor of the transactions — in order to permit an informed assessment of prospective conflicts of interest.

### III. Compensation and Incentives

Compensation and incentives should align the interests of senior executives and investors. Executive compensation and incentives serve a critical role in recruiting, motivating, and retaining talent. Pay plan design, structure, and goals should be fundamentally derived from and relevant to a firm's core business objectives and collectively promote sustainable value creation. Accordingly, pay and incentives should incentivize and reward executives for the achievement of outstanding performance, while encompassing prudent risk mitigation and taking care to avoid excessive risks that may be detrimental to the firm's long-term financial returns.

Boards should determine core components of executive pay design, including target pay levels and incentives. Boards oversee compensation paid to senior executives, award bonuses, and establish incentive plans that may include equity and performance-based grants and awards. The board may also review and approve supplemental compensation plans for firm employees, including employee equity and retirement plans.

Firms should provide investors with transparent, clear, and comprehensive disclosure of senior executives' total compensation package. This includes disclosure of salary, short and long-term incentive compensation, and all benefits and perquisites. Selected performance metrics and targets upon which compensation is contingent should be provided in a plain and clear format.

#### A. Advisory Vote on Executive Compensation

Executive compensation design and practices should be submitted for investor review and non-binding approval on an annual basis (also known as "say on pay"). Advisory votes should consider the firm's pay design and practices as a whole, taking into account the alignment of executive pay with long-term firm performance, the absence of significant problematic pay practices and excessive risk in targets and reward incentives, and the clarity of the firm's pay disclosures.

#### B. Compensation Plan Design

Executive compensation and practices should link pay to firm performance. Compensation should be commensurate with the firm's long-term performance, appropriately aligned with firms with which the firm competes for executive talent (such as industry peers and firms of comparable size and profile), and properly consider the firm's long-term outlook for generating sustainable returns.

- 1. Performance Criteria:** Incentive compensation should incorporate clearly defined, rigorous, and disclosed performance criteria upon which incentive pay is contingent. Performance metrics, targets, and hurdles should be consistent with and promote the firm's strategy for generating sustainable value, including key financial and operating objectives, and effective management of relevant business risks.
- 2. Peer Benchmarking:** Peer groups used to benchmark compensation should be clearly disclosed and relevant to the firm's business profile and size.

- 3. Compensation Consultants:** Compensation consultants providing strategy, design, and implementation services related to executive compensation to the board's compensation committees should be at the exclusive hire and service of the committee, unquestionably independent, and clearly disclosed.
- 4. Equity Ownership, Retention, and Holding Requirements:** Equity ownership among senior executives may strengthen the alignment of interests between executives and investors and promote prudent risk mitigation, and should be encouraged. Equity ownership guidelines providing that executives should maintain reasonable equity in the firm, requirements for executives to retain a meaningful portion of equity acquired through compensation plans, and equity grant holding requirements should strike an appropriate balance to promote equity ownership while avoiding overly restrictive or onerous provisions that may undermine talent motivation and retention to the detriment of investors' interests.
- 5. Prearranged Trading Plans:** Prearranged trading plans, as provided under Securities and Exchange Commission Rule 10b5-1, define parameters for executives' predetermined securities transactions in advance of an executive becoming aware of material non-public information regarding the firm's securities and are intended to mitigate the risks of insider trading. The adoption, amendment, or termination of prearranged trading plans for senior executives should be governed by the board, promptly disclosed, and provide for timely disclosure of transactions made pursuant to the plan's provisions.
- 6. Hedging and Speculative Transactions:** Senior executives should be prohibited from engaging in derivative or speculative transactions involving equity of the firm, including hedging, holding equity in a margin account, or pledging equity as collateral for a loan.
- 7. Internal Pay Disparity:** Executive compensation should be considered in the context of how a firm compensates its employees, including in relation to industry peers. Firms should disclose the ratio of the chief executive officer's total pay to that of the average firm employee.
- 8. Restrictions:** Executive pay should not be subject to arbitrary restrictions or limitations on the magnitude or form of compensation, such as linking executive pay to average employee compensation. Arbitrary limits and restrictions may undermine a firm's ability to attract and retain competent talent and create a competitive disadvantage for the firm.
- 9. Recoupment Policies:** Firms should adopt and disclose rigorous policies defining the terms and conditions by which incentive compensation may be recouped, in order to align pay with performance, promote accurate financial reporting, and deter misconduct. Robust clawback policies should enable the board to review and recoup senior executive incentive compensation in the event that compensation was calculated using inaccurate financial reports, or in the event of fraud or misconduct. Application of the recoupment policy should be reasonably disclosed.
- 10. Perquisites:** Firms should refrain from providing executives with extraordinary or excessive perquisites that are not linked to firm performance, incongruent with prevailing best practices, and unjustified to adequately attract and retain executive talent. Corporate assets should not be unduly expended on personal expenses that are unrelated to an executive's employment and that extend beyond those

widely offered to a firm's employees. Firms should avoid, or otherwise adequately and cogently justify, paying an executive's personal income tax obligations (including excise tax gross-up's), personal use of corporate aircraft, and extensive personal and home security payments.

### C. Equity Plans

Equity plans should motivate plan participants to focus on long-term firm value and returns, encourage equity ownership, and advance the principle of aligning employee interests with those of investors.

Firms should submit equity plans for investor approval. Equity plans should be reviewed taking into account plan features, impact on equity dilution, and prospects to align pay with performance.

- 1. Performance-Based:** Equity plans should define robust and appropriate performance requirements by which equity may be granted that are aligned with and justifiable by the firm's business strategy and strategic objectives. Such provisions may include terms and performance criteria permitting a plan to qualify for favorable tax treatment.
- 2. Track Record:** The firm should demonstrate a history of responsibly linking equity awards to performance and avoiding grants of excessive awards.
- 3. Impact:** The total cost and potential dilution of the plan should be reasonable.
- 4. Repricing:** Equity granted under the terms of the plan, such as share options and stock appreciation rights, should not be repriced without investor approval, as repricing may sever the link between pay and performance. Requests to reprice underwater options should clearly define and compellingly justify the rationale and intent, timing, defined participants, and terms, such as a value-for-value exchange, exercise price, and vesting requirements.

### D. Employee Equity Programs

- 1. Employee Stock Purchase Plans:** Employee stock purchase plans encourage firm employees to acquire an ownership stake in the firms for which they work by providing employees the right to purchase the firm's equity at a set price within a certain period of time. Employee stock purchase plans should define reasonable terms, such as designating exercise prices at no lower than 85 percent of fair market value, fixing a justifiable offering period, and limiting voting power dilution to less than 10 percent.
- 2. Employee Stock Ownership Plans:** Employee stock ownership plans (ESOPs) enable employees to accumulate firm equity. ESOPs should balance encouraging employee equity ownership while avoiding harm to existing investors. Shares allocated to ESOPs should not be excessive (generally no more than 5 percent of outstanding shares).



## E. Severance and Retirement Arrangements

Severance payments to executives in the event of an employment termination, separation, or change in firm control should be justifiable by the executive's performance, serve the long-term interests of the firm and its investors, and not be excessive.

**1. Parachutes:** Firms should submit for investor approval arrangements to provide executives with extraordinary severance payments in certain circumstances, such as a change in firm control. Extraordinary payments may be assessed in relation to market and peer practice and should not exceed payments greater than three times base salary and bonus. Severance payments should not be so attractive as to influence merger agreements that may not be in the best interests of investors and should have triggering mechanisms beyond the control of senior executives. Any payments in the event of a change in control should be "double triggered," i.e., contingent upon both an actual change in control and an employment separation related to the change-in-control event. Unvested equity should not accelerate upon the change in control. Payments should not trigger, and firms should not commit to paying, executives' excise taxes ("gross ups"). A change in control should not be contingent upon investor approval of executives' severance payments.

**2. Supplemental Executive Retirement Plans:** Retirement plans that provide extraordinary retirement benefits exclusive to executives should be presented for investor approval and avoid excessive payouts, such as excluding all incentive or bonus pay from covered compensation calculations.

**3. Golden Coffins:** Firms should refrain from providing extraordinary compensation upon an executive's death. Firms should submit for investor approval agreements and policies that oblige the firm to make payments or awards following the death of a senior executive, including unearned salary or bonuses, accelerated vesting or continuation in force of unvested equity grants, and other extraordinary payments or awards.

## F. Director Compensation

Firms should disclose the philosophy and process used for determining compensation paid to directors serving on the board and the value of all elements of director compensation.

**1. Structure and Design of Director Compensation:** Directors may be compensated in both cash and equity. Fees and compensation paid to directors should be appropriate relevant to market norms, the firm's industry, and its financial performance. Equity should not constitute the entirety of director compensation, as this may undermine directors' incentive to monitor and exercise oversight of long-term risks to firm value.

**2. Equity Ownership:** Equity ownership by directors promotes the alignment of directors' interests with those of investors. Firms should adopt and disclose equity ownership guidelines to encourage directors to acquire and hold a meaningful amount of equity in the firm. Equity ownership should not, however, be a qualification for board service, as such restrictions may impede otherwise highly qualified individuals from serving as directors.

**3. Retirement Benefits:** Retirement benefits for director service are improper, as such benefits may impede objectivity and sever the alignment of interest between directors and investors.



## IV. Performance Reporting

Financial markets work most efficiently when investors have timely, reliable, and comparable information about material aspects of a firm's performance. Transparency of a firm's key financial and operating performance is critical for investors to assess the firm's financial viability and prospects. Independent verification of a firm's financial disclosures promotes investor confidence.

LACERA supports clear and comprehensive disclosure of relevant financial and operating performance indicators (including environmental, social, and governance matters) that may provide valuable information for investors to assess a firm's prospects for delivering sustainable value.

### A. Financial Reports

Financial statements and auditor reports are essential in evaluating a firm's performance. Financial reports should present clear, reliable, and comprehensive data and information. A firm's overall performance reporting framework should conform with, and place primary prominence on, established accounting standards. Additional reporting measures that do not adhere to generally accepted accounting principles (either GAAP or International Financial Reporting Standards/ IFRS, depending on the reporting market) should be clearly explained and justified, and should supplement, as opposed to replace or otherwise obfuscate, performance reporting that is consistent with established accounting standards.

When presenting financial reports for investor review, there should be no unresolved concerns about the accounts presented or audit procedures, inadequate disclosures, or unresponsiveness regarding investor or regulatory questions on specific items.

### B. Fiscal Term

Firms should define an appropriate fiscal term. The fiscal term should not be altered for the purpose of postponing an annual meeting.

### C. Auditors

Firms should ensure independent, high-quality, and timely provision of audited financial statements by a clearly disclosed external auditing firm.

**1. Ratification:** Auditors should be clearly disclosed and presented to investors for ratification. LACERA takes into consideration the following factors when evaluating auditor ratification:

**1.1. Independence:** The external auditor should be objective and free of conflicts of interest in providing auditing services. Accordingly, non-audit fees paid to an external auditor should not be excessive. Specifically, non-audit fees should not exceed the total of audit and audit-related (such as permissible tax) fees, and the auditing firm should have no financial interest or association with the company.

**1.2. Quality:** There should be no question as to the accuracy of the external auditor's opinion, the financial report's indication of the company's financial position, and the accurate application of established accounting standards. There should be no aggressive accounting practices or significant audit-related issues at the company, such as a history of restated financial results or material weaknesses in internal controls.

**1.3. Timeliness:** There should be no unjustified delays in the publication of audited financial statements.

**2. Rotation:** Requests to rotate auditors should be evaluated in consideration of the audit firm's tenure, any proposed length of rotation, the presence of significant audit-related issues at the company, the extent to which the company periodically assesses audit pricing and quality, and the robustness of the audit committee's functions, such as the presence of financial experts and how often the committee meets.

**3. Indemnification:** To avoid any impairment of the external auditor's objectivity and independence, companies should not enter into engagement letters that indemnify or otherwise limit the external auditor's liability.

## V. Environmental and Social Factors

Environmental and social factors — such as management of human capital, access to natural resources, and environmental risks — may shape and impact a firm's ability to generate and sustain value. Firms should identify and prudently manage social and environmental factors relevant to the firm's business strategy, industry, and geographic markets. Social and environmental factors may present opportunities to drive value or risks to a firm's strategic objectives.

Firms should ensure diligent board oversight and provide reasonable disclosures of relevant environmental and social factors and how they are managed. Reporting enables investors to make informed investment decisions when evaluating companies and the long-term viability and sustainability of their business practices.

In addition to identifying, evaluating, and mitigating the risks presented by social and environmental factors, firms should carefully consider the impact of their business activities. Promotion, adoption, and effective implementation of guidelines for the responsible conduct of business and business relationships are consistent with the fiduciary responsibility of protecting long-term investment interests.

### A. Social Factors

- 1. Human Capital Management:** Effective management of human capital — including the development, incentives, and retention of the firm's workforce — is key to accomplishing a firm's strategic objectives. Companies should identify, ensure board oversight, and disclose information about significant human capital value drivers that are related to the firm's ability to create and protect firm value. Central to effective human capital management is the assurance of equal employment opportunity, including non-bias in compensation and employment terms, and a workplace free of harassment in all forms.
- 2. Human Rights Risk:** Firms should mitigate the risks of human rights abuses in global operations and supply chains by adopting robust human rights policies and ensuring effective internal controls to monitor compliance with stated human rights standards.

### B. Environmental Factors

- 1. Natural Resource Stewardship:** Firms should give consideration to efficient, sustainable use and stewardship of natural resources, such as energy and water, to enhance operational efficiency and safeguard firm value from the risks of resource scarcity.
- 2. Environmental Risk:** Firms should ensure reasonable oversight mechanisms and mitigation of environmental risks, such as hazardous waste disposal and pollution, to mitigate prospective legal, regulatory, and operational risks to firm value.
- 3. Climate Risk:** Climate change may present financial, operational, and regulatory risks to a firm's ability to generate sustainable value, as well as to the broader economy. Firms should assess and disclose material climate-related risks and sufficient, non-proprietary information to enable investors to prudently and adequately evaluate the prospective impact of climate risk on firm value.

# Responsibilities and Delegations

## A. The Board of Investments:

- (i.) Approves and promulgates policies addressing environmental, social, and governance issues, such as corporate governance and proxy voting matters and including but not limited to the *Corporate Governance and Stewardship Principles*, as recommended by the Corporate Governance Committee of the Board.
- (ii.) Receives periodic reports concerning the program's progress and priorities from the Corporate Governance Committee.
- (iii.) Approves LACERA representatives for nomination to governing bodies of the corporate governance associations to which LACERA is affiliated, as recommended by the Corporate Governance Committee.
- (iv.) Approves procedures to comply with legislated or other mandated divestment or investment exclusions, such as LACERA's Guidelines for Evaluating ESG-Related Divestments (Appendix), as developed and recommended by the Corporate Governance Committee.

## B. The Corporate Governance Committee of the Board of Investments:

- (i.) Recommends the *Corporate Governance and Stewardship Principles* and other items concerning environmental, social, and governance matters to the Board of Investments for consideration and approval.
- (ii.) Exercises oversight and monitoring of the corporate governance program, including reviewing program priorities and progress.
- (iii.) Reviews reports regarding proxy voting results and trends and develops recommendations for Board approval for any policy recommendations, as appropriate.
- (iv.) Reviews and ensures alignment of strategic initiatives with the *Corporate Governance and Stewardship Principles*.
- (v.) Provides periodic reports on the program to the Board of Investments.
- (vi.) Delegates authority to the Committee Chair to determine LACERA's action on time-sensitive, investment- or financial market-related legislative or regulatory matters that are not adequately addressed in the *Corporate Governance and Stewardship Principles* or joint investor engagements affiliated with investor associations to which LACERA has formally affiliated.
- (vii.) Recommends for Board of Investment approval, LACERA representatives for nomination to governing bodies of the corporate governance associations to which LACERA is affiliated. In event the Committee is not scheduled to meet or lacks adequate time to recommend a nomination to the Board prior to a formal deadline, the Committee delegates authority to the Committee Chair to recommend consideration of the nomination by the Board.

- (viii.) Recommends for Board of Investment approval, time-permitting, LACERA's votes in support or opposition of candidates listed on a formal member ballot and nominated to a governing board of an investor association to which LACERA has formally affiliated. In event the Committee is not scheduled to meet or lacks adequate time to agendize under the Brown Act an informed recommendation to the Board for vote determinations prior to a formal deadline, the Committee delegates authority to the Committee Chair to recommend consideration by the Board, time-permitting, of the votes in support or opposition of board candidates. In time-sensitive circumstances where vote deadlines do not permit such vote considerations by the Committee or the Board, the Committee delegates authority to the Committee Chair to consult with staff per Section V(C)(vi.) below on votes.

### C. Staff

- (i.) Develops and recommends *Corporate Governance and Stewardship Principles* and related policies for review and consideration by the Corporate Governance Committee.
- (ii.) Executes proxy votes in adherence to the *Corporate Governance and Stewardship Principles*. Staff consults with and seeks the input of the Chief Investment Officer and Chief Counsel, when applicable, to apply the *Corporate Governance and Stewardship Principles*, and the spirit thereof, to unique or new proxy voting items in their best judgment and interpretation of the *Corporate Governance and Stewardship Principles*. Staff recalls shares of loaned securities when doing so is in LACERA's economic interests, such as at portfolio companies where LACERA has sponsored a shareowner proposal.
- (iii.) Communicates and represents the *Corporate Governance and Stewardship Principles* in dialogues and communication with portfolio companies, external asset managers and investment partners, other investors and stakeholders, related conferences, and other interested parties.
- (iv.) Presents any strategic plans for engagement to the Corporate Governance Committee, per the Committee's review and oversight, to promote alignment with Board-approved *Corporate Governance and Stewardship Principles*. In the event of time-sensitive strategic initiatives, staff consults with the Chair of the Committee, who determines action or recommends consideration of the matter by the Committee or Board, time-permitting.
- (v.) Represents the *Corporate Governance and Stewardship Principles* in written communication to legislators and regulatory agencies, in consultation with the Chief Executive Officer, Chief Investment Officer, and Chief Counsel. Staff may participate in joint investor written communications that are organized as part of formal investor associations to which LACERA has formally affiliated. In event that a time-sensitive, investment- or financial market policy-related legislative or regulatory matter arises that is not adequately considered by the *Corporate Governance and Stewardship Principles* or being addressed by an investor association to which LACERA is affiliated, staff consults with the Chair of the Committee, who determines whether to approve action or recommend consideration of the matter by the Board, time-permitting.

(vi.) Represents LACERA and its *Corporate Governance and Stewardship Principles* at investor associations, including managing membership surveys, business meeting votes (other than selecting which candidates to a governing board to support or oppose), and other operational interactions, in adherence to the *Corporate Governance and Stewardship Principles* and the spirit thereof, in its best judgment and interpretation. In event that a time-sensitive vote arises on a unique item or an issue that is not adequately considered by the *Corporate Governance and Stewardship Principles*, as well as for governance-related investor associations' formal business meeting ballot items pertaining to support or opposition of candidates to a governing board, and time constraints prohibit such items from being presented to the Committee or Board for consideration, staff may determine a vote in consultation with the Chair of the Committee.

## Policy Review and Reaffirmation

LACERA reviews and reaffirms this Policy at least every three years in order to ensure its alignment with LACERA's mission and objectives and in light of evolving market practices on corporate governance; environmental, social, and governance ("ESG"); and responsible investment matters.

## APPENDIX: Guidelines for Evaluating Prospective ESG-Related Divestments

As stated in LACERA's Investment Beliefs, "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. Diversification across different risk factors is necessary for risk reduction."

As a diversified, global investor, LACERA may periodically review its public markets investment exposures to certain issues arising from environmental, social, or governance concerns. It is generally the preference of LACERA, in order to promote diversification and minimize risk, to engage rather than divest investment holdings concerning risks to long-term value. However, in order to address prospective divestment issues and identify LACERA's exposure to exogenous risks related to environmental, social, or governance issues and not addressed elsewhere in the Investment Policy Statement, the following formal process has been adopted:

1. The issue will be directed to Committee for further direction to Staff.
2. If the Committee decides to review the issue, Staff will assess the potential economic and reputational impact of the issue on LACERA.
  - a. Does the issue violate LACERA's *Corporate Governance and Stewardship Principles*?
  - b. Determine criteria for identification of investment(s).
  - c. Preliminary identification of the investment.
  - d. Preliminary estimate on size of the investment.
  - e. Seriousness of the issue/violation and whether it impacts the economics of the investment(s).
  - f. Consultation with LACERA's Chief Executive Officer, Chief Investment Officer, and legal counsel.
3. Staff will report its findings on the potential economic and reputational impact of the issue on LACERA to the Committee.
4. The Committee may forward the issue and potential economic and reputational impact on LACERA to the Board of Investments (Board) for further direction.
5. If the Board directs staff to continue the analysis, staff will calculate the anticipated resources involved in analyzing the issue including, but not limited to:
  - a. Estimate of staff hours required for research and analysis.
  - b. Estimate of the resource impact on current staff initiatives and projects (for example the delay in an RFP search).
  - c. Estimate of cost to obtain information (e.g.: company list) from external service provider.
6. Staff will report back to the Committee with its resource requirements analysis.
7. Committee may make recommendation to the Board to pursue additional analysis.
8. Upon receiving direction from the Board, Staff will contract with external data provider to identify investment(s) impacted by the issue.

9. Staff will identify investment exposures within the separate accounts of the public markets asset classes (equities, fixed income and commodities).
10. Staff will contact external investment managers to solicit feedback from portfolio managers on reasoning for the investment and potential return and risk trade-off of economic substitution.
11. Staff will present findings to the Board and any recommendation(s) as necessary. If further action is warranted, such as engagement with companies, staff's report to the Board will include the following:
  - a. An estimate of additional staff hours needed to execute engagement.
  - b. An estimate of the impact of diverting resources from current staff initiatives and projects (for example the delay in an RFP search).
  - c. Cost of retaining external resources (3rd party consultant) to assist in the engagement process.
  - d. Feedback from portfolio managers on their investment in the company.
  - e. Discussion of criteria and terms for company engagement.
12. If further action, such as engagement, is recommended and approved by the Board, staff will seek to engage with companies on the issue. Letters will be written to the company's executive management and their boards requesting responses within 60 days.
13. If company response is determined to be insufficient, staff will assess the need to place the company on an economic substitution list<sup>2</sup> and present recommendation(s) to the Board for approval. Included in the recommendation(s) will be the following:
  - a. Updated company exposure within separate accounts of public markets asset classes.
  - b. Annual cost to procure company list.
  - c. Criteria by which company will be removed from the economic substitution list.
14. Staff will continuously monitor company status relative to criteria for removal from the economic substitution list. Once criteria have been met, staff will recommend removal of the company to the Board.
15. Staff will provide an economic substitution list update to the Board annually which will include the following:
  - a. All companies currently on the list.
  - b. Issue for which the company was placed on the list.
  - c. Investment exposure within separate accounts of public markets asset classes.
  - d. Current status of mitigating factors.

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<sup>2</sup> Companies on the list will be covered by the following investment guideline policy language: "Investment managers should refrain from purchasing securities on the economic substitution list when the same investment goals concerning risk, return, and diversification can be achieved through the purchase of another security."



**Document History**

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Revised August 13, 2003  
Revised June 11, 2003  
Original adopted March 12, 2003



# **Responsible Contractor Policy**

# I. Purpose and Objective

The Los Angeles County Employees Retirement Association's (LACERA) investment philosophy and strategy recognize that careful consideration of financially relevant environmental, social, and governance (ESG) factors in the Fund's investment process may protect and enhance LACERA's risk-adjusted returns, as stated in the Fund's *Investment Policy Statement*. LACERA's *Corporate Governance and Stewardship Principles* (Stewardship Principles) articulate LACERA's position on key corporate governance and broader ESG factors that may impact the financial performance of LACERA's portfolio holdings including, but not limited to:

- Effective legal and regulatory compliance
- Constructive human capital practices
- Inclusive and equitable management of diverse talent
- Robust adherence to human rights standards
- Prudent natural resource stewardship
- Careful mitigation of environmental risks and liabilities

LACERA seeks to steward its assets throughout its investment portfolio in a manner that promotes adherence to its Stewardship Principles in furtherance of its mission, "to produce, protect, and provide the promised benefits." LACERA encourages investment managers who manage capital on its behalf to enact effective and practical measures in their investment processes and portfolio management that exemplify adherence to the principles referenced above.

In furtherance of its Investment Policy Statement and Stewardship Principles, LACERA has adopted this *Responsible Contractor Policy* (Policy) to guide investment managers who manage real estate, infrastructure, and other real assets investments on behalf of LACERA to select construction and operation services contractors that demonstrate practices in line with LACERA's Stewardship Principles. LACERA expects investment managers to ensure effective practices and internal controls are in place to select responsible contractors based upon their demonstrated ability to provide high quality services as evidenced by experience, skill, reputation, responsiveness, fees, dependability, record of compliance with applicable laws, regulations and statutes, and payment of fair compensation and benefits to employees.

By promoting responsible contracting, LACERA seeks to prudently optimize financial performance while mitigating investment risks—including, but not limited to, compliance, legal, operational, and reputational liabilities—that may be presented when business entities fail to meet responsible contracting standards.

# II. Legal Authority and Fiduciary Duty

The LACERA Board of Investments has "the sole and exclusive fiduciary responsibility over the assets of" the system, as provided by the California Constitution (Article XVI, Section 17(a)). LACERA exercises its legal rights in defining responsible contracting provisions in furtherance of its fiduciary duty under Article XVI, Section 17 of the California Constitution, the County Employees Retirement Law of 1937 (CERL), and other governing laws, regulations, and case authority.

The Policy is guided in all aspects by LACERA's fiduciary duties, including loyalty, care, skill, prudence, and diligence, which require evaluation of expected investment returns and risk of loss.

LACERA's assets are diligently and prudently invested and managed in accordance with the Fund's fiduciary duties in the sole interest of plan participants and their beneficiaries, and for the exclusive purpose of providing benefits to its participants and their beneficiaries. LACERA seeks to have its real assets investments managed and operated in a manner that is expected to prudently maximize the rate of return, while minimizing the risk of loss. LACERA's duties, and the duties of its investment managers, to LACERA's participants and their beneficiaries take precedence over any other duty.

### III. Policy Application at Real Assets Investments

LACERA promotes prudent, responsible contracting provisions for construction and operation services throughout its real assets investments. All investment managers who have been selected to manage LACERA's capital in real estate, infrastructure, and natural resources mandates should have in place effective policies, procedures, and internal controls to ensure that contracting practices result in the selection of responsible contractors that reflect the responsible contracting provisions outlined in this Policy.

LACERA recognizes that its control and influence on external investment managers varies by the degree of ownership it maintains in investment funds managed on its behalf by external investment managers. Accordingly, LACERA has defined the application of the terms and provisions of this Policy as follows:

**A. Controlled Investments:** Where LACERA owns more than a 50 percent equity position either directly or indirectly in a real estate, infrastructure, natural resources, or other real assets investment fund or partnership ("Controlled Investments"), LACERA requires the investment manager to use their best efforts to comply with the responsible contractor terms and provisions defined within this Policy when soliciting and selecting contractors and subcontractors for construction and operation services.

At Controlled Investments, LACERA expects investment managers to apply this Policy to all contracts valued at \$100,000 or more. Contract value refers to the total project work to be contracted for, with desegregation by trade or task. Desegregation designed to evade the requirements of this Policy is not permitted.

**B. Non-Controlled Investments:** Where LACERA does not have greater than 50 percent equity ownership and/or control of a real estate, infrastructure, natural resources, or other real assets investment fund or partnership ("Non-Controlled Investments"), LACERA *strongly encourages* its investment managers to comply with the spirit and practice of responsible contracting, including—but not limited to—adhering to the terms of this Policy and defining responsible contracting terms and policies of their own.

For the avoidance of any confusion, while LACERA encourages all real assets firms to practice responsible contracting, the specific terms and requirements of this Policy do not apply to other real assets exposures in LACERA's portfolio, including—but not limited to—publicly-listed REIT's, mezzanine debt, hybrid debt, investments acquired through a secondaries fund acquisition transaction, and indirect, specialty, and mortgage investments lacking equity features, and their respective investment managers.

## IV. Key Provisions of Responsible Contracting

A “Responsible Contractor,” as used in this Policy, is a contractor or subcontractor who: (1) has the appropriate experience, skill, reputation, employee relations, responsiveness, fees, and dependability to perform the required work, and (2) provides workers fair compensation and fair benefits for the required work as evidenced by factors including—but not limited to—payroll and employee records, policies, and practices.

Responsible contracting practices include, but are not limited to, the following:

- A. Fair Wages and Benefits:** In determining fair wages and fair benefits concerning a specific contract in a specific market, items that may be considered include—but are not limited to—local wage practices, prevailing wages, and labor market conditions. This Policy does not mandate a specific wage level or benefits, but instead recognizes and considers that local market practices may vary across LACERA’s investment exposures. How investment managers and their respective contractors evaluate what constitutes “fair wages” and “fair benefits” should be informed by relevant market factors that include the nature and location of the project, comparable job or trade classifications, and the scope and complexity of services provided. “Fair benefits” may include—but are not limited to—employer-supported family health care coverage, pension benefits, employee safety training, and apprenticeship training programs.
- B. Legal Compliance:** All contractors should demonstrate a compelling track record of compliance with all applicable federal, state, and local laws, regulations, and ordinances, including (but not limited to) those related to insurance, withholding taxes, minimum wage, health and safety, and environmental matters. Responsible Contractors exclude any contractor who has been debarred—or whose principal has been debarred—by a municipal, state, or federal government. Responsible Contractors also respect the right of all workers to freedom of association in the workplace, as protected under local, state, and federal law, and as recognized by the United Nations International Labor Organization (ILO) core labor standards.
- C. Diversity, Equity, and Inclusion:** As outlined in LACERA’s *Investment Policy Statement*, 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 real assets investment managers to ensure equal opportunity and non-discrimination in contracting provisions for construction and operation services. Effective assurance of equal opportunity and non-discrimination includes effective policies and practices to prohibit and deter retaliation against any individual or entity who reports incidents of prospective non-compliance.
- D. Competitive Bidding:** Investment managers should ensure that all requests for proposals and invitations to bid applicable contracts covered by this Policy are made in accordance with the terms of this Policy. LACERA encourages adequate advance notice of bidding opportunities to promote competitive bidding, as practical and appropriate. Investment managers and their associated property managers and contractors should use reasonable methods to provide adequate notice to potential contractors of bidding opportunities for contracted services. Adequate notification may include, but is not limited to, maintaining lists of eligible, qualified Responsible Contractors for inclusion in the bidding process.

- E. Neutrality:** Where there is a legitimate attempt by a labor organization to organize workers employed in contracted construction, maintenance, operation, and services, LACERA encourages investment managers, property managers, and contractors to maintain a position of neutrality. To remain “neutral” means not taking any action or making any statement that will directly or indirectly state or imply any support for or opposition to the selection by employees of a collective bargaining agent, or preference or opposition to any particular union as a bargaining agent.

For the avoidance of any confusion, nothing in this Policy obligates or prohibits an investment manager, property or asset manager, or contractor from entering into project labor agreements, labor peace or other lawful agreements with a labor organization seeking to represent or that currently represents workers, or take actions to address violations of applicable law.

It is also not the intent of this Policy to call for any involvement by investment managers, property or asset managers, or contractors in resolving any jurisdiction disputes that may arise between or among building trades and other labor organizations and unions.

## V. Policy Implementation

- A. Notification:** All current and prospective real assets investment managers shall be provided a copy of this Policy (both at Controlled Investments and Non-Controlled Investments).
- B. Contracts and Contract Renewals:** All contracts and contract renewals at Controlled Investments entered into after the effective date of this Policy shall incorporate expectations of adherence to all applicable provisions of this Policy.
- C. Investment Manager Administration and Reporting:** All investment managers of Controlled Investments are expected to communicate the terms and provisions of this Policy to property and asset managers and ensure effective practices are in place to implement them. Investment managers of Controlled Investments are further expected to collect, provide, and retain adequate data documenting their compliance with this Policy on no less than an annual basis in reporting to LACERA in a format acceptable to and approved by LACERA. Effective monitoring and enforcement by investment managers includes reasonable investigation of allegations of non-compliance with the terms and provisions of the Policy, as well as cooperative and timely communication with LACERA regarding the status of any such investigations.

Investment managers of Non-Controlled Investments are encouraged to report to LACERA on the administration, monitoring, and compliance with the responsible contracting provisions and terms stated above and any responsible contracting policies or provisions of their own, as well as to be responsive to any inquiries from LACERA related to the same.

- D. LACERA Monitoring:** LACERA actively monitors all external investment managers, including those managing Controlled Investments and Non-Controlled Investments. All investment managers should demonstrate a compelling track record of adhering to responsible contracting practices. Any investment decisions to renew, increase, or decrease allocations may be informed, in part, by the investment managers track record of adherence to responsible contracting practices.

LACERA's regular review of Controlled Investments includes an assessment of the investment manager's track record in adhering to the terms and provisions of this Policy. LACERA reviews reports from investment managers of Controlled Investments regarding implementation and compliance with the terms and provisions of this Policy and furnishes reports, including an annual publicly-available report on investment manager compliance with the Policy, as part of LACERA's overall compliance reporting practices to the Board of Investments for its oversight.

LACERA's review of all investment managers (both Controlled Investments and Non-Controlled Investments) focuses on the overall pattern of conduct and compliance and not particularly a single incident, depending on the severity and impact of incidents of non-compliance.

**Document History**

Revised and restated July 13, 2022

Revised November 19, 2014

Reviewed November 20, 2013

Revised November 13, 2012

Adopted December 11, 2002



# **Emerging Manager Policy**

FEBRUARY 2020



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# I. Introduction

LACERA's mission is to "Produce, Protect, and Provide the Promised Benefit" for all its members. In order to achieve this mission, LACERA has developed various policies to guide its investments. These policies are governed by the California constitution and by various statutes, and embedded within the regulations are fundamental concepts of loyalty and prudence. The duty of loyalty means that Board members and staff must act in the sole interest of LACERA's members and beneficiaries; the duty of prudence requires that we discharge our responsibilities with skill, care, and diligence—and that we diversify the portfolio in order to minimize the risk of loss and maximize the expected rate of return.

The Emerging Manager Policy ("Policy") furthers the investment beliefs, philosophy, and strategies outlined in LACERA's Investment Policy Statement ("IPS"), adheres in all respects to the Code of Ethical Conduct and the Conflict of Interest Code, and complies with all applicable governing regulations.

LACERA values diversity and inclusion. These values permeate the entire LACERA portfolio and extend beyond the emerging manager program. As stated in the IPS, LACERA believes that effectively accessing and managing diverse talent—inclusive of varied backgrounds, age, experience, race, sexual orientation, gender, ethnicity, and culture—leads to improved outcomes. LACERA expects all its external asset managers and third party providers to respect LACERA's values of diversity and inclusion and to reflect them in their own organizations.

## II. Purpose and Objective

The objective of LACERA's Emerging Manager Policy is to enhance the total Fund's risk-adjusted return. The Policy seeks a proper balance between the potential for higher returns available to select emerging managers, and the higher risks—both investment-related and operational—associated with less established firms.

The Policy provides LACERA an opportunity to invest in promising investment management organizations early in their development. Investing with managers that have fewer clients, smaller assets, or a short track record may provide LACERA access to investment strategies that larger, more established managers might overlook. Smaller investment management firms may generate attractive performance, net-of-fees, because of increased market flexibility associated with smaller asset bases. In addition, first- or second-time funds may outperform later funds in private markets. Furthermore, investing early in the lifecycle of select emerging managers may carry benefits that include lower fees (founder's terms), future capacity rights, and preferred economics such as a share of future revenues.

Counterbalancing the attractive returns from investing with emerging managers is a greater return dispersion and the possibility of greater investment and operational risk—particularly in areas such as compliance, portfolio administration, cybersecurity, business continuity, and succession planning.

Emerging managers are highly motivated to perform well for early investors because doing so can be crucial to their firm's growth. As a result, institutional investors such as LACERA may have a greater alignment of interests with emerging managers than with more established ones.

### III. Emerging Manager Definition

Emerging investment managers are independent firms that have less substantial assets under management or may lack a long-term investment performance record. LACERA is interested in emerging managers that have strong alignment of interest with their investors and expects principals of the firm to hold a substantial majority of the ownership interest of the company. Specific requirements for assets under management (“AUM”) and length of track record are tailored for each asset class and updated for each mandate to take into account the composition of the manager universe prevailing at the time a search is conducted.

Emerging managers are held to the same high performance standards that apply to all of LACERA's external managers. In addition, LACERA conducts an ongoing assessment of all external managers' commitment to, adherence with, and track record of accessing and retaining diverse and inclusive workforces. Emerging managers may include, but are not limited to, investment managers that are owned by individuals of diverse backgrounds that have traditionally been underrepresented in the financial services industry. More broadly, all else equal, LACERA prefers firms that are committed to and have established a demonstrated track record of diversity and inclusion throughout the firm's workforce, inclusive of investment professionals.

### IV. Structure

LACERA may hire emerging managers either directly or by employing a fund-of-funds manager skilled at sourcing emerging managers. Either type of mandate must adhere to LACERA's defined procurement procedures and requires approval by the Board of Investments. Investment strategies managed by emerging managers must be suitable for LACERA's portfolio and fit within the approved strategic asset allocation and asset class structure, as well as the portfolio's risk and liquidity constraints.

For each asset class, LACERA conducts periodic structure reviews that incorporate specific criteria and recommended allocation ranges for emerging managers (see “Attachment” for current BOI-approved ranges). The structure reviews take into consideration the opportunities and risks of the asset class and are conducted in consultation with LACERA's applicable investment consultants. The implementation of any emerging manager program must advance the principles, objectives, and initiatives established within the asset class structure review.

## V. Graduation

Selected emerging managers will be reviewed in accordance with their respective asset class policies to determine if they continue to meet the requirements of the emerging manager program or if they qualify for graduation from emerging status. Graduation recommendations will be included in the biennial asset class structure reviews.

## VI. Monitoring and Reporting

LACERA staff will monitor the emerging managers on an ongoing basis and report annually to the Board on potential issues, performance, and significant developments.

# Attachment

## Emerging Manager Allocation Ranges<sup>1</sup>

	Minimum	Maximum
Global Equities	0%	5%
Fixed Income	0%	4%
Real Estate	0%	20%
Private Equity	0%	7%
Hedge Funds <sup>2</sup>	0%	10%
Total Fund	0%	6%

### Document History

Revised February 12, 2020

Revised August 8, 2016

Revised November 19, 2014

Revised November 20, 2013

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Revised October 31, 2012

Revised July 8, 2009

Revised March 11, 2009

Revised September 13, 2006

Adopted June 13, 2001

<sup>1</sup>The allocation ranges shown are the most recent numbers approved by the BOI.

<sup>2</sup>The BOI approved a \$200 million allocation in September of 2019, and \$200 million is approximately 10% of the target Hedge Fund allocation.



# **Placement Agent Policy**

NOVEMBER 2014

Investment managers in both the public and private markets use placement agents to help them raise capital. The purpose of this Policy is to bring transparency to placement agent activity in connection with LACERA's investments and to help ensure that all investment decisions are made solely on their merits and in a manner consistent with the fiduciary duties of LACERA's Board of Investments (the "Board").

Prior to LACERA investing with any External Manager<sup>1</sup>, investment staff shall obtain a written representation from the External Manager, in a form acceptable to the Legal Office, stating that the External Manager has not used a Placement Agent<sup>2</sup> in connection with LACERA's investment (and that a Placement Agent will not receive compensation from the External Manager if LACERA invests in the investment), or if the External Manager has used a Placement Agent (or if a Placement Agent will receive compensation from the External Manager if LACERA invests in the investment), it will disclose the following in writing, on a form prepared by staff:

- The name of the Placement Agent and the relationship between the External Manager and the Placement Agent
- A resume for each officer, partner, or principal of the Placement Agent detailing the individual's education, professional designations, regulatory licenses, and investment and work experience
- A description of any and all compensation of any kind provided, or agreed to be provided, to the Placement Agent
- A description of the services to be performed by the Placement Agent
- Representation that the fee is the sole obligation of the External Manager and not of LACERA, the Investment Vehicle, the Investment Fund, or any investor(s) in the Investment Vehicle or in the Investment Fund
- The name(s) of current or former LACERA board members, employees, or consultants or member(s) of the immediate family of any such individuals that are either employed or receiving compensation of any kind provided, or agreed to be provided, directly or indirectly from the Placement Agent
- The name(s) of any current or former LACERA Board members, employees, or consultants who suggested the retention of the Placement Agent
- A statement whether the Placement Agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association or any similar state regulatory agency, or any similar regulatory agency in a country other than the United States, and the details of that registration or explanation as to why no registration is required
- A statement whether the Placement Agent, or any of its affiliates, is registered (or is required to be registered as of a date certain) as a lobbyist with any state or national government

Any External Manager or Placement Agent that violates the Policy shall not solicit new investments from LACERA for five years after the violation was committed. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

## Document History

Reviewed November 19, 2014

Revised November 9, 2011

Effective retroactively to October 9, 2011

<sup>1</sup>As defined in California Government Code section 7513.8, "External Manager" means either of the following: (1) a Person who is seeking to be, or is, retained by a board or an Investment Vehicle to manage a portfolio of securities or other assets for compensation; or (2) a Person who manages an Investment Fund and who offers or sells, or has offered or sold, an ownership interest in the Investment Fund to a board or an Investment Vehicle. (All code section references are to the Government Code, unless otherwise noted.)

As defined in section 7513.8, "Person" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

As defined in section 7513.8, "Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

As defined in section 7513.8, "Investment Fund" means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets. Notwithstanding the preceding sentence, an investment company that is registered with the Securities and Exchange Commission pursuant to the Investment Company Act of 1940 (15 U.S.C. Sec. 80a-1 et seq.) and that makes a public offering of its securities is not an Investment Fund.

<sup>2</sup>As defined in section 7513.8, "Placement Agent" means any Person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager or an Investment Fund managed by an External Manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker, or other intermediary in connection with the offer or sale to a board or an Investment Vehicle either of the following: in the case of an External Manager as defined in subpart (1) of the definition of an External Manager, the investment management services of the External Manager; in the case of an External Manager as defined in subpart (2) of the definition of an External Manager, an ownership interest in an Investment Fund managed by the External Manager. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equityholder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time during a calendar year managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.



### **PRIVATE EQUITY PRIVATIZATION POLICY**

LACERA does not aim to promote privatization of public jobs through its private equity investment program. It is highly unlikely that LACERA private equity investments would be in domestic partnerships or similar pooled investment vehicles ("partnerships") that are dependent on privatization strategies.

When performing due diligence prior to making the initial investment in a domestic partnership, staff and/or Consultant, as applicable, will use their reasonable efforts to ascertain:

- (1) Whether the partnership's current investment strategy includes the privatization of jobs held by LACERA members.
- (2) Whether previous partnerships operated by the general partners, if any, have invested in companies dependent upon privatization of jobs held by LACERA members.

Staff and/or Consultant will seek guidance from the Board of Investments before investing in a domestic partnership if the due diligence establishes a positive answer to either (1) or (2) above.

Adopted on May 21, 2003.

# **PROCUREMENT POLICY FOR INVESTMENT-RELATED SERVICES**

**Adopted: November 20, 2019**

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## **Statement of Purpose**

LACERA's Procurement Policy for Investment-Related Services (the "Procurement Policy") sets forth the procedures and guidelines by which LACERA shall procure investment-related services. Investment-related services include, but are not limited to, external investment management, general and specialty consulting, custodial, securities lending, and analytics/database service providers. Procurement of services and products not related to investments are governed by LACERA's General Policy Guidelines for Purchasing Goods and Services.

## **Legal Authority**

The California Constitution and LACERA's governing statutes create a legal framework within which the Procurement Policy must be interpreted and implemented by LACERA's Board of Investments (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, its members, and staff 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.

### **B. Ethics and Code of Conflicts**

The Board and 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.

## 1. Introduction

The Procurement Policy supplements LACERA's Investment Policy Statement (the "IPS"). The IPS defines the framework by which LACERA manages the assets of the Fund in order to fulfill its mission. The Procurement Policy is designed to comply with and follow all guidance included within the IPS. To the extent a conflict exists between the IPS and the Procurement Policy, the IPS shall prevail.

The Board has adopted 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 position as an institutional investor with a long-term investment horizon in order to achieve the Fund's objectives.

Consistent with the Investment Beliefs, the Procurement Policy is designed to adhere to the following guiding principles.

- **Fiduciary.** The Board and staff are fiduciaries to LACERA. Procurement decisions are made for the benefit of the Fund as a whole without other concerns or outside influence.
- **Inclusive.** Opportunity to provide investment-related services to LACERA will be as inclusive as possible, providing all qualified service providers a chance to participate in procurement efforts.
- **Fair.** Procurement efforts will be conducted in a fair and impartial manner. Selections of service providers will be made free from any conflict of interest or bias.

- **Transparent.** Records of procurement efforts will be subject to public disclosure unless subject to a specific exception pursuant to the Ralph M. Brown Act.
- **Timely.** Procurement efforts will be conducted in as efficient and timely manner as practical.
- **Rule-Based.** Procurement efforts will be conducted in a consistent manner
- **Market Aware.** Procurement efforts will be tailored to the specifics of a mandate or service need.
- **Informed.** Procurement efforts will utilize available databases, tools and advances in underwriting to inform the process. Databases may be used to identify a comprehensive list of qualified service providers to optimize submissions/responses to RFPs.

Searches for service providers completed under the Procurement Policy do not have a pre-ordained outcome. Searches could result in the selection and retention of one or multiple service providers. Alternatively, no service provider may be selected.

## **Scope**

Investment-Related Services covered by this Procurement Policy include investment consulting services, investment management services, and specialized services that support investment functions, such as, but not limited to, attorneys, appraisers, auditors, custodians, data and analytics providers, securities lending providers, and independent fiduciaries.



## **Term**

The term for engagements with service providers selected via the Procurement Policy vary.

- i. **Investment Managers.** Terms for agreements with separate account investment managers may be evergreen. Investment managers engaged via separate accounts and open-end comingled funds are monitored closely relative to return objectives, benchmarks, and alternative options. All contracts between LACERA and separate account managers must contain reasonable termination rights for LACERA.
- ii. **Custody Services.** Engagements with custody service providers may be for terms of up to ten years and may provide for two one-year extensions at the discretion of the Chief Investment Officer. The Board will be notified of any extensions. Agreements with custody providers shall contain reasonable termination provisions.
- iii. **Other Service Providers.** Other services procured using the Procurement Policy will have a term of no longer than five years, with two one-year extensions at the discretion of the Chief Investment Officer with respect to investment-related matters, or Chief Legal Counsel for the procurement of services for legal-related matters. The Board will be notified of any extensions.

## 2. Definitions

- a) **Active Management** refers to investment managers whose investment strategy and process allow them to make investments that attempt to exceed their benchmarks.
- b) **Board** means the LACERA Board of Investments
- c) **Evaluation Team** means the group of individuals that have been assigned responsibility to review the search respondents relative to the criteria set forth in the search as well as to each other, as appropriate. Each phase of evaluation must be completed by the same participating members of the Evaluation Team. The Evaluation Team will include staff as appropriate and possibly a third-party advisor.
- d) **Fund** or **Funds** means both the Los Angeles County Employees Retirement Association (LACERA), and the Other Post-Employment Benefits Master Trust (OPEB).
- e) **Illiquid Investment** means securities or other assets that cannot easily be sold or exchanged for cash within one month without a substantial loss in value. These investments include private equities, private credit, private real assets (including real estate), and hedge fund strategy products. These assets are intended to provide the portfolio with higher risk-adjusted returns and/or enhanced diversification. They are not intended to be a source of short-term liquidity.
- f) **Legal Services Procurements** means the procurement of investment-related legal services to assist in transactions or other investment matters.
- g) **Liquid Investments** means securities and other assets that can be converted into cash quickly without material impact on fair value and where there is typically a transactional price available on a daily basis. These assets include

global equities, investment-grade bonds, publicly-traded real estate and real assets, and overlays implemented via exchange-traded instruments.

- h) **Miscellaneous Small Purchases** means the procurement of investment-related services for flat-fee or hourly compensation that may not exceed a total of \$150,000 per provider for any single transaction or assignment, even if the services are provided over a five-year period. Small Purchases may be approved, and later renewed or extended every five years subject to a new \$150,000 cap, jointly by the Chief Executive Officer and Chief Investment Officer. Small Purchases do not include any services for on-going investment management.
- i) **Passive Management** refers to investment managers whose investment strategy and process are designed to replicate a benchmark.
- j) **RFP** means open Requests for Proposals. An RFP is a public solicitation posted on LACERA's website inviting all qualified bidders to respond. Recommendations to initiate an RFP will be presented to the Board and will identify the recommended: (i.) Scope of Services; (ii.) Minimum Qualifications; (iii.) Search timing; (iv.) Structure of the Evaluation Team; (v.) Evaluation Criteria; and (vi.) Selection Authority.
- k) **Selection Authority** refers to the body, group or individual that has authority to select the service provider that will be retained. This may be the Board, the Evaluation Team, the Chief Investment Officer, Chief Legal Counsel, or some combination of the above. A Selection Authority will be recommended to the Board for its approval for each procurement effort unless otherwise delegated in existing LACERA policy.
- l) **Staff** means employees of LACERA.
- m) **Trustee** means a member of the Board of Investments.

### **3. Service Being Procured and Selection Method**

The types of investment-related services being procured can be characterized as:

- Investment Management
- Consulting
- Other Investment Related Services
- Legal
- Miscellaneous Small Assignments

The method or process utilized to procure services is dependent upon the type of service being procured. Regardless of the selection method utilized, a high level of scrutiny and rigor is applied for whatever length of time is needed to ensure that the successful service provider(s) are most appropriate for the Fund.

The selection method for the different types of services covered by the Procurement Policy is described below. Upon selection of service providers, the Legal Division and Investment Office are responsible for completing engagement agreements and/or contracts.

#### **a) Investment Management Services**

- Active Management
  - Liquid Investments

Investment Managers utilizing Active Investment strategies to invest in Liquid Investments shall be selected using an RFP.

- Illiquid Investments

Illiquid Investments are identified and underwritten on a one-off basis and, if deemed appropriate, advanced to the Board for consideration, unless delegated within the IPS. Individual

Actively Managed Illiquid Investments do not lend themselves to selection via an RFP. Rather, illiquid investments are discussed in periodic asset class structure reviews and individual recommendations include independent third-party assessments. Exceptions to this are fund-of-fund mandates. In those circumstances, an RFP will be utilized for selection efforts.

- **Passive Management**
  - Liquid Investment managers shall be selected using an RFP.
  - Illiquid Investments (N/A)

Staff will obtain Board authorization on a mandate-by-mandate basis prior to initiating an RFP.

The Evaluation Team is responsible for making an affirmative recommendation of the most qualified candidate manager(s) to the Selection Authority.

#### **b) Consulting Services**

LACERA will select general and/or specialist consultants using an RFP. Staff will recommend an Evaluation Team and obtain Board authorization prior to initiating a search effort.

The Evaluation Team is responsible for presenting the most qualified candidate consultants to the Selection Authority.

#### **c) Other Investment Related Services**

Numerous specialized investment related service providers that **do not** directly manage money are utilized to support Fund investment activities. Some specialized providers are on retainer or under an open

contract for services as needed and are utilized repetitively to deliver expert services, such as legal counsel negotiating and documenting transactions. Other specialized providers may be retained to deliver ongoing operational support services, such as a master custodian or securities lending service provider. Still other specialized providers may be retained to deliver frequently needed services, such as private equity fee verifications or real estate appraisals.

The selection process utilized for Other Investment Related Service providers will be an RFP. The selection process utilized will be authorized by the Board on a case-by-case basis.

#### **d) Legal Services Procurements**

The Chief Legal Counsel may initiate an RFP without Board approval to select a panel of outside counsel to assist on investment-related matters on an individual asset class basis. The Chief Legal Counsel will report the selected panelists to the Board after the panel selection. The Chief Legal Counsel or their designee, in consultation with the Investment Division, may thereafter select outside counsel from the panel to represent LACERA in individual transactions or provide other necessary legal services.

The Chief Legal Counsel also has the authority, without the need to conduct an RFP, to (1) retain specialized counsel based on expertise or geographical location when necessary to complete a transaction or fulfill a Board-approved initiative or programmatic priority, or (2) retain litigation counsel when necessary to protect LACERA's interests before a Board meeting seeking approval can be held, with the selected

litigation counsel presented to the Board for ratification at the next meeting.

Any selection of legal counsel covered by this Policy will be reported to the Board no later than the meeting of the Board immediately following the selection.

**e) Miscellaneous Small Purchases**

Miscellaneous Small Purchases shall be made after seeking multiple bids. The Board shall be notified of the selected specialized service providers within the monthly Chief Investment Officer report.

#### **4. Proposal Evaluation**

An Evaluation Team will be identified by Staff prior to the commencement of a search effort. The Evaluation Team will be responsible for evaluating and scoring written responses to the RFP, interviewing respondents, conducting due diligence, and deliberating and determining which of the respondents would best meet the needs of the Fund.

Each member of the Evaluation Team is responsible for evaluating and scoring each search response meeting the minimum qualifications. The Evaluation Team subsequently meets to discuss and justify scores to avoid inconsistencies and jointly determine a score for each respondent.

Further evaluation of the top ranked respondents may consist of in-house interviews at LACERA's offices, requests for and evaluation of additional information, and, if deemed appropriate, on-site interviews.

When a template agreement exists, top ranked respondents will be provided and asked to review and comment on the LACERA template agreement. The template agreement has key legal terms that the respondent must mark up with any proposed modifications. The RFP requires that respondents be bound to LACERA's terms, unless the respondent identifies an objection or addition, sets forth the basis for the objection or addition, and provides substitute language to make the clause acceptable to the respondent.

The Evaluation Team relies upon the Legal Division to determine the acceptability of any proposed language affecting legal issues or terms in the agreement. The respondent's proposed language is a significant consideration in the evaluation and scoring of proposals.



Upon completion of the process, the Evaluation Team assigns final scores to the respondents based on all information gathered during the entire evaluation process.

The Evaluation Team will prepare and submit a summary of its findings along with an affirmative recommendation for which respondent(s) should be hired to the Selection Authority.

## **5. Observance of a Quiet Period**

LACERA requires a quiet period to ensure that the process of selecting a contractor is efficient, diligent and fair. The Quiet Period is a “no contact period” during the procurement process to prevent Trustees and staff communication with prospective vendors. Questions concerning the quiet period should be directed to the Legal Office.

- A. The quiet period shall be maintained after the issuance of a solicitation and continue until a final selection is made or the process is otherwise terminated.
- B. Initiation, continuation, and conclusion of the quiet period shall be publicly communicated to prevent inadvertent violations.
- C. During the quiet period, all Trustees and staff, except for designated LACERA contact persons, shall refrain from communicating with contractor candidates regarding any product or service offered by the candidate, except as permitted by Subsection G below.
- D. During the quiet period, no Trustee or staff member shall accept meals, travel, lodging, entertainment, or any other good or service of value from the candidates.
- E. All authority related to the search process shall be exercised, when the Board has authority under this policy, solely by the Board, or by delegated staff, and not by individual Board members. With respect

to procurements within the authority of Staff, authority related to the search process shall be exercised solely by the authorized staff member with contracting authority for the search.

- F. If any Trustee or staff member is contacted by a candidate during the quiet period about a matter relating to the pending selection, the Trustee or staff member shall refer the candidate to the designated LACERA contact person and report the contact to the Chief Counsel.
- G. The quiet period does not prevent Board-approved meetings or communications by staff with an incumbent contractor that is also a candidate provided that their communication is strictly limited to matters necessary in connection with the contractor's existing scope of work. Other than due diligence, discussion related to the pending selection is not permitted during these activities.
- H. A contractor candidate may be disqualified from a search process for a willful violation of this policy.

## MEMORANDUM

**TO:** LACERA Board of Investments  
**FROM:** Tim Filla, Aysun Kilic, Leo Festino, and Imran Zahid  
**DATE:** December 14, 2022  
**RE:** LACERA Investment Beliefs

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The purpose of this memo is for Meketa Investment Group to review and support LACERA's updated Investment Beliefs.

### Background

In August of 2016, LACERA's Board of Investments ("BOI") adopted a set of Investment Beliefs. The purpose of developing and adopting Investment Beliefs is to provide a framework in which investment decisions are made for LACERA's assets. Specifically, they explicitly define the core beliefs that the Board of Investments uses as a foundation for its decision making as an institutional investor with a long-term investment horizon. Meketa believes it is important for the BOI to review and reaffirm or refine its Investment Beliefs every few years.

Staff performed a survey of both the BOI and the Investment Division ahead of the September Offsite as a first step in the review process. Staff then used the survey results to identify areas of opportunities for enhancement of the Investment Beliefs. At the September BOI Offsite meeting, LACERA staff conducted a session designed to gather additional feedback and facilitate discussion with the Trustees around the Investment Beliefs. The discussion facilitated by staff helped shape the language in the updated Investment Beliefs. Staff and Meketa collaborated on integrating the takeaways from the Offsite discussion into LACERA's Investment Beliefs.

### Evaluation

The overall nature of the proposed changes is to add greater clarity and provide better alignment with LACERA's strategic plan of evolving from allocator to best-in-class investor. The main pillars and overall structure of LACERA's current Investment Beliefs remain intact.

A few key areas worth highlighting are as follows:

- i. Strategic Asset Allocation remains the first section of the Investment Beliefs with additional language to highlight diversification and describe the inputs into setting the Strategic Asset Allocation.

- ii. The section regarding Market Efficiency has been renamed Market Dynamics and changed to reflect broader considerations and more concrete linkage to investment implementation decisions.
- iii. The Active Versus Passive Management and Private Markets and Liquidity Beliefs were merged into a single Belief named Return.
- iv. The proposed Belief about Risk is more succinct and explicit about the types of risks LACERA faces and is focused on mitigating.
- v. ESG has been renamed to Stewardship to reflect LACERA's strong capabilities as an investor and the importance of Stewardship in protecting and providing the promised benefits.
- vi. The name of the Costs and Fees Belief was changed to Terms to encompass all types of terms and to formally recognize LACERA's ability as an investor to influence those terms.
- vii. The Belief regarding education was expanded to include multiple areas of both human capital and organizational resources and was renamed Productivity.

A thorough process was conducted as detailed above, and Meketa believes that the proposed changes put forth by staff incorporate the views expressed at the Offsite while also recognizing the durable nature of the Investment Beliefs.

While LACERA staff and Meketa worked together on developing the refinements to LACERA's Investment Beliefs, ultimately the Investment Beliefs are meant to represent the views and beliefs of the Trustees. If further refinements are required to align with the voice of the Board, we will continue to work with staff on any desired changes.

If you have any questions, please feel free to reach us at 760-795-3450. We look forward to speaking with you soon.

TF/AK/LF/IZ/sf

December 5, 2022

TO: Each Trustee,  
Board of Investments

FROM: Santos H. Kreimann <sup>SHK</sup>  
Chief Executive Officer

<sup>TJ</sup>  
Ted Granger  
Interim Chief Financial Officer

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **2022 INVESTIGATION OF EXPERIENCE FOR RETIREMENT BENEFIT ASSUMPTIONS**

### **RECOMMENDATION**

It is recommended that the Board of Investments:

1. Adopt the economic assumptions identified in Appendix A on pages 61-82 of the draft 2022 Investigation of Experience for Retirement Benefit Assumption Report (2022 Experience Study), as recommended by the plan actuary (Milliman). There were no changes recommended to the economic assumptions. The economic assumptions recommended for adoption by LACERA staff and Milliman include:
  - a. 7.00% investment return,
  - b. 3.25% wage growth,
  - c. 3.25% payroll growth,
  - d. 2.75% national price inflation,
  - e. 2.75% local price inflation, and
  - f. 2.0–2.75% future Cost of Living Adjustment (COLA).
2. Adopt the economic actuarial methods recommended by LACERA staff and Milliman including:
  - a. Entry age for the actuarial cost method (no change),
  - b. Five-year smoothing with offsets for the actuarial asset method,
  - c. UAAL amortization method:
    - i. 20-year layered as a level percent of pay for assumption changes and actuarial gains / losses (no change),
    - ii. 10-year layered as a level percent of pay for benefit changes that increase the UAAL,
  - d. Implicit approach for the administrative expense treatment (no change), and
  - e. Exclusion of STAR Reserve from Valuation Assets.
3. Adopt the demographic assumptions recommended by LACERA staff and Milliman including:
  - a. Retain the base mortality tables and scaling factors for actives and retirees,

- b. Update the mortality improvement scale to the newest version (MP-2021) released by the Society of Actuaries,
- c. Update to merit salary increases for both General and Safety members. Use higher rates at longer service durations for both and lower rates at shorter service durations for Safety members. Ultimate proposed rates are 0.40% of pay for General members and 0.90% of pay for Safety members,
- d. Update to both General and Safety members expected service retirement rates to reflect both age and years of service,
- e. Update rates of termination from active status for both General and Safety members applying higher termination rates during lower years of service (all) and lower termination rates during higher years of service (General Plans D & G members),
- f. Small reductions in the probability of refunds,
- g. No changes to the disability retirement rates,
- h. No changes to the assumed retirement rate for deferred members,
- i. No changes to the beneficiary age difference of 2 years older for female retirees,
- j. Decrease the beneficiary age difference to 3 years younger for male retirees,
- k. Decrease the probability of eligible survivor to 48% for female retirees,
- l. No change to the probability of eligible survivor of 77% for male retirees, and
- m. Change the probability of future deferred vested members to establish reciprocity with another employer which increases to 17% for General members and 36% for Safety members.

The recommended changes are more fully described in Milliman's draft 2022 Experience Study report included as *Attachment I*.

- 4. Delegate authority to the Chief Executive Officer working in concert with LACERA's Interim Chief Financial Officer, Chief Investment Officer, and General Counsel to ensure the actuarial assumptions adopted by the BOI, as stated above and as more fully detailed in Appendix A of the 2022 Experience Study report, are incorporated in Milliman's calculation of plan liabilities presented in the upcoming 2022 Actuarial Valuation of Retirement Benefits report.

## **EXECUTIVE SUMMARY**

The Board of Investments' Retirement Benefit Funding Policy requires annual valuations to monitor the LACERA pension plan (Plan) funding status and to calculate employer and employee contribution rates for the coming year. The California Government Code requires the Board to conduct a plan experience study at least once every three years to measure the effectiveness of the plan assumptions and valuation methodology. *Attachment I* for the Board's consideration is the draft 2022 Experience Study conducted by Milliman.

At the August, October and November 2022 BOI meetings, LACERA's consulting actuaries, Nick Collier and Craig Glyde from Milliman, provided educational sessions and

discussed potential assumption changes with the BOI Trustees. At the November meeting, fiduciary counsel Ashley Dunning of Nossaman LLP also provided education. The consulting actuary primarily recommended the Board make changes to the actuarial methods and demographic assumptions used in projecting benefit liabilities. Milliman believes the current economic assumptions remain appropriate and recommended no changes. As a supplement to this discussion, Milliman estimated the likely funding impact on the Plan.

LACERA's audit actuary, Cavanaugh Macdonald Consulting, LLC (CMC) completed their review of the draft 2022 Investigation of Experience report and the processes Milliman used to develop the recommendations, and will provide and oral presentation at the December 14, 2022 Board meeting. CMC's draft Actuarial Review on the 2022 Investigation of Experience draft report is included as *Attachment II*.

## **LEGAL AUTHORITY**

Provisions contained in the County Employees Retirement Law (California Government Code, Sections 31450-31899.1) and the California Constitution (Article XVI, Section 17) govern the actuarial process at LACERA.

Section 31453 of the County Employees Retirement Law requires LACERA to obtain an actuarial valuation at least once every three years. The valuation shall be conducted under the supervision of an actuary, shall cover the mortality, service, and compensation experience of the members and beneficiaries, and shall evaluate the assets and liabilities of the retirement fund. The Board is required to act based on the recommendation of the actuary. Government Code Section 7504(a) additionally provides, for all California public pension systems, not less than every three years, the fund actuary "shall perform a valuation of the system utilizing actuarial assumptions and techniques established by the agency that are, in the aggregate, reasonably related to the experience and the actuary's best estimate of anticipated experience under the system. Any differences between the actuarial assumptions and techniques used by the actuary that differ significantly from those established by the agency shall be disclosed in the actuary's report and the effect of the differences on the actuary's statement of costs and obligations shall be shown."

The California Constitution, Article XVI, Section 17(a) of the Constitution provides that public pension trustees "shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty." To comply with their fiduciary duty with respect to actuarial decisions, the Constitution requires that each of these three elements be considered and evaluated with the interests of members and beneficiaries being paramount.

Article XVI, Section 17(e), assigns "the sole and exclusive power to provide for actuarial services" to the governing body of the public employees' retirement system. Such power



is given by the Constitution in order to “assure the competency of the assets of the public pension or retirement system.”

## **LACERA’s RETIREMENT BENEFIT FUNDING POLICY**

LACERA’s Retirement Benefit Funding Policy requires annual actuarial valuations to review the retirement system’s funding progress. These annual valuations are used to set the employer contribution rates and member contribution rates for the General Plan G and Safety Plan C tiers.

In addition to the annual valuations, LACERA requires its actuary to review the reasonableness of the economic and non-economic (demographic) actuarial assumptions every three years. This review, commonly referred to as the investigation of experience or experience study, is accomplished by comparing actual experience during the preceding three years to what was expected to happen according to the actuarial assumptions. Based on this analysis, the actuary recommends whether any changes in the assumptions or methodologies would allow a more accurate projection of total benefit liabilities and asset growth.

Milliman completes the triennial investigation of experience and uses the assumptions to prepare the upcoming annual actuarial valuation. Then the consulting actuary will evaluate the actuarial valuation results for reasonableness and recommend adjustments as need to all employer contribution rates and employee contribution rates for legacy plan (General Plans A-E and Safety Plans A-B) and PEPRA plan (General G and Safety C Plans).

## **INVESTIGATIVE PROCESS**

The plan actuary, Milliman, prefers to discuss the results of the investigation of plan experience with the Board of Investments Trustees prior to performing the valuation. This enables the Trustees to discuss the reasonableness of the actuarial assumptions and actuarial methods with Milliman and provides the opportunity for the Trustees to give input to the actuary prior to completing the annual valuation of plan liabilities. A significant part of the investigation process is to evaluate LACERA’s plan experience over the last three years and consider prior experience. The actuary completed this process and presents their recommendations in the attached draft report titled ‘2022 Investigation of Experience for Retirement Benefit Assumptions’.

The Investigation of Experience report is the basis for completing the next step in the investigative process which is for the Trustees to review the reasonableness of actuarial assumptions and methods to be used in the upcoming calculation of plan liabilities. Milliman includes a summary of their recommendations in their draft report on page 8. LACERA staff concur with Milliman’s recommendations.

LACERA engaged CMC, our reviewing actuary, to prepare an independent ‘Actuarial Review Report of the 2022 Investigation of Experience for LACERA’ (Actuarial Review Report). The scope of CMC’s work included an independent verification of the results and

evaluation of the recommendations in Milliman's Report, the preparation of a report, and a presentation of any findings to the Board of Investments. We have received CMC's draft report (*Attachment II*), and CMC will be present at the December 14, 2022 Board of Investments meeting to summarize the results of their actuarial review and address any questions the Board may have.

In the opinion of CMC, the assumptions and methods proposed by Milliman are reflective of sound professional judgement and are appropriate for the systematic funding of the pension obligations of LACERA. Furthermore, CMC has determined that the actuarial methods, assumptions, processes, and Milliman's report as written are consistent with the applicable Actuarial Standards of Practice. CMC noted a few minor items and stylistic preferences for consideration that may present opportunities for improvement, but none are believed to have a material impact on the proposed assumptions.

## SUMMARY OF RECOMMENDATIONS

At the December Board of Investments meeting, LACERA's consulting actuary Milliman will present the 2022 Investigation of Experience draft report to the Board for consideration and adoption. A complete list of proposed actuarial procedures and assumptions can be found in Appendix A of the report beginning on Page 61.

The table below summarizes Milliman's recommendations.

Assumption	Recommendation														
<b>Actuarial Methods</b>	Exclude STAR Reserve from Valuation Assets.  Amortize benefit changes / improvements that increase UAAL over 10 years.  Modify the asset valuation method to include an offsetting of gains and losses prior to applying asset smoothing.														
<b>Other Actuarial Methods</b>	Update operating tables used in the calculation of optional forms of payment to include recommended changes.														
<b>Economic</b>	<table> <tr> <th>Assumption</th><th>Current = Proposed</th></tr> <tr> <td>Investment Return</td><td>7.00%</td></tr> <tr> <td>National Price Inflation</td><td>2.75%</td></tr> <tr> <td>Local Price Inflation</td><td>2.75%</td></tr> <tr> <td>Wage Growth</td><td>3.25%</td></tr> <tr> <td>Payroll Growth</td><td>3.25%</td></tr> <tr> <td>COLAs for Retirees (Plan A / Other Plans)</td><td>2.75% / 2.00%</td></tr> </table>	Assumption	Current = Proposed	Investment Return	7.00%	National Price Inflation	2.75%	Local Price Inflation	2.75%	Wage Growth	3.25%	Payroll Growth	3.25%	COLAs for Retirees (Plan A / Other Plans)	2.75% / 2.00%
Assumption	Current = Proposed														
Investment Return	7.00%														
National Price Inflation	2.75%														
Local Price Inflation	2.75%														
Wage Growth	3.25%														
Payroll Growth	3.25%														
COLAs for Retirees (Plan A / Other Plans)	2.75% / 2.00%														
<b>Merit Salary Increase</b>	Increases, particularly at longer service durations.														
<b>Death While Active</b>	Update mortality improvement scale to ultimate rates of MP-2021.														
<b>Service Retirement</b>	Change to reflect the impact of a member's service on retirement probabilities.														
<b>Disability Retirement</b>	No change.														
<b>Termination</b>	Increases in rates at lower levels of service, primarily for General members.														
<b>Probability of Refund</b>	Small reductions.														
<b>Retiree Mortality</b>	Update mortality improvement scale to ultimate rates of MP-2021.														
<b>Miscellaneous</b>	Minor changes.														

## ESTIMATED FINANCIAL IMPACT

Milliman also provided an estimated financial impact on the Plan due to these assumption and method changes recommended in their draft report. A summary of these impacts is highlighted below.

### Funded Status and Employer Contributions (estimated)

The table below includes estimated results when applying all recommended economic and demographic assumption and actuarial method changes:

- The June 30, 2022 funded ratio with all changes is estimated to be 0.4 percent higher than the estimated June 30, 2022 funded ratio before the changes.
- The June 30, 2022 employer contribution rate with all changes is estimated to be 1.7 percent of payroll, or \$155 million, more than the estimated June 30, 2022 employer contribution rate before the changes.

### *Projected Results of June 30, 2022 Valuation With Proposed Assumptions*

	Funded Ratio	Total Employer Contribution	
		% of Payroll	\$ millions
<b>June 30, 2021 Valuation</b>	<b>79.3%</b>	<b>24.5%</b>	<b>\$ 2,205</b>
<b>Estimated June 30, 2022 Valuation (before changes)</b>	<b>81.0%</b>	<b>24.2%</b>	<b>\$ 2,178</b>
<b>Recommended Actuarial Method Changes</b>			
Alternate Asset Smoothing	0.0%	0.2%	\$ 18
Exclude STAR Reserve from Funding Assets	-0.5%	0.5%	44
<b>Total Method Changes</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>\$ 62</b>
<b>Recommended Economic Assumption Changes</b>			
<b>Economic Assumptions</b>	<b>0.0%</b>	<b>0.0%</b>	<b>\$ -</b>
<b>Recommended Demographic Assumption Changes</b>			
Merit Salary Increases	-0.5%	0.7%	\$ 62
Service Retirement	-0.9%	1.1%	98
Mortality	0.5%	-0.6%	(52)
Other	0.1%	-0.2%	(15)
<b>Demographic Assumption Changes</b>	<b>-0.8%</b>	<b>1.0%</b>	<b>\$ 93</b>
<b>Recommended Changes</b>			
<b>Total Recommended Changes</b>	<b>-1.3%</b>	<b>1.7%</b>	<b>\$ 155</b>
<b>Estimated June 30, 2022 Valuation (with all changes)</b>	<b>79.7%</b>	<b>25.9%</b>	<b>\$ 2,333</b>

### **Member Contributions (estimated)**

The table includes estimated results for both legacy plan and PEPRA plan member contribution rates when applying all recommended economic and demographic assumption and actuarial method changes:

- Projected increase in member contribution rates for most members.
- Amount of increase dependent on plan and entry age (where applicable).

#### *Projected Results of June 30, 2022 Valuation With Proposed Assumptions*

Entry Age	Member Contribution Rates <sup>(1)</sup>			
	Current	Estimated New	Estimated Monthly Increase	
			% of Pay	Average \$ <sup>(2)</sup>
<b>General D</b>				
25	6.95%	7.18%	0.23%	\$ 19
35	8.56%	8.77%	0.21%	17
45	10.49%	10.63%	0.14%	11
<b>General G</b>				
All Ages	9.08%	9.18%	0.10%	6
<b>Safety B</b>				
25	12.61%	13.00%	0.39%	45
35	14.99%	15.13%	0.14%	16
45	17.83%	17.83%	0.00%	0
<b>Safety C</b>				
All Ages	14.33%	14.33%	0.00%	0

1. Final member contribution rates will not be determined until the June 30, 2022 actuarial valuation is completed.

2. Average increases are based on the estimated percent of pay increase and the average monthly compensation for active members of the specified plan.

### **Letter from County of Los Angeles – Chief Executive Office**

Staff received the attached letter (*Attachment III*) dated December 2, 2022 from the Los Angeles County Chief Executive Officer, Fesia Davenport regarding Milliman's recommended changes to the economic and demographic assumptions. Ms. Davenport indicates in her letter that the County supports the recommendation to adopt the economic and demographic assumptions presented at the Board of Investment's October and November 2022 meetings that are contained in Milliman's draft 2022 Experience Study Report.

## CONCLUSION

During the last few BOI meetings, LACERA's actuary Milliman presented recommended economic and demographic assumptions, and actuarial methods for the Board to consider. Milliman will present the 2022 Investigation of Experience for Retirement Benefit Assumptions draft report and answer any questions you may have regarding experience study results at the Board's December 14, 2022 meeting. Milliman's presentation slides are included as *Attachment IV*. This discussion enables the Board of Investment Trustees to provide the actuary with input prior to completing the annual valuation as well as adopt actuarial assumptions and methods based on the actuary's recommendation to be used in upcoming 2022 Actuarial Valuation of Retirement Benefits. As soon as the 2022 Actuarial Valuation of Retirement Benefits report has been completed and approved by the Board of Investments at the upcoming March 2023 BOI meeting, LACERA will communicate contribution rate changes that will become effective July 1, 2023 for all active members impacted by the rate changes.

## Attachments

- I. Draft 2022 Investment of Experience for Retirement Benefit Assumptions (Experience Study Report)
- II. Draft Cavanaugh MacDonald's Actuarial Review report
- III. County of Los Angeles Letter dated December 2, 2022
- IV. Milliman's Presentation Slides dated December 14, 2022
- V. Actuarial Projects 2022 - Roadmap

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2022ExpStudy.BOI.Dec2022\_Final.docx

c: Luis A. Lugo, LACERA      Laura Guglielmo, LACERA      JJ Popowich, LACERA  
Jonathan Grabel, LACERA      Steven P. Rice, LACERA      Richard Bendall, LACERA  
Fesia Davenport, CEO, Los Angeles County

## **Attachment I**

### **Draft 2022 Investment of Experience for Retirement Benefit Assumptions (Experience Study Report)**



# Los Angeles County Employees Retirement Association

2022 Investigation of Experience  
for Retirement Benefit Assumptions

**December 2022 Board Meeting**

Prepared by:

**Nick J. Collier, ASA, EA, MAAA**  
Consulting Actuary

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November 28, 2022

Board of Investments  
Los Angeles County Employees Retirement Association  
300 North Lake Avenue, Suite 820  
Pasadena, CA 91101-4199

**Re: Los Angeles County Employees Retirement Association**

Dear Trustees of the Board:

It is a pleasure to submit this report of our investigation of the experience of the Los Angeles County Employees Retirement Association (LACERA) for the three-year period ending June 30, 2022. The results of this investigation are the basis for recommended changes in actuarial assumptions for the actuarial valuation of retirement benefits to be performed as of June 30, 2022.

The purpose of this report is to communicate the results of our review of the actuarial methods and the economic and demographic assumptions to be used in the completion of the upcoming valuation. Several of our recommendations represent changes from the prior methods or assumptions and are designed to better anticipate the emerging experience of LACERA.

We have provided financial information showing the estimated hypothetical impact of the recommended assumptions if they had been used in the June 30, 2021 actuarial valuation. We believe the recommended assumptions provide a reasonable estimate of anticipated experience affecting LACERA. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following:

- Plan experience differing from the actuarial assumptions,
- Future changes in the actuarial assumptions,
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as potential additional contribution requirements due to changes in the plan's funded status), and
- Changes in the plan provisions or accounting standards.

Due to the scope of this assignment, we did not perform an analysis of the potential range of such measurements.

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. We used LACERA's benefit provisions as stated in our June 30, 2021 actuarial valuation report. In our examination, after discussion with LACERA and making certain adjustments, we have found the data to be reasonably consistent and comparable with data used for other purposes. The experience study results are dependent on the integrity of this information. If any of this information is inaccurate or incomplete, our determinations may need to be revised.



We certify that the assumptions developed in this report satisfy ASB Standards of Practice, in particular, No. 27 (Selection of Economic Assumptions for Measuring Pension Obligations) and No. 35 (Selection of Demographic and Other Non-Economic Assumptions for Measuring Pension Obligations).

This investigation of experience report recommends assumptions to be used in the valuation to provide an estimate of the System's financial condition as of a single date. The valuation can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

The results for the estimated financial impact were developed using models employing standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice. Reliance on other experts is reflected in Milliman's capital market assumptions, and in Milliman's expected return model maintained by Milliman investment consultants.

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 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 exception(s):

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System'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 the System.
- (b) The System 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 sponsor. 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.

We would like to acknowledge the help in the preparation of the data for this investigation given by the LACERA staff. We look forward to our discussions and the opportunity to respond to your questions and comments at your next meeting.

Sincerely,

---

Nick Collier, ASA, EA, MAAA  
Consulting Actuary

---

Craig Glyde, ASA, EA, MAAA  
Consulting Actuary

DRAFT

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## 1. Executive Summary and Recommendations

Milliman has performed the triennial investigation of experience for the period July 1, 2019 through June 30, 2022. Although new information is added to our investigation based on the study period, the analysis and accompanying recommendations encompass a longer period by reflecting results from prior investigations. This report contains the findings of this investigation and includes several recommended changes in assumptions.

Calculating appropriate contribution rates is dependent on the assumptions used to project the future benefit payments and then to discount the value of future benefits to determine the present values. Therefore, the assumptions are critical in assisting the System in adequately funding future retirement benefits.

### Summary

This section describes the key findings of this investigation of experience. We have recommended several changes to the demographic assumptions and actuarial methods. If adopted, these changes would have an effect on the member and employer contribution rates effective July 1, 2023. The potential impact to the members is discussed on the next page. The potential impact to employers is discussed at the end of this section.

We will refer to our recommended assumptions as the “recommended” or “proposed” assumptions throughout this report. We have provided a summary of the proposed changes to the assumptions later in this section. The Board of Investments has the ultimate decision on the assumptions to be used in the actuarial valuation.

The triennial study period of July 1, 2019 to June 30, 2022 overlapped with the COVID pandemic which impacted the results for that three-year period. In particular, we observed more retiree deaths than predicted by the assumptions, and there were more terminations and service retirements than predicted by the assumptions. We believe both of these were related to the pandemic and are not indicative of long-term trends. Results for the triennial period were reviewed, but changes were only made if they were also supported by experience from prior studies or reflective of emerging best practice in assumption setting.

### Introduction

Section 2 discusses the following:

- How the investigation of experience study was performed.
- Actuarial Standards of Practice No. 27 and No. 35.
- The presentation of results you will see in this report.

### Actuarial Methods (Includes Amortization Periods and Member Contribution Rates)

Section 3 describes the actuarial methods used in performing our valuation and in assisting LACERA to administer the plan. We are recommending three changes in the actuarial methods used in the valuation.

1. Under LACERA's current amortization policy, annual changes in the Unfunded Actuarial Accrued Liability (UAAL) are funded over separate 20-year periods as a level percentage of payroll. These annual payments are referred to as “layers.” This approach of amortizing the changes in the UAAL due to assumption changes and actuarial gains and losses over 20 years is consistent with actuarial guidance and is similar to other California retirement systems. We are recommending one modification to better comply with actuarial guidance. If there is an increase in the UAAL due to changes in the benefit provisions, we recommend the impact of that increase be amortized over a 10-year period.
2. Under LACERA's funding policy, the reserve value for STAR benefits is included in the Valuation Assets; however, the liability for any STAR benefits that may be granted in the future is not included in the liability

portion of valuation. We recommend the funding policy be changed to exclude the STAR reserve from the Valuation Assets for consistency with the treatment of STAR benefits.

3. We believe that the current asset valuation method where actuarial asset gains and losses are smoothed over five years is appropriate for LACERA's valuation. A five-year period is used by a majority of large public retirement systems. We are recommending one modification which should result in slightly smoother employer contribution rates in the future. The modified method would still smooth asset gains and losses over 5 years; however, before smoothing is applied, the current year gain (or loss) is offset against prior losses (or gains), if any. In addition to smoother employer contribution rates, the offsetting method is expected to reduce the likelihood and magnitude of spikes or dips in employer contribution rates in most cases.

An update to the operating tables LACERA uses in the calculation of optional forms of payment will be needed to reflect any changes in the COLA, mortality, and investment return assumptions. Based on the recommended changes, the only change would be due to the update to the mortality projection scale.

New member contribution rates will be calculated based on the 2022 triennial valuation using the assumptions adopted. We have estimated the new member rates based on the proposed assumptions, as shown in Section 3. These estimates show that there is expected to be increases in member rates in most cases under the proposed assumptions. Note that the actual member contribution rates cannot be determined until completion of the June 30, 2022 valuation.

Sample member contribution rates are shown in the following table. Note that all estimated member contribution rates also include the proposed demographic assumption changes and are the total member contribution rate (i.e., Normal + COLA).

Entry Age	Member Contribution Rates <sup>(1)</sup>			
	Current	Estimated New	Estimated Monthly Increase % of Pay	Average \$ <sup>(2)</sup>
<b>General D</b>				
25	6.95%	7.18%	0.23%	\$ 19
35	8.56%	8.77%	0.21%	17
45	10.49%	10.63%	0.14%	11
<b>General G</b>				
All Ages	9.08%	9.18%	0.10%	6
<b>Safety B</b>				
25	12.61%	13.00%	0.39%	45
35	14.99%	15.13%	0.14%	16
45	17.83%	17.83%	0.00%	0
<b>Safety C</b>				
All Ages	14.33%	14.33%	0.00%	0

1. Final member contribution rates will not be determined until the June 30, 2022 actuarial valuation is completed.

2. Average increases are based on the estimated percent of pay increase and the average monthly compensation for active members of the specified plan.

## Economic Assumptions

Section 4 discusses the economic assumptions: price inflation, general wage growth (which includes price inflation and productivity), payroll growth, investment return, and future retiree COLA increases. There have been significant changes in the economic environment since the last experience study; however, we believe the current assumptions remain appropriate and we are recommending no change.

Balancing both the current high price inflation and forecasts that are somewhat lower than the current assumption, we recommend the price inflation assumption remain at 2.75%. Related to the price inflation assumption, we also recommend the following.

- We recommend the 2.75% price inflation we applied both on a local basis (indirectly affecting general wage growth, payroll and COLA assumptions) and a national basis (indirectly affecting the investment return assumption).
- We recommend the wage inflation assumption remain equal to the local price inflation plus 0.5%, for a total of 3.25%, as there is a high correlation between price and wage inflation.
- We recommend no change in the assumed cost-of-living adjustment (COLA) for retiree benefits, which is equal to the price inflation assumption subject to plan maximum increases and COLA accumulation bank levels. Due to current COLA accumulation bank levels, the assumed COLA for Plan A retirees retired before April 1, 2022 is 3.0%. For other Plan A retirees the assumed COLA is equal to local price inflation. For all other plans the assumed COLA is 2.0% (with pro-rata adjustment based on pre-2002 service for General Plan E).

Based on the January 2022 capital market assumptions, there was less than a 50% probability that the current investment return of 7.0% would be met over the next 10 to 20 years; however, recent changes in the economic environment have increased the expected return as of July 2022 to at or above the 7.0% return. Considering both the January and July 2022 expected returns, we are recommending retaining the investment return assumption of 7.0%.



The following table shows our recommended economic assumptions which are equal to the current assumption.

Assumption	Current = Proposed
Investment Return <sup>(1)</sup>	7.00%
National Price Inflation	2.75%
Local Price Inflation	2.75%
Wage Growth	3.25%
Payroll Growth	3.25%
COLAs for Retirees (Plan A / Other Plans) <sup>(2)</sup>	2.75% / 2.00%

1. Net of both investment and administration expenses. For GASB financial reporting, the recommended investment return assumption is 0.15% higher.

2. The first of the two numbers applies to Plan A; the second number applies to the remainder of the plans (although the Plan E COLA is pro-rated percentage of 2.00% based on pre-2002 service). To account for existing Plan A COLA accumulation balances, retirees and beneficiaries with a retirement date prior to April 1, 2022 are assumed to receive a 3.00% annual COLAs.

### Analysis by Compensation Level

In our analysis of the active demographic assumptions (merit salary, active death, service retirement, disability, and termination), we reflect the impact of compensation levels by weighting the results by compensation. That is, a member with annual compensation of \$80,000 has twice the impact on the observed rates in comparison to a member with annual compensation of \$40,000. We observed some differences in member behavior based on compensation. For example, members with higher levels of compensation tended to have higher probabilities of retiring at a given age. These compensation-weighted probabilities are shown as the “Actual” bars in the graphs in Section 5 through Section 9. This approach is consistent with the previous experience study.

### Merit Salary Increases

Section 5 discusses the individual salary increases due to promotion and longevity – the merit component of salaries. Merit salary increases were generally higher than the assumed increases. We are recommending increases in the assumption for both General and Safety members at most service levels to reflect actual experience.

### Death from Active Status

Section 6 discusses the probability of a member dying while in active employment.

For nonservice-connected deaths, the actual rates were greater than what the current assumptions predicted. This experience is likely at least partially related to the pandemic, and as a consequence we are recommending no update to the base mortality tables, nor the plan and gender-specific adjustment factors applied to those base rates. However, we are recommending an update to the mortality improvement scale from the ultimate rate of MP-2014 to the ultimate rate of MP-2021. MP-2021 is the most recent mortality improvement scale published by the Society of Actuaries (SOA) and we believe it is appropriate to use in the valuation of LACERA. This change will result in lower mortality rates for most active members.

For the service-connected death assumption, we are not recommending a change given the limited data for this assumption.



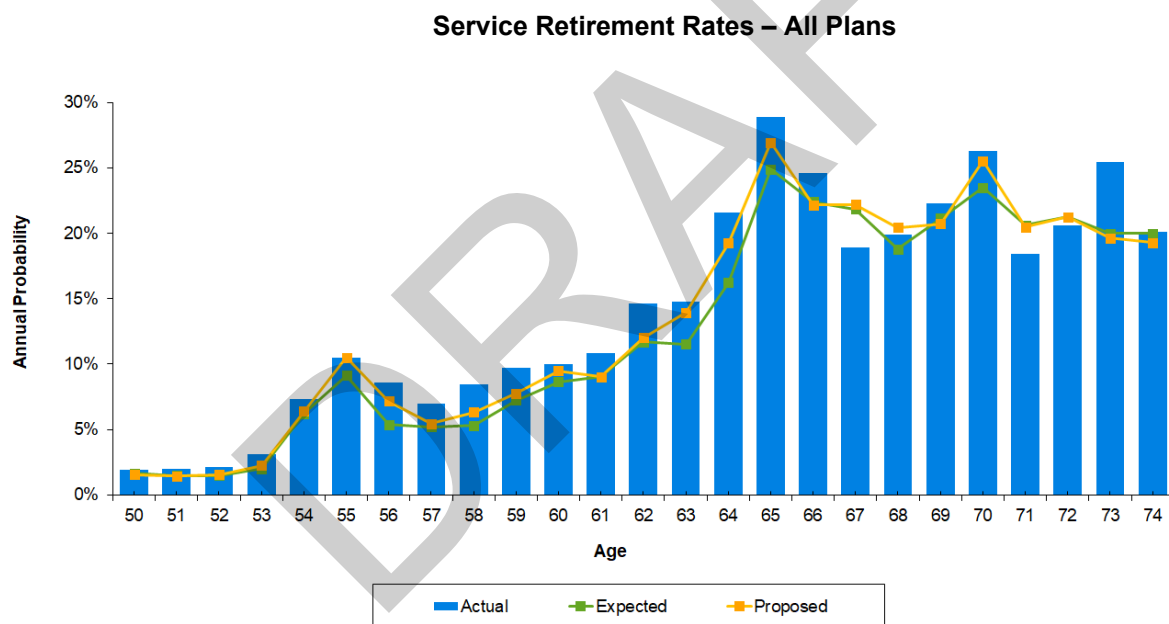
## Service Retirement

Section 7 discusses the probability of an eligible active member taking a service retirement at a specific age and service level. The results of our study showed actual retirement rates, weighted by compensation, that were approximately 25% higher than those expected by the assumptions. As noted above, we believe a portion of these extra retirements is related to the pandemic and not necessarily indicative of a long-term trend. As such, our recommendation will not reflect this experience to the extent it is not supported by the experience from earlier study periods.

Historically, rates of retirement have been analyzed based on a members's age and membership class. We have observed that rates of retirement also vary based on a member's years of service. That is, a member age 60 with 30 years of service is more likely to retire than a member age 60 with 10 years of service.

Based on the above, we are recommending modest adjustments to the age-based service retirement rates, and the addition of service-based adjustment factors to reflect different rates of retirement for similarly aged members with a different number of years of service. These revisions are projected to provide a better estimate of liabilities and cashflows.

The following graph shows the actual experience for all members from the current experience study (light blue bars). The proposed assumptions are shown as an orange line and compared to the current assumptions (green line).



## Disability Retirement

Section 8 discusses the probability of an active member becoming disabled. We studied both service-connected disability and nonservice-connected disability.

We have found that in many systems, including LACERA, there is generally at least a six-month lag between the actual occurrence of a disability retirement and the subsequent approval and reporting of that same retirement, which can lead to underreporting of disability retirements. After accounting for this reporting lag, the actual number of disability retirements, specifically service-connected disability retirements, is higher than expected by

the assumptions. As a portion of these disability retirements could be due to the pandemic, we are recommending no change to the disability retirement assumptions. However, if this experience continues over the next study period we will likely recommend changes to these assumptions.

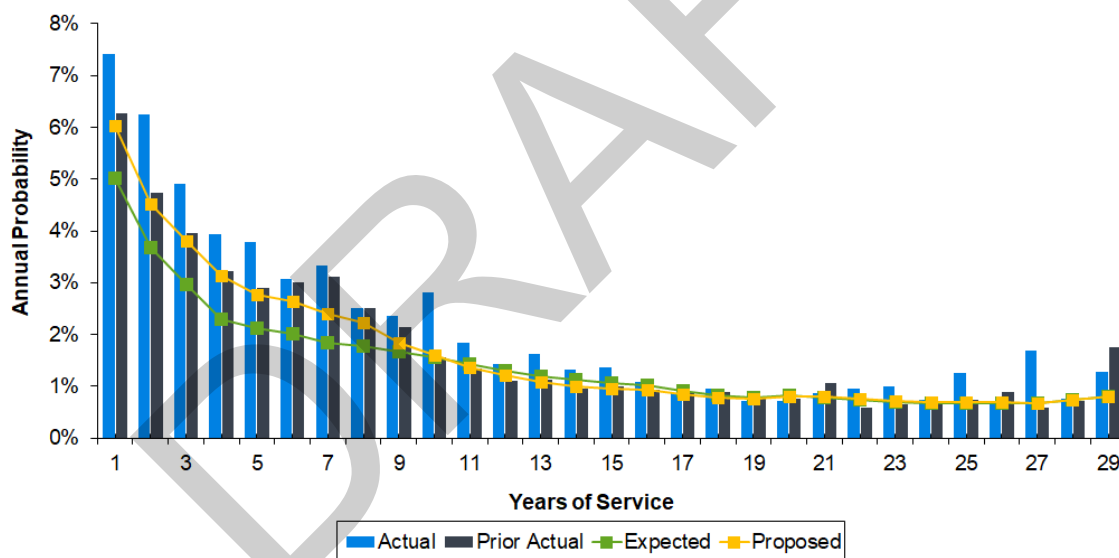
## Termination

Section 9 summarizes the results of our study of terminations of employment for reasons other than death, service retirement, or disability. As used in the actuarial valuation, termination rates refer to both voluntary and involuntary terminations of employment.

The results of our study showed actual termination rates, weighted by compensation, that were approximately 50% higher than those expected by the assumptions. As noted above, we believe a portion of these extra terminations is related to the pandemic and not necessarily indicative of a long-term trend. As such, our recommendation will not reflect this experience to the extent it is not supported by the experience from earlier study periods.

The following graph shows the actual experience for all members from the current experience study (light blue bars), as well as the actual experience from the prior experience study (dark gray bars). The proposed assumptions are shown as an orange line and compared to the current assumptions (green line).

**Termination from Employment Rates – All Plans**



For General Plan D and G members we are recommending increases to the termination rates at service less than 10 years, and small decreases between 10 and 20 years of service. We are also recommending minor changes for Safety and General Plan E members.

## Probability of Refund

In Section 10, we report the actual number of vested members electing a refund upon termination was 92% of the expected number. We are recommending small reductions in this assumption for General members to reflect the recent experience.

## Retiree Mortality

The mortality assumption is used to predict the life expectancy of both members currently in pay status and those expected to receive a benefit in the future. The results of the study showed there were approximately 7% more deaths than the assumptions predicted. Since retirees with larger-than-average benefits tend to have lower mortality than those with smaller-than-average benefits we reflect the impact of benefit amounts by weighting the results based on the benefit amount. This approach is consistent with the prior experience study.

Although we observed more deaths than expected, it can be assumed that a portion of these “excess deaths” were related to the pandemic, and may not be expected to be part of a long-term trend. As a consequence we are recommending no update to the base mortality tables, nor the plan and gender-specific adjustment factors applied to those base rates. However, we are recommending an update to the mortality improvement scale from the ultimate rate of MP-2014 to the ultimate rate of MP-2021. MP-2021 is the most recent mortality improvement published by the Society of Actuaries (SOA) and we believe it is appropriate to use in the valuation of LACERA. This change will result in higher mortality rates (and shorter life expectancy) for most retired members.

Additional details are provided in Section 11.

## Miscellaneous Assumptions

Section 12 discusses some other assumptions that are made. We are recommending the following:

- Modifying the assumption that a female member will have an eligible survivor at retirement who is eligible for the unreduced continuance benefit from a 50% probability to a 48% probability.
- Changing the assumption that an active male's beneficiary is 4 years younger to 3 years younger.
- Updating the current assumption for the probability of a deferred vested member establishing reciprocity and retiring with another system – from 16% to 17% for General members and from 35% to 36% for Safety members.

## Summary of Recommendations

The following table summarizes our recommendations. The next section provides an overview of the financial impact of these proposed changes.

Assumption	Recommendation														
<b>Actuarial Methods</b>	Exclude STAR Reserve from Valuation Assets.  Amortize benefit changes / improvements that increase UAAL over 10 years.  Modify the asset valuation method to include an offsetting of gains and losses prior to applying asset smoothing.														
<b>Other Actuarial Methods</b>	Update operating tables used in the calculation of optional forms of payment to include recommended changes.														
<b>Economic</b>	<table> <tr> <th>Assumption</th><th>Current = Proposed</th></tr> <tr> <td>Investment Return</td><td>7.00%</td></tr> <tr> <td>National Price Inflation</td><td>2.75%</td></tr> <tr> <td>Local Price Inflation</td><td>2.75%</td></tr> <tr> <td>Wage Growth</td><td>3.25%</td></tr> <tr> <td>Payroll Growth</td><td>3.25%</td></tr> <tr> <td>COLAs for Retirees (Plan A / Other Plans)</td><td>2.75% / 2.00%</td></tr> </table>	Assumption	Current = Proposed	Investment Return	7.00%	National Price Inflation	2.75%	Local Price Inflation	2.75%	Wage Growth	3.25%	Payroll Growth	3.25%	COLAs for Retirees (Plan A / Other Plans)	2.75% / 2.00%
Assumption	Current = Proposed														
Investment Return	7.00%														
National Price Inflation	2.75%														
Local Price Inflation	2.75%														
Wage Growth	3.25%														
Payroll Growth	3.25%														
COLAs for Retirees (Plan A / Other Plans)	2.75% / 2.00%														
<b>Merit Salary Increase</b>	Increases, particularly at longer service durations.														
<b>Death While Active</b>	Update mortality improvement scale to ultimate rates of MP-2021.														
<b>Service Retirement</b>	Change to reflect the impact of a member's service on retirement probabilities.														
<b>Disability Retirement</b>	No change.														
<b>Termination</b>	Increases in rates at lower levels of service, primarily for General members.														
<b>Probability of Refund</b>	Small reductions.														
<b>Retiree Mortality</b>	Update mortality improvement scale to ultimate rates of MP-2021.														
<b>Miscellaneous</b>	Minor changes.														

## Estimated Financial Impact

The following exhibit is designed to give the reader an idea of how the proposed changes may affect LACERA as a whole. Note that these estimates represent the immediate impact. Ultimately, the long-term cost of any retirement system is based on the benefits provided by employers, and the actual experience of the system.

The financial impact was evaluated by performing additional valuations with the June 30, 2021 valuation data and benefits, and reflecting the proposed assumption changes. This allows us to evaluate the relative financial impact of the various proposed changes; however, it should be noted that these are just estimates and the actual impact may vary when the June 30, 2022 valuation is completed. We have projected these results forward to June 30, 2022. Note that the impact of the various assumption changes by component is somewhat dependent on the order in which they are evaluated.

**Projected Results of June 30, 2022 Valuation  
With Proposed Assumptions**

	Funded Ratio	Total Employer Contribution	
		% of Payroll	\$ millions
<b>June 30, 2021 Valuation</b>	<b>79.3%</b>	<b>24.5%</b>	<b>\$ 2,205</b>
<b>Estimated June 30, 2022 Valuation</b> (before changes)	<b>81.0%</b>	<b>24.2%</b>	<b>\$ 2,178</b>
<b>Recommended Actuarial Method Changes</b>			
Alternate Asset Smoothing	0.0%	0.2%	\$ 18
Exclude STAR Reserve from Funding Assets	-0.5%	0.5%	44
<b>Total Method Changes</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>\$ 62</b>
<b>Recommended Economic Assumption Changes</b>			
<b>Economic Assumptions</b>	<b>0.0%</b>	<b>0.0%</b>	<b>\$ -</b>
<b>Recommended Demographic Assumption Changes</b>			
Merit Salary Increases	-0.5%	0.7%	\$ 62
Service Retirement	-0.9%	1.1%	98
Mortality	0.5%	-0.6%	(52)
Other	0.1%	-0.2%	(15)
<b>Demographic Assumption Changes</b>	<b>-0.8%</b>	<b>1.0%</b>	<b>\$ 93</b>
<b>Recommended Changes</b>			
<b>Total Recommended Changes</b>	<b>-1.3%</b>	<b>1.7%</b>	<b>\$ 155</b>
<b>Estimated June 30, 2022 Valuation</b> (with all changes)	<b>79.7%</b>	<b>25.9%</b>	<b>\$ 2,333</b>

1. Impact estimated based on June 30, 2021 actuarial valuation. New assumptions will be implemented with the June 30, 2022 actuarial valuation and affect contribution rates effective July 1, 2023, so actual results will vary.
2. Impact of proposed changes will vary by plan; however, relative increase for the combined General plans and the combined Safety plans should be similar.

## Conclusion

We recommend that the Board adopt the proposed actuarial assumptions and methods shown in Appendix A. We believe these assumptions reasonably reflect future expectations.

## 2. Introduction

### Funding and Valuation Principles

While our goal is to make the best possible estimate of future experience, it is important for the Board to recognize that the future will almost certainly differ from our current best efforts to forecast it. Routine scheduled evaluations of the actuarial assumptions, such as through this experience investigation, are a sound methodology to identify where assumptions differ from emerging experience and to fine-tune the actuarial estimates to keep them as close as possible to emerging experience.

It is expected that there will be years in which the actual investment return will exceed the actuarial assumption, and there will be years when the actual experience will not meet the assumed rate. It is the annualized expected median long-term rate that is used to actuarially project and finance the retirement benefits.

A higher investment return assumption will tend to result in lower required contributions in the short term (and higher required contributions in the long term), while a lower investment return assumption will tend to require higher contributions in the short term (and lower required contributions in the long term). However, the actual contributions will ultimately be determined by the actual experience, so in the long term, this should approximately balance out.

The actuarial assumptions are usually divided into two groups: economic and demographic. The economic assumptions must not only reflect LACERA's actual experience but also consider the long-term expectation of future economic growth for the nation as well as the global economy.

The non-economic, or demographic assumptions, are based on LACERA's actual experience, adjusted to reflect trends and historical experience. Thus, the economic assumptions are more subjective than the demographic assumptions, and the demographic assumptions are much more dependent on recent experience.

### Overview

This report presents the results of an investigation of the recent actuarial experience of LACERA. We will refer to this investigation as an experience study.

Throughout this report, we refer to "expected" and "proposed" actuarial assumptions. The "expected" assumptions are those used for our actuarial valuation of LACERA as of June 30, 2021. They may also be referred to as the "current" assumptions. The current assumptions and methods were adopted by the Board based on Milliman's 2019 experience study. The "proposed" or "recommended" assumptions are those we recommend for use in the valuation as of June 30, 2022 and for subsequent valuations until further changes are made.

The choice of economic assumptions (price inflation, investment return, general wage growth, payroll growth, and retiree COLA increase) is discussed in Section 4 of this report. These assumptions are generally chosen on the basis of expectations as to the effect of future economic conditions on the operation of LACERA.

Sections 5 through 12 of this report show the results of our study of demographic assumptions. These assumptions tend to be more objective than the economic assumptions. The exhibits are detailed comparisons between actual and expected decrements (members leaving active or retired status, for reasons such as retirement or death) on both the current and proposed bases. Each exhibit is identified by two numbers corresponding to the section of the report and the specific exhibit within that section. For example, Exhibit 7-1 is referred to in Section 7, retirement rates.

For each type of assumption, graphs show the actual, the expected and proposed rates, usually by some combination of gender, plan, years of service, and age. Ratios larger than 100% on the current basis generally indicate that the rates may need to be raised; ratios smaller than 100% generally indicate that rates may need to be lowered.

For each exhibit, the actual decrement rates for the current and prior period are shown as bar graphs on either a quinquennial-age basis, a years-of-service basis, or on an age-by-age basis. The current assumptions – the "expected" rates – used in the June 30, 2021 actuarial valuation, are shown, as well as the new proposed assumptions, as line graphs. Therefore, the assumption changes we are proposing are illustrated by the difference between the two lines in each exhibit. Note that in cases where no change is being proposed, only the proposed rate line is shown. On most graphs, we have also shown the actual results from the prior study period for comparison.

### **Actuarial Standard of Practice No. 27**

The Actuarial Standards Board has adopted Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*. This standard provides guidance to actuaries giving advice on selecting economic assumptions for measuring obligations under defined benefit plans such as LACERA.

Because no one knows what the future holds, the best an actuary can do is to use professional judgment to estimate possible future economic outcomes. These estimates are based on a mixture of past experience, future expectations, and professional judgment. The actuary should consider a number of factors, including the purpose and nature of the measurement, and appropriate recent and long-term historical economic data. However, the standard explicitly advises the actuary not to give undue weight to recent experience.

ASOP 27 states that each economic assumption selected by the actuary should be reasonable. The assumption is reasonable if it has the following characteristics:

- It is appropriate for the purpose of the measurement.
- It reflects the actuary's professional judgment.
- It takes into account relevant historical and current economic data.
- It reflects the actuary's estimate of future experience and observation of the estimates in market data.
- It has no significant bias (i.e., it is not significantly optimistic or pessimistic), but may specifically make provision for adverse deviation.

Each economic assumption should individually satisfy this standard. Furthermore, with respect to any particular valuation, each economic assumption should be consistent with every other economic assumption over the measurement period.

In our opinion, the economic assumptions we recommend for Retirement Board consideration in this report have been developed in accordance with ASOP No. 27.

### **Actuarial Standard of Practice No. 35: Selection of Demographic Assumptions**

Actuarial Standard of Practice No. 35 (ASOP No. 35) governs the selection of demographic and other non-economic assumptions for measuring pension obligations. ASOP No. 35 states that the actuary should use professional judgment to estimate possible future outcomes based on past experience and future expectations, and select assumptions based upon application of that professional judgment. The actuary should select reasonable demographic assumptions in light of the particular characteristics of the defined benefit plan that is the subject of the measurement.



## ASOP 35 Steps

The actuary should follow these steps in selecting the demographic assumptions:

1. **Identify the types of assumptions.** Types of demographic assumptions include but are not limited to: retirement, mortality, termination of employment, disability, election of optional forms of payment, administrative expenses, family composition, and treatment of missing or incomplete data. The actuary should consider the purpose and nature of the measurement, the materiality of each assumption, and the characteristics of the covered group in determining which types of assumptions should be incorporated into the actuarial model.
2. **Consider the relevant assumption universe.** The relevant assumption universe includes experience studies or published tables based on the experience of other representative populations, the experience of the plan sponsor, the effects of plan design, general trends, and future expectations.
3. **Consider the assumption format.** The assumption format includes whether assumptions are based on parameters such as gender, age, service, or calendar year. The actuary should consider the impact the format may have on the results, the availability of relevant information, the potential to model anticipated plan experience, and the size of the covered population.
4. **Select the Specific Assumptions.** In selecting an assumption the actuary should consider the potential impact of future plan design as well as the factors listed above.
5. **Select a Reasonable Assumption.** The assumption should be expected to appropriately model the contingency being measured. The assumption should not be anticipated to produce significant actuarial gains or losses.

## ASOP 35 General Considerations and Application

Each individual demographic assumption should satisfy the criteria of ASOP No. 35. In selecting demographic assumptions, the actuary should also consider: the internal consistency between the assumptions, materiality, cost effectiveness, and the combined effect of all assumptions. At each measurement date, the actuary should consider whether the selected assumptions continue to be reasonable, but the actuary is not required to do a complete assumption study at each measurement date. In our opinion, the demographic assumptions recommended in this report have been developed in accordance with ASOP No. 35.

## Actuarial Standard of Practice 44: Selection and Use of Asset Valuation Methods for Pension Valuations

Actuarial Standard of Practice No. 44 (ASOP No. 44) governs the selection of asset valuation methods. For plans using an asset smoothing method, considerations include: 1) whether actuarial investment gains and losses are recognized over a reasonable period of time; 2) whether there is any significant bias toward the smoothed value overstating or understating compared to the market value; and 3) whether realized and unrealized actuarial investment gains and losses are treated similarly. In our opinion, the asset valuation method recommended in this report has been developed in accordance with ASOP No. 44.



### 3. Actuarial Methods

As part of the triennial investigation, we have reviewed the valuation methods and other issues related to the actuarial assumptions. Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs and Contributions, provides guidance to actuaries giving advice on selecting actuarial methods for defined benefit plans. Actuarial Standard of Practice (ASOP) No. 44, Selection and Use of Asset Valuation Methods for Pension Valuations, provides guidance on methods for recognizing investment gains and losses through the asset valuation method. As part of the current experience study, we reviewed the valuation methods and other issues related to the actuarial assumptions in the context of these ASOPs. This section contains a discussion of actuarial cost methods, the valuation of assets, and other miscellaneous assumptions used in the valuation.

#### Actuarial Cost Method

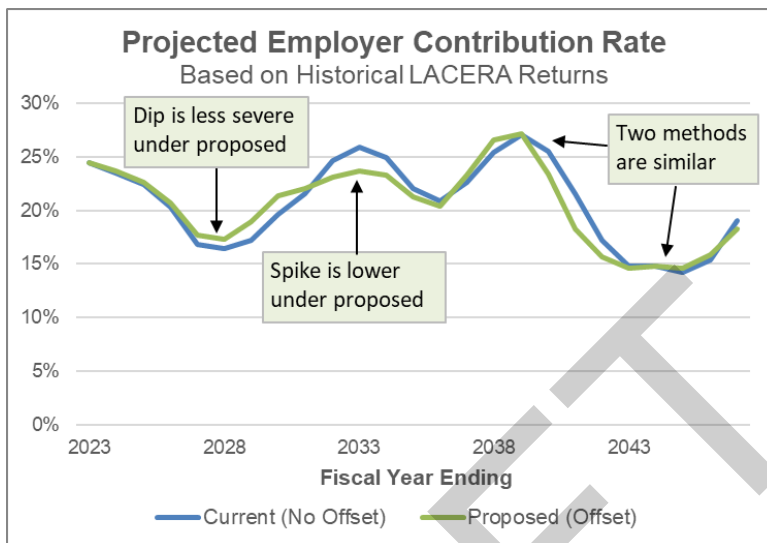
The actuarial valuation is prepared using the entry age actuarial cost method. We believe that this cost method is appropriate for LACERA's valuation. It is also the cost method that is required for financial reporting under GASB Statements 67 and 68. We recommend no change. Note that this is by far the most common method used for public sector retirement systems (used by about 90% of large public retirement systems), as it results in more stability in normal costs and provides a level allocation of costs as a percentage of pay over each individual's working lifetime. The entry age actuarial cost method satisfies the requirements of ASOP No. 4 for cost methods.

#### Valuation Assets

We believe that the current asset valuation method where actuarial asset gains and losses are smoothed over five years is appropriate for LACERA's valuation. A five-year period is used by a majority of large public retirement systems. We are recommending one modification which should result in slightly smoother employer contribution rates in the future:

To the extent that there is a loss for the year and there are unrecognized gains from previous years, or to the extent that there is a gain for the year and there are unrecognized losses from previous years, the gain or loss for the year shall be used to offset unrecognized gains or losses from previous years in the order of oldest to most recent. Any remaining gain or loss for the year is recognized over a five-year period.

Based on our analysis, the addition of the offsetting should result in slightly smoother employer contribution rates. As an example, if LACERA's returns for the last 25 years were to repeat over the next 25 years and all other assumptions are met, we see a slightly smoother employer contribution rate pattern under the offsetting method (green lines) than under the current method without offsetting (blue lines).



The proposed asset valuation method satisfies the requirements of ASOP No. 44 that discusses the selection of asset valuation methods.

It should be noted that the California Actuary Advisory Panel (CAAP) has published a paper on model actuarial funding policies which include guidelines for asset smoothing. LACERA's method of five-year smoothing without a corridor falls in the "Acceptable Practices" category under these guidelines (categories described below for reference). We do not believe the addition of the offsetting of asset gains and losses would change this. The main difference between LACERA's method and the method described in the "Model Practices" is that the model practical includes a corridor of no greater than 50% to 150%, and LACERA has no corridor for five-year smoothing. We believe a five-year period is short enough that a corridor is not needed.

Categories Under CAAP Guidelines	
Model Practices	Those practices most consistent with the Level Cost Acturial Model (LCAM) developed by CAAP.
Acceptable Practices	Generally those which, while not consistent with the LCAM, are well established in practice and typically do not require additional analysis.
Acceptable Practices with Conditions	May be acceptable in some circumstances either to reflect different policy objectives or on the basis of additional analysis.
Non-Recommended Practices	Systems using these practices should acknowledge the policy concerns identified in the CAAP Guidelines.
Unacceptable Practices	No description provided by CAAP, but implication appears to be clear.

## Amortization of UAAL

Under LACERA's current amortization policy, annual changes in the Unfunded Actuarial Accrued Liability (UAAL) are funded over separate 20-year periods as a level percentage of payroll. These annual payments are referred to as "layers." This approach of amortizing the changes in the UAAL due to assumption changes and actuarial gains and losses over 20 years is consistent with actuarial guidance and similar to other California retirement systems.

We are recommending one modification to better comply with actuarial guidance. If there is an increase in the UAAL due to changes in the benefit provisions, we recommend the impact of the increase be amortized over a 10-year period.

## Treatment of STAR Reserve

Under LACERA's funding policy, the reserve value for STAR benefits is included in the Valuation Assets; however, the liability for any STAR benefits that may be granted in the future is not included in the liability portion of valuation. We recommend the valuation be changed to exclude the STAR reserve from the Valuation Assets for consistency with the treatment of STAR benefits.

## Administrative Expense Treatment

Expenses are reflected in the valuation either implicitly or explicitly. Under the implicit method, an adjustment is made to the investment return assumption to reflect that administrative expenses are paid from investment earnings. Under the explicit method, the member and/or employer contribution rates are loaded by a percentage or amount to estimate the administrative expenses for the coming year. LACERA uses the implicit method. We believe this method is appropriate for LACERA and recommend continued usage.

## Operating Tables

We are recommending a change in mortality projection assumption. If this change is adopted, the operating tables should be updated to reflect the change.

## Blended Mortality Table

We have studied the following factors that apply to the blended mortality tables used in the operating factors:

- **Gender Proportion:** In the prior study, we found that males account for 33% of the total present value of benefits for current General members and 86% for current Safety members.  
We are recommending the General Unisex mortality table use a blending of 35% male and 65% female (no change) and the Safety Unisex mortality table use a blending of 85% male and 15% female (no change).
- **Assumed Retirement Year:** Since a generational mortality assumption is complex administratively to apply for operating tables, we recommend a static projection of mortality rates be used instead. To generate the static mortality table we recommend using the average retirement age of General (age 64) and Safety members (age 56) and project the base mortality table rate to 2026 for that age. Mortality rates at all other ages would then be projected to the corresponding year based on the average retirement age in 2026. For example, age 64 is the average retirement age for General members, so the mortality base table rate for age 64 is projected to 2026. The mortality rate at age 74 (10 years from age 64) would then be the base table rate for age 74 projected an additional 10 years to 2036. Note that we recommend that the projected mortality rates be limited such that the rates not be greater than the corresponding base mortality rate.

- **Retirement Type:** LACERA uses healthy mortality (i.e., the mortality table used for service retirees) in cases where a member retires as a disability, but the benefit is based on the service retirement formula. We believe this continues to be a reasonable approach.

Reflecting the proposed assumptions in the optional monthly annuities would result in changes in the modified (or Unmodified Plus) benefit amount for future retirees who elect optional forms of payment. It would not affect the unmodified benefit.

Sample member contribution rates are shown in the following table. Note that all estimated member contribution rates include the proposed demographic assumption changes and are the total member rate (i.e., Normal + COLA).

Entry Age	Estimated Member Contribution Rates <sup>(1)</sup>			
	Current	Estimated New	Estimated Monthly Increase % of Pay	Average \$ <sup>(2)</sup>
<b>General D</b>				
25	6.95%	7.18%	0.23%	\$ 19
35	8.56%	8.77%	0.21%	17
45	10.49%	10.63%	0.14%	11
<b>General G</b>				
All Ages	9.08%	9.18%	0.10%	6
<b>Safety B</b>				
25	12.61%	13.00%	0.39%	45
35	14.99%	15.13%	0.14%	16
45	17.83%	17.83%	0.00%	0
<b>Safety C</b>				
All Ages	14.33%	14.33%	0.00%	0

1. Final member contribution rates will not be determined until the COLA portion is calculated in the June 30, 2022 actuarial valuation.

2. Average increases are based on the estimated percent of pay increase and the average monthly compensation for active members of the specified plan.

#### 4. Economic Assumptions

Actuarial Standard of Practice (ASOP) No. 27, *Selection of Economic Assumptions for Measuring Pension Obligations*, provides guidance to actuaries giving advice on selecting economic assumptions for measuring obligations under defined benefit plans. As future events are unknown, the best an actuary can do is to use professional judgment to estimate possible future economic outcomes. These estimates are based on a mixture of past experience, future expectations, and professional judgment. The actuary should consider a number of factors, including the purpose and nature of the measurement, and appropriate recent and long-term historical economic data. However, the standard explicitly advises the actuary not to give undue weight to recent experience. To meet the standard, the assumption should reflect “the actuary’s estimate of future experience” and “it has no significant bias (i.e., it is not significantly optimistic or pessimistic).”

Each economic assumption should individually satisfy this standard. Furthermore, with respect to any particular valuation, each economic assumption should be consistent with every other economic assumption over the measurement period.

This section will discuss the economic assumptions. We have recommended no changes in these assumptions. We believe this set of assumptions satisfies ASOP No. 27.

The following table shows the current economic assumptions which is also our recommendation.

Assumption	Current = Proposed
Investment Return <sup>(1)</sup>	7.00%
National Price Inflation	2.75%
Local Price Inflation	2.75%
Wage Growth	3.25%
Payroll Growth	3.25%
COLAs for Retirees (Plan A / Other Plans) <sup>(2)</sup>	2.75% / 2.00%

1. Net of both investment and administration expenses. For GASB financial reporting, the recommended investment return assumption is 0.15% higher.

2. The first of the two numbers applies to Plan A; the second number applies to the remainder of the plans (although the Plan E COLA is pro-rated percentage of 2.00% based on pre-2002 service). To account for existing Plan A COLA balances, retirees and beneficiaries with a retirement date prior to April 1, 2022 are assumed to receive 3.00% annual COLAs.

## 1. Price Inflation

### Use in the Valuation

When we refer to inflation in this report, we are generally referring to price inflation, both on a local and national basis. The national inflation assumption has an indirect impact on the results of the actuarial valuation through the development of the investment return assumption. The local price inflation affects the general wage increases and the payroll increase assumption. The price inflation assumptions do not have a direct impact on the valuation results, except where it affects the assumed COLA to be paid (local inflation) and the assumed increase in the PEPRA wage limit (national inflation).

The long-term relationship between inflation and investment return has long been recognized by economists. The basic principle is that the investors demand a “real return” – the excess of actual investment returns over national inflation. If inflation rates are expected to be high, investors will demand investment returns that are also expected to be high enough to exceed inflation, while lower inflation rates will result in lower expected investment returns, at least in the long run.

The current valuation assumption for both local and national inflation is 2.75% per year. Our recommendation is to retain the assumption.

### Historical Perspective

The data for inflation shown below is based on the national Consumer Price Index, US City Average, All Urban Consumers (CPI-U) as published by the Bureau of Labor Statistics.

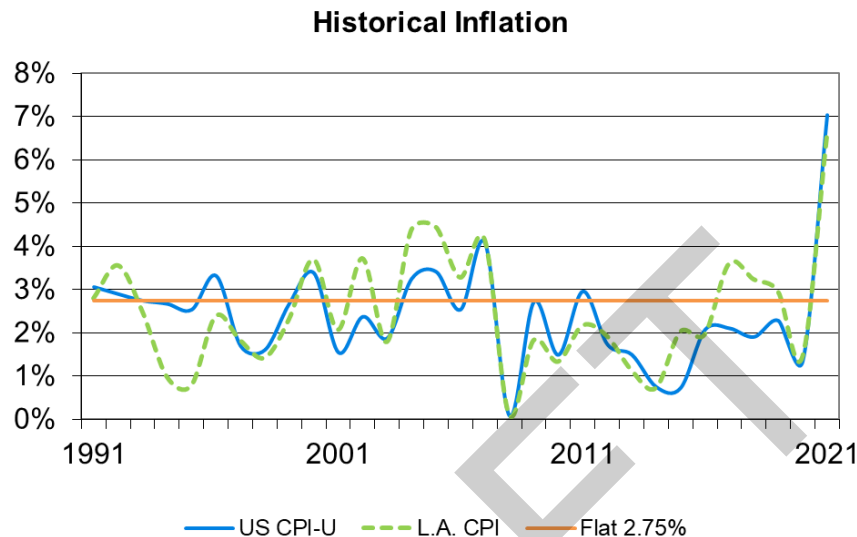
Although economic activities in general and inflation in particular, do not lend themselves to prediction on the basis of historical analysis, historical patterns and long term trends are a factor to be considered in developing the inflation assumption.

There are numerous ways to review historical data, with significantly differing results. The table below shows the compounded annual inflation rate for various 10-year periods, and for the 50-year period ended in December 2021. Note that the 50-year average is heavily influenced by the inflation of the late 1970s and early 1980s. The last 30 years have averaged closer to 2.5% on both a local and national basis.

Decade	CPI Increase	
	National	Local
2012-2021	2.1%	2.6%
2002-2011	2.5%	2.7%
1992-2001	2.5%	2.2%
1982-1991	3.9%	4.1%
1972-1981	8.6%	8.9%
<b>Prior 50 Years</b>		
1972-2021	3.9%	4.1%

The inflation assumption as it relates to the investment return assumption should be based more on national and even global inflation; whereas, the inflation assumption used in the wage growth, payroll growth, and COLA increase assumptions is tied to inflation in California. There have been differences between U.S. and Los Angeles-area CPI changes over time. For the 50-year period from 1972 to 2021 the CPI increase for the Los Angeles area has been on average 0.17% higher than national inflation.

The following graph shows historical CPI increases since 1990. The national CPI increase has generally been less than 2.75% over the last 10 years of the period, with 2021 being a notable exception. Also shown for comparison are CPI increases specific to the Los Angeles area, which has exceeded national CPI by about 0.10% on average over the 30-year period shown.



### Forecasts of Inflation

Since 2020, national and local CPI has exceeded the assumed 2.75%, and most forecasts are for this to continue in the near term. Over the longer term, CPI is expected to decline as the Federal Reserve has a stated goal of inflation closer to 2.0%. However, it is uncertain over what time period that will occur and what inflation level will be reached. Most long-term forecasts of national inflation are lower than 2.75% although they have increased in response to economic conditions, and many investment consultant's 10-year estimate of average annual inflation is higher than their 20-year estimate.

Since the U.S. Treasury started issuing inflation indexed bonds (TIPS), it is possible to determine the approximate rate of inflation anticipated by the financial markets by comparing the yields on inflation indexed bonds with traditional fixed government bonds. Current market prices as of November 2022 suggest investors expect inflation to be 2.74% over the next 20 years and 2.46% over the next 30 years. Most long-term forecasts of future price inflation by economists and investment professionals are lower than 2.75%, although they are generally greater than 2.0%.

Additionally, we reviewed the expected increase in the CPI by the Office of the Chief Actuary for the Social Security Administration. In the 2022 Trustees Report, the projected average annual increase in the CPI over the next 75 years under the intermediate cost assumptions was 2.40%.

## Recommendation

We considered both the current high inflationary environment and long-term forecasts that are generally lower than the current 2.75% assumption. We recommend leaving the local and national inflation assumptions at 2.75%, which is consistent with the implied inflation from TIPS over the next 20 years.

Consumer Price Inflation (Local and National)	
Current Assumption	2.75%
Recommended Assumption	2.75%

DRAFT



## 2. Wage and Payroll Growth

### Use in the Valuation

Estimates of future salaries are based on two types of assumptions: 1) general wage increase and 2) merit increase. Rates of increase in the general wage level of the membership are directly related to inflation, while individual salary increases due to promotion and longevity generally occur even in the absence of inflation. The promotion and longevity assumptions, referred to as the merit scale, will be reviewed with the other demographic assumptions (see Section 5).

The current assumption is for wage growth of 0.50% above the inflation assumption.

### Historical Perspective

We have used statistics from the Social Security Administration on the National Average Wage back to 1972.

There are numerous ways to review this data. For consistency with our observations of other indices, the table below shows the compounded annual rates of wage growth for various 10-year periods and for the 50-year period ending in 2021. The excess of wage growth over price inflation represents “productivity” (or the increase in the standard of living, also called the real wage inflation rate).

Period	Wage Growth	CPI Increase	Real Wage Inflation
2012-2021	3.2%	2.1%	1.1%
2002-2011	2.9%	2.3%	0.6%
1992-2001	3.4%	2.4%	1.0%
1982-1991	3.7%	2.8%	0.9%
1972-1981	4.5%	3.9%	0.6%
<b>Prior 50 Years</b>			
1972-2021	4.5%	3.9%	0.6%

### LACERA-Specific Experience

We reviewed the increase in the average compensation for LACERA members since 1989. Over that period, the average compensation increased by 3.19% annually, compared to a 2.61% average annual increase in inflation. Therefore, for LACERA members only, we estimate real wage inflation has averaged 0.58% (3.19% less 2.61%) over the last three decades.

### Forecasts of Future Wages

Wage inflation has been projected by the Office of the Chief Actuary of the Social Security Administration. In the 2022 Trustees Report, the ultimate long-term annual increase in the National Average Wage is estimated to be 1.15% higher than the Social Security intermediate inflation assumption of 2.4% per year.

### Recommendation

Over the last 50 years, the actual experience, on a national basis, has been close to the current assumption, although this has varied considerably by decade, with the last 10 year’s real wage inflation exceeding the assumption. Actual experience for employees participating in LACERA has also been close to the assumption over the last 30 years. We believe that wages will continue to grow at a greater rate than prices over the long

term, although not to the extent projected by Social Security. We are recommending that the long-term assumed real wage inflation rate remain at 0.50% per year.

Real Wage Inflation Rate	
Current assumption	0.50%
Recommended assumption	0.50%

The wage growth assumption is the total of the local price inflation assumption and the real wage inflation rate. If the real wage inflation assumption remains at 0.50% and the local price inflation assumption is set at 2.75%, this would result in a total wage growth assumption 3.25%.

### Payroll Increase Assumption

In addition to setting salary assumptions for individual members, the aggregate payroll of LACERA is expected to increase, without accounting for the possibility of an increase (or decrease) in membership. See comments on growth in membership discussed below.

The current payroll increase assumption is equal to the general wage growth assumption of 3.25%. It is our general recommendation to set these two assumptions to be equal, unless the active population is projected to decline or there is projected to be a material change in the make-up of the population. Over the past 20 years LACERA has experienced an overall increase in its active population, and we believe it is reasonable to assume the active population will remain at approximately the current level. We are not aware of any expected changes in the make-up of the population (such as an increased proportion of lower paid employees) that would materially affect the payroll. Therefore, we are recommending that the payroll increase assumption continue to be set equal to total wage growth assumption.

### Growth in Active Membership

We propose continuing the assumption that no future growth or decline in active membership will occur. This assumption affects the Unfunded Actuarial Accrued Liability (UAAL) amortization payment rate. With no assumed growth in membership, future salaries are assumed to grow due to wage growth increases only. If increases should occur because of additional members, there will be a larger pool of salaries over which to spread the UAAL, if any, resulting in an actuarial gain.

### 3. Investment Return

#### Use in the Valuation

The investment return assumption is one of the primary determinants in the calculation of the expected cost of LACERA's benefits, providing a discount of the future benefit payments that reflects the time value of money. This assumption has a direct impact on the calculation of liabilities, normal costs, member contribution rates, and the factors for optional forms of benefits. The current investment return assumption for LACERA is 7.00% per year, net of all administrative and investment-related expenses.

#### January 2022 Expected Long-Term Investment Return

To estimate the expected long-term return we have looked at capital market assumptions from three sources: Milliman, Meketa (LACERA's external investment consultant, and a survey of other investment consulting firms (Horizon Survey of Capital Market Assumptions, 2022 edition). We have combined these capital market assumptions with LACERA's target asset allocation. The target asset allocation is summarized in the following table:

Class	Target Allocation
Global Equity	32%
Private Equity	17%
Non-Core Private Real Estate	4%
Liquid Credit	4%
Illiquid Credit	7%
Core / Value-Add Real Estate	6%
Natural Resources / Commodities	3%
Custom Infrastructure	5%
TIPs	3%
Investment Grade Bonds	7%
Custom Hedge Funds	6%
Long-Term Government Bonds	5%
Cash Equivalents	1%

Combining the capital market assumptions with the target asset allocation policy, we calculated both the 10- and 20-year expected returns for each of the three sources. These expected returns have been reduced for administrative and investment expenses, as discussed later, and are the median expected return on a geometric basis for LACERA's assets. Note that we have also indicated the associated inflation assumptions for the capital market assumptions. A higher inflation assumption will generally lead to a higher expected return.

2022 Beginning of Year	Meketa	Milliman	Horizon
<b>Based on 10-Year Assumptions</b>			
Median Annualized Return	<b>5.6%</b>	<b>5.8%</b>	<b>6.4%</b>
Assumed Inflation	2.2%	2.4%	2.5%
<b>Based on 20-Year Assumptions</b>			
Median Annualized Return	<b>6.6%</b>	<b>6.6%</b>	<b>7.0%</b>
Assumed Inflation	2.2%	2.3%	2.4%

Notes:

1. Returns are net of assumed expenses of 0.20% of assets.
2. The Horizon Survey reports a limited number of asset classes. In cases where there was not a corresponding asset class in the survey, Milliman's assumptions for the corresponding time horizon were used.
3. Horizon 10-year assumptions include some consultants with less than 10 years. Horizon 20-year assumptions include some consultants with more than 20 years and are based on a subgroup of less than half of the full group.

When actuaries recommend the investment return assumption, they generally consider a long-term time horizon. As LACERA is a mature plan (over half the value of accrued liabilities are expected to be paid in the next 15 years), we have considered both the 10-year and 20-year time horizons in making our recommendation. This reflects the time horizon over which the majority of LACERA's actuarial accrued liability is to be paid.

## July 2022 Expected Long-Term Investment Return

The capital market assumptions used in the previous calculation of the expected return were as of January 2022 (or the end of 2021). Subsequent to those capital market assumptions being determined, there has been a significant increase in yields on fixed income and a decrease in the price-to-earnings ratio. Both Milliman and Meketa issued mid-year updates to their capital market assumptions that reflected this changing environment.

Mid-Year Update 2022	Meketa	Milliman	Horizon
<b>Based on 10-Year Assumptions</b>			
Median Annualized Return	7.3%	6.9%	Not
Assumed Inflation	2.1%	2.5%	Available
<b>Based on 20-Year Assumptions</b>			
Median Annualized Return	7.8%	7.3%	Not
Assumed Inflation	2.1%	2.4%	Available

Notes:

1. Returns are net of assumed expenses of 0.20% of assets.
2. The Horizon Survey is annual, so no mid-year update is available.

The mid-year update reflects a significant increase in the expected return as compared to the beginning-of-year forecasts.

## Relationship Between Inflation and Investment Return Assumptions

The real return is the investment return that can be achieved above national price inflation. For example, Milliman's 10-year expected return reflecting the mid-year update of capital market assumptions is 6.9% with a underlying price inflation assumed to be 2.5%. Therefore, using a building block approach, the real return is 4.4% (6.9% less 2.5%). In theory, if actual inflation is consistent with the proposed assumption of 2.75%, the expected return would be 0.25% higher at 7.15% (4.4% real return plus 2.75% inflation). However, if inflation is higher than the underlying assumption there is generally an offsetting impact in the short-term as higher inflation generally results in lower fixed income values. Therefore, we have considered the difference in the inflation assumptions in our analysis, but our primary consideration is on the nominal investment return when making our recommendations.

## Administrative and Investment-Related Expenses

The investment return used for the valuation is assumed to be net of all administrative and investment-related expenses. Most asset classes in the Milliman capital market assumptions are effectively net of investment expenses. It is our understanding this is true for Meketa and the investment consultants included in the Horizon survey. Asset classes that are readily marketable, such as global equity and fixed income, do not reflect expenses in the expected return assumption. For those classes, we assume investment fees based on the cost of indexing, as it is unlikely LACERA would pay active managers unless it was expected the net return could at least match the index return. Additionally, we adjust for other investment-related expenses, such as custodian bank fees and outside consultants. Our assumption is that investment expenses will be 0.05% of assets.

The following table shows the ratio of administrative expenses to the LACERA Plan assets over the last 10 fiscal years ending June 30. The expense ratio is calculated as the expense amount divided by the beginning asset balance at fair market value.

Year Beginning	Beginning Market Assets	Admin. Expense	
		Amount	Ratio
2012	\$38,307	\$54	0.14%
2013	41,774	59	0.14
2014	47,722	63	0.13
2015	48,818	67	0.14
2016	47,847	67	0.14
2017	52,743	78	0.15
2018	56,300	83	0.15
2019	58,295	85	0.15
2020	58,510	91	0.16
2021	73,012	100	0.14

For the administrative expenses, we have assumed a small increase in the assumption to 0.15% of market assets (from 0.13%), as the actual ratio has averaged 0.15% over the last five years. Accounting for this, combined with the 0.05% we have assumed for investment-related expenses, we have included a reduction of 0.20% in our calculation of the expected return. For example, Meketa calculated a 7.5% 10-year expected return based on the mid-year update; we have used 7.3% in our analysis, reflecting this 0.20% reduction.

The expense assumption does not have a direct impact on the actuarial valuation results, but it does provide a measure of gross return on investments that will be needed to meet the actuarial assumption used for the valuation. For example, our recommended investment return assumption is 7.0%, so LACERA would need to earn a gross return on its assets of 7.2% in order to net the 7.0% for funding purposes.

We recommend the 0.15% adjustment for administrative expenses be added to the investment return assumption adopted to determine the discount rate used in LACERA's GASB 67 and 68 valuations, as GASB requires the discount rate to be the long-term expected rate of return gross of administrative expenses, but net of investment expenses.

### Excess Earnings

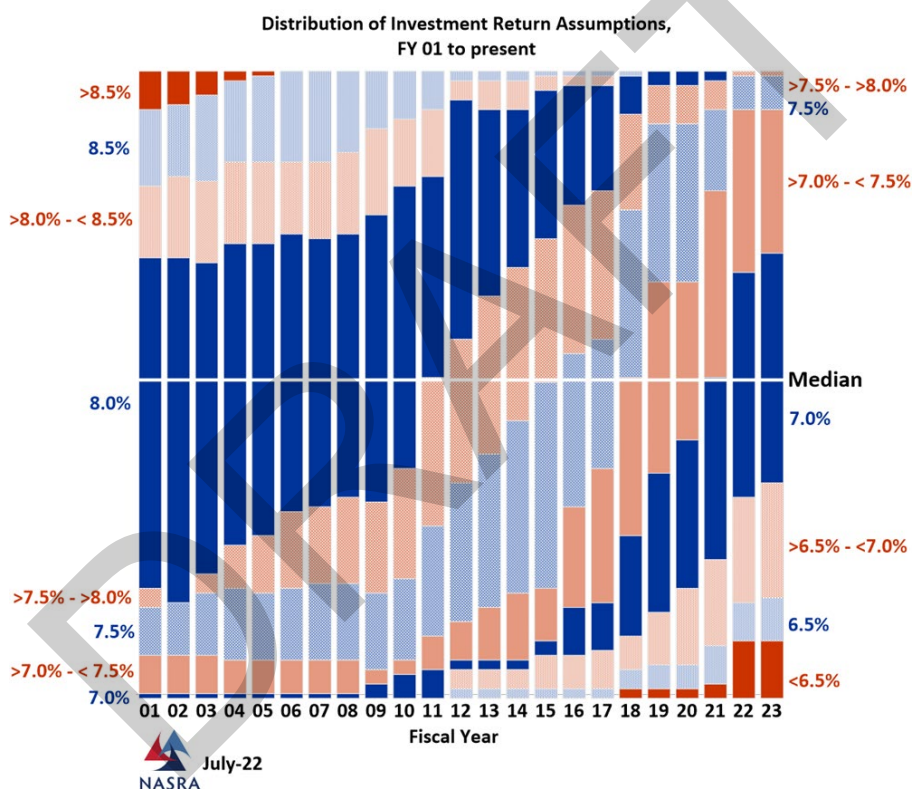
Section 31592.2 of the 1937 Act provides the Retirement Board with the authority to set aside earnings of the retirement fund during any year in excess of the total interest credited to contributions when such surplus exceeds 1.00% of the total assets of the retirement system.

Under LACERA's Retirement Benefit Funding Policy, it is the intention of the Board of Investments to distribute no excess earnings unless the plan is fully funded and then to only provide limited benefits on the basis of excess earnings after the plan is fully funded. Since it is expected to be quite some time before LACERA once again reaches full funding status, the likelihood of any excess earnings being distributed for discretionary benefits is quite low in the foreseeable future. Further Section 7522.44 may further restrict the Board's ability to distribute excess earnings. Therefore, for purposes of the 2022 experience study, we do not propose to recognize any additional excess earnings benefits for future years when setting the investment return assumption. This issue should be addressed again in 2025 as part of the 2025 experience study.

If the Board of Investments determines that the fund should share excess earnings with members when times are good, but the fund is not able to collect additional revenue when investment returns lag expectations, there is a cost to LACERA over time. Thus, if the Board changes its policy toward excess earnings, it must find some way to recognize an obligation for benefits attributable to excess earnings. An excess earnings policy would result in increased payments made by LACERA to members over the long term. If these potential future benefits are not recognized in setting the investment return assumption or in determining LACERA's future benefit payments, the total liabilities will be understated.

## Peer System Comparison

According to the *Public Fund Survey*, the average investment return assumption for statewide systems has been steadily declining. As of the most recent study, the median rate is 7.0%. The following chart shows a progression of the distribution of the investment return assumptions. In 2001, very few systems had an assumption of 7.0% or lower and over 80% had an assumption of 8.0% or greater. As of fiscal year 2022, over 70% have an assumption of 7.0% or lower.





## Conclusion

Based on the January 2022 capital market assumptions, there was less than a 50% probability that the current investment return of 7.0% would be met over the next 10 to 20 years; however, recent changes in the economic environment have increased the expected return as of July 2022 to at or above the 7.0% return. Considering both the January and July 2022 expected returns, we are recommending retaining the investment return assumption of 7.0%.

Investment Return (net of all expenses)	
Current assumption	7.0%
Recommended Assumption	7.00%

## Post-Retirement Cost-of-Living Adjustments (COLA)

The current assumption is that retiree COLAs will be equal to price inflation subject to plan maximum increases and COLA accumulation bank levels. Due to current COLA accumulation bank levels, the assumed COLA for Plan A retirees retired before April 1, 2022 is 3.0%. For other Plan A retirees the assumed COLA is equal to local price inflation. For all other plans the assumed COLA is 2.0% (with pro-rata adjustment based on pre-2002 service for General Plan E). We recommend this assumption be continued.



## 5. Salary Increases Due to Promotion and Longevity (Merit Increases)

As discussed in Section 4, estimates of future salaries are based on assumptions for two types of increases:

1. Increases in each individual's salary due to promotion or longevity, which occur even in the absence of inflation; and
2. Increases in the general wage level of the membership, which are closely related to inflation and increases in productivity.

In section 4, we reviewed the general wage growth assumption. In this section, we will study increases due to promotion or longevity. We generally refer to these increases as merit increases.

### Results

Merit increases are assumed to be related to two factors. We studied each of these factors to see if they were significant, and, if so, what the impact was. Our findings were as follows:

- **Service:** Members in the early stages of their careers tend to get larger merit increases. In other studies, we have found years of service to have the most significant impact on merit increases. We found this to be true with LACERA.
- **Membership:** The current rates assume that Safety members receive larger salary increases than General members, particularly later in their career. Similar to prior experience studies, we observed that Safety members received significantly larger merit increases at certain service levels (19, 24 and 29 years of service), consistent with the 2018 contract for deputy sheriffs which includes longevity pay increases at those service levels. Other than those service levels, we observed higher than assumed increases in most service levels. We observed a similar trend for General members with the observed increases exceeding the assumption, primarily at 9 or more years of service.

### Methodology

In studying merit increases, we first calculated the increase in member salaries that was due to general wage growth. We then remove this from the total salary increase actually observed for each individual in successive years. The remaining portion of salary increase is the merit increase.

There can be significant year-to-year variations in the calculated general wage growth, and this can lead to disparities in the observed merit salary increases. To reduce these variations, we use a 15-year period in our studies of merit salary increases. We also reviewed the results for the prior two study periods (2016 to 2022) to identify any trends. In general, the merit increases over the last six years have been higher than the 15-year average; however, given the variations that can occur over shorter timeframes, we relied on the 15-year analysis in making our recommendations.

### Recommendation

For General members, merit salary increases were higher than assumed for members at all service intervals. We recommend increases in the merit salary increase assumption for General members at service levels of 9 years and higher to better reflect this experience. At shorter service levels we believe the current assumption remains reasonable.

For Safety members, the main observation was that merit salary increases were higher than assumed for members with longer service. At some shorter service levels we observed smaller merit salary increases than assumed. We recommend decreases in the merit salary increase assumption at service years 2 to 5 and increases at most service levels starting at 7 years of service. The recommended rates are shown numerically in Appendix A.

Exhibit 5-1  
Salary Increases by Service – General Members

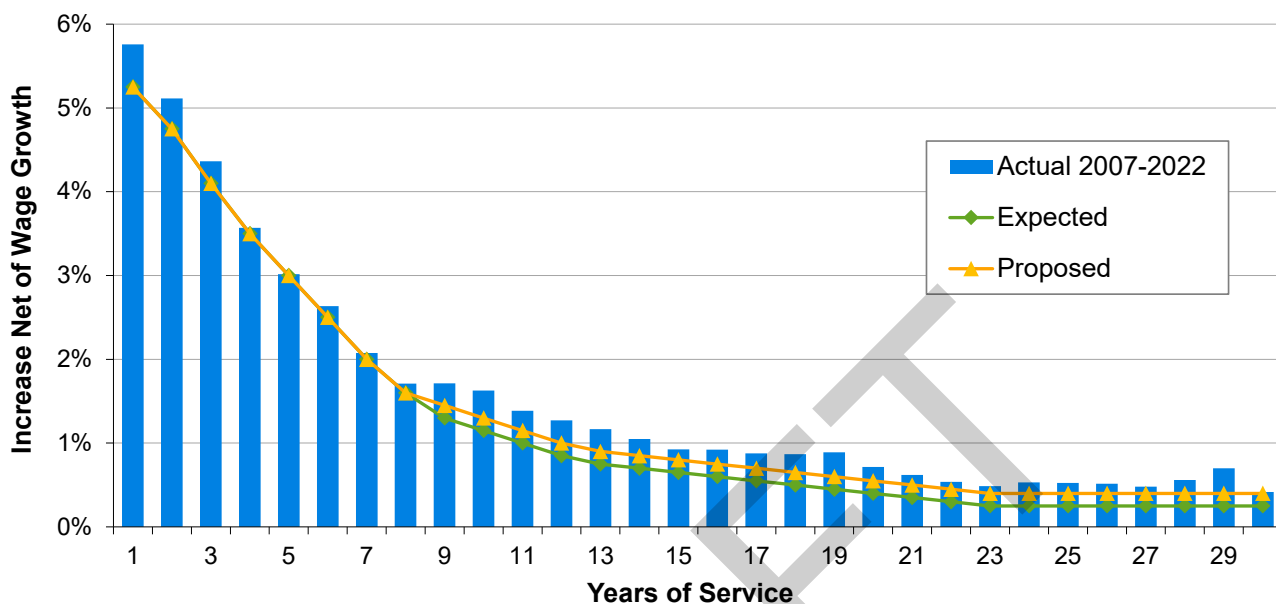
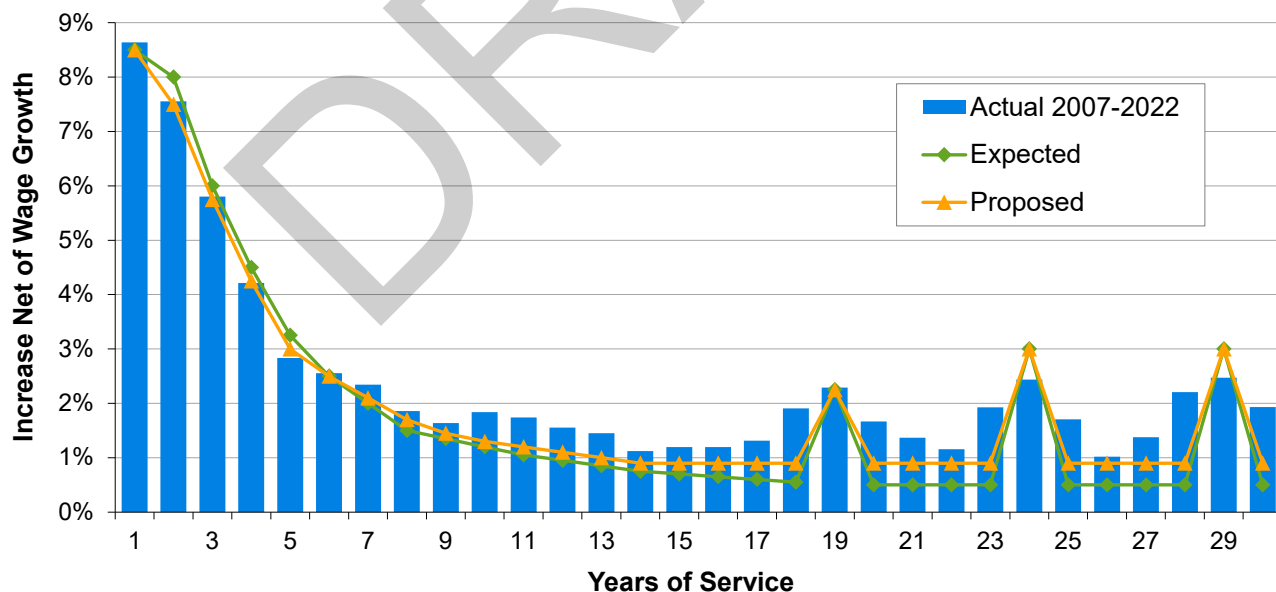


Exhibit 5-2  
Salary Increases by Service – Safety Members



## 6. Death from Active Status

We studied rates of mortality among active members. At any given age, the current assumption is a lower probability of death for an active member than for a retired member. We feel this is reasonable as a person who is actively working tends to be healthier on average, and therefore less likely to die than the general population.

### Results: Service-Connected Deaths

The current assumptions for service-connected deaths are zero for General members and 0.01% per year for Safety members. Since the actual experience is extremely limited, we recommend retaining the current service-connected death assumption for active members. The data is not a statistically significant enough size to merit studying separately.

### Results: Nonservice-Connected Deaths (Ordinary Deaths)

The table below shows a comparison of the actual-to-expected deaths of active members by plan and gender for this study period, weighted by compensation. The study period of July 1, 2019 to June 30, 2022 significantly overlaps with the COVID-19 pandemic and this likely at least partially explains the higher number of deaths compared to expected, and the elevated levels of active mortality over this period may not reasonably be expected to continue..

We are recommending no changes to the mortality base tables underlying the ordinary death assumption. However, we recommend reflecting a more recent mortality improvement projection scale. A mortality improvement scale projects the expected changes in mortality over time to reflect that a member aged 35, for example, is expected to experience different rates of mortality, and have a different life expectancy, than a member aged 35 in a future year. The recommended assumptions are discussed on the following page.

Active mortality (weighted by compensation)						
Plan	Gender	Actual	Expected	Actual / Expected	Proposed	Actual / Proposed
General A-D & G <sup>(1)</sup>	Male	18,591,084	15,063,572	123%	15,126,926	123%
General A-D & G <sup>(1)</sup>	Female	19,611,792	16,730,379	117%	16,573,807	118%
Safety	Male	4,980,936	3,619,542	138%	3,531,029	141%
Safety	Female	507,456	384,892	132%	371,072	137%
<b>Total</b>		<b>43,691,268</b>	<b>35,798,385</b>	<b>122%</b>	<b>35,602,834</b>	<b>123%</b>

1. Note that Plan E has been excluded from this study, as we believe that these deaths may be under-reported because Plan E does not provide a death benefit for active members.

The results of the study are shown graphically in Exhibits 6-1 to 6-4. The proposed rates are also shown numerically in Appendix A. The rates are currently based on three factors. We studied each of these factors to see if they were significant, and, if so, what the impact was. Our findings were as follows:

- **Age:** Members at older ages tend to have a greater probability of dying than younger members. This is almost universally true in mortality studies.
- **Gender:** Male members tend to have a greater probability of dying than females. This trend is generally true for all mortality studies, and we found this to be true with LACERA.
- **Membership:** Safety members have comparatively lower rates of mortality while in active status than General members. These lower rates of death while still in active employment are most likely a result of the much earlier retirement ages available to Safety members and their higher rates of disability while

active. That is, Safety members who are less healthy than the rest of the population will tend to leave active employment sooner, and only the healthiest group remains in active Safety employment at ages 50 and above when there is a higher probability of active death.

### Projection Scale for Mortality Improvement

The Society of Actuaries (SOA) publishes mortality improvement scales on a regular basis, typically annually. These improvement scales are a complex matrix of rates that vary based on a member's age and birth year. The scales include projections for past and future years until reaching an "ultimate" rate of improvement for individual ages at a future year.

In 2016 LACERA adopted the ultimate rates of the MP-2014 mortality improvement scale for the 2016 and future valuations. In subsequent iterations of the mortality improvement scales the ultimate rate of improvement remained unchanged, until the release of MP-2020 in the fall of 2020. An updated projection scale (MP-2021) was issued last year with similar ultimate rates. MP-2021, like MP-2020, relies heavily on Social Security experience for years 1958 through 2018. Compared to the ultimate rates of MP-2014, the ultimate rates of MP-2021 assume larger mortality improvements at ages less than 83 (i.e. fewer deaths at each year of age) and smaller mortality improvements at ages 83 and higher (i.e. more deaths at each year of age).

### Recommendation

Based on results of the study, we are recommending no change to the mortality base tables. To reflect future increases in life expectancies and the most recently available published data, we are also recommending updating the mortality improvement projection scale from MP-2014 ultimate to MP-2021 ultimate. A summary of the active mortality assumption (current and proposed) is shown below:

Class	Gender	Current Table <sup>(1)</sup>	Proposed Table <sup>(1)</sup>
General	Male	PubG-2010 (120%) Male with MP-2014 Ultimate projection scale	PubG-2010 (120%) Male with MP-2021 Ultimate projection scale
General	Female	PubG-2010 (130%) Female with MP-2014 Ultimate projection scale	PubG-2010 (130%) Female with MP-2021 Ultimate projection scale
Safety	Male	PubS-2010 (100%) Male with MP-2014 Ultimate projection scale	PubS-2010 (100%) Male with MP-2021 Ultimate projection scale
Safety	Female	PubS-2010 (100%) Female with MP-2014 Ultimate projection scale	PubS-2010 (100%) Female with MP-2021 Ultimate projection scale

1. All tables are the Pub-2010 Employee mortality tables for General and Safety members.

See Section 11 (Retiree Mortality) for additional discussion about mortality improvement.

Exhibit 6-1  
Nonservice-Connected Death – General A-D & G Male Members

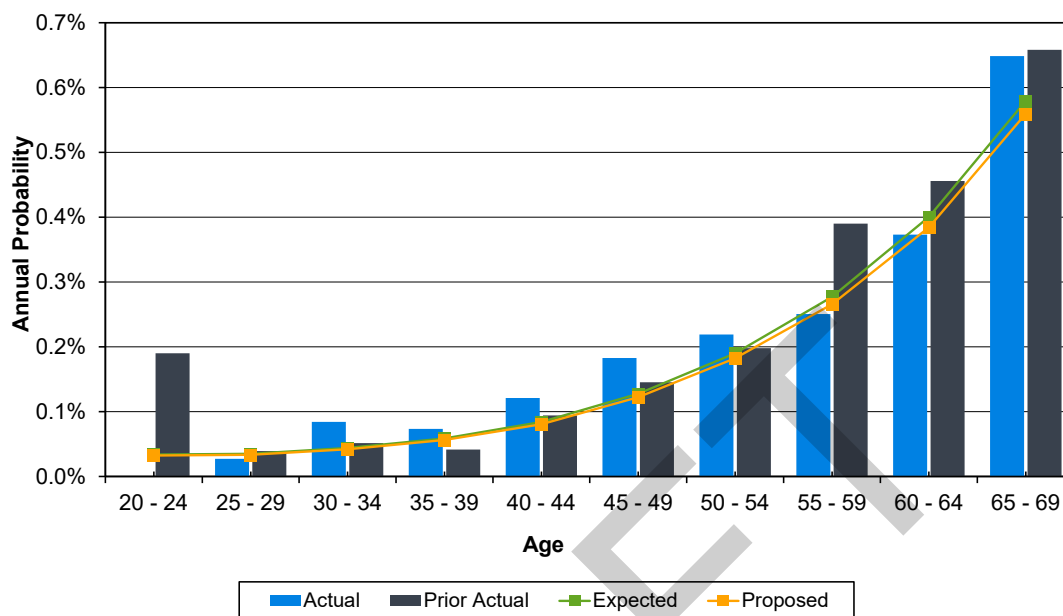


Exhibit 6-2  
Nonservice-Connected Death – General A-D & G Female Members

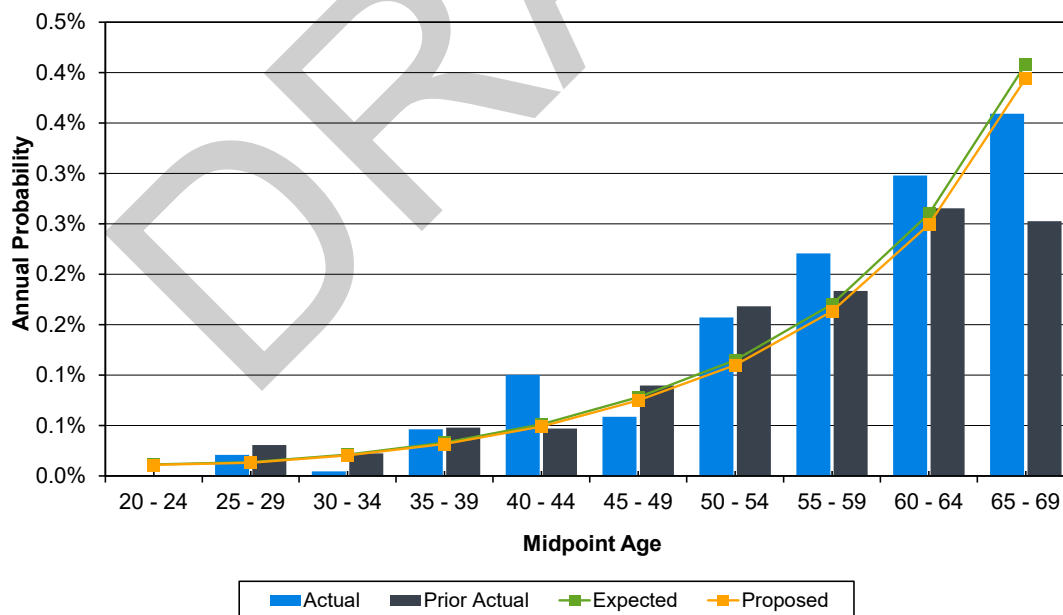


Exhibit 6-3  
Nonservice-Connected Death – Safety Male Members

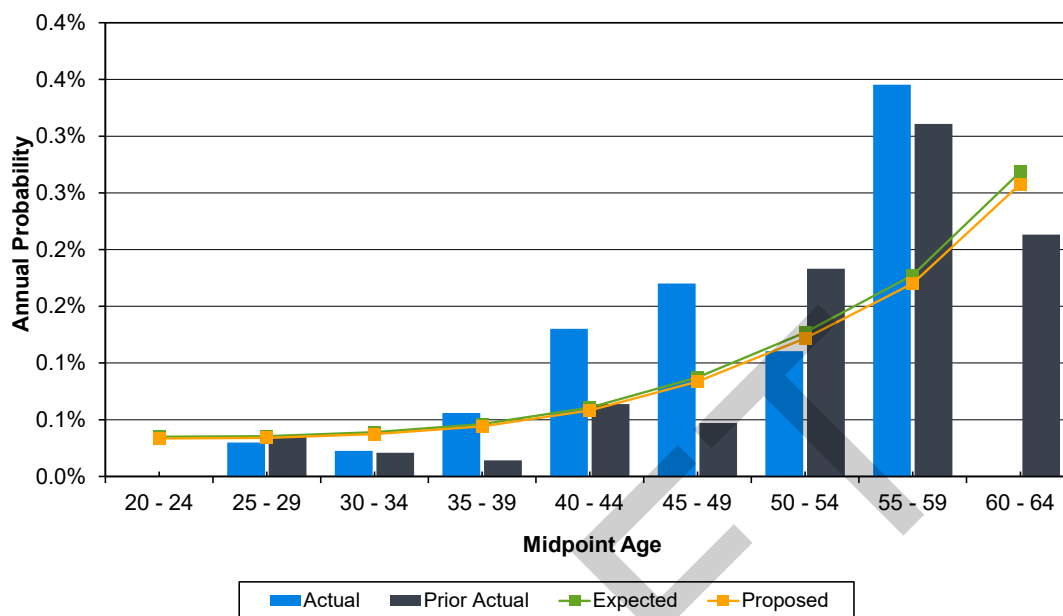
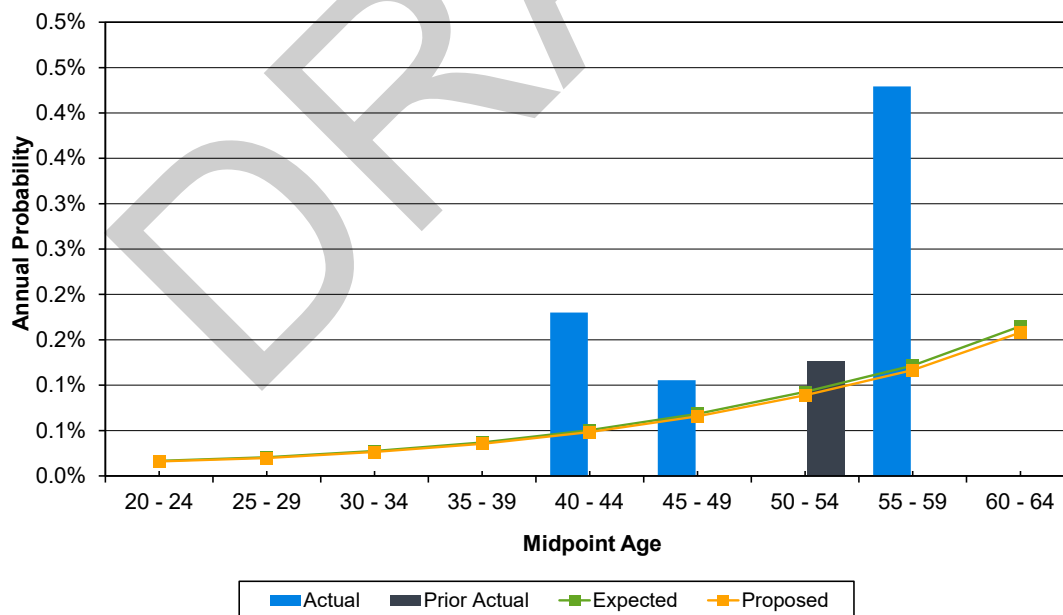


Exhibit 6-4  
Nonservice-Connected Death – Safety Female Members



## 7. Service Retirements

Exhibits 7-1 through 7-3 show the actual and expected rates of service retirements during the study period. These rates are weighted by compensation level. Overall, the actual rates of service retirements exceeded the expected rates, although there were some differences by plan.

General Plan G and Safety Plan C have very few actual retirements since most members in those plans entered LACERA within the last 10 years. General Plans A through C and Safety Plan A have less than 100 combined active members as of June 30, 2022. There were not enough service retirements in any of these plans to perform a meaningful statistical analysis of their experience. As such, our analysis relies primarily on the experience of General Plans D and E, and Safety Plan B.

In prior studies retirement rates have been based primarily on two factors – age and class of membership. We have also observed differences in decrements based upon compensation levels, and therefore we apply a weighting based on compensation level. In addition, we have observed that rates of retirement differ based on number of years of service as well as age; therefore, in this study we reviewed the rates of retirement based on age, service and class of membership. We found that in general, members with more years of service have a higher probability of retiring at a given age than those with less years of service.

For the three-year period, there was a significant increase in employees leaving their jobs, particularly in 2021, in both the public and private sector. This was true of both employees who were eligible for retirement and those who were not. Therefore, we believe that the high level of service retirements may be temporary. Accordingly, our recommendations focus more on fitting retirement patterns better, and the adjustments in the expected number of retirements was only made if it was also consistent with experience from the prior experience study.

### Results

For General Plans D and E, and Safety Plan B, the actual number of retirements from active service, weighted by compensation, exceeded the expected number. However, as can be seen in Exhibits 7-1 through 7-3, the pattern of retirements by age varied somewhat compared to expected.

Service Retirements (weighted by compensation)			
Class	Actual	Expected	Actual / Expected
General A-C	6,802,500	8,727,670	78%
General D	467,628,204	354,545,879	132%
General E	224,347,476	204,557,147	110%
Safety B	<u>183,907,920</u>	<u>139,826,097</u>	132%
Total	882,686,100	707,656,793	125%

Note that the numbers shown above are for ages 50 to 74 for General members and ages less than 65 for Safety members. The values in the table are weighted by compensation, so the first line of the table indicates that individuals with total annual compensation of \$6,802,500 retired from active status compared to the expected value of \$8,727,670 based on the valuation assumption.

As noted above, we also studied the incidence of retirement by years of service for General Plans D and E, and Safety Plan B members, as these plans have sufficiently large populations. To do this, we first determined an age-based assumption for each class of member, and then compared how that proposed age-based assumption compared to actual experience for members with different lengths of service. The tables below show the actual

probability of retirement by years of service compared to what would have been predicted to occur with the proposed age-based assumption.

General Members (Plan D)				General Members (Plan E)		
Service	Actual Probability of Retirement	Proposed Probability of Retirement	Actual / Proposed	Actual Probability of Retirement	Proposed Probability of Retirement	Actual / Proposed
< 5	n/a	n/a	n/a	n/a	n/a	n/a
5 - 9	45%	23%	199%	n/a	n/a	n/a
10 - 14	4%	7%	66%	7%	9%	70%
15 - 19	5%	7%	76%	6%	10%	64%
20 - 24	6%	6%	88%	7%	10%	64%
25 - 29	8%	6%	136%	9%	8%	108%
30+	14%	7%	197%	14%	10%	142%

*Note that the experience for General Plan D members with 5 to 9 years of service includes only a small number of members who are eligible to retire on account of attaining age 70 and is not statistically significant.)*

Safety Members (Plan B)			
Service	Actual Probability of Retirement	Proposed Probability of Retirement	Actual / Proposed
< 5	n/a	n/a	n/a
5 - 9	n/a	n/a	n/a
10 - 14	2%	7%	30%
15 - 19	3%	8%	39%
20 - 24	2%	3%	57%
25 - 29	7%	6%	125%
30+	20%	11%	188%

These results show that at lower years of service actual retirements are less than under the proposed age-only assumptions, and at higher years of service actual retirements are higher than under the proposed age-only assumptions, for both plans.

### Recommendation

We are recommending the following changes in the rates of service retirement:

1. Revisions to the age-based service retirement rates; and
2. The addition of a service-based adjustment component.

The service-based adjustment component will be a percentage that will be applied to the age-based service retirement rate to determine the applicable assumed rate of service retirement for an individual of a given age and length of service. We recommend that the proposed retirement probabilities be adjusted based on years of completed service by the percentages shown in the table below.



Proposed Adjustments to Age-Based Retirement Rates			
Service	General Members (all Plans except Plan E)	General Members (Plan E)	Safety Members
< 5	80%	70%	30%
5 - 9	80%	70%	30%
10 - 14	80%	70%	30%
15 - 19	80%	70%	40%
20 - 24	90%	70%	70%
25 - 29	110%	100%	110%
30+	160%	130%	170%

As an illustration of how this service-based adjustment works, assume that the age-based age 65 service retirement rate for a General Plan D member is 23%. Then, for a member with between 20 and 24 years of service, the assumed rate of service retirement will be 20.7% (23% x 90%) and for a member with more than 30 years of service, the assumed rate of service retirement will be 36.8% (23% x 160%).

Exhibits 7-4 and 7-5 shows actual, expected and proposed retirement rates separately for members of General Plan D and Safety Plan B with different lengths of service.

These revisions result in higher expected retirements overall for General and Safety members, and the proposed service retirement rates more closely follow the pattern of anticipated retirements. A comparison of the actual and expected retirements under the proposed assumptions is shown in the table below.

Service Retirements (weighted by compensation)			
Class	Actual	Proposed	Actual / Proposed
General A-C	6,802,500	8,054,244	84%
General D	467,628,204	390,966,684	120%
General E	224,347,476	205,700,607	109%
Safety B	183,907,920	170,664,392	108%
Total	882,686,100	775,385,927	114%

Additionally, we recommend continuing the 100% probability of retirement at certain age and service combinations (shown in Appendix A) where the benefit is approximately 100% (or greater) of final average compensation.

Exhibit 7-1  
Service Retirement – General D Members

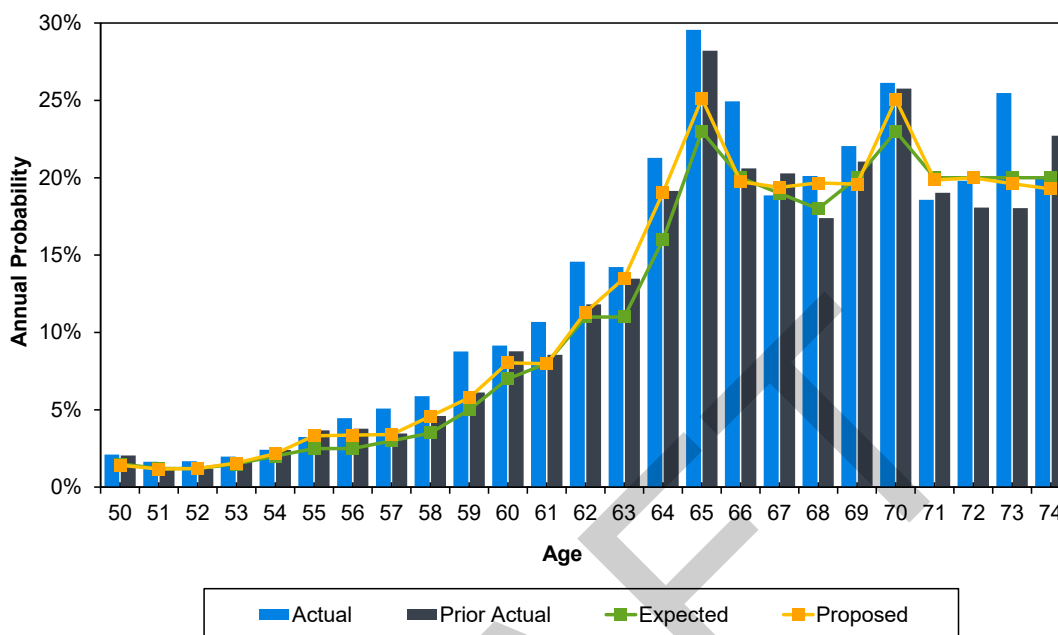


Exhibit 7-2  
Service Retirement – General E Members

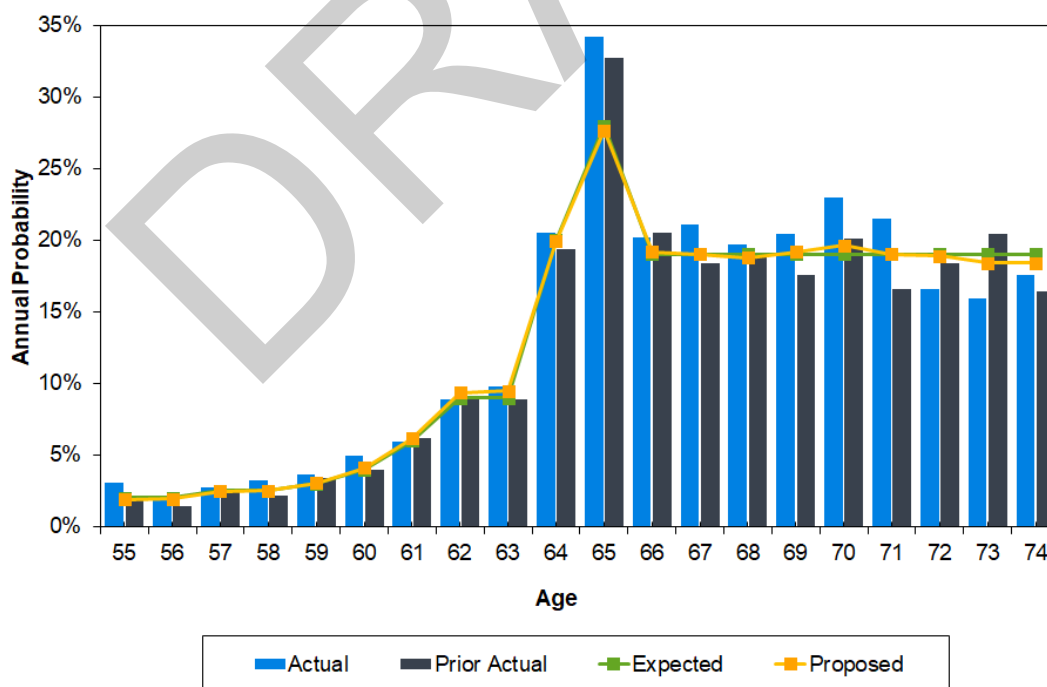


Exhibit 7-3  
Service Retirement – Safety Members

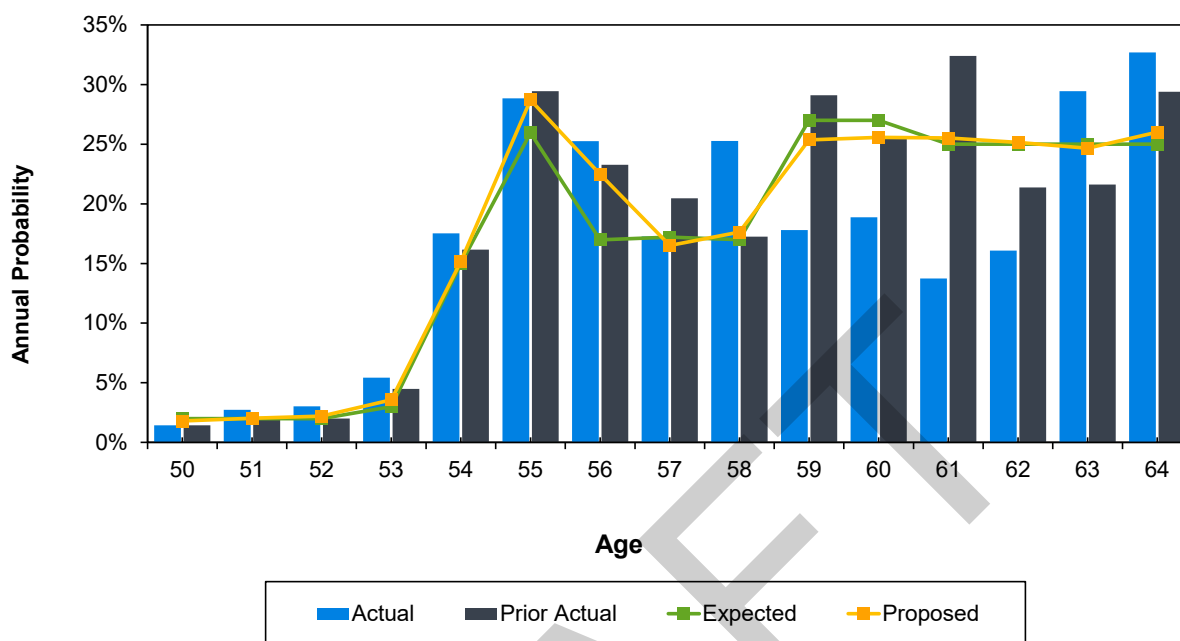


Exhibit 7-4  
Service Retirement – General Plan D Members (by Service)

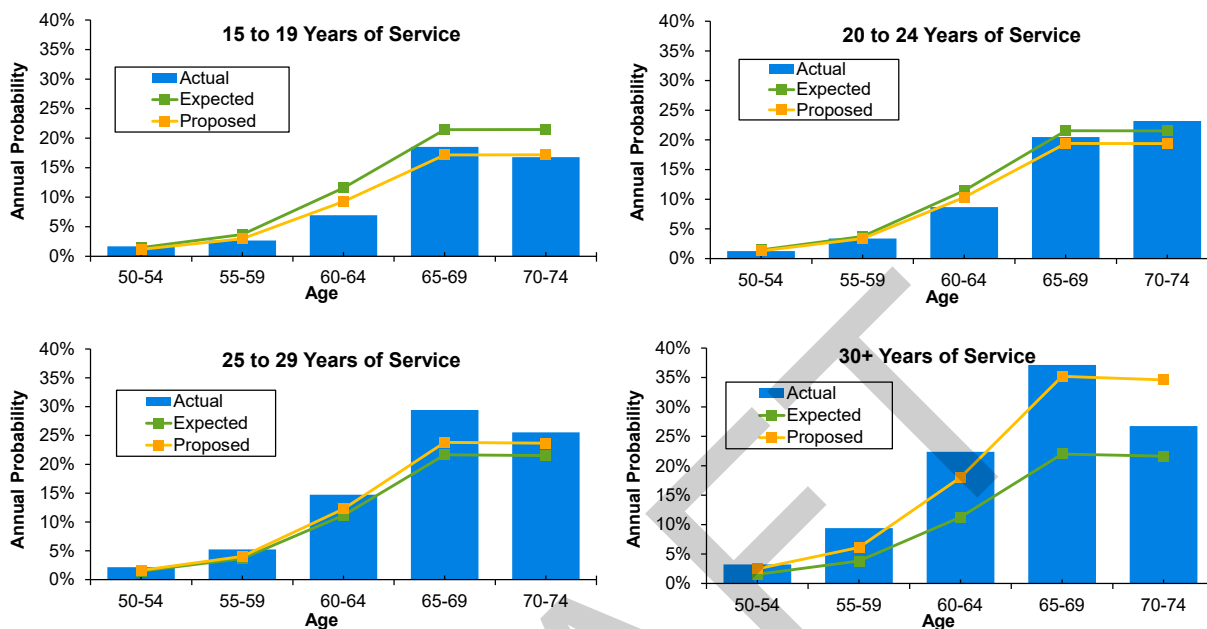
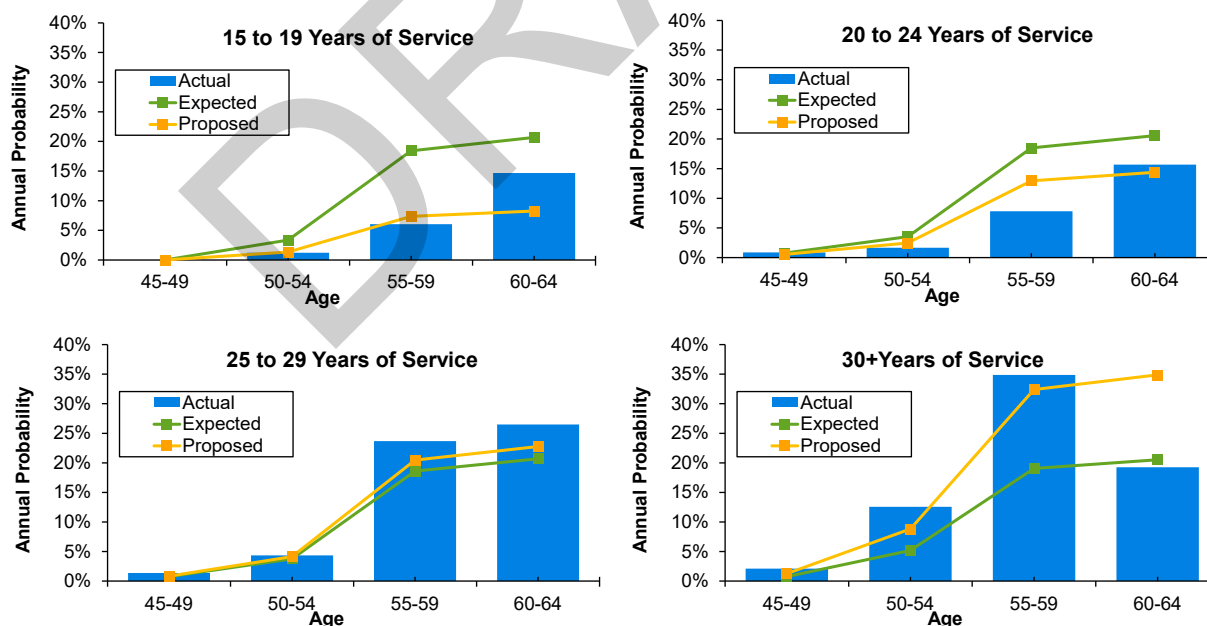


Exhibit 7-5  
Service Retirement – Safety Plan B Members (by Service)



## 8. Disability Retirements

LACERA allows a member to start receiving benefits prior to eligibility for service retirement if the member becomes disabled. There are two types of disability:

- **Service-Connected Disability:** This is available only to members who are disabled for the performance of duty. There is no service requirement for this benefit, and the service-connected disability benefit generally pays a larger benefit than nonservice-connected disability.
- **Nonservice-Connected Disability:** This is available to a disabled member upon satisfying the vesting requirement.

We have found that in many systems, including LACERA, there is generally at least a six-month lag between the actual occurrence of a disability retirement and the subsequent approval and reporting of that same retirement. In many cases the actual decrement from active service shows in the data as a service retirement, and that service retirement is subsequently reclassified. Since our analysis shown here is based on those active members who have a direct decrement to disability retirement (that is, the change from active status to disability occurs within the same fiscal year) it may underreport the actual number of disability retirements. We discuss this below, and have accounted for it in our recommendation.

### Results: Service-Connected Disability

Overall, the actual number of service-connected disabilities, weighted by compensation level, were close to that expected by the current assumptions, although there were some variations between different groups. The following is a comparison of the actual to expected service-connected disabilities for active members by gender and member class for this study period, weighted by compensation level.

Service-Connected Disability Retirements (weighted by compensation)				
Plan	Gender	Actual	Expected	Actual / Expected
General A-D & G	Male	6,949,908	9,463,188	73%
General A-D & G	Female	11,596,092	12,027,390	96%
Safety	Male	62,339,544	57,549,026	108%
Safety	Female	9,243,672	10,314,828	90%
Total	Total	90,129,216	89,354,432	101%

Overall, there are 230 General member service-connected disabilities and 460 Safety member service-connected disabilities included in the above analysis. In addition, over the study period 154 retired General members and 571 retired Safety members were reclassified from a service retirement to a service-connected disability retirement.

Exhibits 8-1 to 8-4, at the end of this section, show the results of the analysis graphically.

### Results: Nonservice-Connected Disability

Actual experience for nonservice-connected disabilities, weighted by compensation level, was lower than the assumptions for General members predicted, which is consistent with the prior study. Overall we do not view this difference as material given the small number of nonservice-connected disability retirements, and the underreporting noted above. The following is a comparison of the actual-to-expected nonservice-connected disabilities for active General members for this study period, weighted by compensation level. For Safety members there were only four nonservice-connected disabilities, so we have not included them in the table.

Nonservice-Connected Disability Retirements (weighted by compensation)				
Plan	Gender	Actual	Expected	Actual / Expected
General A-D & G	Male	836,040	2,567,535	33%
General A-D & G	Female	2,449,176	3,897,822	63%
Total	Total	3,285,216	6,465,357	51%

Overall there are 44 nonservice-connected disabilities included in the above analysis. In addition, over the study period 26 retired members were reclassified from a service retirement to a nonservice-connected disability retirement.

Exhibits 8-5 to 8-6, at the end of this section, show the results of the analysis graphically.

#### Recommendation: Service-Connected Disability

After accounting for retired members whose retirement type was reclassified to service-connected disability over the study period, there were significantly more service-connected disability retirements than expected by the assumptions, particularly for Safety members. Consistent with our approach to all decrement analysis in this study, we are attempting to not assign too much credibility to experience during the COVID pandemic period, in case any changes are temporary. As a result, we are recommending no change to the service-connected disability retirement assumptions at this time. However, if this experience continues over the next study period we will likely recommend increases in these assumptions.

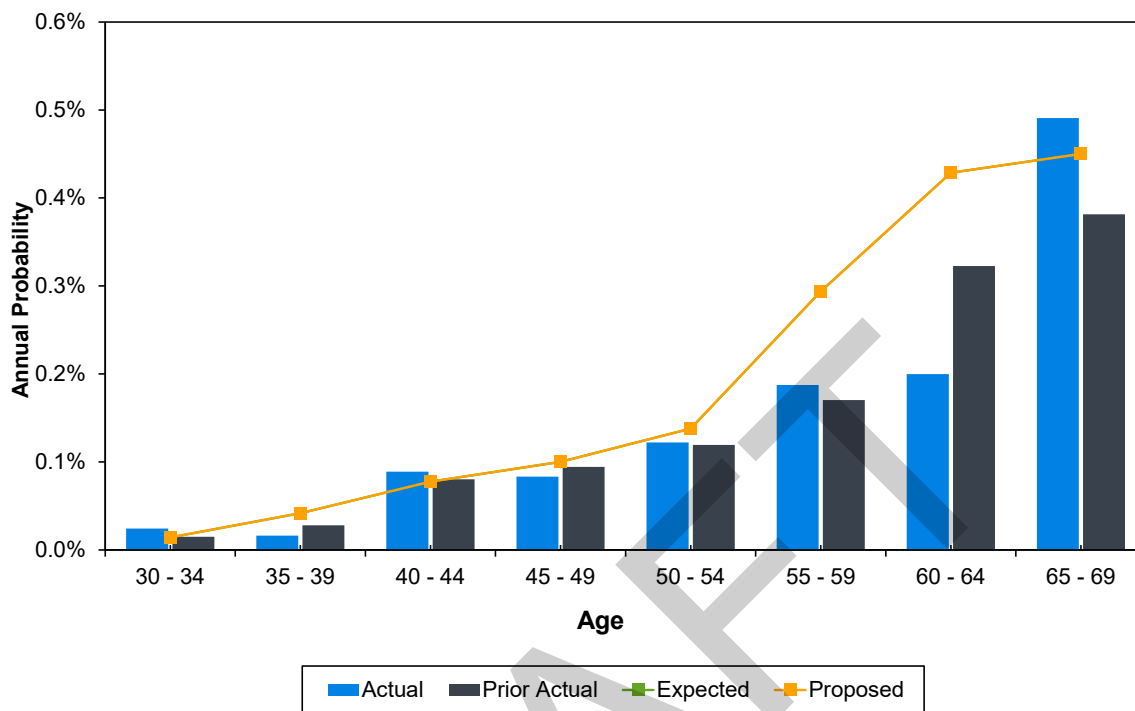
Note that for many members who retire due to service-connected disability, their benefit calculated under the service retirement provisions will be larger than that calculated under the disability retirement provisions. As a result, their monthly retirement allowance will be the same regardless of whether they retire for disability. Consequently, the impact on plan liabilities is somewhat muted, except for differences between mortality assumptions and the unmodified continuance allowance provisions.

#### Recommendation: Nonservice-Connected Disability

Actual experience for nonservice-connected disabilities was lower than the assumptions for General members predicted, even after accounting for retired members whose retirement type was reclassified to nonservice-connected disability over the study period. Given the relatively small number of nonservice-connected disability retirements we do not consider these differences material. For this reason, and our approach of not assigning too much credibility to experience during the COVID pandemic period, we are recommending no change to the nonservice-connected disability retirement assumptions at this time.

For Safety members there were only four nonservice-connected disabilities, so we recommend continuing the current practice of assuming all Safety disability retirements are service-connected.

**Exhibit 8-1**  
**Service-Connected Disability Retirement – General A-D & G Male Members**



**Exhibit 8-2**  
**Service-Connected Disability Retirement – General A-D & G Female Members**

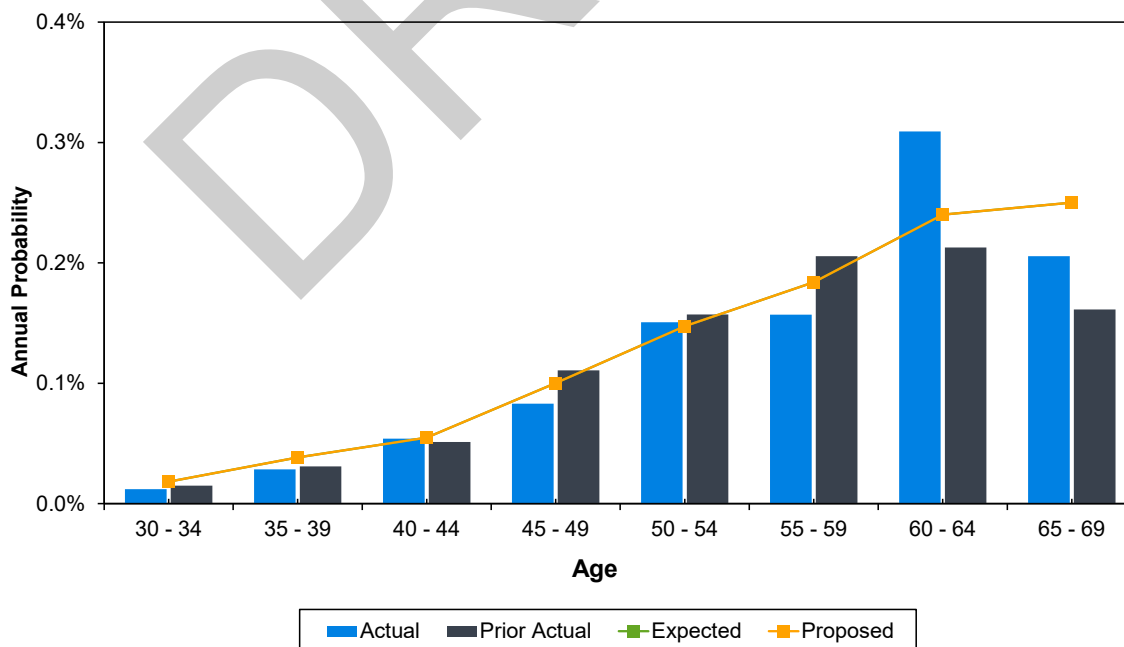


Exhibit 8-3  
Service-Connected Disability Retirement – Safety Male Members

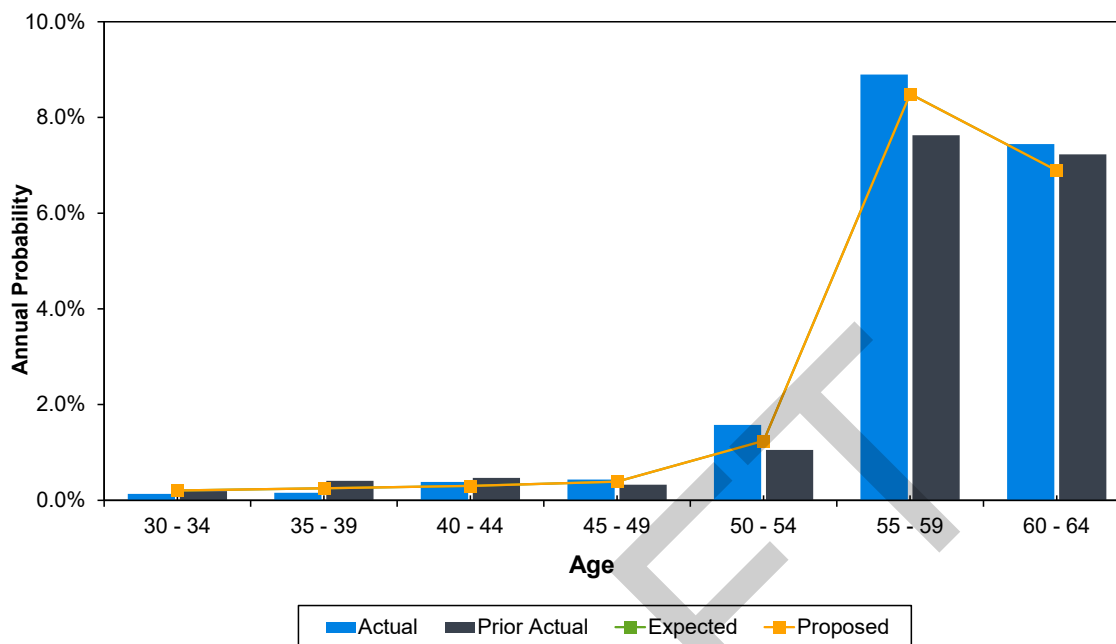


Exhibit 8-4  
Service-Connected Disability Retirement – Safety Female Members

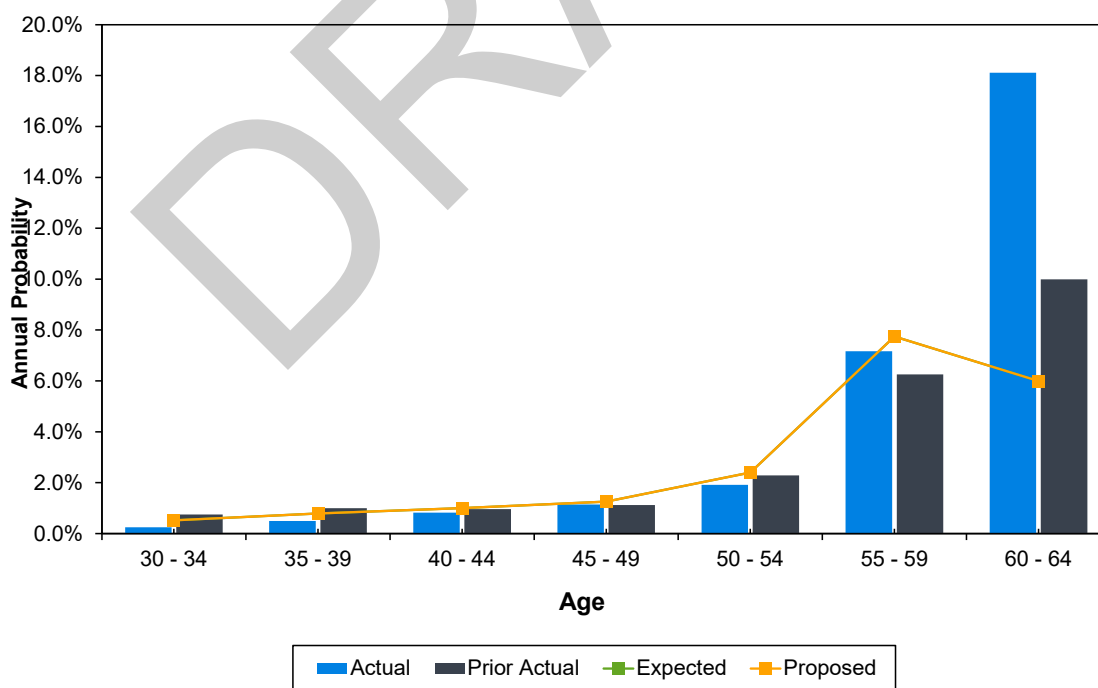




Exhibit 8-5  
Nonservice-Connected Disability Retirement – General A-D & G Male Members

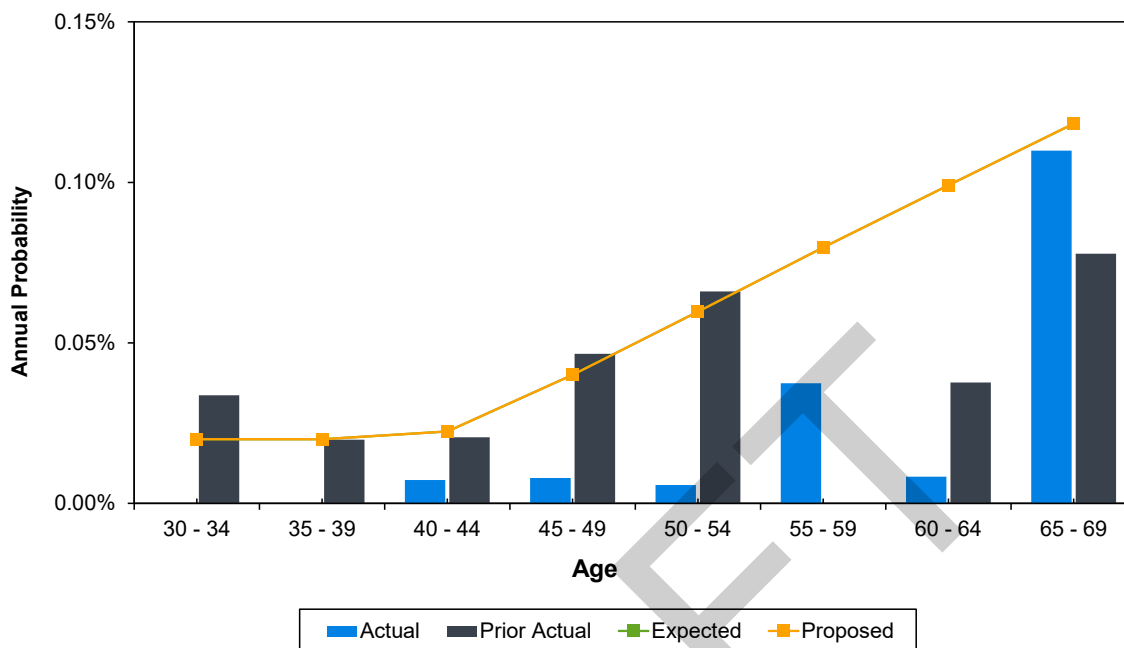
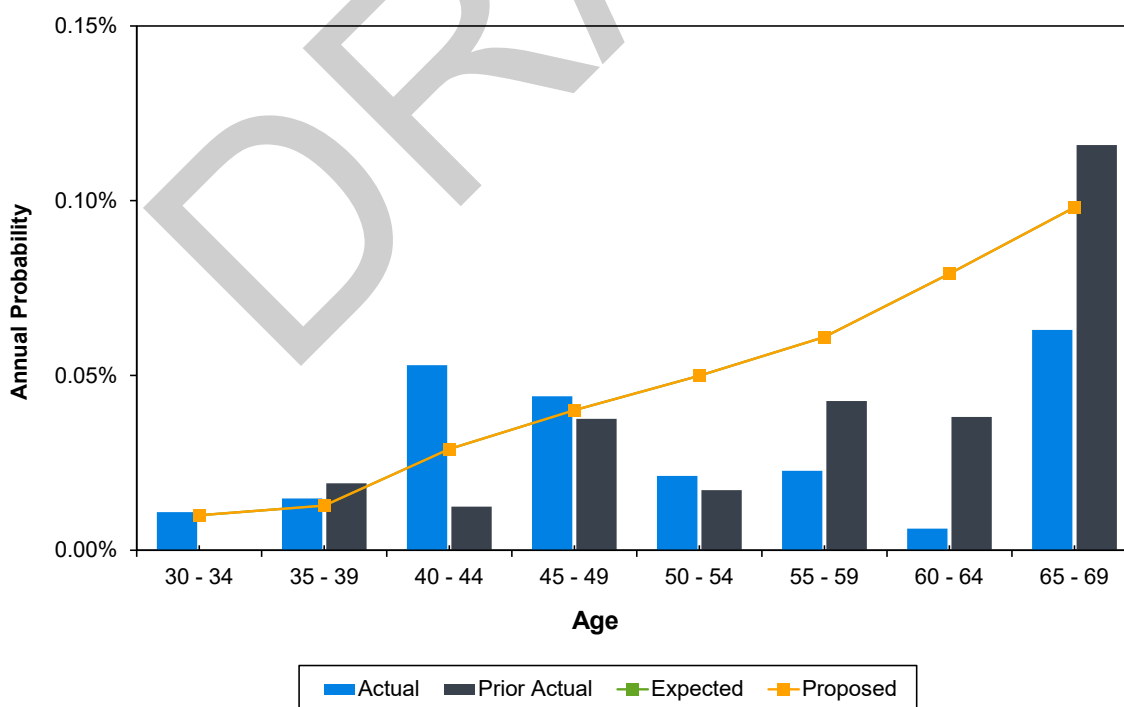


Exhibit 8-6  
Nonservice-Connected Disability Retirement – General A-D & G Female Members



## 9. Terminations (Includes both Refunds and Vested Terminations)

This section of the report summarizes the results of our study of terminations of employment for reasons other than death, service retirement, or disability. As used in the actuarial valuation, termination rates refer to both voluntary and involuntary terminations of employment. A member who terminates, but does not retire, is assumed to either take a refund (a withdrawal) or to terminate employment but leave their member contributions with the System (a vested termination). We will refer to the combination of the two rates as the aggregate termination rate. This approach sets a probability that the member will terminate, and then assumes a certain portion of the members terminating will elect a refund. The probability of refund is discussed in more detail in Section 10.

We have found in our analysis of LACERA experience that termination rates vary by member class and the stage of a member's career. That is, members in the early stages of their career generally have a higher probability of terminating. This is consistent with our findings from other studies. As such, we analyze termination rates separately for General and Safety members, and based on a member's length of service with LACERA.

### Results: Aggregate Terminations (Refunds and Vested Terminations)

As shown in the table below, the overall number of terminations, weighted by compensation level, was higher than expected for all plans. Although the actual terminations were greater, this pattern is consistent with the experience from the prior study. The following is a comparison of the actual to expected terminations by plan for this study period, weighted by compensation level.

Termination of Employment (weighted by compensation)			
Plan	Actual	Expected	Actual / Expected
General D & G	402,079,080	264,955,911	152%
General E	27,038,472	23,084,273	117%
Safety	44,791,668	28,015,182	160%
<b>Total</b>	<b>473,909,220</b>	<b>316,055,365</b>	<b>150%</b>

Exhibits 9-1 to 9-3 at the end of this section show the results of the study graphically. Total terminations were greater than the assumptions predicted, with some variance by plan and at different service intervals. This total experience is consistent with the experience of other retirement systems during this study period, which is likely at least partially due to the COVID pandemic.

We studied General Plans D and G together, and Safety Plans B and C together. General Plans A through C and Safety Plan A no longer have many members impacted by the termination assumption so are not considered in this analysis. General Plan D and Safety Plan B provide experience for members with longer service while General Plan G and Safety Plan C provide experience for members with shorter service.

### Recommendation

For General Plans D and G we recommend increasing termination rates for members with less than 10 years of service, and slightly lowering termination rates for members who have between 10 and 20 years of service. We also recommend slight increases for members with more than 20 years of service.

For General Plan E we recommend increasing termination rates for members with 8 to 10 years of service, and no change at all other service durations.

Although we reviewed the results of the most recent three-year period, we only made recommendations where the proposed changes were consistent with prior experience.

General Plans A to C are closed and no new employees are covered by these plans since May of 1979. The total membership is aging and has 30 years of service in most cases. Under the current approach to applying termination rates, once a member is eligible for retirement, no termination is assumed. Thus, these rates represent the very low probabilities there are still members not yet eligible for retirement that could terminate. The current rate of termination is assumed at a flat 0.5%, regardless of age or years of service. We recommend no change to this assumption.

For Safety members we recommend higher termination rates for members with less than two years of service, and no change for members with two or more years of service.

A comparison of the actual and expected terminations under the proposed assumptions, weighted by compensation level, is shown in the table below.

Termination of Employment (weighted by compensation)			
Plan	Actual	Proposed	Actual / Proposed
General D & G	402,079,080	317,831,977	127%
General E	27,038,472	23,411,879	115%
Safety	44,791,668	30,906,182	145%
<b>Total</b>	<b>473,909,220</b>	<b>372,150,038</b>	<b>127%</b>

Exhibit 9-1  
Termination Rates – General Plan D & G Members

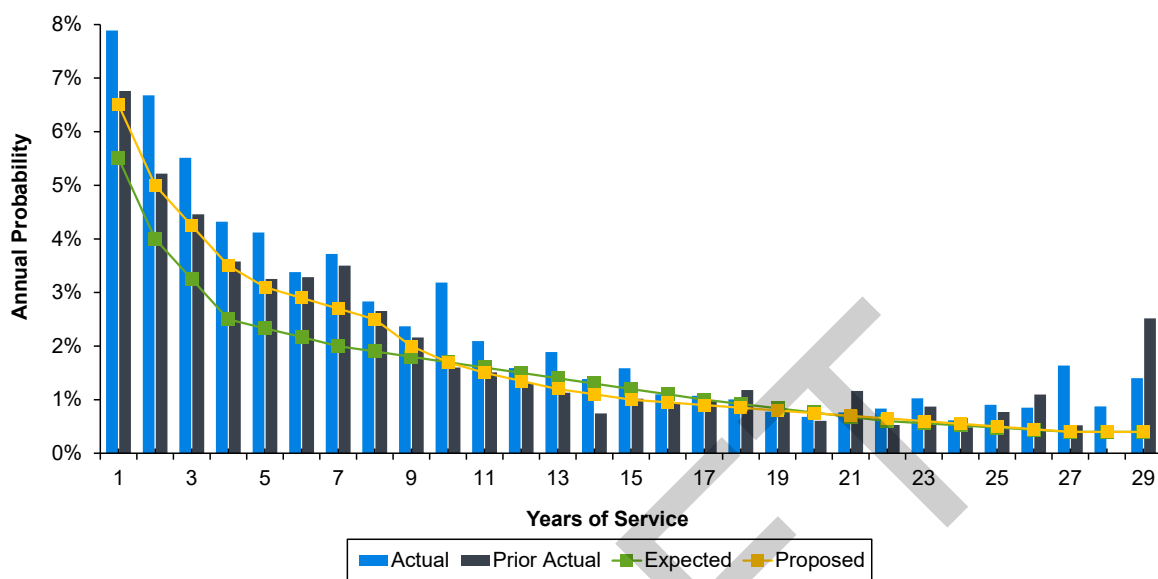


Exhibit 9-2  
Termination Rates – General Plan E Members

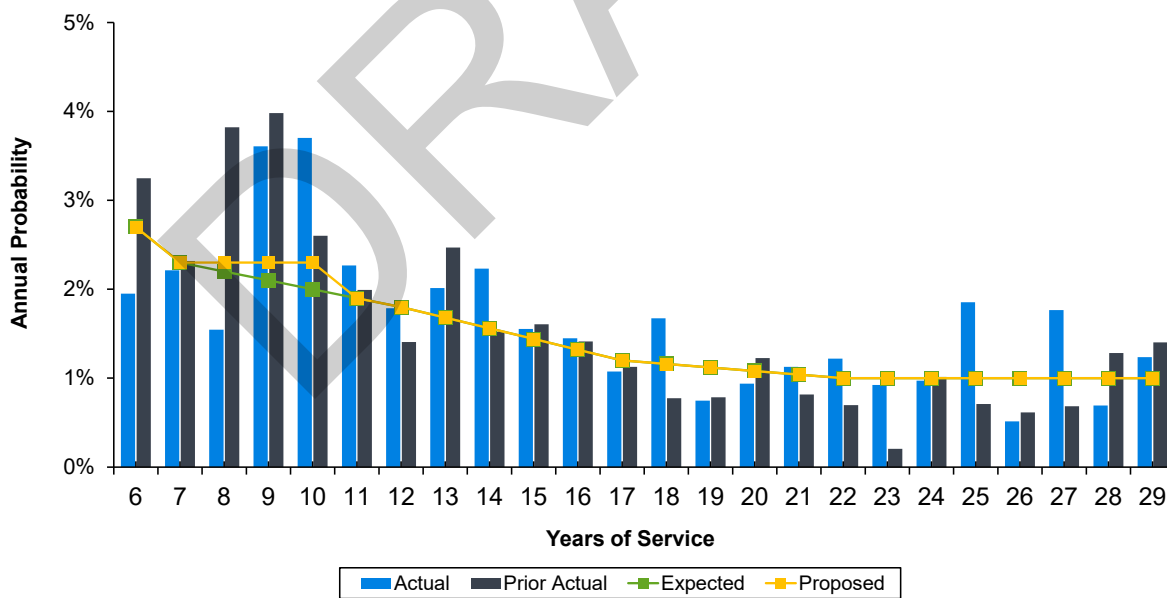
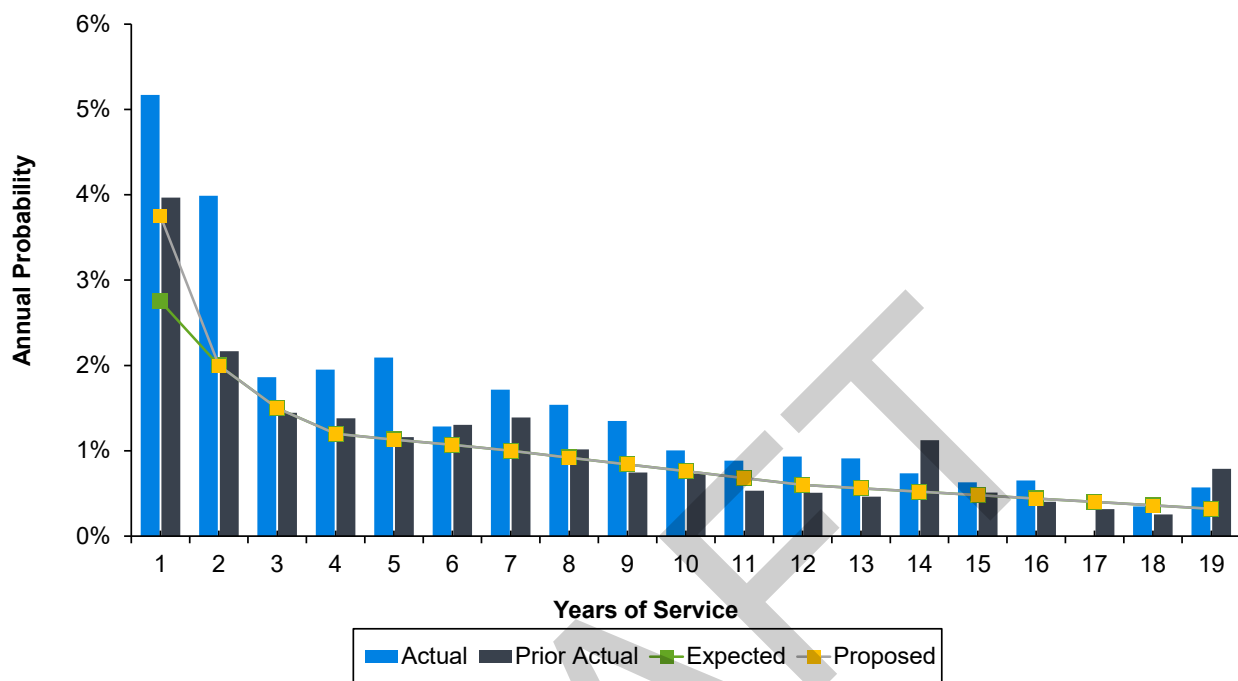


Exhibit 9-3  
Termination Rates – Safety Members



## 10. Probability of Refund

As discussed in Section 9, the aggregate termination rates include both members who terminate and take a refund of their contributions and those who elect to keep their contributions with LACERA and receive a deferred vested benefit. The percentage of members who are expected take a refund of their contributions is the probability of refund assumption and is discussed in this section.

### Results

The current assumptions project that a portion of vested members will take a refund of their contributions based on their years of service and classification.

For vested members, there were somewhat fewer refunds than the assumptions projected for General members and more than projected for Safety members, as shown in the following table.

Probability of Refund (at least 5 years of service, headcount weighted)					
Class	Actual	Expected	Actual / Expected	Proposed	Actual / Proposed
General	469	535	88%	501	94%
Safety	58	39	148%	39	148%
<b>Total</b>	<b>527</b>	<b>574</b>	<b>92%</b>	<b>540</b>	<b>98%</b>

Exhibits 10-1 to 10-2 on the following page show the results of the study graphically. Note that the probability of refund for Safety members with 20 or more years of service only applies to Safety Plan C members, since members of Safety Plans A and B are eligible for service retirement after 20 years of service.

### Recommendation

We recommend lowering the probability of refund for General members who have between 5 and 15 years of service. The experience for Safety members is the opposite of what was observed in the prior study, and we recommend no changes in the probability of refund for Safety members at the current time.

Exhibit 10-1  
Probability of Refund – General Members

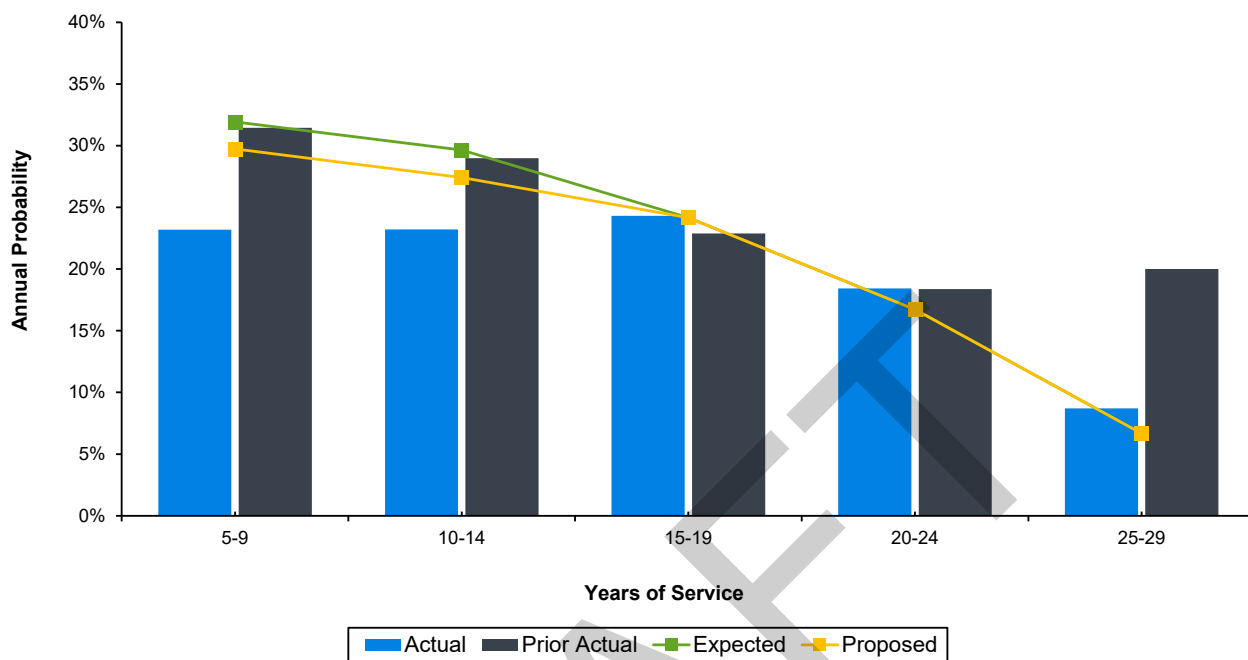
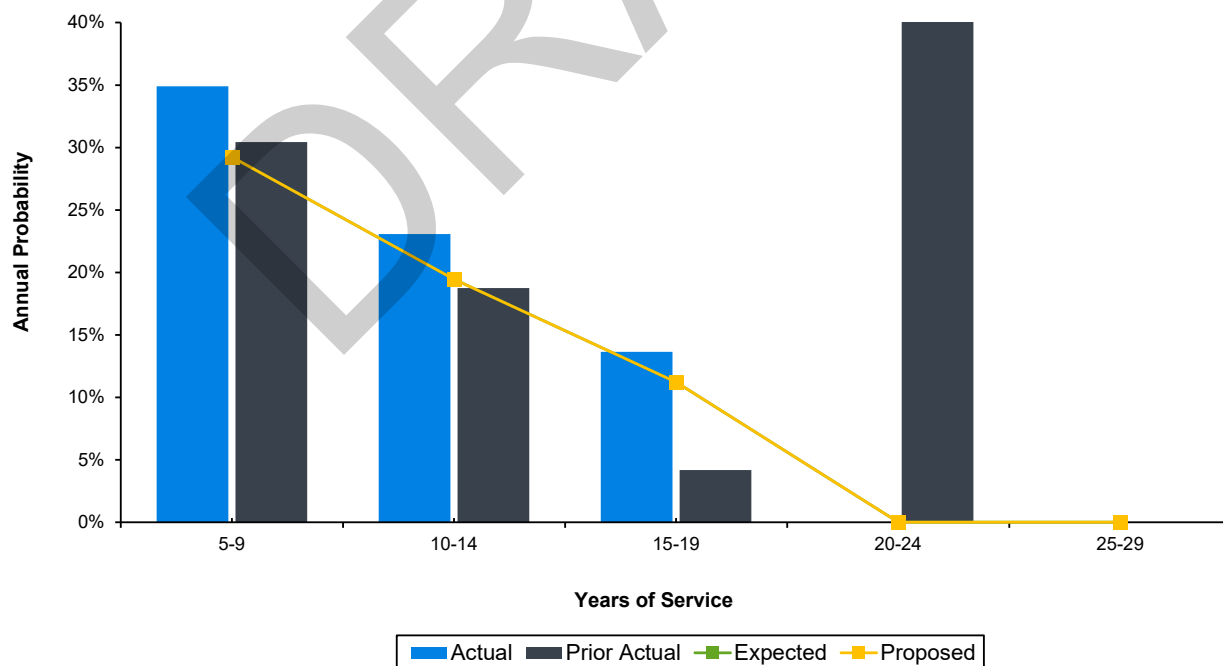


Exhibit 10-2  
Probability of Refund – Safety Members



## 11. Retiree Mortality for Valuation Purposes

In this section we look at the results of the study of actual and expected death rates of retired members. We studied rates of mortality among healthy and disabled retired members.

Although there has been a recent deviation due to the pandemic, mortality has been improving in this country and is expected to continue to improve. We recommend continued use of generational mortality tables (see later discussion) to account for projected future improvements in mortality. Generational mortality is reflected by including a mortality improvement scale that projects annual decreases in mortality rates. Therefore, generational mortality explicitly assumes that members born more recently will live longer than the members born before them.

The Actuarial Standards of Practice require expected future mortality improvements to be considered in selecting the assumption. Using generational mortality tables achieves this.

### Results

Overall, we found there were more deaths than the current rates predicted for healthy and disabled retired members. This is perhaps unsurprising given the COVID pandemic overlaps significantly with this study period. The ratio of active-to-expected deaths is also higher in this study than in the prior study period. The following table shows a comparison of the actual-to-expected deaths of service retired members by gender and class for the current study period, weighted by benefit amounts.

Retiree Mortality (weighted by benefit amounts)					
<b>Service Retirement</b>					
Group	Deaths			Actual to Expected	Actual to Proposed
	Actual	Expected	Proposed		
General Male	9,422,483	8,704,306	8,719,998	108%	108%
General Female	7,735,952	7,416,652	7,407,782	104%	104%
Safety Male	2,515,046	2,293,922	2,283,950	110%	110%
Safety Female	140,336	137,850	135,280	102%	104%
<b>Total Svc Ret</b>	<b>19,813,817</b>	<b>18,552,730</b>	<b>18,547,010</b>	<b>107%</b>	<b>107%</b>
<b>Disability Retirement</b>					
Group	Deaths			Actual to Expected	Actual to Proposed
	Actual	Expected	Proposed		
General Male	723,259	678,264	676,270	107%	107%
General Female	731,231	634,900	631,663	115%	116%
Safety Male	3,276,596	3,004,383	2,979,974	109%	110%
Safety Female	183,066	160,019	157,498	114%	116%
<b>Total Dis Ret</b>	<b>4,914,152</b>	<b>4,477,566</b>	<b>4,445,405</b>	<b>110%</b>	<b>111%</b>

The values in the table are weighted by monthly benefit amount, so the first line of the table indicates that General male retirees with total monthly benefits of \$9,422,483 died compared to the expected value of monthly benefits associated with General male retiree deaths of \$8,704,306 based on the valuation assumptions.

Results are shown graphically on the following pages.



## Mortality for Beneficiaries/Survivors

The previous analysis was focused on members who are currently receiving either service retirement or disability retirement benefits. An additional assumption must be made for beneficiaries of members who are currently receiving survivor benefits or may receive survivor benefits in the future. Analysis of this assumption is more difficult as the information on deaths of beneficiaries who are not in payment is generally not as well reported in most systems as members who are in payment. The information on beneficiaries currently receiving survivor benefits is more reliable; however, we do not believe it is appropriate to apply this experience to beneficiaries who are not in payment.

Studies have shown that: 1) beneficiaries have materially higher mortality rates after their spouse has died (“grieving widow effect”); and 2) married people live longer than single people. Since most beneficiaries who are not in payment are spouses of the members, we would expect on average they would live longer than the general retired population as they are married and retirees are a mix of married and single. After the member has died, the expectation is the survivor will have higher mortality (and a shorter life expectancy), which is consistent with LACERA experience. To approximate this lower-than-average beneficiary mortality prior to the retiree’s death and higher-than-average beneficiary mortality following the retiree’s death, we recommend continuing the assumption of the beneficiary mortality being equal to the assumption for a healthy General retiree of the same gender.

## Generational Mortality Tables

Most actuarial valuations for public sector retirement systems use generational mortality tables, which explicitly reflect expected improvements in mortality. Generational mortality tables include a base table and a projection table. The projection table reflects the expected annual reduction in mortality rates at each age. Therefore, each year in the future, the mortality at a specific age is expected to decline slightly (and people born in succeeding years are expected to live slightly longer).

For example, if the mortality rate at age 75 is 2.00% for a member currently aged 75 and the projected improvement is 1.00%, the mortality rate at age 75 for a member currently aged 74 will be 1.98% [ $2.00\% \times (100.00\% - 1.00\%)$ ]. Therefore, the life expectancy for a 75-year old in the next year will be greater than a 75-year old in the current year. This can result in significant differences in life expectancies when projecting improvements 30-plus years into the future.

One of the main benefits of generational mortality tables is that the valuation assumptions should effectively update each year to reflect improved mortality, and the mortality tables should need to be changed less frequently. During the 2016 investigation of experience study, LACERA adopted a generational mortality assumption.

## Projection Scale for Mortality Improvement

There is a strong consensus in the actuarial community that future improvements in mortality should be reflected in the valuation assumptions. There is less consensus, however, about how much mortality improvement should be reflected. Beginning in 2014, the Society of Actuaries (SOA) began publishing a mortality improvement scale (MP-2014) that varies by age and birth year. This results in a complex matrix of rates that is projected forwards and backwards. Ultimately, in any mortality improvement table, the mortality improvement scale stops at a future year, and that year’s rate is used for all later years. It is referred to as the “ultimate rate”.

Our general recommendation is to use a mortality projection scale based on the ultimate portion of the mortality improvement scale. We believe this approach reasonably reflects the long-term expectation of mortality improvement with less complexity than using a complete matrix of improvement rates.

LACERA currently uses a mortality projection scale equal to 100% of the MP-2014 ultimate projection scale.

Although the SOA publishes an updated mortality improvement scale each year, the ultimate rate did not change until the release of MP-2020 in the fall of 2020. An updated projection scale (MP-2021) was issued last year with similar ultimate rates. This new scale relies heavily on Social Security experience for years 1958 through 2018, and assumes flat 1.35% annual improvements in mortality for individuals 62 and younger. Note that since this scale includes experience through 2018 there are no effects of pandemic mortality included, nor any adjustments to account for its impact. The improvement decreases gradually between the ages of 62 and 80, then more steeply for individuals aged 80 and older. Compared to MP-2014, the new scale projects bigger improvements in mortality for individuals younger than 83, and smaller improvements for individuals 83 and older. For example, the improvement under MP-2021 drops to 0.30% at age 100, compared to 0.64% when using MP-2014.

## Recommendation

LACERA uses standard mortality tables adjusted to best fit the patterns of mortality among its retirees. The current mortality rates are based on the PubG-2010 and PubS-2010 Healthy Retiree and Disabled Retiree mortality tables and all assume generational mortality improvement based on 100% of the MP-2014 Ultimate projection scale.

We recommend no change to the standard mortality tables, nor scaling factors, currently in place.

We recommend an update to the ultimate projection scale included in the recently published MP-2021 mortality improvement scale.

The recommended mortality rates are therefore all based on the PubG-2010 and PubS-2010 Healthy Retiree and Disabled Retiree mortality tables and all assume generational mortality improvement based on 100% of the MP-2021 Ultimate projection scale, as follows:

Class	Type <sup>(1)</sup>	Sex	Mortality Tables	
			Current Table <sup>(2)</sup>	Proposed Table <sup>(3)</sup>
General	Healthy	Male	PubG-2010 (100%) Healthy Retiree Male	PubG-2010 (100%) Healthy Retiree Male
General	Healthy	Female	PubG-2010 (110%) Healthy Retiree Female	PubG-2010 (110%) Healthy Retiree Female
Safety	Healthy	Male	PubS-2010 (85%) Healthy Retiree Male	PubS-2010 (85%) Healthy Retiree Male
Safety	Healthy	Female	PubS-2010 (100%) Healthy Retiree Female	PubS-2010 (100%) Healthy Retiree Female
General	Disabled	Male	Avg of: PubG-2010 (100%) Healthy Retiree Male PubG-2010 (100%) Disabled Retiree Male	Avg of: PubG-2010 (100%) Healthy Retiree Male PubG-2010 (100%) Disabled Retiree Male
General	Disabled	Female	Avg of: PubG-2010 (100%) Healthy Retiree Female PubG-2010 (100%) Disabled Retiree Female	Avg of: PubG-2010 (100%) Healthy Retiree Female PubG-2010 (100%) Disabled Retiree Female
Safety	Disabled	Male	PubS-2010 (100%) Disabled Retiree Male	PubS-2010 (100%) Disabled Retiree Male
Safety	Disabled	Female	PubS-2010 (100%) Disabled Retiree Female	PubS-2010 (100%) Disabled Retiree Female

1. Beneficiaries are assumed to have the same mortality as a healthy General member of the same sex.
2. Generational Projections using 100% of the MP-2014 Ultimate projection scale.
3. Generational Projections using 100% of the MP-2021 Ultimate projection scale.

Exhibit 11-1  
Healthy Mortality – Male General Members

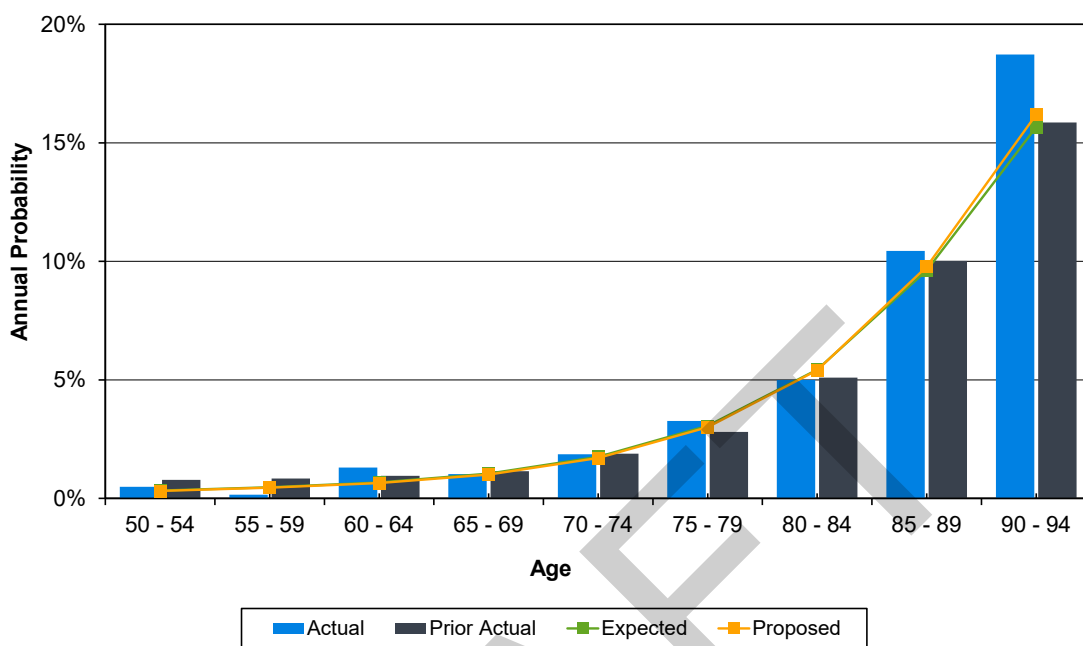


Exhibit 11-2  
Healthy Mortality – Female General Members

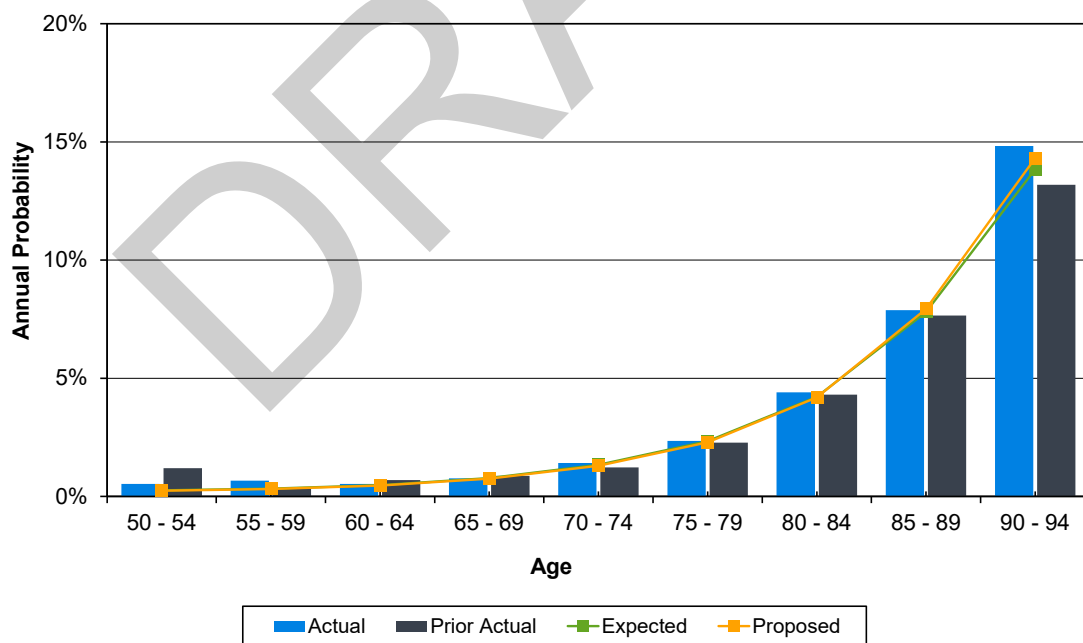


Exhibit 11-3  
Healthy Mortality – Male Safety Members

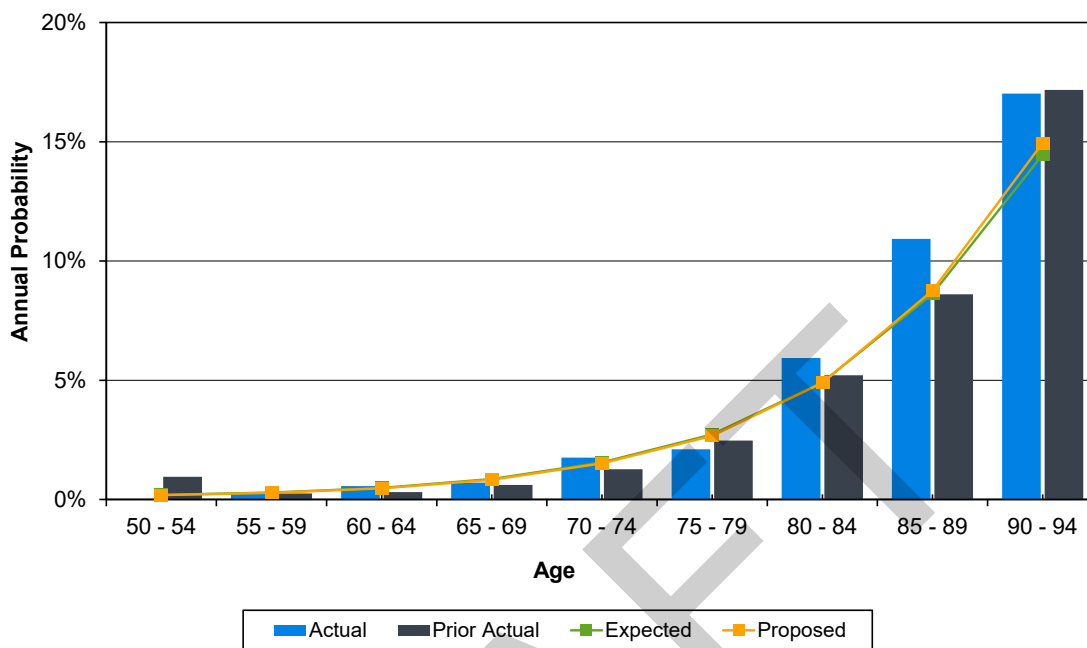


Exhibit 11-4  
Healthy Mortality – Female Safety Members

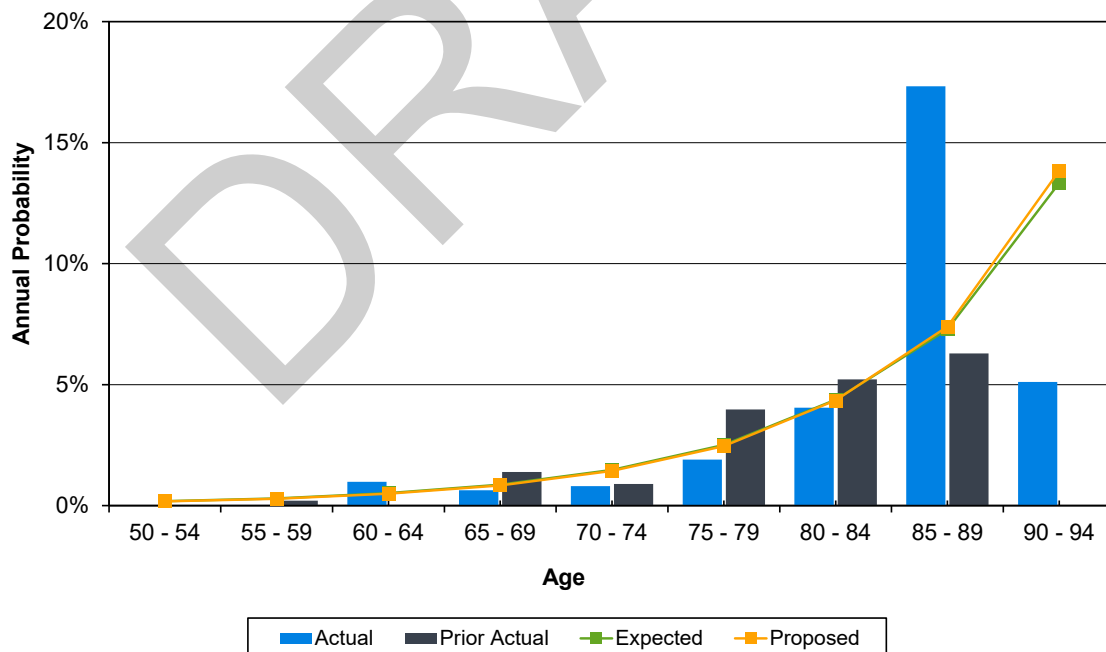


Exhibit 11-5  
Disabled Mortality – Male General Members

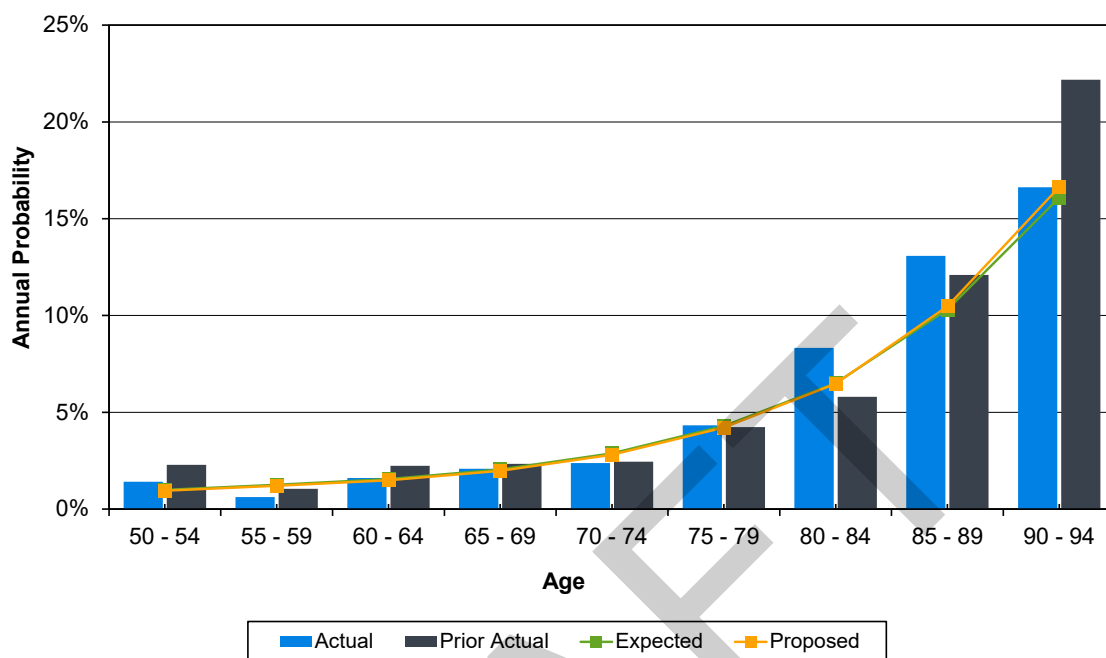


Exhibit 11-6  
Disabled Mortality – Female General Members

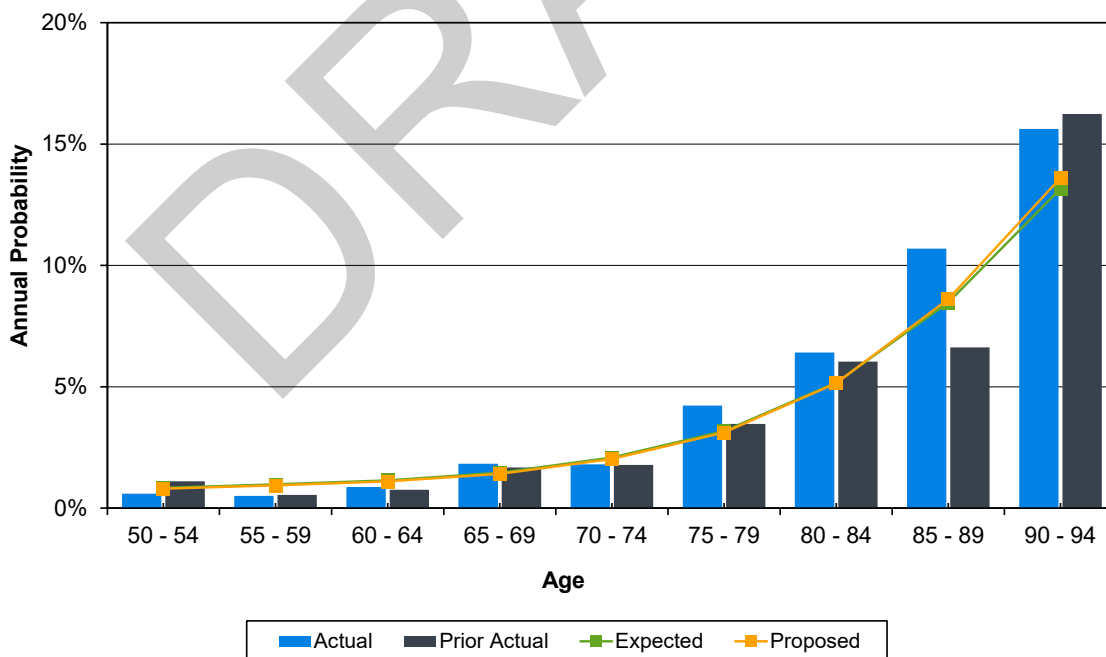


Exhibit 11-7  
Disabled Mortality – Male Safety Members

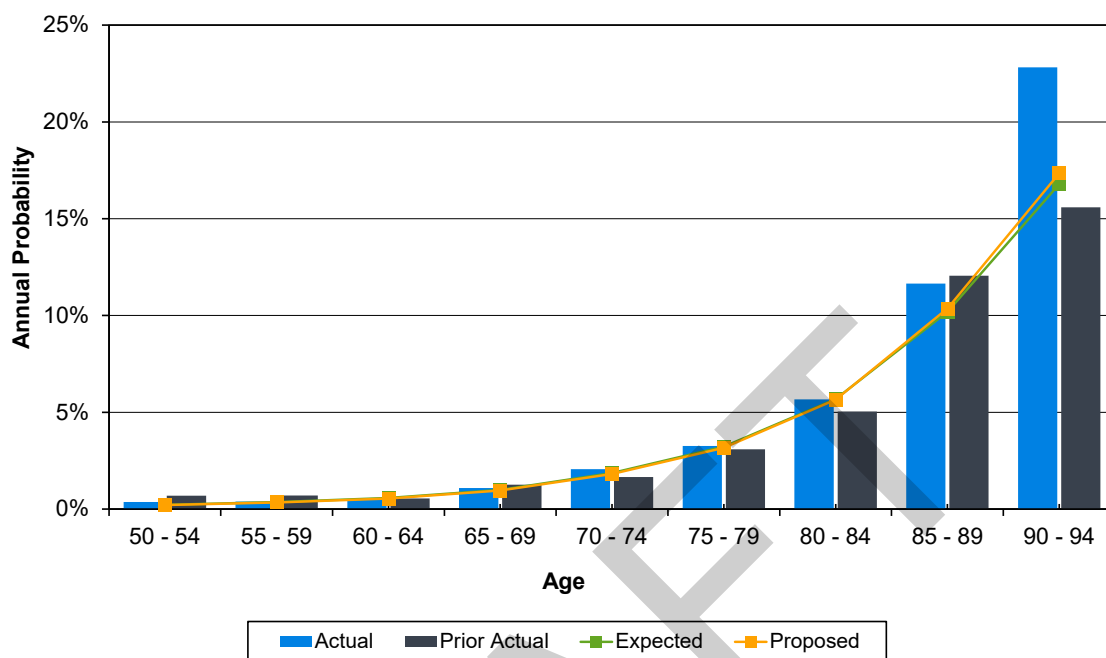
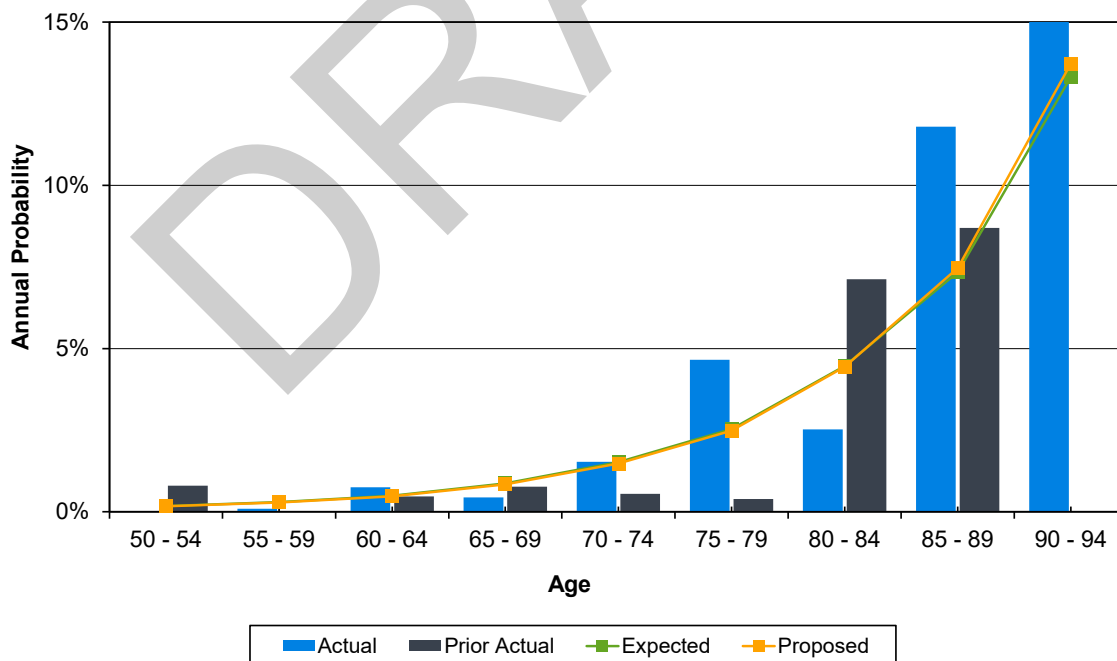


Exhibit 11-8  
Disabled Mortality – Female Safety Members



## 12. Miscellaneous Assumptions

### Probability of Eligible Survivor

All members are assumed to elect the unmodified retirement allowance. Surviving beneficiaries (spouses or qualified domestic partners of members) generally receive a 65% continuance of the member's benefit (100% continuance for service-connected disabilities and 55% for Plan E members). Thus, the probability a member has an eligible survivor impacts the value of the benefit.

Based on our analysis of retirements during the study period, we found that 76% of males and 45% of females received an unmodified (or unmodified plus) benefit with an eligible survivor. We are recommending lowering the assumption for probability of retiring with an Eligible Survivor to 48% for female members, while keeping the assumption for male members unchanged at 77%.

Retiree Gender	Probability of Retiring with an Eligible Survivor		
	Current Assumption	Actual Experience	Recommended Assumption
Male	77%	76%	No change
Female	50%	45%	48%

### Beneficiary Age

To determine the value of a member's retirement or death benefit, we must estimate the value of the portion payable to the surviving eligible beneficiary. Since the value of the survivor's benefit is dependent on their age, we must estimate the age. We studied the beneficiary age difference compared to the member based on retirements during the study period. Based on this analysis, we are recommending changing the assumption for beneficiary age of male retirees to be 3 years younger than the member, while keeping the assumption unchanged at 2 years older for female retirees.

Retiree Gender	Beneficiary's Age Relative to Member		
	Current Assumption	Actual Experience	Recommended Assumption
Male	4 years younger	3.1 years younger	3 years younger
Female	2 years older	1.8 years older	No change

Since the majority of eligible survivors are expected to be of the opposite gender, even with the inclusion of qualified domestic partners, we will continue to assume that the survivor's gender is the opposite of the member.

## Retirement for Deferred Vested Members

The age when members who terminate (or have terminated) employment with a vested benefit are assumed to retire varies by plan. We have studied the actual retirement ages of deferred vested members during the study period, and we recommend no changes to current assumptions.

Assumption for Deferred Commencement			
Plan	Age at Commencement		
	Current Assump.	Actual Results	Proposed Assump.
GA	62	N/A <sup>(1)</sup>	No Change
GB	62	N/A <sup>(1)</sup>	No Change
GC	62	N/A <sup>(1)</sup>	No Change
GD	59	59.2	No Change
GE	62	62.9	No Change
GG	57	N/A <sup>(1)</sup>	No Change
SA	55	N/A <sup>(1)</sup>	No Change
SB	50	50.7	No Change
SC	50	N/A <sup>(1)</sup>	No Change

1. Insufficient data for analysis.

Note that General Plans A, B and C and Safety Plan A have very few deferred vested members. For these plans, we consider this assumption to not be material. For General Plan G and Safety Plan C, there is very little experience for this assumption at this time.

## Reciprocity

Members who terminate in the future (or have already terminated) with a deferred vested benefit may go to work for a reciprocal employer. This can result in an increase in the member's final compensation used in the calculation of their LACERA benefit. Currently, 16% reciprocity is assumed for General members, and 35% is assumed for Safety members. Based on recent experience, we are recommending increasing the reciprocity percentage by 1% for each group.

Retirements from Deferred Status (2019-2022)					
Plan	Total	Reciprocal Status	% with Reciprocity	Current Assump.	Proposed Assump.
General	1,207	241	20%	16%	17%
Safety	88	32	36%	35%	36%
Total	1,295	273	21%		



## **Appendix A: Proposed Actuarial Procedures and Assumptions**

This section of the experience study report reflects how the Appendix A of the June 30, 2022 actuarial valuation would appear if the Board of Investments adopts all of the recommended assumptions.

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## Appendix A Actuarial Procedures and Assumptions

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of LACERA and of LACERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of LACERA's benefits.

Table A-1 summarizes the assumptions. The mortality probabilities are taken from the sources listed. Tables A-2 and A-3 show how members are expected to leave retired status due to death.

Table A-4 presents the probability of refund of contributions upon termination of employment while vested. Table A-5 presents the expected annual percentage increase in salaries.

Tables A-6 to A-13 were developed from the experience as measured by the 2022 Investigation of Experience Study. These are the probability that a member will leave the System for various reasons.

**Note: Recommended changes from the prior methods and assumptions have been shaded in green.**

### Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL).

For members who transferred between plans, entry age is based on original entry into the System.

For General Plan G and Safety Plan C, the normal cost rate is rounded up to the nearest 0.02%.

### Amortization Method

The original UAAL as of June 30, 2009 is amortized as a level percentage of the projected salaries of present and future members of LACERA over a closed 30-year period. As of the June 30, 2019 valuation, all amortization layers with periods greater than 22 years as of July 1, 2020 were amortized over a 22-year period. Future changes in the UAAL due to actuarial gains and losses and assumption changes are amortized over new closed 20-year periods, beginning with the date the contribution is first expected to be made. This is referred to as "layered" amortization. For increases in the UAAL due to changes in benefit provisions, the increase is amortized over a 10-year period.

### Records and Data

The data used in this valuation consists of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by LACERA and are accepted for valuation purposes without audit.

## Replacement of Former Members

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. The normal cost rates for active members within an individual plan will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions, or the pattern of the new entrants.

## Growth in Membership

For benefit determination purposes, no growth in the membership of LACERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth or decline in the total number of active members is assumed.

## Payroll Growth

Total payroll is expected to grow at 3.25% per year.

## Internal Revenue Code Section 415 Limit

The Internal Revenue Code (IRC) Section 415 maximum benefit limitation is not explicitly reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit calculation at retirement.

## Internal Revenue Code Section 401(a)(17)

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

## Government Code Section 7522.10

The maximum compensation limit under Government Code Section 7522.10 is reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

## Employer Contributions

The employer contribution rate is set by the Board of Investments based on actuarial valuations.

## Member Contributions

The member contribution rates of contributory legacy plans (all plans except General Plans E and G and Safety Plan C) vary by entry age and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.

The individual member rates by entry age, plan, and class are illustrated in Appendix D of the valuation report.

## Valuation of Assets

The assets are valued using a five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The market value excludes the STAR Reserve. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. To the extent that there is a loss for the year and there are unrecognized gains from previous years, or to the extent that there is a gain for the year and there are unrecognized losses from previous years, the gain or loss for the year shall be used to offset unrecognized gains or losses from previous years in the order of oldest to most recent. Any remaining gain or loss for the year is recognized over a five-year period. The five-year smoothing valuation basis for all assets was adopted effective June 30, 2009, and the offsetting methodology and STAR Reserve treatment were adopted effective June 30, 2022.

### Price Inflation (Local and National)

The price inflation assumption is used in the determination of assumptions for individual salary increases, overall wage growth, postretirement benefit increases, and PEPRA compensation limit increases. Both the local and national price inflation assumptions are 2.75% per year

### Investment Earnings and Expenses

The future investment earnings of the assets of LACERA are assumed to accrue at an annual rate of 7.00% compounded annually, net of both investment and administrative expenses. This rate was adopted June 30, 2019.

### Postretirement Benefit Increases

Postretirement increases are assumed for the valuation in accordance with the benefits provided as described in Appendix B. These adjustments vary by plan and are assumed payable each year in the future but are limited to not exceed the expected local inflation of 2.75% per year, with the exception that any COLA accumulation banks for Plan A members are reflected in the valuation. The local inflation rate used for the postretirement benefit assumptions was adopted June 30, 2016.

### Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 7.00% compounded semi-annually for an annualized rate of 7.12%. This rate was adopted effective June 30, 2019.

### Future Salaries

The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Table A-5. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 3.25% per annum rate of increase in the general wage level of the membership. These rates were adopted June 30, 2019.

Increases are assumed to occur mid-year (i.e., January 1st) and only apply to base salary, excluding megaflex compensation. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.

For plans with a one-year final average compensation period, actual average annual compensation is used. For Plan E, Plan G and Safety Plan C, the monthly rate as of June of the valuation year was annualized. Due to irregular compensation payments included as pensionable earnings, actual annual pay is preferred over annualizing a single monthly payment amount.

### Social Security Wage Base

Plan E members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 3.25% per year. Note that statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement. This rate was adopted June 30, 2016.

Note also, that it is assumed all Plan E members born after 1950 have less than 10 years of Social Security-covered service and, therefore, do not have their benefit offset.

General Plan G and Safety Plan C members have their compensation limited to approximately 120% of the Social Security Wage Base. The limit for 2022 is \$161,969 (after applying the 120% factor) and is projected to increase at the CPI rate of 2.75%. This rate of future increase was adopted effective June 30, 2016.

## Retirement

Members in General Plans A-D may retire at age 50 with 10 years of service, or any age with 30 years of service, or age 70 regardless of the number of years of service. General Plan G members are eligible to retire at age 52 with 5 years of service, or age 70 regardless of the number of years of service. Non-contributory Plan E members may retire at age 55 with 10 years of service. Members of Safety Plans A and B may retire at age 50 with 10 years of service, or any age with 20 years of service. Safety Plan C members are eligible to retire at age 50 with 5 years of County service. Retirement probabilities vary by age and are shown by plan in Tables A-6 through A-13.

All General members who attain or have attained age 75 in active service and all Safety members who attain or have attained age 65 in active service are assumed to retire immediately (except for Safety Plan C members who have not yet attained 5 years of service).

Vested former members are assumed to retire at the later of their current age and the assumed retirement age specified as follows:

Assumption for Deferred Commencement	
Plan	Age at Commencement
GA	62
GB	62
GC	62
GD	59
GE	62
GG	57
SA	55
SB	50
SC	50

The assumptions regarding termination of employment, early retirement, and unreduced service retirement are treated as a single set of decrements in regard to a particular member. For example, a General Plan D member hired at age 30 has a probability of withdrawing from LACERA due to death, disability or other termination of employment until age 50. After age 50, the member can withdraw due to death, disability, or retirement. Thus, in no year during the member's projected employment would the member be eligible for both a probability of other termination of employment and a probability of retirement.

The retirement probabilities were adopted June 30, 2019.

## Disability

The probabilities of disability used in the valuation are also illustrated in Tables A-6 through A-13. These probabilities were adopted June 30, 2019.

## Postretirement Mortality – Other Than Disabled Members

The same postretirement mortality probabilities are used in the valuation for members retired for service and beneficiaries. These probabilities are illustrated in Table A-2. Current beneficiary mortality is assumed to be the same as for healthy members of the same sex. Future beneficiaries are assumed to be of the opposite sex and have the same mortality as General members. The amount-weighted Pub-2010 mortality tables are used. These probabilities were adopted June 30, 2019.

Note that these assumptions include a projection for expected future mortality improvement. The new projection scale was adopted June 30, 2022.

**Males:** General members: PubG-2010 Healthy Retiree Mortality Table for Males, with MP-2021 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Males multiplied by 85%, with MP-2021 Ultimate Projection Scale.

**Females:** General members: PubG-2010 Healthy Retiree Mortality Table for Females multiplied by 110%, with MP-2021 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Females, with MP-2021 Ultimate Projection Scale.

### Postretirement Mortality – Disabled Members

For members retired for disability, the mortality probabilities used in the valuation are illustrated in Table A-3. The amount-weighted Pub-2010 mortality tables are used. These probabilities were adopted June 30, 2019.

Note that these assumptions include a projection for expected future mortality improvement. The new projection scale was adopted June 30, 2022.

**Males:** General members: Average of PubG-2010 Healthy Retiree Mortality Table for Males and PubG-2010 Disabled Retiree Mortality Table for Males, both projected with MP-2021 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Males, with MP-2021 Ultimate Projection Scale.

**Females:** General members: Average of PubG-2010 Healthy Retiree Mortality Table for Females and PubG-2010 Disabled Retiree Mortality Table for Females, both projected with MP-2021 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Females, with MP-2021 Ultimate Projection Scale.

### Mortality while in Active Status

For active members, the mortality probabilities used in the valuation are illustrated in Tables A-6 through A-13. The amount-weighted Pub-2010 mortality tables are used. These probabilities were adopted June 30, 2019.

Class	Gender	Proposed Table
General	Male	PubG-2010 (120%) Employee Male <sup>(1)</sup>
General	Female	PubG-2010 (130%) Employee Female <sup>(1)</sup>
Safety	Male	PubS-2010 (100%) Employee Male <sup>(1)</sup>
Safety	Female	PubS-2010 (100%) Employee Female <sup>(1)</sup>

1. Projected using the MP-2021 Ultimate projection scale.

These assumptions include a projection for expected future mortality improvement, which was adopted June 30, 2022.

Note that Safety members have an additional service-connected mortality probability of 0.01% per year.

### Other Employment Terminations

Tables A-6 to A-13 show, for all ages, the probabilities assumed in this valuation for future termination from active service other than for death, disability, or retirement. These probabilities do not apply to members eligible for service retirement. These probabilities were adopted June 30, 2022.

Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions with LACERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work, or may remain inactive until becoming eligible to receive a retirement benefit under either LACERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately. It is assumed that all terminating members will not be rehired in the future.

Table A-4 gives the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability that remaining members will elect a deferred vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions. These probabilities were adopted June 30, 2022.

### Probability of Eligible Survivors

For members not currently in pay status, 77% of all males and 48% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be three years younger than male members and two years older than female members. Survivors are assumed to be of the opposite gender as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.

### Valuation of Vested Former Members

The deferred retirement benefit is calculated based on the member's final compensation and service at termination. The compensation amount is projected until the assumed retirement age for members who are assumed to be employed by a reciprocal agency. For members who are missing compensation data, Final Compensation is estimated as the average amount for all members who terminated during the same year and had a valid compensation amount. The greater of the present value of the calculated benefit and the employee's current contribution balance is valued for future deferred vested members.

### Reciprocal Employment

17% of General and 36% of Safety current and future vested former members are assumed to work for a reciprocal employer.

Current vested reciprocal members are assumed to receive annual salary increases of 4.25%. Future reciprocal vested members are assumed to receive the same salary increases they would have received if they had stayed in active employment with LACERA and retired at the assumed retirement age.

### Valuation of Annuity Purchases

Over 30 years ago, LACERA purchased single life annuities from two insurance companies for some retired members (currently less than 1% of the retired population). The total liability for these members is calculated and then offset by the expected value of the benefit to be paid by the insurance companies.

For affected members, the insurance companies are responsible for:

1. Straight life annuity payments
2. Statutory COLAs

LACERA is responsible for:

1. Benefit payments payable to any beneficiary
2. STAR COLAs



### Member Contribution Rate Assumptions

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the Present Value of the Future Benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL:

- A. The Annuity factor used for General members is based on a 35% / 65% blend of the male and female valuation mortality tables and projection scale, with a static projection to 2044. For Safety members, it is based on an 85% / 15% blend of the male and female annuity factors determined using the same mortality tables as used for service-retired members.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.00%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.
- D. Example: For a General Plan C Member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.
- E. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.



**Table A-1**  
**Summary of Valuation Assumptions as of June 30, 2022**

- I. Economic assumptions
  - A. Payroll / General wage increases 3.25%
  - B. Investment earnings 7.00%
  - C. Growth in membership 0.00%
  - D. Postretirement benefit increases (varies by plan) Plan COLA not greater than local price inflation assumption<sup>(1)</sup>
  - E. National price inflation assumption 2.75%
  - F. Local price inflation assumption 2.75%
- II. Demographic assumptions
  - A. Salary increases due to service Table A-5
  - B. Retirement Tables A-6 to A-13
  - C. Disability Tables A-6 to A-13
  - D. Mortality during active employment Tables A-6 to A-13
  - E. Mortality for active members after termination and service retired members<sup>(2)</sup> Table A-2

Class	Gender	
General	Male	PubG-2010 (100%) Healthy Retiree Male
General	Female	PubG-2010 (110%) Healthy Retiree Female
Safety	Male	PubS-2010 (85%) Healthy Retiree Male
Safety	Female	PubS-2010 (100%) Healthy Retiree Female

- F. Mortality among disabled members<sup>(2)</sup> Table A-3

Class	Gender	
General	Male	Avg of: PubG-2010 (100%) Healthy Retiree Male PubG-2010 (100%) Disabled Retiree Male
General	Female	Avg of: PubG-2010 (100%) Healthy Retiree Female PubG-2010 (100%) Disabled Retiree Female
Safety	Male	PubS-2010 (100%) Healthy Retiree Male
Safety	Female	PubS-2010 (100%) Healthy Retiree Female

- G. Mortality for beneficiaries<sup>(1)</sup> Table A-2  
Basis – Beneficiaries are assumed to have the same mortality as a General member of the opposite gender who has taken a service retirement.
- H. Other terminations of employment Tables A-6 to A-13
- I. Refund of contributions on vested termination Table A-4

1. To account for existing Plan A COLA accumulation balances, retirees and beneficiaries with a retirement date prior to April 1, 2022 are assumed to receive a 3.00% annual COLAs..

2. All mortality probabilities are projected using the **MP-2021** Ultimate projection scale.

**Table A-2**  
**Mortality for Members Retired for Service<sup>(1)</sup>**

Age	Safety Male	Safety Female	General Male	General Female
20	0.0520%	0.0210%	0.0740%	0.0380%
25	0.0470%	0.0260%	0.0560%	0.0260%
30	0.0520%	0.0350%	0.0720%	0.0440%
35	0.0590%	0.0470%	0.0940%	0.0680%
40	0.0750%	0.0640%	0.1320%	0.1060%
45	0.1037%	0.0870%	0.1960%	0.1650%
50	0.1632%	0.1490%	0.2980%	0.2442%
55	0.2601%	0.2580%	0.4310%	0.3146%
60	0.4318%	0.4460%	0.6150%	0.4224%
65	0.7489%	0.7700%	0.9130%	0.6743%
70	1.3328%	1.3290%	1.5260%	1.1693%
75	2.4021%	2.2950%	2.6710%	2.0713%
80	4.3376%	3.9620%	4.7740%	3.6960%
85	7.7648%	6.8420%	8.5910%	6.8255%
90	13.4810%	11.8150%	14.6720%	12.6357%

Age	All Groups
60 & Less	1.350%
61	1.350%
62	1.350%
63	1.340%
64	1.320%
65	1.310%
70	1.240%
75	1.170%
80	1.100%
85	0.870%
90	0.630%
95	0.400%
100	0.300%
105	0.200%
110	0.100%
115	0.000%

1. Mortality probabilities are those applicable for the fiscal year beginning in 2010. Annual projected improvements are assumed in the following years under the schedule shown. For example, the annual mortality probability for an 85-year old Safety male in fiscal year beginning in 2022 is 6.9918% calculated as follows:

$$\begin{aligned} \text{Age 85 probability in 2022} &= \text{Age 85 probability in 2010 with 12 years improvement} \\ &= 7.7648\% \times (100.0\% - 0.87\%) ^{12} = 6.9918\% \end{aligned}$$

**Table A-3**  
**Mortality for Members Retired for Disability<sup>(1)</sup>**

<b>Age</b>	<b>Safety Male</b>	<b>Safety Female</b>	<b>General Male</b>	<b>General Female</b>
20	0.0610%	0.0210%	0.2430%	0.1340%
25	0.0550%	0.0260%	0.1670%	0.0940%
30	0.0610%	0.0350%	0.2130%	0.1485%
35	0.0700%	0.0470%	0.2760%	0.2315%
40	0.0880%	0.0640%	0.3885%	0.3625%
45	0.1220%	0.0870%	0.6015%	0.5675%
50	0.1920%	0.1490%	0.9515%	0.8525%
55	0.3060%	0.2580%	1.2725%	1.0140%
60	0.5080%	0.4460%	1.5590%	1.1700%
65	0.8810%	0.7700%	1.9785%	1.4345%
70	1.5680%	1.3290%	2.7135%	1.9625%
75	2.8260%	2.2950%	3.9315%	2.9430%
80	5.1030%	3.9620%	6.0610%	4.6835%
85	9.1350%	6.8420%	9.7030%	7.7680%
90	15.8600%	11.8150%	15.4625%	12.5760%

1. Mortality probabilities are those applicable for the fiscal year beginning in 2010. Annual projected improvements are assumed in the following years under the schedule shown on the preceding page.

**Table A-4**  
**Immediate Refund of Contributions upon Termination of Employment**  
**(Excludes Plan E)**

<b>Years of Service</b>	<b>General</b>	<b>Safety</b>
0	100%	100%
1	100%	100%
2	100%	100%
3	100%	100%
4	100%	100%
5	30%	30%
6	30%	30%
7	30%	30%
8	29%	28%
9	28%	26%
10	28%	24%
11	28%	22%
12	28%	20%
13	27%	18%
14	26%	16%
15	26%	14%
16	25%	12%
17	24%	10%
18	22%	9%
19	21%	8%
20	19%	7%
21	18%	6%
22	16%	5%
23	14%	4%
24	12%	3%
25	10%	2%
26	8%	2%
27	6%	2%
28	4%	2%
29	2%	2%
30 & Up	0%	0%

**Table A-5**  
**Annual Increase in Salary<sup>(1)</sup>**

Years of Service	General	Safety
<1	6.00%	9.00%
1	5.25%	8.50%
2	4.75%	7.50%
3	4.10%	5.75%
4	3.50%	4.25%
5	3.00%	3.00%
6	2.50%	2.50%
7	2.00%	2.10%
8	1.60%	1.70%
9	1.45%	1.45%
10	1.30%	1.30%
11	1.15%	1.20%
12	1.00%	1.10%
13	0.90%	1.00%
14	0.85%	0.90%
15	0.80%	0.90%
16	0.75%	0.90%
17	0.70%	0.90%
18	0.65%	0.90%
19	0.60%	2.25%
20	0.55%	0.90%
21	0.50%	0.90%
22	0.45%	0.90%
23	0.40%	0.90%
24	0.40%	3.00%
25	0.40%	0.90%
26	0.40%	0.90%
27	0.40%	0.90%
28	0.40%	0.90%
29	0.40%	3.00%
30 or More	0.40%	0.90%

1. The total expected increase in salary includes both merit (shown above) and the general wage increase assumption of 3.25% per annum increase. The total result is compounded rather than additive. For example, the total assumed increase for General members for service less than one year is 9.45%.

## Appendix A Probabilities of Separation from Active Service Tables A-6 to A-13

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred vested retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each of these represents the probability that a member will separate from service at each age due to the particular cause. For example, a probability of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each table represents the detailed probabilities needed for each LACERA plan by gender:

Table A-6: General Plan A, B & C – Males	A-10: General Plan E – Males
A-7: General Plan A, B & C – Females	A-11: General Plan E – Females
A-8: General Plan D & G – Males	A-12: Safety Plan A, B & C – Males
A-9: General Plan D & G – Females	A-13: Safety Plan A, B & C – Females

**Table A-6**  
**Probability of Separation from Active Service for General Members**  
**Plans A, B & C – Male**

Age	Service Retirement	Other Terminations	Service Disability	Ordinary Disability	Service Death	Ordinary Death
18	0.00000	0.00500	0.00010	0.00010	N/A	0.00043
19	0.00000	0.00500	0.00010	0.00010	N/A	0.00046
20	0.00000	0.00500	0.00010	0.00010	N/A	0.00044
21	0.00000	0.00500	0.00010	0.00010	N/A	0.00043
22	0.00000	0.00500	0.00010	0.00010	N/A	0.00040
23	0.00000	0.00500	0.00010	0.00010	N/A	0.00037
24	0.00000	0.00500	0.00010	0.00010	N/A	0.00035
25	0.00000	0.00500	0.00010	0.00010	N/A	0.00034
26	0.00000	0.00500	0.00010	0.00010	N/A	0.00036
27	0.00000	0.00500	0.00010	0.00010	N/A	0.00037
28	0.00000	0.00500	0.00010	0.00010	N/A	0.00040
29	0.00000	0.00500	0.00010	0.00010	N/A	0.00041
30	0.00000	0.00500	0.00010	0.00020	N/A	0.00043
31	0.00000	0.00500	0.00010	0.00020	N/A	0.00046
32	0.00000	0.00500	0.00010	0.00020	N/A	0.00048
33	0.00000	0.00500	0.00016	0.00020	N/A	0.00050
34	0.00000	0.00500	0.00022	0.00020	N/A	0.00053
35	0.00000	0.00500	0.00028	0.00020	N/A	0.00056
36	0.00000	0.00500	0.00034	0.00020	N/A	0.00060
37	0.00000	0.00500	0.00040	0.00020	N/A	0.00064
38	0.00000	0.00500	0.00048	0.00020	N/A	0.00068
39	0.00000	0.00500	0.00056	0.00020	N/A	0.00073
40	0.03000	0.00500	0.00064	0.00020	N/A	0.00079
41	0.03000	0.00500	0.00072	0.00020	N/A	0.00085
42	0.03000	0.00500	0.00080	0.00020	N/A	0.00092
43	0.03000	0.00500	0.00084	0.00024	N/A	0.00100
44	0.03000	0.00500	0.00088	0.00028	N/A	0.00108
45	0.03000	0.00500	0.00092	0.00032	N/A	0.00118
46	0.03000	0.00500	0.00096	0.00036	N/A	0.00128
47	0.03000	0.00500	0.00100	0.00040	N/A	0.00139
48	0.03000	0.00500	0.00104	0.00044	N/A	0.00152
49	0.03000	0.00500	0.00108	0.00048	N/A	0.00166
50	0.03000	0.00500	0.00112	0.00052	N/A	0.00179
51	0.03000	0.00500	0.00116	0.00056	N/A	0.00194
52	0.03000	0.00500	0.00120	0.00060	N/A	0.00210
53	0.03000	0.00500	0.00156	0.00064	N/A	0.00227
54	0.06000	0.00500	0.00192	0.00068	N/A	0.00244
55	0.10000	0.00500	0.00228	0.00072	N/A	0.00263
56	0.12000	0.00500	0.00264	0.00076	N/A	0.00283
57	0.17000	0.00500	0.00300	0.00080	N/A	0.00306
58	0.26000	0.00500	0.00330	0.00084	N/A	0.00330
59	0.26000	0.00500	0.00360	0.00088	N/A	0.00355
60	0.30000	0.00500	0.00390	0.00092	N/A	0.00383
61	0.30000	0.00500	0.00420	0.00096	N/A	0.00413
62	0.30000	0.00500	0.00450	0.00100	N/A	0.00445
63	0.30000	0.00500	0.00450	0.00104	N/A	0.00481
64	0.30000	0.00500	0.00450	0.00108	N/A	0.00520
65	0.30000	0.00500	0.00450	0.00112	N/A	0.00562
66	0.22000	0.00500	0.00450	0.00116	N/A	0.00607
67	0.22000	0.00500	0.00450	0.00120	N/A	0.00658
68	0.22000	0.00500	0.00450	0.00124	N/A	0.00713
69	0.22000	0.00500	0.00450	0.00128	N/A	0.00775
70	0.22000	0.00500	0.00450	0.00132	N/A	0.00844
71	0.22000	0.00500	0.00450	0.00136	N/A	0.00920
72	0.22000	0.00500	0.00450	0.00140	N/A	0.01004
73	0.22000	0.00500	0.00450	0.00144	N/A	0.01098
74	0.22000	0.00500	0.00450	0.00148	N/A	0.01201
75	1.00000	0.00000	0.00000	0.00000	N/A	0.01315

**Table A-7**  
**Probability of Separation from Active Service for General Members**  
**Plans A, B & C – Female**

Age	Service Retirement	Other Terminations	Service Disability	Ordinary Disability	Service Death	Ordinary Death
18	0.00000	0.00500	0.00015	0.00010	N/A	0.00017
19	0.00000	0.00500	0.00015	0.00010	N/A	0.00017
20	0.00000	0.00500	0.00015	0.00010	N/A	0.00017
21	0.00000	0.00500	0.00015	0.00010	N/A	0.00016
22	0.00000	0.00500	0.00015	0.00010	N/A	0.00014
23	0.00000	0.00500	0.00015	0.00010	N/A	0.00013
24	0.00000	0.00500	0.00015	0.00010	N/A	0.00012
25	0.00000	0.00500	0.00015	0.00010	N/A	0.00012
26	0.00000	0.00500	0.00015	0.00010	N/A	0.00013
27	0.00000	0.00500	0.00015	0.00010	N/A	0.00014
28	0.00000	0.00500	0.00015	0.00010	N/A	0.00016
29	0.00000	0.00500	0.00015	0.00010	N/A	0.00017
30	0.00000	0.00500	0.00015	0.00010	N/A	0.00020
31	0.00000	0.00500	0.00015	0.00010	N/A	0.00021
32	0.00000	0.00500	0.00015	0.00010	N/A	0.00023
33	0.00000	0.00500	0.00020	0.00010	N/A	0.00025
34	0.00000	0.00500	0.00025	0.00010	N/A	0.00027
35	0.00000	0.00500	0.00030	0.00010	N/A	0.00030
36	0.00000	0.00500	0.00035	0.00010	N/A	0.00033
37	0.00000	0.00500	0.00040	0.00010	N/A	0.00036
38	0.00000	0.00500	0.00042	0.00014	N/A	0.00039
39	0.00000	0.00500	0.00044	0.00018	N/A	0.00043
40	0.03000	0.00500	0.00046	0.00022	N/A	0.00047
41	0.03000	0.00500	0.00048	0.00026	N/A	0.00052
42	0.03000	0.00500	0.00050	0.00030	N/A	0.00056
43	0.03000	0.00500	0.00060	0.00032	N/A	0.00061
44	0.03000	0.00500	0.00070	0.00034	N/A	0.00066
45	0.03000	0.00500	0.00080	0.00036	N/A	0.00073
46	0.03000	0.00500	0.00090	0.00038	N/A	0.00079
47	0.03000	0.00500	0.00100	0.00040	N/A	0.00086
48	0.03000	0.00500	0.00110	0.00042	N/A	0.00092
49	0.03000	0.00500	0.00120	0.00044	N/A	0.00100
50	0.03000	0.00500	0.00130	0.00046	N/A	0.00108
51	0.03000	0.00500	0.00140	0.00048	N/A	0.00117
52	0.03000	0.00500	0.00150	0.00050	N/A	0.00126
53	0.03000	0.00500	0.00156	0.00052	N/A	0.00137
54	0.06000	0.00500	0.00162	0.00054	N/A	0.00147
55	0.10000	0.00500	0.00168	0.00056	N/A	0.00160
56	0.12000	0.00500	0.00174	0.00058	N/A	0.00173
57	0.17000	0.00500	0.00180	0.00060	N/A	0.00187
58	0.26000	0.00500	0.00194	0.00064	N/A	0.00203
59	0.26000	0.00500	0.00208	0.00068	N/A	0.00221
60	0.30000	0.00500	0.00222	0.00072	N/A	0.00242
61	0.30000	0.00500	0.00236	0.00076	N/A	0.00264
62	0.30000	0.00500	0.00250	0.00080	N/A	0.00289
63	0.30000	0.00500	0.00250	0.00084	N/A	0.00317
64	0.30000	0.00500	0.00250	0.00088	N/A	0.00350
65	0.30000	0.00500	0.00250	0.00092	N/A	0.00385
66	0.22000	0.00500	0.00250	0.00096	N/A	0.00425
67	0.22000	0.00500	0.00250	0.00100	N/A	0.00471
68	0.22000	0.00500	0.00250	0.00104	N/A	0.00520
69	0.22000	0.00500	0.00250	0.00108	N/A	0.00575
70	0.22000	0.00500	0.00250	0.00112	N/A	0.00636
71	0.22000	0.00500	0.00250	0.00116	N/A	0.00703
72	0.22000	0.00500	0.00250	0.00120	N/A	0.00777
73	0.22000	0.00500	0.00250	0.00124	N/A	0.00859
74	0.22000	0.00500	0.00250	0.00128	N/A	0.00950
75	1.00000	0.00000	0.00000	0.00000	N/A	0.01050



**Table A-8**  
**Probability of Separation from Active Service for General Members**  
**Plans D & G – Male**

Age	Service Retirement <sup>(1)</sup>		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
	Plan D	Plan G							
18	0.00000	0.00000	0.00010	0.00010	N/A	0.00043	0	0.08000	80%
19	0.00000	0.00000	0.00010	0.00010	N/A	0.00046	1	0.06500	80%
20	0.00000	0.00000	0.00010	0.00010	N/A	0.00044	2	0.05000	80%
21	0.00000	0.00000	0.00010	0.00010	N/A	0.00043	3	0.04250	80%
22	0.00000	0.00000	0.00010	0.00010	N/A	0.00040	4	0.03500	80%
23	0.00000	0.00000	0.00010	0.00010	N/A	0.00037	5	0.03100	80%
24	0.00000	0.00000	0.00010	0.00010	N/A	0.00035	6	0.02900	80%
25	0.00000	0.00000	0.00010	0.00010	N/A	0.00034	7	0.02700	80%
26	0.00000	0.00000	0.00010	0.00010	N/A	0.00036	8	0.02500	80%
27	0.00000	0.00000	0.00010	0.00010	N/A	0.00037	9	0.02000	80%
28	0.00000	0.00000	0.00010	0.00010	N/A	0.00040	10	0.01700	80%
29	0.00000	0.00000	0.00010	0.00010	N/A	0.00041	11	0.01500	80%
30	0.00000	0.00000	0.00010	0.00020	N/A	0.00043	12	0.01350	80%
31	0.00000	0.00000	0.00010	0.00020	N/A	0.00046	13	0.01200	80%
32	0.00000	0.00000	0.00010	0.00020	N/A	0.00048	14	0.01100	80%
33	0.00000	0.00000	0.00016	0.00020	N/A	0.00050	15	0.01000	80%
34	0.00000	0.00000	0.00022	0.00020	N/A	0.00053	16	0.00950	80%
35	0.00000	0.00000	0.00028	0.00020	N/A	0.00056	17	0.00900	80%
36	0.00000	0.00000	0.00034	0.00020	N/A	0.00060	18	0.00850	80%
37	0.00000	0.00000	0.00040	0.00020	N/A	0.00064	19	0.00800	80%
38	0.00000	0.00000	0.00048	0.00020	N/A	0.00068	20	0.00750	90%
39	0.00000	0.00000	0.00056	0.00020	N/A	0.00073	21	0.00700	90%
40	0.01500	0.00000	0.00064	0.00020	N/A	0.00079	22	0.00650	90%
41	0.01500	0.00000	0.00072	0.00020	N/A	0.00085	23	0.00600	90%
42	0.01500	0.00000	0.00080	0.00020	N/A	0.00092	24	0.00550	90%
43	0.01500	0.00000	0.00084	0.00024	N/A	0.00100	25	0.00500	110%
44	0.01500	0.00000	0.00088	0.00028	N/A	0.00108	26	0.00450	110%
45	0.01500	0.00000	0.00092	0.00032	N/A	0.00118	27	0.00400	110%
46	0.01500	0.00000	0.00096	0.00036	N/A	0.00128	28	0.00400	110%
47	0.01500	0.00000	0.00100	0.00040	N/A	0.00139	29	0.00400	110%
48	0.01500	0.00000	0.00104	0.00044	N/A	0.00152	30 & Above	0.00000	160%
49	0.01500	0.00000	0.00108	0.00048	N/A	0.00166			
50	0.01500	0.01200	0.00112	0.00052	N/A	0.00179			
51	0.01200	0.00960	0.00116	0.00056	N/A	0.00194			
52	0.01200	0.00960	0.00120	0.00060	N/A	0.00210			
53	0.01500	0.01200	0.00156	0.00064	N/A	0.00227			
54	0.02000	0.01600	0.00192	0.00068	N/A	0.00244			
55	0.03000	0.02400	0.00228	0.00072	N/A	0.00263			
56	0.03000	0.02400	0.00264	0.00076	N/A	0.00283			
57	0.03000	0.02400	0.00300	0.00080	N/A	0.00306			
58	0.04000	0.03200	0.00330	0.00084	N/A	0.00330			
59	0.05000	0.04000	0.00360	0.00088	N/A	0.00355			
60	0.07000	0.05600	0.00390	0.00092	N/A	0.00383			
61	0.07000	0.05600	0.00420	0.00096	N/A	0.00413			
62	0.10000	0.10000	0.00450	0.00100	N/A	0.00445			
63	0.12000	0.12000	0.00450	0.00104	N/A	0.00481			
64	0.17000	0.17000	0.00450	0.00108	N/A	0.00520			
65	0.23000	0.18400	0.00450	0.00112	N/A	0.00562			
66	0.19000	0.15200	0.00450	0.00116	N/A	0.00607			
67	0.19000	0.30000	0.00450	0.00120	N/A	0.00658			
68	0.19000	0.19000	0.00450	0.00124	N/A	0.00713			
69	0.19000	0.19000	0.00450	0.00128	N/A	0.00775			
70	0.24000	0.24000	0.00450	0.00132	N/A	0.00844			
71	0.19000	0.19000	0.00450	0.00136	N/A	0.00920			
72	0.19000	0.19000	0.00450	0.00140	N/A	0.01004			
73	0.19000	0.19000	0.00450	0.00144	N/A	0.01098			
74	0.19000	0.19000	0.00450	0.00148	N/A	0.01201			
75	1.00000	1.00000	0.00000	0.00000	N/A	0.01315			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.
2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

**Table A-9**  
**Probability of Separation from Active Service for General Members**  
**Plans D & G – Female**

Age	Service Retirement <sup>(1)</sup>						Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
	Plan D	Plan G	Service Disability	Ordinary Disability	Service Death	Ordinary Death			
18	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	0	0.08000	80%
19	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	1	0.06500	80%
20	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	2	0.05000	80%
21	0.00000	0.00000	0.00015	0.00010	N/A	0.00016	3	0.04250	80%
22	0.00000	0.00000	0.00015	0.00010	N/A	0.00014	4	0.03500	80%
23	0.00000	0.00000	0.00015	0.00010	N/A	0.00013	5	0.03100	80%
24	0.00000	0.00000	0.00015	0.00010	N/A	0.00012	6	0.02900	80%
25	0.00000	0.00000	0.00015	0.00010	N/A	0.00012	7	0.02700	80%
26	0.00000	0.00000	0.00015	0.00010	N/A	0.00013	8	0.02500	80%
27	0.00000	0.00000	0.00015	0.00010	N/A	0.00014	9	0.02000	80%
28	0.00000	0.00000	0.00015	0.00010	N/A	0.00016	10	0.01700	80%
29	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	11	0.01500	80%
30	0.00000	0.00000	0.00015	0.00010	N/A	0.00020	12	0.01350	80%
31	0.00000	0.00000	0.00015	0.00010	N/A	0.00021	13	0.01200	80%
32	0.00000	0.00000	0.00015	0.00010	N/A	0.00023	14	0.01100	80%
33	0.00000	0.00000	0.00020	0.00010	N/A	0.00025	15	0.01000	80%
34	0.00000	0.00000	0.00025	0.00010	N/A	0.00027	16	0.00950	80%
35	0.00000	0.00000	0.00030	0.00010	N/A	0.00030	17	0.00900	80%
36	0.00000	0.00000	0.00035	0.00010	N/A	0.00033	18	0.00850	80%
37	0.00000	0.00000	0.00040	0.00010	N/A	0.00036	19	0.00800	80%
38	0.00000	0.00000	0.00042	0.00014	N/A	0.00039	20	0.00750	90%
39	0.00000	0.00000	0.00044	0.00018	N/A	0.00043	21	0.00700	90%
40	0.01500	0.00000	0.00046	0.00022	N/A	0.00047	22	0.00650	90%
41	0.01500	0.00000	0.00048	0.00026	N/A	0.00052	23	0.00600	90%
42	0.01500	0.00000	0.00050	0.00030	N/A	0.00056	24	0.00550	90%
43	0.01500	0.00000	0.00060	0.00032	N/A	0.00061	25	0.00500	110%
44	0.01500	0.00000	0.00070	0.00034	N/A	0.00066	26	0.00450	110%
45	0.01500	0.00000	0.00080	0.00036	N/A	0.00073	27	0.00400	110%
46	0.01500	0.00000	0.00090	0.00038	N/A	0.00079	28	0.00400	110%
47	0.01500	0.00000	0.00100	0.00040	N/A	0.00086	29	0.00400	110%
48	0.01500	0.00000	0.00110	0.00042	N/A	0.00092	30 & Above	0.00000	160%
49	0.01500	0.00000	0.00120	0.00044	N/A	0.00100			
50	0.01500	0.01200	0.00130	0.00046	N/A	0.00108			
51	0.01200	0.00960	0.00140	0.00048	N/A	0.00117			
52	0.01200	0.00960	0.00150	0.00050	N/A	0.00126			
53	0.01500	0.01200	0.00156	0.00052	N/A	0.00137			
54	0.02000	0.01600	0.00162	0.00054	N/A	0.00147			
55	0.03000	0.02400	0.00168	0.00056	N/A	0.00160			
56	0.03000	0.02400	0.00174	0.00058	N/A	0.00173			
57	0.03000	0.02400	0.00180	0.00060	N/A	0.00187			
58	0.04000	0.03200	0.00194	0.00064	N/A	0.00203			
59	0.05000	0.04000	0.00208	0.00068	N/A	0.00221			
60	0.07000	0.05600	0.00222	0.00072	N/A	0.00242			
61	0.07000	0.05600	0.00236	0.00076	N/A	0.00264			
62	0.10000	0.10000	0.00250	0.00080	N/A	0.00289			
63	0.12000	0.12000	0.00250	0.00084	N/A	0.00317			
64	0.17000	0.17000	0.00250	0.00088	N/A	0.00350			
65	0.23000	0.18400	0.00250	0.00092	N/A	0.00385			
66	0.19000	0.15200	0.00250	0.00096	N/A	0.00425			
67	0.19000	0.30000	0.00250	0.00100	N/A	0.00471			
68	0.19000	0.19000	0.00250	0.00104	N/A	0.00520			
69	0.19000	0.19000	0.00250	0.00108	N/A	0.00575			
70	0.24000	0.24000	0.00250	0.00112	N/A	0.00636			
71	0.19000	0.19000	0.00250	0.00116	N/A	0.00703			
72	0.19000	0.19000	0.00250	0.00120	N/A	0.00777			
73	0.19000	0.19000	0.00250	0.00124	N/A	0.00859			
74	0.19000	0.19000	0.00250	0.00128	N/A	0.00950			
75	1.00000	1.00000	0.00000	0.00000	N/A	0.01050			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.
2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

**Table A-10**  
**Probability of Separation from Active Service for General Members**  
**Plan E – Male**

Age	Service Retirement <sup>(1)</sup>	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
18	0.00000	N/A	N/A	N/A	0.00043	0	0.08000	70%
19	0.00000	N/A	N/A	N/A	0.00046	1	0.06500	70%
20	0.00000	N/A	N/A	N/A	0.00044	2	0.05000	70%
21	0.00000	N/A	N/A	N/A	0.00043	3	0.04250	70%
22	0.00000	N/A	N/A	N/A	0.00040	4	0.03500	70%
23	0.00000	N/A	N/A	N/A	0.00037	5	0.03100	70%
24	0.00000	N/A	N/A	N/A	0.00035	6	0.02700	70%
25	0.00000	N/A	N/A	N/A	0.00034	7	0.02300	70%
26	0.00000	N/A	N/A	N/A	0.00036	8	0.02300	70%
27	0.00000	N/A	N/A	N/A	0.00037	9	0.02300	70%
28	0.00000	N/A	N/A	N/A	0.00040	10	0.02300	70%
29	0.00000	N/A	N/A	N/A	0.00041	11	0.01900	70%
30	0.00000	N/A	N/A	N/A	0.00043	12	0.01800	70%
31	0.00000	N/A	N/A	N/A	0.00046	13	0.01680	70%
32	0.00000	N/A	N/A	N/A	0.00048	14	0.01560	70%
33	0.00000	N/A	N/A	N/A	0.00050	15	0.01440	70%
34	0.00000	N/A	N/A	N/A	0.00053	16	0.01320	70%
35	0.00000	N/A	N/A	N/A	0.00056	17	0.01200	70%
36	0.00000	N/A	N/A	N/A	0.00060	18	0.01160	70%
37	0.00000	N/A	N/A	N/A	0.00064	19	0.01120	70%
38	0.00000	N/A	N/A	N/A	0.00068	20	0.01080	70%
39	0.00000	N/A	N/A	N/A	0.00073	21	0.01040	70%
40	0.00000	N/A	N/A	N/A	0.00079	22	0.01000	70%
41	0.00000	N/A	N/A	N/A	0.00085	23	0.01000	70%
42	0.00000	N/A	N/A	N/A	0.00092	24	0.01000	70%
43	0.00000	N/A	N/A	N/A	0.00100	25	0.01000	100%
44	0.00000	N/A	N/A	N/A	0.00108	26	0.01000	100%
45	0.00000	N/A	N/A	N/A	0.00118	27	0.01000	100%
46	0.00000	N/A	N/A	N/A	0.00128	28	0.01000	100%
47	0.00000	N/A	N/A	N/A	0.00139	29	0.01000	100%
48	0.00000	N/A	N/A	N/A	0.00152	30 & Above	0.01000	130%
49	0.00000	N/A	N/A	N/A	0.00166			
50	0.00000	N/A	N/A	N/A	0.00179			
51	0.00000	N/A	N/A	N/A	0.00194			
52	0.00000	N/A	N/A	N/A	0.00210			
53	0.00000	N/A	N/A	N/A	0.00227			
54	0.00000	N/A	N/A	N/A	0.00244			
55	0.02000	N/A	N/A	N/A	0.00263			
56	0.02000	N/A	N/A	N/A	0.00283			
57	0.02500	N/A	N/A	N/A	0.00306			
58	0.02500	N/A	N/A	N/A	0.00330			
59	0.03000	N/A	N/A	N/A	0.00355			
60	0.04000	N/A	N/A	N/A	0.00383			
61	0.06000	N/A	N/A	N/A	0.00413			
62	0.09000	N/A	N/A	N/A	0.00445			
63	0.09000	N/A	N/A	N/A	0.00481			
64	0.19000	N/A	N/A	N/A	0.00520			
65	0.27000	N/A	N/A	N/A	0.00562			
66	0.20000	N/A	N/A	N/A	0.00607			
67	0.20000	N/A	N/A	N/A	0.00658			
68	0.20000	N/A	N/A	N/A	0.00713			
69	0.20000	N/A	N/A	N/A	0.00775			
70	0.20000	N/A	N/A	N/A	0.00844			
71	0.20000	N/A	N/A	N/A	0.00920			
72	0.20000	N/A	N/A	N/A	0.01004			
73	0.20000	N/A	N/A	N/A	0.01098			
74	0.20000	N/A	N/A	N/A	0.01201			
75	1.00000	N/A	N/A	N/A	0.01315			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.
2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

**Table A-11**  
**Probability of Separation from Active Service for General Members**  
**Plan E – Female**

Age	Service Retirement <sup>(1)</sup>	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
18	0.00000	N/A	N/A	N/A	0.00017	0	0.08000	70%
19	0.00000	N/A	N/A	N/A	0.00017	1	0.06500	70%
20	0.00000	N/A	N/A	N/A	0.00017	2	0.05000	70%
21	0.00000	N/A	N/A	N/A	0.00016	3	0.04250	70%
22	0.00000	N/A	N/A	N/A	0.00014	4	0.03500	70%
23	0.00000	N/A	N/A	N/A	0.00013	5	0.03100	70%
24	0.00000	N/A	N/A	N/A	0.00012	6	0.02700	70%
25	0.00000	N/A	N/A	N/A	0.00012	7	0.02300	70%
26	0.00000	N/A	N/A	N/A	0.00013	8	0.02300	70%
27	0.00000	N/A	N/A	N/A	0.00014	9	0.02300	70%
28	0.00000	N/A	N/A	N/A	0.00016	10	0.02300	70%
29	0.00000	N/A	N/A	N/A	0.00017	11	0.01900	70%
30	0.00000	N/A	N/A	N/A	0.00020	12	0.01800	70%
31	0.00000	N/A	N/A	N/A	0.00021	13	0.01680	70%
32	0.00000	N/A	N/A	N/A	0.00023	14	0.01560	70%
33	0.00000	N/A	N/A	N/A	0.00025	15	0.01440	70%
34	0.00000	N/A	N/A	N/A	0.00027	16	0.01320	70%
35	0.00000	N/A	N/A	N/A	0.00030	17	0.01200	70%
36	0.00000	N/A	N/A	N/A	0.00033	18	0.01160	70%
37	0.00000	N/A	N/A	N/A	0.00036	19	0.01120	70%
38	0.00000	N/A	N/A	N/A	0.00039	20	0.01080	70%
39	0.00000	N/A	N/A	N/A	0.00043	21	0.01040	70%
40	0.00000	N/A	N/A	N/A	0.00047	22	0.01000	70%
41	0.00000	N/A	N/A	N/A	0.00052	23	0.01000	70%
42	0.00000	N/A	N/A	N/A	0.00056	24	0.01000	70%
43	0.00000	N/A	N/A	N/A	0.00061	25	0.01000	100%
44	0.00000	N/A	N/A	N/A	0.00066	26	0.01000	100%
45	0.00000	N/A	N/A	N/A	0.00073	27	0.01000	100%
46	0.00000	N/A	N/A	N/A	0.00079	28	0.01000	100%
47	0.00000	N/A	N/A	N/A	0.00086	29	0.01000	100%
48	0.00000	N/A	N/A	N/A	0.00092	30 & Above	0.01000	130%
49	0.00000	N/A	N/A	N/A	0.00100			
50	0.00000	N/A	N/A	N/A	0.00108			
51	0.00000	N/A	N/A	N/A	0.00117			
52	0.00000	N/A	N/A	N/A	0.00126			
53	0.00000	N/A	N/A	N/A	0.00137			
54	0.00000	N/A	N/A	N/A	0.00147			
55	0.02000	N/A	N/A	N/A	0.00160			
56	0.02000	N/A	N/A	N/A	0.00173			
57	0.02500	N/A	N/A	N/A	0.00187			
58	0.02500	N/A	N/A	N/A	0.00203			
59	0.03000	N/A	N/A	N/A	0.00221			
60	0.04000	N/A	N/A	N/A	0.00242			
61	0.06000	N/A	N/A	N/A	0.00264			
62	0.09000	N/A	N/A	N/A	0.00289			
63	0.09000	N/A	N/A	N/A	0.00317			
64	0.19000	N/A	N/A	N/A	0.00350			
65	0.27000	N/A	N/A	N/A	0.00385			
66	0.20000	N/A	N/A	N/A	0.00425			
67	0.20000	N/A	N/A	N/A	0.00471			
68	0.20000	N/A	N/A	N/A	0.00520			
69	0.20000	N/A	N/A	N/A	0.00575			
70	0.20000	N/A	N/A	N/A	0.00636			
71	0.20000	N/A	N/A	N/A	0.00703			
72	0.20000	N/A	N/A	N/A	0.00777			
73	0.20000	N/A	N/A	N/A	0.00859			
74	0.20000	N/A	N/A	N/A	0.00950			
75	1.00000	N/A	N/A	N/A	0.01050			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.
2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

**Table A-12**  
**Probability of Separation from Active Service for Safety Members**  
**Plans A, B & C – Male**

Age	Service Retirement <sup>(1)</sup>		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
	Plans A & B	Plan C							
18	0.00000	0.00000	0.00200	0.00000	0.00010	0.00037	0	0.05000	30%
19	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	1	0.03750	30%
20	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	2	0.02000	30%
21	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	3	0.01500	30%
22	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	4	0.01200	30%
23	0.00000	0.00000	0.00200	0.00000	0.00010	0.00039	5	0.01130	30%
24	0.00000	0.00000	0.00200	0.00000	0.00010	0.00038	6	0.01070	30%
25	0.00000	0.00000	0.00200	0.00000	0.00010	0.00037	7	0.01000	30%
26	0.00000	0.00000	0.00200	0.00000	0.00010	0.00038	8	0.00920	30%
27	0.00000	0.00000	0.00200	0.00000	0.00010	0.00039	9	0.00840	30%
28	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	10	0.00760	30%
29	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	11	0.00680	30%
30	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	12	0.00600	30%
31	0.00000	0.00000	0.00200	0.00000	0.00010	0.00042	13	0.00560	30%
32	0.00000	0.00000	0.00200	0.00000	0.00010	0.00043	14	0.00520	30%
33	0.00000	0.00000	0.00210	0.00000	0.00010	0.00044	15	0.00480	40%
34	0.00000	0.00000	0.00220	0.00000	0.00010	0.00045	16	0.00440	40%
35	0.00000	0.00000	0.00230	0.00000	0.00010	0.00047	17	0.00400	40%
36	0.00000	0.00000	0.00240	0.00000	0.00010	0.00049	18	0.00360	40%
37	0.00000	0.00000	0.00250	0.00000	0.00010	0.00050	19	0.00320	40%
38	0.00000	0.00000	0.00260	0.00000	0.00010	0.00053	20	0.00280	70%
39	0.00000	0.00000	0.00270	0.00000	0.00010	0.00056	21	0.00240	70%
40	0.00750	0.00000	0.00280	0.00000	0.00010	0.00059	22	0.00200	70%
41	0.00750	0.00000	0.00290	0.00000	0.00010	0.00062	23	0.00200	70%
42	0.00750	0.00000	0.00300	0.00000	0.00010	0.00067	24	0.00200	70%
43	0.00750	0.00000	0.00310	0.00000	0.00010	0.00071	25	0.00200	110%
44	0.00750	0.00000	0.00320	0.00000	0.00010	0.00076	26	0.00200	110%
45	0.00750	0.00000	0.00330	0.00000	0.00010	0.00082	27	0.00200	110%
46	0.00750	0.00000	0.00340	0.00000	0.00010	0.00088	28	0.00200	110%
47	0.00750	0.00000	0.00350	0.00000	0.00010	0.00095	29	0.00200	110%
48	0.00750	0.00000	0.00400	0.00000	0.00010	0.00102	30 & Above	0.00000	170%
49	0.00750	0.00000	0.00500	0.00000	0.00010	0.00111			
50	0.02000	0.02000	0.00750	0.00000	0.00010	0.00120			
51	0.02000	0.02000	0.00750	0.00000	0.00010	0.00129			
52	0.02000	0.02000	0.00750	0.00000	0.00010	0.00140			
53	0.03000	0.03000	0.02000	0.00000	0.00010	0.00151			
54	0.12000	0.08000	0.02000	0.00000	0.00010	0.00162			
55	0.22000	0.15000	0.07500	0.00000	0.00010	0.00175			
56	0.18000	0.15000	0.07500	0.00000	0.00010	0.00190			
57	0.14000	0.23000	0.10000	0.00000	0.00010	0.00205			
58	0.15000	0.15000	0.10000	0.00000	0.00010	0.00223			
59	0.22000	0.22000	0.10000	0.00000	0.00010	0.00243			
60	0.21000	0.21000	0.10000	0.00000	0.00010	0.00264			
61	0.20000	0.20000	0.05000	0.00000	0.00010	0.00288			
62	0.20000	0.20000	0.05000	0.00000	0.00010	0.00315			
63	0.20000	0.20000	0.05000	0.00000	0.00010	0.00344			
64	0.23000	0.23000	0.05000	0.00000	0.00010	0.00375			
65	1.00000	1.00000	0.00000	0.00000	0.00000	0.00410			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.

2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

**Table A-13**  
**Probability of Separation from Active Service for Safety Members**  
**Plans A, B & C – Female**

Age	Service Retirement <sup>(1)</sup>		Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations	Retirement Rate Loading <sup>(2)</sup>
	Plans A & B	Plan C							
18	0.00000	0.00000	0.00300	0.00000	0.00010	0.00014	0	0.05000	30%
19	0.00000	0.00000	0.00300	0.00000	0.00010	0.00015	1	0.03750	30%
20	0.00000	0.00000	0.00300	0.00000	0.00010	0.00016	2	0.02000	30%
21	0.00000	0.00000	0.00300	0.00000	0.00010	0.00017	3	0.01500	30%
22	0.00000	0.00000	0.00300	0.00000	0.00010	0.00017	4	0.01200	30%
23	0.00000	0.00000	0.00300	0.00000	0.00010	0.00018	5	0.01130	30%
24	0.00000	0.00000	0.00300	0.00000	0.00010	0.00019	6	0.01070	30%
25	0.00000	0.00000	0.00300	0.00000	0.00010	0.00020	7	0.01000	30%
26	0.00000	0.00000	0.00300	0.00000	0.00010	0.00021	8	0.00920	30%
27	0.00000	0.00000	0.00300	0.00000	0.00010	0.00022	9	0.00840	30%
28	0.00000	0.00000	0.00340	0.00000	0.00010	0.00024	10	0.00760	30%
29	0.00000	0.00000	0.00380	0.00000	0.00010	0.00025	11	0.00680	30%
30	0.00000	0.00000	0.00420	0.00000	0.00010	0.00027	12	0.00600	30%
31	0.00000	0.00000	0.00460	0.00000	0.00010	0.00028	13	0.00560	30%
32	0.00000	0.00000	0.00500	0.00000	0.00010	0.00030	14	0.00520	30%
33	0.00000	0.00000	0.00560	0.00000	0.00010	0.00032	15	0.00480	40%
34	0.00000	0.00000	0.00620	0.00000	0.00010	0.00034	16	0.00440	40%
35	0.00000	0.00000	0.00680	0.00000	0.00010	0.00036	17	0.00400	40%
36	0.00000	0.00000	0.00740	0.00000	0.00010	0.00038	18	0.00360	40%
37	0.00000	0.00000	0.00800	0.00000	0.00010	0.00041	19	0.00320	40%
38	0.00000	0.00000	0.00840	0.00000	0.00010	0.00043	20	0.00280	70%
39	0.00000	0.00000	0.00880	0.00000	0.00010	0.00046	21	0.00240	70%
40	0.00750	0.00000	0.00920	0.00000	0.00010	0.00049	22	0.00200	70%
41	0.00750	0.00000	0.00960	0.00000	0.00010	0.00052	23	0.00200	70%
42	0.00750	0.00000	0.01000	0.00000	0.00010	0.00056	24	0.00200	70%
43	0.00750	0.00000	0.01040	0.00000	0.00010	0.00059	25	0.00200	110%
44	0.00750	0.00000	0.01080	0.00000	0.00010	0.00063	26	0.00200	110%
45	0.00750	0.00000	0.01120	0.00000	0.00010	0.00067	27	0.00200	110%
46	0.00750	0.00000	0.01160	0.00000	0.00010	0.00071	28	0.00200	110%
47	0.00750	0.00000	0.01200	0.00000	0.00010	0.00076	29	0.00200	110%
48	0.00750	0.00000	0.01300	0.00000	0.00010	0.00080	30 & Above	0.00000	170%
49	0.00750	0.00000	0.01500	0.00000	0.00010	0.00085			
50	0.02000	0.02000	0.01800	0.00000	0.00010	0.00091			
51	0.02000	0.02000	0.02000	0.00000	0.00010	0.00097			
52	0.02000	0.02000	0.02400	0.00000	0.00010	0.00103			
53	0.03000	0.03000	0.02800	0.00000	0.00010	0.00109			
54	0.12000	0.08000	0.03200	0.00000	0.00010	0.00116			
55	0.22000	0.15000	0.11000	0.00000	0.00010	0.00123			
56	0.18000	0.15000	0.06000	0.00000	0.00010	0.00131			
57	0.14000	0.23000	0.06000	0.00000	0.00010	0.00140			
58	0.15000	0.15000	0.06000	0.00000	0.00010	0.00148			
59	0.22000	0.22000	0.06000	0.00000	0.00010	0.00158			
60	0.21000	0.21000	0.10000	0.00000	0.00010	0.00168			
61	0.20000	0.20000	0.10000	0.00000	0.00010	0.00178			
62	0.20000	0.20000	0.10000	0.00000	0.00010	0.00190			
63	0.20000	0.20000	0.10000	0.00000	0.00010	0.00202			
64	0.23000	0.23000	0.10000	0.00000	0.00010	0.00215			
65	1.00000	1.00000	0.00000	0.00000	0.00000	0.00228			

1. Service retirement rates vary by years of service. The applicable retirement rate loading that varies by years of service is shown on this page in a separate column.

2. The retirement rate loading is applied to the service retirement rate at each member's applicable age and years of service.

## **Attachment II**

**Draft Cavanaugh MacDonald's Actuarial Review report**



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*

**ACTUARIAL REVIEW REPORT ON THE  
2022 INVESTIGATION OF EXPERIENCE  
FOR THE  
LOS ANGELES COUNTY EMPLOYEES  
RETIREMENT ASSOCIATION**

**Prepared by Cavanaugh Macdonald Consulting, LLC**

**November 28, 2022**







# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

November 28, 2022

Mr. Richard Bendall  
Chief Audit Executive  
Los Angeles County Employees Retirement Association  
300 North Lake Avenue, Suite 840  
Pasadena, California 91101

Dear Mr. Bendall:

Cavanaugh Macdonald Consulting, LLC has performed an independent review of the 2022 Investigation of Experience for Retirement Benefit Assumptions, prepared for the Los Angeles County Employees Retirement Association (LACERA). As an independent reviewing or auditing actuary, we have verified the numerical results and provided our professional opinion on the reasonableness and appropriateness of the actuarial assumptions and methods recommended in the report. We have also offered our comments on possible ways to improve the process in future experience investigations.

The retained actuary for LACERA is Milliman, Inc. and we would like to thank them for their cooperation and assistance in providing the required information to us. **We find the proposed actuarial assumptions and methods to be reasonable. The Investigation of Experience was performed by qualified actuaries and was performed in accordance with the principles and practices prescribed by the Actuarial Standards Board.** This report documents the detailed results of our review.

If you need anything else, please let us know. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Sincerely,

Brent A. Banister, Ph.D., FSA, EA, MAAA, FCA  
Chief Actuary

Patrice A. Beckham, FSA, FCA, MAAA, EA  
Principal and Consulting Actuary

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## 1. EXECUTIVE SUMMARY

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LACERA engaged Cavanaugh Macdonald Consulting, LLC (CMC) to prepare an independent review of the 2022 Investigation of Experience for the Retirement Benefits Assumptions Report prepared by LACERA's retained actuary, Milliman, Inc. The scope of the actuarial review requested by LACERA includes:

- independent verification of the results in the Study,
- evaluation of any recommendations in the Report,
- preparation of a report containing CMC's findings and conclusions from the actuarial review, and
- presentation of any findings to the Board of Investments.

The process of setting actuarial assumptions brings together a blend of both numerical analysis and professional judgment. An experience study is not simply a mathematical exercise, but also draws on the experience and insight of the professionals conducting the study to interpret those results and develop assumptions that will appropriately model future experience. While our review included confirming certain data tabulations supporting the results in Milliman's report, we wish to stress that we also examined the bigger picture to determine if an assumption, or recommended change, is appropriate. We considered whether there are other ways to develop an assumption, whether an assumption may be simplified, and whether or not the assumption reflects trends that we have observed in other similar plans. The fact that we might prefer an alternate approach does not automatically mean that Milliman's approach is not reasonable. Rather, we offer some of these thoughts as a consideration for future studies, fully aware that there are multiple ways in which to appropriately model a dynamic retirement program like LACERA.

**Overall, we find Milliman's work to be accurate and complete, and we have not identified any material findings.**

We summarize our findings for each major review task as follows:

### 1. Review of Data Used in the 2022 Experience Study

The actuarial review of the 2022 Investigation of Experience for Retirement Benefit Assumptions Report is based on the experience study data provided to us by Milliman. We requested and received from Milliman the full valuation (processed) data files for the 2019, 2020, 2021, and 2022 valuations. These files allowed us to replicate certain portions of Milliman's analysis with regards to the observed experience for the demographic assumptions. In our opinion, the data used is sufficient for the purposes of the experience study, appears consistent with previous Retirement Plan valuations and, therefore, appropriately reflects the active and inactive membership of LACERA during the three-year study period ending on June 30, 2022.

### 2. Review the Proposed Economic and Demographic Assumptions Contained in the 2022 Investigation of Experience for Retirement Benefits Assumptions Report

We find the work prepared by Milliman—reviewed within the scope of this assignment—to be based on reasonable processes, to be technically sound, and to be fairly presented. Milliman's work related to LACERA's experience, selecting assumptions, and presenting the



## **1. EXECUTIVE SUMMARY**

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associated results is based on generally accepted actuarial practices and principles. Relevant details for each assumption reviewed are provided in Section 3 of our Report.

### **3. Present Any Recommendations to the Board of Investments Regarding the Work Completed by Milliman**

We believe that the actuarial assumptions recommended by Milliman are reasonable and appropriate for use in the upcoming actuarial valuation for LACERA. We have no findings of material discrepancies with generally accepted actuarial principles or professional standards. In Section 4, we provide some minor considerations and suggestions for future studies.

Because this study period largely overlaps the period during which the world was experiencing the COVID pandemic, Milliman decided not to make changes in assumptions based solely on the most recent three years of experience. In our opinion, this was an appropriate decision and one followed by many actuaries working for public plans.

Milliman proposes changes to several demographic assumptions in its experience study report. We would classify many of these recommendations as typical on-going and fine-tuning changes. We believe that all of the proposed changes are reasonable and appropriate.

In our review of the 2019 Investigation of Experience for Retirement Benefits Assumptions, we made some recommendations for Milliman's consideration, including making a specific assumption for inflation in the Los Angeles area and performing some analysis on the real rate of return. We note that both of these items are discussed more completely in this 2022 Investigation.

### **Conclusions**

Because of the complexity of actuarial work and the impact of professional judgment on the selection of assumptions, we would not expect our opinions to be the same as those of Milliman. We do expect, however, that there would be sufficient explanation of their choices and decisions in the report to allow us to acknowledge the recommendations they propose are reasonable based upon the relevant factors. In our opinion, the assumptions and methods proposed by Milliman are reflective of sound professional judgment and are appropriate for the systematic funding of the pension obligations of LACERA.

We have determined that the actuarial methods, assumptions, processes, and the report are consistent with the applicable Actuarial Standards of Practice. Throughout this report, we have noted a few minor items for consideration that we believe may present opportunities for improvement, but none that we believe would have a material impact on the proposed assumptions.

The remainder of this report provides the basis for our findings and evaluation of the recommendations that appears in the 2022 Investigation of Experience for Retirement Benefits Assumptions Report and our conclusions.



## **1. EXECUTIVE SUMMARY**

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We would like to thank LACERA's staff for their responsiveness in providing the information that we requested during the course of our review. Additionally, we would also like to thank Milliman for their cooperation and assistance in providing the requested information and answering our questions.

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## 2. ACTUARIAL ASSUMPTIONS

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### BACKGROUND ON ACTUARIAL ASSUMPTIONS

The actuarial assumptions form the basis of any actuarial valuation or cost study. Since it is not possible to know in advance how each member's career will evolve in terms of salary growth, future service and cause of termination, the actuary must develop assumptions in an attempt to estimate future patterns. These assumptions enable the actuary to estimate the amount of benefits earned and to reasonably anticipate when and how long these benefits will be paid. Similarly, the actuary must make an assumption about future investment earnings of the trust fund. In developing the assumptions, the actuary examines the past experience, but more heavily considers future expectations to make the best estimate of the anticipated experience under the plan.

There are two general types of actuarial assumptions:

- Economic assumptions – these include the investment return assumption (expected return on plan assets), assumed rates of salary increase, price inflation, wage inflation, and increases in total covered payroll. The selection of economic assumptions should conform to ASOP No. 27 *“Selection of Economic Assumptions for Measuring Pension Obligations”*.
- Demographic assumptions – these include the assumed rates of retirement, mortality, termination, and disability. The selection of demographic assumptions should conform to ASOP No. 35 *“Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations”*.

The discussion on the actuarial assumptions on the following pages is based on the data and recommendations found in Milliman's 2022 Investigation of Experience for Retirement Benefit Assumptions.



## 2. ACTUARIAL ASSUMPTIONS

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### ECONOMIC ASSUMPTIONS

Actuarial Standards of Practice (ASOPs) are issued by the Actuarial Standards Board to provide guidance to actuaries with respect to certain aspects of performing their work. As mentioned earlier, ASOP 27 is the actuarial standard that addresses the selection of or recommendations regarding economic assumptions for measuring pension obligations (liabilities) under defined benefit plans. There are two particular items from ASOP 27 that we believe are relevant to the discussion: 1) For a given assumption, there is a range of possible choices, and 2) An assumption may be made with a degree of conservatism, when appropriate and disclosed.

Milliman did not recommend any changes to the current set of economic assumptions which are shown in the following table:

Current Assumptions	
Price inflation	2.75%
Real wage growth	<u>0.50%</u>
Total wage growth	3.25%
Payroll Growth	3.25%
Price inflation	2.75%
Real rate of return	<u>4.25%</u>
Investment return	7.00%
Cost-of-Living Adjustment	
Plan A	2.75%
All others	2.00%

Each assumption is briefly discussed in the following narrative.

**Price Inflation:** Price inflation indirectly impacts the rates of future salary increase, the payroll growth assumption, and the investment return assumption, so the underlying price inflation component in each must be consistent in accordance with the guidance provided in ASOP 27. In addition, because the retirees receive a cost-of-living adjustment (COLA) linked to changes in the CPI-U, the inflation assumption also impacts the COLA assumption.

Inflation has varied significantly over time, with some notably high periods in the 1970's influencing the long-term average. Until recent periods, inflation was below the long-term average for many years. Over the last year or two, there has been a significant upward spike in inflation, but the financial markets' pricing of inflation (comparing Treasuries and TIPS) suggests that the markets expect inflation to subside in a relatively short period of time and then remain relatively low, around 2% to 3% for the next 30 years.





## 2. ACTUARIAL ASSUMPTIONS

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While the market pricing argument suggests long-term lower inflation, we note that inflation is not random. It can be significantly affected by monetary and fiscal policy, and those policies may change dramatically and rapidly. Consequently, there are also some strong arguments for assuming that inflation could be higher than it has been over the last 20 years for a sustained period.

In their report, Milliman provides supporting documentation for their recommendation to leave inflation unchanged. Until recently, there had been a trend among public retirement systems to lower this assumption, with most selecting an assumption in the range of 2.25% to 2.50%. LACERA bases their COLA on the Los Angeles area CPI, which has tended to be higher than the national CPI over the recent past. Wages are also likely to be affected by the local (Los Angeles) economy. Milliman proposes assuming a 2.75% assumption for both, which we find reasonable, especially while the current economic environment is in flux.

**General Wage Growth:** The general wage growth or wage inflation assumption consists of price inflation and a real wage growth component (also called productivity). These increases are affected by a variety of factors including price inflation, the policies and financial state of the employer, and the nature and extent of competition for employees in the relevant labor markets. Over time, however, the impact of wage increases in the broader economy will also have a strong influence as workers and competing employers respond to market forces.

Milliman considers several relevant sources in their analysis of this assumption including:

- (1) the National Average Wage Index (published by the Social Security Administration),
- (2) the assumption used by the Social Security Administration in their 75-year projections, and
- (3) actual LACERA data.

Based on these sources, Milliman recommends retaining the current 0.50% real wage growth assumption. While we find this assumption reasonable, we would note that over the last 30 years – following the high inflation period of the 70's and early 80's – the real wage growth in the general economy has been higher than the 50-year average of 0.50% that Milliman cites. We also realize that the National Average Wage Index has limitations in that it does not perfectly track wage inflation directly (although it is a reasonable proxy) and because it is a reflection of the entire U.S. Social Security covered population which may have different pay increase patterns from those of LACERA employees.

Public-sector employees have also lagged the salary increases across the broader economy in more recent years, at least when the costs of benefits are excluded. Another source to consider is the State and Local Government Workers Employment Cost Index, produced by the Bureau of Labor Statistics. It provides evidence that real “across the board” salary increases have averaged about 0.2% annually during the last 10 to 20 years. Total compensation (with benefits) have increased at a real rate of about 0.8% over that same period. Whether these trends will continue or there will be a correction is an open question.

In Milliman's analysis of merit salary increases, there is a persistent merit increase for general members of around 0.40% for service after 30 years. Typically, there is very little, if any, true





## 2. ACTUARIAL ASSUMPTIONS

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merit increase after 30 years. One could argue that this increase is more appropriately classified as part of the general wage increase rather than merit, although Milliman believes it truly is part of the merit salary increase arising from promotions. Since the total of the general wage growth and merit is the same regardless how of this persistent merit is classified, there is no effect on the liability measures either way.

Milliman also uses the general wage growth assumption as the basis for their recommended payroll increase assumption. The payroll growth assumption is used in the amortization of the Unfunded Actuarial Accrued Liability (UAAL) and is appropriate for developing costs that are intended to be reasonably stable as a percentage of covered payroll. Using the general wage inflation to estimate future payroll growth has been a common practice amongst public plan practitioners for many years, but we would point out that some retirement systems are choosing to amortize the UAAL with an assumed payroll growth that is somewhat lower than the wage inflation assumption or even setting the assumption equal to the expected growth in the revenue of the sponsoring organization.

One consideration in setting a lower assumption has been that as older employees retire, new employees are being hired with lower salaries. In theory, there are internal promotions to fill the vacated positions, but this expected payroll growth has not always been realized, especially given the high proportion of baby boomers still in the work force. Because the youngest baby boomers are nearing 60-years old, this potential impact may be around for just a few more years, although LACERA's experience may vary from that of other public plans. We are not opposed to Milliman's choice of using the wage inflation assumption as the payroll increase assumption, but we could also be comfortable with an assumption that was between price inflation and wage inflation which would provide a margin of conservatism for adverse deviations. Note the 3.25% payroll growth for amortization could be thought of as having some conservatism if the persistent merit described above were treated as part of wage growth.

***Investment Return Assumption:*** In our opinion, the investment return assumption should represent the long-term compound rate of return expected on the plan assets, considering the asset allocation, the real rate of return on each asset class, and the underlying inflation rate, all net of investment (and possibly administrative) expenses paid from the Trust.

The long term relationship between price inflation and investment return has long been recognized by economists. The basic principle is that the investor demands a more or less level "real return" – the excess of actual investment return over price inflation. If inflation rates are expected to be high, investment return rates are also expected to be high, while low inflation rates will result in lower expected investment returns, at least in the long run.

The period considered for pension funding represents a very long time horizon (30 to 50 years or more). In reviewing this assumption, the actuary should consider asset allocation policy, historical returns, and expectations of future returns. Frequently, asset advisors focus on no more than the next 5 to 10 years since they are most concerned with how to invest the funds currently to maximize returns. The longer term is less relevant to them, but it is, of course, paramount to actuaries who



## 2. ACTUARIAL ASSUMPTIONS

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are projecting benefits to be paid for the next 50 to 100 years. This difference in perspective can significantly influence how investment advisors and actuaries derive an investment return assumption.

Our preferred approach to setting the investment return assumption is called the “building block” approach. This approach develops a “real” return, or the return net of inflation, and then adds it to the inflation assumption. One advantage of this approach is that it assures that the total or “nominal” return is consistent with the inflation assumption, since it is determined as the sum of the price inflation assumption and the real rate of return. A second advantage is that it is helpful when comparing various sources of expected returns by eliminating any differences related to price inflation expectations as a source of variation in the nominal return assumptions. While we find this approach helpful, we also acknowledge that there are other reasonable approaches that may be used and are compliant with actuarial standards of practice. Milliman notes that they consider this approach in their analysis.

In Milliman’s analysis of the expected return, they considered three sets of capital market assumptions regarding future expected returns. They also considered the general trend observed with respect to the investment return assumptions used by other large public systems, but primarily relied on the expected future return arising from these capital market assumptions. We believe their approach is appropriate as the asset allocations and risk perspective of each board influences the investment return used by the system, so the median return assumption would not necessarily be an appropriate basis to use in setting LACERA’s assumption. The three sources of capital market assumptions are:

- (1) Meketa, LACERA’s investment advisor,
- (2) Milliman’s internal investment experts, and
- (3) the 2022 Horizon Actuarial Services Survey which reviews the assumptions of about 40 investment consulting firms (including Meketa) who work with defined benefit plans, providing a median return for each common asset class.

As was noted earlier, most investment advisors focus on a shorter timeframe than actuaries because they are using the assumptions for a different purpose. For instance, the 2022 Horizon Survey included 40 advisors with capital market assumptions for the next 10-year period, but only 24 advisors provided assumptions for periods of 20 years or more. Milliman’s discussion states they have given consideration to both the 10-year and 20-year time horizons, which we believe to be appropriate. As Milliman notes, LACERA is a mature retirement plan. One consequence is that annual benefit payments exceed annual contributions, so the difference must be made up from investment income. For LACERA, this shortfall is currently about 2% of the total trust fund, an amount that could likely be covered by income cash flows such as interest payments and stock dividends, rather than by selling assets. However, this net negative outflow means that the expected lower returns over the next ten years (when lower returns are forecast) will diminish the corpus of the trust over this period so a comparatively lower trust fund balance will exist when the higher returns are earned. This will limit the ability of the higher returns on the LACERA trust fund in the long term to offset the impact of the lower returns in the next ten years, so we agree that it is appropriate to consider both the short and long horizons, as Milliman has done.



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Milliman also discusses how the return expectations from their internal consultants and from Meketa for both the 10- and 20- year time horizons have increased substantially between January of 2022 and the middle of the year. This dramatic change in the long-term assumptions of investment consultants is something we have observed as well. These changes are largely driven by the significant increase in interest rates through the first half of the year (leading to a decline in bond market valuations) coupled with a decline in equity valuations. The expectation of market recovery is significant enough to increase the expected 10-year returns by 1% to 1.5% per year. The impact on the 20-year expectation is smaller, because the expectations for the period from 10 to 20 years is largely unaffected.

In light of all of these factors, Milliman recommends leaving the investment return assumption unchanged at 7.00%. Based on the most recent assumptions from investment consultants, they believe there is more than a 50% chance of achieving this return in a given year, meaning the assumption is slightly conservative.

In summary, there is a range of reasonable assumptions for the investment return assumption, and we believe the recommended assumption of 7.00% falls within that range. Other reasonable approaches could lead to different recommendations of which some might be lower than 7.00% and some might be higher. In light of the economic volatility over the last three years related at least in part to COVID, we believe that choosing to leave this assumption unchanged is reasonable.

***Use of Investment Return Assumption for GASB Discount Rate:*** The investment return assumption used in the funding valuation is net of both investment and administrative expenses. GASB requires the use of an assumption regarding the expected return on assets that is net of investment expenses, but not administrative expenses. Administrative expenses are directly modeled in the projection of the Fiduciary Net Position for purposes of determining whether there is a depletion date of the plan assets in the future (called the crossover test). This test determines whether the assumption for the expected return on assets may be used for the GASB discount rate.

As part of the experience investigation, Milliman reviewed the actual administrative expenses for the past 10 years and estimated that these expenses have averaged about 0.15% of the asset value. Consequently, their recommendation for GASB 67 and 68 reporting is to use an investment return assumption that is 0.15% higher than the investment return assumption used for funding purposes. This approach has been used in the past, and we believe it is reasonable and appropriate to continue its use.

***COLA:*** Closely related to the price inflation assumption is the Cost-of-Living Adjustment (COLA) assumption. The actual COLAs granted to LACERA members are based upon the change in the CPI-U for the Los Angeles metropolitan area. By law, there are upper limits on the COLA that may be granted each year (varying by plan), but to the extent that inflation exceeds the actual COLA granted in any year, there is a “carry-over” which future COLAs may use in years when inflation is lower than the cap. If inflation is less than 0% for a year, the member benefit may be reduced, but not below the original benefit. In these situations, it is also anticipated that the carry-



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over would be utilized to offset the negative inflation adjustment and perhaps even provide a positive COLA as well. Based on the design of the COLA, we believe Milliman's recommendation to set the COLA assumption equal to the price inflation assumption (up to the capped level) is an appropriate model.

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## 2. ACTUARIAL ASSUMPTIONS

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### DEMOGRAPHIC ASSUMPTIONS

The major demographic assumptions used in the valuation process are the assumed rates of retirement, termination of employment (with or without a vested benefit), disability, and mortality (death before or after retirement). Other non-economic assumptions that are typically evaluated include salary merit increases, election of refunds in lieu of a deferred benefit, and family composition (where applicable for death and some disability benefits).

#### *General Comments*

The purpose of a study of demographic experience is to compare what actually happened to the individual members of LACERA during the study period (July 1, 2019 through June 30, 2022) with what was expected to happen based on the actuarial assumptions, using the results as an important tool to evaluate whether some adjustment to the current assumptions is necessary.

The basic steps performed by most actuaries include the following:

- First, the number of members changing membership status, called decrements, during the study is tabulated by age, duration, gender, group, and membership class as appropriate (active, retired, etc.).
- Next, the number of members expected to change status is calculated by multiplying certain membership statistics, called exposure, by the expected rates of decrement.
- Finally, the number of actual decrements is compared with the number of expected decrements. The comparison is called the actual to expected ratio (A/E Ratio), and is expressed as a percentage.

The A/E ratio is a key indicator as to the *overall fit* of actual experience to that expected based on the assumptions. While this metric is an important measurement, the fit of the assumption at each individual age or service duration is also critical because experience that is higher at certain ages/durations does not typically offset the impact of experience that is lower at other ages/durations. The fit of the actual experience to the assumption at each age or duration is important in order to more accurately value the liabilities (present value of future benefits). The A/E ratio also provides a good way to easily evaluate the impact of the recommended assumption in comparison to the current assumption to determine how much the assumption was adjusted.

For the most part, Milliman's analysis develops these A/E ratios with compensation-weighted exposures and decrements (for actives) or benefit-weighted exposures and decrements (for retirees) rather than using the counts of members. This means, for example, that the influence of the higher-paid members on retirement rates is greater than lower-paid members. Since the higher paid (and usually longer service) group also has greater liability, this aligns the assumptions better with actual experience of the plan liabilities and should reduce the dollar amount of actuarial gains



## 2. ACTUARIAL ASSUMPTIONS

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and losses from year to year. We are very supportive of this approach, as we use it in our own practice.

As part of our review of the demographic assumptions, Milliman provided us with the processed valuation data files for the 2019 through 2022 valuations. They also provided us with their detailed experience study results, including the number of exposures and observed decrements, broken down by LACERA plan, sex, and age or service as appropriate for each assumption. We used the valuation data files to replicate the exposure and decrement summary for active and retired members over the study period and matched the total number of decrements almost exactly. We also attempted to validate Milliman's results at each age or service data point. Due to rounding issues, we did not always match each cell exactly, but we were able to satisfy ourselves that Milliman's processing was performed with a sufficient degree of accuracy that the results are reliable for the assessment and development of actuarial assumptions.

In the following paragraphs, we make specific comments on the demographic assumptions.

***Merit Salary Increases:*** In the economic assumptions section, we discussed Milliman's development of the general wage growth assumption. A second type of salary increase occurs at the individual level as a result of such things as promotion and longevity. Milliman examined these increases separately for General and Safety members, recognizing that the two groups have different patterns of salary increase through a typical member's career. They also studied the assumption as a function of years of service. We agree that these two factors are the most appropriate and commonly used approaches to model merit increases.

Total salaries are reported from year to year so, in order to isolate the merit component of the salary increases, Milliman compared the total salaries of each individual member in each consecutive year of employment, after removing the estimated general wage inflation observed in the actual LACERA data for each year. We find this approach a reasonable way in which to isolate the salary increases due to merit and longevity.

For purposes of this analysis, Milliman used the last 15 years of actual salary increases. We note that this period is quite long and includes the recession of 2008 and subsequent recovery. From our perspective, a period that is too long may not be sensitive to recent changes or trends. For instance, with nearly all of the active membership being employed by the County, a change in the longevity compensation structure could quickly affect the merit scale but might not be easily detected with Milliman's longer time frame. Milliman's report indicates this analysis was also performed for the most recent time periods to detect any significant recent change, but none was found.

***Rates of Mortality:*** One of the most important demographic assumptions in the pension valuation is mortality because it projects how long benefit payments are expected to be made. The longer retirees live and receive benefits, the larger the liability of the system, thus increasing the contributions necessary to actuarially fund the system. In addition, if members live longer than anticipated by the assumption, the true cost of future benefit obligations will be understated and





## 2. ACTUARIAL ASSUMPTIONS

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contributions will increase as the unfavorable experience unfolds. Because there are also death benefits payable for active members, it is also relevant to consider the patterns of death for active members, although this assumption has comparatively little impact on the valuation results due to the low probability of active member deaths.

In early 2019, the Society of Actuaries (SOA) published a new set of mortality tables (Pub-2010 Tables) that are based solely on the experience of public retirement systems rather than corporate pension plans (the source of data for past mortality tables published by the SOA). The new tables include mortality rates for active members, healthy retirees, disabled retirees, and beneficiaries of retirees, and also vary by membership type (general government, teachers, and public safety). They represent a significant improvement in the universe of mortality tables available to value public retirement systems. Milliman adopted these new tables in the last study, with certain adjustments as appropriate, for their recommended mortality rates. We believe that Milliman's use of these tables is appropriate and reasonable.

In the past, mortality rates for those of retirement age have gradually declined each year. Because actuarial valuations are projecting many years into the future, it is reasonable to anticipate that mortality rates will continue to decline, so they will be lower in the future than they are now. In order to anticipate that improvement, Milliman uses an approach known as “generational mortality” in which the mortality rates at most ages are “improved” by a small amount each year in estimating an individual's future lifespan. The SOA publishes a projection scale each year which essentially grades recently observed mortality improvement into its long-term expected improvement over a short period of time. Milliman's assumption has been, and continues to be, a simplified version of the SOA-published mortality improvement scale that uses only the ultimate year of that projection scale. There is insufficient data from LACERA to statistically test this assumption, but we believe it is reasonable and have observed other systems using similar simplified mortality improvement assumptions. Because the SOA has updated the ultimate improvement scale since the last study, Milliman recommends updating to this scale, a recommendation that we find reasonable.

Milliman uses separate mortality assumptions based on sex, membership type (General or Safety), and status (active, healthy retiree, and disabled retiree). For the most part, they use the corresponding table from the SOA Pub-2010 tables, sometimes scaled by a constant multiplier to achieve a better fit to actual experience. For General disabled members, they blend the healthy and disabled retiree tables to achieve a table that more appropriately reflects LACERA's actual experience. Overall, this approach to selecting mortality tables is common actuarial practice. Further, Milliman bases their analysis on benefit-weighted amounts for retirees and compensation-weighted amounts for actives. This weighting is an appropriate way in which to reflect the observed patterns of mortality rates varying by benefits/compensation.

While we do not disagree with Milliman's recommendations, we offer some considerations for the next investigation of experience. First, the SOA Pub-2010 Tables include beneficiary mortality tables. Milliman elected to use the General membership healthy retiree table for beneficiaries and



## 2. ACTUARIAL ASSUMPTIONS

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provides a rationale for their approach. We note that there is not a uniform approach in the pension actuarial community and so we have no objection to Milliman's preference.

Second, in our experience we have found that the quality of the fit of a mortality table can sometimes be improved by applying one scaling factor at younger ages and a different factor at older ages (with a blending around the transition age). When they next make a change to the mortality assumption, we would suggest that Milliman consider whether or not such an approach might allow a better fit of the mortality assumption to observed experience across all ages. This approach is not as widely used in the pension actuarial profession, but for larger retirement systems, such as LACERA, may have some merit. Milliman has indicated that they will give this consideration.

***Rates of Retirement:*** Retirement is a decision that is usually planned by an individual at a time that is perceived as most beneficial from a personal and financial perspective. One significant factor is the interaction of the retirement eligibility provisions with the potential retirement date. Because the different LACERA retirement plans have different eligibility requirements and benefit provisions, it is not surprising that retirement behavior varies by plan. Milliman develops retirement rates for General plans A-C, plan D, plan E, and plan G, and for Safety plans A&B and plan C. The newer plans (General G and Safety C) do not have any meaningful retirement experience yet, and so the proposed rates are based on applying professional judgment to the experience observed in the other plans. Likewise, General plans A-C and Safety plan A have been in existence long enough that there are few members left, and so there is no longer sufficient data to perform a meaningful analysis.

For each plan or group of plans, Milliman observed the actual and expected retirements, weighted by compensation, as described earlier. The assumption and analysis varies by age, a typical approach. In general, we believe that the proposed changes recommended by Milliman are an appropriate response to the observed retirement patterns.

In some plans, particularly in the public safety arena, the provisions for the availability and amount of benefits lead to patterns that are more influenced by years of service than age. Milliman performed additional analysis in this study to determine how retirement rates vary with service and modified their assumptions to now be effectively a function of age and service. We believe this was a useful enhancement.

***Rates of Termination:*** The termination of employment assumption is a service-based assumption which is the most commonly used format for other public retirement systems. Milliman examined General members and Safety members separately, which is reasonable given the different jobs and termination patterns of the two groups. General plan E is valued separately from plans D and G because experience has shown a different behavior by those who elected this option.

Milliman proposes some minor adjustments to some of the termination rates to improve the quality of the fit to actual experience. Their analysis considered compensation-weighting in the development of the A/E ratios, and we concur with that.





## 2. ACTUARIAL ASSUMPTIONS

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For General plans A-C, the termination assumption has no significant effect on estimating future obligations since there are few members left who are not currently retirement eligible. Our preference would be to use the termination rates from the newer plans for General plans A-C because in calculating the normal cost, the Entry Age Normal cost method requires the use of retrospective termination rates. This is primarily a theoretical issue, and we acknowledge that Milliman's approach will produce very similar results.

***Refund of Employee Contributions:*** In the valuation process, this assumption is applied to active members who are assumed to terminate employment after becoming vested. It anticipates the election of a refund of accumulated employee contributions by the member and the resulting forfeiture of any vested monthly benefit payable once the member is eligible for retirement. As would be expected, the probability of electing a refund declines as service increases, and so Milliman studies this assumption as a function of service, with separate rates for General and Safety membership.

We find Milliman's analysis and proposed changes reasonable. There are some retirement systems where the valuation assumes that the decision of whether or not a refund is elected is based on which option is most valuable (i.e., the higher present value) to the member from the system's perspective. Such an approach is designed to value the worst case scenario to the system, regardless of how experience is expected to unfold. While we are not necessarily suggesting that Milliman change to this approach, they have indicated they have considered it and will continue to in the future.

***Rates of Disability:*** Disability is a relatively low occurrence event, and so the analysis of disability rates is generally challenging. Lack of data creates results with limited credibility. Milliman has considered disability separately for males and females and for General and Safety members, which is a very common and appropriate approach. (Because General plan E has no disability provision, those members are excluded.) Disability may be either service-connected or not-service-connected, so an analysis of both rates was conducted for General members. For Safety members, all but four of over 460 observed disabilities were service-connected, so the analysis focused on service-connected disability only.

In general, we believe that Milliman's analysis and proposed adjustments to the disability rates are reasonable and appropriate.

***Other Assumptions:*** There are some miscellaneous assumptions that were addressed in the experience study report. These assumptions do not have a major impact on the valuation results, and we believe the recommendations are all reasonable. The assumptions include:

- Probability of retiring with an eligible survivor
- Beneficiary age
- Deferred vested member retirement age
- Reciprocity employment rates for deferred vested members



### 3. ACTUARIAL METHODS

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#### ACTUARIAL COST METHOD

For all retirement plans, whether defined benefit or defined contribution, the basic retirement funding equation is:

$$C + I = B + E$$

Where:

- C = employer and member contributions
- I = investment income
- B = benefits paid
- E = expenses paid from the fund, if any.

As can be seen from the formula, for a given level of benefits and expenses the greater “I” is, the smaller “C” is. This is the underlying reason for advance funding a pension plan, and historically investment income pays for 65% to 75% of the benefit dollars received by plan members. In other words, for every dollar paid to a member only 25 to 35 cents comes from contributions. To determine what pattern of contributions is needed, plan sponsors hire actuaries to estimate the cost of their plans and to create a budget for systematic contributions to meet that cost.

Different actuarial cost methods can provide for more rapid funding, more level funding over time, or more flexibility in funding. The choice of an actuarial cost method will determine the pattern or pace of the funding and, therefore, should be linked to the long-term financing objectives of the system and benefit security considerations.

The actuarial cost method used by LACERA is the individual Entry Age Normal method. This cost method determines the normal cost as a level percentage of pay which, if paid from entry into the plan to the last assumed retirement age, will accumulate to an amount sufficient to pay the expected benefit payments. Entry Age Normal tends to result in stable normal cost rates, a feature that has helped make it the most commonly used cost method for public plans. An additional cost is determined by amortizing the unfunded actuarial accrued liability (discussed later in this section).

In our opinion, the actuarial cost method employed by the LACERA is appropriate and will systematically fund the prospective pension benefits on an actuarially sound basis, if all of the actuarial assumptions are realized and the actuarial required contributions are made.



### 3. ACTUARIAL METHODS

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#### ASSET VALUATION METHOD

Since the purpose of actuarial funding is to build up an asset pool (remember the importance of “I” in “ $C + I = B + E$ ”) actuaries need to value the current asset pool on each valuation date. The market value could be used, but it would tend to create too much volatility from valuation date to valuation date, and a single day’s measurement is not necessarily indicative of the true underlying value of the investments held by the plan. Thus, most actuaries use an asset valuation method which smoothes out these fluctuations in pursuit of achieving more stable funding measures and (when relevant) developing more level contributions. A good asset valuation method places values on a plan’s assets which are related to current market value, but which will also produce a smooth pattern of costs.

The goal of the actuarial asset valuation method is thus to smooth or reduce investment market fluctuations. This is particularly important during periods of volatile capital markets in which abrupt changes in asset values, when factored into the funding valuation, produce sudden unnecessary changes in contribution levels. In this case, “unnecessary” implies that the change in asset values is not necessarily a true revaluing of the assets involved, but rather a fluctuation reflecting a current economic climate or a short-term reaction to specific news.

**LACERA’s Asset Valuation Method:** The asset valuation method used by Milliman in the valuation is a variant of methods commonly used by other public sector retirement systems. The smoothing method finds the difference between the actual investment return and the expected investment return on the market value of assets. The dollar amount of this difference is then recognized equally over five years. In this study, Milliman proposed a modification of the current method in which the prior deferred gains or losses are first used to offset any current loss or gain respectively.

#### Compliance with ASOP 44

Actuarial Standard of Practice Number 44, “*Selection and Use of Asset Valuation Methods for Pension Valuations*”, provides guidance to the actuary when selecting an asset valuation method for purposes of a defined benefit pension plan actuarial valuation. Several of the terms in the criteria of ASOP 44 such as “reasonable” and “sufficiently narrow” are not specifically defined. As a result, actuaries can differ in their opinion on these matters. As we consider the current asset valuation method used by LACERA, with the recommended modification discussed above, we believe it satisfies the requirements of ASOP 44.

We find LACERA’s asset valuation method to be reasonable and appropriate and compliant with ASOP 44.



### 3. ACTUARIAL METHODS

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#### AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY METHOD

Currently, the unfunded actuarial accrued liability is amortized using a layered base approach. Following the establishment of the initial UAAL base, each year actuarial gains or losses arising from asset and demographic experience or other factors such as assumption and benefit changes are amortized over a new 20-year period with payments that are determined as a level percentage of payroll. In this study, Milliman propose that future benefit improvements be amortized over 10 years.

The layered amortization approach has rapidly become the most common amortization method used by public retirement systems, and we believe this method is reasonable for amortizing LACERA's UAAL. It is also worth noting that, as LACERA does, most public retirement systems develop UAAL payments that are intended to be level, as a percentage of payroll, in the future. This general amortization methodology is very much in the mainstream with public retirement systems.

We believe Milliman's recommendation for the amortization method is appropriate.



## **SECTION 4 – INVESTIGATION OF EXPERIENCE REPORT REVIEW**

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### **GENERAL OBSERVATIONS**

Because of the diversity of public retirement systems and their actuaries, along with the scope and frequency of experience studies, the reports are also very diverse, ranging from extensive formal reports with many charts and tables to only a slide presentation. Actuarial Standards of Practice provide only minimal guidance on the contents of these reports, so much of the report depends upon the style and preference of both the retained actuary and the retirement system board and staff. Milliman's report is on the more comprehensive end of the spectrum, including some degree of numerical detail and graphical illustration along with narrative explanation.

In offering the following ideas, we are by no means suggesting that these are necessary or that the current report is inadequate. Rather, we are sharing some ideas from our years of experience that we believe might be useful to LACERA and Milliman. Ultimately, they will decide if any of these ideas are worth pursuing in future experience studies.

At the end of the report, Milliman includes an appendix that contains the proposed assumptions, with the assumption changes highlighted. While this approach makes it very easy to identify which rates were changed, it is not clear how they have changed. As an alternative, they could consider an additional appendix which includes the current assumptions, allowing an easy way to compare not only what rates were changed, but how they were changed.

Generally, Milliman has presented graphs with quinquennial grouped data. This has the advantage of smoothing out some of the variability that exists without the grouping, but it may also make the shape of assumption and its fit at each age/duration harder to observe, particularly for an assumption like retiree mortality which ranges from low rates at younger ages to high rates at older ages. It might be worth considering whether some of the graphs, especially those for retirement, would better communicate the results if they were not grouped.

Another idea for improvement would be to provide tables to show the exposure, actual decrements, expected decrements and proposed decrements, and resulting A/E ratios for each key assumption. Viewing the data graphically does not tell the reader which rates are based on more underlying data and, therefore, are more credible. In our opinion, including tables with the details of the underlying calculation of the results would improve the technical aspect of the report. These tables could be included as an Appendix rather than be in the body of the report.

### **EXAMINATION OF PRIOR REVIEW**

Cavanaugh Macdonald Consulting prepared a review report of the 2019 Milliman Investigation of Experience which included a number of suggestions for future experience studies. Most of these suggestions were simply ideas for enhancements, many of which simply suggested consideration of an alternative approach. We note that Milliman clarified their assumption regarding the Los Angeles area and national inflation, provided some commentary on real investment return, and reflected service in the determination of retirement rates, all of which were items we suggested.



## **SECTION 4 – INVESTIGATION OF EXPERIENCE REPORT REVIEW**

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Our 2019 review also made some suggestions that were minor or primarily stylistic. We note that Milliman did consider how service might interact with retirement rates in this study and that they clarified to us that they considered the short term as well as the long term in their salary merit analysis. Milliman indicated to us directly that they considered each of our recommendations from last time and made some changes where they found it appropriate. We do not believe there any items identified last time which needed to be addressed that were not addressed this time.

### **SUMMARY OF CMC SUGGESTIONS FOR FUTURE INVESTIGATIONS OF EXPERIENCE**

CMC performs a concurrent review of Milliman's work, allowing for us to provide feedback in advance to Milliman regarding corrections or suggestions. As a result, we do not expect to have many suggestions beyond some stylistic preferences. We do suggest the following:

- We suggest that Milliman consider enhancing their report with some of the ideas presented earlier in this section.
- Milliman reflects expected mortality improvement by using the ultimate rates of the Society of Actuary's projection improvement scale. As noted, we believe this is reasonable. For the next study, however, we would encourage a re-examination of this practice to be sure that any issues related to COVID are fully considered. We expect the Society to provide additional resources between now and then which will help in this consideration.

## **Attachment III**

**County of Los Angeles Memo dated December 2, 2022**



FESIA A. DAVENPORT  
Chief Executive Officer

## County of Los Angeles CHIEF EXECUTIVE OFFICE

Kenneth Hahn Hall of Administration  
500 West Temple Street, Room 713, Los Angeles, California 90012  
(213) 974-1101  
<http://ceo.lacounty.gov>

Board of Supervisors  
HILDA L. SOLIS  
First District

HOLLY J. MITCHELL  
Second District

SHEILA KUEHL  
Third District

JANICE HAHN  
Fourth District

KATHRYN BARGER  
Fifth District

December 2, 2022

Mr. Santos H. Kreimann  
Chief Executive Officer  
Los Angeles County Employees Retirement Association  
300 N. Lake Avenue  
Pasadena, CA 91101-4199

Dear Mr. Kreimann:

### **LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION 2022 INVESTIGATION OF EXPERIENCE FOR RETIREMENT BENEFIT ASSUMPTIONS**

It is our understanding that as a result of the 2022 Investigation of Experience for Retirement Benefit Assumptions that your consulting actuary, Milliman, will be making some minor recommended changes in actuarial assumptions. The recommended changes are related to both economic and demographic assumptions, which are expected to have an impact to employer and employee contributions.

As the plan sponsor, the purpose of this letter is to communicate the County of Los Angeles' (County) position on the recommended changes, which we made in consultation with Cheiron, the County's consulting actuary. We understand that they are within the acceptable actuarial standards and are also in line with the reasonable recommendations made by Milliman. We are in support of Milliman's recommendations and will be supportive of the Board of Investment's affirming agreement with Milliman's recommendations. Like the Board of Investment, we are committed to a strong pension system based upon realistic and achievable assumptions that ensure the promised benefits to employees.

We thank you for the assistance you and your staff have provided to the Chief Executive Office staff. Los Angeles County Employees Retirement Association and the County have a unique partnership, and we value our positive working relationship.



Mr. Santos H. Kreimann  
December 2, 2022  
Page 2

If you have any further questions regarding this matter, please contact me or Susan R. Moomjean at (213) 893-0040 or [smoomjean@ceo.lacounty.gov](mailto:smoomjean@ceo.lacounty.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Fesia A. Davenport', followed by a small 'fox' in the same ink.

FESIA A. DAVENPORT  
Chief Executive Officer

FAD:JMN:MM  
TP:SRM:LR:mst

c: Each Supervisor  
County Counsel (Dawyn Harrison)  
Auditor-Controller (Arlene Barrera)  
Treasurer and Tax Collector (Keith Knox)  
Coalition of County Unions (Dave Gillotte)  
Service Employees International Union Local 721 (Ramon Rubalcava)

**Attachment IV**

**Milliman's Presentation Slides dated  
December 14, 2022**

# 2022 Investigation of Experience

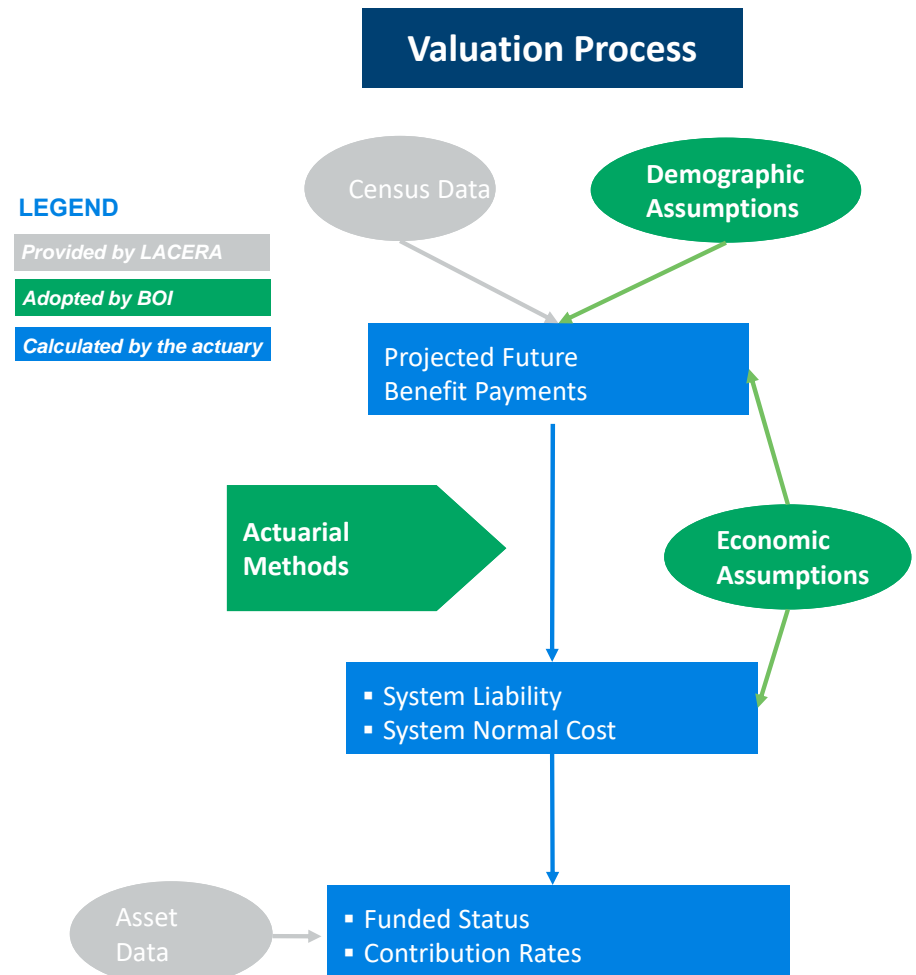
Nick Collier  
Craig Glyde

DECEMBER 14, 2022



# Schedule

- October 2022 meeting:
  - Discussion and analysis of economic assumptions
  - Reach general consensus on economic assumptions
- November 2022 meeting:
  - Follow-up discussion on economic assumptions
  - Discuss and reach general consensus on demographic assumptions
- December 2022 meeting:
  - Draft experience study report presentation
  - Adopt assumptions to be used in 2022 valuation
- March 2023 meeting:
  - Valuation results
  - Adopt member and employer contribution rates for fiscal year beginning July 1, 2023



## Actuarial Methods Summary

- No changes needed to current actuarial methods, but 3 modifications to current methods recommended for Board consideration

Actuarial Methods	Current	Alternative	Comment
Actuarial Cost Method	Entry Age	None suggested	Current method results in level Normal Cost rate
Actuarial Asset Method	5-Year Smoothing	5-Year Smoothing with Offsets (Recommended)	Alternative results in smoother employer contribution rates in most cases (difference is generally small).
Amortization Method	20-Year Layered Level % of Pay	Add 10-Year Recognition for Benefit Increases (Recommended)	Current method provides a good balance between progress toward 100% funding and stable employer rates. One modification recommended for changes due to benefit increases to comply with actuarial guidance.
Administrative Expense Treatment	Implicit	Explicit (Not recommended)	Explicit approach may be viewed as more transparent, but in practice it makes little difference and can cause some shifting of costs between members and employers
STAR Reserve Treatment	STAR Reserve <u>included</u> with Valuation Assets	STAR Reserve <u>excluded</u> from Valuation Assets (Recommended)	Current method includes STAR Reserve in valuation, but does not account for liabilities associated with STAR COLAs that may be granted in the future. Extensive analysis and discussion previously done prior to BOI adopting this approach.

# Economic Assumptions Summary

- No changes recommended to current economic assumptions

Economic Assumptions	Current	Recommended	Comment
National Price Inflation	2.75%	No Change	Current inflation levels are much higher than 2.75%, although most long-term forecasts are for less than 2.75%
Local Price Inflation	Equal to National Price Inflation (2.75%)	No Change	Generally set equal to national inflation, although past LA inflation has averaged slightly above national
Future COLAs	Local Inflation not greater than cap with adjustment for COLA bank (Varies by Plan)	No Change	Plan A: Current assumption is 2.75%, but for current retirees with a COLA bank > 0%, assumption is 3.0%. Other Plans: 2.0% (pro-rated amount for Plan E).
Wage Growth	Local Price Inflation + Real Wage Growth (3.25%)	No Change	Current assumption of 0.5% real wage growth over local price inflation is consistent with historical LACERA experience
Payroll Growth	Equal to Wage Growth (3.25%)	No Change	Assumes stable active population
Investment Return (Discount Rate)	7.00%	No Change	Long-term trend of decreasing expected returns continued through January of 2022; however, updated mid-year 2022 capital market expectations indicate some reversal (possibly short-term) of this trend.

# Demographic Assumptions Summary

Demographic Assumption	Recommended Change
Merit Salary Increases	Adjustments to merit salary increase scale for all members. Overall, an increase in the scale, particularly at longer service intervals.
Mortality	No change to mortality base tables and scaling factors; retain public plan specific tables. Update mortality improvement scale to ultimate MP-2021. Greater improvements (fewer deaths) for younger members. Lower improvements (more deaths) for older members.
Service Retirement	Include separate assumptions for individuals with different years of service. This reflects that individuals with high years of service are more likely to retire than individuals of the same age with lower service. Overall, an increase in rates of retirement.
Disability Retirement	No changes
Termination from Employment (voluntary & involuntary, except for retirement, death & disability)	Overall, higher rates of termination from employment. Particularly for General Plans D & G members with less than 10 years of service. Relatively smaller increases for General Plan E and Safety Plans at lower service durations.
Probability of Refund of Contributions (upon termination of employment)	Decreases for General members with less than 15 years of service.
Miscellaneous	Small adjustments to (1) probability of eligible survivor, (2) beneficiary age, and (3) probability of reciprocity.

# **Actuarial Review Comments (Cavanaugh Macdonald)**



## Review of Milliman's Work



- Review of the underlying data
  - Confirm appropriate treatment of LACERA raw data
  - Confirm reasonableness of demographic experience analysis
  
- Review of proposed economic assumptions
  - Assess compliance with Actuarial Standards of Practice
  - Recognize professional judgment
  - Current economic and financial market environment makes this challenging
  - We believe Milliman's recommendations are reasonable

# Review of Milliman's Work



- Review of proposed demographic assumptions
  - Assess compliance with Actuarial Standards of Practice
  - Recognize professional judgment
  - The overlap of this study with COVID presents challenges – Milliman looked longer term
  - We believe Milliman's recommendations are reasonable
  
- Review of proposed methods
  - Assess compliance with Actuarial Standards of Practice
  - We believe Milliman's recommendations are reasonable

## Review of Milliman's Work



### ➤ Review of Milliman's report

- Assess compliance with Actuarial Standards of Practice
- Reports need to consider the style and preferences of the client and the consultant
- Offered ideas for future reports

**We find the proposed actuarial assumptions and methods to be reasonable. The Investigation of Experience was performed by qualified actuaries and was performed in accordance with the principles and practices prescribed by the Actuarial Standards Board.**

# **2022 Investigation of Experience Financial Impact**

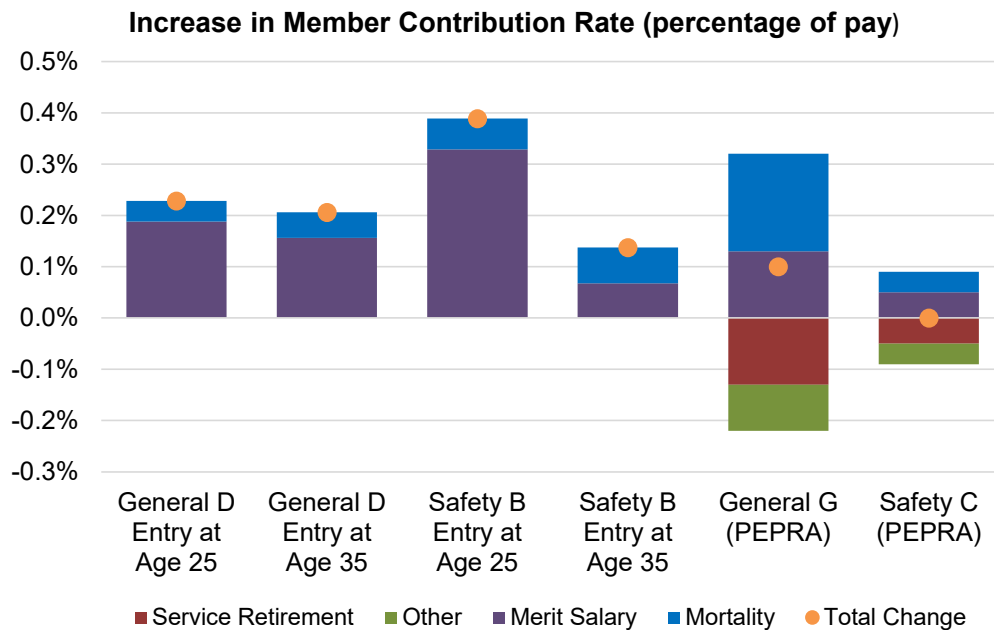
## Financial Impact – Funded Ratio / Employer Rates

- Employer contribution rate:
  - FYB 2023 rate is 0.3% of payroll lower than FYB 2022 rate (before changes)
  - FYB 2023 rate is 1.4% of payroll higher than FYB 2022 rate (after changes)
- Funded Ratio (FR):
  - 2022 FR is 1.7% higher than 2021 FR (before changes)
  - 2022 FR is 0.4% higher than 2021 FR (after changes)

	Funded Ratio	Total Employer Contribution	
		% of Payroll	\$ millions
<b>June 30, 2021 Valuation</b>	<b>79.3%</b>	<b>24.5%</b>	<b>\$ 2,205</b>
<b>Estimated June 30, 2022 Valuation (before changes)</b>	<b>81.0%</b>	<b>24.2%</b>	<b>\$ 2,178</b>
<b>Recommended Actuarial Method Changes</b>			
Alternate Asset Smoothing	0.0%	0.2%	\$ 18
Exclude STAR Reserve from Funding Assets	-0.5%	0.5%	44
<b>Total Method Changes</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>\$ 62</b>
<b>Recommended Economic Assumption Changes</b>			
<b>Economic Assumptions</b>	<b>0.0%</b>	<b>0.0%</b>	<b>\$ -</b>
<b>Recommended Demographic Assumption Changes</b>			
Merit Salary Increases	-0.5%	0.7%	\$ 62
Service Retirement	-0.9%	1.1%	98
Mortality	0.5%	-0.6%	(52)
Other	0.1%	-0.2%	(15)
<b>Demographic Assumption Changes</b>	<b>-0.8%</b>	<b>1.0%</b>	<b>\$ 93</b>
<b>Recommended Changes</b>			
<b>Total Recommended Changes</b>	<b>-1.3%</b>	<b>1.7%</b>	<b>\$ 155</b>
<b>Estimated June 30, 2022 Valuation (with all changes)</b>	<b>79.7%</b>	<b>25.9%</b>	<b>\$ 2,333</b>

\* All amounts and percentages shown on this page are estimates except June 30, 2021 values

# Financial Impact – Member Contribution Rates



	Change in Member Rate	Average Monthly Salary	Change in Monthly Contribution
<b>Legacy Members</b>			
- General D (Entry Age 25)	0.23%	\$ 8,200	\$19
- General D (Entry Age 35)	0.21%	\$ 8,200	\$17
- Safety B (Entry Age 25)	0.39%	\$ 11,600	\$45
- Safety B (Entry Age 35)	0.14%	\$ 11,600	\$16
<b>PEPRA Members</b>			
- General	0.10%	\$ 6,100	\$6
- Safety	0.00%	\$ 8,300	\$0

- Increase in member contribution rates for most members
- Amount of increase dependent on plan and entry age (for Legacy plan members)
  - Legacy members with younger entry ages will see largest percentage increase

# Financial Impact – Member Contribution Rate Comparison

- Additional detail on member contribution rates

Entry Age	Estimated Member Contribution Rates <sup>(1)</sup>			
	Current	Estimated New	Estimated Monthly Increase	
			% of Pay	Average \$ <sup>(2)</sup>
<b>General D</b>				
25	6.95%	7.18%	0.23%	\$ 19
35	8.56%	8.77%	0.21%	17
45	10.49%	10.63%	0.14%	11
<b>General G</b>				
All Ages	9.08%	9.18%	0.10%	6
<b>Safety B</b>				
25	12.61%	13.00%	0.39%	45
35	14.99%	15.13%	0.14%	16
45	17.83%	17.83%	0.00%	0
<b>Safety C</b>				
All Ages	14.33%	14.33%	0.00%	0

- Final member contribution rates will not be determined until the June 30, 2022 actuarial valuation is completed.
- Average increases are based on the estimated percent of pay increase and the average monthly compensation for active members of the specified plan.

## Average Monthly Compensation

General D = \$8,200 per month

General G = \$6,100 per month

Safety B = \$11,600 per month

Safety C = \$8,300 per month

# Questions





## Caveats and Disclaimers

This presentation is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated November 22, 2021, supplemented by information included in the Preliminary Funding Estimate letter dated September 23, 2022. The statements of reliance and limitations on the use of this material is reflected in the actuarial report and still apply to this presentation.

These statements include reliance on data provided, on actuarial certification, and the purpose of the report.

Milliman's work product was prepared exclusively for LACERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations, and uses LACERA's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

# Glossary

# Glossary

- **Actuarial Accrued Liability (AAL):** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.
- **Actuarial Asset Smoothing:** A method used to determine the Actuarial Values of Assets that reduces the effect of short-term market volatility while still tracking the overall movement of the market value of assets.
- **Actuarial Assumptions:** Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disability, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets. The Actuarial Assumptions fall in to two main categories: Demographic and Economic Assumptions.
- **Actuarial Methods:** Procedures used to determine the Actuarial Value of Assets; how the liabilities (value of promised benefit payments) are allocated to accrued and future; how the Unfunded Actuarial Accrued Liability is systematically paid down (amortization method); and other relevant items.
- **Actuarial Standards of Practice:** The Actuarial Standards Board sets standards for appropriate actuarial practice in the United States through the development and promulgation of Actuarial Standards of Practice (ASOPs). These ASOPs describe the procedures an actuary should follow when performing actuarial services and identify what the actuary should disclose when communicating the results of those services.

## Glossary (continued)

- **Actuarial Valuation:** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.
- **Actuarial Value of Assets:** The value of cash, investments and other property belonging to a pension plan after reflection of Actuarial Asset Smoothing, as used by the actuary for the purpose of an Actuarial Valuation.
- **Alpha:** Actual investment return, if any, above the benchmark return.
- **Amortization Payment:** That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
- **Capital Market Assumptions (or Expectations):** Capital Market Assumptions are numerical expectations about the future performance of available asset classes that incorporate theories, observations and experience. Each asset class has an expected return, variance and correlation between other asset classes.
- **COLA:** LACERA retirement and survivor allowances are adjusted annually by the cost-of-living adjustment (COLA). The adjustment is based on changes in the cost of living over the previous 12-month period as of December 31.
- **COLA Bank:** Also referred to as the COLA Accumulation. The COLA Bank is the accumulation of annual CPI increases that exceed the COLA Cap. In years where the CPI increase is less than the COLA Cap, a withdrawal from the COLA Bank takes place to increase the actual COLA granted, up to the COLA Cap.

## Glossary (continued)

- **COLA Cap (Maximum):** LACERA retirees and beneficiaries cannot receive an annual COLA increase above the COLA Cap. For Plan A, the amount is 3%; for other plans the maximum is 2%.
- **CPI:** Consumer Price Index. Used to measure local and national price inflation.
- **Demographic Assumptions:** Assumptions as to the occurrence of future events specific to member experience, such as: mortality, withdrawal, disability, retirement, and changes in compensation in excess of General Wage Growth.
- **Discount:** The discount is the reduction that is applied to future cash flows (primarily benefit payments and contributions) to determine the present value as of the valuation date of those cash flows. For LACERA, the discount rate is equal to the investment return assumption.
- **Economic Assumptions:** Assumptions as to the occurrence of future events specific to economic factors, such as: investment returns, compensation increases related to inflation and productivity, and inflation.
- **General Wage Growth:** Increases in compensation related to the general economy and not related to individual merit, promotion and longevity increases.
- **Inflation:** See Price Inflation.
- **Investigation of Experience:** Periodic review of Actuarial Assumptions to review recent experience and future forecasts. For LACERA, this is completed every three years

## Glossary (continued)

- **Layered Amortization Period:** Payment of each year's change in the Unfunded Actuarial Accrued Liability (UAAL) is amortized over separate closed periods. For LACERA, the original UAAL as of June 30, 2009 is being amortized over a closed 30-year period. Subsequent changes in the UAAL were amortized over new closed 30-year periods. Effective with the June 30, 2019 valuation all existing layers with more than 22 years remaining as of June 30, 2020 were re-amortized over closed 22-year periods. All new UAAL layers thereafter are amortized over closed 20-year periods beginning with the date the contribution is first expected to be made. All amortization payments are based on a level percent of pay.
- **Legacy:** Legacy plans are those plans that existed prior to the implementation of PEPRA. For LACERA, these are the following defined benefit plans: General Plans A, B, C & D and Safety Plans A & B.
- **Median Expected Return:** The numerical value that there is a 50% probability the actual return will exceed (and 50% probability it will fall short of) this value over a long-term time horizon on annualized geometric basis.
- **Merit Salary Increases:** Salary increases in excess of the General Wage Growth that are expected as a member moves through their career related to merit, promotion and longevity.
- **Mortality Projection Scale:** A scale that is used to project future changes in mortality rates. A scale that project declines in future mortality rates is expecting increased life expectancies for future retirees.
- **Payroll Growth:** The annual increase in the pensionable payroll used in the calculation of the UAAL amortization rate.

## Glossary (continued)

- **PEPRA:** The California Public Employees' Pension Reform Act (PEPRA) of 2013 specifies benefit provisions for LACERA General Plan G and Safety Plan C. It also governs certain provisions of other LACERA plans and places additional restrictions on employer contribution rates to be paid.
- **Price Inflation:** A sustained increase in the general level of prices for goods and services.
- **Price-to-Earnings (P/E) Ratio:** The price-to-earnings ratio is the ratio for valuing a company that measures its current share price relative to its earnings per share. P/E ratios are used by investors and analysts to determine the relative value of a company's shares in an apples-to-apples comparison
- **Projected Benefits:** Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
- **Real Rate of Return:** The portion of the expected investment return that is in excess of national Price Inflation.
- **Real Wage Growth:** The portion of General Wage Growth that is not related to local Price Inflation.

## Glossary (continued)

- **STAR Reserve:** Reserves accumulated for the payment of cost-of-living benefits as defined in California Government Code Section 31874.3. Supplemental Targeted Adjustment for Retirees (STAR) Benefits Supplemental cost-of-living payments to retired members to restore purchasing power at a specified percentage level, as described in California Government Code Section 31874.3.
- **Unfunded Actuarial Accrued Liability (UAAL):** The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
- **Valuation Date:** The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.
- **Wage Growth:** See General Wage Growth.



# **October Milliman Presentation to BOI**

# 2022 Triennial Investigation of Experience Economic Assumptions & Actuarial Methods

Nick Collier  
Craig Glyde

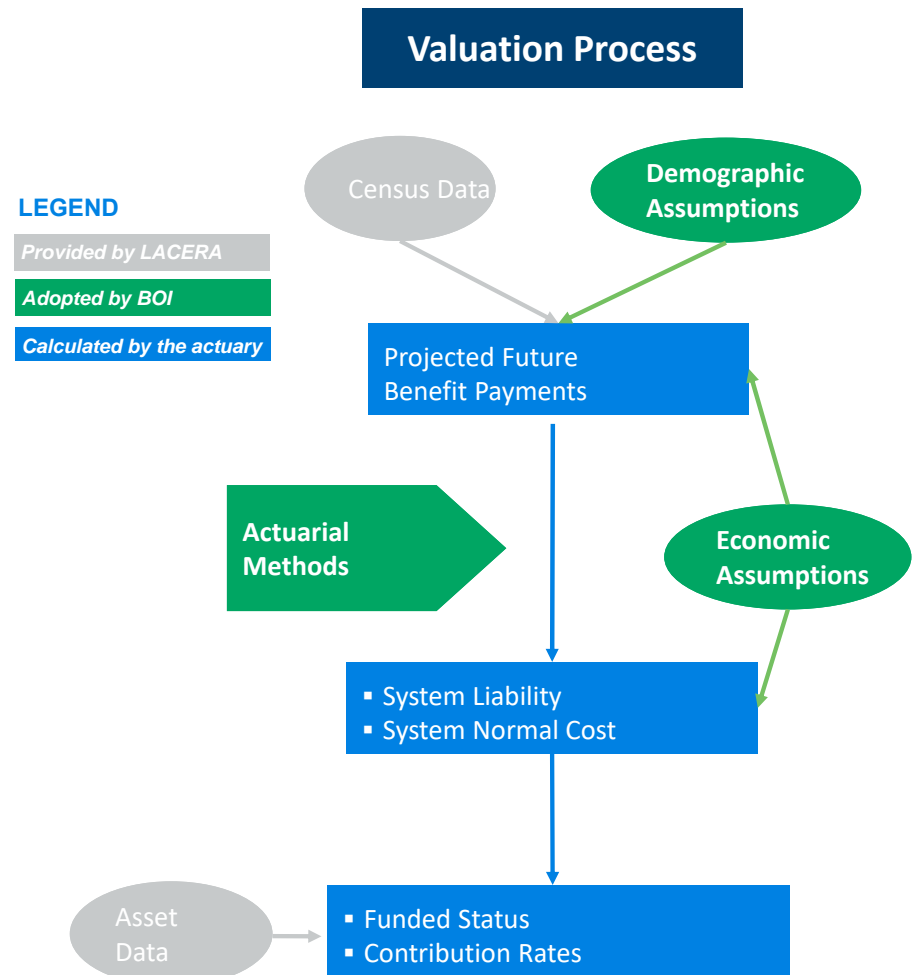
OCTOBER 12, 2022

*With updates / revisions from original presentation*



# Schedule

- October 2022 meeting:
  - Discussion and analysis of economic assumptions
  - Reach general consensus on economic assumptions
- November 2022 meeting:
  - Follow-up discussion on economic assumptions
  - Discuss and reach general consensus on demographic assumptions
- December 2022 meeting:
  - Draft experience study report presentation
  - Adopt assumptions to be used in 2022 valuation
- March 2023 meeting:
  - Valuation results
  - Adopt member and employer contribution rates for fiscal year beginning July 1, 2023



# Economic Assumptions

## Economic Assumptions – Overview

- Summary of economic assumptions. Note these tend to be set based on forecasts.

**National Price Inflation:** Directly used in the valuation to project PEPPRA compensation limit. Indirectly considered as part of investment return assumption.

**Local Price Inflation:** A key component of assumptions for COLAs, wage and payroll. Does not directly affect valuation.

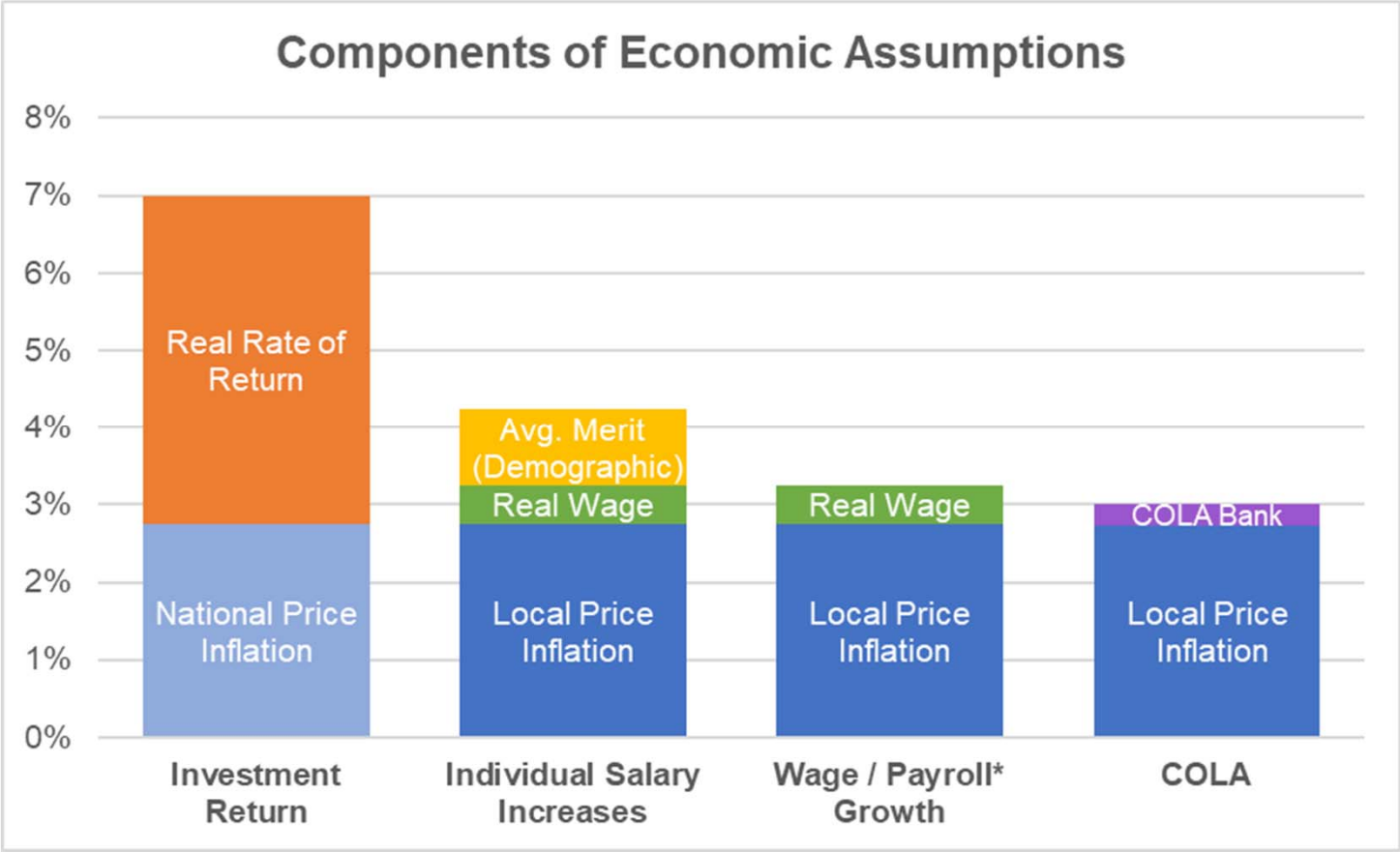
**Future COLAs:** Used in the valuation to project current and future retiree benefits. Generally equal to lesser of local price inflation and maximum COLA amount. Existing COLA banks are considered.

**General Wage Growth:** Used in the valuation to project salaries used and therefore affects future benefit amounts. Equal to local price inflation plus an additional amount (if any) for real wage growth.

**Payroll Growth:** Used in the valuation to project payroll used in the UAAL amortization calculation. Equal to wage growth if stable active population is assumed.

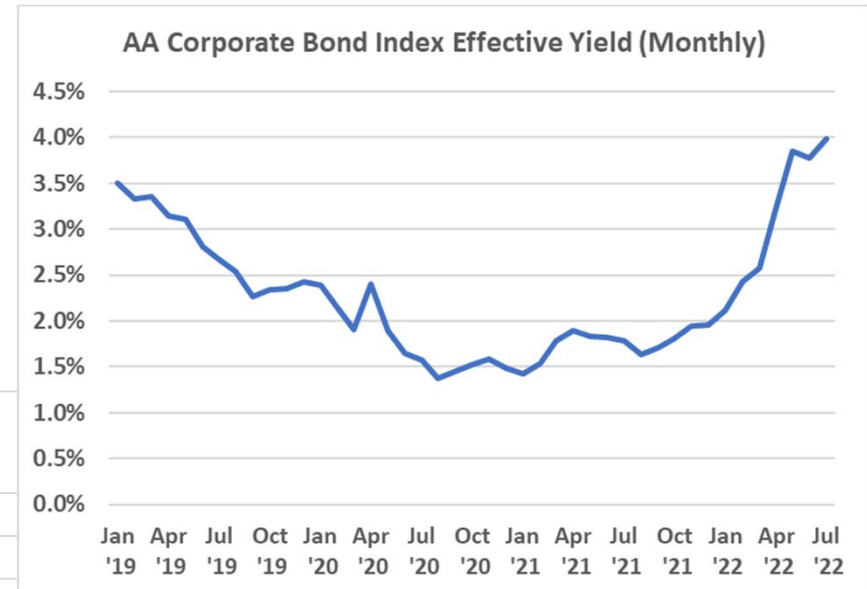
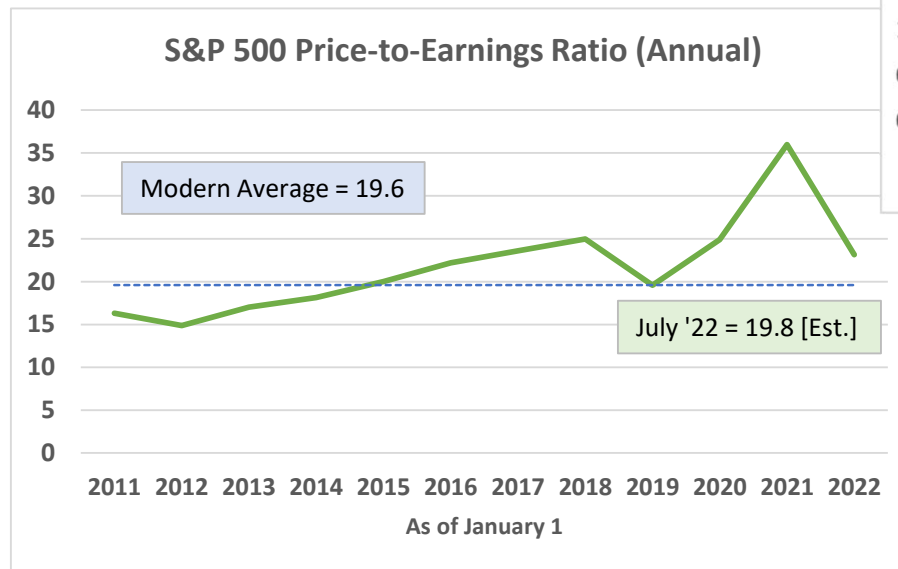
**Investment Return (Discount Rate):** Used in the valuation to “discount” future payment stream to present value. Generally the most significant assumption in allocation of future contributions.

# Economic Assumptions – Overview (continued)



# Economic Assumptions – Current Environment

- Economic assumptions = changing environment
  - Interest rates have rebounded from historic lows
  - Price-to-earnings ratios have declined in 2022 and are now closer to historic averages
  - Inflation has spiked in 2021 and 2022



# Economic Assumptions Summary

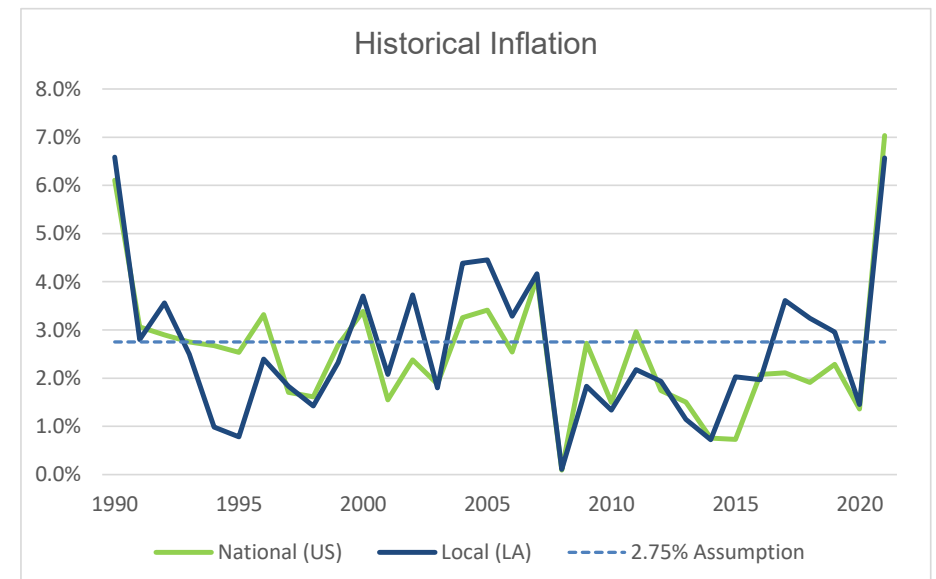
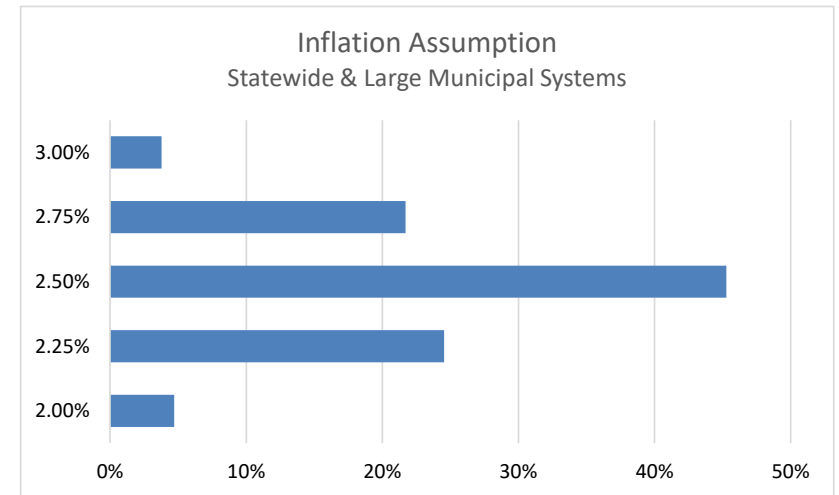
- No changes recommended to current economic assumptions

Economic Assumptions	Current	Recommended	Comment
National Price Inflation	2.75%	No Change	Current inflation levels are much higher than 2.75%, although most long-term forecasts are for less than 2.75%
Local Price Inflation	Equal to National Price Inflation (2.75%)	No Change	Generally set equal to national inflation, although past LA inflation has averaged slightly above national
Future COLAs	Local Inflation not greater than cap with adjustment for COLA bank (Varies by Plan)	No Change	Plan A: Current assumption is 2.75%, but for current retirees with a COLA bank > 0%, assumption is 3.0%. Other Plans: 2.0% (pro-rated amount for Plan E).
Wage Growth	Local Price Inflation + Real Wage Growth (3.25%)	No Change	Current assumption of 0.5% real wage growth over local price inflation is consistent with historical LACERA experience
Payroll Growth	Equal to Wage Growth (3.25%)	No Change	Assumes stable active population
Investment Return (Discount Rate)	7.00%	No Change	Long-term trend of decreasing expected returns continued through January of 2022; however, updated mid-year 2022 capital market expectations indicate some reversal (possibly short-term) of this trend.



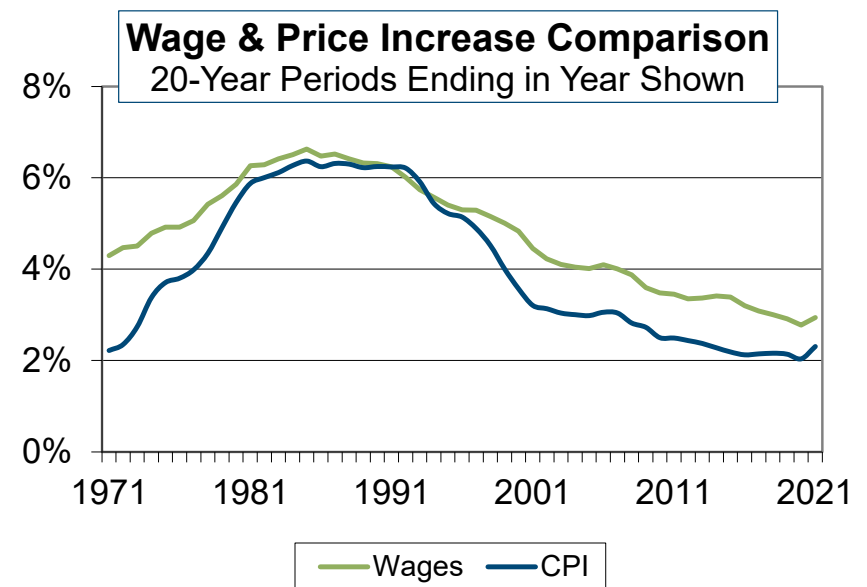
# Price Inflation & COLA Assumption

- Current inflation assumption is 2.75%
  - CalPERS is 2.30% and CalSTRS is at 2.75%
  - 2.50% is median assumption for 100 largest systems
- Long-range Social Security projection is 2.4%
- Other forecasts for 20 years at June 30, 2022
  - Implied inflation from TIPS of 2.6%
  - Cleveland Fed = 2.3%
  - Milliman = 2.4% / Meketa = 2.1%
- Recommend keeping current 2.75% assumption
  - Wait and see if inflation reverts back to lower levels
- Set COLA assumption equal to plan maximum COLA, subject to price inflation assumption and COLA Bank levels



# General Wage Growth

- An individual member's assumed annual salary increase is composed of:
  - Local inflation
  - Real wage growth
  - Individual merit/longevity component (demographic assumption)
- Real wage growth represents the increase in wages in excess of inflation due to improvements in productivity and competitive market pressures
- National average real wage growth has been 0.6% over last 50 years
- Social Security projections have 1.2% average real wage growth over long term
- Estimated LACERA-specific real wage growth has been close to the current 0.5% assumption
- Current assumption of 3.25% is reasonable
  - Local inflation of 2.75% + real wage growth of 0.5%



## Payroll Growth

- The system payroll growth assumption is used in the calculation to amortize the unfunded liability
- Fairly standard among public retirement systems to have payroll growth equal to general wage growth
- Historical County payroll has increased at a greater rate than the general wage increase due to increase in number of active members, but this has for the most part levelled off over the last 10 years
- It is reasonable to keep the payroll growth assumption equal to the general wage growth assumption (currently 3.25%)

## Expected Return – 2022 Capital Market Assumptions

- Milliman calculated the median expected return for LACERA's target portfolio using the 2022 (beginning of year) capital market outlook assumptions from three sources
  - Meketa
  - Milliman
  - 2022 Horizon survey of capital market assumptions (survey of 40 investment advisors)
- Estimates do not reflect any possible "alpha" due to selected managers potentially outperforming market benchmarks over the long term
- Significant changes in economic environment first half of year

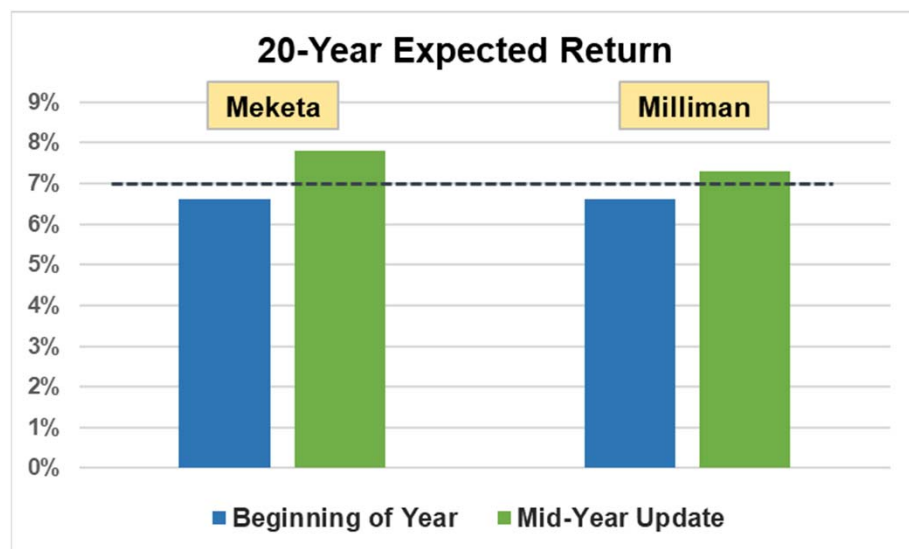
2022 Beginning of Year	Meketa	Milliman	Horizon
<b>Based on 10-Year Assumptions</b>			
Median Annualized Return	<b>5.6%</b>	<b>5.8%</b>	<b>6.4%</b>
Assumed Inflation	2.2%	2.4%	2.5%
<b>Based on 20-Year Assumptions</b>			
Median Annualized Return	<b>6.6%</b>	<b>6.6%</b>	<b>7.0%</b>
Assumed Inflation	2.2%	2.3%	2.4%

### Notes:

- Returns are net of assumed expenses of 0.20% of assets.
- The Horizon Survey reports a limited number of asset classes. In cases where there was not a corresponding asset class in the survey, Milliman's assumptions for the corresponding time horizon were used.
- Horizon 10-year assumptions include some consultants with less than 10 years. Horizon 20-year assumptions include some consultants with more than 20 years and are based on a subgroup of less than half of the full group.

## Expected Return – June 30, 2022 Update

- Both Milliman and Meketa updated their capital market assumptions to reflect changes in first half of the year
  - Result is significantly higher expected returns than analysis as of the beginning of the year



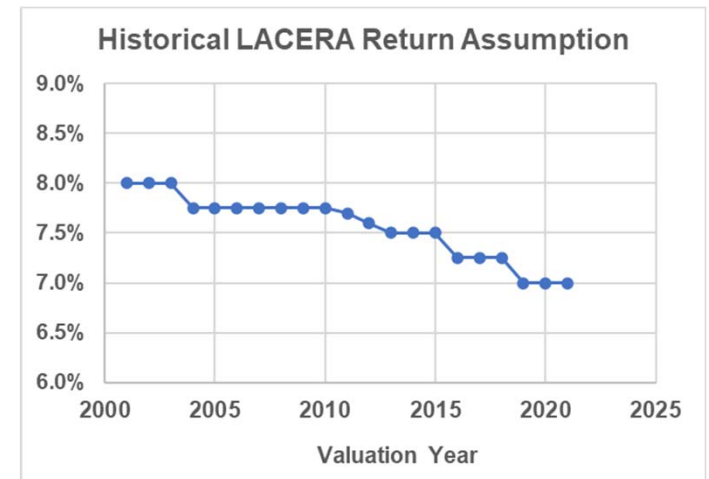
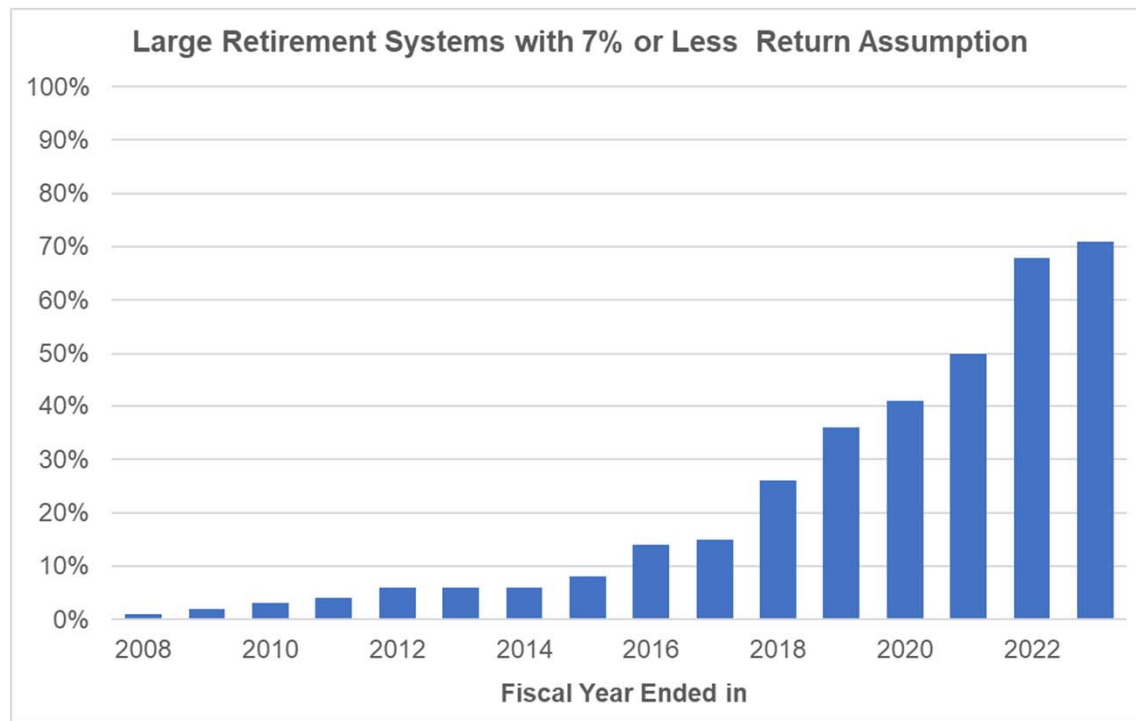
Mid-Year Update 2022	Meketa	Milliman	Horizon
<b>Based on 10-Year Assumptions</b>			
Median Annualized Return	7.3%	6.9%	Not
Assumed Inflation	2.1%	2.5%	Available
<b>Based on 20-Year Assumptions</b>			
Median Annualized Return	7.8%	7.3%	Not
Assumed Inflation	2.1%	2.4%	Available

Notes:

- Returns are net of assumed expenses of 0.20% of assets.
- The Horizon Survey is annual, so mid-year update is not available.

# Investment Return Assumption Trend

- Over 70% of large public retirement systems now have an investment return assumption of 7% or less



- LACERA's return assumption has followed a similar pattern to other large retirement systems
- Price inflation has decreased from 4.00% to 2.75% over period (2000 to 2021)

# Actuarial Methods

# Actuarial Methods

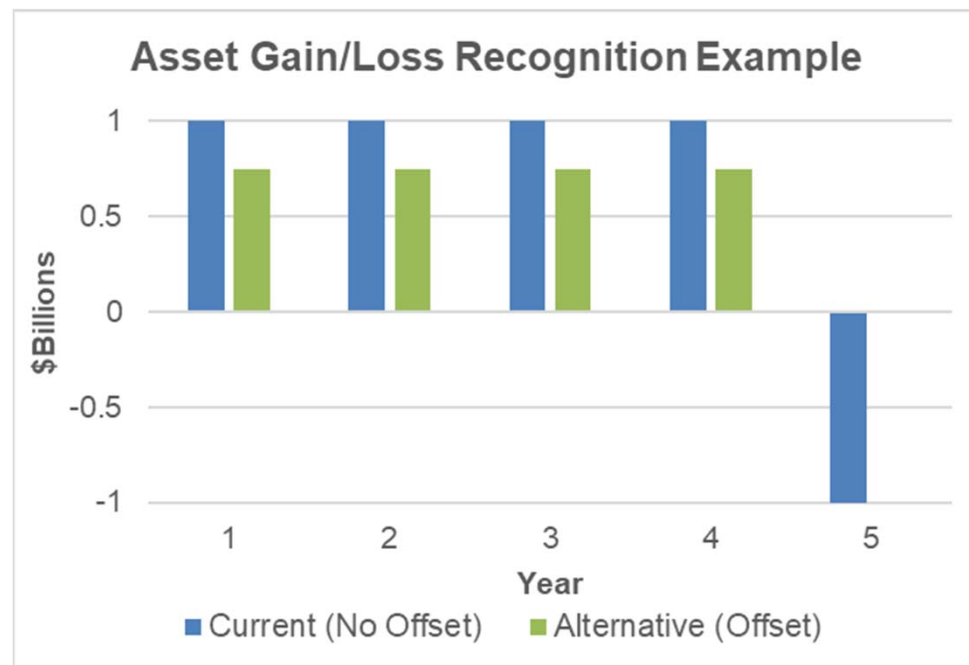
- No changes needed to current actuarial methods, but 3 modifications to current methods recommended for Board consideration

Actuarial Methods	Current	Alternative	Comment
Actuarial Cost Method	Entry Age	None suggested	Current method results in level Normal Cost rate.
Actuarial Asset Method	5-Year Smoothing	5-Year Smoothing with Offsets (Recommended)	Alternative results in smoother employer contribution rates in most cases (difference is generally small).
Amortization Method	20-Year Layered Level % of Pay	Add 10-Year Recognition for Benefit Increases (Recommended)	Current method provides a good balance between progress toward 100% funding and stable employer rates. One modification recommended for changes due to benefit increases to comply with actuarial guidance.
Administrative Expense Treatment	Implicit	Explicit (Not recommended)	Explicit approach may be viewed as more transparent, but in practice it makes little difference and can cause some shifting of costs between members and employers.
STAR Reserve Treatment	STAR Reserve <u>included</u> with Valuation Assets	STAR Reserve <u>excluded</u> from Valuation Assets (Recommended)	Current method includes STAR Reserve in valuation, but does not account for liabilities associated with STAR COLAs that may be granted in the future. Extensive analysis and discussion previously done prior to BOI adopting this approach.



# Actuarial Methods – Asset Smoothing Modification Example

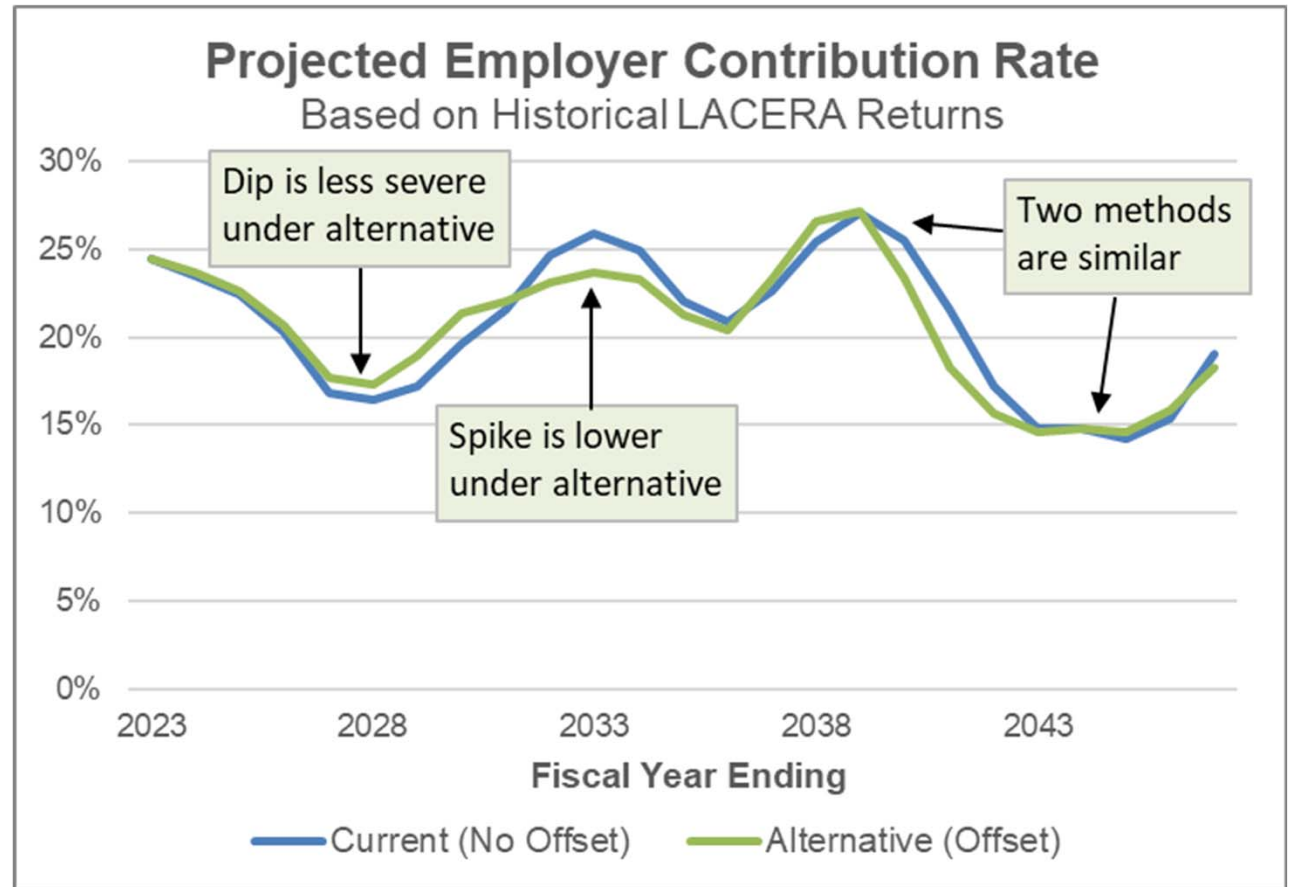
- Alternative would still smooth asset gains and losses over 5 years; however, before smoothing is applied, current year gain (or loss) is offset against prior losses (or gains), if any
  - Offsetting is expected to reduce the likelihood and magnitude of spikes or dips in employer contribution rates in most cases
- Example (simplification of LACERA situation)
  - \$10B gain in FYE2021 → \$2B gain recognized for next 5 years (Years 0-4)
  - \$5B loss in FYE2022 → \$1B loss recognized for next 5 years (Years 1-5)
  - Modification would offset the \$8B gain remaining from the FYE2021 gain in Year 1 with the \$5B loss, leaving a \$3B gain and no loss; \$3B gain is recognized evenly over remaining period (Years 1-4)



Under the current method, a net asset gain is recognized for years 1-4 followed by a loss in year 5, resulting in a decreasing employer rate but an increase in the last year. Under the alternative method, a smaller gain would be recognized resulting in smaller decreases in the employer rate in years 1-4 but there would not be an increase in year 5.

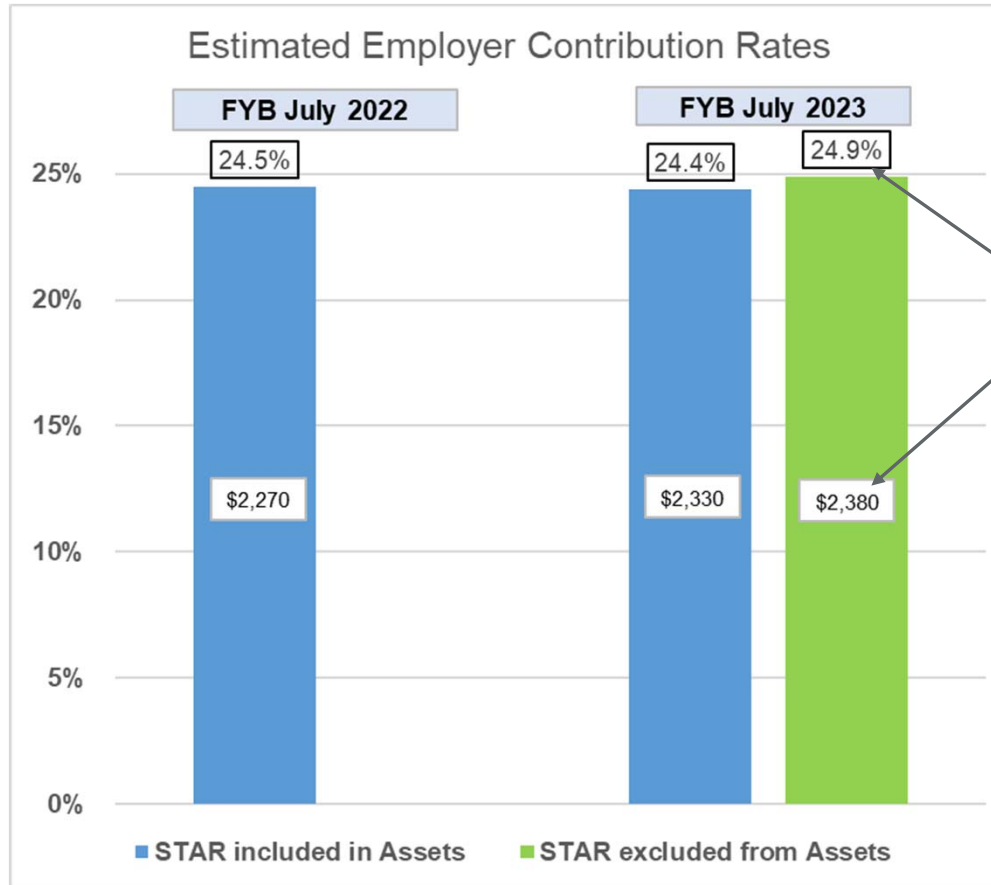
## Actuarial Methods – Asset Smoothing Modification Example #2

- “Real life” example:  
Projection of employer contribution rate if actual LACERA returns from last 25 years were to repeat for next 25 years
  - Shows lower contribution rate volatility using offsetting method
- Average year-to-year rate change over period:
  - Current: 1.93% of pay
  - Alternative: 1.67% of pay



# Estimated Financial Impact

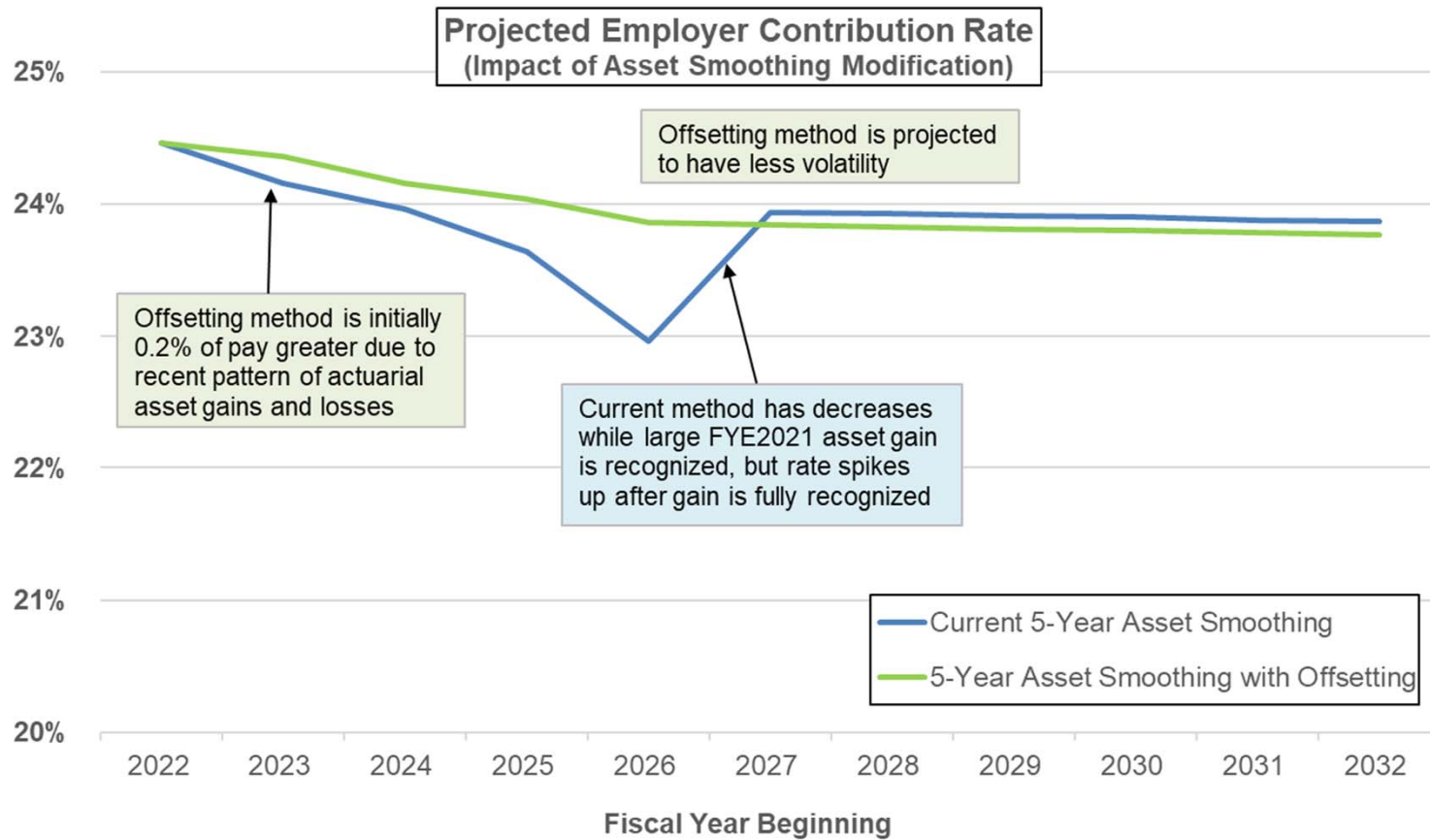
## Financial Impact – STAR Treatment and Estimated FYE2022 Experience



Top row of boxes in chart shows estimated employer rates. Bottom row of boxes shows estimated employer contributions in \$millions.

- Estimated FYB 2023 rates reflect
  - Modification to asset smoothing (+0.2% of pay)
  - Following experience
    - Actual return for FYE 2022
    - Actual payroll for FYE 2022
    - Actual CPI for December 2021

# Financial Impact – Asset Smoothing Modification



# Recommendations

- Economic assumption recommendations
  - Keep investment return assumption at 7.00%
    - Trend of lower return assumptions among public sector retirement system continues; however, there has been a recent increase in forecasts of future returns
    - 7.0% assumption maintains smooth employer and member contribution rates, and allows for some reversion in expected returns
  - Keep other economic assumptions at current levels
- Recommendation for treatment of STAR Reserve
  - Exclude STAR Reserve from valuation assets
- Other actuarial methods recommendation
  - Two modifications to current methods
    - Adding offsetting to asset smoothing
    - Shorter recognition of changes in plan provisions that increase benefits

# Questions



## Caveats and Disclaimers

This presentation is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated November 22, 2021, supplemented by information included in the Preliminary Funding Estimate letter dated September 23, 2022. The statements of reliance and limitations on the use of this material is reflected in the actuarial report and still apply to this presentation.

These statements include reliance on data provided, on actuarial certification, and the purpose of the report.

Milliman's work product was prepared exclusively for LACERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations, and uses LACERA's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.



# **November Milliman Presentation to BOI**

# 2022 Investigation of Experience Demographic Assumptions

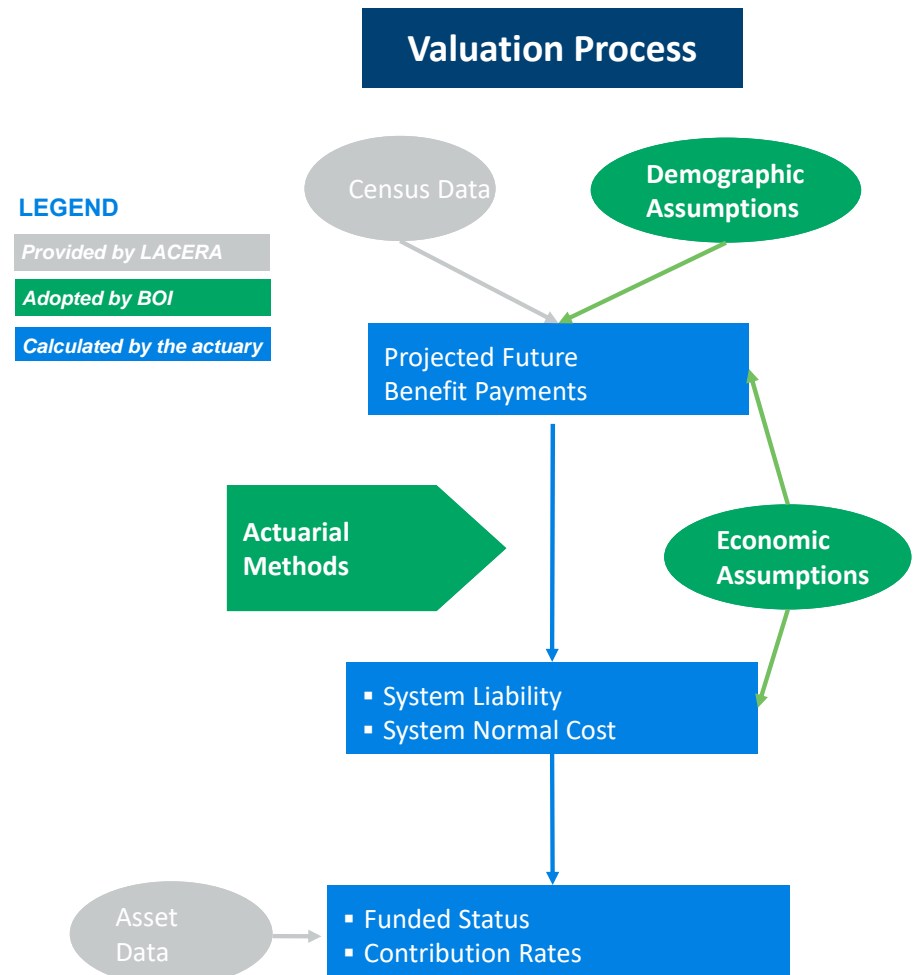
Nick Collier  
Craig Glyde

NOVEMBER 9, 2022



# Schedule

- October 2022 meeting:
  - Discussion and analysis of economic assumptions
  - Reach general consensus on economic assumptions
- November 2022 meeting:
  - Follow-up discussion on economic assumptions
  - Discuss and reach general consensus on demographic assumptions
- December 2022 meeting:
  - Draft experience study report presentation
  - Adopt assumptions to be used in 2022 valuation
- March 2023 meeting:
  - Valuation results
  - Adopt member and employer contribution rates for fiscal year beginning July 1, 2023



# Demographic Assumptions

## Key Demographic Assumptions – Overview

- Summary of demographic assumptions. Note these are set based on LACERA experience.

**Mortality (Life Expectancy):** Mortality tables are used to estimate current rates of death. Mortality tables are combined with the mortality projection scale to estimate how long current and future retirees will live.

**Mortality Projection Scale:** A scale that is used to project future changes in mortality rates. A scale that project declines in future mortality rates is expecting increased life expectancies for future retirees.

**Merit Salary:** Assumed increases in compensation for reasons other than general wage growth, such as promotion and longevity.

**Service Retirement:** Probability of taking a service retirement at a given age which affects projected benefit amount and length member is expected to receive benefit.

**Disability Retirement:** Probability of taking a disability retirement at a given age which affects projected benefit amount and length member is expected to receive benefit.

**Termination:** Probability of member leaving active service for reasons other than death, disability or service retirement.

# Demographic Assumptions

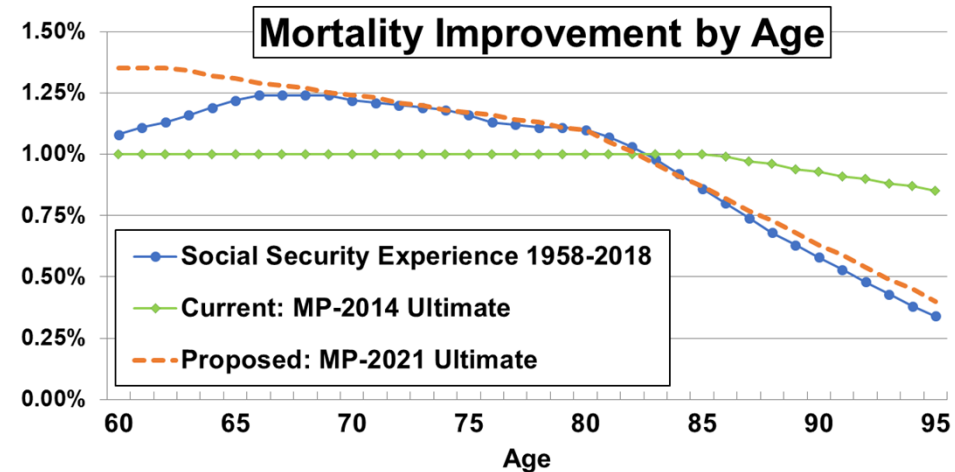
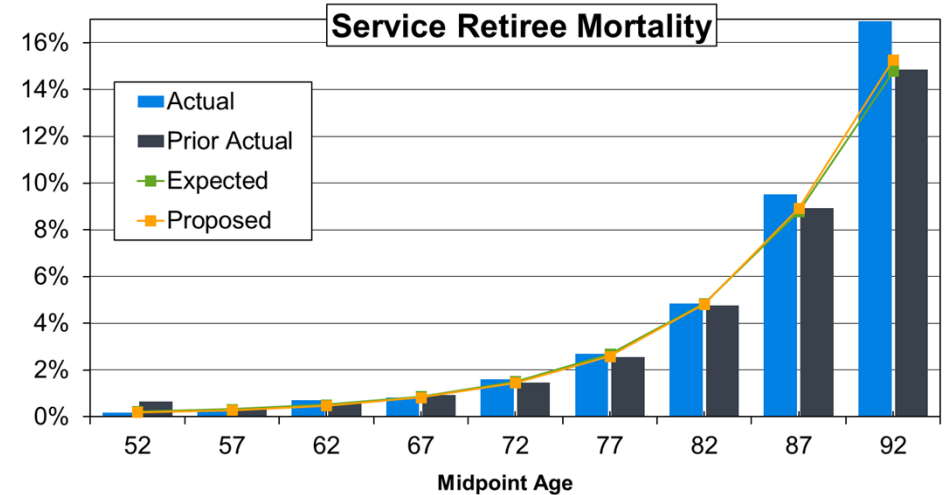
## Rationale for Changes & Pandemic Commentary

- Study period of July 1, 2019 to June 30, 2022 overlaps with the pandemic which influenced the study results
  - There were more retiree deaths than predicted by the assumptions
  - There were more terminations and service retirements than predicted by the assumptions
- Results for the study period were reviewed, but changes were only made if they were also supported by experience from prior studies
  - Also considered trends in actuarial assumptions for public retirement systems

## Retiree Mortality

- Assumption used to predict how long current and future retirees and beneficiaries will receive benefits
- Results show mortality rates were about 5% to 10% higher than assumed
- Recommendation:
  - Retain base mortality tables and scaling factors
  - Update mortality improvement scale to newest version released by Society of Actuaries
    - New version projects greater improvements below age 83 and smaller improvements after age 83 than current assumption, resulting in a small decrease in life expectancies for older active employees and retirees.

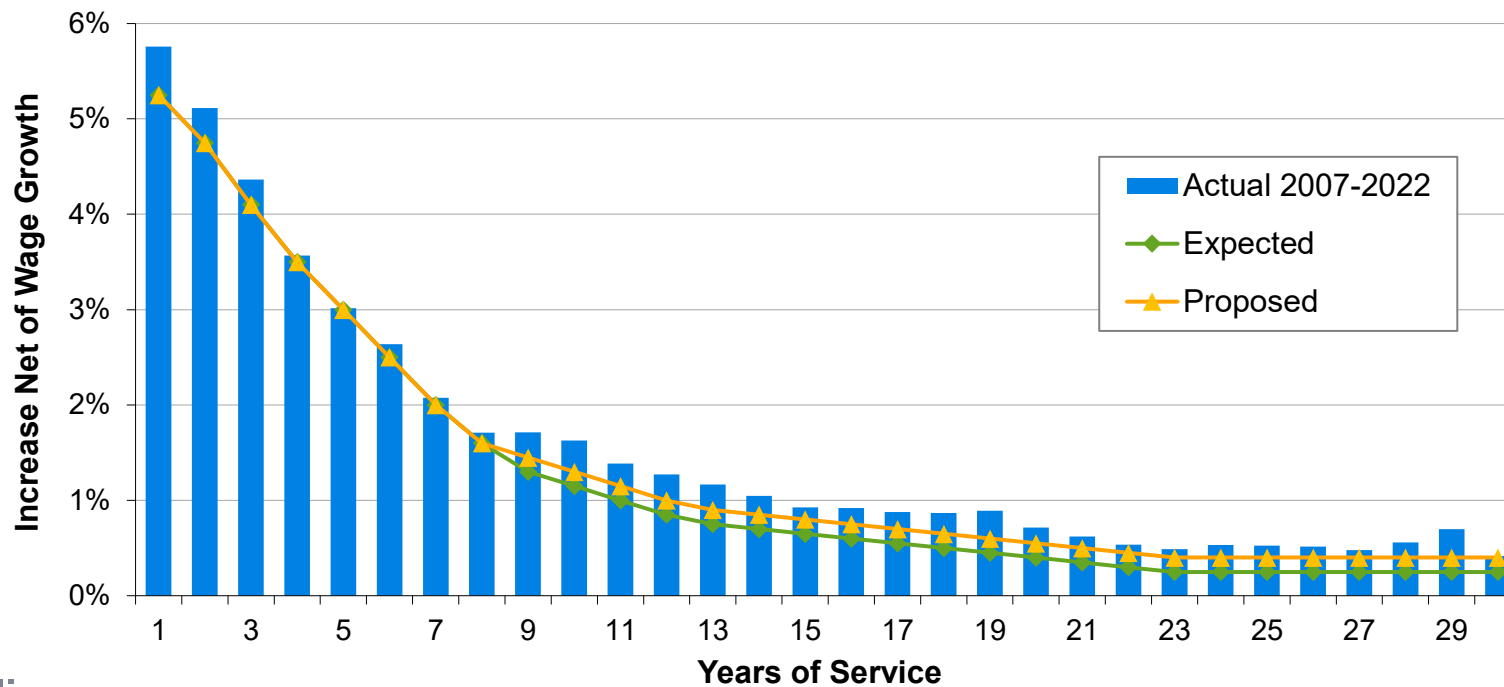
Expected Lifetime for Age 60 Retiree in 2023		
	Curr.	Prop.
General Male	86.7	86.5
General Female	88.4	88.1
Safety Male	87.9	87.6
Safety Female	88.4	88.1



Note: mortality improvement implies that mortality rates at a given age will decrease in the future and life expectancies will be longer.

## Merit Salary Increases - General

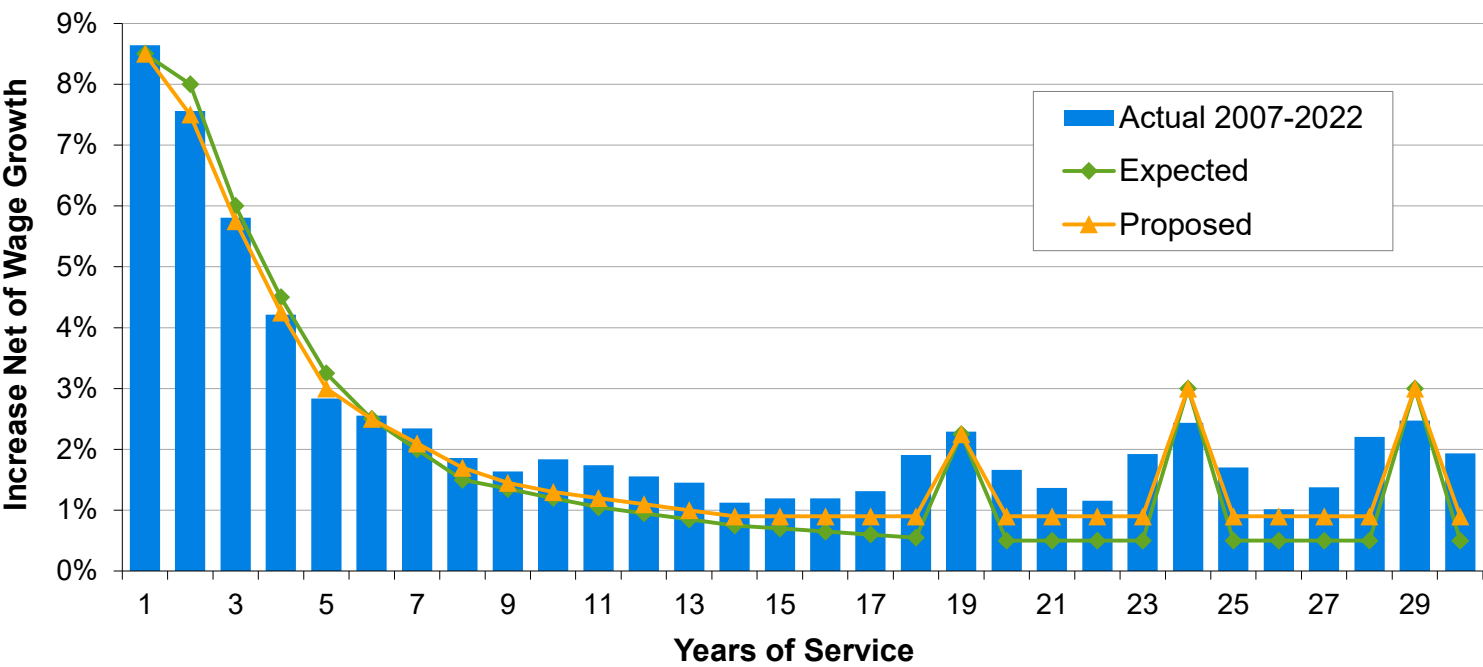
- Merit salary increases are in addition to general wage increases (recommended 3.25%)
- Proposed merit salary increase to 0.40% of pay, compared to 0.25% of pay (at service years 9+)
  - Reflects the trend of larger increases for longer service employees on account of merit & longevity





# Merit Salary Increases - Safety

- Merit salary increases are in addition to general wage increases (recommended 3.25%)
- Proposed merit salary changes
  - Small decreases in service years 2 to 5; increases in most service years 7+
  - Reflects the trend of larger increases for longer service employees on account of merit and longevity



In Comparison to Current Assumption	
Years of Service	Change
1	0.00%
2	-0.50%
3-5	-0.25%
6	0.00%
7	+0.10%
8	+0.20%
9-10	+0.10%
11-14	+0.15%
15	+0.20%
16	+0.25%
17	+0.30%
18	+0.35%
19	0.00%
20-23	+0.40%
24	0.00%
25-28	+0.40%
29	0.00%
30+	+0.40%

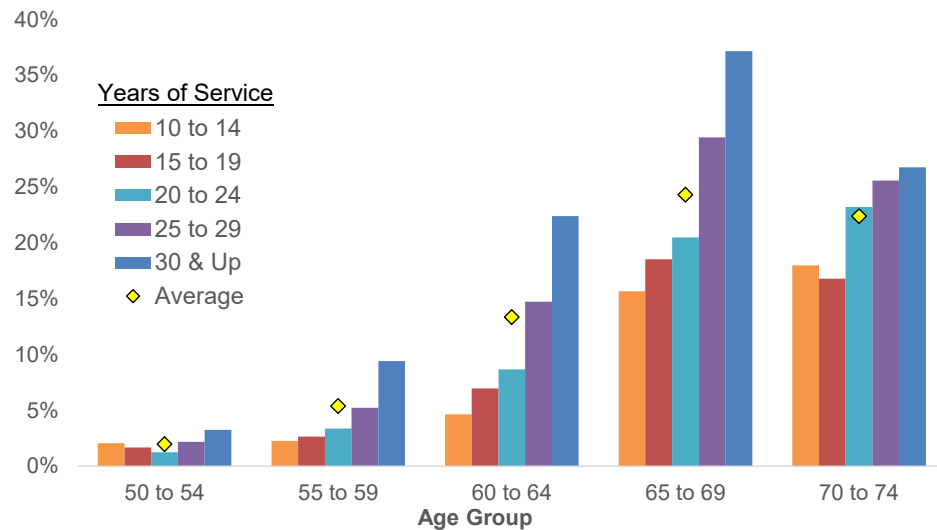


Note: spikes in actual and assumed experience at 19, 24 and 29 years of service reflect bargained increases

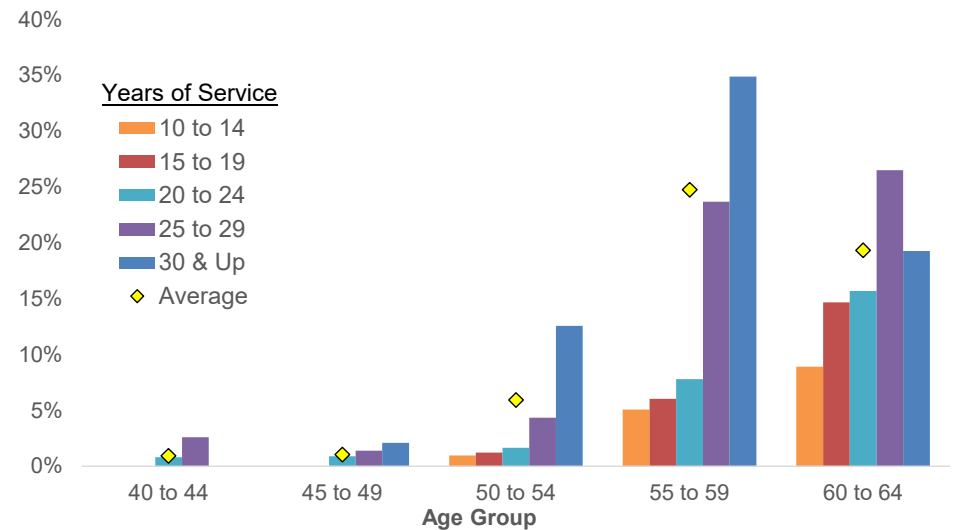
# Service Retirement from Active Status

- Service retirement rates have historically been based solely on an employee's age and plan
- However, the impact of service on retirement rates is apparent for LACERA
  - More service = Larger benefit = More likely to retire
  - Introducing a service component provides a more accurate estimate of liabilities and cash flow

General D: Actual Rates of Retirement by Age Group & Service

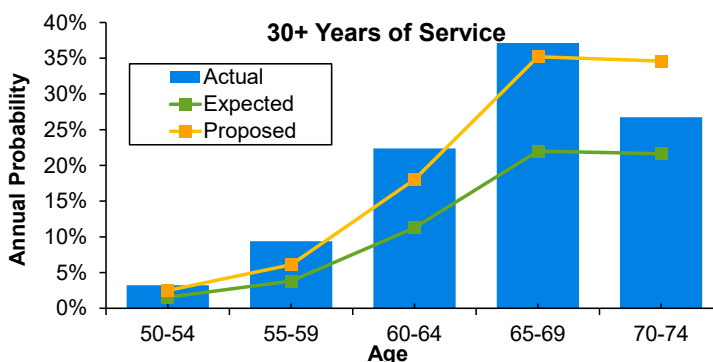
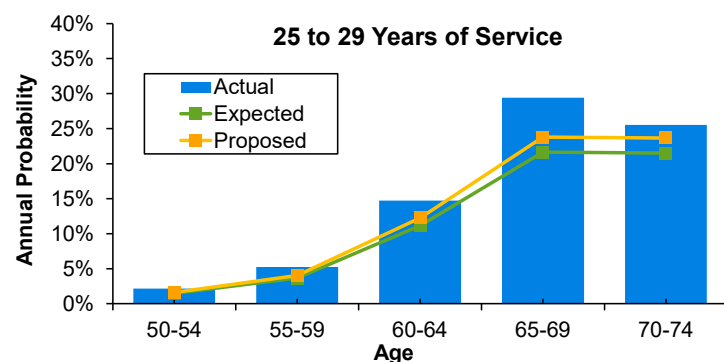
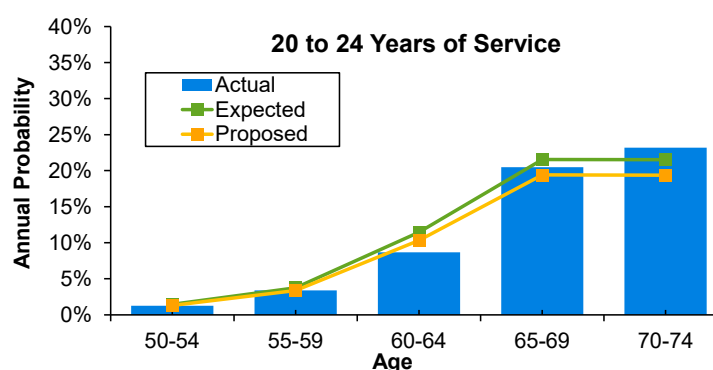
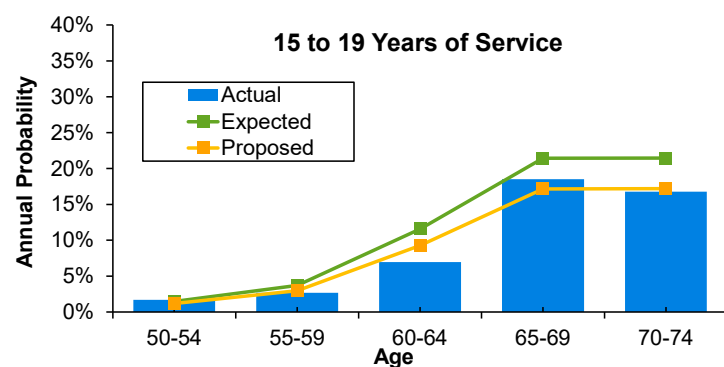


Safety B: Actual Rates of Retirement by Age Group & Service



# Service Retirement from Active Status - General

- Proposed changes to service retirement rates to reflect both age and service

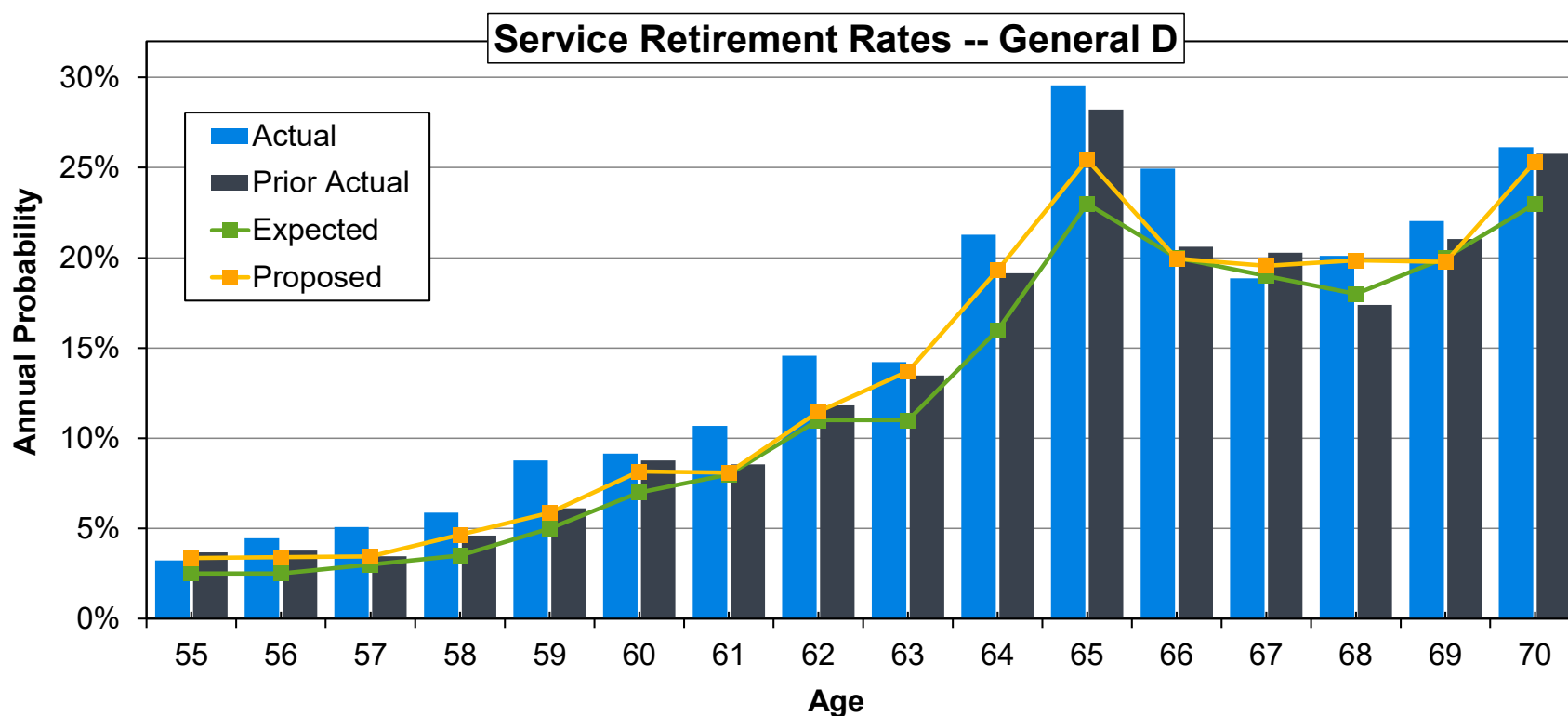


- Green line is the expected retirement rate
  - Based on age only
  - Same in each chart
- Yellow line is the proposed retirement rate which varies for members of the same age based on length of service
  - Higher retirement rate for those with longer service

Ages 55 to 69 are when most General member service retirements occur. These are the most critical age ranges for the General member retirement rate assumption.

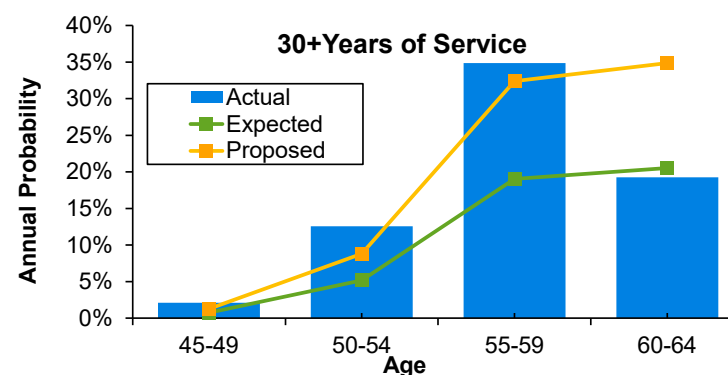
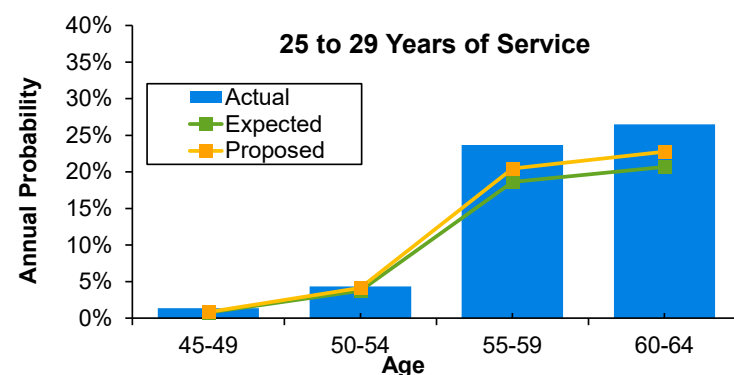
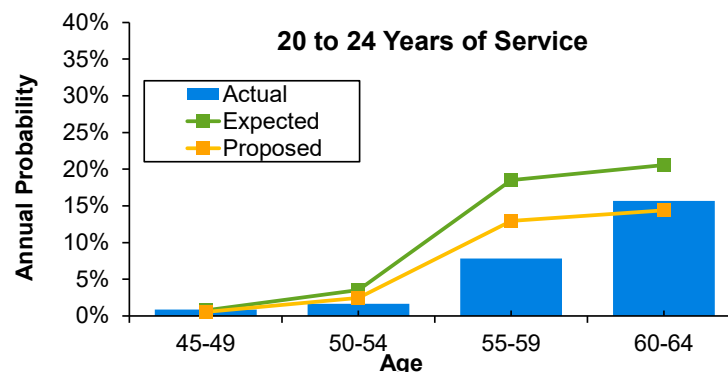
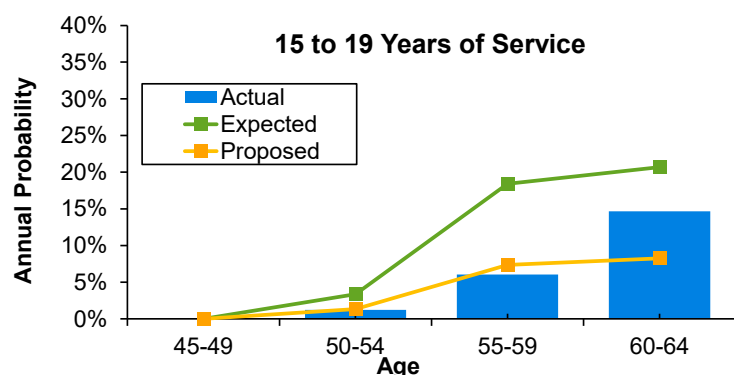
## Service Retirement from Active Status – General (Aggregate)

- Aggregate proposed service retirement rates reflecting both age and service



# Service Retirement from Active Status - Safety

- Proposed changes to service retirement rates to reflect both age and service

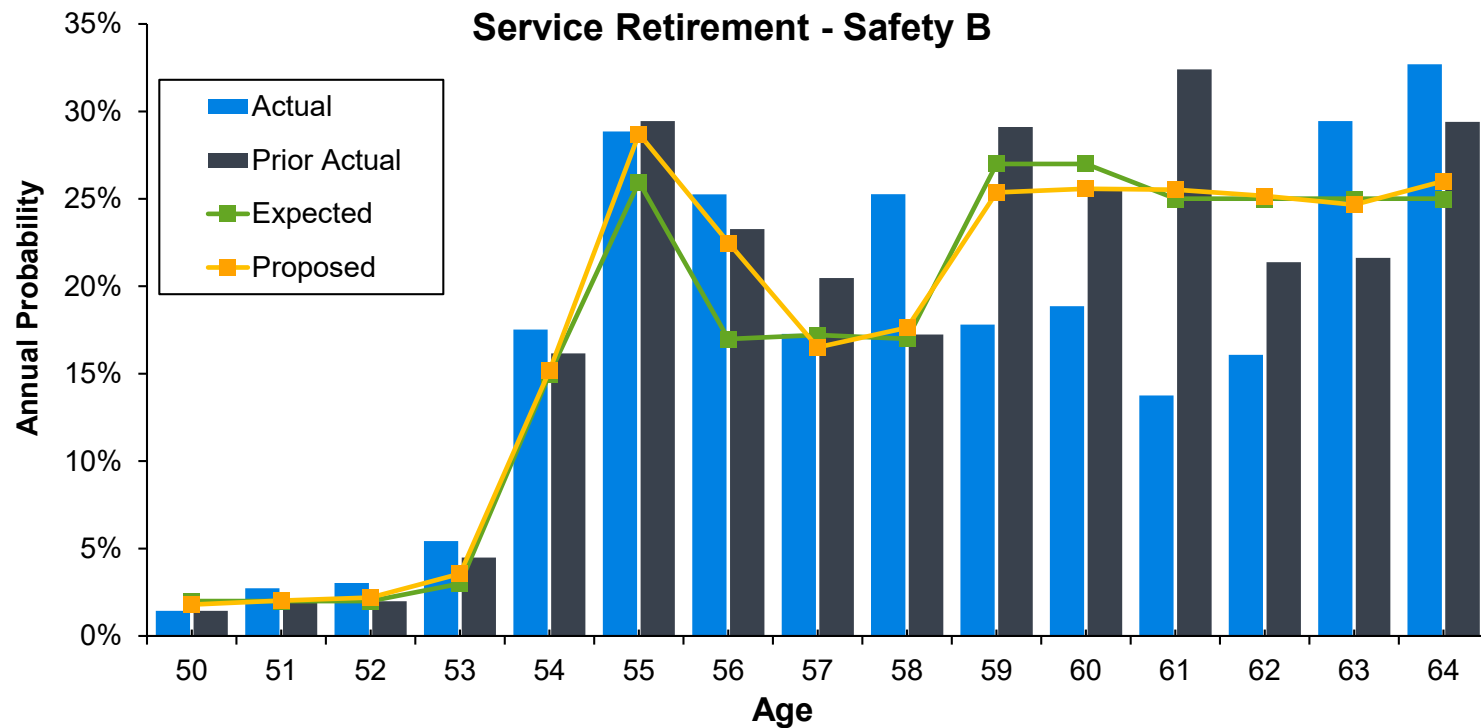


- Green line is the expected retirement rate
  - Based on age only
  - Same in each chart
- Yellow line is the proposed retirement rate which varies for members of the same age based on length of service
  - Higher retirement rate for those with longer service

Ages 50 to 59 are when most Safety member service retirements occur. These are the most critical age ranges for the Safety member retirement rate assumption.

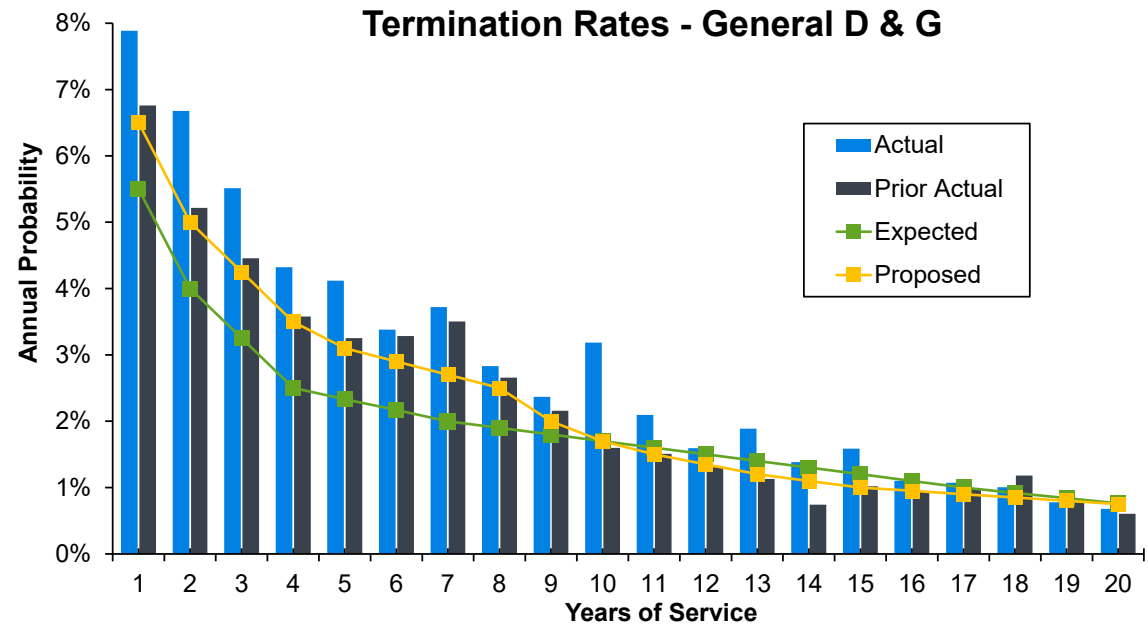
## Service Retirement from Active Status – Safety (Aggregate)

- Aggregate proposed service retirement rates reflecting both age and service



# Rates of Termination from Active Status - General

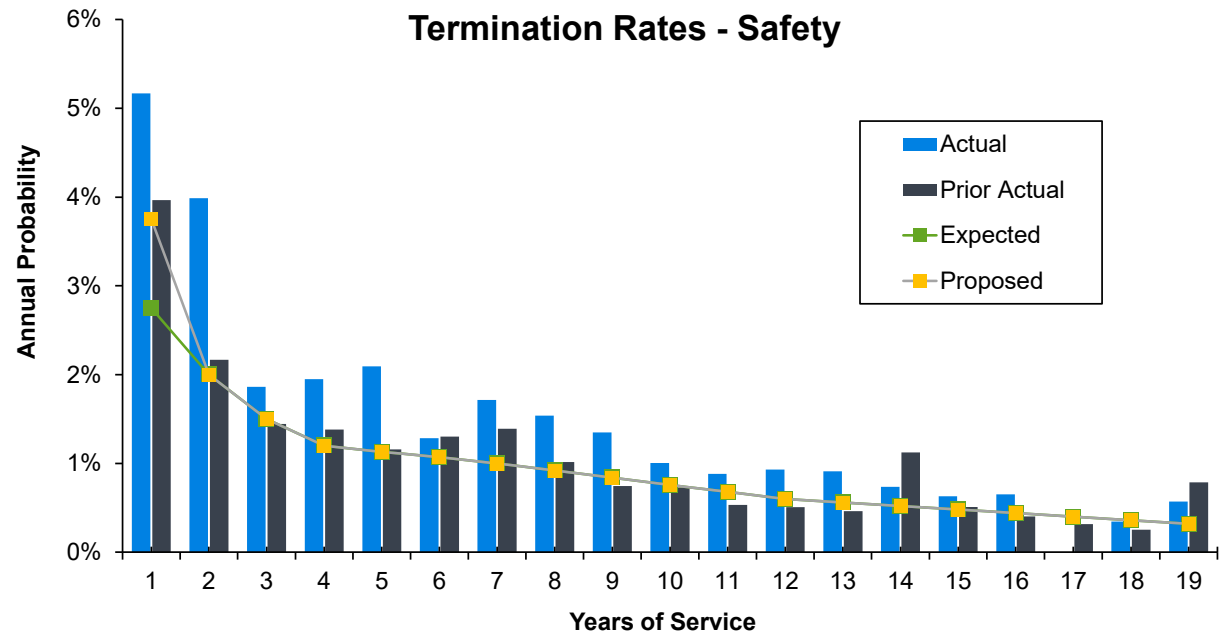
- About 45% more terminations than assumed to occur
  - Particularly from June '20 to June '22
- Revisions proposed to better fit patterns and prior period data
  - Plan D & G as shown
  - Plan E (not shown) - minor changes at lower years of service (8 – 10 years)



	2019 - 2022 Data		
	Expected	Actual	Proposed
Total Count	3,778	5,489	4,559
Actual / Expected	145%		120%

## Rates of Termination from Active Status - Safety

- About 65% more terminations than assumed to occur
  - Particularly from June '20 to June '22
- Current assumption generally predicts prior period experience quite well
- Minor revision proposed at low service to better fit data



	2019 - 2022 Data		
	Expected	Actual	Proposed
Total Count	287	474	322
Actual / Expected	165%		147%



## Other Recommendations: Demographic Assumptions

- Probability of refund: small reductions
- Disability retirement rates: no changes to current rates
- Death while active: continue to use public plan specific table; update improvement scale
- Assumed retirement age for deferred members: no changes
- Beneficiary age difference:
  - 2 years older for beneficiaries of female retirees (no change)
  - 3 years younger for beneficiaries of male retirees (current is 4 years younger)
- Probability of eligible survivor:
  - 48% for females (current is 50%); 77% for males (no change)
- Probability future deferred vested members establishes reciprocity with another employer:
  - 17% for General (current is 16%); 36% for Safety (current is 35%)

# **Follow-Up on Economic Assumptions and Actuarial Methods**

# Economic Assumptions and Methods Recap

- Economic Assumption Recap
  - No changes recommended

Assumption	Current = Proposed
Investment Return	7.00%
National Price Inflation	2.75%
Local Price Inflation	2.75%
Wage Growth	3.25%
Payroll Growth	3.25%
COLA (Plan A / Other Plans)*	2.75% / 2.00%

*\* Plan A COLAs for current retirees are valued at 3.0% to reflect COLA banks.*

- Actuarial Method Recap
  - Recommendation: Exclude STAR Reserve from Valuation Assets
  - Recommendation: Add modification to 5-Year smoothing to offset current year gains/losses against prior year losses/gains
  - Recommendation: Shorter amortization period for plan changes

# **Estimated Financial Impact**

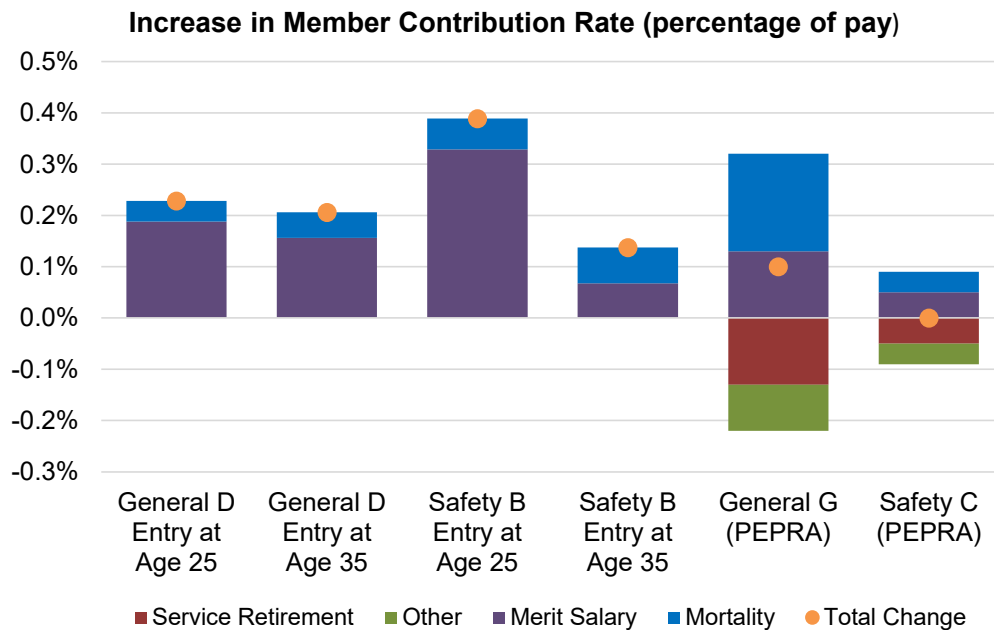
## Financial Impact – Funded Ratio / Employer Rates

- Employer contribution rate:
  - FYB 2023 rate is 0.3% of payroll lower than FYB 2022 rate (before changes)
  - FYB 2023 rate is 1.4% of payroll higher than FYB 2022 rate (after changes)
- Funded Ratio (FR):
  - 2023 FR is 1.7% higher than 2022 FR (before changes)
  - 2023 FR is 0.4% higher than 2022 FR (after changes)

	Funded Ratio	Total Employer Contribution	
		% of Payroll	\$ millions
<b>June 30, 2021 Valuation</b>	<b>79.3%</b>	<b>24.5%</b>	<b>\$ 2,205</b>
<b>Estimated June 30, 2022 Valuation (before changes)</b>	<b>81.0%</b>	<b>24.2%</b>	<b>\$ 2,178</b>
<b>Recommended Actuarial Method Changes</b>			
Alternate Asset Smoothing	0.0%	0.2%	\$ 18
Exclude STAR Reserve from Funding Assets	-0.5%	0.5%	44
<b>Total Method Changes</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>\$ 62</b>
<b>Recommended Economic Assumption Changes</b>			
<b>Economic Assumptions</b>	<b>0.0%</b>	<b>0.0%</b>	<b>\$ -</b>
<b>Recommended Demographic Assumption Changes</b>			
Merit Salary Increases	-0.5%	0.7%	\$ 62
Service Retirement	-0.9%	1.1%	98
Mortality	0.5%	-0.6%	(52)
Other	0.1%	-0.2%	(15)
<b>Demographic Assumption Changes</b>	<b>-0.8%</b>	<b>1.0%</b>	<b>\$ 93</b>
<b>Recommended Changes</b>			
<b>Total Recommended Changes</b>	<b>-1.3%</b>	<b>1.7%</b>	<b>\$ 155</b>
<b>Estimated June 30, 2022 Valuation (with all changes)</b>	<b>79.7%</b>	<b>25.9%</b>	<b>\$ 2,333</b>

\* All amounts and percentages shown on this page are estimates except June 30, 2021 values

# Financial Impact – Member Contribution Rates



	Change in Member Rate	Average Monthly Salary	Change in Monthly Contribution
<b>Legacy Members</b>			
- General D (Entry Age 25)	0.23%	\$ 8,200	\$19
- General D (Entry Age 35)	0.21%	\$ 8,200	\$17
- Safety B (Entry Age 25)	0.39%	\$ 11,600	\$45
- Safety B (Entry Age 35)	0.14%	\$ 11,600	\$16
<b>PEPRA Members</b>			
- General	0.10%	\$ 6,100	\$6
- Safety	0.00%	\$ 8,300	\$0

- Increase in member contribution rates for most members
- Amount of increase dependent on plan and entry age (for Legacy plan members)
  - Legacy members with younger entry ages will see largest percentage increase

# Recommendations

- Merit salary increases
  - Changes for General and Safety members, overall increases compared to current assumption
  - Reflects the trend of larger increases for longer service employees
- Retiree mortality
  - No changes to mortality tables
    - Based on public-plan specific mortality data customized to LACERA experience
  - Update to latest mortality projection scale
- Service retirement rates
  - Small adjustments to age-based retirement rates
  - Added additional adjustments to reflect impact of service levels on retirement rates
    - Provides a more accurate estimate of liabilities and cash flow and is consistent with trends among public systems
- Other demographic assumptions
  - Minor adjustments to termination rates for some groups

# Questions





## Caveats and Disclaimers

This presentation is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated November 22, 2021, supplemented by information included in the Preliminary Funding Estimate letter dated September 23, 2022. The statements of reliance and limitations on the use of this material is reflected in the actuarial report and still apply to this presentation.

These statements include reliance on data provided, on actuarial certification, and the purpose of the report.

Milliman's work product was prepared exclusively for LACERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning LACERA's operations, and uses LACERA's data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

## **Attachment V**

### **Actuarial Projects 2022 - Roadmap**

# Actuarial Projects 2022

## Pension Plan

### Risk Assessment Report

Milliman will present the 2022 Risk Assessment report for the June 30, 2021 Valuation report.

### Demographic Assumptions

This meeting will focus on the review and methods used for the demographic (retirement rates, mortality rates, etc.) assumptions done by Milliman.

### Valuation Report

Milliman will discuss the actuarial valuation results using the Board's approved assumptions in the experience study report.

June 2022

October 2022

November 2022

December 2022

March 2023

Apr.–May 2023

### Economic Assumptions

The actuary will review and recommend changes on assumptions such as Price inflation, wages inflation, discount rate, payroll growth.

### Experience Study Report

The Board will need to decide on the actuary (Milliman) recommendations for both the demographic and economic assumptions changes.

### EE and ER Contribution Rates Presentation

California State Law requires LACERA to transmit the approved and recommended contribution rates to the Board of Supervisors prior to May 15.

November 28, 2022

**TO:** Each Trustee,  
Board of Retirement  
Board of Investments

**FROM:** Carly Ntoya, Ph.D.  
Director, Human Resources

Connie Chan<sup>CC</sup>  
Senior Human Resources Analyst

**FOR:** December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

**SUBJECT:** Financial and Accounting Services Division Classification/Compensation Changes

### RECOMMENDATIONS

- 1) It is recommended that the proposed classification and compensation changes be approved for implementation for the existing Accounting Officer II, LACERA; Accounting Officer I, LACERA; Senior Accountant, LACERA; Accountant, LACERA; and Accounting Technician I, LACERA, including submission to the Board of Supervisors (BOS);
- 2) It is recommended that the proposed classification and compensation changes be approved for implementation for the creation of new Senior Investment Accountant, LACERA; Investment Accountant, LACERA; and Accountant II, LACERA classifications, including submission to the BOS; and
- 3) It is recommended that the Accounting Technician II, LACERA classification be deleted from the Ordinance, including submission to the BOS.

### SUMMARY OF PROPOSED CLASSIFICATION AND COMPENSATION CHANGES

Action	Current Classification Title	Current Sal Sch	New Classification Title	New Sal Sch	% Increase
Title/Sal Change	Accounting Officer II	106J MO	Investment Accounting Officer	113L M	18.24%
Title/Sal Class	Accounting Officer I	103B MO	Accounting Officer	110K M	20.02%
New Class			Senior Investment Accountant	105G MO	20.61%
Sal Change	Senior Accountant	98H MO	No Change	101H MO	8.48%
New Class			Investment Accountant	98G MO	11.74%
New Class			Accountant II	96A MO	4.27%
Title Change	Accountant	94F MO	Accountant I	No Change	0%

Title Change	Accounting Technician I	85L MO	Accounting Technician	No Change	0%
Delete	Accounting Technician II	85J NMO	Delete from Ordinance		

Note: LACERA Compensation effective 1/1/2022. Proposed compensation will be adjusted based on future approved compensation adjustments. All classifications are LACERA-specific.

The recommended titles and salary ranges serve to bring LACERA's classes closer to compensation levels provided by the market while preserving LACERA's current pay differential practice to ensure appropriate internal equity.

The authority to implement proposed title changes and proposed salary adjustments for the above classifications rests jointly with the Board of Retirement and Board of Investments. Such authority is provided in the California Government Code Sections 31522.1, and will require the BOS to amend the Salary Ordinance.

This item is being brought to the Boards without a JOGC recommendation because the committee lacked a quorum at its November 16, 2022 meeting. The JOGC Chair expressed his desire, in managing the committee's business, that the item be presented directly to the Boards instead of being reagendized for the JOG-C; other committee members, less than a quorum, agreed.

## EXECUTIVE SUMMARY

### Background

It is a human resources best practice to update class specifications and market price salaries on a periodic basis, in line with LACERA's philosophy to pay fair and competitive wages that will attract, retain, and motivate a highly skilled workforce and support its Mission to Produce, Protect and Provide the Promised Benefits to its membership. LACERA's previous department-wide study on FASD positions was last conducted in 2006. Beginning in 2015, Human Resources (HR) found difficulty recruiting Investment Accountants from the outside market. Given that a specific "Investment Accountant" classification does not exist, specialty exams were run with desirable qualifications related to investment accounting. Candidates were still required to meet the Minimum Requirements as stated on the existing generic Accountant, LACERA classification.

Feedback received from potential candidates and new hires indicated that:

1. LACERA's compensation for Investment Accountant positions is significantly lower than the outside market and would require potential candidates accept a significant pay reduction if hired; and
2. Potential candidates with investment accounting experience typically do not have the 21 accounting units required in the Minimum Requirements of the existing Accountant, LACERA and Accounting Officer II, LACERA classes. Education often consists of a combination of finance, economics, and/or accounting courses, resulting in disqualification of experienced Investment Accountant candidates.

From March 2015, through September 2018, HR conducted four recruitments for Investment Accountants, two (2) each for Accountant, LACERA and Accounting Officer II, LACERA. HR conducted an aggressive and active recruitment via extensive advertisements and targeted LinkedIn searches. The four recruitments garnered a total of 15,752 hits to the LACERA website but resulted in only twenty-three (23) eligible candidates placed on the eligible registers and only five (5) new hires. A majority of eligible candidates qualified to be on the lists based on the Minimum Requirements but did not have the specialized investment accounting experience needed. All five (5) new hires negotiated for and received a special starting salary adjustment to Step 5, based on previous salary documentation. Two of the Accounting Officer II, LACERA new hires have since resigned and returned to their previous employers. Based on review of failed applications and feedback from potential candidates contacted via LinkedIn, it was found that the existing education requirements and compensation levels of the Accountant, LACERA and Accounting Officer II, LACERA were barriers to finding qualified Investment Accountants, as they tend to have majors in economics or finance and make significantly more than the compensation offered at LACERA.

In October 2017, HR engaged AON Consulting (AON) to conduct a classification and compensation study (Study) of LACERA's general and investment accounting positions. The purpose of the Study was to address LACERA's recruitment issues related to Investment Accountants and update the classifications, as needed. It is a compensation best practice to market price salaries on a periodic basis; therefore, general Accountants were also included in the Study.

As part of the Study, AON reviewed the class specifications and compared the salary levels of LACERA's accounting positions to a diverse peer group consistent with past studies, which included California-based public pension funds, Los Angeles County (LA County), and the private sector. AON provided salary range recommendations based on market data, of which 75% of data collected was from public sector organizations and 25% of data collected was from private sector organizations.

The Study included twenty-six (26) positions in five (5) existing classifications. All five classifications are represented by SEIU.

1. Accounting Officer II, LACERA
2. Accounting Officer I, LACERA
3. Senior Accountant, LACERA
4. Accountant, LACERA
5. Accounting Technician I, LACERA

FASD findings and recommendations provided by AON include title changes, description revisions, and/or salary changes to all five (5) studied classifications and creation of three (3) new classifications.

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After completion of the Study, an exam was conducted for Senior Accountant, LACERA, to fill three (3) vacant supervisory positions. The job posting was opened and suspended multiple times from April 21, 2021, through May 24, 2022. The job posting received 10,536 hits and 142 applications. There was only one (1) qualified external applicant with investment accounting experience. The exam resulted in only 21 eligible candidates on the resulting register, with 9 in Band 2. Of those, three (3) internal candidates were promoted, and three (3) external candidates declined to be hired due to offers elsewhere.

Based on communication with applicants and potential candidates, it appears that aside from compensation being an issue for all Accountants, preference for full-time remote work brought on by the pandemic made it even harder to find qualified candidates. In addition, minimum education requirements and relevant investment accounting experience continue to still be an issue when seeking Investment Accountants.

## **CLASSIFICATION AND COMPENSATION STUDY**

### Classification Recommendations

Civil Service Rule 5.01 requires that a class specification be developed and maintained for each class in the classification service to meet the needs of the service for the allocation of new positions and the reallocation of existing positions. A fundamental principle in classification is that the class specification should describe and define the nature and scope of responsibilities, work activities, qualifications, and other level defining characteristics of the class so that it is properly classified within the classification structure.

Classes, and jobs within them, evolve for many reasons and under many influences. A classification may undergo gradual growth that results in additional or changed duties and responsibilities and thereby require a corresponding class specification be amended or a position be reclassified to a new or existing classification. To keep current, a class specification should be reviewed when significant duties and level of responsibilities change.

It is LACERA's goal to ensure that titles and class specifications reflect current assignments, responsibilities, programs, and technology. AON based its comparative analysis on essential job functions, level of responsibility, and reporting relationships. As a result of the Study findings, HR and AON propose new classifications and revisions to current classification titles and specifications to more accurately reflect duties and responsibilities performed.

Based on the Study findings, HR recommends:

- creation of new classifications for investment accounting positions;
- creation of new senior journey-level Accountant II, LACERA and Investment Accountant, LACERA classifications performing at a lead or highly technical level;
- classification of the Accounting Officer and Investment Accounting Officer as non-represented and exempt from the Fair Labor Standards Act (FLSA); and

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- revision of existing classification titles and specifications to more accurately reflect the duties and responsibilities of the positions.

#### Notable Changes

The existing Accountant, LACERA classification will be retitled as Accountant I, LACERA and will act as a feeder class for the new Accountant II, LACERA and the Investment Accountant, LACERA classifications. Entry level functions for both investment and general accounting are combined into the single Accountant I, LACERA classification as they were recommended to be compensated at the same rate. The Investment Accountant, LACERA and Accountant II, LACERA are created to accurately classify staff members working at the senior-journey level such as acting as a lead and/or technical specialist, depending on assignment as detailed on the class specifications.

The exiting Accounting Technician II, LACERA classification will be deleted. There are no budgeted positions in this classification and the classification concept is obsolete.

During the Study, FASD implemented a significant organizational change. Originally, FASD had one (1) Accounting Officer I, LACERA assigned to oversee the General Accounting Section and one (1) Accounting Officer II, LACERA assigned to oversee the Investment Accounting Section. In Fiscal Year 2019-20, a second Accounting Officer II, LACERA position was added through the budget process by the previous Chief Financial Officer, LACERA to oversee a newly created Reporting and Compliance Section. Unfortunately, the Accounting Officer II, LACERA classification was not the appropriate level because the new Reporting and Compliance Section had only one subordinate and did not perform duties related to investment accounting. Therefore, it was determined to consolidate the Reporting and Compliance function with General Accounting into the updated Accounting Officer, LACERA class specification and compensate at the market-rate as recommended by AON. The extraneous Accounting Officer II, LACERA position will be deleted in the next budget.

The Study recommended that the Accounting Officer I, LACERA and Accounting Officer II, LACERA be retitled as Accounting Officer, LACERA and Investment Accounting Officer, LACERA to more accurately reflect functions performed. In addition, it was determined that the Officer positions shall be classified as non-represented and FLSA exempt based on the Fair Labor Standards Act (FLSA) Administrative Exemption test because:

- Both positions are compensated on a salary basis of more than \$107,432/annually.
- Both positions have the primary duty of performance of office/non-manual work directly related to management and general business operations because they are second level supervisors responsible for a major accounting function for LACERA.
- Both positions have the authority to exercise discretion and independent judgement on matters of significance when developing and implementing new and revised policies and procedures, assisting and acting in the absence of the Assistant Chief Financial Officer and Chief Financial Officer, and playing a major role in the selection process and other personnel matters.



All other title and compensation changes will be implemented through a revision of the existing FASD classifications in the Ordinance.

The below chart summarizes how the existing classifications will change to the proposed new classification titles, bargaining unit, and FLSA exempt status:

Current Classification Title	New Classification Title	BU	FLSA Exempt?
<b>Accounting Officer II</b>	Investment Accounting Officer	-	Yes
<b>Accounting Officer I</b>	Accounting Officer	-	Yes
<b>NEW</b>	Senior Investment Accountant	851	No
<b>Senior Accountant</b>	No Change	851	No
<b>NEW</b>	Investment Accountant	850	No
<b>NEW</b>	Accountant II	850	No
<b>Accountant</b>	Accountant I	850	No
<b>Accounting Technician I</b>	Accounting Technician	850	No

All staff members will automatically convert to the updated classification titles as shown in the above chart. Staff members found to be performing at the level of Accountant II, LACERA; Investment Accountant, LACERA; or Senior Investment Accountant, LACERA will go through the Civil Service Process to promote to the new classifications.

Classification Study findings per position are shown in the proposed new organization chart provided in **Attachment A**.

Class Specifications revisions are shown as **Attachment B**.

#### Compensation Recommendations

LACERA recommends aligning the compensation for the studied positions to market rates while taking into consideration internal equity and sufficient salary differentials between positions. The market rates were aged annually in accordance with negotiated salary agreements and the proposed salaries below are for 2022. Proposed salaries will be adjusted upward by 3% on January 1, 2023 based on the current agreement with SEIU for represented classifications and Board approved adjustments for non-represented classifications.

The Study found the following two (2) classifications are currently compensated at above the market; therefore, no salary range adjustment is recommended. Recommendations based on the market rate provided by AON is shown below for reference.

Classification	Current Pay Range	Current Salary Maximum	AON Market Salary Maximum
Accountant I	94F MO	\$7,311	<b>\$6,574.00</b>

Accounting Technician I	85L MO	\$5,799	<b>\$4,974.00</b>
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The Study found the following three (3) classifications are currently compensated below the market; therefore, the following salary range adjustments are recommended by AON:

Classification	Current Pay Range	Current Salary Maximum	New Pay Range	New Salary Maximum
Investment Accounting Officer	106J MO	\$10,199	113L M	\$12,060
Accounting Officer	103B MO	\$9,241	110K M	\$11,091
Senior Accountant	98H MO	\$8,190	101H MO	\$8,884

The following three (3) classifications are new; therefore, considering the market rate and internal equity, the following salaries are recommended:

New Classification	New Pay Range	New Salary Maximum
Senior Investment Accountant	105G MO	\$9,877
Investment Accountant	98G MO	\$8,170
Accountant II	96A MO	\$7,624

#### Budget Impact

Implementation of the Study findings as recommended will result in an annual budget increase of \$94,074.34 and a reduction of one position authority (Accounting Officer II).

HR's summary of current and proposed salaries and a breakdown of the budget impact is shown in **Attachment C**.

### **PROCEDURE FOR ESTABLISHING CLASSIFICATIONS AND PAY RANGES**

LACERA provides Local 721 notice and consult regarding new classifications of which the primary duties are derived from represented classifications. LACERA notified Local 721 of proposed classification and compensation changes on July 29, 2022, and they provided their concurrence on November 7, 2022.

On November 16, 2022, the JOG-C met to review and consider the classification and compensation changes proposed by staff, but no action was taken for lack of quorum. Staff recommendations are therefore provided directly to the Boards for review and adoption.

Upon approval from the Board of Retirement and Board of Investments, Human Resources (HR) will prepare a memorandum to the Los Angeles County's Chief Executive Office (LACCEO) which will include the class specification and salary schedule. The

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Re: FASD Classification/Compensation Changes

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LACCEO Class and Compensation staff will review the submitted documents to assure all necessary information is provided in order to revise the classification title and salary schedule in the County's Payroll System. HR staff, with the LACERA Legal Office's oversight, will prepare and submit an ordinance amending Sections 6.28.050 and 6.127.010 of LACERA's Salary Code to the Los Angeles County Counsel's Office and the BOS for adoption. These actions will create the new Senior Investment Accountant, LACERA; Investment Accountant, LACERA; and Accountant II, LACERA classifications and modify the classification titles, class descriptions, and/or compensation of the existing Accounting Officer II, LACERA; Accounting Officer I, LACERA; Senior Accountant, LACERA; Accountant, LACERA; and Accounting Technician I, LACERA.

## **RECOMMENDATION**

### **THAT THE BOARDS APPROVE:**

- 1) That the proposed classification and compensation changes be approved for implementation for the existing Accounting Officer II, LACERA; Accounting Officer I, LACERA; Senior Accountant, LACERA; Accountant, LACERA; and Accounting Technician I, LACERA classifications by the Board of Retirement and Board of Investments, including submission to the Board of Supervisors (BOS);
- 2) That the proposed classification and compensation changes be approved for implementation for the creation of new Senior Investment Accountant, LACERA; Investment Accountant, LACERA; and Accountant II, LACERA classifications, including submission to the BOS; and
- 3) To delete the Accounting Technician II, LACERA classification from the Ordinance, including submission to the BOS.

### **Attachments**

cc: Steven P. Rice  
Laura Guglielmo

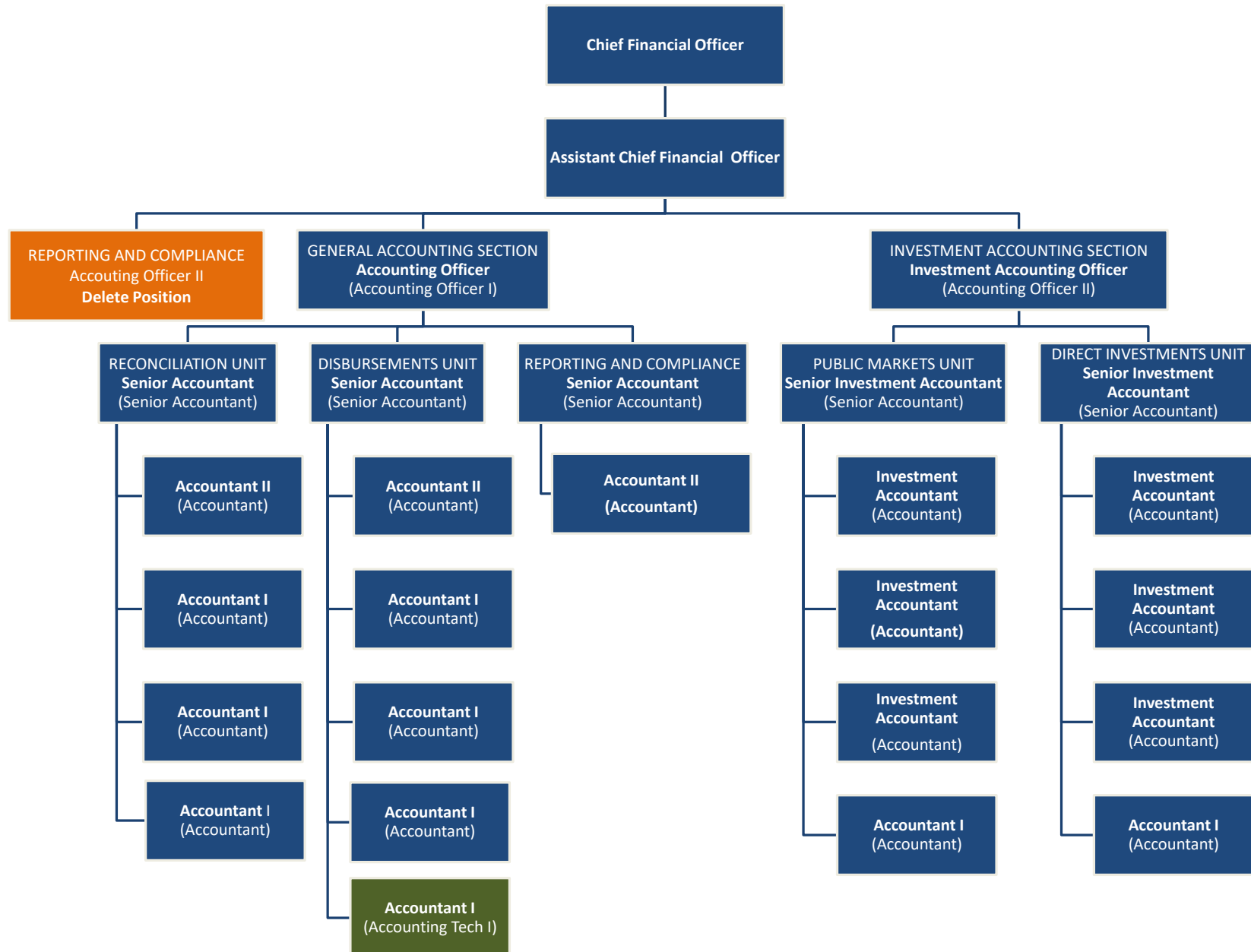
Santos H. Kreimann  
JJ Popowich

Luis A. Lugo

FASD  
PROPOSED ORG CHART

New position classification is shown in **Bold**. Original budgeted position title is show in (parenthesis).

ATTACHMENT A



LAST UPDATE: 5/10/2021

**CLASSIFICATION TITLE:** Accounting Technician I, LACERA

**ITEM NO:** 0413

**DEFINITION:**

Performs accounting operations or cost accounting work requiring the application of established principles of double entry accrual accounting and a substantive knowledge of generally accepted accounting principles, under general supervision at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class are assigned to the General Accounting Section of the Financial and Accounting Services Division (FASD). The position performs various accounting duties related to the maintenance of LACERA's Pension Trust and Retiree Healthcare (RHC) Benefits Program Funds, General Ledger System, Accounts Payable System, receipts of members' funds and Los Angeles County and Outside Districts' retirement and healthcare contributions.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Analyzes and calculates members' semi-weekly and month-end Federal and State income tax deposits using the Member Workspace system and reports.

Processes retiree payroll tax deposits and ensures deposits are made to the proper taxing agencies and verified through reports provided by LACERA's commercial banking service provider.

Reconciles transmitted daily check issues of Retiree Payroll, Administrative, and RHC bank accounts per accounting records, compares to records from commercial bank service provider, and prepares reconciliation reports for review by an Accountant.

Prepares schedule of retirees' healthcare benefit based on Member Workspace reports and identifies the members' liability, employers' liability, and Medicare portion using the daily Member Workspace report. Reconciles and verifies accuracy of information.

For retiree benefit payments made, processes stop payment and ACH adjustment requests received from the Benefits and/or Member Services Division(s).

Generates bank statement reports for Retiree Payroll, Administrative, and RHC bank accounts.

Monitors daily bank transactions and balances based on the daily bank statement reports to ensure cash flow is accurate and correct.

Secures all supporting documents for the account activities and forwards bank statements and supporting documents to an Accountant or Supervisor for review.

Processes and reconciles physical voided checks received from the Administrative Services Division. Verifies the recording of voided checks within members' accounts and monitors any outstanding unrecorded checks.

Organizes and sorts daily Member Workspace disbursement reports for reconciliation and recording purposes. Distributes to staff in charge of the accounts.

Enters journal entry transmittals into general ledger accounting application for approval and verifies the accuracy.

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE**

OPTION 1: Completion of twelve (12) semester units or eighteen (18) quarter units of accounting including a course in either advanced accounting or cost accounting in an accredited college or university -AND- one (1) year of clerical accounting experience.

OPTION 2: Graduation from an accredited junior college or two-year business college with completion of the full accounting curriculum prescribed by the school of record.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

LAST UPDATE: ~~9/29/2014~~16/20215/10/2021

**CLASSIFICATION TITLE:** Accounting Technician I, LACERA

**ITEM NO:** 0413

**DEFINITION:**

Performs accounting operations or cost accounting work requiring the application of established principles of double entry accrual accounting and a substantive knowledge of County generally accepted accounting principles, under general supervision at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

~~The Accounting Technician I, LACERA Positions allocable to this class are assigned to in the General Accounting Section of LACERA's the Retirement Financial and Accounting Services Division (FASD).- The position performs various accounting duties related to the maintenance of LACERA's Pension Trust and Retiree Healthcare (RHC) Benefits Program RHCBP Funds, eEnterprise General Ledger System, eEnterprise Accounts Payable System, receipts of members' funds and Los Angeles County and Outside Districts' retirement and healthcare contributions.~~

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Analyzes and calculates members' semi-weekly and month-end Federal and State income tax deposits using the Member Workspace system and reports.

Processes retiree payroll tax deposits and ensures deposits are made to the proper taxing agencies and verified through reports provided by LACERA's commercial banking service provider.

Reconciles transmitted daily check issues of Retiree Payroll, Administrative, and RHC bank accounts per accounting records, compares to against records from confirmed by custodial commercial bank service provider, records and prepares reconciliation reports for review by an Accountant.

Prepares schedule of retirees' healthcare benefit based on Member Workspace reports and identifies the members' liability, employers' liability, and Medicare portion using the daily Member Workspace report.— Reconciles and verifies accuracy of information.

For retiree benefit payments made, pProcesses stop payment and ACH adjustment requests on retiree benefits received from the Benefits and/or Member Services Division(s).

~~Monitors daily bank transactions and balances based on the Daily Bank Statement Report to ensure cash flow is accurate and correct.~~

~~Generates bank statement reports for Retiree Payroll, Administrative, and RHC bank accounts.~~

~~Monitors daily bank transactions and balances based on the dDaily bBank sStatement rReports to ensure cash flow is accurate and correct.~~

~~Secures all supporting documents for the account activities and forwards bank statements and supporting documents to an Accountant or Supervisor for review.~~

~~HandlesProcesses and reconciles physical voided checks received from the Administrative Services Division. Verifies the recording of voided checks within members' accounts and- mMonitors any outstanding unrecorded checks-monthly.~~

~~Organizes and sorts daily Member Workspace disbursement reports for reconciliation and recording purposes. Distributes to staff in charge of the accounts.~~

~~Enters journal entry transmittals into accounting systemgeneral ledger accounting application for approval and verifies the accuracy.~~

~~May be required to perform other duties as assigned.Processes daily miscellaneous receipts of funds affecting Members Reserves, Employees Reserves, Overpayment Receivable Accounts, insurance premiums, reimbursable costs, reimbursements of various administrative expenses, etc.~~

~~Verifies and processes various daily Payment Requests through the eEnterprise Accounts Payable System which include inputting of payment requests' journal entries to the eEnterprise General Ledger System send printing of Payable Transaction Edit Lists.~~

~~Verifies and processes daily IRIS checks printing in accordance with the established security procedures; maintains files of automated Systems and Accounting log of daily paid IRIS checks.~~

~~Analyzes and prepares monthly set up of Retirement Benefit Overpayment Receivable; inputs relative journal entries to the eEnterprise General Ledger System and prints General Transaction Edit List.~~

## **MINIMUM REQUIREMENTS:**

## **TRAINING AND EXPERIENCE**



OPTION ~~A1: Accounting Education:~~ Completion of twelve (12) semester units or eighteen (18) quarter units of accounting including a course in either advanced accounting or cost accounting in an accredited college or university, ~~or equivalent accounting education.~~  
~~Experience: -AND- o~~One (1) year's of accounting clerical accounting experience.

OPTION 2B: Education: Graduation from an accredited junior college or two-year business college with completion of the full accounting curriculum prescribed by the school of record.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

~~Physical Class~~**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

**CLASSIFICATION TITLE:** Accountant I, LACERA

**ITEM NO:** 0415

**DEFINITION:**

Performs journey level professional financial or investment accounting and auditing functions at the Los Angeles County Employee Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class perform journey level professional accounting and auditing work in the Financial and Accounting Services Division (FASD). Under the general supervision of a higher-level accounting professional, incumbents of these positions are responsible for performing a variety of financial accounting functions, accounting information technology systems and cost accounting assignments in connection with the overall operation of a moderate scale accounting system and a large scale investment program requiring a professional level of knowledge of accounting principles and practices, including: cost accounting, governmental accounting, financial accounting, investment accounting, auditing, accounting software, and general office procedures.

Incumbents assigned to perform investment accounting functions are responsible for the analysis, reconciliation, reporting and maintenance of investment transactions requiring a professional level of knowledge of accounting principles and practices, including: investment assets, investment funds, investment fund accounting, governmental accounting, financial accounting, auditing, general ledger accounting applications, accounting information technology systems, and general office procedures.

Incumbents operate personal computers and 10-key adding machines in the performance of their duties. Incumbents must exercise initiative and independent judgement within defined accounting principles and procedures.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

**General Accounting**

Interprets financial accounting, government financial statement reporting, and other financial provisions of a variety of laws and regulations, recommending steps for their implementation.

Conducts the routine cost surveys, revenue analyses, and financial accounting systems and procedural studies, writes reports of findings in which recommendations for modifications or other action are made, and participates in installation of accounting information technology systems and procedures.

Compiles and evaluates complex consolidated and operating statements, final accountings for projects with large budgets, and claims for reimbursement from other government agencies or private contractors.

Performs routine audits of the books of other governmental agencies or private contractors and writes audit reports; or assists with more complex audits. x.

Verifies filing of the retiree payroll tax withholdings remitted to the Internal Revenue Service across reportable accounts.

May review and participate in day-to-day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, creating the trial balance, reconciling and personally preparing year-end closing transactions as an incident to performing other more difficult accounting assignments.

May serve as liaison with County departments or governmental agencies concerning accounting matters.

### **Investment Accounting**

Monitors, analyzes, reconciles, records transactions, maintains daily and monthly investment accounting records, and prepares reports throughout the year or at year-end.

Prepares and generates financial statement schedules and internal reports based on investment accounting data.

Researches, develops, and implements procedural changes to investment accounting policies, procedures, and practices.

Participates in daily accounting operations, such as daily wire monitoring functions, wire transaction data entry, accounts payable check reviews, approval and posting of investment funding/distributions, and provides support for special requests from internal offices.

Works closely with the Investment Office staff.

Verifies and releases State and Federal income tax payments initiated through their online payment systems.

Maintains physical and electronic documentation to support wire transfer transactions.

May assist with the preparation of reports, summaries, and financial statements impacting the Annual Comprehensive Financial Report (ACFR), compliance with financial reporting standards, and with projects completed by external auditors and consultants.

May work on special financial accounting projects within the Division.

May be required to perform other duties as assigned.

**MINIMUM REQUIREMENTS:**

**TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting, including at least two (2) courses in advanced subjects such as cost accounting, governmental accounting, financial accounting, or auditing in an accredited college or university -AND- either two (2) years of professional accounting or auditing experience, or three (3) years of responsible technical accounting experience.

**SPECIALTY REQUIREMENTS:**

Investment Accounting

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and three (3) courses in advanced subjects such as accounting, finance, economics, or auditing - AND- Two (2) years professional investment fund accounting or investment-related auditing experience.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

LAST UPDATE: ~~5/7/2021~~~~3/26/2021~~5/21/2021

**CLASSIFICATION TITLE:** Accountant I, LACERA

**ITEM NO:** 0415

**DEFINITION:**

Performs journey level professional financial or investment accounting and auditing ~~functions~~~~work, under general supervision~~ at the Los Angeles County Employee Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class perform journey level professional accounting and auditing work in the ~~retirement accounting division~~Financial and Accounting Services Division (FASD).

Under the general supervision of a ~~higher~~higher-level accounting professional, incumbents of these positions are responsible for performing a variety of financial accounting functions~~staff~~, accounting information technology systems and cost accounting assignments in connection with the overall operation of a moderate scale accounting system and a large scale investment program requiring a professional level of knowledge of accounting principles and practices, including: cost accounting,~~;~~ governmental accounting, ~~;~~ financial accounting,~~;~~ investment accounting,~~;~~ ~~and auditing~~,~~;~~ accounting information technology software,~~;~~ ~~and~~, general office procedures,~~;~~ ~~and accounting information technology software~~.

Incumbents assigned to this position perform investment accounting functions ~~and are responsible for the analysis, reconciliation, reporting and maintenance of investment transactions requiring a professional level of knowledge of accounting principles and practices, including: investment assets, investment funds, investment fund accounting, governmental accounting, /financial accounting, auditing, general ledger accounting applications, accounting information technology systems, and, general office procedures, and accounting software.~~

Incumbents operate personal computers and, 10-key adding machines in the performance of their duties. Incumbents must exercise initiative and independent judgement within defined accounting principles and procedures ~~and principles~~.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

financial accounting, **General Accounting**

~~Performs a variety of staff, accounting systems, and financial cost accounting assignments in connection with the overall operation of a moderate or large scale accounting system and has immediate responsibility for one or more of the following:~~

~~May review and participate in day to day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, taking trial balance, reconciling and personally preparing year end closing transactions as an incident to performing other more difficult accounting assignments.~~

~~Interpreting-Interprets the financial accounting, government financial statement reporting, -and other financial provisions of a variety of laws and regulations, recommending steps for their implementation.~~

~~Conducting-Conducts the less complex routine cost surveys, revenue analyses, and financial accounting systems and procedural studies, writing-writes reports of findings in which recommendations for modifications or other action are made, and participating-participates in installation of accounting information technology systems and procedures.~~

~~Compiling-Compiles and evaluating-evaluates complex consolidated and operating statements, final accountings for large construction and other for projects with large budgets, and claims for reimbursement from other government agencies or private contractors.~~

~~Performing-Performs routine audits of the books of other governmental agencies or private contractors and writesing audit reports; or assists with more complex audits. xconducting an internal audit program approaching in complexity the former.~~

~~Comprehensive (ACFR)with projects completed by external consultants.~~

~~Verifies filing of the retiree payroll tax withholdings remitted to the Internal Revenue Service across reportable accounts.~~

~~May review and participate in day-to-day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, creating thetaking trial balance, reconciling and personally preparing year-end closing transactions as an incident to performing other more difficult accounting assignments.financial~~

May serve as liaison with ~~other~~ County departments or governmental agencies concerning accounting matters.

~~May supervise a small supporting accounting technical and clerical staff.~~

~~May review and participate in day-to-day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, taking trial balance, reconciling and personally preparing year-end closing transactions as an incident to performing other more difficult accounting assignments.~~

### **Investment Accounting**

Monitors, analyzes, reconciles, records transactions, maintains daily and monthly investment accounting records, and prepares reports throughout the year or at year-end and maintains daily and monthly investment accounting records.

Prepares and generates annual financial statement schedules and internal reports based on investment accounting data reporting. Verifies filing of the retiree payroll tax withholdings remitted to the Internal Revenue Service across reportable accounts.

Researches, develops, and implements procedural changes to investment accounting policies, procedures, and practices.

Participates in daily accounting operations, such as daily wire monitoring functions, wire transaction data entry, accounts payable check reviews, approval and posting of investment funding/distributions approved and posted, and provides support for special requests from internal offices.

Works closely with the Investments Office staff.

Verifies and releases State and Federal income tax payments initiated through their online payment accounting systems.

Maintains physical and electronic documentation to support wire transfer transactions.

May assist with the preparation of reports, summaries, and financial statements impacting the Annual Comprehensive Annual Financial Report (ACFR), compliance with financial reporting standards, and with actual projects completed by external auditors and consultants.

May work on special financial accounting projects within the Division.

May be required to perform other duties as assigned.

### **MINIMUM REQUIREMENTS:**

## TRAINING AND EXPERIENCE:

~~Accounting Education:~~ Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting, including at least two (2) courses in advanced subjects such as cost accounting, governmental accounting, financial accounting, or auditing in an accredited college or university, or equivalent accounting education.

-AND-

~~Experience:~~ ~~Either~~ one ~~two~~ (2) years ~~of~~ professional accounting or auditing experience, ~~or~~ ~~two~~ three (3) years of responsible ~~or supervisory~~ technical accounting experience.

~~LICENSE:~~ A valid California Class C Driver License ~~or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.~~

### Additional Information

~~PHYSICAL CLASS II - Light~~ physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

## SPECIALTY REQUIREMENTS:

### Investment Accounting

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and three (3) courses in advanced subjects such as accounting, finance, economics, or auditing - AND- Two (2) years professional investment fund accounting or investment-related auditing experience.

LICENSE: A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

PHYSICAL CLASS II - Light physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.



**CLASSIFICATION TITLE:** Accountant II, LACERA

**ITEM NO:** NEW

**DEFINITION:**

Performs senior-journey level professional financial accounting, auditing, and reporting and internal control compliance functions at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class perform senior-journey level professional accounting and auditing work in the Financial and Accounting Services Division (FASD). Positions perform the more complex accounting work in connection with the overall operation of a moderate scale accounting system, including assisting the supervisor with management of the unit, conducting complex research projects, and acting as a technical specialist to lower-level Accountant I positions. Some positions may be assigned to assist with managing more complex projects conducted by others such as audits and engagements completed by external auditors and other professional consultants; researching and implementing accounting standards, pronouncements, financial statement and regulatory reporting requirements; conducting internal and organization-wide financial reporting; and implementing internal control and compliance initiatives.

Under the general supervision of a higher-level accounting professional, incumbents of these positions are responsible for performing a variety of assignments requiring a professional level of knowledge of accounting principles and practices, including: cost accounting, financial accounting and auditing, government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), general ledger accounting applications, accounting information technology systems, and general office procedures. Incumbents operate personal computers and 10-key adding machines in the performance of their duties.

Incumbents must exercise initiative and independent judgement within defined accounting procedures and project management principles.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

**General Accounting**

Interprets financial accounting, payroll tax and other financial provisions of a variety of laws and regulations, recommending steps for their implementation. Communicates implementation plans and projects with appropriate parties and monitors from project initiation to completion.

Conducts complex cost surveys, revenue analyses, and accounting information technology systems and procedural studies, writes reports of findings in which recommendations for modifications or other action are made, and participates in installation and modification of financial information technology systems and procedures.

Compiles and evaluates complex consolidated and operating financial statements, final accountings for large projects with large budgets and claims for reimbursement from other government agencies or private contractors.

Performs routine audits of the books of other governmental agencies or private contractors and writes audit reports; or conducts an internal audit or an internal control compliance program.

Supervises unit in the absence of the Supervisor making decisions on ad hoc matters; attends meetings with Supervisor or in absence of Supervisor; reviews the work of Unit staff; and assists Supervisor in making sure all matters within the Unit are addressed.

Responsible for providing training and assistance to lower-level Accountant I staff and/or temporary staff.

Prepares lead schedules, technical summaries, and drafts footnotes for annual financial statements. Communicates and provides information to internal, external financial statement auditors, and external professional consultants.

Performs complex and technical assignments which may include analysis and reporting, requiring knowledge of an internal process, accounting treatment or other specialized area.

Prepares complex schedules and reports that may include general ledger data, supporting information for Board and/or external reports, travel and expenditure information, cash flows, monthly or annual organizational expenses, payroll tax schedules, and other similar type reporting.

May review and participate in day-to-day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, preparing a trial balances, reconciling and personally preparing year-end closing transactions as an incident to performing other more difficult accounting assignments.

May serve as liaison with other County departments, governmental agencies, external service providers and consultants, plan sponsors, and clientele, concerning accounting matters.

May assist with the preparation of reports, summaries, and financial statements impacting the Annual Comprehensive Financial Report (ACFR), compliance with financial reporting standards, and with projects completed by external auditors and consultants.

## **Reporting and Compliance**

Acts as a technical specialist responsible for independently managing and performing highly complex accounting assignments and/or special accounting projects impacting LACERA's annual financial statements, compliance with financial statement/legal/regulatory reporting standards, external consulting and other reports to LACERA's governing Boards; implementing organization-wide accounting strategies; and working directly with external consultants and service providers.

Develops project plans and coordinates the work deliverables for projects completed by external auditors and/or other professional consultants which may include actuaries; organizes meetings, ensures timelines are met, communicates the project status, updates and tasks to be completed with internal staff and external entities; reviews project budgets; reviews and edits reports and materials prepared by the consultants; and makes recommendations to Supervisor for actions to be taken.

Assists with managing and preparing the Annual Comprehensive Financial Report (ACFR) with summaries, updating accounting and financial data through internal records and reports, compiling accounting information technology system data, including new financial statement reporting policies and procedure changes, and extracting data from external reports.

Prepares complex schedules and reports that may include general ledger data, supporting information for Board and/or external reports, travel and expenditure information, cash flows, monthly or annual organizational expenses, payroll tax schedules, and other similar type reporting.

Manages and coordinates organizational initiatives for compliance with contract terms, policies, procedures, audit recommendation implementation, and prepares any required reports.

May work on special financial accounting projects and ad-hoc requests within the Division and for other divisions.

May be required to perform other duties as assigned.

### **MINIMUM REQUIREMENTS:**

### **TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting including at least two (2) courses in advanced subjects such as cost accounting, governmental, financial accounting, or auditing from an accredited college or university or equivalent accounting education -AND- four (4) years professional accounting, auditing, or financial statement reporting and internal control compliance experience.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

DRAFT

LAST UPDATE: 3/26/20215/21/2021

**CLASSIFICATION TITLE:** Accountant II, LACERA

**ITEM NO:** NEW

**DEFINITION:**

Performs ~~senior-~~journey level professional ~~financialgeneral~~ accounting ~~and~~, auditing, ~~and reporting and internal control compliance workfunctions~~, ~~under general supervision~~ at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDSPOSITION INFORMATION:**

Positions allocable to this class perform ~~senior-~~journey level professional accounting and auditing work in the Financial and Accounting Services Division (~~FASD~~). ~~Positions perform the more complex accounting work in connection with the overall operation of a moderate scale accounting system, including assisting the supervisor with management of the unit, conductingand complex special-research projects, and acting as a technical specialist to lower-level Accountant I positions.~~ Some positions may be assigned to assist with ~~managing more complex projects conducted by others such as audits and engagements completed by external auditors and other professional consultantsactuarial related projects~~; research~~esing-ing~~ and ~~implementimplementingsing-ing~~ accounting ~~standards and~~, pronouncements, ~~financial statement~~ and ~~regulatory reporting~~ requirements; ~~and~~ conduct~~sing-ing~~ ~~internal and~~ organization-wide financial reporting; and ~~implementing internal control and~~ compliance initiatives.

Under the general supervision of a ~~higher-higher-~~level accounting professional, incumbents of these positions are responsible for performing a variety of ~~staff, accounting information technology systems and cost accounting~~ assignments requiring a professional level of knowledge of accounting principles and practices, including: cost accounting; ~~governmentalfinancial~~ accounting and auditing; ~~government financial statement reporting standards and procedures~~; ~~generally accepted accounting principles (GAAP)~~; ~~general ledger accounting applications~~; ~~accounting information technology systems, and~~; general office procedures; ~~and accounting information technology software~~.

Incumbents operate personal computers and, 10-key adding machines in the performance of their duties.

Incumbents must exercise initiative and independent judgement within defined accounting ~~principles and~~ procedures ~~and project management principles~~.

**EXAMPLES OF DUTIES:**

~~The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:~~

~~Performs a variety of staff, accounting information technology systems, and cost accounting assignments in connection with the overall operation of a moderate or large scale accounting system and has immediate responsibility for one or more of the following:~~

## General Accounting

Interprets financial ~~the~~ accounting, payroll tax and other financial provisions of a variety of laws and regulations, recommending steps for their implementation. Communicates implementation plans and projects with appropriate parties and monitors from project initiation to completion~~the completion~~.

Conducts complex cost surveys, revenue analyses, and accounting information technology systems and procedural studies, writes reports of findings in which recommendations for modifications or other action are made, and participates in installation and modification of financial information technology systems and procedures.

Compiles and evaluates complex consolidated and operating financial statements, final accountings for large projects with large budgets and claims for reimbursement from other government agencies or private contractors.

Performs routine audits of the books of other governmental agencies or private contractors and writes audit reports; or conducts an internal audit or an internal control compliance program.

~~May work on special accounting projects and ad hoc requests within the Division and for other the Divisions.~~

~~May serve as liaison with other County departments, or governmental agencies, external service providers and consultants, plan sponsors, and clientele, concerning accounting matters.~~

~~May review and participate in day to day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, preparing ataking trial balance, reconciling and personally preparing year end closing transactions as an incident to performing other more difficult accounting assignments.~~

Supervises unit in the absence of the Supervisor making decisions on ad hoc matters; attends meetings with Supervisor or in absence of Supervisor; reviews the work of Unit staff; and, assists Supervisor in making sure all matters within the Unit are addressed.

Responsible for providing training and assistance to lower-level Accountant I staff and/or temporary staff.

Prepares lead schedules, technical summaries, and drafts footnotes for annual financial statements. Communicates and provides information to internal, external financial statement auditors, and external professional consultants.

Performs complex and technical assignments which may include analysis and reporting, requiring knowledge of an internal process, accounting treatment or other specialized area.

Prepares complex schedules and reports that may include general ledger data, supporting information for Board and/or external reports, travel and expenditure information, cash flows, monthly or annual organizational expenses, payroll tax schedules, and other similar type reporting.

May review and participate in day-to-day accounting and bookkeeping operations such as setting up accounting books or subsidiary records, classifying accounting transactions, posting and journalizing, preparing a trial balances, reconciling and personally preparing year-end closing transactions as an incident to performing other more difficult accounting assignments.

May serve as liaison with other County departments, governmental agencies, external service providers and consultants, plan sponsors, and clientele, concerning accounting matters.

May assist with the preparation of reports, summaries, and financial statements impacting the Annual Comprehensive Financial Report (ACFR), compliance with financial reporting standards, and with projects completed by external auditors and consultants.

May be assigned to assist with supervising the Unit in the absence of the supervisor including making decisions on ad hoc matters, attending meetings with supervisor or in absence of supervisor, reviewing the work of unit staff, and assisting the supervisor in making sure all matters within the Unit are addressed.

### Reporting and Compliance

Acts as a technical specialist responsible for independently managing and performing highly complex accounting assignments and/or special accounting projects impacting LACERA's annual financial statements, compliance with financial statement/legal/—regulatory reporting standards, external consulting/actuarial and other reports to LACERA's governing Boards, ~~;~~ and performs specialized tasks implementing organization-wide accounting strategies; ~~;~~ and works working directly with external consultants and service providers.

Develops project plans and coordinates the work deliverables for projects completed by external auditors and/or other professional consultants which may include actuaries; ~~which involve the Pension and Other Post-Employment Benefits (OPEB) actuarial projects, OPEB Program Valuation organizes~~ meetings, ensures timelines are met, communicates the project status, updates and tasks to be completed with internal staff and external entities; reviews project budgets; reviews and edits reports and materials prepared by the consultants; and makes recommendations to Supervisor for actions to be taken.

Assists with managing and preparing the ~~Comprehensive~~ Annual Comprehensive Financial Report (ACFR) with summaries, updating accounting and financial data through internal records and reports, compiling accounting information technology system data, including new financial statement reporting policies and procedure changes, and extracting data from external reports.

Prepares complex schedules and reports that may include general ledger data, supporting information for Board and/or external reports, travel and expenditure information, daily cash flows, monthly or annual investment organizational expenses, payroll tax schedules monthly investment category asset class reconciliation, and other similar type reporting.

Manages and coordinates organizational initiatives for compliance with contract terms, policies, procedures, audit recommendation implementation, and prepares any required reports.

May work on special financial accounting projects and ad-hoc requests within the Division and for other divisions.

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE:**

~~OPTION 1: Completion of a Bachelor of Science degree or equivalent, with a major in any of the following subjects: accounting, finance, economics, banking, or auditing from an accredited college or university AND three (3) years of professional accounting or auditing~~financial statement reporting and internal control experience

~~OPTION 2: Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting including at least two (2) courses in advanced subjects such as cost accounting, governmental, financial accounting, or auditing from an accredited college or university or equivalent accounting education -AND- four (4) years professional accounting or auditing~~, or financial statement reporting and internal control compliance accounting experience.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.



**CLASSIFICATION TITLE:** Senior Accountant, LACERA

**ITEM NO:** 0416

**DEFINITION:**

Supervises and performs highly complex professional financial accounting, auditing, and financial reporting and internal control compliance functions at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class report to the Accounting Officer of the General Accounting Section within the Financial and Accounting Services Division (FASD). Positions in this class are distinguished by their responsibility for supervising professional accounting staff and performing highly specialized and complex accounting work. Positions are assigned to (1) supervise a unit composed of professional and technical accounting personnel engaged in the operation of a moderate scale financial accounting function, or (2) supervise a smaller unit composed of professional accountants engaged in managing and monitoring external consulting engagements, financial statement reporting and internal control compliance work, operational studies, and other special projects.

Positions perform a variety of the more difficult staff, accounting information technology systems, research, or cost accounting assignments. Positions may be assigned responsibility for managing and completing special projects; researching and implementing accounting pronouncements and requirements; developing and preparing accounting procedures; managing complex projects conducted by internal and external consultants including auditors and actuaries; such as studies, audits, reviews, and other engagements; and conducting organization-wide financial and accounting related initiatives.

Incumbents must exercise a professional level of knowledge of accounting principles and practices, including: cost accounting, financial accounting, and auditing; government financial statement reporting standards and procedures; generally accepted accounting principles (GAAP); a knowledge of general office procedures; personal computer operations; general ledger accounting applications; accounting information technology systems; and the operation of a 10-key adding machine. Incumbents must have a knowledge of the principles of supervision. Some positions must also have a basic knowledge of project management and actuarial principles and practices.

Incumbents must exercise initiative and wide latitude for making independent decisions.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

## **General Accounting:**

Plans, assigns, evaluates, and supervises the work of a unit composed of professional accounting and accounting technical personnel engaged in executing financial accounting functions throughout the accounting cycle or a smaller unit engaged in financial statement reporting work, specialized internal studies, and the management of special projects conducted by external consultants.

Prepares updates to internal procedures and accounting policies and maintains schedules of projects and reports due to and from other internal and external parties.

Researches, analyzes, prepares, and reviews fiscal year-end audit schedules and notes for the Annual Comprehensive Financial Report (ACFR) in accordance with Generally Accepted Accounting Principles (GAAP) and in compliance with all standards issued by the Governmental Accounting Standards Board (GASB) and financial statement reporting practices prescribed by the Government Finance Officers Association (GFOA).

Conducts the more complex cost surveys, revenue analyses, and accounting information technology systems and procedural studies; writes reports of findings, and makes recommendations including those involving major modifications of accounting information technology systems and internal operating procedures.

Installs major modifications of organization accounting information technology systems, updates procedures and provides informal training to staff.

Analyzes and interprets especially complex and extensive accounting, financial statement reporting, and other financial provisions of laws and regulations including payroll tax reporting, and recommends steps for their implementation. Communicates implementation with appropriate parties and monitors tasks from project initiation to completion.

Acts as expert user in financial statement reporting technology tools to develop and modify structures with the software to prepare financial statements and generate reports.

Verifies and authorizes wire transfer releases. Reviews and posts payment request batches, travel-related expenses, purchase order expenses, and disability payments.

Manages, monitors, updates, and enforces compliance with organization-wide policies applicable to staff and Trustees including those for conducting business travel and for organizational expenditure transactions.

Coordinates the work of subordinate accounting staff and other activities with the work of other Divisions, County departments, external service providers and consultants, plan sponsors, and clientele.

## **Reporting and Compliance:**

Plans, assigns, evaluates, and supervises the work of small unit composed of professional accounting personnel engaged in the management and coordination of reporting and compliance projects.

Assists senior level management and external auditors with managing and developing functions related to annual financial statement reporting.

Performs organization-wide compliance initiatives including monitoring compliance with financial statement reporting and disclosure standards, consulting contracts, and organizational policies and procedures.

Manages projects conducted by external professional consultants which may include actuaries and auditors, from initiation to completion which includes creating timelines, monitoring data gathering, coordinating questions and responses, overseeing report drafting and editing, directing status meetings, communicating responsibilities/requests to the team and external professional service providers, preparing and editing formal memos to governing Boards and external parties, and reviewing deliverables.

Reviews the work of staff for complex financial reporting items, changes to the financial statement reporting technology tools, and invoices from external consultants for contract compliance and payment.

May work on special accounting projects and ad hoc requests within the Division and for other Divisions, or upon request from Board Trustees or the Executive and Legal Offices.

Responsible for training and providing assistance to lower-level staff.

May serve as immediate assistant to or act in the capacity of a higher-level accounting officer.

May be required to perform other duties as assigned.

## **REQUIREMENTS:**

### **TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting including at least two (2) courses in advanced subjects such as cost accounting, governmental accounting, financial accounting, or auditing from an accredited college or university -AND- six (6) years of years professional accounting, auditing, or compliance accounting experience, of which two (2) years must include in a lead capacity over major accounting projects or a team of professional accountants.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

DRAFT

LAST UPDATE: 3/26/20215/25/2021

**CLASSIFICATION TITLE:** Senior Accountant, LACERA

**ITEM NO:** 0416

**DEFINITION:**

Supervises and pPerforms responsible highly complex professional financial accounting, auditing, and financial reporting and auditing work, under technical direction and internal control compliance dutiesfunctions and directs professional accounting staff, at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class are located in the report to the Accounting Officer offer the general General Accounting and investment accounting sSections of within the Financial and Accounting Services Divisionretirement accounting division (FASD). This is the senior or lead level classPositions in this class are distinguished by their responsibility for supervising professional accounting staff and performing highly specialized and complex accounting work. Under the technical direction of a higher level accounting professional, positionsPositions may are be assigned to: (1) (1) supervise a section unit composed of professional and technical accounting, technical accounting and clerical personnel engaged in the operation of a moderate scale financial accounting functionmajor general accounting function, or, (2) supervise supervise a smaller unit composed of professional accountants engaged in managing and monitoring external consulting engagementscomplex actuarial accounting, and financial statement reporting and internal control compliance work, operational studies, and other special projectsactuarial accounting work.

, or (3) Positions perform a variety of the more difficult staff, accounting information technology systems, research, or cost accounting assignments. Some Ppositions may be assigned responsibility for managing and completing special projects; researching and implementing accounting pronouncements and requirements; developing and preparing accounting procedures; managing complex projects conducted by internal and external consultants including auditors and actuaries; such as studies, audits, reviews, and other engagements; and conducting organization-wide financial and accounting related initiatives.

Incumbents must exercise a professional level of knowledge of accounting principles and practices, including: cost accounting, governmentalfinancial accounting, and auditing; government financial statement reporting standards and procedures; generally accepted accounting principles (GAAP); a knowledge of general office procedures; personal computer operations and; general ledger accounting applicationssoftware; accounting information technology systems; accounting information technology systems; and the operation of a 10-key adding machine. Incumbents must also have, a knowledge of the principles of supervision. Some positions must also have a basic knowledge of project management and actuarial principles and practices.

Incumbents must exercise initiative and wide latitude for making independent decisions.

## EXAMPLES OF DUTIES:

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

### General Accounting:

~~Supervises~~ Plans, assigns, evaluates, and supervises the work of a ~~section unit~~ composed of professional accounting and accounting technical ~~and clerical~~ personnel engaged in executing financial accounting functions throughout the accounting cycle, ~~operating an accounting system,~~ or a smaller unit engaged in financial statement reporting work, specialized internal studies, and the management of special projects conducted by external consultants.

OR

~~Supervises a smaller unit engaged in actuarial accounting work in support of a large retirement system.~~

OR

~~Performs a variety of the more difficult staff,~~ accounting systems or cost accounting assignments including immediate responsibility for at least one of the following:

Prepares updates to internal procedures and accounting policies and maintains schedules of projects and reports due to and from other internal and external parties.

Researches, analyzes, prepares, and reviews fiscal year-end audit schedules and notes for the Annual Comprehensive Financial Report (ACFR) in accordance with Generally Accepted Accounting Principles (GAAP) and in compliance with all standards issued by the Governmental Accounting Standards Board (GASB) and financial statement reporting practices prescribed by the Government Finance Officers Association (GFOA).

~~Conducting~~ Conducts the more complex cost surveys, revenue analyses, and accounting information technology systems and procedural studies, ~~and writing~~ writes reports of findings, and ~~making~~ makes recommendations including those involving major modifications of accounting information technology systems and internal operating procedures.

~~Installing~~ Installs major modifications of ~~department organization~~ accounting information technology systems, ~~and updates~~ procedures and provides informal training to staff.

~~Analyzing~~ Analyzes and ~~interpreting~~ interprets especially complex and extensive accounting, financial statement reporting, and other financial provisions of laws and regulations including payroll tax reporting, and ~~recommending~~ recommends

steps for their implementation. Communicates implementation with appropriate parties and monitors tasks from project initiation to through completion.

Acts as expert user in financial statement reporting technology tools to develop and modify structures with the software to prepare run financial statements and generate reports.

Verifies and authorizes wire transfer releases. Reviews and posts payment request batches, travel-related expenses, purchase order expenses, and disability payments.

Manages, monitors, updates, and enforces compliance with organization-wide policies applicable to staff and Trustees including those for conducting business travel (travel policy) and for organizational expenditure transactions (credit card policy).

Coordinates the work of subordinate accounting staff and other activities with the work of other Divisions, County departments, external service providers and consultants, plan sponsors, and clientele.

### Reporting and Compliance:

Plans, assigns, evaluates, and supervises the work of small unit composed of professional accounting personnel engaged in the management and coordination of reporting and compliance projects.

Assists senior level management and external auditors with managing and developing functions related to annual financial statement reporting.

Performs organization-wide compliance initiatives including monitoring compliance with financial statement reporting and disclosure standards, consulting contracts, and organizational policies and procedures.

Manages projects conducted by external professional consultants which may include actuaries and auditors, from initiation start to completion finish—which includes creating timelines, monitoring data gathering, coordinating questions and responses, overseeing report drafting and editing, directing status meetings, communicating responsibilities/requests to the team and external professional service providers, preparing and editing formal memos to governing Boards and external parties, and reviewing deliverables.

Reviews the work of staff for complex financial reporting items, changes to the financial statement reporting technology tools, and invoices from external consultants for contract compliance and payment.

May work on special accounting projects and ad hoc requests within the Division and for other the Divisions, or upon request from Board Trustees or the Executive and Legal Offices.

Responsible for training and providing assistance to lower-level staff.

May serve as immediate assistant to or act in the capacity of a higher-level accounting officer.

~~Responsible for training and providing assistance to lower level staff.~~

May be required to perform other duties as assigned.

#### **REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE:**

Completion of ~~accounting courses in an accredited college equivalent to twenty-one (21) semester units or thirty-two (32) quarter units of accounting including a-at least two (2) courses in advanced subjects such as~~ cost accounting, governmental ~~accounting,~~ ~~financial~~ accounting, ~~or auditing from an accredited college or university -AND- Two-six (6) years of years professional accounting, or auditing, or compliance accounting experience, of which two (2) years must include in a lead capacity over major accounting projects or a team of professional accountants. -experience at the level of Los Angeles County's class of Accountant Auditor, or Accountant, LACERA or higher.~~

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**Physical Class PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.



**CLASSIFICATION TITLE:** Accounting Officer, LACERA

**ITEM NO:** 0417

**DEFINITION:**

Performs professional accounting work and directs professional and technical accounting staff the operation of a moderate scale financial accounting system, financial statement reporting, and internal control compliance functions of the Los Angeles County Employees Association (LACERA).

**CLASSIFICATION STANDARDS:**

The one position allocable to this class performs professional accounting and supervises professional accounting and technical accounting staff in the General Accounting Section of the Financial and Accounting Services Division (FASD). Under the direction of the Chief Financial Officer and Assistant Chief Financial Officer, the position is responsible for planning, assigning, directing, evaluating, and overseeing the work of subordinate financial accounting and reporting and compliance staff; supervising cost studies; supervising the reconciliation of the monthly benefits payroll; supervising the payment of Federal and State payroll taxes; managing specialized and unique projects; communicating to internal and external stakeholders and managing the work of staff from project initiation to completion; managing projects completed by external consultants; managing the annual financial statement external audit; coordinating the implementation of audit recommendations; and assuming additional compliance and risk management related functions as the needs of the Division and organization evolve.

Incumbents must exercise a professional level of knowledge of accounting principles and practices, including: cost accounting, financial accounting, and auditing; government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), a knowledge of general office procedures, personal computer operations and general ledger accounting applications, accounting information technology systems, and the operation of a 10-key adding machine. Incumbents must have a knowledge of the principles of supervision, supervisory policies and practices. Incumbents must also have a thorough knowledge of project management and a basic understanding of actuarial principles and practices.

Incumbents must exercise initiative and have full autonomy in terms of independent judgement. The incumbent is accountable to top management and executives.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by incumbents assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Provides full supervisory responsibility of the General Accounting Section which includes: approving time off requests, timesheets, assessing staff training needs, preparing monthly

staff activity reports, attends weekly management meetings, prepares performance evaluations, performs discipline, etc.

Plans, assigns, directs, and evaluates the work of organization-wide treasury and commercial banking functions, financial accounting for the Retiree Health Care (RHC) program operations, Division-wide budget compilation and control, cashiering, supply, payroll, statistical, data processing, financial statement reporting and internal control compliance or other related staff or service activities.

Advises and consults with management concerning financial accounting, financial statement reporting, external professional consulting services, payroll tax reporting, and financial implications of existing and projected organization activities.

Supervises or personally conducts cost, revenue, and accounting information technology applications and procedure studies, writes reports of findings, and secures approval for implementation of recommendations from management and the Los Angeles County Auditor-Controller when necessary.

Supervises staff work with regards to: external consulting projects including the project scope, timing and final reports; financial audits; other audits and reviews; coordination of external consultant projects, entrance, status and exit meetings, Board presentations, and educational sessions; monitors timelines; and reviews the consultant's monthly invoice and validates the work performed.

Analyzes and interprets accounting provisions of laws and regulations, payroll tax laws, and recommends steps for their implementation.

Oversees significant portions of the Annual Comprehensive Financial Report (ACFR) project, manages special research projects and informational/data requests from other Divisions.

Analyzes and interprets accounting standards including Generally Accepted Accounting Principles (GAAP), standards issued by the Governmental Accounting Standards Board (GASB), reporting practices prescribed by the Government Finance Officers Association (GFAO), and provisions of laws and regulations, and recommends steps for their implementation.

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes disclosures for the ACFR in accordance with GAAP and in compliance with all standards issued by the GASB and reporting practices prescribed by the GFOA.

Provides direction to administrative staff to ensure proper handling of work projects and products.

Oversees staff and coordination of ongoing consulting projects, annual financial statement report preparation, and several annual financial audits.

Administers revenue producing agreements.

Assists management with strategic direction and planning aspects of the Division which includes future initiatives, recommendations for hiring, reviews and proposes changes to

the annual budget, researches and implements changes to existing procedures, prepares and edits formal memos to governing Boards and external parties, and completes the Internal Audit's annual risk assessment.

Coordinates the work of subordinate accounting, financial statement reporting and internal control compliance, and other activities with the work of other divisions, County departments, external service providers, and clientele.

Works closely with Division Managers and Executive Management staff and regularly attends and makes formal presentations Trustees including the Board of Retirement and Board of Retirement Committee meetings and internal meetings with senior staff, and makes formal presentations.

May serve as immediate assistant to or act in the capacity of a higher-level accounting manager.

May be required to perform other duties as assigned.

**MINIMUM REQUIREMENTS:**

**TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting including at least three (3) courses in advanced subjects such as cost accounting, governmental, financial accounting, or auditing from an accredited college or university - AND- three (3) years of experience providing both administrative and technical supervision to a team of professional accountants performing accounting, auditing, or compliance accounting and reporting functions at the level of Senior Accountant, LACERA.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

LAST UPDATE: ~~5/10/2021~~~~3/26/2021~~5/21/2021

CLASSIFICATION TITLE: Accounting Officer-I, LACERA

ITEM NO: 0417

**DEFINITION:**

Performs professional accounting work and directs ~~a small staff (five or more) professional and technical accounting staff –engaged in~~ the operation of a ~~general financial~~ moderate large scale accounting ~~system, and financial statement reporting, and internal control compliance functions –system of moderate scale or complexity and in the work of a small group of related activities~~ of the Los Angeles County Employees Association (LACERA).

**CLASSIFICATION STANDARDS:**

~~The one position~~Positions allocable to this class ~~to performs~~ professional accounting and supervises ~~of a unit (five or more) of~~ professional accounting and technical accounting staff in the ~~general General Accounting section Section~~ of the ~~Financial and Accounting Services Division (FASD)~~ retirement accounting division. Under the direction of the ~~division Chief Financial Officer manager and assistant Assistant division manager~~ Chief Financial Officer, the ~~incumbent position performs duties such as is responsible for~~ planning, assigning, directing, ~~and evaluating, and overseeing~~ the work of subordinate ~~financial general~~ accounting, ~~and reporting and compliance~~ staff ~~members~~; supervising cost studies; ~~supervising the reconciliation of the monthly~~ benefits payroll; ~~and supervising the payment of federal Federal and state State payroll taxes; managing specialized and unique projects; communicating to internal and external stakeholders and to coordinate managing the work of staff from through project initiation to completion; managing actuarial projects completed by external consultants; managing the annual financial statement external audit; coordinating the implementation of audit recommendations; and assuming additional compliance and risk management related functions as the needs of the~~ Division and organization evolve.

~~Positions Incumbents must in this class~~ exercise a professional level of knowledge of accounting principles ~~and practices~~ practices, including: cost accounting, ~~governmental financial~~ accounting, and auditing; government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), a knowledge of general office procedures, personal computer operations and general ledger accounting –software applications, accounting information technology systems, and the operation of a 10-key adding machine. Incumbents They must also have a knowledge of the principles of supervision, supervisory policies policies, and practices. Incumbents must also have a basic thorough knowledge of project management and a basic understanding of actuarial principles and practices.

Incumbents must exercise initiative and have full autonomy in terms of independent judgement. ~~The incumbent is accountable to top management~~ and executives.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by incumbents assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Provides full supervisory responsibility of the General Accounting Section which includes: approving time off requests, timesheets, assessing staff training needs, preparing monthly staff activity reports, attends weekly management meetings, prepares performance evaluations, performs discipline, etc.

Plans, assigns, directs, and evaluates the work of the organization-wide treasury and commercial banking functions, financial accounting, for the Retiree Health-Care (RHC) program operations, Division-wide budget compilation and control, cashiering, supply, payroll, statistical, data processing, financial statement reporting and internal control compliance or other related staff or service activities.

Advises and consults with management concerning the financial accounting, financial statement reporting, external professional actuarial consulting services, payroll tax reporting, and financial implications of existing and projected departmental organization activities.

Supervises or personally conducts cost, revenue, and accounting information technology applications systems and procedures studies, writes reports of findings, and secures approval for implementation of recommendations from departmental administration management and the Los Angeles County Auditor-Controller when necessary.

Supervises staff work with regards to: actuarial-external consulting projects including the project scope, timing and final annual actuarial valuation reports; financial audits; other audits and actuarial reviews; coordination of external consultant project experience studies, entrance, status and exit meetings, Board presentations, and educational sessions; monitors timelines; and reviews the consultant's monthly invoice and validates the work performed.

Analyzes and interprets accounting provisions of laws and regulations, payroll tax laws, and recommends steps for their implementation.

Oversees significant portions of the Annual Comprehensive Financial Report (ACFR) project, and manages special research projects and informational/data requests from other Divisions.

Analyzes and interprets accounting standards including Generally Accepted Accounting Principles (GAAP), standards issued by the Governmental Accounting Standards Board (GASB), reporting practices prescribed by the Government Finance Officers Association (GFAO), and provisions of laws and regulations, and recommends steps for their implementation.

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes disclosures for the ACFR Annual Financial Report in accordance with GAAP and in

compliance with all standards issued by the GASB and reporting practices prescribed by the GFOA.

Provides direction to administrative staff to ensure proper handling of work projects and products.

Oversees staff and coordination of ongoing consulting projects ~~which include pension and OPEB actuarial projects, triennial experience and assumption studies, actuarial reviews, annual financial statement reports preparation, and several annual financial audits.~~

Administers revenue producing agreements.

Assists management with strategic direction and planning aspects of the Division which includes future initiatives, recommendations for hiring, reviews and proposes changes to the annual budget, researches and implements changes to existing procedures, prepares and edits formal memos to governing Boards and external parties, and completes the Internal Audit's annual risk assessment.

Coordinates the work of subordinate accounting, financial statement reporting and internal control compliance, and other activities with the work of other divisions, County departments, external service providers, and clientele.

Works closely with Division Managers and Executive Management staff and regularly attends and makes formal presentations Trustees including the Board of Retirement and Board of Retirement Committee meetings and internal meetings with senior staff, and makes formal presentations.

May serve as immediate assistant to or act in the capacity of a ~~higher level~~ higher-level accounting ~~officer-manager.~~

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of accounting courses in an accredited college equivalent to 21 semester units or 32 quarter units, including at least three (3) courses in advanced subjects such as ~~course in~~ cost accounting, governmental, financial accounting, or auditing from an accredited college or university -AND- three (3) years of experience providing both administrative and technical supervision to a team of professional accountants performing accounting, auditing, or compliance accounting and reporting functions at the level of Senior Accountant, LACERA.

~~-AND-~~

~~Two (2) years' professional accounting or auditing experience at the level of Los Angeles County's class of Accountant-Auditor, Accountant II, LACERA or higher.~~

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**~~Physical Class~~PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

**CLASSIFICATION TITLE:** Investment Accountant, LACERA

**ITEM NO:** NEW

**DEFINITION:**

Performs senior-journey level professional investment accounting, financial accounting, and auditing work at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class perform senior-journey level professional investment accounting and auditing work in the Investment Accounting Section of the Financial and Accounting Services Division (FASD). Positions act as a technical specialist responsible for independently managing and performing highly complex investment/fund accounting assignments in connection with the overall operation of a large scale investment program, including special accounting projects impacting LACERA's annual financial statements, ensuring compliance with financial statement/legal/regulatory reporting standards, preparing reports to LACERA's governing Boards, performing specialized tasks, implementing investment strategies determined by the Investment Office, working directly with external investment consultants and service providers, and acting as lead to lower-level Accountant I positions. Some positions may be assigned to assist the supervisor with management of the unit.

Under the general supervision of a higher-level investment accounting professional, incumbents of these positions are responsible for the analysis, reconciliation, reporting and maintenance of investment transactions requiring a professional level of knowledge of accounting principles and practices, including: investment assets; investment funds, investment fund accounting, financial accounting and auditing, government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), general ledger accounting applications, accounting and investments information technology systems, and general office procedures. Incumbents operate personal computers and 10-key adding machines in the performance of their duties.

Incumbents must exercise initiative and independent judgement within defined accounting procedures and principles.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Responsible for training and providing assistance to lower-level Accountant I staff.



Monitors, analyzes, reconciles, records transactions, maintains daily and monthly investment accounting records, and prepares reports throughout the year or at year-end.

Compiles investment accounting data to prepare and generate annual financial statement reporting schedules and supporting documentation.

Monitors investment cash balances and prepares the daily, weekly and monthly cash projections to ensure they are provided to the Investment Office timely and accurately.

Researches, develops, and implements procedural changes to investment accounting policies, procedures, and practices.

Participates in daily accounting operations, such as daily wire monitoring functions, wire transaction data entry, accounts payable check reviews, approving and posting investment funding/distributions, and provides support for specials requests from internal offices.

Verifies wire transfer transactions for payments to external parties. Maintains physical and electronic documentation to support wire transfer transactions.

Verifies and releases State and Federal income tax payments initiated through online payment systems.

Works closely with Investments Office staff.

May be assigned to assist with supervising the Unit in the absence of the supervisor including making decisions on ad hoc matters, attending meetings with supervisor or in absence of supervisor, reviewing the work of unit staff, and assisting the supervisor in making sure all matters within the Unit are addressed.

May work on special accounting research projects, informational and data requests, and ad-hoc requests.

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, including completion of twelve (12) semester units or eighteen (18) quarter units of accounting and three (3) advanced courses within any of the following subjects: accounting, finance, economics, or auditing -AND- four (4) years of professional investment fund accounting or investment-related auditing experience.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

DRAFT

LAST UPDATE: ~~3/26/2021~~5/21/2021

**CLASSIFICATION TITLE:** Investment Accountant, LACERA

**ITEM NO:** NEW

**DEFINITION:**

Performs ~~senior~~ journey level professional investment accounting, financial accounting, and auditing work, ~~under general supervision~~ at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

Positions allocable to this class perform ~~senior~~ journey level professional investment accounting and auditing work in the Investment Accounting Section of the Financial and Accounting Services Division (FASD), ~~Investment Accounting Section~~. Positions act as a technical specialist responsible for independently managing and performing highly complex investment/fund accounting assignments in connection with the overall operation of a large scale investment program, ~~and including/or~~ special accounting projects impacting LACERA's annual financial statements, ensuring compliance with financial statement/legal/regulatory reporting standards, preparing reports to LACERA's governing Boards, performing specialized tasks, implementing investment strategies determined by the Investment Office, ~~and~~ working directly with external investment consultants and service providers, ~~assisting the supervisor with management of the unit, and acting as a technical specialist to act as lead to lower-level Accountant I positions.~~ Some positions may be assigned to assist the supervisor with management of the unit.

Under the general supervision of a higher-level investment accounting professional, incumbents of these positions are responsible for the analysis, reconciliation, reporting and maintenance of investment transactions requiring a professional level of knowledge of accounting principles and practices, including: investment assets; investment funds; ~~investment fund accounting;~~ financial accounting and auditing; government financial statement reporting standards and procedures; generally accepted accounting principles (GAAP); general ledger accounting applications; accounting and investments information technology systems, and; general office procedures. ~~governmental accounting and auditing; general office procedures; and accounting information technology software.~~

Incumbents operate personal computers and, 10-key adding machines in the performance of their duties.

~~Incumbents~~ must exercise initiative and independent judgement within defined accounting procedures and principles.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

~~Performs a variety of staff, accounting/investment information technology application functions, systems, and investment accounting assignments in connection with the overall operation of a moderate or large scale accounting system, large scale investment program, and has immediate responsibility for one or more of the following:~~

~~Responsible for training and providing assistance to lower-level Accountant I staff.~~

Monitors, analyzes, reconciles, records transactions, maintains daily and monthly investment accounting records, and prepares reports throughout the year or at year-end ~~and maintains daily and monthly investment accounting records.~~

Compiles investment accounting data to p~~Prepare \_s~~ and generate s annual financial statement reporting schedules and supporting documentation.

Monitors investment cash balances and prepares the daily, weekly and monthly cash projections to ensure they are provided to the Investment Office timely and accurately.

~~Verifies retiree payroll tax withholdings remitted to the Internal Revenue Service across reportable accounts~~

Researches, develops, and implements procedural changes to investment accounting policies, procedures, and practices.

Participates in daily accounting operations, such as daily wire monitoring functions, wire transaction data entry, accounts payable check reviews, approving and posting investment funding/distributions ~~approved and posted~~, and provides support for specials requests from internal offices.

Verifies wire transfer transactions for payments to external parties. Maintains physical and electronic documentation to support wire transfer transactions.

Verifies and releases State and Federal income tax payments initiated through online payment systems.

Works closely with Investments Office staff.

~~Verifies and releases State and Federal income tax payments initiated through the accounting system.~~

~~Maintains physical and electronic documentation to support wire transfer transactions.~~

May be assigned to assist with supervising the Unit in the absence of the supervisor including making decisions on ad hoc matters, attending meetings with supervisor or in absence of supervisor, reviewing the work of unit staff, and assisting the supervisor in making sure all matters within the Unit are addressed.

May work on special accounting research projects, informational and data requests, and ad-hoc requests within the Division.  
providing

May be required to perform other duties as assigned.

**MINIMUM REQUIREMENTS:**

**TRAINING AND EXPERIENCE:**

~~OPTION 1: Completion of a Bachelor of Science degree, or equivalent, with a major in any of the following subjects: accounting, finance, economics, banking, or auditing from an accredited college or university -AND- three (3) years of professional investment fund accounting or investment-related auditing experience.~~

~~OPTION 2: Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, including completion of twelve (12) semester units or eighteen (18) quarter units of accounting and three (3) advanced courses within any of the following subjects: accounting, finance, economics, **banking**, or auditing -AND- four (4) years of professional investment fund accounting or investment-related auditing experience.~~

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

**CLASSIFICATION TITLE:** Senior Investment Accountant, LACERA

**ITEM NO:** NEW

**DEFINITION:**

Supervises and performs highly complex professional investment accounting and financial accounting work at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

The position is assigned to the Investment Accounting Section in the Financial Accounting Services Division (FASD) and are distinguished by their responsibility for overseeing major investment accounting functions in connection with a large scale investment program. Positions supervise a unit of professional investment accounting staff engaged in investment accounting work and perform a variety of the more difficult staff, accounting and investment information technology applications, and investment fund accounting assignments.

Incumbents must exercise a professional level of knowledge of generally accepted accounting principles and practices (GAAP), including: investment fund accounting and auditing, a knowledge of investment custodian bank operations, financial accounting and auditing, government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), general ledger accounting applications, general office procedures, accounting and investment information technology systems, and the operation of a 10-key adding machine. Incumbents must also have knowledge of the principles of supervision.

Incumbents must exercise initiative and wide latitude for making independent decisions.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

- Plans, assigns, evaluates, and supervises the work of a unit composed of professional investment accountants engaged in investment fund and financial accounting work.

- Oversees and monitors accounting and financial transactions related to a broad range of investment vehicles and investment portfolios within a large scale investment program.

- Leads, develops and maintains new investment accounting and financial reporting projects initiated by the Investments Office and/or other Divisions.

Participates in intra-Divisional teams to implement audit recommendations, make changes to procedures and modify and/or establish new processes.

Reviews, analyzes and prepares monthly financial reports pertaining to Retiree Healthcare (RHC) Investment accounts and the Other Post-Employment Benefit (OPEB) Trust accounts.

Oversees preparation of the Pension and OPEB Trust Non-Administrative (Investment) Expense Reports included with LACERA's organizational budget reports.

Responsible for monitoring investment cash balances and reviews the daily, weekly and monthly cash projections to ensure they are provided to the Investment Office timely and accurately.

Oversees the electronic wire transfer process for various payment types including: capital calls, management fees, funding of real estate acquisitions, emergency member benefit payments, internal fund transfers, and distributions from investments.

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes for the Annual Comprehensive Financial Report (ACFR) in accordance with Generally Accepted Accounting Principles (GAAP) and in compliance with all standards issued by the Governmental Accounting Standards Board (GASB) and reporting practices prescribed by the Government Finance Officers Association (GFOA).

Coordinates and responds to internal and external auditor's questions regarding the financial statement information, investment information, footnotes, disclosures, and reporting.

Installs major modifications of department accounting or investment information technology applications and procedures.

Analyzes and interprets especially complex and extensive accounting and other financial provisions of laws and regulations and recommends steps for their implementation. Communicates implementation with appropriate internal and external parties and monitors from project initiation to completion.

Responsible for training and providing assistance to lower-level staff.

May work on special accounting research projects, investment accounting projects, informational and data requests, audit recommendation implementation, and ad hoc requests within the Division and for other Divisions.

May serve as immediate assistant to or act in the capacity of a higher-level accounting officer.

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

**TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and (3) advanced courses within any of the following subjects: accounting, finance, economics, or auditing -AND- six (6) years of professional investment fund accounting or investment-related auditing experience, of which two (2) years must include in a lead capacity over a team of investment fund accountants.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.



LAST UPDATE: ~~3/26/2021~~5/10/20215/21/2021

**CLASSIFICATION TITLE:** Senior Investment Accountant, LACERA

**ITEM NO:** NEW

**DEFINITION:**

~~Supervises and p~~Performs ~~highly complex~~responsible professional investment accounting and financial accounting work, ~~under technical direction,~~ at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

The position is assigned to the Investment Accounting Section in the Financial Accounting Services Division (FASD) ~~and are~~. ~~This is the senior or lead level class. Under the technical direction of a higher level accounting professional, positions is are distinguished by their responsibility for overseeing a major investment accounting functions in connection with a large scale investment program. Positions supervise assigned to:~~ ~~supervise~~ a unit of professional investment accounting staff engaged in investment accounting work and perform a variety of the more difficult staff, accounting and ~~investment~~ information technology applications~~systems~~, and investment fund accounting assignments.

Incumbents must exercise a professional level of knowledge of generally accepted accounting principles and practices (GAAP), including: investment fund accounting and auditing, a knowledge of ~~general office procedures,~~ investment custodian bank operations, financial accounting and auditing, government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), general ledger accounting applications, general office procedures ~~personal computer operations and accounting software,~~ accounting and investment information technology systems, and the operation of a 10-key adding machine. Incumbents must also have knowledge of the principles of supervision.

Incumbents must exercise initiative and wide latitude for making independent decisions.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

~~Supervises~~Plans, assigns, evaluates, and supervises the work of a unit composed of professional investment accountants engaged in investment fund and financial accounting work.

~~Performs a variety of the more difficult staff, accounting/investment information technology application functions~~information technology systems, and investment fund accounting assignments including immediate responsibility for at least one of the following:

Oversees and ~~maintains—monitors~~control over all accounting and financial transactions related to a broad range of investment vehicles and the investment portfolios within a large scale investment program.

Leads, develops and maintains new investment accounting and financial reporting projects initiated by the Investments Office and/or other Divisions.

Participates in intra-Divisional teams to implement audit recommendations, make changes to procedures and modify and/or establish new processes.

Reviews, ~~and analyzes and prepares the~~ monthly financial reports pertaining to the three Retiree Healthcare (RHC) Investment accounts and the Other Post-Employment Benefit (OPEB) Trust accounts.

Oversees ~~the~~ preparation of the annual Pension and OPEB Trust Non-Administrative (Investment) Expense Reports included with LACERA's organizational budget reports for LACERA's Administrative Services Division's Budget Unit.

Responsible for monitoring investment cash balances and reviews the daily, weekly and monthly ~~Ensures unit's daily/weekly/monthly~~ cash projections to ensure they are provided to the Investment Office timely and accurately.

Oversees the electronic wire transfer process for various payments types including: ~~of~~ capital calls, management fees, funding of real estate acquisitions, emergency member benefit payments, and internal fund transfers, ~~—and~~ distributions from investments.

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes for the ~~Comprehensive Annual Accounting Comprehensive~~ Financial Report (ACFR) ~~(CAFR)~~ in accordance with Generally Accepted Accounting Principles (GAAP) and in compliance with all standards issued by the Governmental Accounting Standards Board (GASB) and reporting practices prescribed by the Government Finance Officers Association (GFOA).

Coordinates and responds to internal and external auditor's questions regarding the financial statement information, investment information statements, footnotes, disclosures, and reporting.

Installs major modifications of department accounting or investment information technology application systems and procedures.

Analyzes and interprets especially complex and extensive accounting and other financial provisions of laws and regulations and recommends steps for their implementation. Communicates implementation with appropriate internal and external parties and monitors from project initiation to through completion.

Responsible for training and providing assistance to lower-level staff.

May work on special accounting research projects, investment accounting projects, informational and data requests, audit recommendation implementation, and ad hoc requests within the Division and for other Divisions.

~~Responsible for training and providing assistance to lower level staff.~~

May serve as immediate assistant to or act in the capacity of a higher-level accounting officer.

May be required to perform other duties as assigned.

#### **MINIMUM REQUIREMENTS:**

#### **TRAINING AND EXPERIENCE:**

~~OPTION 1: Completion of a Bachelor of Science degree, or equivalent, with a major in any of the following subjects: accounting, finance, economics, banking, or auditing from an accredited college or university AND two (2) years of professional investment fund accounting or investment-related auditing experience, of which one (1) year must include lead or supervisory capacity over a team of investment fund accountants.~~

~~OPTION 2: Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and (3) advanced courses within any of the following subjects: accounting, finance, economics, ~~banking,~~ or auditing -AND- ~~three-six~~ (63) years of professional investment fund accounting or investment-related auditing experience, of which two (2) years must include in a lead ~~or supervisory~~ capacity over a team of investment fund accountants.~~

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

**CLASSIFICATION TITLE:** Investment Accounting Officer, LACERA

**ITEM NO:** 0418

**DEFINITION:**

Performs responsible professional investment accounting and financial accounting work and directs professional investment accounting staff in the operation of the investment accounting system at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

The one position allocable to this class performs professional investment accounting and supervises professional investment accounting staff in the Investment Accounting Section of the Financial Accounting Services Division. Under the direction of the Chief Financial Officer and Assistant Chief Financial Officer, the position performs and directs professional and technical investment accounting work and monitors accounting operations of LACERA's large scale investment portfolio. The position supervises a staff of professional investment accountants engaged in the accounting and financial reporting of investment related transactions for a large-scale investment program.

Incumbents must exercise a professional level of knowledge of generally accepted accounting principles and practices (GAAP), including: investment assets, investment funds, investment fund accounting, a knowledge of investment custodian bank operations, financial accounting and auditing; government financial statement reporting standards and procedures, generally accepted accounting principles (GAAP), general ledger accounting applications, general office procedures, accounting and investment information technology systems, a the operation of a 10-key adding machine. Incumbents must also have knowledge of the principles of supervision, supervisory policies and practices.

Incumbents must exercise initiative and have full autonomy in terms of independent judgement. Incumbents are accountable to top management.

**EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Provides full supervisory responsibility of the Investment Accounting Section which includes: approving time off requests, timesheets, assessing staff training needs, preparing monthly staff activity reports, attends weekly management meetings, prepares performance evaluations, etc.

Plans, assigns, directs, and evaluates the work of the Investment Accounting Section who analyze, record, maintain, monitor, and reconcile public markets and

direct investment activities effected by LACERA's external investment managers and custodian bank.

Assists management with strategic direction and planning aspects of the Division which includes future initiatives, recommendations for hiring, reviews and proposes changes to the annual budget, researches and implements changes to existing procedures, coordinates the implementation of audit recommendations, prepares and edits formal memos to governing Boards and external parties, and completes the Internal Audit's annual risk assessment.

Advises and consults with management concerning the accounting and financial reporting implications of existing and newly implemented investment portfolio activities.

Supervises or personally conducts cost, revenue, and accounting or investment information technology systems and procedures studies, writes reports of findings, and secures approval for implementation of recommendations from departmental administration and the external parties (i.e., plan sponsors) when necessary.

Oversees significant portions of the Annual Comprehensive Financial Report (ACFR) project and manages special research projects and investment-related data requests.

Analyzes and interprets accounting standards including Generally Accepted Accounting Principles (GAAP), standards issued by the Governmental Accounting Standards Board (GASB), reporting practices prescribed by the Government Finance Officers Association (GFAO), and provisions of laws and regulations, and recommends steps for their implementation.

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes for the ACFR in accordance with GAAP and in compliance with all standards issued by the GASB and reporting practices prescribed by the GFOA.

Supervises staff work with regards to: external consulting projects including the project scope, timing and final reports; financial audits; other audits and reviews; coordination of external consultant projects, entrance, status and exit meetings, Board presentations, and educational sessions; monitors timelines; and reviews the consultant's monthly invoice and validates the work performed.

Administers revenue producing agreements.

Works closely with Investments Office staff and regularly attends and makes formal presentations to Trustees including Board of Investment and Board of Investment Committee meetings and Investment Office meetings with Senior Staff.

Coordinates the work of subordinate investment accounting and other activities with the work of other divisions, County departments, external service providers, and clientele.

Responsible for training and providing assistance to lower-level staff.

May work on special investment accounting projects within the Division and with other Divisions such as the Investment Office.

May serve as immediate assistant to or act in the capacity of a higher-level accounting manager.

May be required to perform other duties as assigned.

**MINIMUM REQUIREMENTS:**

**TRAINING AND EXPERIENCE:**

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and (3) advanced courses within any of the following subjects: accounting, finance, economics, or auditing -AND- three (3) years of experience providing both administrative and technical supervision to a team of professional investment accountants performing professional investment fund accounting or investment-related auditing functions at the level of Senior Investment Accountant, LACERA.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

LAST UPDATE: 3/26/20215/21/2021

**CLASSIFICATION TITLE:** ~~Accounting Officer II, LACERA~~Investment Accounting Officer, LACERA

**ITEM NO:** 0418

**DEFINITION:**

Performs responsible professional investment accounting and financial accounting work and directs professional investment accounting staff in the operation of the investment accounting system at the Los Angeles County Employees Retirement Association (LACERA).

**CLASSIFICATION STANDARDS:**

The one position allocable to this class performs professional investment accounting and supervises professional investment accounting staff is assigned to in the Investment Accounting Section of the Financial Accounting Services Division's Investment Accounting Section. Under the direction of the Chief Financial Officer and Assistant Chief Financial Officer, the position performs and directs professional and technical investment accounting work and monitors accounting operations of LACERA's large scale investment portfolio. The position supervises a staff of professional investment accountants engaged in the accounting and financial reporting of investment related transactions for a large-scale investment program.

~~The FASD is responsible for managing LACERA's financial operations in accordance with established fiscal policies. FASD is divided into two operational areas: Investment Accounting and General Accounting Sections.~~

~~-~~

~~The Investment Accounting Section is responsible for recording, monitoring, and reconciling financial transactions related to LACERA's investment portfolio.~~

~~-~~

~~The General Accounting Section is responsible for the recording, monitoring, and reconciling financial transactions related to the collection of retirement contributions, payment of retiree benefits, and payment of administrative and non-administrative expenses.~~

~~supervisory policies and procedures.~~

Incumbents must exercise a professional level of knowledge of generally accepted accounting principles and practices (GAAP), including: investment assets, investment funds, investment fund accounting, a knowledge of investment custodian bank operations, financial accounting and auditing; government financial statement reporting standards and procedures; generally accepted accounting principles (GAAP); general ledger accounting applications; general office procedures, accounting and investment information technology systems, and the operation of a 10-key adding machine; governmental accounting, and auditing; a knowledge of general office procedures, personal computer operations and accounting software, and the operation of a 10-key adding machine. Incumbents must also have knowledge of the principles of supervision, supervisory policies, and practices.

Incumbents must exercise initiative and have full autonomy in terms of independent judgement.- Incumbents ~~are~~is accountable to top management.

## **EXAMPLES OF DUTIES:**

The following examples are intended to describe the general nature and level of work performed by persons assigned to each classification. Depending on the assignment, duties may include, but are not limited to the following:

Provides full supervisory responsibility of the Investment Accounting Section which includes: approving time off requests, timesheets, assessing staff training needs, preparing monthly staff activity reports, attends weekly management meetings, prepares performance evaluations, etc.

Plans, assigns, directs, and evaluates the work of the Investment Accounting Section who analyze, record, maintain, monitor, and reconcile public markets and direct investment activities effected by LACERA's external investment managers and ~~custod~~custodial bank.

~~Plans, assigns, directs, and evaluates the work of the accounting, budget compilation and control, cashiering, supply, payroll, statistical, data processing, or other staff or service activities.~~

Assists management with strategic direction and planning aspects of the Division which includes future initiatives, recommendations for hiring, reviews and proposes changes to the annual budget, ~~researches and implements changes to existing procedures, coordinates the implementation of audit recommendations, prepares and edits formal memos to governing Boards and external parties, and completes the Internal Audit's annual risk assessment.~~

Advises and consults with management concerning the accounting and financial ~~reporting~~ implications of existing and ~~projected departmental~~newly implemented investment portfolio activities.

Supervises or personally conducts cost, revenue, and accounting or investment information technology systems and procedures studies, writes reports of findings, and secures approval for implementation of recommendations from departmental administration and the external parties (i.e., plan sponsors) when necessary.  
~~Supervises or personally conducts cost, revenue, and accounting systems and procedures studies, writes reports of findings; and secures approval for implementation of recommendations from departmental administration and the Auditor-Controller when necessary.~~

Oversees significant portions of the Annual ~~Comprehensive~~ Financial Report (ACFR) project and manages special ~~research projects and investment-related data requests, projects.~~

Analyzes and interprets accounting standards including Generally Accepted Accounting Principles (GAAP), standards issued by the Governmental Accounting Standards Board (GASB), reporting practices prescribed by the Government



Finance Officers Association (GFAO), and provisions of laws and regulations, and recommends steps for their implementation.  
~~Analyzes and interprets accounting provisions of laws and regulations and recommends steps for their implementation.~~

Researches, analyzes, prepares and reviews fiscal year-end audit schedules and notes for the ~~ACFR~~Annual Financial ReportCAFR in accordance with GAAP and in compliance with all standards issued by the GASB and reporting practices prescribed by the GFOA.

Supervises staff work with regards to: external consulting projects including the project scope, timing and final reports; financial audits; other audits and reviews; coordination of external consultant projects, entrance, status and exit meetings, Board presentations, and educational sessions; monitors timelines; and reviews the consultant's monthly invoice and validates the work performed.

Administers revenue producing agreements.

Works closely with Investments Office staff and regularly attends and makes formal presentations to Trustees including Board of Investment and Board of Investment Committee meetings and Investment Office meetings with Senior Staff, and makes formal presentations.

Coordinates the work of subordinate investment accounting and other activities with the work of other divisions, County departments, external service providers, and clientele.

Responsible for training and providing assistance to lower-level staff.

May work on special investment accounting projects within the Division and with other Divisions such as the Investment Office.

~~Responsible for training and providing assistance to lower-level staff.~~

May ~~act-serve~~ as immediate assistant to or act in the capacity of a higher-level accounting ~~position-manager~~.

May be required to perform other duties as assigned.

## MINIMUM REQUIREMENTS:

## TRAINING AND EXPERIENCE:

~~**Accounting Education:** Completion of twenty-one units of accounting including at least two courses in advanced subjects such as cost accounting, governmental accounting, or auditing in an accredited college, or equivalent accounting education.~~

**Experience:** ~~One year's professional accounting or auditing experience at the level of Accountant III, Intermediate Accountant Auditor or Accounting Officer I, LACERA.~~

Completion of twenty-one (21) semester units or thirty-two (32) quarter units of coursework from an accredited college or university, which includes completion of twelve (12) semester units or eighteen (18) quarter units of accounting and (3) advanced courses within any of the following subjects: accounting, finance, economics, or auditing -AND- three (3) years of experience providing both administrative and technical supervision to a team of professional investment accountants performing professional investment fund accounting or investment-related auditing functions at the level of Senior Investment Accountant, LACERA.

**LICENSE:** A valid California Class C Driver License or the ability to utilize an alternative method of transportation when needed to carry out job-related essential functions.

**PHYSICAL CLASS II - Light** physical effort which may include occasional light lifting to a 10 pound limit, and occasional bending, walking, stooping or squatting. Incumbents sit for extended periods of time. Work is performed in an office environment in a controlled climate.

FASD Study  
Budget Summary

ATTACHMENT C

No. of Pos	Budgeted Position	CURRENT SALARY (1/1/22)			Proposed New Titles	AON/McLagan Market Data		LACERA STUDY PROPOSED SALARY 2022			BUDGET IMPACT				
		Sch	Max Salary	Annual		Max Salary	Annual	Sch	Max Salary	Annual	Per Position	With Benefits	Total	% Change	
0	Accounting Tech I	85L MO	\$ 5,799	\$ 69,585.84	Accounting Technician	\$ 4,974	\$ 59,688.00	85L MO	\$ 5,799	\$ 69,585.84	\$ -	\$ -	\$ -	0.00%	
9	Accountant	94F MO	\$ 7,311	\$ 87,737.40	Accountant I*	\$ 6,574	\$ 78,888.00	94F MO	\$ 7,311	\$ 87,737.40	\$ -	\$ -	\$ -	0.00%	
3		94F MO	\$ 7,311	\$ 87,737.40	Accountant II	\$ 7,640	\$ 91,680.00	96A MO	\$ 7,624	\$ 91,488.00	\$ 3,750.60	\$ 5,813.43	\$ 17,440.29	4.27%	
6		94F MO	\$ 7,311	\$ 87,732.00	Investment Accountant	\$ 8,173	\$ 98,076.00	98G MO	\$ 8,170	\$ 98,034.60	\$ 10,302.60	\$ 15,969.03	\$ 95,814.18	11.74%	
3	Senior Accountant	98H MO	\$ 8,190	\$ 98,275.68	Senior Accountant	\$ 8,883	\$ 106,596.00	101H MO	\$ 8,884	\$ 106,604.76	\$ 8,329.08	\$ 12,910.07	\$ 38,730.22	8.48%	
2		98H MO	\$ 8,190	\$ 98,275.68	Senior Investment Accountant	\$ 9,880	\$ 118,560.00	105G MO	\$ 9,877	\$ 118,526.16	\$ 20,250.48	\$ 31,388.24	\$ 62,776.49	20.61%	
1	Accounting Officer I	103B MO	\$ 9,241	\$ 110,892.00	Accounting Officer	\$ 11,104	\$ 133,248.00	110K NM	\$ 11,091	\$ 133,089.84	\$ 22,197.84	\$ 34,406.65	\$ 34,406.65	20.02%	
1	Accounting Officer II	106J MO	\$ 10,199	\$ 122,388.00	Delete Budgeted Position						\$ (122,388.00)	\$ (189,701.40)	\$ (189,701.40)	-100.00%	
1	Accounting Officer II	106J MO	\$ 10,199	\$ 122,388.00	Investment Accounting Officer	\$ 12,081	\$ 144,972.00	113L NM	\$ 12,060	\$ 144,715.68	\$ 22,327.68	\$ 34,607.90	\$ 34,607.90	18.24%	
26	TOTAL NUMBER OF POSITIONS														\$ 94,074.34

\*Accountant I budgeted positions are allocated to both the general and investment accounting sections and may be used to underfill with Accounting Technicians.

November 28, 2022

TO: Each Trustee,  
Board of Retirement  
Board of Investments

FROM: Santos H. Kreimann *SHK*  
Chief Executive Officer

FOR: Board of Retirement Meeting on December 7, 2022  
Board of Investments Meeting on December 14, 2022

SUBJECT: **BOARD OF RETIREMENT AND BOARD OF INVESTMENTS 2023  
MEETING CALENDAR**

## **RECOMMENDATION**

It is recommended the Boards review and approve the 2023 meeting and education calendar and consider rescheduling meeting dates that conflict with a holiday or may result in a lack of quorum.

## **DISCUSSION**

Regular meetings of the Board of Retirement shall be held on the first Wednesday of each month. Regular meetings of the Board of Investments shall be held on the second Wednesday of each month. It is encouraged to focus on rescheduling meeting dates that conflict with a holiday or other events that may result in a lack of quorum.

The meeting date to consider rescheduling is the Board of Retirement meeting on Wednesday, July 5, 2023, which follows the July 4th holiday. Several meeting dates also conflict with various educational conferences attended by Trustees. These events are shown on the attached 2023 meeting and educational calendar and should be considered as part of your deliberation to change meeting dates.

SHK:le

Attachment

January 2023						
◀ Dec 2022					Feb 2023 ▶	
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 New Year's Day Observed	3	4 BOR	5	6	7
8	9	10	11 BOI	12	13	14
15	16 Martin Luther King Jr. Day	17	18	19	20	21
22	23	24	25	26	27	28
NCPERS Legislative Conference, Washington, DC						
29	30 IFEBP Health Benefits Conference, Clearwater Beach, FL	31				

February 2023						
◀ Jan 2023						Mar 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 <b>BOR</b> IFEBP Health Benefits Conference, Clearwater Beach, FL	2	3	4
5	6	7	8 <b>BOI</b>	9	10	11
12	13	14	15	16	17	18
19	20 Presidents' Day	21	22	23	24	25
26	27	28				

March 2023						
◀ Feb 2023		Apr 2023 ▶				
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 BOR	2	3	4 CALAPRS General Assembly, Monterey, CA
			Pacific Pension Institute (PPI) LA Jolla, CA			
5	6	7	8 BOI	9	10	11
	CII Spring Conference, Washington DC					
CALAPRS General Assembly, Monterey, CA						
12	13	14	15	16	17	18
		AHIP (America's Health Policy and Markets Forum), Washington DC				
19	20	21	22	23	24	25
			PREA Spring Conference, Seattle, WA			
	2023 Infrastructure Investor Global Summit, Berlin, Germany					
26	27 Cesar Chavez Day	28	29	30	31	
			CALAPRS (Advanced Principles of Pension Governance for Trustees, Los Angeles, CA			

April 2023						
◀ Mar 2023						May 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5 BOR	6	7	8
9 Easter	10	11	12 BOI	13	14	15
16	17	18	19	20	21	22
	Investment Strategies & Portfolio Management Wharton School, University of Pennsylvania					
23	24 IFEBP Investments Institute, New Orleans, LA	25	26	27	28	29
	IFEBP Health Care Mgmt. Conference Miami, FL					
	CRCEA Spring Conference, Ontario, CA					
30						



May 2023						
◀ Apr 2023						Jun 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 BOR	4	5	6
7	8	9	10 BOI	11	12	13
	SACRS Spring Conference, San Diego, CA					
14	15	16	17	18	19	20 NCPERS ( TEDS) New Orleans, LA
						NCPERS Accredited Fiduciary New Orleans, LA
21 NCPERS ( TEDS) New Orleans, LA	22 IFEBP Washington Legislative Update Washington D.C.	23	24	25	26	27
	NCPERS Annual Conference & Exhibition (ACE), New Orleans, LA					
28	29 Memorial Day	30	31			

June 2023						
◀ May 2023						Jul 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7 BOR	8	9	10
11	12	13	14 BOI	15	16	17
		AHIP (America's Health Insurance Plans Portland, OR)				
18	19	20	21	22	23	24
25	26	27	28	29	30	

July 2023						
◀ Jun 2023						Aug 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4 Independence Day Holiday	5 BOR	6	7	8
9	10	11	12 BOI	13	14	15
16	17	18	19	20	21	22
			(PPI) Summer Roundtable, San Francisco, CA			
23	24	25	26	27	28	29
30	31					

August 2023						
◀ Jul 2023						Sep 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2 BOR	3	4	5
6	7	8	9 BOI	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September 2023						
◀ Aug 2023						Oct 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4 Labor Day	5	6 BOR	7	8	9
10	11	12	13 BOI	14	15 Rosh Hashanah Begins	16
	(CII) Fall Conference, Long Beach, CA					
17 Rosh Hashanah Ends	18	19	20	21	22	23
24	25 Yom Kippur	26	27	28	29	30

October 2023						
◀ Sep 2023						Nov 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4 BOR	5	6	7
IFEBP Annual Employee Benefits Conference, Boston, MA						
8	9 Indigenous People's Day	10	11 BOI	12	13	14
(NACD) Summit 2023, Fort Washington, MD						
15	16	17	18	19	20	21
			PREA Annual Institutional Investor Conference, Boston, MA			
22	23	24	25	26	27	28
			Asia Roundtable, Tokyo Japan			
NCPERS FALL Conference, Las Vegas, NV						
29	30	31 Halloween				

November 2023						
◀ Oct 2023						Dec 2023 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 BOR	2	3	4
5	6	7	8 BOI	9	10 Veterans Day	11
		SACRS Fall Conference, San Rancho Mirage, CA				
12	13	14	15	16	17	18
19	20	21	22	23 Thanksgiving Day	24 Thanksgiving Day Holiday	25
26	27	28	29	30		

December 2023						
◀ Nov 2023						Jan 2024 ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6 BOR	7 Hanukkah Begins	8	9
10	11	12	13 BOI	14	15 Hanukkah Ends	16
17	18	19	20	21	22	23
24	25 Christmas Day	26	27	28	29	30
31						



December 2, 2022

TO: Each Trustee  
Board of Investments

FROM: Jonathan Grabel   
Chief Investment Officer

FOR: December 14, 2022, Board of Investments Meeting

SUBJECT: **ANNUAL UPDATE AND REVIEW OF LACERA TOWARDS INCLUSION,  
DIVERSITY, AND EQUITY (LACERA T.I.D.E.)**

The attached presentation (**Attachment 1**) summarizes recent activities, progress, and anticipated next steps of LACERA's T.I.D.E. initiative for Trustee review and discussion at the December 14, 2022, Board of Investments meeting.

Attachment

# **Annual Review and Update of LACERA Towards Inclusion Diversity and Equity (T.I.D.E.)**

**Board of Investments**

**December 14, 2022**

Investment Division



**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**

# Discussion Outline

---

1. LACERA T.I.D.E. Background and Objectives of Review
2. Review of Progress in Each Pillar
  - Internal Practices
  - Due Diligence
  - Active Ownership
  - Capital Formation
  - Industry Advocacy
3. Observations

# About LACERA T.I.D.E. and Today's Objectives



LACERA believes organizations comprised of diverse backgrounds and managed in an inclusive and equitable manner perform better, as compelled by our fiduciary duty and articulated in our [Investment Policy Statement](#)

LACERA consolidated various longstanding DEI initiatives under “LACERA T.I.D.E.” in 2020, as ratified by the Board in March 2021

LACERA T.I.D.E. incorporates short- and long-term objectives across activities organized under 5 pillars and is an integral component of the Investment Division Strategic Work Plan

Annual review of progress against stated goals

Iterative, total team process of continuous improvement

**Objectives for today's review include:**

- ✓ **Assess progress against stated goals**
- ✓ **Share observations**
- ✓ **Identify opportunities to enhance effectiveness**

# Recap of LACERA T.I.D.E.'s Five Pillars

Comprehensive, synergistic strategies to implement Board-approved policies and principles to advance diversity, equity, and inclusion (DEI) in LACERA's investment program and the financial services industry

## Internal Practices

Strategies to foster an inclusive, diverse, and equitable workplace in LACERA's Investments Division

## Due Diligence

Strategies to evaluate, influence, and monitor current and prospective investment partners

## Active Ownership

Strategies to encourage sound DEI practices at portfolio companies by voting proxies and governance engagements

## Capital Formation

Strategies to facilitate capital formation among firms with diverse ownership, such as emerging managers

## Industry Advocacy

Strategies to improve LACERA's opportunity set by advancing DEI best practices across the financial services industry

Multi-pronged initiative to advance mission in adherence to fiduciary duty

Pillars range in LACERA's degree of direct influence, from left to right

# Review of Progress Across Five Pillars



# Pillar 1: Internal Practices



Internal  
Practices



Due  
Diligence



Active  
Ownership



Capital  
Formation



Industry  
Advocacy

## Internal Practices

Strategies to foster an inclusive, diverse, and equitable workplace in LACERA's Investments Division

### Next Steps

- Enhance team engagement in internal investment committees
- Advance effective approaches for inclusive workplace practices in both virtual and back-to-office environments
- Expand synergies in Investment Division DEI initiatives and agency-wide employee engagement and inclusion efforts
- Widen and deepen the list of recruitment channels for greater reach of talent in prospective hires

### Accomplishments

- ✓ Diversified school representation and adopted a hybrid model in the Division's internship program
- ✓ Further cultivated an "Allocator to Best-In-Class Investor" mindset within the team, supporting career development
- ✓ Strengthened track record of growing talent from within via internal promotions, inter-divisional transfers, and hires among former interns

### Stated Objectives

- Expand regularity and reach of successful Investments Division internship opportunities
- Ensure inclusive recruitment channels, career pathways, and succession planning
- Promote inclusive workplace culture within the Investments Division and LACERA

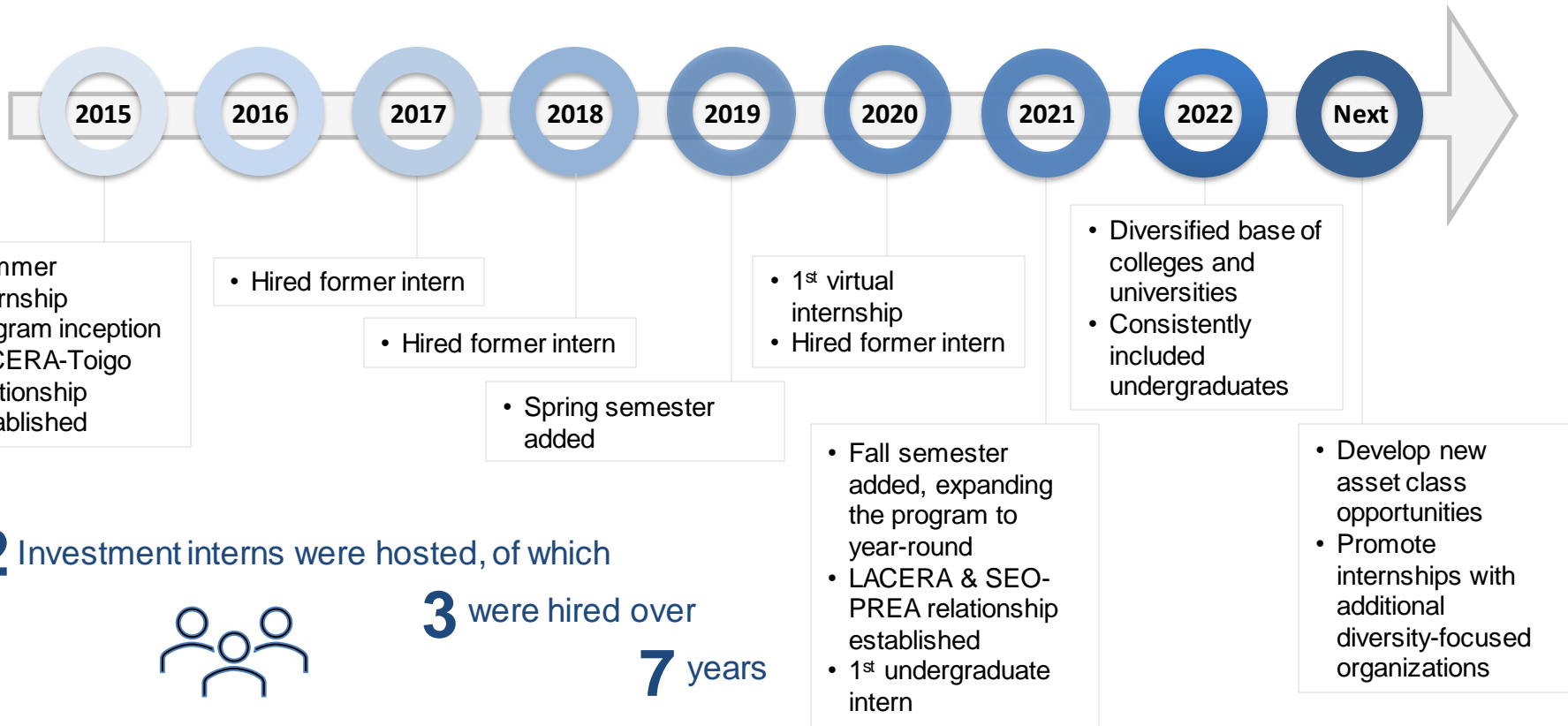
LACERA T.I.D.E.





# Intern Opportunities

**Objective:** Expand regularity and reach of Investment Division internship opportunities, aiming to enhance the familiarity of prospective careers in investments and public service, as well as benefiting LACERA's Investment Team, internal culture, and recruitment efforts

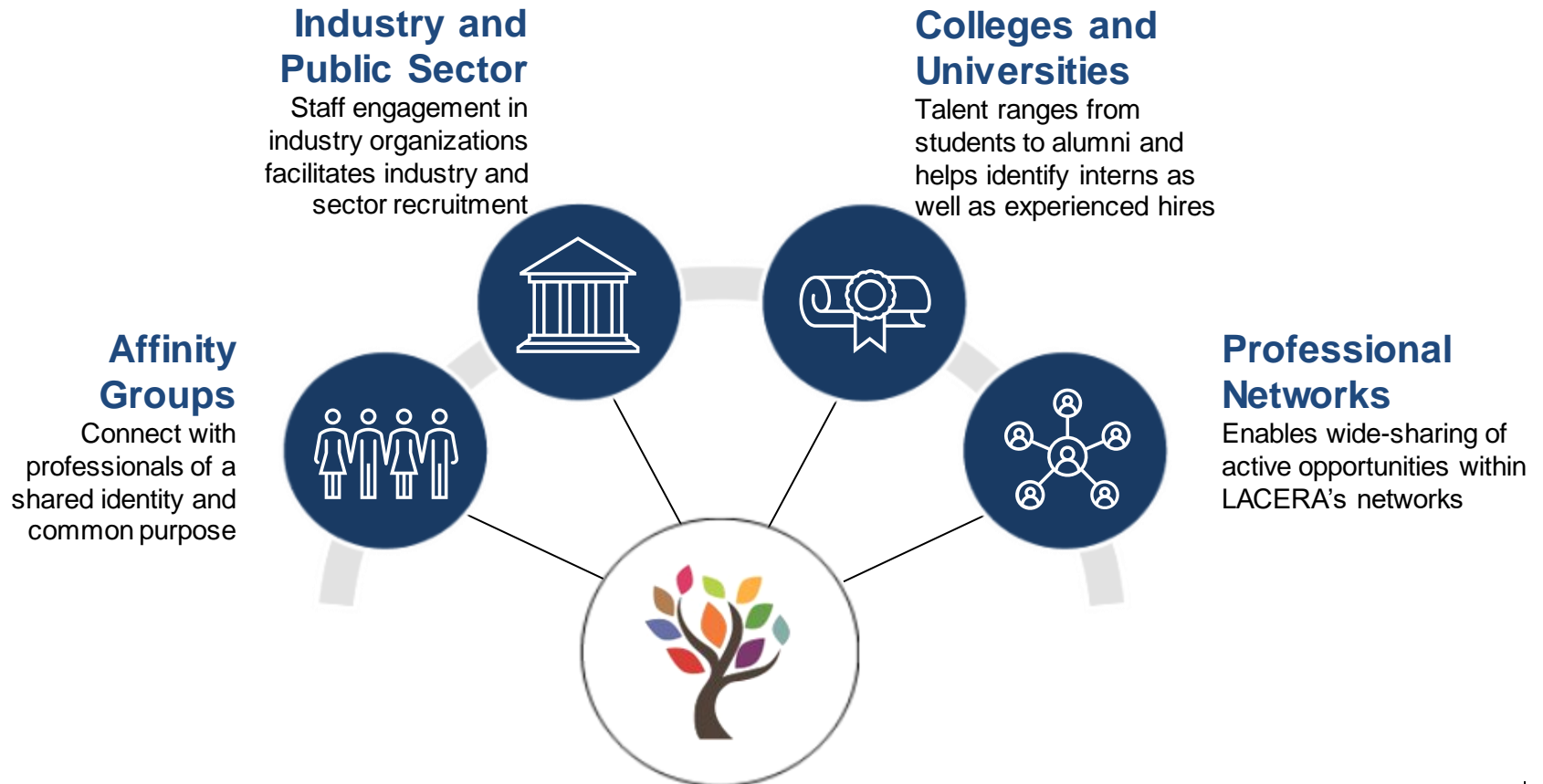






# Recruitment Channels

**Objective:** Facilitate equitable and inclusive recruitment channels, career pathways, and succession planning by partnering with Human Resources to widen and deepen recruitment channels and cultivate a diverse team





# Talent Management

**Objective:** Enhance an inclusive and equitable workplace culture with diverse backgrounds to further LACERA's strategic objective to move from "Allocator to Best-In-Class Investor"

## Recruitment Channels

Effectively expanded and deepened recruitment channels that are mindful of strategic initiatives including LACERA T.I.D.E.

## Investment Acumen Cross Training

Pursuing multiple strategies to build foundation, enable exposure, and share best practices of competencies across asset classes and functional teams, including:

- ✓ cross-functional team projects
- ✓ internal investment committees

## Career Path Development

Cross-team exposures and collaborations in various environments (i.e., in-person, virtual, and hybrid) can facilitate career progression and internal promotions. Total Fund orientation deepens each team member's expertise, helps further refine an "Allocator to Best-In-Class Investor" mindset, and allows for greater professional outcomes

## Succession Planning

Attentive career path development aims to strengthen the bench for future succession planning in an inclusive, deliberate manner. This is a holistic approach designed to attract, develop, and retain future leaders

# Pillar 2: Due Diligence



Internal  
Practices



Due  
Diligence



Active  
Ownership



Capital  
Formation



Industry  
Advocacy

## Due Diligence

Strategies to evaluate, influence, and monitor current and prospective external managers and vendors

### Next Steps



- Continued push on data consistency, quality, reliability
- Use data set to inform manager benchmarking and progress
- Support efforts to expand DEI reporting, such as non-US
- Incorporate manager scorecard DEI pillar

### Accomplishments



- ✓ Notable strides in firms with adopting DEI policies and reporting
- ✓ Manager reporting increasingly responsive, granular, candid
- ✓ Higher industry DEI priority, focus, diligence
- ✓ More nuance to LACERA DEI assessments
- ✓ Revised DEI summary slide in BOI recommendations

### Stated Objectives

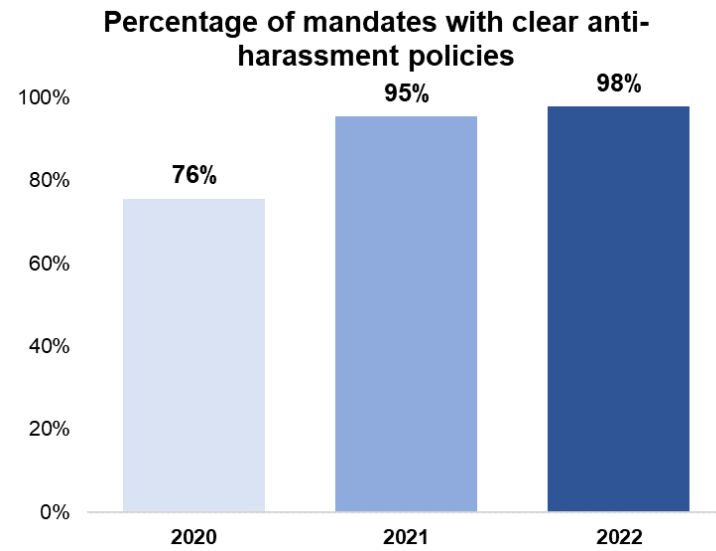
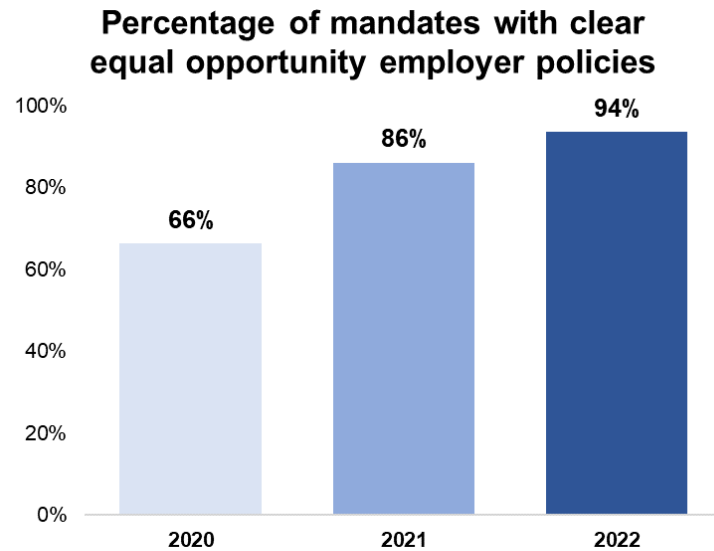


- **Policies:** 100% of investment partners should have DEI policies
- **Transparency:** 100% of investment partners should report DEI demographics of leadership and investment teams, where available
- **Contracting:** Incorporate DEI reporting requirements in investment contracts
- **Leading Governance Practices:** Encourage adoption of four practices
  - Board oversight
  - Clawbacks
  - Pay parity assessment
  - Portfolio integration
- **Develop Separate DEI Assessment in Manager Scorecard**



# Established and Clear DEI Policies in Place

**Objective: 100% of investment partners should have clear DEI policies**

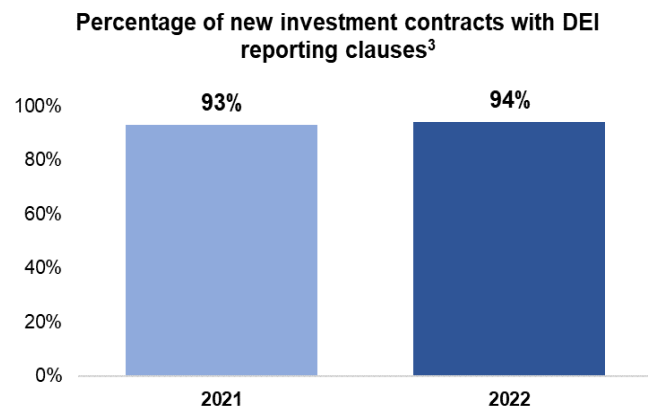
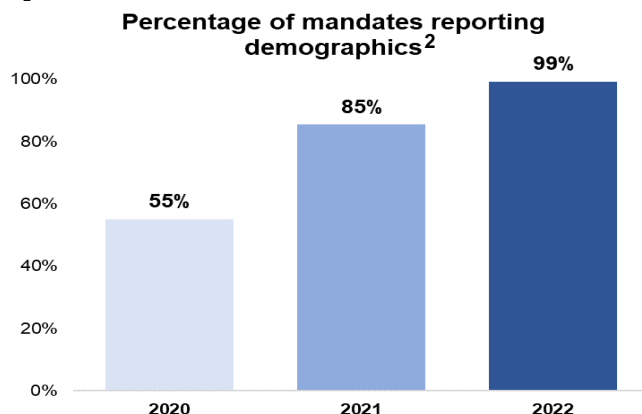


## Observations

- Continued progress in percentage of firms with DEI-related policies in place
- Increase in firms with policies driven by firms adopting policies and more attentive manager reporting
- Firms lacking policies concentrated among non-US and smaller firms



**Objective: 100% of investment partners should report available demographics of their investment teams and firm leadership<sup>1</sup>**



## Observations

- Data quality and consistency improving but challenges remain for clarity and cross-border comparability
- Strong progress in investment partners reporting available demographic information
- Nearly all executed contracts continue to include clauses and terms to promote DEI reporting<sup>2</sup>
- Diversity attributes remain limited in scope
  - EEO-1 reporting requirements facilitate gender and race disclosures among US firms
  - Reported demographics at some non-US firms limited to gender demographics
  - All firms invited to report additional attributes on self-identified, voluntary basis
  - Some firms include additional attributes (e.g., national origin, LGBTQ, disability status) although challenges to quantify or aggregate remain

<sup>1</sup> As permissible according to local market laws, regulations, and privacy concerns

<sup>2</sup> For FY2022 reporting cycle, excludes one firm; four firms with data in non-comparable format excluded from data analysis in remainder of presentation

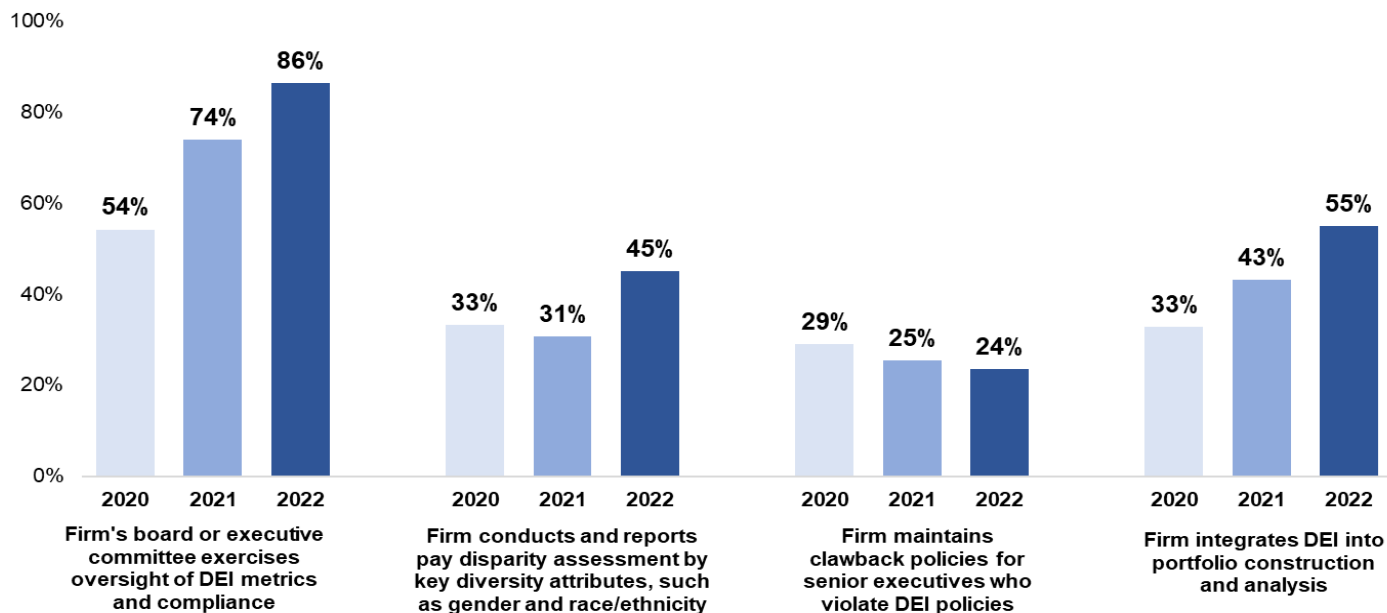
<sup>3</sup> For FY2022 executed agreements, represents 33 of 35 executed agreements



# Promote Leading DEI Governance Practices

**Objective:** Encourage adoption of four practices encouraging adherence to DEI

Percentage of LACERA mandates with four specific leading DEI practices



## Observations

- Increased percentage of firms in LACERA's portfolio with board oversight and portfolio integration of DEI
- Robustness and formality of reported practices vary considerably
- Clawbacks decreasing as fewer managers in expanding asset classes have provisions to recoup compensation in the event of misconduct related to anti-harassment and non-discrimination policies



# Sample of Progress from Investment Partners

Engagement and monitoring illustrate a range of advances, such as:

- ✓ Increased focus on tracking and reporting workforce demographics
- ✓ Formal adoption of new DEI policies, formal initiatives, and new hires to manage DEI efforts
- ✓ Wider employee recruitment, hiring, and board level inclusion efforts

A Global Equity manager signed the CFA Institute's DEI Code which calls on firms to use their influence to promote meaningful DEI change

A Private Equity firm formalized the DEI reporting process by adopting new software to facilitate trend analysis and provide reporting

A Global Equity manager has adopted a formal DEI policy due to LACERA's influence

Manager introduced an assessment of employees' "conscious inclusion" into employee performance reviews to deepen DEI efforts

A Private Equity manager launched a "Women on Boards" initiative to prepare women senior executives to serve as independent board members of portfolio companies

Credit manager adopted a DEI strategy and partnered with a consultant to implement best practices

Global Equity firm hired a dedicated global head of DEI who reports to the president and COO

A Private Equity firm works with external recruiters to ensure a diverse slate of candidates among the talent pipeline for undergraduate hires

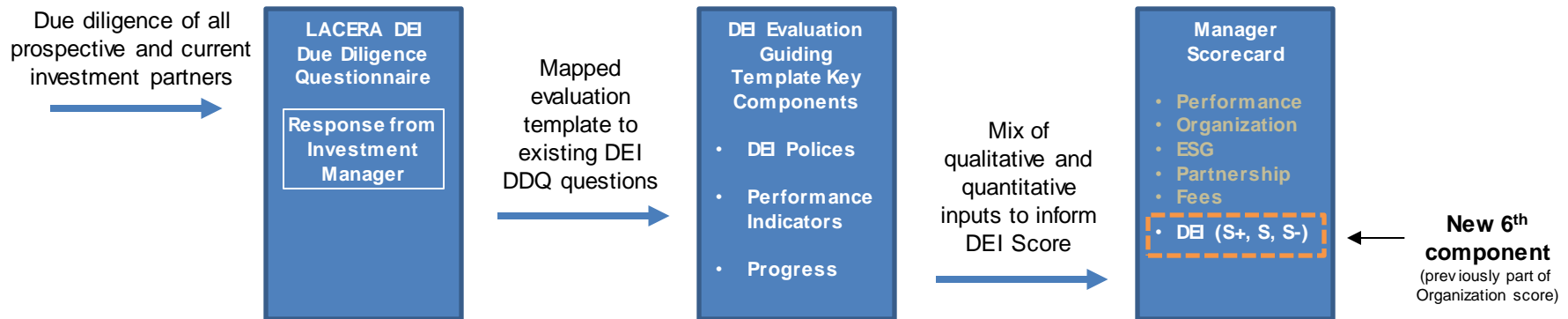
A Credit manager expanded their DEI efforts to include reporting and assessment of workforce composition

A manager reported increased diverse representation among associate candidates



# Manager Scorecard DEI Assessments

## Continued Refinement of Consistent DEI Manager Scorecard Assessments



### All investment mandates assessed and updated across portfolio

- Full team effort
- Added granularity in scored categories to reflect range of manager practices and evolution
- Emphasized both qualitative and quantitative factors covering DEI policies, performance, and progress
- Enhanced cohesion and consistency in assessment scores across asset classes
- Anticipate reporting DEI assessments in quarterly Manager Scorecard reports in calendar year 2023



# Pillar 3:

## Active Ownership



Internal  
Practices



Due  
Diligence



Active  
Ownership



Capital  
Formation



Industry  
Advocacy

### Active Ownership

Strategies to encourage sound DEI practices at portfolio companies by voting proxies and governance engagements

### Next Steps



- Continue public markets initiatives in proxy voting, corporate engagement, and policy advocacy
- Increase focus on portfolio companies in private asset classes by engaging key private market managers on portfolio company board and workplace DEI practices

### Accomplishments



- ✓ Continued strides in board diversity initiative, with 310 directors of diverse backgrounds appointed in past 4 years
- ✓ Proxy voting supported DEI disclosures and practices
- ✓ Regulatory and legislative advocacy of DEI disclosures

### Stated Objectives



- Robust proxy voting in support of board diversity and sensible DEI policies
- Advance corporate board diversity, inclusive of gender, race, and LGBTQ community
- Clarify and encourage effective DEI governance practices at engaged companies

LACERA T.I.D.E.



# DEI in Proxy Voting



Active  
Ownership



## **LACERA's Corporate Governance and Stewardship Principles Promote Board Quality and Inclusion**

- ✓ Corporate directors should have the requisite mix of skills to oversee strategy and risk on investors' behalf
- ✓ LACERA encourages companies to cast a wide net for talent and expects to see **a credible track record of inclusion**
- ✓ Diversity is broadly defined, including gender, race, ethnicity, gender identities, sexual orientation, and disability status

## **LACERA Applies Principles for Board Diversity in Proxy Votes Universally in All Markets**

- ✓ Based on available disclosures (typically limited to gender in most markets), LACERA votes "Against" certain directors (such as nominating committee chair or board leadership) **in all markets** when there is a lack of board diversity
- ✓ LACERA opposed 7.6% of director nominees in FY2122 for failing to put forward inclusive director nominees<sup>1</sup>

## **Board Diversity Continues to Increase Yet Remains Limited**

- ✓ Women comprise 26% of Russell 3000 Index company board seats, up from 12% in 2013; 74 boards lack women<sup>2</sup>
- ✓ No S&P 500 boards lack racial diversity as of 2022 and 23% of S&P 500 directorships are people of color
- ✓ Percentage of Russell 3000 boards with no racial diversity decreased from 38% in 2020 to 10% in 2022<sup>3</sup>
- ✓ Racially/ethnically diverse directors of Russell 3000 Index board seats increased from 7% in 2013 to 16% in 2022<sup>3</sup>

## **Increasing Disclosure of Workforce Demographics and Support For Civil Rights/Racial Equity Audits**

- ✓ Surge in investor support asking companies to disclose workplace diversity: Constellation Software (63%), Tesla (55%)
- ✓ Number of shareholder proposals requesting diversity disclosures declined from 44 in 2021 to 6 in 2022 as disclosure becomes prevalent among large companies and companies disclose prior to a proposal being voted
- ✓ Strong investor support for new shareholder proposals requesting civil rights/racial equity reports and audits: Altria (62%), Apple (54%), Johnson and Johnson (63%), McDonald's (55%), Home Depot (63%), Waste Management (55%)

<sup>1</sup> Analysis by LACERA and ISS covers Fiscal year 2021-2022 proxy votes

<sup>2</sup> ISS. 2022 Proxy Season Review : US Director Elections & Governance. Available at <https://insights.issgovernance.com/posts/2022-proxy-season-review-u-s-director-elections-governance/>.

<sup>3</sup> ISS Insights - Racial and Ethnic Diversity on US Corporate Boards. Available at <https://insights.issgovernance.com/posts/racial-and-ethnic-diversity-on-us-corporate-boards/>.





# Advancing Board Diversity in Public Markets



## Corporate Board Diversity Engagement Initiative

**310** directors appointed at  
**231** engaged companies over  
**4 years**

**Objective :** Encourage board quality through casting a wide net for director talent, inclusive of diverse backgrounds

**Initiative:** 4th year collaborative engagement with peer California funds (CalPERS, CalSTRS, and San Francisco ERS)

Identify and engage portfolio companies lagging in board diversity based on available disclosures

- Letters and dialogues with corporate directors to encourage robust board self-evaluation and recruitment practices

## Progress Report

- **56 directors** appointed at 43 of 57 at engaged US firms last year
  - ✓ 32 women and 42 directors of color, of whom 18 women of color
- **310 directors appointed over past four years** at 184 boards of the 231 total engaged companies
  - ✓ Includes both women and people of color
  - ✓ 3 firms disclosed LGBTQ board representation
  - ✓ All disclosures on voluntary, self-identified basis

## Current FY22-23 Engagement Cycle

- 60 firms engaged for gender, race/ethnicity, and LGBTQ community inclusion in board recruitment

# Expand DEI Engagements in Private Market Portfolio Companies



Active  
Ownership

## Objective

- Advance portfolio company board diversity and constructive DEI practices in private markets to encourage firms to cast a wide net for talent<sup>1</sup>

## Background and Details

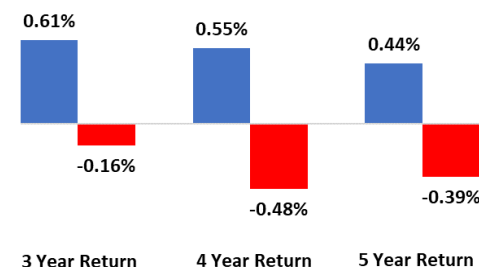
- Over half of LACERA's private equity general partners report that they integrate DEI into portfolio company management
  - Unclear how DEI is considered in portfolio company board composition
  - Some efforts to influence portfolio company management on DEI
- Private equity portfolio company boards indicate low inclusion profiles:<sup>2</sup>
  - 39% have no women<sup>3</sup>
  - 14% of directors are women
  - 3% are women of color
  - 18% are men of color
- LACERA restated its Responsible Contractor Policy (RCP) in 2022, incorporating DEI expectations of real assets managers

## Next Steps

- Initiate pilot project to engage several current general partners to focus and report on portfolio company board diversity
- Institute reporting from real assets managers of RCP DEI policy adherence

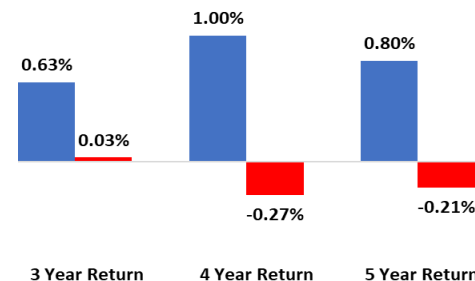
Russell 3000 Index - Average  
Annual Active Return

■ 2 or more women ■ fewer than 2 women



Russell 3000 Index - Average  
Annual Active Return

■ 3 or more racially/ethnically diverse directors ■ fewer than 3 racially/ethnically diverse directors



<sup>1</sup> Institutional Shareholder Services, "The Content of Their Character: How Diversity & Inclusion Continue to Drive Change", <https://insights.issgovernance.com/posts/the-content-of-their-character/>, Charts on right of slide show relative performance of Russell 3000 Index public companies based upon diversity attributes.

<sup>2</sup> Him for Her & Crunchbase, "2021 Study Of Gender Diversity On Private Company Boards", <https://news.crunchbase.com/business/him-for-her-2021-diversity-study-private-company-boards/>

<sup>3</sup> Data covering corporate board diversity at private companies is not widely available. The study analyzed 500 companies, at which 195 had no women serving on their boards.



# Pillar 4: Capital Formation



Internal  
Practices



Due  
Diligence



Active  
Ownership



Capital  
Formation



Industry  
Advocacy

## Capital Formation

Strategies to facilitate capital formation among firms with diverse ownership, such as emerging managers

### Next Steps



- Continue to enhance insights on firm ownership demographics, where available
- Continuously widen sourcing funnel for managers who embrace diverse teams to improve portfolio results
- Further expand emerging manager opportunities by launching emerging manager program in Real Assets

### Accomplishments



- ✓ Expanded systematic reporting on firm ownership demographics
  - Increased percentage of firms reporting demographics from prior year
- ✓ Doubled emerging manager program opportunities
  - Completed searches for private equity, illiquid credit, and global equity
  - Board increased global equity emerging manager program target allocation from 0-5% to 0-10%
- ✓ Continued annual review of the Board's consultant diversity practices

### Stated Objectives



- Systematically track firm ownership attributes across Fund, as available
- Take holistic view of capital formation by tracking allocations by firm demographics
- Ensure robust emerging manager opportunities across Fund
- Identify opportunities to widen sourcing funnel

LACERA T.I.D.E.

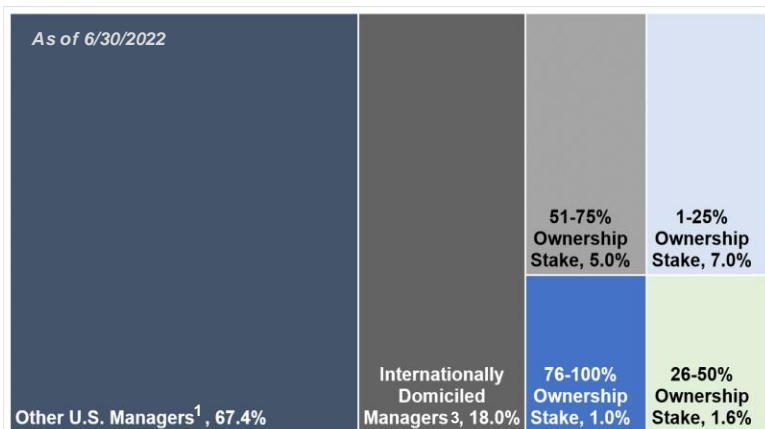




# Investment Partners by Firm Ownership

**Objective:** Systematically track demographics of investment partners' ownership across all mandates (to the extent they are available and reported) to monitor reach of inclusion of LACERA's capital commitments

## Total Fund AUM by Firm Ownership



- An aggregate of 14.6% of total Fund AUM is managed by US-based firms with a portion of firm ownership held by women or people of color<sup>2</sup>
- In absolute terms, assets managed by US-based diverse firms equal US\$10.1 billion
- 1.8% of total Fund AUM (\$1.3 billion) are US-based with diverse ownership that are within LACERA's emerging manager programs, up from 1.3% (\$910.4 million) last year and 1.2% (\$582.6 million) from prior year

## Active AUM by Firm Ownership

- 22.2% of assets (\$10.1 billion) in actively-managed mandates (i.e., excluding passive index strategies) are managed by US-based firms with diverse ownership, up from 10.6% in 2021 and 11.0% in 2020
- 2.8% (\$1.3 billion) of active assets under management are managed by US-based firms with diverse ownership that are in LACERA's emerging manager programs, up from 1.5% in the previous year



<sup>1</sup> "Other US Managers" includes publicly traded companies and US-based managers with no reported equity ownership by women or people of color.

<sup>2</sup> "Diverse ownership" indicates firms that report a portion of equity ownership by women and/or people of color based on EEO-1 classifications. Additional attributes have not been reported.

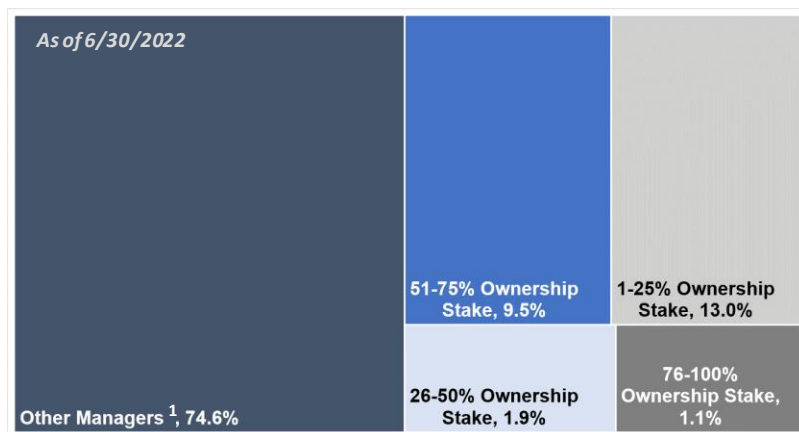
<sup>3</sup> "Internationally Domiciled Managers" is included to represent all assets managed by non-U.S. firms, regardless of ownership DEI attributes.



# Fee Analysis by Firm Ownership

**Objective:** Monitor fee distribution by reported investment partners' ownership across all mandates (to the extent they are available and reported) to monitor equity and inclusion of LACERA's capital commitments

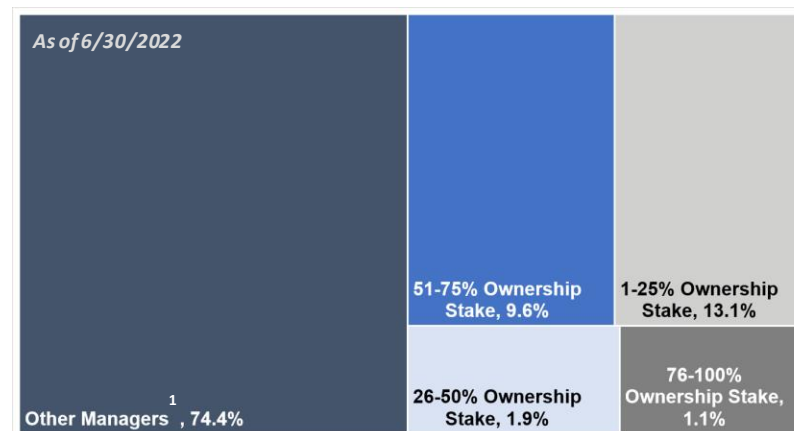
## Total Fund Fees Paid by Ownership



- Aggregate fees paid to US-based firms with diverse ownership increased to 25.4% of total Fund fees paid, compared to 12.7% in 2021 and 12.1% in 2020
- Fees paid to emerging managers with diverse ownership represent approximately 4.1% of total Fund fees paid. This is increased from 2.8% from prior year and 2.1% from 2020<sup>2</sup>

## Active Fees Paid by Ownership

- Fees paid to US-based firms with diverse ownership in actively-managed investment mandates increased to 25.6% of total active fees paid, relative 12.8% last year and 12.2% in 2020
- Emerging managers with diverse ownership represent approximately 4.1% of fees for actively managed mandates, an increase from 2.8% in 2021 and 2.1% in 2020



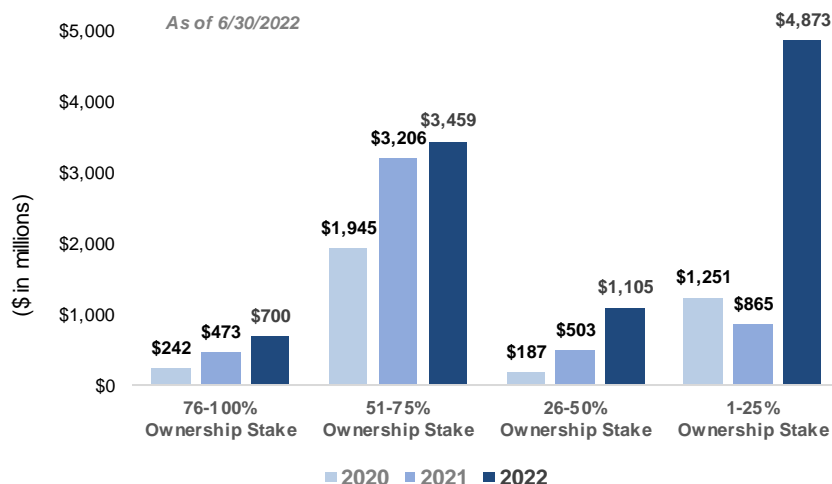
<sup>1</sup> "Other Managers" includes publicly traded companies that do not disclose broad employee ownership, US-based managers with no diverse ownership, and internationally domiciled managers

<sup>2</sup> LACERA emerging managers are composed of diverse-owned firms and non-diverse-owned firms



# Investment Partners Trend Analysis

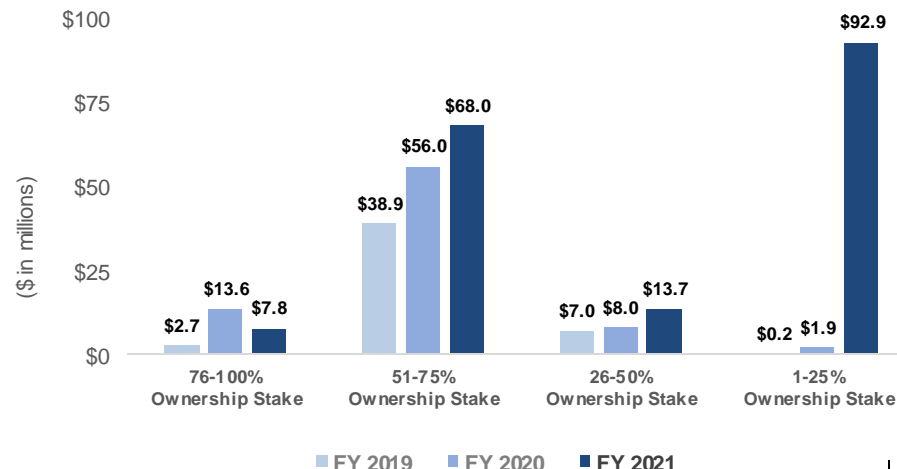
## US AUM by Ownership



- LACERA's deliberate due diligence practices have led to improvements in manager reporting and contributed to the year-over-year increase in the demographic ownership information
- In absolute dollar terms, total AUM managed by firms with diverse ownership equaled \$10.1 billion. This increase is due to enhanced data collection and has led to a sharp rise in the 1-25% diverse ownership category
- After normalizing the year-over-year manager data, assets managed by firms with diverse ownership remained flat

## US Fees Paid By Ownership

- Total fees paid to managers with diverse ownership rose to \$182.4 million in absolute terms. This increase is mostly due to enhanced data collection
- After normalizing the year-over-year manager data and comparing it to year-over-year AUM, fees paid to managers with diverse ownership increased by 31 basis points
- LACERA consistently structures each mandate with the best possible terms available across the total Fund to enhance future outcomes

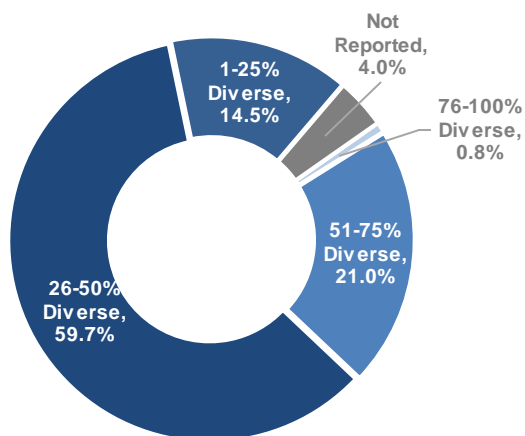




# Investment Partners Demographic Attributes

**Objective:** Monitor capital commitments by demographics of investment partners' investment and leadership teams as new firms may be founded by professionals from established firms

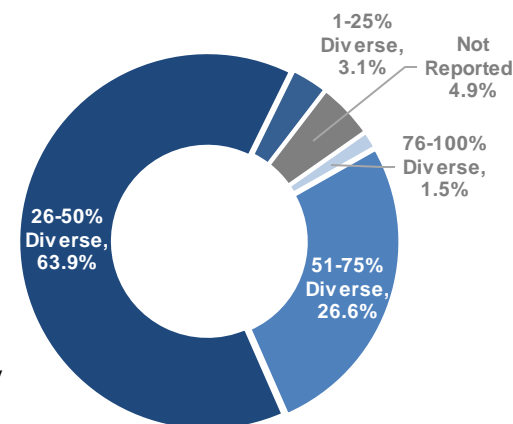
## Breakdown of U.S. Managers by Investment and Leadership Team Demographics<sup>1</sup>



- The US Manager distribution by demographic shows the percent composition of investment and leadership teams that are women and/or people of color
- For example, 21% of mandates are managed by teams with 51% to 75% of their investment and leadership teams comprised of women and/or people of color

## Total LACERA AUM by U.S. Demographic Composition

- The chart on the right shows the distribution of LACERA's assets managed by US-based managers divided by quartile of their combined investment and leadership team demographics that include women and/or people of color
- For example, 26.6% of LACERA assets are managed by teams with 51% to 75% of their combined investment and leadership comprised of women and/or people of color. Team demographics remained relatively unchanged across the various categories



<sup>1</sup> Analysis conducted based on the most recently reported data from investment partners including firms that did not provide demographic data in analyzable format and firms terminated after June 30, 2022, fiscal year-end. Private equity separate account emerging manager program underlying sub-managers excluded from data analysis due to unavailability of demographics data.

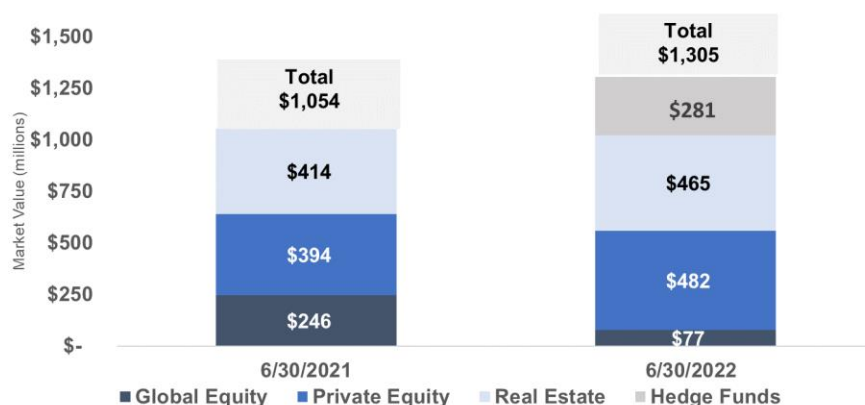
# Broadening Inclusion through Emerging Manager Programs



Capital  
Formation

**Objective:** Evaluate newer firms that may generate attractive returns, stemming from flexibility provided by smaller asset bases and more nimble investment approaches

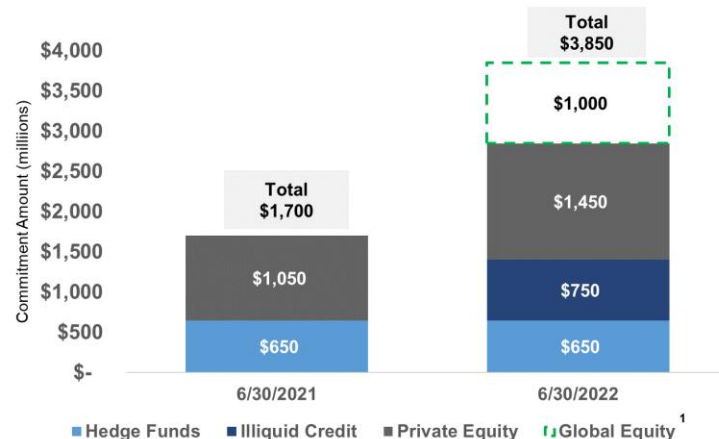
## LACERA Emerging Manager Market Value



- LACERA's emerging manager ("EM") market value increased from \$1.1 billion to \$1.3 billion from increased investments to EMs and market appreciation from June 2021 to June 2022
- LACERA deployed \$280 million to new EM mandates in hedge funds during fiscal year with an additional \$40 million deployed in Q3 2022
- Illiquid credit made first commitment of \$100 million in October 2022
- Private equity and global equity are in contract negotiations for newly approved EM mandates

## Expanding Allocation Opportunities to Emerging Manager Asset Categories

- LACERA more than doubled its emerging manager target allocations from prior year
  - Illiquid Credit EM program approved for 15% target allocation in October 2021
  - Private equity initiated its 5<sup>th</sup> EM program with a \$400 million allocation in February 2022
  - Board increased global equity EM program target range by 5% (~\$1 billion) in October 2022
- Board-approved Real Assets structure review includes upcoming launch of an EM program for Real Assets



<sup>1</sup> Global equity allocation range increased after FY 2022.

# Pillar 5: Industry Advocacy



Internal  
Practices



Due  
Diligence



Active  
Ownership



Capital  
Formation



Industry  
Advocacy

## Industry Advocacy

Strategies to improve LACERA's opportunity set by advancing DEI best practices across the financial services industry

### Next Steps

- Continue outreach to organizations to broaden reach of LACERA T.I.D.E.
- Explore industry affiliations that are consistent with and can augment industry advocacy (e.g., consider becoming signatory to CFA Institute's DEI code)
- Seek to influence trade organizations, consultants and other business partners to improve quality of DEI data and disclosures

### Accomplishments

- ✓ Trustees and staff featured as speakers, panelists, and moderators at over 110 events since launch of LACERA T.I.D.E.
- ✓ Inaugural CFA-LA and LACERA annual DEI event and quarterly DEI roundtables with other local public pension plans, asset managers and consultants
- ✓ Continued collaboration and outreach with affinity groups, industry organizations and business partners to increase visibility of LACERA's advocacy efforts

### Stated Objectives

- Expand industry influence through active engagement
- Collaborate with peers to advance best practices in DEI
- Improve availability and reliability of DEI data and disclosures
- Become a recognized leader in advocating for DEI in investment management industry

# Expand Industry Influence



Industry  
Advocacy

**Objective:** Advance industry focus on DEI by elevating LACERA's profile and engaging industry on DEI

**Update:** Trustees and staff spoke at over 110 industry events on DEI since T.I.D.E.'s inception

## Select 2022 events include

CALAPRS Trustees Roundtable  
2021 Milken Institute Global Conference  
The Women's Alliance of Saxena White  
LACERA and CFA-LA annual DEI Conference  
Council of Institutional Investors  
Women Investment Leaders Summit  
TIDE Spark  
2022 LAVCA ESG Awards  
CFA Research Challenge  
RFK Compass Emerging Manager Roundtable  
NASP SoCal  
Prequin Women in Alternatives  
ILPA Diversity in Action Roundtable  
NAIC Diverse Manager Roadshow  
Nossaman DEI Roundtable

**CALAPRS**  
EDUCATION • COMMUNICATION • NETWORKING

California Association of Public Retirement Systems



MILKEN  
INSTITUTE



CFA Society  
Los Angeles

Women's  Alliance



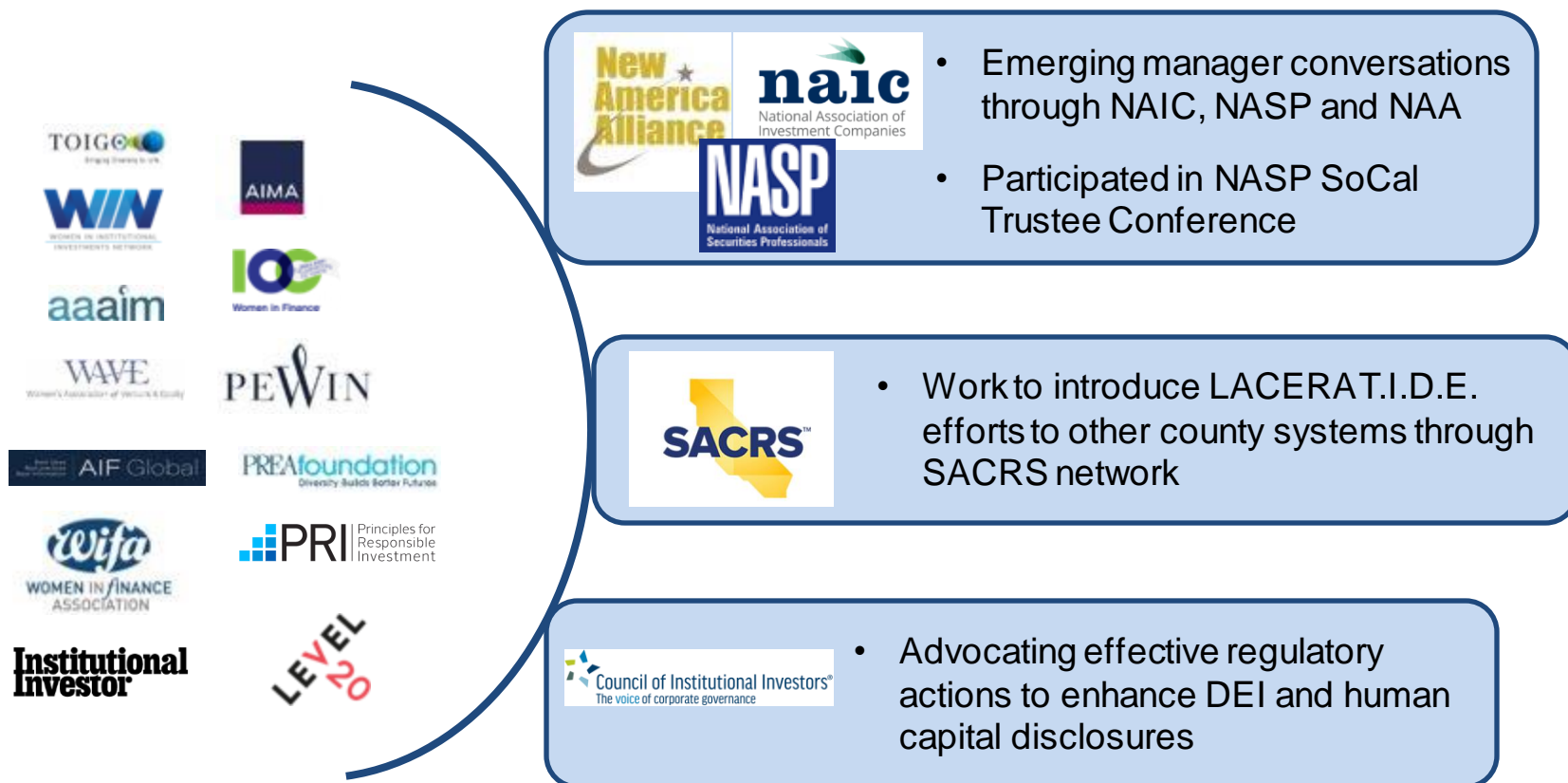
INSTITUTIONAL  
**LIMITED PARTNERS**  
ASSOCIATION



# Collaborate to Advance Best Practices

**Objective:** Collaborate to clarify and promote adoption of DEI best practices

**Update:** Ongoing outreach with industry organizations, asset managers, consultants and other public pension plans



# Improve DEI Data Availability and Reliability

**Objective:** Support efforts to improve availability and reliability of DEI data and disclosures for constructive due diligence

**Update:** Continuing work with PRI, ILPA and consultants to improve consistency of DEI data



- Provided input into new PRI standardized DEI due diligence questionnaire (“DDQ”) template, launched in 2022, to expand global DEI focus across markets
- LACERA is PRI signatory and serves on various advisory committees



- LACERA participates on ILPA DEI committee
- Continuing to encourage private equity managers to become ILPA “Diversity in Action” signatories
- Provided feedback on DEI metrics template and DDQ
- Explore potential of collaborating with other industry groups to further standardize data collection and disclosure



- Support the International Financial Reporting Standards new sustainability reporting framework to expand corporate disclosures of human capital and DEI performance using SASB standards



**Objective:** Provide a constructive voice for deliberate, pragmatic and meaningful focus on integrating DEI into the investment process

**Update:** LACERA's profile on advocating for DEI continues to elevate

## CFA LA Collaboration

- Partnered with the CFA Society of Los Angeles to hold a series of roundtable discussions amongst institutional investors, asset managers, and consultants in Southern California
- Conversations culminated in the first annual LACERA/CFA LA DEI Conference featuring a fireside chat and panel summaries

## LACERA Speaker Spotlight

- LACERA staff featured as fireside chat speaker at private equity sponsor's annual CEO summit
- Chat focused on LACERA's integration of DEI in all aspects of investment process as an important driver of superior risk-adjusted performance

# Observations





# Observations

## 1. Continued strong strides in several areas, including

- 99% of investment partners reporting available DEI demographics, up from 55% over 2 years
- Improved insight into investment partners' DEI practice, policies, and demographic profiles
- Over 300 directors of diverse backgrounds appointed to corporate boards
- Increased allocation opportunities for emerging managers

## 2. LACERA pursuing full Fund approach

- Standard part of diligence and monitoring of all investment mandates
- Every asset category, every mandate
- Steady yet asymmetric progress

## 3. Industry is evolving

- More candor, less window dressing from investment partners
- Focused engagement yielding some progress in policies and practices
- Increasing attention beyond “diversity” alone to include equity and inclusion
- More elevated executive oversight from HR/compliance
- Expansion of industry efforts to facilitate reporting (PRI, ILPA, CFA Institute, AIMA)

## 4. Noted challenges being addressed to further refine progress

- Progress is uneven and may be influenced by firm size and maturity
- DEI information not readily available in some non-US markets and for range of DEI attributes
- DEI focus remains uneven within firms, from senior positions to incoming junior positions
- Some continued inconsistent DEI disclosures from firms year-over-year

# Advanced, Unique Model of DEI Integration

LACERA T.I.D.E. continues to be innovative approach to further our strategic objective of moving from “Allocator to Best-in-Class Investor”

Earnest, routine, comprehensive analysis and reporting helps advance iterative improvements

## 1. More Information and Insights on Manager Practices

- 5 years of comprehensive DEI due diligence provides expanding data and team knowledge
- Enables year-over-year trendlines, peer comparisons, analysis



## 2. Analyzing Information with Greater Insights

- Compare asset managers to peers by asset class, firm size, location, etc.
- Advise investment partners when they lag in DEI reporting and practices
- Better equipped to spot “window dressing” disclosures

LACERA T.I.D.E.

## 3. Fostering Comprehensive Approach to DEI

- Covering policy, processes, practices, and demographic profiles
- Inclusive of executives, investment teams, and equity owners

## 4. Pursuing Synergies in LACERA T.I.D.E. Pillars and Strategic Work Plan

- Industry advocacy to support DEI reporting frameworks improves our due diligence tools
- DEI focus on the investment teams at asset managers may open opportunities for talent to spin off new firms and expand our opportunity set

December 2, 2022

TO: Trustees – Board of Investments

FROM: Calvin Chang   
Senior Investment Analyst

Noah Damsky   
Senior Investment Analyst

Terra Elijah   
Senior Investment Analyst

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **LACERA INVESTMENT COST REPORT – FISCAL YEAR 2022**

California Government Code Section 7514.7 (Section 7514.7) requires that public pensions disclose information on fees, expenses, and carried interest information in connection with their investments in alternative investment vehicles at least on an annual basis, the results to the public in an open meeting for all new commitments made on and after January 1, 2017. In addition, the law requires each public pension system to undertake reasonable efforts to obtain the aforementioned information for any existing contracts to which the public pension has not made a new capital commitment on or after January 1, 2017. This expense and fee report provides maximum transparency within the limitations of the law and existing confidentiality agreements.

Included in this year's report, in addition to alternative investment vehicles, investment costs for the public markets and title holding companies are now also summarized in this report to provide a comprehensive view of LACERA's investment program. Investment costs are one of LACERA's core investment beliefs and a contributing factor to risk-adjusted performance. Given the importance, we believe investment costs should be transparent and actively monitored.

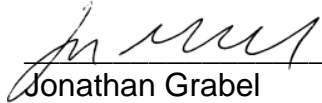
For the fiscal year 2022, LACERA's alternative investment vehicle costs were \$628 million and \$83 million for public market and title holding company investments. Alternative investment costs increased by 15% from the prior fiscal year after about \$8 billion of new capital commitments were made across private equity, hedge fund, and real asset opportunities.

An overview of investment costs (**Attachment 1**) will be reviewed at the December 14, 2022, Board of Investments meeting. An expanded view of the fees is provided (**Attachment 2**) as required by Section 7514.7, in addition to California Government Code Section 6254.26(b) reporting (**Attachment 3**).

Trustees - Board of Investments  
December 2, 2022  
Page 2 of 2

Attachments

Noted and Reviewed:

  
\_\_\_\_\_  
Jonathan Grabel  
Chief Investment Officer

CC:ND:TE:cl

# **Annual Investment Cost Report**

## **Fiscal Year 2021-2022**

**Board of Investments**

**December 14, 2022**

Calvin Chang – Senior Investment Analyst  
Noah Damsky – Senior Investment Analyst  
Terra Elijah – Senior Investment Analyst



**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**

# Alternative Investment Costs



# Overview of CA Government Code Section 7514.7

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The intent of California Government Code Section 7514.7 (Section 7514.7), also referred to as “AB 2833”, is to increase the transparency of fees paid by public investment funds to alternative investments<sup>1</sup> by requiring public investment funds to disclose the fees, expenses, and carried interest in connection with alternative investment vehicles and their underlying investments at least once annually at an open meeting. The fee transparency disclosure requirements are applicable to:

- 1) New contracts entered into on and after January 1, 2017; and
- 2) Existing contracts for which a new capital commitment is made on or after January 1, 2017
- 3) In addition, each public pension system is required to undertake reasonable efforts to disclose such information for any existing contract for which the public investment fund has not made a new capital commitment on or after January 1, 2017



# Requirements Under CA Government Code Section 7514.7

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Effective January 1, 2017, annual reporting rules require the disclosure of the following:

- 1) The fees and expenses paid directly to the alternative investment vehicle, the fund manager, or related parties;
- 2) Pro rata share of fees and expenses not covered by item (1) above that are paid from the alternative investment vehicle to the fund manager or related parties;
- 3) Pro rata share of carried interest distributed to the fund manager or related parties;
- 4) Pro rata share of aggregate fees and expenses paid by all of the portfolio companies held within the alternative investment vehicle to the fund manager or related parties;
- 5) The gross and net rate of return of each alternative investment vehicle since inception; and
- 6) The information described in subdivision (b) of CA Government Code Section 6254.26 (Section 6254.26(b)) of the Public Records Act.



## CA Government Code Section 6254.26 (b)

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Included as a subset of Section 7514.7, Section 6254.26(b) requires the disclosure of the following:

- 1) Name, address and vintage year of fund;
- 2) Dollar amount since inception of public plan's commitment to fund;
- 3) Dollar amount since inception of public plan's cash contributions to fund;
- 4) Fiscal year-end dollar amount of fund's cash distributions received by public plan from fund;
- 5) Fiscal year-end dollar amount of cash distributions received plus the remaining value of fund's assets attributable to the investment by public plan;
- 6) Net internal rate of return of fund since inception;
- 7) Investment multiple of fund since inception;
- 8) Dollar amount of total management fees and costs paid by public plan on an annual fiscal year-end basis; and
- 9) Annual fiscal year-end dollar amount of cash profit public plan has received from fund.

# Summary of Alternative Investment Fees, Expenses, and Carried Interest for the period July 1, 2021 through June 30, 2022

Functional Category <sup>1</sup>	Management Fee <sup>2</sup>	Fund Expenses <sup>3</sup>	Carried Interest <sup>4</sup>	Total Costs
<b>Growth</b>	<b>\$ 152,250,120</b>	<b>\$ 61,542,152</b>	<b>\$ 210,961,171</b>	<b>\$ 424,753,443</b>
Global Equity	7,034,336	785,395	6,707,514	14,527,245
Private Equity	135,997,583	53,733,408	204,014,350	393,745,340
Non-Core Private Real Estate	9,218,202	7,023,349	239,308	16,480,858
<b>Credit</b>	<b>\$ 25,792,791</b>	<b>\$ 13,150,422</b>	<b>\$ 31,607,394</b>	<b>\$ 70,550,607</b>
Bank Loans	-	-	-	-
Illiquid Credit	25,792,791	13,150,422	31,607,394	70,550,607
<b>Real Assets and Inflation Hedges</b>	<b>\$ 26,630,476</b>	<b>\$ 6,349,059</b>	<b>\$ -</b>	<b>\$ 32,979,535</b>
Core Private Real Estate	4,104,350	942,267	-	5,046,618
Infrastructure	11,592,049	3,876,977	-	15,469,026
Natural Resources & Commodities	10,934,077	1,529,815	-	12,463,892
<b>Risk Reduction and Mitigation</b>	<b>\$ 49,318,969</b>	<b>\$ 12,255,584</b>	<b>\$ 37,900,334</b>	<b>\$ 99,474,888</b>
Diversified Hedge Fund	49,318,969	12,255,584	37,900,334	99,474,888
<b>Total</b>	<b>\$ 253,992,357</b>	<b>\$ 93,297,217</b>	<b>\$ 280,468,900</b>	<b>\$ 627,758,473</b>

<sup>1</sup> Cost data representative for only alternative investment vehicles within each functional asset category.

<sup>2</sup> Management fees paid or accrued to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, calculation using the respective management fee rate, and pro rata share of the alternative investment fund's total management fee. Negative values indicate giveback of previously accrued or paid fees.

<sup>3</sup> Fund expenses paid or accrued to the alternative investment fund during the fiscal year, including by portfolio companies. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, pro rata share of the alternative investment fund's total fund expenses, and estimations based on alternative investment fund's operating expense ratios obtained from the most recent audited financial statement. Negative values indicate giveback of previously accrued or paid fees.

<sup>4</sup> Carried interest paid to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, and pro rata share of the alternative investment fund's total carried interest. Negative values indicate giveback of previously paid fees.

# Summary of Alternative Investment Fees, Expenses, and Carried Interest for the period July 1, 2020 through June 30, 2021

Functional Category <sup>1</sup>	Management Fee <sup>2</sup>	Fund Expenses <sup>3</sup>	Carried Interest <sup>4</sup>	Total Costs
<b>Growth</b>	<b>\$ 133,127,042</b>	<b>\$ 45,056,356</b>	<b>\$ 210,064,376</b>	<b>\$ 388,247,774</b>
Global Equity	6,125,883	845,052	5,448,303	12,419,238
Private Equity	119,619,979	41,931,971	194,374,149	355,926,099
Non-Core Private Real Estate	7,381,180	2,279,333	10,241,924	19,902,437
<b>Credit</b>	<b>\$ 17,533,316</b>	<b>\$ 7,711,438</b>	<b>\$ 31,397,705</b>	<b>\$ 56,642,459</b>
Bank Loans	3,833,781	805,774	-	4,639,555
Illiquid Credit	13,699,535	6,905,664	31,397,705	52,002,904
<b>Real Assets and Inflation Hedges</b>	<b>\$ 13,413,211</b>	<b>\$ 3,378,539</b>	<b>\$ -</b>	<b>\$ 16,791,749</b>
Core Private Real Estate	6,660,841	1,210,727	-	7,871,568
Infrastructure	5,530,331	2,100,536	-	7,630,866
Natural Resources & Commodities	1,222,039	67,276	-	1,289,315
<b>Risk Reduction and Mitigation</b>	<b>\$ 29,182,781</b>	<b>\$ 6,654,866</b>	<b>\$ 46,547,625</b>	<b>\$ 82,385,271</b>
Diversified Hedge Fund	29,182,781	6,654,866	46,547,625	82,385,271
<b>Total</b>	<b>\$ 193,256,350</b>	<b>\$ 62,801,198</b>	<b>\$ 288,009,706</b>	<b>\$ 544,067,254</b>

<sup>1</sup> Cost data representative for only alternative investment vehicles within each functional asset category.

<sup>2</sup> Management fees paid or accrued to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, calculation using the respective management fee rate, and pro rata share of the alternative investment fund's total management fee. Negative values indicate giveback of previously accrued or paid fees.

<sup>3</sup> Fund expenses paid or accrued to the alternative investment fund during the fiscal year, including by portfolio companies. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, pro rata share of the alternative investment fund's total fund expenses, and estimations based on alternative investment fund's operating expense ratios obtained from the most recent audited financial statement. Negative values indicate giveback of previously accrued or paid fees.

<sup>4</sup> Carried interest paid to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, and pro rata share of the alternative investment fund's total carried interest. Negative values indicate giveback of previously paid fees.

# Year-Over-Year Sources of Change

Functional Category	Sources of Change
<b>Growth</b>	
Global Equity	Increased management fees and carried interest due to outperformance and higher returns relative to high watermark, respectively
Private Equity	Management fee and expenses increased as a result of new vintage year fund activations while carried interest increased slightly after portfolio company exit activity continued from the prior year
Non-Core Private Real Estate	Management fee and expenses increased due to reclassification of assets from core private equity real estate and new fund activations while carried interest decreased due to limited realizations
<b>Credit</b>	
Bank Loans	Asset reclassified to illiquid credit and had no material changes to fees from prior fiscal year
Illiquid Credit	All costs increased as a result of an increased allocation to illiquid credit managers and reclassification of assets to illiquid credit
<b>Real Assets and Inflation Hedges</b>	
Core Private Real Estate	Management fee and expenses decreased due to reclassification of assets to non-core private equity real estate
Infrastructure	Increased commitments led to higher fees
Natural Resources & Commodities	Increased commitments led to higher fees
<b>Risk Reduction and Mitigation</b>	
Diversified Hedge Fund	Management fees and fund expenses increased as a result of an increased allocation to hedge fund managers while carried interest decreased due to stronger relative performance in the prior year

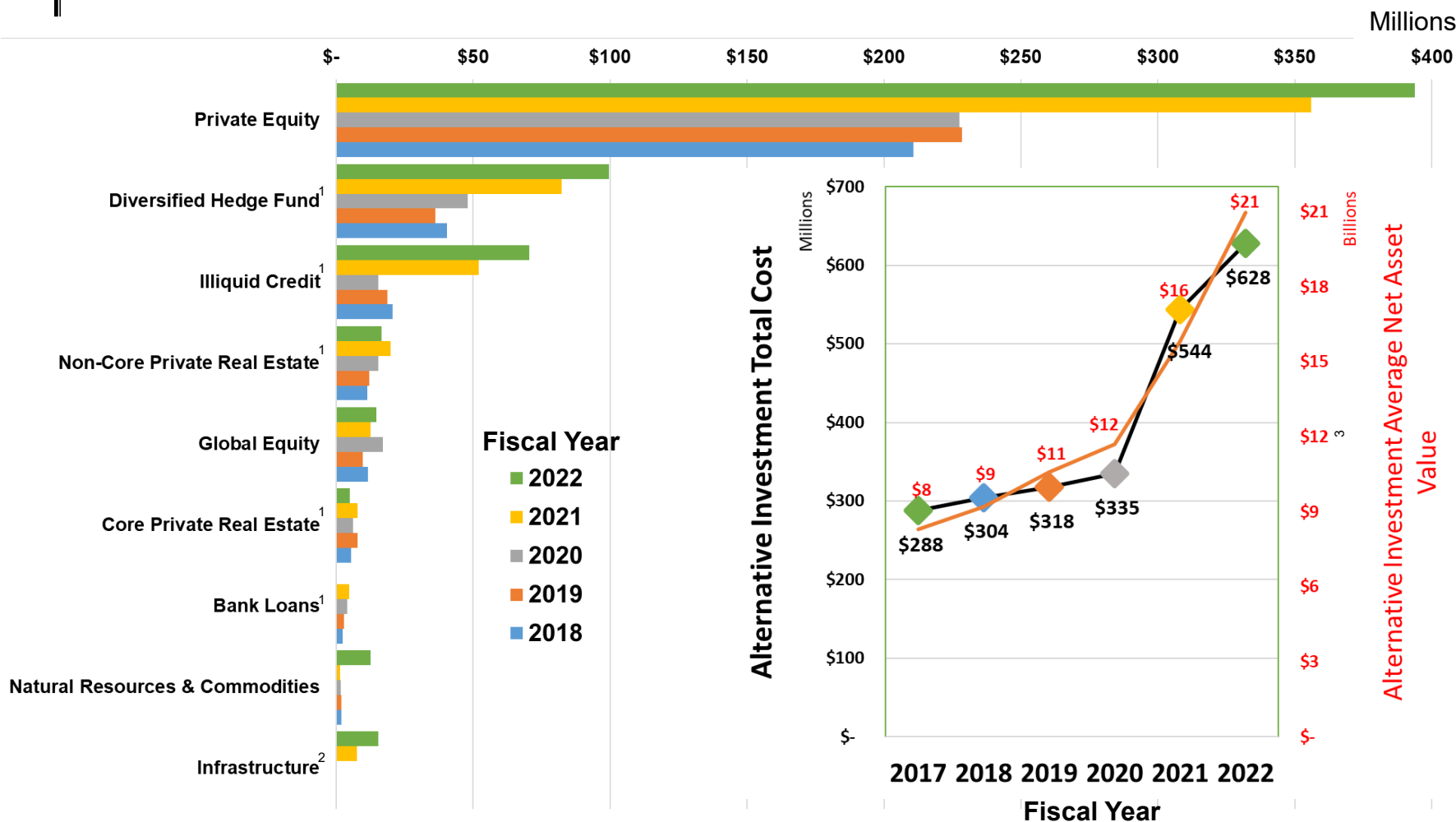
Functional Category	Management Fee	Fund Expenses	Carried Interest	Total Costs
Private Equity	\$ 16,377,604	\$ 11,801,437	\$ 9,640,201	\$ 37,819,241
Illiquid Credit	\$ 12,093,256	\$ 6,244,758	\$ 209,689	\$ 18,547,703
Diversified Hedge Fund	\$ 20,136,188	\$ 5,600,718	\$ (8,647,291)	\$ 17,089,617
Natural Resources & Commodities	\$ 9,712,038	\$ 1,462,539	\$ -	\$ 11,174,577
Infrastructure	\$ 6,061,718	\$ 1,776,441	\$ -	\$ 7,838,160
Global Equity	\$ 908,453	\$ (59,657)	\$ 1,259,211	\$ 2,108,007
Core Private Real Estate	\$ (2,556,491)	\$ (268,460)	\$ -	\$ (2,824,950)
Non-Core Private Real Estate	\$ 1,837,022	\$ 4,744,016	\$ (10,002,616)	\$ (3,421,579)
Bank Loans	\$ (3,833,781)	\$ (805,774)	\$ -	\$ (4,639,555)

Increase / (Decrease) from prior year

\*Illiquid Credit and Diversified Hedge Fund portfolio allocation increases stem from adjustments made to reach LACERA's strategic asset allocation targets.



# Historical Alternative Investment Total Costs

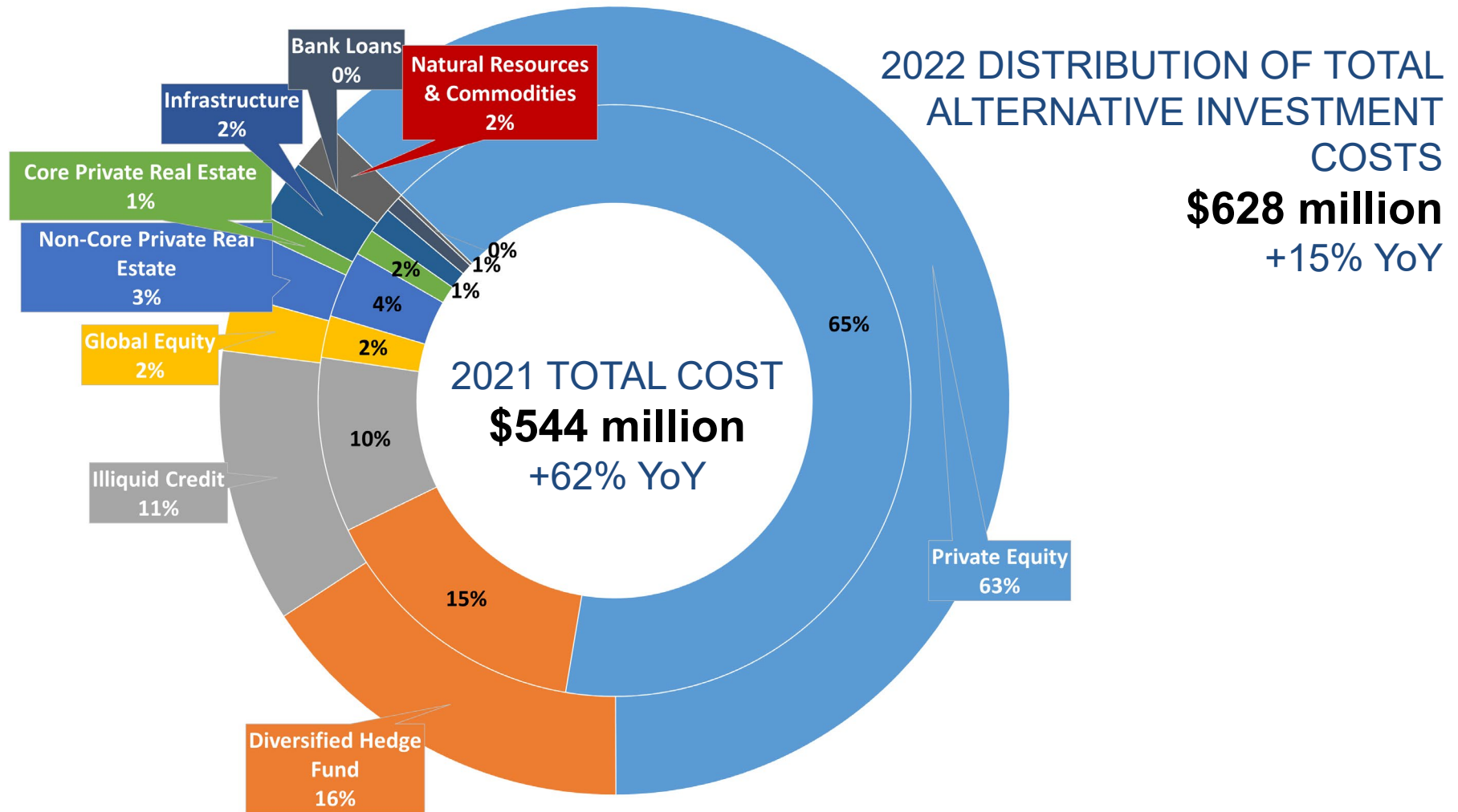


<sup>1</sup> Some assets were reclassified amongst functional categories during fiscal year 2022

<sup>2</sup> Infrastructure alternative fund investments commenced during fiscal year 2021

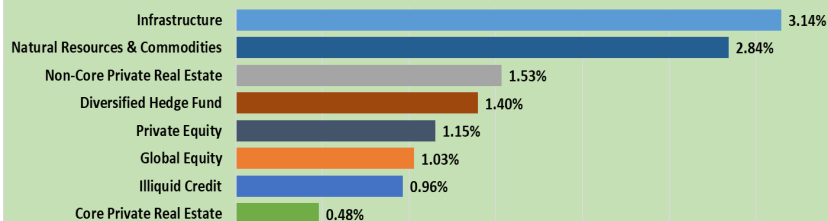
<sup>3</sup> Net asset value is the average of the beginning and ending market values for the respective periods

# Distribution of Total Alternative Investment Costs

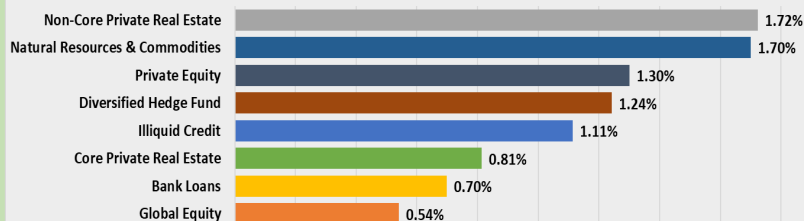


# Alternative Investment Costs Per Market Value

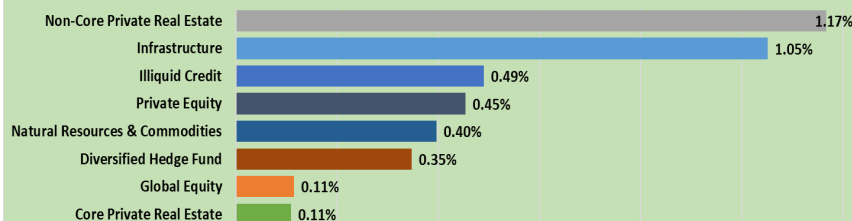
**FY 2022 Management Fee per Market Value**



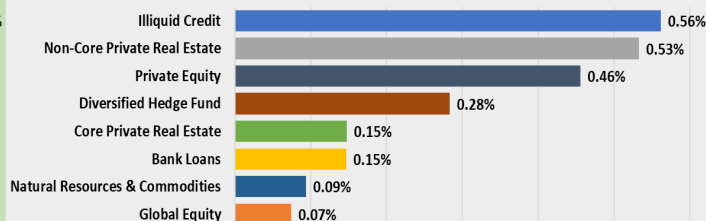
**FY 2021 Management Fee per Market Value**



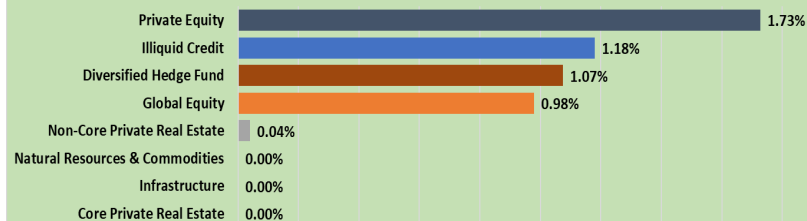
**FY 2022 Fund Expenses per Market Value**



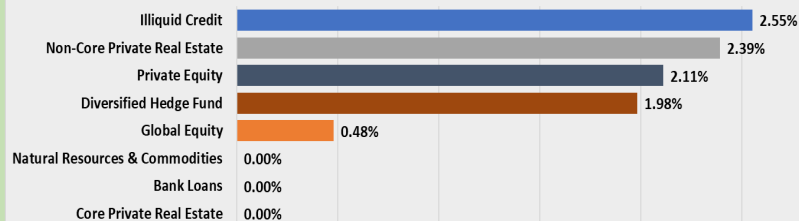
**FY 2021 Fund Expenses per Market Value**



**FY 2022 Carried Interest per Market Value**



**FY 2021 Carried Interest per Market Value**



**LACERA reports performance net of costs**

\*Market value is the average of the beginning and ending market values for the respective periods; Infrastructure was excluded in 2021 due to the low market value during the ramp up period, which resulted in short-term volatility in the cost ratio; Bank loan assets were reclassified into illiquid credit during fiscal year 2022

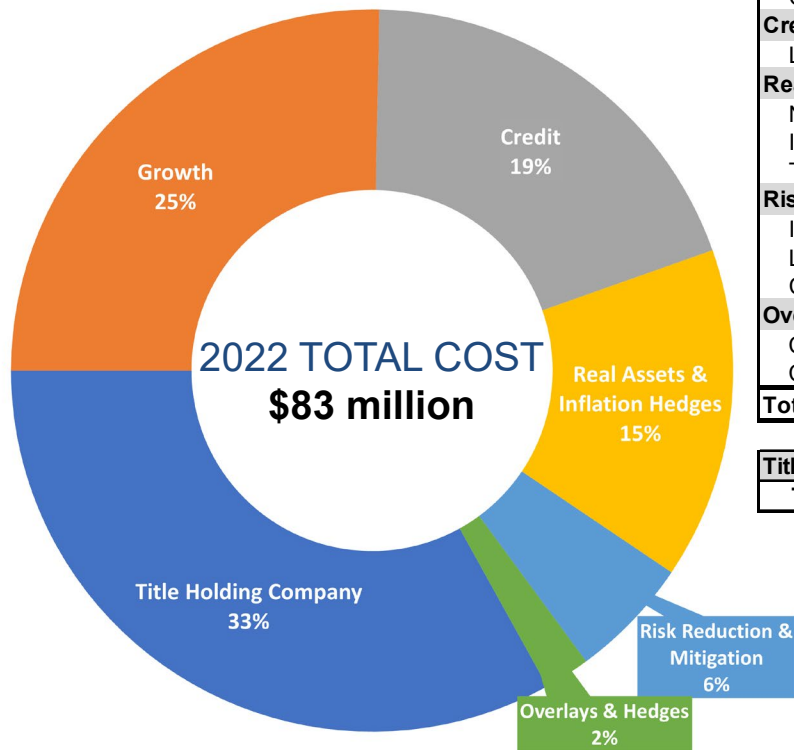


# Public Market and Title Holding Company Investment Costs





# Summary of Public Market and Title Holding Company Investment Costs for the period July 1, 2021 through June 30, 2022



Functional Category	Management Fee	Fund Expenses	Carried Interest	Total Costs
<b>Growth</b>	\$ 21,000,006	\$ -	\$ -	<b>\$21,000,006</b>
Global Equity	21,000,006	-	-	21,000,006
<b>Credit</b>	\$ 15,982,561	\$ -	\$ -	<b>\$15,982,561</b>
Liquid Credit	15,982,561	-	-	15,982,561
<b>Real Assets &amp; Inflation Hedges</b>	\$ 12,311,548	\$ -	\$ -	<b>\$12,311,548</b>
Natural Resources & Commodities	7,578,535	-	-	7,578,535
Infrastructure	4,527,504	-	-	4,527,504
TIPS	205,509	-	-	205,509
<b>Risk Reduction &amp; Mitigation</b>	\$ 4,529,411	\$ -	\$ -	<b>\$ 4,529,411</b>
Investment Grade Bonds	4,251,858	-	-	4,251,858
Long-Term Government Bonds	-	-	-	-
Cash	277,553	-	-	277,553
<b>Overlays &amp; Hedges</b>	\$ 1,694,902	\$ -	\$ -	<b>\$ 1,694,902</b>
Cash Overlay	596,848	-	-	596,848
Currency Hedge	1,098,054	-	-	1,098,054
<b>Total Public Market</b>	\$ 55,518,427	\$ -	\$ -	<b>\$55,518,427</b>

<b>Title Holding Company</b>	\$ 17,739,652	\$ 836,618	\$ 8,838,794	<b>\$27,415,064</b>
<b>Total Costs</b>	\$ 73,258,080	\$ 836,618	\$ 8,838,794	<b>\$82,933,491</b>

# Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

Functional Category	Alternative Investment Fund	A	B	C				
		Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees
Core Private Real Estate	Core Property Index Fund	\$ 283,465	\$ 118,055	\$ -	\$ -	12.3%	12.1%	\$ 401,520
Core Private Real Estate	Invesco Real Estate Asia Fund, L.P.	\$ 1,082,811	\$ 217,957	\$ -	\$ 209,248	6.5%	5.7%	\$ 1,510,016
Core Private Real Estate	Prologis European Logistics Fund, L.P.	\$ 1,937,176	\$ 181,752	\$ -	\$ 215,256	13.1%	11.8%	\$ 2,334,183
Core Private Real Estate	RREEF Core Plus Industrial Fund, L.P.	\$ 800,898	\$ -	\$ -	\$ -	23.5%	23.2%	\$ 800,898
Diversified Hedge Fund	AM Asia Strategies Fund, L.P.	\$ 841,624	\$ 325,156	\$ 114,763	\$ -	-3.1%	-2.6%	\$ 1,166,780
Diversified Hedge Fund	Amundsen Diversified Master Fund ICAV	\$ 829,783	\$ 275,322	\$ 18,242	\$ -	-6.6%	-6.1%	\$ 1,105,105
Diversified Hedge Fund	Brevan Howard Master Fund Limited	\$ 8,944,167	\$ 823,301	\$ 7,938,756	\$ -	15.2%	10.5%	\$ 9,767,468
Diversified Hedge Fund	Capula Global Relative Value Fund, L.P.	\$ 7,559,669	\$ 2,127,368	\$ 1,780,914	\$ -	9.4%	6.3%	\$ 9,687,037
Diversified Hedge Fund	Caxton Global Investments, LLC - Class T	\$ 3,259,227	\$ 404,408	\$ 1,873,889	\$ -	17.8%	12.9%	\$ 3,663,635
Diversified Hedge Fund	Davidson Kempner Institutional Partners, L.P.	\$ 6,121,273	\$ 292,317	\$ 4,145,121	\$ 43,667	7.3%	4.8%	\$ 6,457,257
Diversified Hedge Fund	HBK Multi-Strategy Fund, L.P.	\$ 6,588,415	\$ 2,015,855	\$ 8,448,736	\$ -	7.6%	4.9%	\$ 8,604,270
Diversified Hedge Fund	Hudson Bay Fund, L.P.	\$ 8,752,347	\$ 5,084,154	\$ 12,284,445	\$ -	16.1%	11.5%	\$ 13,836,501
Diversified Hedge Fund	Linear B Onshore Fund, L.P.	\$ 540,912	\$ -	\$ 35,950	\$ -	10.8%	5.0%	\$ 540,912
Diversified Hedge Fund	Lucid Clarity Offshore Fund, Ltd	\$ 267,100	\$ 97,646	\$ -	\$ -	1.8%	1.2%	\$ 364,746
Diversified Hedge Fund	Polar Multi-Strategy Fund (US), L.P.	\$ 4,636,480	\$ 105,357	\$ 1,106,309	\$ -	16.2%	12.1%	\$ 4,741,837
Diversified Hedge Fund	San Gabriel Fund, L.P.	\$ (533,777)	\$ 504,193	\$ -	\$ -	4.8%	4.2%	\$ (29,584)
Diversified Hedge Fund	Sparta Global Opportunities Fund Ltd	\$ 515,964	\$ 146,293	\$ 153,210	\$ -	4.7%	1.7%	\$ 662,256
Diversified Hedge Fund	Stable Asset Management	\$ 522,904	\$ -	\$ -	\$ -	-1.3%	-1.1%	\$ 522,904
Diversified Hedge Fund	Trutino Relative Value Rates Fund, L.P.	\$ 472,881	\$ 10,548	\$ -	\$ -	-4.0%	-5.5%	\$ 483,429
Global Equity	Cevian Capital II Master Fund, L.P.	\$ 4,259,118	\$ 134,182	\$ -	\$ -	7.7%	6.5%	\$ 4,393,300
Global Equity	JANA Strategic Investment Fund V, L.P.	\$ 1,185,393	\$ 201,490	\$ 2,749,841	\$ -	22.5%	14.9%	\$ 1,386,883
Global Equity	The SFP Value Realization Master Fund Ltd	\$ 1,589,825	\$ 449,723	\$ 3,957,673	\$ -	13.7%	10.8%	\$ 2,039,549
Illiquid Credit	BPC Opportunities Fund II, L.P.	\$ 210,838	\$ 343,345	\$ -	\$ -	9.0%	7.9%	\$ 554,183
Illiquid Credit	BPC Opportunities Fund III, L.P.	\$ 968,953	\$ 387,296	\$ -	\$ -	16.3%	12.7%	\$ 1,356,249
Illiquid Credit	Glendon Opportunities Fund II, L.P.	\$ 1,681,873	\$ 136,496	\$ -	\$ 23,836	26.0%	20.9%	\$ 1,842,205
Illiquid Credit	Glendon Opportunities Fund, L.P.	\$ 527,183	\$ 74,510	\$ -	\$ 9,174	10.5%	8.0%	\$ 610,867
Illiquid Credit	Lake Vineyard Fund, L.P.	\$ 179,067	\$ 123,521	\$ -	\$ -	NM	NM	\$ 302,589
Illiquid Credit	Magnetar Lake Credit Fund, LLC	\$ 6,224,237	\$ 6,156,409	\$ 14,512,507	\$ -	33.0%	26.4%	\$ 12,380,646
Illiquid Credit	Napier Park Lake Credit Fund, L.P.	\$ 7,664,812	\$ 3,764,787	\$ 10,829,525	\$ -	23.7%	18.9%	\$ 11,429,598
Illiquid Credit	Oaktree Opportunities Fund IX, L.P.	\$ 900,915	\$ 190,397	\$ -	\$ 35,858	8.6%	6.5%	\$ 1,127,170
Illiquid Credit	Oaktree Opportunities Fund VIII b, L.P.	\$ 184,241	\$ 31,393	\$ -	\$ 25,439	9.8%	7.3%	\$ 241,073
Illiquid Credit	Oaktree Opportunities Fund VIII, L.P.	\$ -	\$ 11,760	\$ 63,905	\$ -	12.9%	9.1%	\$ 11,760
Illiquid Credit	OCM Opportunities Fund VII b, L.P.	\$ -	\$ 1,736	\$ 4,146	\$ -	21.8%	16.5%	\$ 1,736
Illiquid Credit	OCM Opportunities Fund VII, L.P.	\$ -	\$ 2,233	\$ -	\$ -	10.1%	7.3%	\$ 2,233
Illiquid Credit	PIMCO Tactical Opportunities Onshore Fund, L.P.	\$ 2,867,044	\$ 769,302	\$ 6,197,311	\$ -	8.6%	6.2%	\$ 3,636,346
Illiquid Credit	San Gabriel Fund 3, L.P.	\$ 550,464	\$ 305,220	\$ -	\$ -	6.0%	5.3%	\$ 855,684
Illiquid Credit	Tennenbaum Senior Loan Fund V, LLC	\$ 3,833,163	\$ 757,710	\$ -	\$ -	8.4%	7.3%	\$ 4,590,872
Infrastructure	Antin Infrastructure Partners Mid Cap I-A SCSp	\$ 1,960,364	\$ 98,517	\$ -	\$ -	NM	NM	\$ 2,058,881
Infrastructure	AxInfra US II, L.P.	\$ 218,249	\$ 4,154	\$ -	\$ -	7.1%	6.5%	\$ 222,403
Infrastructure	Axiom Infrastructure Canada II, L.P.	\$ -	\$ -	\$ -	\$ -	NM	NM	\$ -
Infrastructure	DIF Core-plus Infrastructure Fund III Coöperatief U.A.	\$ 298,062	\$ 123,246	\$ -	\$ -	NM	NM	\$ 421,308
Infrastructure	DIF Infrastructure IV Coöperatief U.A.	\$ 1,965,750	\$ 660,452	\$ -	\$ -	113.8%	54.6%	\$ 2,626,202
Infrastructure	Grain Communications Opportunity Fund III, L.P.	\$ 1,113,502	\$ 310,106	\$ -	\$ -	NM	NM	\$ 1,423,608
Infrastructure	Grain Spectrum Holdings III, L.P.	\$ 231,499	\$ 17,502	\$ -	\$ (620)	-0.8%	-1.6%	\$ 248,381
Infrastructure	KKR Diversified Core Infrastructure Fund L.P.	\$ 243,724	\$ 175,825	\$ -	\$ -	NM	NM	\$ 419,549
Infrastructure	Pan-Europe Infrastructure III, L.P.	\$ 1,048,398	\$ 142,892	\$ -	\$ 207,171	21.1%	16.3%	\$ 1,398,461
Infrastructure	Partners Group Direct Infrastructure 2020 (USD) A, L.P.	\$ 4,512,500	\$ 1,156,754	\$ -	\$ 980,978	NM	NM	\$ 6,650,232
Natural Resources & Commodities	Cibus Enterprise II, L.P.	\$ 145,563	\$ 57,706	\$ -	\$ -	NM	NM	\$ 203,269
Natural Resources & Commodities	Cibus Fund II, L.P.	\$ 797,343	\$ 325,715	\$ -	\$ -	NM	NM	\$ 1,123,058
Natural Resources & Commodities	Orion Mine Finance (Onshore) Fund III, L.P.	\$ 6,934,952	\$ 293,549	\$ -	\$ -	21.4%	7.5%	\$ 7,228,501
Natural Resources & Commodities	Orion Mineral Royalty Fund I LP	\$ -	\$ 553,230	\$ -	\$ -	16.8%	6.9%	\$ 553,230
Natural Resources & Commodities	The Energy & Minerals Group Fund III, L.P.	\$ 1,207,521	\$ 84,312	\$ -	\$ 22,508	-4.2%	-6.0%	\$ 1,314,341
Natural Resources & Commodities	TIAA-CREF Global Agriculture II LLC	\$ 1,146,351	\$ 92,401	\$ -	\$ -	4.7%	2.5%	\$ 1,238,751
Natural Resources & Commodities	TIAA-CREF Global Agriculture LLC	\$ 702,347	\$ 100,394	\$ -	\$ -	5.2%	3.6%	\$ 802,741

# Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

Fiscal Year-Ended June 30, 2022		A	B	C			Sum of A + B + C	
Functional Category	Alternative Investment Fund	Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees
Non-Core Private Real Estate	Aermont Capital Real Estate Fund IV SCSp	\$ 597,926	\$ 97,468	\$ -	\$ -	-5.0%	-13.0%	\$ 695,393
Non-Core Private Real Estate	AEW Value Investors Asia III, L.P.	\$ 489,922	\$ 43,864	\$ -	\$ -	7.8%	6.1%	\$ 533,786
Non-Core Private Real Estate	AG Asia Realty Fund IV, L.P.	\$ 1,197,178	\$ 193,138	\$ -	\$ -	27.5%	19.5%	\$ 1,390,316
Non-Core Private Real Estate	AG Europe Realty Fund II, L.P.	\$ 624,508	\$ 125,206	\$ -	\$ -	18.9%	12.9%	\$ 749,714
Non-Core Private Real Estate	Bain Capital Real Estate Fund I-A, L.P.	\$ 1,077,074	\$ 643,550	\$ -	\$ 643,550	32.6%	34.2%	\$ 2,364,174
Non-Core Private Real Estate	Bain Capital Real Estate Fund II-B, L.P.	\$ -	\$ -	\$ -	\$ 742,785	NM	NM	\$ 742,785
Non-Core Private Real Estate	CapMan Nordic Real Estate II FCP-RAIF	\$ 459,812	\$ 201,238	\$ -	\$ 326,410	18.8%	14.2%	\$ 987,460
Non-Core Private Real Estate	CapMan Nordic Real Estate III FCP-RAIF	\$ 476,197	\$ 392,737	\$ -	\$ 401,199	NM	NM	\$ 1,270,133
Non-Core Private Real Estate	Capri Urban Investors, LLC	\$ 167,280	\$ -	\$ -	\$ -	N/A	-13.4%	\$ 167,280
Non-Core Private Real Estate	Carlyle Europe Real Estate Partners III, L.P.	\$ 8,473	\$ 4,686	\$ -	\$ -	N/A	-2.3%	\$ 13,159
Non-Core Private Real Estate	CityView Bay Area Fund II, L.P.	\$ 1,195,829	\$ 201,614	\$ -	\$ -	15.3%	11.3%	\$ 1,397,443
Non-Core Private Real Estate	CityView Southern California Fund II, L.P.	\$ -	\$ 53,940	\$ -	\$ -	19.2%	14.2%	\$ 53,940
Non-Core Private Real Estate	CityView Western Fund I, L.P.	\$ 1,285,559	\$ 982,128	\$ -	\$ -	21.2%	16.5%	\$ 2,267,687
Non-Core Private Real Estate	Europa Fund III, L.P.	\$ -	\$ 9,792	\$ 149,825	\$ -	15.0%	10.0%	\$ 9,792
Non-Core Private Real Estate	Europa Fund IV, L.P.	\$ 204,821	\$ 1,701,614	\$ -	\$ -	7.4%	3.2%	\$ 1,906,436
Non-Core Private Real Estate	Heitman Asia-Pacific Property Investors, L.P.	\$ 360,758	\$ 123,667	\$ -	\$ -	8.5%	6.7%	\$ 484,425
Non-Core Private Real Estate	Starwood Capital Hospitality Fund II, L.P.	\$ 350,821	\$ 37,770	\$ -	\$ -	13.0%	10.0%	\$ 388,591
Non-Core Private Real Estate	TPG Real Estate Partners III, L.P.	\$ 722,044	\$ 96,992	\$ 89,483	\$ -	32.0%	24.0%	\$ 819,036
Private Equity	Accel-KKR Capital Partners CV III, L.P.	\$ 92,977	\$ 1,958	\$ 23,244	\$ -	22.2%	17.2%	\$ 94,934
Private Equity	Accel-KKR Capital Partners CV IV Strategic Fund, L.P.	\$ -	\$ 10,075	\$ -	\$ -	NM	NM	\$ 10,075
Private Equity	Accel-KKR Capital Partners CV IV, L.P.	\$ -	\$ 87,327	\$ -	\$ -	NM	NM	\$ 87,327
Private Equity	Accel-KKR Capital Partners VI, L.P.	\$ 1,014,216	\$ 576,760	\$ -	\$ -	19.9%	0.0%	\$ 1,590,977
Private Equity	Accel-KKR Growth Capital Partners III, L.P.	\$ 172,029	\$ 239,817	\$ 496,526	\$ -	28.3%	14.1%	\$ 411,846
Private Equity	Accel-KKR Growth Capital Partners IV, L.P.	\$ 692,391	\$ 359,139	\$ -	\$ -	NM	NM	\$ 1,051,530
Private Equity	Access Foundation Partners Group II, LLC	\$ 75,000	\$ 781,874	\$ -	\$ -	31.7%	27.9%	\$ 856,874
Private Equity	Access Holdings Fund I, L.P.	\$ 300,000	\$ 54,240	\$ 285,115	\$ -	74.5%	52.9%	\$ 354,240
Private Equity	Advent International GPE IX, L.P.	\$ 1,419,332	\$ 888,928	\$ 2,439,484	\$ 39,067	67.0%	49.1%	\$ 2,347,327
Private Equity	AE Industrial Partners Fund II, L.P.	\$ 1,324,808	\$ 185,136	\$ 1,141,117	\$ (46,302)	39.4%	38.2%	\$ 1,463,642
Private Equity	Agilitas 2020 Private Equity Fund	\$ 269,793	\$ 62,517	\$ -	\$ 35,988	1.9%	0.0%	\$ 368,299
Private Equity	Alchemy Special Opportunities Fund IV, L.P.	\$ 1,256,475	\$ 233,382	\$ -	\$ 14,606	36.5%	12.6%	\$ 1,504,462
Private Equity	Aldrich Capital Partners Fund, L.P.	\$ 119,767	\$ 8,876	\$ -	\$ 46,820	35.7%	12.1%	\$ 175,463
Private Equity	Alsop Louie Capital II, L.P.	\$ -	\$ 21,602	\$ -	\$ -	N/A	-0.4%	\$ 21,602
Private Equity	Alsop Louie Capital III, L.P.	\$ 66,858	\$ 13,648	\$ -	\$ -	N/A	14.2%	\$ 80,506
Private Equity	Ampersand CF, L.P.	\$ 524,358	\$ 28,498	\$ 727,689	\$ -	46.5%	40.3%	\$ 552,856
Private Equity	Atlantic Street Capital II, L.P.	\$ -	\$ 18,593	\$ 850,379	\$ -	N/A	36.4%	\$ 18,593
Private Equity	Atlantic Street Capital III, L.P.	\$ -	\$ 19,375	\$ -	\$ -	N/A	25.6%	\$ 19,375
Private Equity	Atlantic Street Capital IV, L.P.	\$ 976,875	\$ 749,284	\$ 3,418,042	\$ 37,125	49.0%	36.2%	\$ 1,763,284
Private Equity	Australis Partners Fund, L.P.	\$ 1,727,491	\$ 303,780	\$ -	\$ -	N/A	1.2%	\$ 2,031,271
Private Equity	Blackfin Financial Services Fund III, L.P.	\$ 1,964,124	\$ 490,190	\$ -	\$ -	28.2%	-7.7%	\$ 2,454,314
Private Equity	Blackstone Capital Partners IV - Secondary	\$ -	\$ 169	\$ 455	\$ 108	N/A	14.0%	\$ 278
Private Equity	Blackstone Capital Partners IV, L.P.	\$ -	\$ 2,542	\$ 6,821	\$ 1,621	N/A	37.6%	\$ 4,164
Private Equity	Blackstone Capital Partners V, L.P.	\$ -	\$ 22,470	\$ -	\$ 3,510	N/A	7.6%	\$ 25,979
Private Equity	Blackstone Capital Partners VI, L.P.	\$ 76,199	\$ 40,600	\$ 2,667,581	\$ 98,967	N/A	12.2%	\$ 215,766
Private Equity	Blackstone Capital Partners VII, L.P.	\$ 1,613,968	\$ 77,851	\$ 7,352,780	\$ 215,231	N/A	15.6%	\$ 1,907,049
Private Equity	Blackstone Communications Partners I, L.P.	\$ -	\$ 1,347	\$ -	\$ 113	N/A	6.5%	\$ 1,460
Private Equity	BRV Aster Fund II, L.P.	\$ 875,000	\$ 123,643	\$ -	\$ 50,408	40.3%	23.3%	\$ 1,049,051
Private Equity	BRV Aster Fund III, L.P.	\$ 1,250,000	\$ 68,382	\$ -	\$ 500	73.2%	23.7%	\$ 1,318,882
Private Equity	BRV Aster Opportunity Fund II, L.P.	\$ 250,000	\$ 36,503	\$ -	\$ -	9.5%	-0.5%	\$ 286,503
Private Equity	Canaan XI, L.P.	\$ 1,041,256	\$ 52,146	\$ -	\$ -	53.6%	35.5%	\$ 1,093,402
Private Equity	Canaan XII, L.P.	\$ 3,086,635	\$ 257,939	\$ -	\$ 60,114	97.9%	56.5%	\$ 3,404,688
Private Equity	Carlye U.S. Equity Opportunity Fund II, L.P.	\$ 874,579	\$ 337,580	\$ 6,530,470	\$ 1,253,180	N/A	14.5%	\$ 2,465,339
Private Equity	Carlyle Partners V, L.P.	\$ (8,374)	\$ 6,666	\$ 907,030	\$ 73,097	N/A	13.7%	\$ 71,389
Private Equity	Carlyle Partners VI, L.P.	\$ 465,478	\$ 81,273	\$ 17,943,918	\$ 114,341	N/A	15.9%	\$ 661,092
Private Equity	Centerbridge Capital Partners II, L.P.	\$ 1,563	\$ 39,434	\$ -	\$ 1	N/A	-6.9%	\$ 40,998

# Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

Fiscal Year-Ended June 30, 2022		A		B		C		Sum of A + B + C	
Functional Category	Alternative Investment Fund	Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees	
Private Equity	Centerbridge Capital Partners III, L.P.	\$ 613,332	\$ 151,036	\$ 4,755,811	\$ 60,387	N/A	19.8%	\$ 824,755	
Private Equity	Centerbridge Capital Partners IV, L.P.	\$ 2,350,275	\$ 2,135,191	\$ -	\$ 423,540	NM	NM	\$ 4,909,006	
Private Equity	Centerbridge Capital Partners, L.P.	\$ (7,797)	\$ 14,338	\$ -	\$ 14,500	N/A	19.3%	\$ 21,041	
Private Equity	CHP II, L.P.	\$ -	\$ 240	\$ -	\$ -	N/A	12.7%	\$ 240	
Private Equity	Clarion Investors II, L.P.	\$ -	\$ 11,343	\$ 804,867	\$ 79,736	N/A	40.2%	\$ 91,079	
Private Equity	Clarion Investors III, L.P.	\$ 218,884	\$ 247,969	\$ -	\$ 1,262,232	36.0%	34.3%	\$ 1,729,085	
Private Equity	Clearlake Capital Partners V, L.P.	\$ 570,428	\$ 403,824	\$ 6,954,717	\$ -	56.0%	49.6%	\$ 974,252	
Private Equity	Clearlake Capital Partners VI, L.P.	\$ 1,552,031	\$ 965,049	\$ -	\$ -	51.1%	45.7%	\$ 2,517,080	
Private Equity	Clearlake Capital Partners VII, L.P.	\$ 2,263,405	\$ 845,678	\$ -	\$ -	NM	NM	\$ 3,109,083	
Private Equity	CVC Capital Partners VI (B) L.P.	\$ 809,225	\$ 42,872	\$ 11,893,033	\$ -	23.3%	17.9%	\$ 852,097	
Private Equity	CVC Capital Partners VII, L.P.	\$ 2,117,985	\$ 449,920	\$ -	\$ -	32.6%	26.1%	\$ 2,567,904	
Private Equity	CVC Capital Partners VIII, L.P.	\$ 3,213,730	\$ 728,801	\$ -	\$ -	30.0%	8.1%	\$ 3,942,532	
Private Equity	CVC European Equity Partners III, L.P.	\$ -	\$ 5,396	\$ -	\$ -	40.0%	41.1%	\$ 5,396	
Private Equity	CVC European Equity Partners IV (D), L.P.	\$ -	\$ 7,609	\$ -	\$ -	24.2%	16.7%	\$ 7,609	
Private Equity	CVC European Equity Partners Tandem Fund, L.P.	\$ -	\$ 3,432	\$ -	\$ -	12.0%	6.6%	\$ 3,432	
Private Equity	CVC European Equity Partners V (A), L.P.	\$ -	\$ 6,200	\$ 152,878	\$ -	26.4%	16.4%	\$ 6,200	
Private Equity	Excellere Capital Fund II, L.P.	\$ -	\$ 26,758	\$ 1,064,037	\$ -	N/A	31.0%	\$ 26,758	
Private Equity	Excellere Capital Fund IV, L.P.	\$ 433,788	\$ 149,363	\$ -	\$ -	NM	NM	\$ 583,151	
Private Equity	Foundation Investment Partners II, L.P.	\$ 238,260	\$ 10,560	\$ -	\$ 5,859	18.0%	6.1%	\$ 254,679	
Private Equity	Foundation Investment Partners, L.P.	\$ 9,880	\$ 4,877	\$ -	\$ 2,930	48.9%	29.8%	\$ 17,687	
Private Equity	Gateway Private Equity Fund, L.P.	\$ 1,331,604	\$ 53,372	\$ -	\$ -	N/A	14.3%	\$ 1,384,976	
Private Equity	Gateway Private Equity Fund-B, L.P.	\$ 1,015,744	\$ 34,923	\$ -	\$ -	N/A	35.9%	\$ 1,050,667	
Private Equity	GBOF V Feeder SCS	\$ 667,096	\$ 29,302	\$ -	\$ 43,136	N/A	26.3%	\$ 739,533	
Private Equity	GGV Capital IV, L.P.	\$ 335,999	\$ 128,194	\$ -	\$ -	N/A	9.6%	\$ 464,193	
Private Equity	GGV Capital V, L.P.	\$ 665,310	\$ 59,246	\$ 694,429	\$ -	N/A	29.3%	\$ 724,556	
Private Equity	GGV Capital VI Plus, L.P.	\$ -	\$ 20,473	\$ 608,875	\$ -	42.9%	33.7%	\$ 20,473	
Private Equity	GGV Capital VI, L.P.	\$ 703,096	\$ 38,471	\$ 512,537	\$ -	N/A	20.5%	\$ 741,567	
Private Equity	GGV Capital VII Plus, L.P.	\$ -	\$ 10,097	\$ -	\$ -	15.4%	11.4%	\$ 10,097	
Private Equity	GGV Capital VII, L.P.	\$ 1,090,983	\$ 25,477	\$ -	\$ -	33.6%	20.9%	\$ 1,116,461	
Private Equity	GGV Capital VIII Plus, L.P.	\$ -	\$ 10,204	\$ -	\$ -	NM	NM	\$ 10,204	
Private Equity	GGV Capital VIII, L.P.	\$ 1,440,000	\$ 32,254	\$ -	\$ -	NM	NM	\$ 1,472,254	
Private Equity	GGV Discovery I, L.P.	\$ 188,636	\$ 32,964	\$ -	\$ -	N/A	12.8%	\$ 221,600	
Private Equity	GGV Discovery II, L.P.	\$ 357,455	\$ 10,793	\$ -	\$ -	62.6%	41.8%	\$ 368,247	
Private Equity	GGV Discovery III, L.P.	\$ 600,000	\$ 12,164	\$ -	\$ -	NM	NM	\$ 612,164	
Private Equity	GHO Capital III, L.P.	\$ 1,527,876	\$ 1,128,559	\$ -	\$ 506,996	NM	NM	\$ 3,163,432	
Private Equity	GHO Capital Virtue	\$ 125,793	\$ 238,680	\$ -	\$ -	NM	NM	\$ 364,473	
Private Equity	GI Mint Holdings, L.P.	\$ 280,137	\$ 64,674	\$ -	\$ 107,117	NM	NM	\$ 451,928	
Private Equity	Goode Partners Consumer Fund II, L.P.	\$ 106,125	\$ 4,837	\$ 104,038	\$ (78,565)	50.1%	47.8%	\$ 32,397	
Private Equity	Goode Partners Consumer Fund III, L.P.	\$ 70,870	\$ 15,229	\$ -	\$ 66,366	2.6%	0.1%	\$ 152,465	
Private Equity	Great Hill Equity Partners VIII, L.P.	\$ 518,023	\$ 627,570	\$ -	\$ 123,874	NM	NM	\$ 1,269,467	
Private Equity	Great Point Partners III, L.P.	\$ 184,826	\$ 71,391	\$ -	\$ 345,523	38.8%	34.9%	\$ 601,740	
Private Equity	Green Equity Investors VII, L.P.	\$ 978,014	\$ 397,835	\$ 12,612,898	\$ -	34.4%	27.0%	\$ 1,375,849	
Private Equity	Green Equity Investors VIII, L.P.	\$ (467,125)	\$ 371,168	\$ -	\$ -	11.3%	7.4%	\$ (95,957)	
Private Equity	Greycroft Growth II, L.P.	\$ 150,000	\$ 8,652	\$ 31,500	\$ -	44.5%	38.4%	\$ 158,652	
Private Equity	Greycroft Growth, L.P.	\$ 127,500	\$ 9,737	\$ 66,582	\$ -	N/A	15.4%	\$ 137,237	
Private Equity	Greycroft Partners II, L.P.	\$ 32,953	\$ 17,787	\$ 655,313	\$ -	N/A	21.1%	\$ 50,739	
Private Equity	Greycroft Partners III, L.P.	\$ 162,640	\$ 19,583	\$ 300,392	\$ -	N/A	18.5%	\$ 182,223	
Private Equity	Greycroft Partners IV, L.P.	\$ 173,438	\$ 21,368	\$ 94,875	\$ -	N/A	36.1%	\$ 194,805	
Private Equity	Gridiron Capital Fund II, L.P.	\$ 14,861	\$ 4,524	\$ 170,187	\$ -	N/A	13.1%	\$ 19,385	
Private Equity	GRO Capital III, L.P.	\$ 98,094	\$ 29,938	\$ -	\$ -	NM	NM	\$ 128,033	
Private Equity	GTB Capital Partners II, L.P.	\$ 1,641,537	\$ 496,862	\$ -	\$ -	N/A	11.0%	\$ 2,138,399	
Private Equity	Hellman & Friedman Capital Partners IX, L.P.	\$ 1,566,809	\$ 51,784	\$ -	\$ 872	19.9%	14.7%	\$ 1,619,465	
Private Equity	Hellman & Friedman Capital Partners VIII, L.P.	\$ 719,730	\$ 27,469	\$ 4,778,091	\$ 486	N/A	18.8%	\$ 747,685	
Private Equity	Hellman & Friedman Capital Partners X, L.P.	\$ 2,250,000	\$ 477,699	\$ -	\$ -	NM	NM	\$ 2,727,699	

# Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

Fiscal Year-Ended June 30, 2022		A	B	C			Sum of A + B + C	
Functional Category	Alternative Investment Fund	Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees
Private Equity	HPH II FF, L.P.	\$ 860,021	\$ 98,087	\$ -	\$ -	NM	NM	\$ 958,108
Private Equity	Icon Partners II, L.P.	\$ -	\$ 2,152	\$ 1,088,765	\$ -	NM	NM	\$ 2,152
Private Equity	Icon Partners V, L.P.	\$ 124,295	\$ 13,864	\$ -	\$ 136,604	NM	NM	\$ 274,763
Private Equity	Incline Equity Partners III, L.P.	\$ -	\$ 5,941	\$ 269,888	\$ -	N/A	37.1%	\$ 5,941
Private Equity	Incline Equity Partners IV, L.P.	\$ 225,037	\$ 45,433	\$ -	\$ 288,610	39.0%	34.2%	\$ 559,079
Private Equity	Incline Equity Partners IV, L.P. (JPM)	\$ 60,010	\$ 12,115	\$ -	\$ 76,963	39.0%	34.2%	\$ 149,088
Private Equity	Insignia Capital Partners (Parallel A), L.P.	\$ 1,102,542	\$ 177,032	\$ 65,089	\$ 110,710	37.6%	28.2%	\$ 1,390,284
Private Equity	Institutional Venture Partners XIV, L.P.	\$ 985,930	\$ 26,218	\$ 498,496	\$ -	N/A	9.4%	\$ 1,012,148
Private Equity	Institutional Venture Partners XV, L.P.	\$ 1,898,827	\$ 62,306	\$ 8,177,108	\$ -	N/A	31.4%	\$ 1,961,133
Private Equity	J.P. Morgan Emerging Managers Program	\$ 379,500	\$ 1,970	\$ 4,638,032	\$ -	21.4%	19.8%	\$ 381,470
Private Equity	J.P. Morgan Emerging Managers Program II	\$ 384,654	\$ -	\$ 4,079,939	\$ -	38.7%	35.4%	\$ 384,654
Private Equity	J.P. Morgan Emerging Managers Program III	\$ 374,444	\$ 33,589	\$ -	\$ -	36.8%	33.3%	\$ 408,033
Private Equity	J.P. Morgan Emerging Managers Program IV	\$ 433,856	\$ 91,444	\$ -	\$ -	18.2%	16.4%	\$ 525,300
Private Equity	Jade Equity Investors, L.P.	\$ 347,713	\$ 182,756	\$ 48,937	\$ -	74.8%	48.3%	\$ 530,469
Private Equity	JMI Equity Fund VI, L.P.	\$ -	\$ 4,699	\$ 133,250	\$ -	N/A	11.5%	\$ 4,699
Private Equity	JMI Equity Fund VII, L.P.	\$ -	\$ 4,664	\$ -	\$ -	N/A	17.9%	\$ 4,664
Private Equity	Joy Capital I, L.P.	\$ 65,625	\$ 6,667	\$ 79,542	\$ -	43.8%	36.1%	\$ 72,292
Private Equity	Joy Capital II, L.P.	\$ 90,625	\$ 6,338	\$ -	\$ -	16.1%	10.6%	\$ 96,963
Private Equity	Joy Capital III, L.P.	\$ 989,770	\$ 67,719	\$ -	\$ -	42.8%	31.9%	\$ 1,057,489
Private Equity	Joy Capital Opportunity, L.P.	\$ 232,224	\$ 30,477	\$ -	\$ -	15.4%	11.8%	\$ 262,701
Private Equity	Joy Capital Opportunity, L.P. (JPM)	\$ 139,335	\$ 18,286	\$ -	\$ -	15.4%	10.2%	\$ 157,621
Private Equity	Juggernaut Capital Partners II, L.P.	\$ 930,636	\$ 156,879	\$ 591,532	\$ 72,122	18.7%	12.6%	\$ 1,159,637
Private Equity	Juggernaut Capital Partners III, L.P.	\$ 1,104,315	\$ 97,000	\$ -	\$ 13,876	19.6%	14.0%	\$ 1,215,191
Private Equity	Juggernaut Capital Partners IV, L.P.	\$ 1,993,136	\$ 326,696	\$ -	\$ 69,364	43.8%	33.1%	\$ 2,389,196
Private Equity	JZI Fund III, L.P.	\$ 22,943	\$ 61,256	\$ -	\$ -	N/A	5.1%	\$ 84,199
Private Equity	KarpReilly Capital Partners II, L.P.	\$ 43,223	\$ 6,165	\$ -	\$ -	7.9%	5.9%	\$ 49,388
Private Equity	Kerogen Expansion Fund, L.P.	\$ 58,745	\$ 33,762	\$ -	\$ -	18.2%	11.8%	\$ 92,507
Private Equity	LAV Biosciences Fund IV, L.P.	\$ 756,937	\$ 114,494	\$ -	\$ 2,844	26.3%	20.9%	\$ 874,275
Private Equity	LAV Biosciences Fund V, L.P.	\$ 943,322	\$ 122,678	\$ -	\$ -	19.4%	12.7%	\$ 1,066,000
Private Equity	LAV Biosciences Fund VI Opportunities, L.P.	\$ -	\$ 33,804	\$ -	\$ -	NM	NM	\$ 33,804
Private Equity	LAV Biosciences Fund VI, L.P.	\$ 825,252	\$ 62,270	\$ -	\$ -	NM	NM	\$ 887,522
Private Equity	Lexington Capital Partners III, L.P.	\$ -	\$ 3,278	\$ -	\$ -	N/A	8.6%	\$ 3,278
Private Equity	Lexington Capital Partners V, L.P.	\$ -	\$ 2,793	\$ -	\$ -	N/A	18.2%	\$ 2,793
Private Equity	Lightyear Fund III, L.P.	\$ 149,137	\$ 38,055	\$ -	\$ 2,814	N/A	24.8%	\$ 190,006
Private Equity	Lightyear Fund IV, L.P.	\$ 1,183,693	\$ 143,068	\$ 5,476,033	\$ 612,250	N/A	22.0%	\$ 1,939,011
Private Equity	Lightyear Fund V, L.P.	\$ 1,628,774	\$ 351,583	\$ -	\$ 33,405	NM	NM	\$ 2,013,762
Private Equity	Marlin Equity IV, L.P.	\$ 9,047	\$ 24,029	\$ -	\$ 402,352	N/A	9.1%	\$ 435,428
Private Equity	MBK Partners Fund III, L.P.	\$ 328,172	\$ 47,033	\$ 9,172,990	\$ -	16.2%	10.6%	\$ 375,205
Private Equity	MBK Partners Fund IV, L.P.	\$ 712,201	\$ 57,180	\$ -	\$ -	23.9%	17.0%	\$ 769,381
Private Equity	MBK Partners Fund V, L.P.	\$ 2,310,054	\$ 415,978	\$ -	\$ -	30.9%	10.8%	\$ 2,726,032
Private Equity	Mercato Partners Growth II, L.P.	\$ 105,000	\$ 9,417	\$ -	\$ -	11.8%	10.2%	\$ 114,417
Private Equity	Moelis Capital Partners Opp. Fund I-B LP	\$ 27,488	\$ 18,608	\$ 538,793	\$ 8,757	20.9%	17.5%	\$ 54,854
Private Equity	Montefiore Investment V, S.L.P.	\$ 859,640	\$ 506,606	\$ -	\$ -	38.0%	19.7%	\$ 1,366,246
Private Equity	NeoTribe Ventures I, L.P.	\$ 100,000	\$ 8,309	\$ -	\$ -	35.3%	32.8%	\$ 108,309
Private Equity	NeoTribe Ventures II, L.P.	\$ 238,437	\$ 10,080	\$ -	\$ -	18.1%	-11.5%	\$ 248,517
Private Equity	New Mainstream Capital II, L.P.	\$ 3,940	\$ (800)	\$ 3,595	\$ 93,059	N/A	10.3%	\$ 96,199
Private Equity	NexPhase Capital Fund IV, L.P.	\$ 159,722	\$ 46,758	\$ -	\$ 92,354	NM	NM	\$ 298,834
Private Equity	Next Coast ETA I, L.P.	\$ 199,390	\$ 52,507	\$ -	\$ -	NM	NM	\$ 251,898
Private Equity	Next Coast Ventures I, L.P.	\$ 75,486	\$ 6,763	\$ -	\$ -	49.8%	38.1%	\$ 82,249
Private Equity	Next Coast Ventures II, L.P.	\$ 296,396	\$ 84,511	\$ -	\$ -	22.3%	12.1%	\$ 380,906
Private Equity	Novacap International TMT VI-A, L.P.	\$ 1,186,141	\$ 234,955	\$ -	\$ -	NM	NM	\$ 1,421,097
Private Equity	Oak Investment Partners IX, L.P.	\$ -	\$ 1,449	\$ -	\$ -	N/A	-6.6%	\$ 1,449
Private Equity	Oak Investment Partners X, L.P.	\$ -	\$ 3,175	\$ -	\$ -	N/A	3.5%	\$ 3,175
Private Equity	Oak Investment Partners XI, L.P.	\$ -	\$ 10,285	\$ -	\$ -	N/A	-1.7%	\$ 10,285



# Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

Fiscal Year-Ended June 30, 2022		A		B		C		Sum of A + B + C	
Functional Category	Alternative Investment Fund	Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees	
Private Equity	Oak Investment Partners XII, L.P.	\$ -	\$ 11,888	\$ -	\$ -	N/A	-1.1%	\$ 11,888	
Private Equity	One Rock Capital Partners II, L.P.	\$ 581,413	\$ 47,373	\$ -	\$ 524,699	28.5%	22.4%	\$ 1,153,485	
Private Equity	One Rock Capital Partners III, L.P.	\$ 2,534,875	\$ 140,844	\$ -	\$ 465,125	43.1%	37.2%	\$ 3,140,844	
Private Equity	Onex Partners II, L.P.	\$ -	\$ 2,990	\$ -	\$ 67	N/A	12.7%	\$ 3,057	
Private Equity	Onex Partners III, L.P.	\$ (11,627)	\$ 34,468	\$ 857,258	\$ 11,627	N/A	11.3%	\$ 34,468	
Private Equity	Onex Partners IV, L.P.	\$ 743,271	\$ 45,640	\$ -	\$ 61,542	N/A	8.2%	\$ 850,453	
Private Equity	Onex Partners V, L.P.	\$ 3,297,301	\$ 662,050	\$ -	\$ 5,301	20.6%	11.5%	\$ 3,964,652	
Private Equity	Osceola Fund I, L.P.	\$ 212,000	\$ 25,171	\$ -	\$ 217,500	38.6%	24.3%	\$ 454,671	
Private Equity	PAI Europe VII, L.P.	\$ 2,529,086	\$ 165,011	\$ -	\$ -	22.7%	17.8%	\$ 2,694,097	
Private Equity	Palladium Equity Partners IV, L.P.	\$ 499,213	\$ 331,433	\$ -	\$ 294,559	N/A	9.3%	\$ 1,125,205	
Private Equity	Palm Beach Capital Fund III, L.P.	\$ 20,403	\$ 37,583	\$ -	\$ -	N/A	21.4%	\$ 57,986	
Private Equity	Palm Beach Capital Fund IV, L.P.	\$ 72,204	\$ 42,819	\$ 839,953	\$ 170,774	37.6%	47.4%	\$ 285,797	
Private Equity	Palm Beach Capital III, L.P. - Secondary	\$ 3,935	\$ 7,248	\$ -	\$ -	N/A	24.6%	\$ 11,183	
Private Equity	Peloton Equity II, L.P.	\$ 300,000	\$ 12,182	\$ -	\$ -	NM	NM	\$ 312,182	
Private Equity	Pemba Capital Fund II, L.P.	\$ 446,844	\$ 399,955	\$ -	\$ -	NM	NM	\$ 846,800	
Private Equity	Permira Europe III, L.P.	\$ -	\$ 10,047	\$ -	\$ -	N/A	25.9%	\$ 10,047	
Private Equity	RedBird Capital Partners Series 2019, L.P.	\$ 1,055,599	\$ 923,122	\$ 4,716,697	\$ 1,484,726	34.4%	22.8%	\$ 3,463,447	
Private Equity	Revelstoke Capital Partners III, L.P.	\$ 1,178,293	\$ 387,246	\$ -	\$ 171,434	NM	NM	\$ 1,736,972	
Private Equity	Revelstoke Capital Partners Single Asset Fund I, L.P.	\$ 387,213	\$ 20,443	\$ -	\$ 37,010	41.4%	36.7%	\$ 444,667	
Private Equity	Riverside Capital Appreciation Fund VI, L.P.	\$ 760,681	\$ 145,873	\$ 2,562,079	\$ -	N/A	12.0%	\$ 906,554	
Private Equity	Riverside Micro-Cap Fund V, L.P.	\$ 392,769	\$ 83,180	\$ -	\$ -	35.3%	21.2%	\$ 475,949	
Private Equity	Rizvi Opportunistic Equity Fund II	\$ 48,581	\$ 12,746	\$ -	\$ -	N/A	5.8%	\$ 61,327	
Private Equity	Silver Lake Partners III, L.P.	\$ 81,308	\$ 14,040	\$ 139,991	\$ -	N/A	18.0%	\$ 95,348	
Private Equity	Silver Lake Partners IV, L.P.	\$ 668,906	\$ 58,542	\$ 3,611,499	\$ 19,901	N/A	23.4%	\$ 747,349	
Private Equity	Silver Lake Partners V, L.P.	\$ 1,352,238	\$ 140,362	\$ 2,434,678	\$ 26,579	21.0%	16.5%	\$ 1,519,179	
Private Equity	Silver Lake Partners VI, L.P.	\$ 2,994,967	\$ 998,940	\$ -	\$ 259	6.0%	-0.1%	\$ 3,994,166	
Private Equity	Sinovation Fund IV, L.P.	\$ 1,875,000	\$ 59,017	\$ -	\$ -	30.1%	15.4%	\$ 1,934,016	
Private Equity	Siris Partners III, L.P.	\$ -	\$ 26,460	\$ -	\$ 404,239	N/A	13.3%	\$ 430,699	
Private Equity	Siris Partners IV, L.P.	\$ 1,096,841	\$ 325,486	\$ -	\$ 617,459	27.5%	23.2%	\$ 2,039,786	
Private Equity	Southfield Capital III, L.P.	\$ 119,152	\$ 72,867	\$ -	\$ -	24.3%	6.1%	\$ 192,019	
Private Equity	Southvest Fund V, L.P.	\$ -	\$ 9,794	\$ 79,886	\$ 12,012	N/A	15.7%	\$ 21,806	
Private Equity	Sterling Investment Partners III, L.P.	\$ -	\$ 246,429	\$ 5,371,923	\$ 1,046,355	37.0%	25.4%	\$ 1,292,784	
Private Equity	Sterling Investment Partners IV, L.P.	\$ 1,880,980	\$ 1,372,184	\$ -	\$ 1,983,324	207.0%	32.6%	\$ 5,236,488	
Private Equity	STG Allegro - A, L.P.	\$ 1,057,414	\$ 320,509	\$ -	\$ 396,032	NM	NM	\$ 1,773,955	
Private Equity	STG VI, L.P.	\$ 770,960	\$ 286,519	\$ -	\$ 465,595	NM	NM	\$ 1,523,074	
Private Equity	Storm Ventures Fund V, L.P.	\$ 647,655	\$ 36,328	\$ -	\$ -	46.6%	37.2%	\$ 683,982	
Private Equity	Storm Ventures Fund VI, L.P.	\$ 1,000,000	\$ 46,395	\$ -	\$ -	37.5%	21.9%	\$ 1,046,395	
Private Equity	Storm Ventures Fund VII, L.P.	\$ -	\$ 1,234	\$ -	\$ -	NM	NM	\$ 1,234	
Private Equity	Summit Park I-A	\$ -	\$ 10,884	\$ -	\$ -	N/A	26.3%	\$ 10,884	
Private Equity	Summit Park II, L.P.	\$ -	\$ 12,218	\$ 2,399,741	\$ -	N/A	29.5%	\$ 12,218	
Private Equity	Summit Park III, L.P.	\$ 108,928	\$ 6,328	\$ -	\$ -	20.5%	15.1%	\$ 115,257	
Private Equity	Summit Partners Europe Growth Equity Fund III SCSp	\$ 709,075	\$ 183,518	\$ -	\$ -	10.0%	-6.2%	\$ 892,593	
Private Equity	Summit Partners Growth Equity Fund VIII-A, L.P.	\$ 673,955	\$ 15,236	\$ 2,725,935	\$ 1,172	N/A	27.3%	\$ 690,363	
Private Equity	Summit Partners Growth Equity Fund XI-A, L.P.	\$ 732,820	\$ 147,409	\$ -	\$ 3,593	NM	NM	\$ 883,822	
Private Equity	Summit Partners Private Equity Fund VII-A, L.P.	\$ -	\$ 3,203	\$ 1,124,132	\$ -	18.0%	10.6%	\$ 3,203	
Private Equity	Summit Partners Venture Capital Fund II-A, L.P.	\$ -	\$ 3,987	\$ 54,308	\$ -	32.0%	19.3%	\$ 3,987	
Private Equity	Summit Ventures VI-A, L.P.	\$ -	\$ 1,930	\$ -	\$ -	27.0%	15.4%	\$ 1,930	
Private Equity	TA Select Opportunities Fund II, L.P.	\$ -	\$ 25,777	\$ -	\$ -	NM	NM	\$ 25,777	
Private Equity	TA XIII, L.P.	\$ 1,060,470	\$ 200,118	\$ 1,695,872	\$ -	56.4%	47.8%	\$ 1,260,588	
Private Equity	TA XIV, L.P.	\$ 1,037,419	\$ 442,782	\$ -	\$ -	NM	NM	\$ 1,480,202	
Private Equity	TCV V, L.P.	\$ -	\$ 26,247	\$ 265,244	\$ -	N/A	10.6%	\$ 26,247	
Private Equity	TCV VI, L.P.	\$ -	\$ 9,348	\$ 30,145	\$ -	N/A	12.3%	\$ 9,348	
Private Equity	TCV VII, L.P.	\$ (61,614)	\$ 38,317	\$ 7,646,882	\$ -	31.3%	23.5%	\$ (23,297)	
Private Equity	Ten Coves Capital I, L.P.	\$ 23,281	\$ 6,706	\$ -	\$ 2,194	32.4%	87.7%	\$ 32,182	

## Section 7514.7

Fiscal Year-Ended June 30, 2022

Attachment 2

Sum of A + B + C

		A	B	C				
Functional Category	Alternative Investment Fund	Management Fees <sup>1</sup>	Fund Expenses <sup>2</sup>	Carried Interest <sup>3</sup>	Portfolio Company Expenses <sup>4</sup>	Since Inception Gross Return <sup>5</sup>	Since Inception Net Return <sup>6</sup>	Total Fees
Private Equity	Ten Coves Capital II, L.P.	\$ 95,954	\$ 26,131	\$ -	\$ -	28.8%	19.0%	\$ 122,085
Private Equity	Ten Coves Capital III, L.P.	\$ 138,440	\$ 46,251	\$ -	\$ -	NM	NM	\$ 184,691
Private Equity	The Fifth Alcuin Fund Limited Partnership	\$ 248,362	\$ 31,255	\$ -	\$ 38,529	NM	NM	\$ 318,145
Private Equity	The Veritas Capital Vantage Fund, L.P.	\$ 2,202,342	\$ 1,068,142	\$ -	\$ 416,814	NM	NM	\$ 3,687,298
Private Equity	Thoma Bravo Discover Fund III, L.P.	\$ 998,563	\$ 98,737	\$ -	\$ 255,454	16.5%	8.8%	\$ 1,352,754
Private Equity	Thoma Bravo Fund XIV, L.P.	\$ 1,442,893	\$ 55,478	\$ -	\$ 1,318,544	0.7%	-3.8%	\$ 2,816,915
Private Equity	Thoma Bravo Fund XV, L.P.	\$ 346,154	\$ 134,207	\$ -	\$ 423,811	NM	NM	\$ 904,172
Private Equity	TPG Partners IV, L.P.	\$ -	\$ 28,184	\$ -	\$ -	N/A	15.3%	\$ 28,184
Private Equity	Triton Fund V, L.P.	\$ 2,295,311	\$ 1,817,528	\$ -	\$ (500,520)	23.0%	21.7%	\$ 3,612,320
Private Equity	Undisclosed <sup>7</sup>	\$ 2,986,158	\$ 917,305	\$ 26,614,523	\$ -	N/A	18.4%	\$ 3,903,462
Private Equity	USV 2019, L.P.	\$ 205,847	\$ 77,446	\$ -	\$ -	121.1%	85.3%	\$ 283,293
Private Equity	USV Opportunity 2019, L.P.	\$ 102,923	\$ 3,351	\$ -	\$ -	11.5%	6.5%	\$ 106,274
Private Equity	Vinci Capital Partners III, L.P.	\$ 862,500	\$ 527,197	\$ -	\$ -	38.1%	23.6%	\$ 1,389,697
Private Equity	Vista Equity Partners Fund III, L.P.	\$ -	\$ 15,098	\$ -	\$ -	N/A	27.8%	\$ 15,098
Private Equity	Vista Equity Partners Fund IV, L.P.	\$ 617,418	\$ 51,139	\$ -	\$ -	N/A	14.7%	\$ 668,557
Private Equity	Vista Equity Partners Fund V, L.P.	\$ 1,862,822	\$ 135,999	\$ 3,433,571	\$ -	N/A	20.2%	\$ 1,998,821
Private Equity	Vista Equity Partners Fund VI, L.P.	\$ 2,667,935	\$ 137,772	\$ 9,918,424	\$ -	N/A	20.2%	\$ 2,805,707
Private Equity	Vista Equity Partners Fund VII, L.P.	\$ 2,991,792	\$ 328,918	\$ 211,882	\$ -	26.4%	16.4%	\$ 3,320,710
Private Equity	Warren Equity Partners Fund II, L.P.	\$ 58,170	\$ 16,670	\$ 1,372,027	\$ 29,774	59.0%	48.6%	\$ 104,613
Private Equity	Warren Equity Partners Fund III, L.P.	\$ 151,473	\$ 12,955	\$ -	\$ 33,815	NM	NM	\$ 198,243
Private Equity	Webster Equity Partners V, L.P.	\$ 2,209,033	\$ 250,277	\$ -	\$ 114,327	NM	NM	\$ 2,573,638
Private Equity	Wynnchurch Capital Partners V, L.P.	\$ 1,121,801	\$ 98,763	\$ -	\$ 563,327	52.4%	37.3%	\$ 1,783,891

<sup>1</sup> Management fees paid or accrued to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, calculation using the respective management fee rate, and pro rata share of the alternative investment fund's total management fee. Negative values indicate giveback of previously accrued or paid fees.

<sup>2</sup> Fund expenses paid or accrued to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, pro rata share of the alternative investment fund's total fund expenses, and estimations based on alternative investment fund's operating expense ratios obtained from the most recent audited financial statement. Negative values indicate giveback of previously accrued or paid fees.

<sup>3</sup> Carried interest paid to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, and pro rata share of the alternative investment fund's total carried interest. Negative values indicate giveback of previously paid fees.

<sup>4</sup> LACERA's pro rata share of fees and expenses paid by the portfolio companies to the general partner or related parties.

<sup>5</sup> Since-inception money-weighted gross returns for Private Equity, Fixed Income, Real Asset, Real Estate, and Global Equity asset category were calculated by the respective alternative investment funds, custodian banks, or asset category advisor. Hedge Funds since-inception gross returns were provided by the manager or estimated by annualizing the manager's total fees as an annualized percentage of monthly average NAV and adding the annualized fee return to the fund's since-inception net return. Hedge Funds since-inception gross returns are cumulative geometric returns for holding periods less than 12 months of the alternative investment fund and annualized geometric return for holding periods greater than 12 months. Performance results marked "NM" signifies not meaningful due to recency of the fund.

<sup>6</sup> Since-inception money-weighted net returns for Private Equity, Real Asset, Real Estate asset categories were calculated by LACERA's custodian bank using all the outflows to and inflows from the underlying fund investments, including cash flows for expenses and fees paid by the Portfolio to those underlying fund investments. The terminal values used are the capital account balances as of the reporting period, as stated by the General Partners of the underlying fund investment, whether at cost or fair value. If the underlying fund investment's terminal value is prior to the reporting period, the internal rate of return (IRR) was calculated as of the last valuation date indicated by the fund manager. Hedge Fund, Fixed Income, and Global Equity (excluding JANA Strategic Investment Fund V) are cumulative geometric returns for holding periods less than 12 months of the alternative investment fund and annualized geometric return for holding periods greater than 12 months. JANA Strategic Investment Fund V (Global Equity) is a money-weighted return provided by the alternative investment fund. Performance results marked "NM" signifies not meaningful due to recency of the fund.

<sup>7</sup> Cost data for a subset of alternative investment funds were aggregated due to existing confidentiality agreements. Management fees, fund expenses, and since inception net returns for these funds are disclosed individually in the Section 6254.26(b) report.

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Core Private Real Estate	Core Property Index Fund	1111 Superior Avenue, Suite 1100, Cleveland, Ohio 44114	2019	\$ 100,000,000	\$ 100,244,365	\$ 5,516,324	\$ 136,859,602	12.1%	1.37x	\$ 401,520	N/A
Core Private Real Estate	Invesco Real Estate Asia Fund, L.P.	37A, Avenue J.F. Kennedy, L-1855 Luxembourg	2014	\$ 100,000,000	\$ 135,056,816	\$ 44,182,811	\$ 198,600,414	5.7%	1.47x	\$ 1,510,016	N/A
Core Private Real Estate	Prologis European Logistics Fund, L.P.	34-38, Avenue de la Liberté, L-1930 Luxembourg	2007	\$ 104,784,000	\$ 269,904,483	\$ 193,772,893	\$ 412,182,147	11.8%	1.53x	\$ 2,334,183	N/A
Core Private Real Estate	RREEF Core Plus Industrial Fund, L.P.	345 Park Avenue, 24th Floor, New York, NY 10154	2017	\$ 125,000,000	\$ 127,452,272	\$ 27,577,719	\$ 333,896,647	23.2%	2.62x	\$ 800,898	N/A
Diversified Hedge Fund	AM Asia Strategies Fund, L.P.	1401 York House, The Landmark, 15 Queen's Road Central, Hong Kong	2021	\$ 225,000,000	\$ 225,000,000	\$ -	\$ 216,165,868	-2.6%	0.96x	\$ 1,166,780	\$ -
Diversified Hedge Fund	Amundsen Diversified Master Fund ICAV	207 rue de Bercy, 75012 Paris, France	2021	\$ 65,000,000	\$ 65,000,000	\$ -	\$ 61,820,869	-6.1%	0.95x	\$ 1,105,105	\$ -
Diversified Hedge Fund	Brevan Howard Master Fund Limited	55 Baker Street, London W1U 8EW, United Kingdom	2021	\$ 550,733,015	\$ 550,733,015	\$ -	\$ 629,812,765	10.5%	1.14x	\$ 9,767,468	\$ -
Diversified Hedge Fund	Capula Global Relative Value Fund, L.P.	7 Clarges Street, London W1J 8AE, United Kingdom	2019	\$ 521,012,650	\$ 521,012,650	\$ 27,454,501	\$ 586,680,551	6.3%	1.13x	\$ 9,687,037	\$ -
Diversified Hedge Fund	Caxton Global Investments, LLC - Class T	500 Park Avenue, New York, NY 10022	2021	\$ 200,000,000	\$ 200,000,000	\$ -	\$ 234,791,949	12.9%	1.17x	\$ 3,663,635	\$ -
Diversified Hedge Fund	Davidson Kempner Institutional Partners, L.P.	520 Madison Avenue, 30th Floor, New York, NY 10022	2018	\$ 450,000,000	\$ 450,000,000	\$ -	\$ 480,344,202	4.8%	1.07x	\$ 6,457,257	\$ -
Diversified Hedge Fund	HBK Multi-Strategy Fund, L.P.	2101 Cedar Springs Road, Suite 700, Dallas, TX 75201	2018	\$ 500,000,000	\$ 500,000,000	\$ -	\$ 546,209,434	4.9%	1.09x	\$ 8,604,270	\$ -
Diversified Hedge Fund	Hudson Bay Fund, L.P.	777 3rd Avenue, 30th Floor, New York, NY 10017	2020	\$ 550,000,000	\$ 550,000,000	\$ -	\$ 631,886,710	11.5%	1.15x	\$ 13,836,501	\$ -
Diversified Hedge Fund	Linear B Onshore Fund, L.P.	405 Lexington Avenue, 34th Floor, New York, NY, 10174	2021	\$ 65,000,000	\$ 65,000,000	\$ -	\$ 69,229,457	5.0%	1.07x	\$ 540,912	\$ -
Diversified Hedge Fund	Lucid Clarity Offshore Fund, Ltd	4400 Post Oak Parkway, Houston, TX 77027	2022	\$ 70,000,000	\$ 70,000,000	\$ -	\$ 70,875,484	1.2%	1.01x	\$ 364,746	\$ -
Diversified Hedge Fund	Polar Multi-Strategy Fund (US), L.P.	401 Bay Street, Suite 1900, P.O. Box 19, Toronto A6 M5H 2Y4, Canada	2020	\$ 375,000,000	\$ 375,000,000	\$ -	\$ 457,345,042	12.1%	1.22x	\$ 4,741,837	\$ -
Diversified Hedge Fund	San Gabriel Fund, L.P.	101 Barclay Street, 20th Floor West, New York, NY 10286	2011	\$ 397,525,000	\$ 397,525,000	\$ 464,100,000	\$ 506,827,375	4.2%	1.27x	\$ (29,584)	\$ 11,061,813
Diversified Hedge Fund	Sparta Global Opportunities Fund Ltd	6th Floor, 125 London Wall, London, EC2Y 5AS, United Kingdom	2021	\$ 50,000,000	\$ 50,000,000	\$ -	\$ 50,875,929	1.7%	1.02x	\$ 662,256	\$ -
Diversified Hedge Fund	Stable Asset Management	405 Lexington Avenue, New York, NY 10174	2021	\$ 633,000,000	\$ 280,000,000	\$ -	\$ 277,727,696	-1.1%	0.99x	\$ 522,904	\$ -
Diversified Hedge Fund	Trutino Relative Value Rates Fund, L.P.	94 Solaris Avenue, Camana Bay, PO Box 1348, Grand Cayman KY1-1108, Cayman Islands	2021	\$ 30,000,000	\$ 30,000,000	\$ -	\$ 27,148,398	-5.5%	0.90x	\$ 483,429	\$ -
Global Equity	Cevian Capital II Master Fund, L.P.	LaMotte Chambers, St. Heller, Jersey JE1-1BJ, United Kingdom	2016	\$ 250,000,000	\$ 250,000,000	\$ -	\$ 358,922,660	6.5%	1.44x	\$ 4,393,300	N/A
Global Equity	JANA Strategic Investment Fund V, L.P.	1330 Avenue of the Americas, 32nd Floor, New York, NY 10019	2016	\$ 120,000,000	\$ 589,990,883	\$ 542,827,946	\$ 661,447,331	14.9%	1.12x	\$ 1,386,883	N/A
Global Equity	The SFP Value Realization Master Fund Ltd	80 Raffles Place, #24-21 UOB Plaza 2, Singapore, 048624	2016	\$ 100,000,000	\$ 100,000,000	\$ -	\$ 203,530,654	10.8%	2.04x	\$ 2,039,549	N/A
Illiquid Credit	BPC Opportunities Fund II, L.P.	1620 26th Street, Suite 6000N, Santa Monica, CA 90404	2014	\$ 150,000,000	\$ 150,000,000	\$ 183,577,586	\$ 197,451,572	7.9%	1.32x	\$ 554,183	N/A
Illiquid Credit	BPC Opportunities Fund III, L.P.	1620 26th Street, Suite 6000N, Santa Monica, CA 90404	2017	\$ 170,000,000	\$ 170,000,000	\$ 91,116,679	\$ 267,706,591	12.7%	1.57x	\$ 1,356,249	N/A
Illiquid Credit	Glendon Opportunities Fund II, L.P.	1620 26th Street, Suite 2000N, Santa Monica, CA 90404	2017	\$ 100,000,000	\$ 75,000,000	\$ -	\$ 103,818,615	20.9%	1.38x	\$ 1,842,205	N/A
Illiquid Credit	Glendon Opportunities Fund, L.P.	1620 26th Street, Suite 2000N, Santa Monica, CA 90404	2014	\$ 60,000,000	\$ 51,000,000	\$ 61,384,777	\$ 80,002,503	8.0%	1.57x	\$ 610,867	N/A
Illiquid Credit	Lake Vineyard Fund, L.P.	4001 Kennett Pike, Suite 302, Wilmington, Delaware, 19807	2022	\$ 775,000,000	\$ 133,305,420	\$ -	\$ 127,654,276	NM	NM	\$ 302,589	\$ -
Illiquid Credit	Magnetar Lake Credit Fund, LLC	1603 Orrington Avenue, 13th Floor, Evanston, IL, 60201	2020	\$ 868,000,000	\$ 752,500,000	\$ 8,000,000	\$ 835,282,131	26.4%	1.11x	\$ 12,380,646	\$ -
Illiquid Credit	Napier Park Lake Credit Fund, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2020	\$ 750,000,000	\$ 650,000,000	\$ -	\$ 762,539,220	18.9%	1.17x	\$ 11,429,598	\$ -
Illiquid Credit	Oaktree Opportunities Fund IX, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2012	\$ 100,000,000	\$ 100,000,000	\$ 71,676,125	\$ 150,495,924	6.5%	1.50x	\$ 1,127,170	N/A
Illiquid Credit	Oaktree Opportunities Fund VIII b, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2010	\$ 37,500,000	\$ 37,500,000	\$ 42,482,652	\$ 57,020,102	7.3%	1.52x	\$ 241,073	N/A
Illiquid Credit	Oaktree Opportunities Fund VIII, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2010	\$ 37,500,000	\$ 37,500,000	\$ 54,528,650	\$ 54,873,940	9.1%	1.46x	\$ 11,760	N/A
Illiquid Credit	OCM Opportunities Fund V, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2004	\$ 32,400,000	\$ 32,400,000	\$ 53,567,421	\$ 53,567,421	14.1%	1.65x	\$ -	\$ 21,167,421
Illiquid Credit	OCM Opportunities Fund VII b, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2007	\$ 45,000,000	\$ 40,500,000	\$ 70,143,095	\$ 70,164,149	16.5%	1.73x	\$ 1,736	N/A
Illiquid Credit	OCM Opportunities Fund VII, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2007	\$ 30,000,000	\$ 30,000,000	\$ 41,256,406	\$ 41,536,001	7.3%	1.38x	\$ 2,233	N/A
Illiquid Credit	PIMCO Tactical Opportunities Onshore Fund, L.P.	650 Newport Center Drive, Newport Beach, CA 92660	2018	\$ 225,000,000	\$ 225,000,000	\$ -	\$ 272,953,786	6.2%	1.21x	\$ 3,636,346	\$ -
Illiquid Credit	San Gabriel Fund 3, L.P.	101 Barclay Street, 20th Floor West, New York, NY 10286	2016	\$ 300,000,000	\$ 300,000,000	\$ 315,800,000	\$ 350,667,402	5.3%	1.17x	\$ 855,684	\$ 2,012,522
Illiquid Credit	Tennenbaum Senior Loan Fund V, LLC	2951 28th Street, Suite 1000, Santa Monica, CA 90405	2014	\$ 475,000,000	\$ 449,465,276	\$ -	\$ 631,978,524	7.3%	1.41x	\$ 4,590,872	N/A
Infrastructure	Antlin Infrastructure Partners Mid Cap I-A SCSp	374 rue Saint-Honore, 75001 Paris, France	2021	\$ 104,840,000	\$ 17,686,508	\$ -	\$ 16,744,654	NM	NM	\$ 2,058,881	N/A
Infrastructure	AxInfra US II, L.P.	2020 Robert-Bourassa Boulevard Suite 2500, Montreal, H3A 2A5, QC, Canada	2019	\$ 250,000,000	\$ 193,934,790	\$ 1,095,874	\$ 196,637,315	6.5%	1.01x	\$ 222,403	N/A
Infrastructure	Axiom Infrastructure Canada II, L.P.	2020 Robert-Bourassa Boulevard Suite 2500, Montreal, H3A 2A5, QC, Canada	2021	\$ 155,363,940	\$ 233,046	\$ -	\$ -	NM	NM	\$ -	N/A
Infrastructure	DIF Core-plus Infrastructure Fund III Coöperatief U.A.	WTC Schiphol Airport, Schiphol Boulevard 269, Schiphol 1118 BH, Netherlands	2022	\$ 157,260,000	\$ 7,213,652	\$ -	\$ 7,045,895	NM	NM	\$ 421,308	N/A
Infrastructure	DIF Infrastructure IV Coöperatief U.A.	WTC Schiphol Airport, Schiphol Boulevard 269, Schiphol 1118 BH, Netherlands	2020	\$ 157,260,000	\$ 57,617,855	\$ -	\$ 69,485,616	54.6%	1.21x	\$ 2,626,202	N/A
Infrastructure	Grain Communications Opportunity Fund III, L.P.	1900 K Street N.W., SUITE 1130, Washington D.C., 20006	2021	\$ 67,500,000	\$ 30,664,641	\$ 8,700	\$ 25,551,081	NM	NM	\$ 1,423,608	N/A
Infrastructure	Grain Spectrum Holdings III, L.P.	100 North Washington Boulevard, Suite 201, Sarasota, FL 34236	2020	\$ 60,000,000	\$ 48,206,972	\$ -	\$ 47,251,304	-1.6%	0.98x	\$ 248,381	N/A
Infrastructure	KKR Diversified Core Infrastructure Fund L.P.	18 Hanover Square, London, W1S 1JY, United Kingdom	2021	\$ 500,000,000	\$ 199,904,423	\$ -	\$ 200,284,226	NM	NM	\$ 419,549	N/A
Infrastructure	Pan-Europe Infrastructure III, L.P.	1 Great Winchester Street, London EC2N 2DB, United Kingdom	2020	\$ 104,840,000	\$ 52,535,858	\$ 4,527,590	\$ 58,645,613	16.3%	1.12x	\$ 1,398,461	N/A
Infrastructure	Partners Group Direct Infrastructure 2020 (USD) A, L.P.	Zugerstrasse 57, 6341 Baar-Zug, Switzerland	2020	\$ 200,000,000	\$ 49,000,000	\$ -	\$ 48,517,711	NM	NM	\$ 6,650,232	N/A
Natural Resources & Commodities	Cibus Enterprise II, L.P.	Ground Floor, Cambridge House, Le Truchot, St Peter Port Guernsey, GY1 1WD Channel Islands	2021	\$ 11,000,000	\$ 4,400,110	\$ -	\$ 4,095,876	NM	NM	\$ 203,269	N/A



Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Natural Resources & Commodities	Cibus Fund II, L.P.	Ground Floor, Cambridge House, Le Truchot, St Peter Port Guernsey, GY1 1WD Channel Islands	2021	\$ 89,000,000	\$ 17,800,889	\$ -	\$ 16,677,831	NM	NM	\$ 1,123,058	N/A
Natural Resources & Commodities	First Reserve Fund X, L.P.	290 Harbor Drive, Stamford, CT 06902	2004	\$ 50,000,000	\$ 50,000,000	\$ 91,380,804	\$ 91,380,804	31.8%	1.83x	\$ -	\$ 41,380,804
Natural Resources & Commodities	Orion Mine Finance (Onshore) Fund III, L.P.	1045 Avenue Of the Americas, 25th Floor, New York, NY, 10018	2019	\$ 150,000,000	\$ 95,723,605	\$ 565,871	\$ 104,388,346	7.5%	1.09x	\$ 7,228,501	N/A
Natural Resources & Commodities	Orion Mineral Royalty Fund I LP	1045 Avenue Of the Americas, 25th Floor, New York, NY, 10018	2019	\$ 100,000,000	\$ 12,199,708	\$ -	\$ 13,822,314	6.9%	1.13x	\$ 553,230	N/A
Natural Resources & Commodities	The Energy & Minerals Group Fund III, L.P.	2229 San Felipe Street, Suite 1300, Houston, TX, 77019	2014	\$ 150,000,000	\$ 150,343,848	\$ 18,148,740	\$ 101,437,253	-6.0%	0.67x	\$ 1,314,341	N/A
Natural Resources & Commodities	TIAA-CREF Global Agriculture II LLC	730 Third Avenue, New York, NY, 10017	2014	\$ 300,000,000	\$ 280,042,673	\$ 34,961,386	\$ 306,026,953	2.5%	1.09x	\$ 1,238,751	N/A
Natural Resources & Commodities	TIAA-CREF Global Agriculture LLC	730 Third Avenue, New York, NY, 10017	2011	\$ 250,000,000	\$ 187,956,500	\$ 7,555,758	\$ 212,886,345	3.6%	1.13x	\$ 802,741	N/A
Non-Core Private Real Estate	Aermont Capital Real Estate Fund IV SCSp	28 Boulevard Royal, 5th Floor, L-2449 Luxembourg	2018	\$ 52,392,000	\$ 34,631,621	\$ -	\$ 28,749,461	-13.0%	0.83x	\$ 695,393	N/A
Non-Core Private Real Estate	AEW Value Investors Asia III, L.P.	15th Floor, 8 Queen's Road Central, Hong Kong	2017	\$ 50,000,000	\$ 47,376,250	\$ 25,808,465	\$ 56,989,368	6.1%	1.20x	\$ 533,786	N/A
Non-Core Private Real Estate	AG Asia Realty Fund IV, L.P.	245 Park Avenue, New York, NY 10167	2018	\$ 100,000,000	\$ 40,014,949	\$ 17,709,648	\$ 99,925,821	19.5%	2.50x	\$ 1,390,316	N/A
Non-Core Private Real Estate	AG Europe Realty Fund II, L.P.	245 Park Avenue, New York, NY 10167	2018	\$ 50,000,000	\$ 46,350,585	\$ 18,056,340	\$ 67,141,905	12.9%	1.45x	\$ 749,714	N/A
Non-Core Private Real Estate	Bain Capital Real Estate Fund I-A, L.P.	200 Clarendon Street, Boston, MA 02116	2018	\$ 100,000,000	\$ 76,552,228	\$ 45,441,177	\$ 123,314,906	34.2%	1.61x	\$ 2,364,174	N/A
Non-Core Private Real Estate	Bain Capital Real Estate Fund II-B, L.P.	301 Howard Street, San Francisco, CA 94105	2021	\$ 100,000,000	\$ 29,339,673	\$ -	\$ 37,152,227	NM	NM	\$ 742,785	N/A
Non-Core Private Real Estate	CapMan Nordic Real Estate II FCP-RAIF	Ludviginkatu 6, 4th Floor, 00130 Helsinki, Finland	2017	\$ 52,392,000	\$ 55,742,247	\$ 27,194,288	\$ 71,016,706	14.2%	1.27x	\$ 987,460	N/A
Non-Core Private Real Estate	CapMan Nordic Real Estate III FCP-RAIF	Ludviginkatu 6, 4th Floor, 00130 Helsinki, Finland	2021	\$ 78,588,000	\$ 24,068,829	\$ -	\$ 23,797,514	NM	NM	\$ 1,270,133	N/A
Non-Core Private Real Estate	Capri Urban Investors, LLC	875 North Michigan Avenue, Suite 3430, Chicago, Illinois 60611	2007	\$ 150,000,000	\$ 149,951,767	\$ 95,483,424	\$ 96,157,262	-13.4%	0.64x	\$ 167,280	N/A
Non-Core Private Real Estate	Carlyle Europe Real Estate Partners III, L.P.	1001 Pennsylvania Avenue, NW Washington, DC 20004-2505	2007	\$ 18,534,194	\$ 26,474,217	\$ 23,524,488	\$ 23,628,826	-2.3%	0.89x	\$ 13,159	N/A
Non-Core Private Real Estate	CB Richard Ellis Strategic Partners Europe Fund III, L.P.	601 South Figueroa Street, 49th Floor, Los Angeles, CA 90017	2007	\$ 16,765,440	\$ 21,347,230	\$ 5,853,404	\$ 5,960,043	-16.4%	0.28x	\$ -	N/A
Non-Core Private Real Estate	CityView Bay Area Fund II, L.P.	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025	2012	\$ 134,100,000	\$ 143,290,517	\$ 145,914,567	\$ 226,127,190	11.3%	1.58x	\$ 1,397,443	N/A
Non-Core Private Real Estate	CityView Southern California Fund II, L.P.	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025	2013	\$ 100,000,000	\$ 99,104,064	\$ 158,080,855	\$ 158,684,073	14.2%	1.60x	\$ 53,940	N/A
Non-Core Private Real Estate	CityView Western Fund I, L.P.	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025	2016	\$ 150,000,000	\$ 110,154,006	\$ 10,659,793	\$ 196,254,244	16.5%	1.78x	\$ 2,267,687	N/A
Non-Core Private Real Estate	Europa Fund III, L.P.	15 Sloane Square, London SW1W 8ER, United Kingdom	2007	\$ 18,127,632	\$ 22,341,415	\$ 28,451,035	\$ 28,832,879	10.0%	1.29x	\$ 9,792	N/A
Non-Core Private Real Estate	Europa Fund IV, L.P.	15 Sloane Square, London SW1W 8ER, United Kingdom	2012	\$ 52,392,000	\$ 59,762,513	\$ 54,879,777	\$ 65,215,642	3.2%	1.09x	\$ 1,906,436	N/A
Non-Core Private Real Estate	Heitman Asia-Pacific Property Investors, L.P.	401 Wilshire Boulevard, Suite 1200, Santa Monica, CA 90401	2017	\$ 50,000,000	\$ 44,764,465	\$ 11,114,382	\$ 49,533,731	6.7%	1.11x	\$ 484,425	N/A
Non-Core Private Real Estate	Hunt UK Realty Partners, L.P.	4 International Drive, Rye brook, NY 10523	2007	\$ 21,766,758	\$ 30,180,110	\$ 2,175,705	\$ 2,541,886	-20.4%	0.08x	\$ -	N/A
Non-Core Private Real Estate	Starwood Capital Hospitality Fund II, L.P.	1601 Washington Avenue, Suite 800, Miami Beach, FL 33139	2007	\$ 100,000,000	\$ 97,134,161	\$ 138,318,039	\$ 157,538,367	10.0%	1.62x	\$ 388,591	N/A
Non-Core Private Real Estate	TPG Real Estate Partners III, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2018	\$ 58,750,000	\$ 39,999,457	\$ 6,556,854	\$ 52,005,664	24.0%	1.30x	\$ 819,036	N/A
Private Equity	ABRY Advanced Securities Fund III, L.P.	888 Boylston Street, 16th Floor, Boston, MA 02199	2014	\$ 25,000,000	\$ 15,295,308	\$ 23,853,755	\$ 23,853,755	18.0%	1.56x	\$ -	\$ 8,558,447
Private Equity	ABRY Partners VIII, L.P.	888 Boylston Street, 16th Floor, Boston, MA 02199	2014	\$ 35,000,000	\$ 36,590,937	\$ 44,820,102	\$ 44,820,102	9.7%	1.22x	\$ -	\$ 8,229,165
Private Equity	Accel IV, L.P.	428 University Avenue, Palo Alto, CA 94301	1993	\$ 5,000,000	\$ 5,010,800	\$ 40,440,003	\$ 40,440,003	78.1%	8.07x	\$ -	\$ 35,429,203
Private Equity	Accel V, L.P.	428 University Avenue, Palo Alto, CA 94301	1996	\$ 9,000,000	\$ 9,000,000	\$ 176,580,105	\$ 176,580,105	188.6%	19.62x	\$ -	\$ 167,580,105
Private Equity	Accel VI, L.P.	428 University Avenue, Palo Alto, CA 94301	1998	\$ 9,000,000	\$ 9,000,000	\$ 3,267,735	\$ 3,556,017	-7.6%	0.40x	\$ 1,524	N/A
Private Equity	Accel VIII, L.P.	428 University Avenue, Palo Alto, CA 94301	2000	\$ 7,293,000	\$ 5,858,250	\$ 8,462,773	\$ 8,462,773	4.7%	1.44x	\$ -	\$ 2,604,523
Private Equity	Accel VI-S, L.P.	428 University Avenue, Palo Alto, CA 94301	2001	\$ 1,451,613	\$ 1,154,031	\$ 4,494,408	\$ 5,329,400	14.4%	4.62x	\$ 1,135	N/A
Private Equity	Accel-KKR Capital Partners CV III, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 16,000,000	\$ 13,254,048	\$ 2,855,619	\$ 19,719,510	17.2%	1.49x	\$ 94,934	N/A
Private Equity	Accel-KKR Capital Partners CV IV Strategic Fund, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2022	\$ 10,391,355	\$ 7,996,041	\$ -	\$ 7,906,143	NM	NM	\$ 10,075	N/A
Private Equity	Accel-KKR Capital Partners CV IV, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2022	\$ 102,318,913	\$ 78,678,975	\$ -	\$ 77,932,888	NM	NM	\$ 87,327	N/A
Private Equity	Accel-KKR Capital Partners VI, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 110,000,000	\$ 46,467,144	\$ -	\$ 46,467,130	0.0%	1.00x	\$ 1,590,977	N/A
Private Equity	Accel-KKR Growth Capital Partners III, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 50,000,000	\$ 42,818,904	\$ 2,980,897	\$ 51,363,447	14.1%	1.20x	\$ 411,846	N/A
Private Equity	Accel-KKR Growth Capital Partners IV, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2022	\$ 65,000,000	\$ 3,643,758	\$ -	\$ 2,613,403	NM	NM	\$ 1,051,530	N/A
Private Equity	Access Foundation Partners Group II, LLC	6 East Eager Street, Baltimore, MD 21202	2019	\$ 30,000,000	\$ 23,206,226	\$ 35,528,955	\$ 35,528,955	27.9%	1.53x	\$ 856,874	\$ 12,322,729
Private Equity	Access Holdings Fund I, L.P.	6 East Eager Street, Baltimore, MD 21202	2019	\$ 15,000,000	\$ 11,903,630	\$ 3,905,914	\$ 23,780,566	52.9%	2.00x	\$ 354,240	N/A
Private Equity	Advent International GPE IX, L.P.	160 Victoria Street, London SW1E 5LB, United Kingdom	2019	\$ 100,000,000	\$ 69,258,235	\$ 7,996,007	\$ 129,600,553	49.1%	1.87x	\$ 2,347,327	N/A
Private Equity	Advent International GPE X, L.P.	160 Victoria Street, London SW1E 5LB, United Kingdom	2022	\$ 130,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	AE Industrial Partners Fund II, L.P.	2500 North Military Trail, Suite 470, Boca Raton, FL 33431	2018	\$ 100,000,000	\$ 85,471,339	\$ 13,241,375	\$ 144,777,827	38.2%	1.69x	\$ 1,463,642	N/A
Private Equity	AE Industrial Partners Fund III, L.P.	2500 North Military Trail, Suite 470, Boca Raton, FL 33431	2022	\$ 100,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Aquilas 2020 Private Equity Fund	105 Piccadilly, 5th Floor, London W1J 7NJ, United Kingdom	2020	\$ 12,960,442	\$ 518,502	\$ -	\$ (37,259)	NM	NM	\$ 368,299	N/A
Private Equity	Alchemy Plan (Pasadena), L.P.	21 Palmer Street, London SW1H 0AD, United Kingdom	2005	\$ 27,689,460	\$ 28,572,282	\$ 32,514,416	\$ 32,514,416	1.7%	1.14x	\$ -	\$ 3,942,134
Private Equity	Alchemy Special Opportunities Fund IV, L.P.	21 Palmer Street, London SW1H 0AD, United Kingdom	2018	\$ 78,939,251	\$ 30,822,819	\$ 5,783,224	\$ 35,942,665	12.6%	1.17x	\$ 1,504,462	N/A
Private Equity	Aldrich Capital Partners Fund, L.P.	8614 Westwood Center Drive, Suite 710, VA 22182	2018	\$ 10,000,000	\$ 8,863,524	\$ -	\$ 11,520,280	12.1%	1.30x	\$ 175,463	N/A
Private Equity	Alsop Louie Capital II, L.P.	50 Pacific Avenue, San Francisco, CA 94111	2010	\$ 5,000,000	\$ 5,000,000	\$ -	\$ 4,795,878	-0.4%	0.96x	\$ 21,602	N/A
Private Equity	Alsop Louie Capital III, L.P.	50 Pacific Avenue, San Francisco, CA 94111	2015	\$ 5,000,000	\$ 4,750,000	\$ 652,110	\$ 10,020,312	14.2%	2.11x	\$ 80,506	N/A
Private Equity	Alta California Partners II, L.P.	One Embarcadero Center, 37th Floor, San Francisco, CA 94111	1998	\$ 15,000,000	\$ 15,000,000	\$ 10,576,049	\$ 10,576,049	-5.6%	0.71x	\$ -	\$ (4,423,951)

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	Alta California Partners III, L.P.	One Embarcadero Center, 37th Floor, San Francisco, CA 94111	2000	\$ 15,000,000	\$ 14,574,076	\$ 17,101,670	\$ 17,101,670	2.2%	1.17x	\$ -	\$ 2,527,594
Private Equity	Ampersand CF, L.P.	55 William Street, Suite 240, Wellesley, MA 02481	2020	\$ 70,000,000	\$ 70,000,000	\$ 71,913,653	\$ 109,920,790	40.3%	1.57x	\$ 552,856	N/A
Private Equity	Apax Europe IV-A, L.P.	Third Floor Royal Bank Place, 1 Gategny Esplanade, St. Peter Port, GY1 2HJ Guernsey	1999	\$ 20,908,998	\$ 20,079,264	\$ 27,299,605	\$ 27,299,605	7.1%	1.36x	\$ -	\$ 7,220,341
Private Equity	Apax Europe V-A, L.P.	Third Floor Royal Bank Place, 1 Gategny Esplanade, St. Peter Port, GY1 2HJ Guernsey	2001	\$ 52,272,494	\$ 59,047,867	\$ 125,378,745	\$ 125,378,745	36.1%	2.12x	\$ -	\$ 66,330,878
Private Equity	Apollo Investment Fund III, L.P.	2 Manhattanville Road, 2nd Floor, Suite 203, Purchase, NY 10577	1995	\$ 15,000,000	\$ 17,236,337	\$ 24,695,084	\$ 24,695,084	9.6%	1.43x	\$ -	\$ 7,458,747
Private Equity	Apollo Investment Fund IV, L.P.	2 Manhattanville Road, 2nd Floor, Suite 203, Purchase, NY 10577	1998	\$ 50,000,000	\$ 51,160,746	\$ 84,562,235	\$ 84,561,947	8.5%	1.65x	\$ 21,612	N/A
Private Equity	Apollo Investment Fund V, L.P.	2 Manhattanville Road, 2nd Floor, Suite 203, Purchase, NY 10577	2001	\$ 30,000,000	\$ 45,638,384	\$ 92,513,248	\$ 92,513,248	37.6%	2.03x	\$ -	\$ 46,874,864
Private Equity	ASC Network Corporation	4041 Macarthur Boulevard, Suite 210, Newport Beach, CA 92660	1992	\$ 5,000,000	\$ 5,000,000	\$ 8,502,725	\$ 8,502,725	14.2%	1.70x	\$ -	\$ 3,502,725
Private Equity	Atlantic Street Capital II, L.P.	300 Main Street, Suite 801, Stamford, CT, 06901	2011	\$ 7,000,000	\$ 9,342,885	\$ 21,430,428	\$ 32,625,202	36.4%	3.49x	\$ 18,593	N/A
Private Equity	Atlantic Street Capital III, L.P.	300 Main Street, Suite 801, Stamford, CT, 06901	2015	\$ 10,000,000	\$ 10,811,818	\$ 6,842,986	\$ 23,409,895	25.6%	2.17x	\$ 19,375	N/A
Private Equity	Atlantic Street Capital IV, L.P.	300 Main Street, Suite 801, Stamford, CT, 06901	2019	\$ 50,000,000	\$ 36,382,285	\$ 21,580,847	\$ 58,878,795	36.2%	1.62x	\$ 1,763,284	N/A
Private Equity	Aurora Equity Partners II, L.P.	10877 Wilshire Boulevard, Suite 2100, Los Angeles, CA 90024	1998	\$ 30,000,000	\$ 33,792,031	\$ 47,497,863	\$ 47,497,863	4.7%	1.41x	\$ -	\$ 13,705,832
Private Equity	Austin Ventures IX, L.P.	300 West Sixth Street, Suite 2300, Austin, TX 78701	2006	\$ 7,600,000	\$ 7,664,734	\$ 10,453,298	\$ 10,453,298	5.1%	1.36x	\$ -	\$ 2,788,564
Private Equity	Austin Ventures VII, L.P.	300 West Sixth Street, Suite 2300, Austin, TX 78701	1999	\$ 5,000,000	\$ 5,000,000	\$ 4,037,188	\$ 4,037,188	-2.8%	0.81x	\$ -	\$ (962,812)
Private Equity	Austin Ventures VIII, L.P.	300 West Sixth Street, Suite 2300, Austin, TX 78701	2001	\$ 11,066,667	\$ 11,563,792	\$ 18,908,284	\$ 18,908,284	6.9%	1.64x	\$ -	\$ 7,344,492
Private Equity	Australis Partners Fund, L.P.	675 Third Avenue, New York, NY 10017	2016	\$ 125,000,000	\$ 126,297,557	\$ 45,932,278	\$ 130,641,892	1.2%	1.03x	\$ 2,031,271	N/A
Private Equity	BDCM Opportunity Fund IV, L.P.	One Sound Shore Drive, Suite 200, Greenwich, CT 6830	2015	\$ 100,000,000	\$ 128,809,686	\$ 64,242,533	\$ 211,682,773	15.0%	1.64x	\$ 1,485,218	N/A
Private Equity	Behrman Capital II, L.P.	One Letterman Drive, Suite D4900, San Francisco, CA 94129	1998	\$ 34,101,071	\$ 34,101,071	\$ 41,945,892	\$ 41,945,892	3.0%	1.23x	\$ -	\$ 7,844,821
Private Equity	Behrman Capital III, L.P.	One Letterman Drive, Suite D4900, San Francisco, CA 94129	2000	\$ 35,000,000	\$ 34,999,999	\$ 62,109,146	\$ 62,109,146	11.8%	1.77x	\$ -	\$ 27,109,147
Private Equity	Berkshire Fund III, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1993	\$ 5,000,000	\$ 4,839,500	\$ 18,502,393	\$ 18,502,393	55.1%	3.82x	\$ -	\$ 13,662,893
Private Equity	Berkshire Fund IV, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1996	\$ 20,000,000	\$ 19,160,798	\$ 49,899,467	\$ 49,899,467	33.4%	2.60x	\$ -	\$ 30,738,668
Private Equity	Berkshire Fund V, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1998	\$ 40,000,000	\$ 38,259,360	\$ 100,517,633	\$ 100,517,633	23.0%	2.63x	\$ -	\$ 62,258,253
Private Equity	Berkshire Fund VI, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	2002	\$ 60,000,000	\$ 59,683,417	\$ 176,349,021	\$ 176,349,021	25.1%	2.95x	\$ -	\$ 116,665,604
Private Equity	Berkshire Fund VII, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	2006	\$ 60,000,000	\$ 61,474,445	\$ 123,232,538	\$ 123,232,538	16.8%	2.00x	\$ -	\$ 61,758,093
Private Equity	Berkshire Fund VIII, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	2011	\$ 75,000,000	\$ 73,176,141	\$ 123,350,909	\$ 123,350,909	15.8%	1.69x	\$ -	\$ 50,174,768
Private Equity	Bertram Growth Capital I, L.P.	950 Tower Lane, Foster City, CA 94404	2006	\$ 10,000,000	\$ 9,533,755	\$ 16,310,356	\$ 17,241,415	11.1%	1.81x	\$ 25,362	N/A
Private Equity	Best Friends Pet Care	19717 62 Avenue South, Suite F103, Kent, WA, 98032	1994	\$ 3,665,530	\$ 3,665,530	\$ 64,260	\$ 64,260	0.0%	0.02x	\$ -	\$ (3,601,270)
Private Equity	Blackfin Financial Services Fund III, L.P.	15 rue de Laborde, 75008 Paris CEDEX 01, France	2019	\$ 91,476,865	\$ 35,616,004	\$ -	\$ 33,318,220	-7.7%	0.94x	\$ 2,454,314	N/A
Private Equity	Blackstone Capital Partners II, L.P.	345 Park Avenue, New York, NY 10154	1993	\$ 25,000,000	\$ 26,330,670	\$ 59,014,041	\$ 59,014,041	37.6%	2.24x	\$ -	\$ 32,683,371
Private Equity	Blackstone Capital Partners III Merchant, L.P.	345 Park Avenue, New York, NY 10154	1997	\$ 50,000,000	\$ 54,055,169	\$ 105,633,891	\$ 105,633,891	14.6%	1.95x	\$ -	\$ 51,578,723
Private Equity	Blackstone Capital Partners IV - Secondary	345 Park Avenue, New York, NY 10154	2012	\$ 5,000,000	\$ 3,145,245	\$ 3,959,115	\$ 4,029,270	14.0%	1.28x	\$ 278	N/A
Private Equity	Blackstone Capital Partners IV, L.P.	345 Park Avenue, New York, NY 10154	2003	\$ 75,000,000	\$ 90,141,042	\$ 211,579,175	\$ 212,631,492	37.6%	2.36x	\$ 4,164	N/A
Private Equity	Blackstone Capital Partners V, L.P.	345 Park Avenue, New York, NY 10154	2006	\$ 74,054,134	\$ 74,018,161	\$ 124,184,129	\$ 124,522,738	7.6%	1.68x	\$ 25,979	N/A
Private Equity	Blackstone Capital Partners VI, L.P.	345 Park Avenue, New York, NY 10154	2010	\$ 75,000,000	\$ 88,743,620	\$ 116,997,192	\$ 148,153,663	12.2%	1.67x	\$ 215,766	N/A
Private Equity	Blackstone Capital Partners VII, L.P.	345 Park Avenue, New York, NY 10154	2016	\$ 180,000,000	\$ 197,491,951	\$ 99,965,887	\$ 298,667,042	15.6%	1.51x	\$ 1,907,049	N/A
Private Equity	Blackstone Communications Partners I, L.P.	345 Park Avenue, New York, NY 10154	2000	\$ 25,000,000	\$ 27,657,709	\$ 33,725,886	\$ 33,889,647	6.5%	1.23x	\$ 1,460	N/A
Private Equity	Blackstone Mezzanine Partners, L.P.	345 Park Avenue, New York, NY 10154	1999	\$ 10,000,000	\$ 6,785,498	\$ 9,127,513	\$ 9,127,513	10.2%	1.35x	\$ -	\$ 2,342,015
Private Equity	BN Capital Fund II, L.P.	1550 Bryant Street, Suite 700, San Francisco, CA 94103	2017	\$ 34,000,000	\$ 2,567,833	\$ 2,126,793	\$ 2,741,889	1.9%	1.07x	\$ 25,704	N/A
Private Equity	Brinson International Partners Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606	1998	\$ 49,256,579	\$ 53,350,625	\$ 92,313,819	\$ 92,786,348	11.2%	1.74x	\$ 6,432	N/A
Private Equity	Bruckmann, Rosser, Sherrill & Co. II, L.P.	126 East 56th Street, 29th Floor, New York, NY 10022	1999	\$ 25,000,000	\$ 26,673,337	\$ 53,836,427	\$ 53,836,427	12.0%	2.02x	\$ -	\$ 27,163,090
Private Equity	Bruckmann, Rosser, Sherrill & Co., L.P.	126 East 56th Street, 29th Floor, New York, NY 10022	1996	\$ 28,000,000	\$ 29,307,496	\$ 51,731,311	\$ 51,731,311	10.4%	1.77x	\$ -	\$ 22,423,814
Private Equity	BRV Aster Fund II, L.P.	Unit 1308, Tower 1, China Central, NO. 81 Jian Guo Road, Chaoyang District, Beijing 100025 China	2017	\$ 40,000,000	\$ 38,127,993	\$ 6,659,473	\$ 74,999,908	23.3%	1.97x	\$ 1,049,051	N/A
Private Equity	BRV Aster Fund III, L.P.	Unit 1308, Tower 1, China Central, NO. 81 Jian Guo Road, Chaoyang District, Beijing 100025 China	2019	\$ 50,000,000	\$ 29,000,000	\$ -	\$ 34,417,950	23.7%	1.19x	\$ 1,318,882	N/A
Private Equity	BRV Aster Opportunity Fund II, L.P.	Unit 1308, Tower 1, China Central, NO. 81 Jian Guo Road, Chaoyang District, Beijing 100025 China	2019	\$ 25,000,000	\$ 6,250,000	\$ -	\$ 6,214,573	-0.5%	0.99x	\$ 286,503	N/A
Private Equity	Canaan VII, L.P.	285 Riverside Avenue, Suite 250, Westport, CT 06880	2005	\$ 9,500,000	\$ 9,500,000	\$ 21,419,157	\$ 23,132,549	14.5%	2.44x	\$ 3,976	N/A
Private Equity	Canaan XI, L.P.	285 Riverside Avenue, Suite 250, Westport, CT 06880	2018	\$ 50,000,000	\$ 46,250,000	\$ 2,299,318	\$ 105,378,380	35.5%	2.28x	\$ 1,093,402	N/A
Private Equity	Canaan XII, L.P.	285 Riverside Avenue, Suite 250, Westport, CT 06880	2020	\$ 100,000,000	\$ 43,000,000	\$ -	\$ 63,507,061	56.5%	1.48x	\$ 3,404,688	N/A
Private Equity	Candover 2005 Fund, L.P.	12 Charles II Street, 3rd Floor, London SW1Y 4QU, United Kingdom	2005	\$ 60,636,094	\$ 93,794,335	\$ 51,095,857	\$ 51,095,857	-11.2%	0.54x	\$ -	\$ (42,698,479)
Private Equity	Cardinal Health Partners, L.P.	230 Nassau Street, Princeton, NJ 08542	1997	\$ 10,000,000	\$ 10,000,000	\$ 18,733,679	\$ 18,733,679	9.7%	1.87x	\$ -	\$ 8,733,679
Private Equity	Carlye U.S. Equity Opportunity Fund II, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2015	\$ 200,000,000	\$ 203,939,832	\$ 188,755,199	\$ 321,669,390	14.5%	1.58x	\$ 2,465,339	N/A
Private Equity	Carlyle Management Group Partners, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2002	\$ 5,364,308	\$ 5,364,308	\$ 5,798,577	\$ 5,798,577	6.0%	1.08x	\$ -	\$ 434,269
Private Equity	Carlyle Partners II, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	1994	\$ 30,000,000	\$ 33,939,244	\$ 81,622,138	\$ 81,622,138	25.8%	2.40x	\$ -	\$ 47,682,894
Private Equity	Carlyle Partners III, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2000	\$ 22,487,354	\$ 26,871,391	\$ 58,770,979	\$ 58,770,979	22.9%	2.19x	\$ -	\$ 31,899,588

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	Carlyle Partners IV, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2005	\$ 75,000,000	\$ 78,154,551	\$ 154,156,184	\$ 154,156,184	13.0%	1.97x	\$ -	\$ 76,001,633
Private Equity	Carlyle Partners V, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2007	\$ 75,000,000	\$ 69,389,321	\$ 126,061,903	\$ 133,358,288	13.7%	1.92x	\$ 71,389	N/A
Private Equity	Carlyle Partners VI, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2013	\$ 150,000,000	\$ 186,904,886	\$ 246,853,850	\$ 341,023,905	15.9%	1.82x	\$ 661,092	N/A
Private Equity	Centerbridge Capital Partners II, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2010	\$ 50,000,000	\$ 61,113,827	\$ 41,137,990	\$ 47,662,351	-6.9%	0.78x	\$ 40,998	N/A
Private Equity	Centerbridge Capital Partners III, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2014	\$ 75,000,000	\$ 108,940,302	\$ 95,747,738	\$ 173,530,699	19.8%	1.59x	\$ 824,755	N/A
Private Equity	Centerbridge Capital Partners IV, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2021	\$ 150,000,000	\$ 63,649,374	\$ -	\$ 82,985,870	NM	NM	\$ 4,909,006	N/A
Private Equity	Centerbridge Capital Partners, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2006	\$ 60,000,000	\$ 59,448,630	\$ 131,422,327	\$ 133,998,546	19.3%	2.25x	\$ 21,041	N/A
Private Equity	Chart Capital Partners II, L.P.	53 Forest Avenue, Old Greenwich, CT, 10019	2010	\$ 6,700,000	\$ 8,656,209	\$ 12,694,501	\$ 13,060,375	9.4%	1.51x	\$ 15,726	N/A
Private Equity	CHP II, L.P.	230 Nassau Street, Princeton, NJ 08540	2000	\$ 10,000,000	\$ 10,000,000	\$ 15,345,207	\$ 15,345,207	12.7%	1.53x	\$ 240	\$ 5,345,207
Private Equity	CHS Private Equity V, L.P.	10 South Wacker Drive, Suite 3300, Chicago, IL 60606	2005	\$ 60,000,000	\$ 53,524,388	\$ 99,389,794	\$ 99,389,794	9.9%	1.86x	\$ -	\$ 45,865,406
Private Equity	Churchill Capital Partners II, L.P.	333 South 7th Street, Suite 3100, Minneapolis, MN 55402	1992	\$ 25,000,000	\$ 25,000,000	\$ 34,314,641	\$ 34,314,641	10.1%	1.37x	\$ -	\$ 9,314,641
Private Equity	Clarion Investors II, L.P.	527 Madison Avenue, 10th Floor, New York, NY 10022	2013	\$ 7,500,000	\$ 7,580,171	\$ 22,341,290	\$ 26,455,978	40.2%	3.49x	\$ 91,079	N/A
Private Equity	Clarion Investors III, L.P.	527 Madison Avenue, 10th Floor, New York, NY 10022	2018	\$ 42,500,000	\$ 27,049,221	\$ 14,114,115	\$ 35,616,404	34.3%	1.32x	\$ 1,729,085	N/A
Private Equity	Clearlake Capital Partners III, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2012	\$ 75,000,000	\$ 151,085,630	\$ 330,623,169	\$ 351,977,453	40.6%	2.33x	\$ 318,081	N/A
Private Equity	Clearlake Capital Partners IV, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2015	\$ 77,000,000	\$ 131,546,184	\$ 185,808,350	\$ 266,047,601	32.2%	2.02x	\$ 529,647	N/A
Private Equity	Clearlake Capital Partners V, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2018	\$ 100,000,000	\$ 142,022,352	\$ 159,972,788	\$ 310,851,297	49.6%	2.19x	\$ 974,252	N/A
Private Equity	Clearlake Capital Partners VI, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2020	\$ 160,000,000	\$ 148,892,165	\$ 13,194,412	\$ 231,690,571	45.7%	1.56x	\$ 2,517,080	N/A
Private Equity	Clearlake Capital Partners VII, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2021	\$ 200,000,000	\$ 62,564,288	\$ 4,868	\$ 59,853,533	NM	NM	\$ 3,109,083	N/A
Private Equity	Clearstone Venture Partners II-A, L.P.	1351 4th Street, 4th Floor, Santa Monica, CA 90401	1999	\$ 5,000,000	\$ 5,000,000	\$ 1,184,982	\$ 1,184,982	-20.1%	0.24x	\$ -	\$ (3,815,018)
Private Equity	Columbia Capital Equity Partners II (QP), L.P.	204 South Union Street, Alexandria, VA 22314	1999	\$ 12,000,000	\$ 12,039,711	\$ 9,537,357	\$ 9,537,357	-4.6%	0.79x	\$ -	\$ (2,502,354)
Private Equity	Columbia Capital Equity Partners III (QP), L.P.	204 South Union Street, Alexandria, VA 22314	2000	\$ 15,000,000	\$ 16,899,640	\$ 19,910,812	\$ 19,910,812	3.1%	1.18x	\$ -	\$ 3,011,172
Private Equity	Copley Partners I, L.P.	N/A	1986	\$ 15,000,000	\$ 15,000,000	\$ 27,320,000	\$ 27,320,000	9.5%	1.82x	\$ -	\$ 12,320,000
Private Equity	Copley Partners 2, L.P.	N/A	1986	\$ 15,000,000	\$ 15,000,000	\$ 21,782,515	\$ 21,782,515	5.7%	1.45x	\$ -	\$ 6,782,515
Private Equity	Cornerstone Equity Partners IV, L.P.	355 Lexington Avenue, Suite 1400, New York, NY 10017	1996	\$ 25,000,000	\$ 25,000,000	\$ 40,412,377	\$ 40,412,377	8.6%	1.62x	\$ -	\$ 15,412,377
Private Equity	CVC Capital Partners VI (B) L.P.	111 Strand, London WC2R OAG, United Kingdom	2013	\$ 104,544,989	\$ 145,911,503	\$ 129,155,650	\$ 269,463,027	17.9%	1.85x	\$ 852,097	N/A
Private Equity	CVC Capital Partners VII, L.P.	111 Strand, London WC2R OAG, United Kingdom	2017	\$ 209,089,978	\$ 202,233,582	\$ 27,886,710	\$ 329,068,537	26.1%	1.63x	\$ 2,567,904	N/A
Private Equity	CVC Capital Partners VIII, L.P.	111 Strand, London WC2R OAG, United Kingdom	2020	\$ 209,089,978	\$ 71,514,849	\$ -	\$ 75,096,765	8.1%	1.05x	\$ 3,942,532	N/A
Private Equity	CVC European Equity Partners II, L.P.	111 Strand, London WC2R OAG, United Kingdom	1998	\$ 50,000,000	\$ 46,360,215	\$ 110,703,608	\$ 110,703,608	19.0%	2.39x	\$ -	\$ 64,343,393
Private Equity	CVC European Equity Partners III, L.P.	111 Strand, London WC2R OAG, United Kingdom	2001	\$ 30,000,000	\$ 29,566,313	\$ 83,252,788	\$ 85,328,319	41.1%	2.89x	\$ 5,396	N/A
Private Equity	CVC European Equity Partners IV (D), L.P.	111 Strand, London WC2R OAG, United Kingdom	2005	\$ 60,636,094	\$ 69,979,390	\$ 137,316,177	\$ 137,417,562	16.7%	1.96x	\$ 7,609	N/A
Private Equity	CVC European Equity Partners Tandem Fund, L.P.	111 Strand, London WC2R OAG, United Kingdom	2006	\$ 22,999,898	\$ 28,712,000	\$ 38,530,788	\$ 38,545,970	6.6%	1.34x	\$ 3,432	N/A
Private Equity	CVC European Equity Partners V (A), L.P.	111 Strand, London WC2R OAG, United Kingdom	2008	\$ 67,954,243	\$ 101,694,756	\$ 192,560,228	\$ 195,489,284	16.4%	1.92x	\$ 6,200	N/A
Private Equity	CVC European Equity Partners, L.P.	111 Strand, London WC2R OAG, United Kingdom	1996	\$ 25,000,000	\$ 24,301,498	\$ 61,070,457	\$ 61,070,457	23.0%	2.51x	\$ -	\$ 36,768,959
Private Equity	Cypress Merchant Banking Partners II, L.P.	437 Madison Avenue, 33rd Floor, New York, NY 10022	1999	\$ 40,000,000	\$ 41,816,808	\$ 40,563,605	\$ 40,563,605	-0.5%	0.97x	\$ -	\$ (1,253,204)
Private Equity	Cypress Merchant Banking Partners, L.P.	437 Madison Avenue, 33rd Floor, New York, NY 10022	1995	\$ 10,000,000	\$ 10,465,248	\$ 12,641,091	\$ 12,641,091	2.6%	1.21x	\$ -	\$ 2,175,843
Private Equity	DLJ Merchant Banking Partners II, L.P.	11 Madison Avenue, 16th Floor, New York, NY 10010	1997	\$ 25,000,000	\$ 28,545,519	\$ 36,654,221	\$ 36,654,221	6.0%	1.28x	\$ -	\$ 8,108,702
Private Equity	Draper Fisher Jurvetson Fund VII, L.P.	2882 Sand Hill Road, Suite 150, Menlo Park, CA 94025	2000	\$ 10,000,000	\$ 10,000,000	\$ 7,238,170	\$ 7,238,170	-3.1%	0.72x	\$ -	\$ (2,761,830)
Private Equity	Enterprise Partners III, L.P.	2223 Avenida de la Playa, Suite 300, La Jolla, CA 92037	1993	\$ 10,000,000	\$ 10,000,000	\$ 74,198,158	\$ 74,198,158	63.7%	7.42x	\$ -	\$ 64,198,158
Private Equity	Excellere Capital Fund II, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2011	\$ 50,000,000	\$ 47,414,563	\$ 77,711,203	\$ 103,825,697	31.0%	2.19x	\$ 26,758	N/A
Private Equity	Excellere Capital Fund III, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2016	\$ 70,000,000	\$ 68,594,924	\$ 38,430,416	\$ 107,092,015	21.3%	1.56x	\$ 43,329	N/A
Private Equity	Excellere Capital Fund IV, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2021	\$ 100,000,000	\$ 24,834,285	\$ -	\$ 23,706,113	NM	NM	\$ 583,151	N/A
Private Equity	Excellere Capital Fund, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2007	\$ 25,000,000	\$ 21,410,078	\$ 45,443,673	\$ 45,443,673	32.8%	2.12x	\$ -	\$ 24,033,595
Private Equity	Exponent Private Equity Partners II, L.P.	2 London Bridge, London SE1 9RA, United Kingdom	2007	\$ 30,361,250	\$ 41,386,185	\$ 61,948,434	\$ 61,948,434	8.9%	1.50x	\$ -	\$ 20,562,248
Private Equity	Exponent Private Equity Partners, L.P.	2 London Bridge, London SE1 9RA, United Kingdom	2004	\$ 30,361,250	\$ 52,872,752	\$ 69,894,830	\$ 69,894,830	7.2%	1.32x	\$ -	\$ 17,022,078
Private Equity	Falcon Mezzanine Partners, L.P.	21 Custom House Street, 10th Floor, Boston, MA 02110	2003	\$ 20,000,000	\$ 19,559,608	\$ 37,695,417	\$ 37,695,417	26.1%	1.93x	\$ -	\$ 18,135,809
Private Equity	First Data Corporation	5565 Glenridge Connector NE, Suite 2000, Atlanta, GA 30342	1992	\$ 5,000,000	\$ 5,000,000	\$ 24,897,520	\$ 24,897,520	91.8%	4.98x	\$ -	\$ 19,897,520
Private Equity	First Reserve Fund XI, L.P.	290 Harbor Drive, Stamford, CT 06902	2006	\$ 60,000,000	\$ 60,000,000	\$ 39,646,621	\$ 39,646,621	-8.7%	0.66x	\$ -	\$ (20,353,379)
Private Equity	First Reserve Fund XII, L.P.	290 Harbor Drive, Stamford, CT 06902	2008	\$ 100,000,000	\$ 101,822,018	\$ 69,240,943	\$ 69,240,943	-7.9%	0.68x	\$ -	\$ (32,581,075)
Private Equity	Forward Ventures IV, L.P.	4747 Executive Drive, Suite 700, San Diego, CA 92121	2000	\$ 10,000,000	\$ 10,051,899	\$ 6,371,752	\$ 6,371,752	-4.7%	0.63x	\$ -	\$ (3,680,147)
Private Equity	Foundation Investment Partners II, L.P.	50 Curzon Street, 3rd Floor, London W1J 7UW, United Kingdom	2018	\$ 14,220,602	\$ 10,420,372	\$ -	\$ 11,856,362	6.1%	1.14x	\$ 254,679	N/A
Private Equity	Foundation Investment Partners, L.P.	50 Curzon Street, 3rd Floor, London W1J 7UW, United Kingdom	2015	\$ 4,797,078	\$ 6,188,445	\$ 8,173,202	\$ 9,035,896	29.8%	1.46x	\$ 17,687	N/A
Private Equity	Gateway Private Equity Fund, L.P.	18575 Jamboree Road, 7th Floor, Irvine, CA 92612	2010	\$ 300,000,000	\$ 293,111,390	\$ 366,179,777	\$ 588,053,312	14.3%	2.01x	\$ 1,384,976	N/A
Private Equity	Gateway Private Equity Fund-B, L.P.	18575 Jamboree Road, 7th Floor, Irvine, CA 92612	2015	\$ 300,000,000	\$ 272,542,443	\$ 268,248,544	\$ 955,515,167	35.9%	3.51x	\$ 1,050,667	N/A

Section 6254.26 (b)

Fiscal Year-Ended June 30, 2022

Attachment 3

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	GBOF V Feeder SCS	Herculesplein 104, 3584, AA Utrecht, Netherlands	2016	\$ 78,408,742	\$ 83,521,150	\$ 74,594,185	\$ 185,906,805	26.3%	2.23x	\$ 739,533	N/A
Private Equity	Geocapital IV, L.P.	1821 Hillandale Road, Suite 1 B-341, Durham, NC 27705	1996	\$ 9,000,000	\$ 9,000,000	\$ 15,606,095	\$ 15,606,095	14.2%	1.73x	\$ -	\$ 6,606,095
Private Equity	GGV Capital IV, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2012	\$ 50,000,000	\$ 50,409,342	\$ 68,076,425	\$ 92,859,519	9.6%	1.84x	\$ 464,193	N/A
Private Equity	GGV Capital V, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2014	\$ 50,000,000	\$ 47,750,070	\$ 66,222,525	\$ 228,592,113	29.3%	4.79x	\$ 724,556	N/A
Private Equity	GGV Capital VI Plus, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2017	\$ 15,000,000	\$ 14,175,000	\$ 5,613,954	\$ 36,433,904	33.7%	2.57x	\$ 20,473	N/A
Private Equity	GGV Capital VI, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2016	\$ 45,000,000	\$ 44,550,000	\$ 10,232,416	\$ 98,429,946	20.5%	2.21x	\$ 741,567	N/A
Private Equity	GGV Capital VII Plus, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019	\$ 16,000,000	\$ 15,600,000	\$ -	\$ 19,451,789	11.4%	1.25x	\$ 10,097	N/A
Private Equity	GGV Capital VII, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019	\$ 64,000,000	\$ 59,520,000	\$ 438,474	\$ 88,490,088	20.9%	1.49x	\$ 1,116,461	N/A
Private Equity	GGV Capital VIII Plus, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2021	\$ 18,000,000	\$ 7,290,000	\$ -	\$ 7,561,517	NM	NM	\$ 10,204	N/A
Private Equity	GGV Capital VIII, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2021	\$ 72,000,000	\$ 32,400,000	\$ -	\$ 36,977,117	NM	NM	\$ 1,472,254	N/A
Private Equity	GGV Discovery I, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2016	\$ 15,000,000	\$ 14,775,000	\$ 88,348	\$ 24,591,792	12.8%	1.66x	\$ 221,600	N/A
Private Equity	GGV Discovery II, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019	\$ 20,000,000	\$ 18,500,000	\$ -	\$ 37,635,920	41.8%	2.03x	\$ 368,247	N/A
Private Equity	GGV Discovery III, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2021	\$ 30,000,000	\$ 12,000,000	\$ -	\$ 15,943,270	NM	NM	\$ 612,164	N/A
Private Equity	GHO Capital III, L.P.	21 St James S Square, London SW1Y 4JZ, United Kingdom	2021	\$ 86,772,341	\$ 32,923,791	\$ -	\$ 31,491,380	NM	NM	\$ 3,163,432	N/A
Private Equity	GHO Capital Virtue	21 St James S Square, London SW1Y 4JZ, United Kingdom	2022	\$ 85,000,000	\$ 65,576,860	\$ -	\$ 64,629,207	NM	NM	\$ 364,473	N/A
Private Equity	GI Mint Holdings, L.P.	135 Main Street, 5th Floor, San Francisco, CA 94105	2021	\$ 65,672,942	\$ 36,712,350	\$ -	\$ 26,947,063	NM	NM	\$ 451,928	N/A
Private Equity	GKH Investments, L.P.	200 West Madison Street, Suite 3800, Chicago, IL 60606	1988	\$ 150,000,000	\$ 166,588,304	\$ 350,453,542	\$ 350,453,542	13.1%	2.10x	\$ -	\$ 183,865,238
Private Equity	Goode Partners Consumer Fund II, L.P.	767 Third Avenue, 22nd Floor, New York, NY 10017	2013	\$ 8,040,750	\$ 12,836,251	\$ 31,326,802	\$ 33,590,770	47.8%	2.62x	\$ 32,397	N/A
Private Equity	Goode Partners Consumer Fund III, L.P.	767 Third Avenue, 22nd Floor, New York, NY 10017	2015	\$ 10,000,000	\$ 11,778,252	\$ 2,707,349	\$ 11,824,214	0.1%	1.00x	\$ 152,465	N/A
Private Equity	Great Hill Equity Partners VIII, L.P.	200 Clarendon St Ste 29, Boston, MA 02116	2022	\$ 100,000,000	\$ -	\$ -	\$ (4,710,748)	NM	NM	\$ 1,269,467	N/A
Private Equity	Great Point Partners III, L.P.	165 Mason Street, 3rd Floor, Greenwich, CT, 06830	2018	\$ 15,000,000	\$ 10,766,470	\$ 8,109,451	\$ 17,334,704	34.9%	1.61x	\$ 601,740	N/A
Private Equity	Green Equity Investors IX, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2022	\$ 150,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Green Equity Investors VII, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2017	\$ 150,000,000	\$ 148,104,490	\$ 101,030,092	\$ 318,245,990	27.0%	2.15x	\$ 1,375,849	N/A
Private Equity	Green Equity Investors VIII, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2020	\$ 150,000,000	\$ 116,059,508	\$ 164,248	\$ 124,247,098	7.4%	1.07x	\$ (95,957)	N/A
Private Equity	Greycroft Growth II, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2017	\$ 7,500,000	\$ 8,142,046	\$ 2,953,785	\$ 20,708,026	38.4%	2.54x	\$ 158,652	N/A
Private Equity	Greycroft Growth, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2014	\$ 7,500,000	\$ 9,076,280	\$ 4,288,976	\$ 19,438,962	15.4%	2.14x	\$ 137,237	N/A
Private Equity	Greycroft Partners II, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2010	\$ 7,500,000	\$ 11,365,634	\$ 18,041,965	\$ 32,810,635	21.1%	2.89x	\$ 50,739	N/A
Private Equity	Greycroft Partners III, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2012	\$ 8,560,000	\$ 11,273,915	\$ 11,188,608	\$ 27,968,157	18.5%	2.48x	\$ 182,223	N/A
Private Equity	Greycroft Partners IV, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2015	\$ 7,500,000	\$ 10,446,379	\$ 5,977,975	\$ 33,179,030	36.1%	3.18x	\$ 194,805	N/A
Private Equity	Gridiron Capital Fund II, L.P.	220 Elm Street, New Canaan, CT 06840	2012	\$ 10,000,000	\$ 10,957,063	\$ 17,110,623	\$ 19,258,720	13.1%	1.76x	\$ 19,385	N/A
Private Equity	GRO Capital III, L.P.	Grønningen 17, 2.sal, 1270 Copenhagen, Denmark	2022	\$ 14,113,573	\$ 121,893	\$ -	\$ 2,081	NM	NM	\$ 128,033	N/A
Private Equity	GS Capital Partners II, L.P.	85 Broad Street, New York, NY 10004	1995	\$ 20,000,000	\$ 19,716,236	\$ 24,256,758	\$ 24,256,758	4.8%	1.23x	\$ -	\$ 4,540,522
Private Equity	GTB Capital Partners II, L.P.	100 Front Street, Suite 400, West Conshohocken, PA 19248	2014	\$ 400,000,000	\$ 384,574,089	\$ 287,118,500	\$ 573,514,953	11.0%	1.49x	\$ 2,138,399	N/A
Private Equity	GTB Capital Partners, L.P.	100 Front Street, Suite 400, West Conshohocken, PA 19248	2006	\$ 250,000,000	\$ 264,962,800	\$ 502,979,007	\$ 502,979,007	12.0%	1.90x	\$ -	\$ 238,016,207
Private Equity	GTCR Fund IX/A, L.P.	7776 Ivanhoe Avenue, Suite 200, La Jolla, CA 92037	2006	\$ 60,000,000	\$ 57,132,136	\$ 103,011,717	\$ 103,011,717	13.8%	1.80x	\$ -	\$ 45,879,581
Private Equity	GTCR Fund VIII, L.P.	7776 Ivanhoe Avenue, Suite 200, La Jolla, CA 92037	2003	\$ 75,000,000	\$ 69,393,692	\$ 120,641,835	\$ 120,641,835	22.3%	1.74x	\$ -	\$ 51,248,143
Private Equity	Halpern Denny Fund II, L.P.	500 Boylstone Street, Suite 1880, Boston, MA 02116	1997	\$ 10,000,000	\$ 10,199,997	\$ 2,334,835	\$ 2,334,835	-22.4%	0.23x	\$ -	\$ (7,865,162)
Private Equity	HarbourVest International Private Equity Partners	One Financial Center, 44th Floor, Boston, MA 02111	1998	\$ 25,000,000	\$ 24,625,000	\$ 38,182,604	\$ 38,226,922	8.6%	1.55x	\$ 319	N/A
Private Equity	Harvest Partners VII, L.P.	280 Park Avenue, 25th Floor, New York, NY 10017	2016	\$ 80,000,000	\$ 92,862,601	\$ 86,753,936	\$ 200,264,672	26.4%	2.16x	\$ 36,878	N/A
Private Equity	Hellman & Friedman Capital Partners IX, L.P.	415 Mission Street, San Francisco, CA 94105	2019	\$ 150,000,000	\$ 146,912,679	\$ 3,969,111	\$ 179,923,620	14.7%	1.22x	\$ 1,619,465	N/A
Private Equity	Hellman & Friedman Capital Partners V, L.P.	415 Mission Street, San Francisco, CA 94105	2004	\$ 39,953,351	\$ 38,227,150	\$ 102,043,445	\$ 102,043,445	27.9%	2.67x	\$ -	\$ 63,816,296
Private Equity	Hellman & Friedman Capital Partners VI, L.P.	415 Mission Street, San Francisco, CA 94105	2007	\$ 60,000,000	\$ 61,562,523	\$ 98,890,674	\$ 130,967,855	12.7%	2.13x	\$ 10,482	N/A
Private Equity	Hellman & Friedman Capital Partners VIII, L.P.	415 Mission Street, San Francisco, CA 94105	2016	\$ 125,000,000	\$ 130,680,193	\$ 69,629,676	\$ 244,368,588	18.8%	1.87x	\$ 747,685	N/A
Private Equity	Hellman & Friedman Capital Partners X, L.P.	415 Mission Street, San Francisco, CA 94105	2021	\$ 150,000,000	\$ 86,211,688	\$ 4,447,321	\$ 80,259,485	NM	NM	\$ 2,727,699	N/A
Private Equity	HPH II FF, L.P.	21500 Biscayne Boulevard, Suite 600, Aventura, FL 33180	2021	\$ 14,189,000	\$ 13,421,795	\$ -	\$ 15,915,341	NM	NM	\$ 958,108	N/A
Private Equity	Icon Partners II, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2021	\$ 70,000,000	\$ 15,655,239	\$ 18,921,535	\$ 32,415,539	NM	NM	\$ 2,152	N/A
Private Equity	Icon Partners V, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2021	\$ 70,000,000	\$ 51,851,855	\$ -	\$ 53,995,330	NM	NM	\$ 274,763	N/A
Private Equity	Incline Equity Partners III, L.P.	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222	2013	\$ 10,000,000	\$ 12,021,502	\$ 29,185,472	\$ 29,287,836	37.1%	2.44x	\$ 5,941	N/A
Private Equity	Incline Equity Partners IV, L.P.	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222	2017	\$ 37,500,000	\$ 36,597,331	\$ 34,343,527	\$ 70,658,001	34.2%	1.93x	\$ 559,079	N/A
Private Equity	Incline Equity Partners IV, L.P. (JPM)	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222	2017	\$ 10,000,000	\$ 9,759,289	\$ 9,158,275	\$ 18,842,135	34.2%	1.93x	\$ 149,088	N/A
Private Equity	Indigo N.V.	5 Limburglaan, Maastricht, 6229 SH, Netherlands	1996	\$ 8,385,925	\$ 7,000,000	\$ 9,251,063	\$ 9,251,063	5.1%	1.32x	\$ -	\$ 2,251,063
Private Equity	Infinity Capital Venture Fund 1999, L.P.	N/A	1999	\$ 15,000,000	\$ 15,000,000	\$ 1,643,938	\$ 1,643,938	-33.7%	0.11x	\$ -	\$ (13,356,062)
Private Equity	Information Technology Venture II, L.P.	N/A	1998	\$ 15,000,000	\$ 15,000,000	\$ 11,580,601	\$ 11,580,601	-11.1%	0.77x	\$ -	\$ (3,419,399)



Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	Insight Venture Partners V Co-investment Fund, L.P.	1114 Avenue of the Americas, 36th Floor, New York, NY 10036	2005	\$ 8,180,615	\$ 8,348,123	\$ 28,122,135	\$ 28,122,135	26.9%	3.37x	\$ -	\$ 19,774,012
Private Equity	Insight Venture Partners V, L.P.	1114 Avenue of the Americas, 36th Floor, New York, NY 10036	2005	\$ 9,500,000	\$ 9,916,890	\$ 26,581,388	\$ 26,581,388	20.9%	2.68x	\$ -	\$ 16,664,498
Private Equity	Insignia Capital Partners (Parallel A), L.P.	1333 North California Boulevard, Suite 520, Walnut Creek, CA 94596	2013	\$ 100,000,000	\$ 108,430,301	\$ 82,549,157	\$ 289,065,669	28.2%	2.67x	\$ 1,390,284	N/A
Private Equity	Institutional Venture Partners XIV, L.P.	3000 Sand Hill Road, Building 2, Suite 250, Menlo Park, CA 94025	2012	\$ 60,000,000	\$ 60,217,604	\$ 51,192,532	\$ 97,481,820	9.4%	1.62x	\$ 1,012,148	N/A
Private Equity	Institutional Venture Partners XV, L.P.	3000 Sand Hill Road, Building 2, Suite 250, Menlo Park, CA 94025	2015	\$ 90,000,000	\$ 90,660,077	\$ 160,174,215	\$ 307,527,011	31.4%	3.39x	\$ 1,961,133	N/A
Private Equity	Intersouth Partners VII, L.P.	102 City Hall Plaza, Suite 200, Durham, NC 27701	2006	\$ 6,700,000	\$ 6,700,000	\$ 3,455,010	\$ 3,455,010	-10.0%	0.52x	\$ -	\$ (3,244,990)
Private Equity	Invesco Partnership Fund II, L.P.	1166 Avenue of the Americas, New York, NY 10036	1999	\$ 20,000,000	\$ 21,480,641	\$ 16,500,663	\$ 16,500,663	-4.1%	0.77x	\$ -	\$ (4,979,978)
Private Equity	J.P. Morgan Emerging Managers Program	320 Park Avenue, New York, NY 10022	2010	\$ 150,000,000	\$ 177,528,080	\$ 304,652,384	\$ 390,735,506	19.8%	2.20x	\$ 381,470	N/A
Private Equity	J.P. Morgan Emerging Managers Program II	320 Park Avenue, New York, NY 10022	2015	\$ 100,000,000	\$ 112,905,784	\$ 186,175,103	\$ 280,886,637	35.4%	2.49x	\$ 384,654	N/A
Private Equity	J.P. Morgan Emerging Managers Program III	320 Park Avenue, New York, NY 10022	2017	\$ 100,000,000	\$ 101,149,734	\$ 89,002,844	\$ 210,770,259	16.4%	1.23x	\$ 408,033	N/A
Private Equity	J.P. Morgan Emerging Managers Program IV	320 Park Avenue, New York, NY 10022	2018	\$ 300,000,000	\$ 154,229,679	\$ 12,015,365	\$ 190,246,094	33.3%	2.08x	\$ 525,300	N/A
Private Equity	Jade Equity Investors II, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2022	\$ 50,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Jade Equity Investors, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2019	\$ 50,000,000	\$ 34,388,788	\$ 6,216,112	\$ 45,522,058	48.3%	1.32x	\$ 530,469	N/A
Private Equity	JMI Equity Fund V, L.P.	100 International Drive, Suite 19100, Baltimore, MD 21202	2005	\$ 16,200,000	\$ 16,203,728	\$ 87,013,410	\$ 87,013,410	39.4%	5.37x	\$ -	\$ 70,809,682
Private Equity	JMI Equity Fund VI, L.P.	100 International Drive, Suite 19100, Baltimore, MD 21202	2007	\$ 19,500,000	\$ 19,568,427	\$ 34,468,894	\$ 34,879,294	11.5%	1.78x	\$ 4,699	N/A
Private Equity	JMI Equity Fund VII, L.P.	100 International Drive, Suite 19100, Baltimore, MD 21202	2010	\$ 30,000,000	\$ 32,712,250	\$ 73,021,920	\$ 76,568,511	17.9%	2.34x	\$ 4,664	N/A
Private Equity	Joy Capital I, L.P.	Room 1501, Wangling Greenland Center B, Chaoyang District, China	2015	\$ 5,000,000	\$ 5,927,358	\$ 10,457,754	\$ 17,501,622	36.1%	2.95x	\$ 72,292	N/A
Private Equity	Joy Capital II, L.P.	Room 1501, Wangling Greenland Center B, Chaoyang District, China	2018	\$ 5,000,000	\$ 4,673,832	\$ -	\$ 6,887,567	10.6%	1.47x	\$ 96,963	N/A
Private Equity	Joy Capital III, L.P.	Room 1501, Wangling Greenland Center B, Chaoyang District, China	2019	\$ 40,000,000	\$ 33,142,674	\$ -	\$ 53,429,615	31.9%	1.61x	\$ 1,057,489	N/A
Private Equity	Joy Capital Opportunity, L.P.	Room 1501, Wangling Greenland Center B, Chaoyang District, China	2018	\$ 25,000,000	\$ 23,185,314	\$ -	\$ 30,898,290	11.8%	1.33x	\$ 262,701	N/A
Private Equity	Jov Capital Opportunity, L.P. (JPM)	Room 1501, Wangling Greenland Center B, Chaoyang District, China	2018	\$ 15,000,000	\$ 13,905,043	\$ -	\$ 18,538,974	10.2%	1.33x	\$ 157,621	N/A
Private Equity	Juggernaut Capital Partners II, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2012	\$ 75,000,000	\$ 99,934,003	\$ 126,041,611	\$ 174,505,939	12.6%	1.75x	\$ 1,159,637	N/A
Private Equity	Juggernaut Capital Partners III, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2015	\$ 100,000,000	\$ 117,026,553	\$ 130,684,506	\$ 196,205,251	14.0%	1.68x	\$ 1,215,191	N/A
Private Equity	Juggernaut Capital Partners IV, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2018	\$ 125,000,000	\$ 104,787,973	\$ 15,655,053	\$ 170,608,532	33.1%	1.63x	\$ 2,389,196	N/A
Private Equity	JZI Fund III, L.P.	9 West 57th Street, 33rd Floor, NY 10019	2015	\$ 6,272,699	\$ 6,791,009	\$ 2,132,205	\$ 7,980,203	5.1%	1.18x	\$ 84,199	N/A
Private Equity	KarpReilly Capital Partners II, L.P.	102 Greenwich Avenue, 2nd Floor, Greenwich, CT 06830	2012	\$ 10,000,000	\$ 9,934,109	\$ 7,474,235	\$ 13,802,090	5.9%	1.39x	\$ 49,388	N/A
Private Equity	Kelso Investment Associates VII, L.P.	320 Park Ave, 24th Floor, New York, NY 10022	2004	\$ 46,000,000	\$ 49,479,790	\$ 78,216,333	\$ 78,216,333	11.4%	1.58x	\$ -	\$ 28,736,543
Private Equity	Kelso Investment Associates VIII, L.P.	320 Park Ave, 24th Floor, New York, NY 10022	2007	\$ 75,000,000	\$ 74,241,945	\$ 87,934,223	\$ 87,934,223	4.0%	1.18x	\$ -	\$ 13,692,278
Private Equity	Kerogen Expansion Fund, L.P.	190 Elgin Avenue, George Town, Grand Cayman KY1-9001, Cayman Islands	2018	\$ 6,666,667	\$ 5,869,349	\$ 2,011,072	\$ 7,930,089	11.8%	1.35x	\$ 92,507	N/A
Private Equity	Kidd Kamm Equity Partners, L.P.	N/A	1992	\$ 15,000,000	\$ 14,874,159	\$ 587,583	\$ 587,583	-49.9%	0.04x	\$ -	\$ (14,286,575)
Private Equity	Kinderhook Capital III, L.P.	505 Fifth Avenue, 25th Floor, New York, NY 10017	2010	\$ 7,000,000	\$ 8,665,862	\$ 14,731,228	\$ 14,731,228	12.9%	1.70x	\$ -	\$ 6,065,366
Private Equity	KKR 1996 Fund, L.P.	9 West 57th Street, Suite 4200, New York, NY 10019	1997	\$ 125,000,000	\$ 131,822,098	\$ 235,069,550	\$ 235,069,550	13.2%	1.78x	\$ -	\$ 103,247,452
Private Equity	KKR 2006 Fund, L.P.	9 West 57th Street, Suite 4200, New York, NY 10019	2006	\$ 60,000,000	\$ 64,488,155	\$ 100,624,957	\$ 100,624,957	7.7%	1.56x	\$ -	\$ 36,136,802
Private Equity	KKR Millennium Fund, L.P.	9 West 57th Street, Suite 4200, New York, NY 10019	2002	\$ 50,000,000	\$ 67,839,702	\$ 122,794,809	\$ 122,794,809	16.4%	1.81x	\$ -	\$ 54,955,107
Private Equity	Kleiner Perkins Caufield & Byers VI, L.P.	2750 Sand Hill Road, Menlo Park, CA 94025	1992	\$ 5,000,000	\$ 5,000,000	\$ 16,562,188	\$ 16,562,188	39.5%	3.31x	\$ -	\$ 11,562,188
Private Equity	Kleiner Perkins Caufield & Byers VII, L.P.	2750 Sand Hill Road, Menlo Park, CA 94025	1994	\$ 3,750,000	\$ 3,750,000	\$ 121,557,017	\$ 121,557,017	124.7%	32.42x	\$ -	\$ 117,807,017
Private Equity	Kline Hawkes Pacific, L.P.	11726 San Vicente Boulevard, Suite 300, Los Angeles, CA 90049	2000	\$ 5,000,000	\$ 5,000,000	\$ 3,372,135	\$ 3,372,135	-4.8%	0.67x	\$ -	\$ (1,627,865)
Private Equity	Knightsbridge Integrated Holdings IV, L.P.	122 S.W. Frank Phillips Boulevard, Bartlesville, OK 74003	1999	\$ 12,000,000	\$ 11,817,257	\$ 11,834,267	\$ 11,834,267	0.0%	1.00x	\$ -	\$ 17,010
Private Equity	Knightsbridge Integrated Holdings V, L.P.	122 S.W. Frank Phillips Boulevard, Bartlesville, OK 74003	2000	\$ 20,000,000	\$ 19,743,132	\$ 21,401,367	\$ 21,401,367	1.1%	1.08x	\$ -	\$ 1,658,235
Private Equity	Kohlberg Investors IV, L.P.	111 Radio Circle, Mount Kisco, NY 10549	2001	\$ 25,000,000	\$ 21,656,624	\$ 29,236,119	\$ 29,236,119	9.4%	1.35x	\$ -	\$ 7,579,495
Private Equity	Landmark Equity Partners III, L.P.	681 Fifth Avenue, 14th Floor, New York, NY 10022	1993	\$ 10,000,000	\$ 10,286,670	\$ 26,789,111	\$ 26,789,111	35.1%	2.60x	\$ -	\$ 16,502,441
Private Equity	Landmark Equity Partners IV, L.P.	681 Fifth Avenue, 14th Floor, New York, NY 10022	1994	\$ 10,533,677	\$ 11,011,182	\$ 16,218,022	\$ 16,218,022	15.8%	1.47x	\$ -	\$ 5,206,840
Private Equity	LAV Biosciences Fund IV, L.P.	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2017	\$ 40,000,000	\$ 44,874,144	\$ 32,514,568	\$ 82,024,746	20.9%	1.83x	\$ 874,275	N/A
Private Equity	LAV Biosciences Fund V, L.P.	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2019	\$ 48,000,000	\$ 50,946,283	\$ 4,969,747	\$ 63,817,728	12.7%	1.25x	\$ 1,066,000	N/A
Private Equity	LAV Biosciences Fund VI Opportunities, L.P.	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2021	\$ 31,000,000	\$ 14,166,726	\$ -	\$ 11,107,166	NM	NM	\$ 33,804	N/A
Private Equity	LAV Biosciences Fund VI, L.P.	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2021	\$ 62,000,000	\$ 28,926,068	\$ 266,872	\$ 25,089,209	NM	NM	\$ 887,522	N/A
Private Equity	Levine Leichtman Capital Partners II, L.P.	335 North Maple Drive, Suite 130, Beverly Hills, CA 90210	1998	\$ 30,000,000	\$ 50,043,193	\$ 57,532,192	\$ 57,532,192	4.9%	1.15x	\$ 5,244	\$ 7,488,998
Private Equity	Lexington Capital Partners II, L.P.	660 Madison Avenue, 23rd Floor, New York, NY 10065	1998	\$ 50,000,000	\$ 49,406,937	\$ 65,710,274	\$ 65,710,274	8.2%	1.33x	\$ -	\$ 16,303,337
Private Equity	Lexington Capital Partners III, L.P.	660 Madison Avenue, 23rd Floor, New York, NY 10065	1999	\$ 25,000,000	\$ 24,654,618	\$ 31,126,135	\$ 31,126,135	8.6%	1.26x	\$ 3,278	\$ 6,471,517
Private Equity	Lexington Capital Partners V, L.P.	660 Madison Avenue, 23rd Floor, New York, NY 10065	2001	\$ 50,000,000	\$ 49,756,618	\$ 83,315,442	\$ 83,512,526	18.2%	1.68x	\$ 2,793	N/A
Private Equity	Lightspeed Venture Partners VI, L.P.	2200 Sand Hill Road, Menlo Park, CA 94025	2000	\$ 8,000,000	\$ 7,340,182	\$ 7,782,321	\$ 7,782,321	1.1%	1.06x	\$ -	\$ 442,139
Private Equity	Lightyear Fund III, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2011	\$ 105,000,000	\$ 120,885,121	\$ 247,957,194	\$ 256,455,106	24.8%	2.12x	\$ 190,006	N/A
Private Equity	Lightyear Fund IV, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2016	\$ 150,000,000	\$ 167,899,861	\$ 106,093,793	\$ 320,847,488	22.0%	1.91x	\$ 1,939,011	N/A

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	Lightyear Fund V, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2021	\$ 100,000,000	\$ 43,338,179	\$ -	\$ 44,753,393	NM	NM	\$ 2,013,762	N/A
Private Equity	Lindsay Goldberg & Bessemer, L.P.	630 Fifth Avenue, 30th Floor, New York, NY 10111	2002	\$ 30,000,000	\$ 29,160,283	\$ 70,239,033	\$ 70,239,033	33.3%	2.41x	\$ -	\$ 41,078,750
Private Equity	Livingbridge 6, L.P.	100 Wood Street, London EC2V 7AN, United Kingdom	2016	\$ 48,578,000	\$ 48,937,116	\$ 14,227,831	\$ 72,094,391	13.1%	1.47x	\$ 559,147	N/A
Private Equity	M/C Venture Partners VI, L.P.	75 State Street, Suite 2500, Boston, MA 02109	2006	\$ 19,000,000	\$ 18,813,924	\$ 39,761,999	\$ 39,761,999	13.3%	2.11x	\$ -	\$ 20,948,075
Private Equity	Madison Dearborn Capital Partners III, L.P.	Three First National Plaza, Suite 4600, Chicago, IL 60602	1999	\$ 30,000,000	\$ 30,021,318	\$ 45,791,560	\$ 45,791,560	8.6%	1.53x	\$ -	\$ 15,770,243
Private Equity	Madison Dearborn Capital Partners IV, L.P.	Three First National Plaza, Suite 4600, Chicago, IL 60602	2000	\$ 25,000,000	\$ 24,258,894	\$ 46,347,176	\$ 46,347,176	13.8%	1.91x	\$ -	\$ 22,088,282
Private Equity	Madison Dearborn Capital Partners V-A, L.P.	Three First National Plaza, Suite 4600, Chicago, IL 60602	2006	\$ 75,000,000	\$ 72,683,212	\$ 115,385,291	\$ 115,385,291	7.1%	1.59x	\$ -	\$ 42,702,079
Private Equity	Madison Dearborn Capital Partners VI, L.P.	Three First National Plaza, Suite 4600, Chicago, IL 60602	2008	\$ 75,000,000	\$ 68,228,887	\$ 149,537,439	\$ 149,537,439	24.3%	2.19x	\$ -	\$ 81,308,552
Private Equity	Marlin Equity IV, L.P.	338 Pier Avenue, Hermosa Beach, CA 90254	2013	\$ 50,000,000	\$ 50,203,022	\$ 44,604,831	\$ 73,369,016	9.1%	1.46x	\$ 435,428	N/A
Private Equity	MBK Partners Fund III, L.P.	22nd Floor, D Tower D1, 17 Jongno 3-gil, Jongno-gu, Seoul, Korea	2013	\$ 100,000,000	\$ 118,100,686	\$ 157,312,786	\$ 182,827,134	10.6%	1.55x	\$ 375,205	N/A
Private Equity	MBK Partners Fund IV, L.P.	22nd Floor, D Tower D1, 17 Jongno 3-gil, Jongno-gu, Seoul, Korea	2017	\$ 120,000,000	\$ 116,489,733	\$ 39,285,710	\$ 183,707,657	17.0%	1.58x	\$ 769,381	N/A
Private Equity	MBK Partners Fund V, L.P.	22nd Floor, D Tower D1, 17 Jongno 3-gil, Jongno-gu, Seoul, Korea	2020	\$ 150,000,000	\$ 47,850,217	\$ 1,814,367	\$ 51,029,928	10.8%	1.07x	\$ 2,726,032	N/A
Private Equity	McCown DeLeeuw & Co. Fund IV, L.P.	950 Tower Lane, Suite 800, Foster City, CA 94404	1998	\$ 25,000,000	\$ 21,327,148	\$ 15,493,357	\$ 15,493,357	-4.5%	0.73x	\$ -	\$ (5,833,791)
Private Equity	Media Communications Partners, L.P.	75 State Street, Suite 2500, Boston, MA 02109	1986	\$ 25,000,000	\$ 25,000,000	\$ 40,272,681	\$ 40,272,681	7.3%	1.61x	\$ -	\$ 15,272,681
Private Equity	Mediphase Venture Partners II, L.P.	One Gateway Center, Suite 407, Newton, MA 02458	2002	\$ 10,000,000	\$ 9,703,163	\$ 17,662,114	\$ 17,662,114	7.6%	1.82x	\$ -	\$ 7,958,951
Private Equity	Menlo Ventures IX, L.P.	3000 Sand Hill Road, Building 4, Suite 100, Menlo Park, CA 94025	2001	\$ 10,000,000	\$ 10,000,000	\$ 9,812,008	\$ 9,812,008	-0.3%	0.98x	\$ -	\$ (187,992)
Private Equity	Mercato Partners Growth II, L.P.	2750 East Cottonwood Parkway, Suite 500, Cottonwood Heights, UT 84121	2011	\$ 7,000,000	\$ 7,000,000	\$ 13,052,193	\$ 13,085,428	10.2%	1.87x	\$ 114,417	N/A
Private Equity	MetroPCS	2250 Lakeside Boulevard, Richardson, TX 75082	1995	\$ 5,784,200	\$ 5,920,141	\$ 54,529,368	\$ 54,529,368	26.4%	9.21x	\$ -	\$ 48,809,227
Private Equity	Moelis Capital Partners Opp. Fund I-B LP	399 Park Avenue, 6th Floor, New York, NY 10022	2014	\$ 10,000,000	\$ 10,914,929	\$ 19,509,680	\$ 20,572,500	17.5%	1.88x	\$ 54,854	N/A
Private Equity	Montagu III, L.P.	2 More London Riverside, London SE1 2AP, United Kingdom	2005	\$ 60,636,094	\$ 74,273,058	\$ 97,904,295	\$ 97,904,295	7.3%	1.32x	\$ -	\$ 23,631,236
Private Equity	Montefiore Investment V, S.L.P.	28 rue Bayard, 75008, Paris CEDEX 01, France	2020	\$ 41,817,996	\$ 12,646,017	\$ -	\$ 14,759,662	19.7%	1.17x	\$ 1,366,246	N/A
Private Equity	Morgan Stanley Dean Witter Venture Partners IV, L.P.	1585 Broadway, New York, NY 10036	1999	\$ 5,000,000	\$ 5,126,102	\$ 4,166,577	\$ 4,243,443	-2.4%	0.83x	\$ 677	N/A
Private Equity	Morgan Stanley Venture Partners 2002 Fund, L.P.	1585 Broadway, New York, NY 10036	2002	\$ 5,000,000	\$ 5,618,225	\$ 8,827,330	\$ 8,827,330	9.3%	1.57x	\$ -	\$ 3,209,105
Private Equity	NeoTribe Ventures I, L.P.	3340 Hillview Avenue, Palo Alto, CA 94304	2017	\$ 5,000,000	\$ 4,650,000	\$ 859,417	\$ 11,942,407	32.8%	2.57x	\$ 108,309	N/A
Private Equity	NeoTribe Ventures II, L.P.	3340 Hillview Avenue, Palo Alto, CA 94304	2020	\$ 9,537,500	\$ 3,338,125	\$ -	\$ 2,969,180	-11.5%	0.89x	\$ 248,517	N/A
Private Equity	New Mainstream Capital II, L.P.	5949 Sherry Lane, Suite 1080, Dallas, TX 75225	2014	\$ 10,000,000	\$ 11,923,501	\$ 11,474,458	\$ 16,826,319	10.3%	1.41x	\$ 96,199	N/A
Private Equity	NexPhase Capital Fund IV, L.P.	600 Lexington Avenue, 12th Floor, New York, NY 10022	2021	\$ 12,578,500	\$ 7,672,947	\$ -	\$ 10,974,628	NM	NM	\$ 298,834	N/A
Private Equity	Next Coast ETA I, L.P.	1204 Nueces Street, Austin, TX 78701	2022	\$ 10,000,000	\$ 2,000,000	\$ -	\$ 1,753,678	NM	NM	\$ 251,898	N/A
Private Equity	Next Coast Ventures I, L.P.	1204 Nueces Street, Austin, TX 78701	2016	\$ 5,000,000	\$ 5,070,502	\$ 3,695,501	\$ 16,334,187	38.1%	3.22x	\$ 82,249	N/A
Private Equity	Next Coast Ventures II, L.P.	1204 Nueces Street, Austin, TX 78701	2019	\$ 15,000,000	\$ 13,500,000	\$ -	\$ 15,995,031	12.1%	1.18x	\$ 380,906	N/A
Private Equity	Nordic Capital Fund VI, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2006	\$ 44,640,710	\$ 62,739,995	\$ 96,405,726	\$ 96,405,726	6.9%	1.54x	\$ -	\$ 33,665,731
Private Equity	Nordic Capital V, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2003	\$ 38,666,480	\$ 51,554,628	\$ 144,088,760	\$ 144,088,760	20.6%	2.79x	\$ -	\$ 92,534,132
Private Equity	Nordic Capital VII Beta, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2007	\$ 52,272,494	\$ 66,746,134	\$ 89,420,866	\$ 89,420,866	4.8%	1.34x	\$ -	\$ 22,674,732
Private Equity	Nordic Capital VIII Beta, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2012	\$ 78,408,742	\$ 94,897,540	\$ 141,748,184	\$ 141,748,184	16.7%	1.49x	\$ -	\$ 46,850,644
Private Equity	Northgate Venture Partners VI, L.P.	649 San Ramon Valley Boulevard, Danville, CA 94526	2012	\$ 50,000,000	\$ 45,500,000	\$ 62,179,857	\$ 62,179,857	9.3%	1.37x	\$ -	\$ 16,679,857
Private Equity	Novacap International TMT VI-A, L.P.	3400 rue de l'Eclipse, Bureau 700, Brossard, QC J4Z 0P3, Canada	2021	\$ 75,000,000	\$ 11,940,133	\$ -	\$ 10,702,837	NM	NM	\$ 1,421,097	N/A
Private Equity	Oak Investment Partners IX, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	1999	\$ 10,000,000	\$ 9,999,798	\$ 6,514,343	\$ 6,518,295	-6.6%	0.65x	\$ 1,449	N/A
Private Equity	Oak Investment Partners V, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	1992	\$ 11,250,000	\$ 11,250,000	\$ 17,094,361	\$ 17,094,361	10.6%	1.52x	\$ -	\$ 5,844,361
Private Equity	Oak Investment Partners VI, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	1994	\$ 14,000,000	\$ 14,000,000	\$ 40,701,314	\$ 40,701,314	34.6%	2.91x	\$ -	\$ 26,701,314
Private Equity	Oak Investment Partners VIII, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	1998	\$ 10,000,000	\$ 10,000,000	\$ 18,005,960	\$ 18,005,960	54.3%	1.80x	\$ -	\$ 8,005,960
Private Equity	Oak Investment Partners X, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	2001	\$ 20,000,000	\$ 20,000,000	\$ 25,255,825	\$ 25,316,590	3.5%	1.27x	\$ 3,175	N/A
Private Equity	Oak Investment Partners XI, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	2004	\$ 32,050,000	\$ 32,040,260	\$ 26,300,795	\$ 27,908,612	-1.7%	0.87x	\$ 10,285	N/A
Private Equity	Oak Investment Partners XII, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	2006	\$ 40,000,000	\$ 39,933,414	\$ 35,430,610	\$ 37,303,991	-1.1%	0.93x	\$ 11,888	N/A
Private Equity	OCM Opportunities Fund II, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	1997	\$ 25,000,000	\$ 25,000,000	\$ 37,729,349	\$ 37,729,349	8.5%	1.51x	\$ -	\$ 12,729,349
Private Equity	OCM Opportunities Fund III, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	1999	\$ 25,000,000	\$ 26,250,000	\$ 38,931,640	\$ 38,931,640	11.9%	1.48x	\$ -	\$ 12,881,640
Private Equity	OCM Opportunities Fund IV, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2001	\$ 35,000,000	\$ 35,000,000	\$ 57,818,378	\$ 57,818,378	28.0%	1.65x	\$ -	\$ 22,818,378
Private Equity	OCM Opportunities Fund VI, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2005	\$ 32,400,000	\$ 32,400,000	\$ 51,174,285	\$ 51,174,285	8.8%	1.58x	\$ -	\$ 18,774,285
Private Equity	Olympus Growth Fund IV, L.P.	Metro Center, One Station Place, 4th Floor, Stamford, CT 06902	2003	\$ 18,000,000	\$ 16,361,176	\$ 26,995,690	\$ 26,995,690	8.4%	1.65x	\$ -	\$ 10,634,514
Private Equity	One Rock Capital Partners II, L.P.	30 Rockefeller Plaza, 54th Floor, New York, NY 10112	2017	\$ 72,500,000	\$ 64,880,974	\$ 9,527,156	\$ 125,869,289	22.4%	1.94x	\$ 1,153,485	N/A
Private Equity	One Rock Capital Partners III, L.P.	30 Rockefeller Plaza, 54th Floor, New York, NY 10112	2020	\$ 150,000,000	\$ 67,791,320	\$ 15,142,348	\$ 84,071,338	37.2%	1.24x	\$ 3,140,844	N/A
Private Equity	Onex Partners II, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2006	\$ 60,000,000	\$ 53,620,551	\$ 96,860,529	\$ 97,012,928	12.7%	1.81x	\$ 3,057	N/A
Private Equity	Onex Partners III, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2008	\$ 75,000,000	\$ 84,352,975	\$ 123,731,571	\$ 137,277,871	11.3%	1.63x	\$ 34,468	N/A
Private Equity	Onex Partners IV, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2014	\$ 150,000,000	\$ 150,678,038	\$ 102,109,547	\$ 211,925,121	8.2%	1.41x	\$ 850,453	N/A

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Private Equity	Onex Partners V, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2018	\$ 200,000,000	\$ 175,930,473	\$ 2,841,485	\$ 207,921,315	11.5%	1.18x	\$ 3,964,652	N/A
Private Equity	Onex Partners, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2003	\$ 75,000,000	\$ 73,984,802	\$ 221,598,361	\$ 221,912,357	38.3%	3.00x	\$ 3,516	N/A
Private Equity	Osceola Fund I, L.P.	1715 North Westshoe Boulevard, Suite 200, Tampa, FL 33607	2020	\$ 15,000,000	\$ 12,114,767	\$ -	\$ 17,417,467	24.3%	1.44x	\$ 454,671	N/A
Private Equity	Oxford Bioscience Partners IV, L.P.	P.O. Box 2017, 12 Giles Place, Mansfield, MA 02048	2001	\$ 20,000,000	\$ 20,000,000	\$ 12,341,882	\$ 12,341,882	-9.7%	0.62x	\$ -	\$ (7,658,118)
Private Equity	PAI Europe VII, L.P.	232, rue de Rivoli, 75054 Paris, CEDEX 01, France	2018	\$ 156,817,483	\$ 107,648,225	\$ 14,243,500	\$ 139,640,131	17.8%	1.30x	\$ 2,694,097	N/A
Private Equity	Palladium Equity Partners IV, L.P.	1270 Avenue of the Americas, 31st Floor, New York, NY 10020	2014	\$ 100,000,000	\$ 112,100,981	\$ 75,793,736	\$ 158,613,080	9.3%	1.41x	\$ 1,125,205	N/A
Private Equity	Palm Beach Capital Fund III, L.P.	525 South Flagler Drive, Suite 201, West Palm Beach, FL 33401	2011	\$ 7,000,000	\$ 6,846,163	\$ 10,386,684	\$ 16,255,408	21.4%	2.37x	\$ 57,986	N/A
Private Equity	Palm Beach Capital Fund IV, L.P.	525 South Flagler Drive, Suite 201, West Palm Beach, FL 33401	2018	\$ 10,000,000	\$ 9,634,631	\$ 24,222,664	\$ 34,045,449	47.4%	3.53x	\$ 285,797	N/A
Private Equity	Palm Beach Capital III, L.P. - Secondary	525 South Flagler Drive, Suite 201, West Palm Beach, FL 33401	2015	\$ 1,053,866	\$ 949,156	\$ 1,220,919	\$ 2,433,718	24.6%	2.56x	\$ 11,183	N/A
Private Equity	Peak Rock Capital Fund, L.P.	13413 Galleria Circle, Suite Q-300, Austin, TX 78738	2013	\$ 11,000,000	\$ 10,185,910	\$ 11,085,414	\$ 16,039,568	19.6%	1.57x	\$ 66,079	N/A
Private Equity	Peleton Equity II, L.P.	66 Field Point Road, 2nd Floor, Greenwich, CT 06830	2021	\$ 15,000,000	\$ 8,938,937	\$ -	\$ 13,170,124	NM	NM	\$ 312,182	N/A
Private Equity	Pemba Capital Fund II, L.P.	Level 45, Gateway, 1 Macquarie Place, NSW 2000, Sydney	2022	\$ 13,753,002	\$ 6,327,761	\$ -	\$ 6,833,455	NM	NM	\$ 846,800	N/A
Private Equity	Permira Europe III, L.P.	80 Pall Mall, London SW1Y 5ES, United Kingdom	2003	\$ 78,408,742	\$ 106,878,038	\$ 174,555,739	\$ 174,980,336	25.9%	1.64x	\$ 10,047	N/A
Private Equity	Permira Europe IV, L.P.	80 Pall Mall, London SW1Y 5ES, United Kingdom	2006	\$ 51,227,045	\$ 75,442,780	\$ 114,483,141	\$ 114,483,141	8.4%	1.52x	\$ -	\$ 39,040,361
Private Equity	Phillips-Smith Specialty Retail Group III, L.P.	5080 Spectrum Drive, Suite 805, West Addison, TX 75001	1993	\$ 5,000,000	\$ 5,000,000	\$ 10,942,836	\$ 10,942,836	23.3%	2.19x	\$ -	\$ 5,942,836
Private Equity	Phoenix Equity Partners III, L.P.	123 Victoria Street, London SW1E 6DE, United Kingdom	2000	\$ 3,934,376	\$ 4,017,518	\$ 5,407,525	\$ 5,407,525	6.0%	1.35x	\$ -	\$ 1,390,006
Private Equity	Phoenix Equity Partners IV, L.P.	123 Victoria Street, London SW1E 6DE, United Kingdom	2001	\$ 15,283,657	\$ 23,037,526	\$ 49,761,889	\$ 49,761,889	31.4%	2.16x	\$ -	\$ 26,724,363
Private Equity	Prospect Venture Partners I, L.P.	435 Tasso Street, Suite 200, Palo Alto, CA 94301	1997	\$ 10,000,000	\$ 10,000,000	\$ 7,477,919	\$ 7,477,919	-3.8%	0.75x	\$ -	\$ (2,522,081)
Private Equity	Prospect Venture Partners II, L.P.	435 Tasso Street, Suite 200, Palo Alto, CA 94301	2001	\$ 20,000,000	\$ 18,500,000	\$ 23,938,622	\$ 23,938,622	5.2%	1.29x	\$ -	\$ 5,438,622
Private Equity	Providence Equity Partners III, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	1999	\$ 21,765,349	\$ 25,250,994	\$ 38,781,756	\$ 38,781,756	14.5%	1.54x	\$ -	\$ 13,530,762
Private Equity	Providence Equity Partners IV - Secondary	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2005	\$ 1,330,097	\$ 1,251,039	\$ 2,233,649	\$ 2,233,649	19.5%	1.79x	\$ -	\$ 982,609
Private Equity	Providence Equity Partners IV, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2000	\$ 35,000,000	\$ 43,939,032	\$ 89,498,730	\$ 89,498,730	23.8%	2.04x	\$ -	\$ 45,559,699
Private Equity	Providence Equity Partners V, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2005	\$ 73,000,000	\$ 69,499,729	\$ 85,416,140	\$ 85,416,140	3.1%	1.23x	\$ -	\$ 15,916,411
Private Equity	Providence Equity Partners VI, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2007	\$ 80,000,000	\$ 77,988,274	\$ 107,823,757	\$ 107,823,757	5.4%	1.38x	\$ -	\$ 29,835,483
Private Equity	Providence Growth Investors, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2000	\$ 10,000,000	\$ 10,245,962	\$ 12,397,723	\$ 12,397,723	4.9%	1.21x	\$ -	\$ 2,151,761
Private Equity	Prudential Venture Partners II	355 Lexington Avenue, Suite 1400, New York, NY 10017	1987	\$ 50,000,000	\$ 50,000,000	\$ 116,405,441	\$ 116,405,441	23.5%	2.33x	\$ -	\$ 66,405,441
Private Equity	Quad C Partners V, L.P.	200 Garrett Street, Suite M, Charlottesville, VA 22902	1998	\$ 25,000,000	\$ 24,966,260	\$ 36,516,994	\$ 36,516,994	9.1%	1.46x	\$ -	\$ 11,550,734
Private Equity	Quad-C Partners VII Co-Investment Fund, L.P.	200 Garrett Street, Suite M, Charlottesville, VA 22902	2007	\$ 13,639,253	\$ 13,561,143	\$ 19,291,212	\$ 19,291,212	8.2%	1.42x	\$ -	\$ 5,730,069
Private Equity	Quad-C Partners VII, L.P.	200 Garrett Street, Suite M, Charlottesville, VA 22902	2006	\$ 43,723,396	\$ 44,927,887	\$ 73,036,197	\$ 73,036,197	10.9%	1.63x	\$ -	\$ 28,108,310
Private Equity	Questor Partners Fund II, L.P.	101 Southfield Road, 2nd Floor, Birmingham, MI 48009	1999	\$ 30,000,000	\$ 32,873,554	\$ 39,052,065	\$ 39,052,065	3.9%	1.19x	\$ -	\$ 6,178,511
Private Equity	Questor Partners Fund, L.P.	101 Southfield Road, 2nd Floor, Birmingham, MI 48009	1996	\$ 30,000,000	\$ 30,335,510	\$ 42,894,358	\$ 42,894,358	15.7%	1.41x	\$ -	\$ 12,558,848
Private Equity	RedBird Capital Partners Series 2019, L.P.	667 Madison Avenue, 16th Floor, New York, NY 10065	2019	\$ 150,000,000	\$ 161,522,349	\$ 55,588,963	\$ 238,328,597	22.8%	1.48x	\$ 3,463,447	N/A
Private Equity	Redpoint Ventures II, L.P.	3000 Sand Hill Road, Building 2, Suite 290, Menlo Park, CA 94025	2000	\$ 4,800,000	\$ 4,656,000	\$ 6,546,873	\$ 6,546,873	5.1%	1.41x	\$ -	\$ 1,890,873
Private Equity	Reliant Equity Partners, L.P.	401 North Michigan Avenue, Suite 550, Chicago, IL 60611	2003	\$ 10,000,000	\$ 9,058,279	\$ 126,988	\$ 126,988	-48.1%	0.01x	\$ -	\$ (8,931,291)
Private Equity	Revelstoke Capital Partners III, L.P.	260 North Josephine Street, Suite 500, Denver, CO 80206	2021	\$ 100,000,000	\$ 9,990,728	\$ 1,014,239	\$ 22,299,829	NM	NM	\$ 1,736,972	N/A
Private Equity	Revelstoke Capital Partners Single Asset Fund I, L.P.	260 North Josephine Street, Suite 500, Denver, CO 80206	2019	\$ 60,000,000	\$ 52,798,902	\$ -	\$ 118,786,003	36.7%	2.25x	\$ 444,667	N/A
Private Equity	Ripplewood Partners, L.P.	1 Rockefeller Plaza, 32nd Floor, New York, NY 10020	1996	\$ 20,000,000	\$ 19,604,622	\$ 36,396,534	\$ 36,396,534	13.6%	1.86x	\$ -	\$ 16,791,912
Private Equity	Riverside Capital Appreciation Fund VI, L.P.	45 Rockefeller Center, New York, NY 10111	2013	\$ 100,000,000	\$ 118,655,829	\$ 133,977,992	\$ 175,451,890	12.0%	1.48x	\$ 906,554	N/A
Private Equity	Riverside Micro-Cap Fund V, L.P.	45 Rockefeller Center, New York, NY 10111	2019	\$ 65,000,000	\$ 49,844,058	\$ -	\$ 68,645,413	21.2%	1.38x	\$ 475,949	N/A
Private Equity	Rizvi Opportunistic Equity Fund II	260 East Brown Street, Suite 380, Birmingham, MI 48009	2010	\$ 4,293,000	\$ 5,003,029	\$ 4,753,927	\$ 7,060,079	5.8%	1.41x	\$ 61,327	N/A
Private Equity	RLH Investors II, L.P.	10900 Wilshire Boulevard, Suite 850, Los Angeles, CA 90024	2006	\$ 10,000,000	\$ 11,482,112	\$ 24,916,208	\$ 24,916,208	21.7%	2.17x	\$ -	\$ 13,434,096
Private Equity	RLH Investors III, L.P.	10900 Wilshire Boulevard, Suite 850, Los Angeles, CA 90024	2010	\$ 50,000,000	\$ 45,145,545	\$ 56,342,040	\$ 56,342,040	6.6%	1.25x	\$ -	\$ 11,196,495
Private Equity	RSTW Partners III, L.P.	5847 San Felipe, Suite 2929, Houston, TX 77057	1997	\$ 25,000,000	\$ 23,010,874	\$ 21,623,881	\$ 21,623,881	-1.2%	0.94x	\$ -	\$ (1,386,993)
Private Equity	Sevin Rosen Fund IV, L.P.	P.O.Box 192128, Dallas, TX 75219	1992	\$ 5,000,000	\$ 5,032,048	\$ 51,249,370	\$ 51,249,370	87.2%	10.18x	\$ -	\$ 46,217,322
Private Equity	Sevin Rosen Fund V, L.P.	P.O.Box 192128, Dallas, TX 75219	1996	\$ 10,000,000	\$ 10,029,497	\$ 11,068,441	\$ 11,068,441	9.3%	1.10x	\$ -	\$ 1,038,945
Private Equity	Sevin Rosen Fund VII, L.P.	P.O.Box 192128, Dallas, TX 75219	1999	\$ 10,000,000	\$ 9,875,000	\$ 2,054,166	\$ 2,054,166	-10.3%	0.21x	\$ -	\$ (7,820,834)
Private Equity	Sevin Rosen Fund VIII, L.P.	P.O.Box 192128, Dallas, TX 75219	2000	\$ 13,720,000	\$ 13,514,200	\$ 15,631,811	\$ 15,631,811	1.6%	1.16x	\$ -	\$ 2,117,611
Private Equity	Sevin Rosen VI, L.P.	P.O.Box 192128, Dallas, TX 75219	1998	\$ 5,000,000	\$ 5,000,000	\$ 9,184,249	\$ 9,184,249	53.5%	1.84x	\$ -	\$ 4,184,249
Private Equity	Sierra Ventures V, L.P.	1400 Fashion Island Boulevard, Suite 1010, San Mateo, CA 94404	1995	\$ 5,000,000	\$ 5,000,000	\$ 21,267,421	\$ 21,267,421	80.1%	4.25x	\$ -	\$ 16,267,421
Private Equity	Sierra Ventures VIII-A, L.P.	1400 Fashion Island Boulevard, Suite 1010, San Mateo, CA 94404	2000	\$ 15,000,000	\$ 15,000,497	\$ 11,739,026	\$ 11,739,026	-3.9%	0.78x	\$ -	\$ (3,261,471)
Private Equity	Silver Lake Partners III, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2007	\$ 60,000,000	\$ 61,855,750	\$ 115,837,394	\$ 139,797,321	18.0%	2.26x	\$ 95,348	N/A
Private Equity	Silver Lake Partners IV, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2013	\$ 105,000,000	\$ 136,015,599	\$ 140,561,546	\$ 305,385,484	23.4%	2.25x	\$ 747,349	N/A
Private Equity	Silver Lake Partners V, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2017	\$ 180,000,000	\$ 179,401,166	\$ 55,271,490	\$ 260,519,415	16.5%	1.45x	\$ 1,519,179	N/A

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	Silver Lake Partners VI, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2020	\$ 200,000,000	\$ 125,540,921	\$ 12,268,360	\$ 125,440,460	-0.1%	1.00x	\$ 3,994,166	N/A
Private Equity	Silver Lake Partners VII, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2022	\$ 200,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Silver Oak Services Partners II, L.P.	1560 Sherman Avenue, Suite 1200, Evanston, IL 60201	2012	\$ 12,000,000	\$ 13,217,171	\$ 30,481,751	\$ 42,069,596	29.4%	3.18x	\$ -	N/A
Private Equity	Silverhawk Capital Partners II, L.P.	140 Greenwich Avenue, Suite 2, Greenwich, CT 06830	2010	\$ 7,000,000	\$ 8,211,241	\$ 13,350,667	\$ 15,422,430	20.9%	1.88x	\$ 4,283	N/A
Private Equity	Sinovation Fund IV, L.P.	Dinghao Tower Block A, Haidian District, Beijing, China	2018	\$ 75,000,000	\$ 66,000,000	\$ -	\$ 92,135,066	15.4%	1.40x	\$ 1,934,016	N/A
Private Equity	Siris Partners III, L.P.	601 Lexington Avenue, 59th Floor, New York, NY 10022	2014	\$ 60,000,000	\$ 65,997,268	\$ 49,660,663	\$ 98,631,487	13.3%	1.49x	\$ 430,699	N/A
Private Equity	Siris Partners IV, L.P.	601 Lexington Avenue, 59th Floor, New York, NY 10022	2019	\$ 100,000,000	\$ 81,933,949	\$ 11,800,407	\$ 124,411,891	23.2%	1.52x	\$ 2,039,786	N/A
Private Equity	Solera Partners, L.P.	625 Madison Avenue, 3rd Floor, New York, NY 10022	2002	\$ 10,000,000	\$ 5,119,929	\$ 14,890,218	\$ 14,890,218	9.6%	2.91x	\$ -	\$ 9,770,289
Private Equity	Southfield Capital III, L.P.	140 Greenwich Avenue, Suite 4, Greenwich, CT 06830	2020	\$ 15,000,000	\$ 4,530,326	\$ -	\$ 4,694,903	6.1%	1.04x	\$ 192,019	N/A
Private Equity	Southvest Fund V, L.P.	40 Burton Hills Boulevard, Suite 420, Nashville, TN 37215	2005	\$ 8,811,316	\$ 8,598,559	\$ 18,506,720	\$ 19,385,394	15.7%	2.25x	\$ 21,806	N/A
Private Equity	Spectrum Equity Investors V, L.P.	140 New Montgomery, San Francisco, CA 94105	2005	\$ 35,000,000	\$ 32,871,719	\$ 80,418,795	\$ 80,418,795	18.0%	2.45x	\$ 6,860	\$ 47,547,076
Private Equity	Sprout VIII, L.P.	1 Madison Avenue, 7th Floor, New York, NY 10010	1998	\$ 20,000,000	\$ 20,000,000	\$ 18,911,128	\$ 18,911,128	-0.9%	0.95x	\$ -	\$ (1,088,872)
Private Equity	SSID CV Fund AB	Regeringsgatan 20, 111 53, Stockholm	2022	\$ 74,645,122	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Sterling Investment Partners III, L.P.	285 Riverside Avenue, Westport, CT 06880	2013	\$ 100,000,000	\$ 106,381,153	\$ 149,087,504	\$ 244,113,170	25.4%	2.29x	\$ 1,292,784	N/A
Private Equity	Sterling Investment Partners IV, L.P.	285 Riverside Avenue, Westport, CT 06880	2020	\$ 125,000,000	\$ 22,140,565	\$ -	\$ 25,676,002	32.6%	1.16x	\$ 5,236,488	N/A
Private Equity	STG Allegro - A, L.P.	1300 El Camino Real, Suite 300, Menlo Park, CA 94025	2021	\$ 75,000,000	\$ 4,104,428	\$ -	\$ 2,263,646	NM	NM	\$ 1,773,955	N/A
Private Equity	STG VI, L.P.	1300 El Camino Real, Suite 300, Menlo Park, CA 94025	2021	\$ 85,000,000	\$ 31,042,256	\$ -	\$ 32,924,262	NM	NM	\$ 1,523,074	N/A
Private Equity	Storm Ventures Fund V, L.P.	3000 Sand Hill Road, Building 4-210, Menlo Park, CA 94025	2015	\$ 50,000,000	\$ 43,000,000	\$ 14,546,223	\$ 229,187,457	37.2%	5.33x	\$ 683,982	N/A
Private Equity	Storm Ventures Fund VI, L.P.	3000 Sand Hill Road, Building 4-210, Menlo Park, CA 94025	2019	\$ 50,000,000	\$ 40,000,000	\$ -	\$ 54,581,372	21.9%	1.36x	\$ 1,046,395	N/A
Private Equity	Storm Ventures Fund VII, L.P.	3000 Sand Hill Road, Building 4-210, Menlo Park, CA 94025	2022	\$ 50,000,000	\$ -	\$ -	\$ (1,234)	NM	NM	\$ 1,234	N/A
Private Equity	Summit Accelerator Fund, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	1999	\$ 5,600,000	\$ 5,498,422	\$ 9,711,301	\$ 9,711,301	9.9%	1.77x	\$ -	\$ 4,212,879
Private Equity	Summit Park I-A	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2012	\$ 7,406,250	\$ 7,616,140	\$ 18,325,987	\$ 24,473,987	26.3%	3.21x	\$ 10,884	N/A
Private Equity	Summit Park II, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2014	\$ 10,000,000	\$ 10,579,820	\$ 22,041,942	\$ 25,673,690	29.5%	2.43x	\$ 12,218	N/A
Private Equity	Summit Park III, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2018	\$ 9,375,000	\$ 8,571,032	\$ 188,561	\$ 10,938,378	15.1%	1.28x	\$ 115,257	N/A
Private Equity	Summit Partners Europe Growth Equity Fund III SCSp	222 Berkeley Street, 18th Floor, Boston, MA 02116	2020	\$ 36,590,746	\$ 18,451,326	\$ -	\$ 17,615,406	-6.2%	0.95x	\$ 892,593	N/A
Private Equity	Summit Partners Growth Equity Fund VIII-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2011	\$ 75,000,000	\$ 106,019,903	\$ 191,187,190	\$ 239,208,912	27.3%	2.26x	\$ 690,363	N/A
Private Equity	Summit Partners Growth Equity Fund XI-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2022	\$ 100,000,000	\$ -	\$ -	\$ (503,516)	NM	NM	\$ 883,822	N/A
Private Equity	Summit Partners Private Equity Fund VII-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2006	\$ 69,900,000	\$ 75,288,529	\$ 129,007,592	\$ 140,676,525	10.6%	1.87x	\$ 3,203	N/A
Private Equity	Summit Partners Venture Capital Fund II-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2006	\$ 8,400,000	\$ 10,338,908	\$ 20,981,793	\$ 20,981,793	19.3%	2.03x	\$ 3,987	\$ 10,642,885
Private Equity	Summit Ventures III, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1992	\$ 25,000,000	\$ 20,000,000	\$ 78,763,052	\$ 78,763,052	61.8%	3.94x	\$ -	\$ 58,763,052
Private Equity	Summit Ventures IV, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1995	\$ 24,750,000	\$ 24,007,500	\$ 181,655,345	\$ 181,655,345	104.1%	7.57x	\$ -	\$ 157,647,845
Private Equity	Summit Ventures V, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1998	\$ 37,000,000	\$ 35,705,000	\$ 49,485,953	\$ 49,485,953	8.1%	1.39x	\$ -	\$ 13,780,953
Private Equity	Summit Ventures VI-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2001	\$ 50,000,000	\$ 53,644,370	\$ 111,989,537	\$ 112,460,548	15.4%	2.10x	\$ 1,930	N/A
Private Equity	Symantec Corp.	350 Ellis Street, Mountain View, CA 94043	1992	\$ 5,569,791	\$ 5,569,791	\$ 2,222,145	\$ 2,222,145	-28.5%	0.40x	\$ -	\$ (3,347,646)
Private Equity	Syndicated Communications II, L.P.	4800 Hampden Lane, Suite 200, Bethesda, MD 20814	1990	\$ 7,500,000	\$ 7,500,000	\$ 16,664,333	\$ 16,664,333	13.0%	2.22x	\$ -	\$ 9,164,333
Private Equity	Syndicated Communications Venture Partners IV, L.P.	4800 Hampden Lane, Suite 200, Bethesda, MD 20814	2000	\$ 7,500,000	\$ 7,445,705	\$ 5,205,401	\$ 5,205,401	-5.3%	0.70x	\$ -	\$ (2,240,304)
Private Equity	T3 Partners II, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2001	\$ 18,707,131	\$ 18,360,961	\$ 56,361,527	\$ 56,361,527	93.9%	3.07x	\$ -	\$ 38,000,566
Private Equity	TA Select Opportunities Fund II, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2021	\$ 30,000,000	\$ 3,600,000	\$ -	\$ 2,946,174	NM	NM	\$ 25,777	N/A
Private Equity	TA X, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2006	\$ 7,900,000	\$ 7,623,500	\$ 10,044,003	\$ 10,044,003	5.2%	1.32x	\$ -	\$ 2,420,503
Private Equity	TA XIII, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2019	\$ 75,000,000	\$ 74,355,754	\$ 33,855,754	\$ 123,731,263	47.8%	1.66x	\$ 1,260,588	N/A
Private Equity	TA XIV, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2021	\$ 110,000,000	\$ 29,700,000	\$ -	\$ 26,687,804	NM	NM	\$ 1,480,202	N/A
Private Equity	TCV V, L.P.	528 Ramona Street, Palo Alto, CA 94301	2004	\$ 39,000,000	\$ 38,668,500	\$ 71,566,890	\$ 71,566,890	10.6%	1.85x	\$ 26,247	\$ 32,898,390
Private Equity	TCV VI, L.P.	528 Ramona Street, Palo Alto, CA 94301	2006	\$ 50,000,000	\$ 52,975,818	\$ 80,836,466	\$ 80,836,466	12.3%	1.53x	\$ 9,348	\$ 27,860,648
Private Equity	TCV VII, L.P.	528 Ramona Street, Palo Alto, CA 94301	2007	\$ 75,000,000	\$ 75,160,608	\$ 234,154,122	\$ 238,229,202	23.5%	3.17x	\$ (23,297)	N/A
Private Equity	Ten Coves Capital I, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2018	\$ 2,902,557	\$ 5,164,152	\$ 12,065,270	\$ 15,474,162	87.7%	3.00x	\$ 32,182	N/A
Private Equity	Ten Coves Capital II, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2018	\$ 8,225,000	\$ 7,919,182	\$ 2,002,953	\$ 11,354,901	19.0%	1.43x	\$ 122,085	N/A
Private Equity	Ten Coves Capital III, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2021	\$ 7,521,000	\$ 2,399,242	\$ -	\$ 2,228,717	NM	NM	\$ 184,691	N/A
Private Equity	TH Lee Putnam Parallel Ventures, L.P.	200 Madison Avenue, Suite 1900, New York, NY 10016	2000	\$ 5,000,000	\$ 5,055,906	\$ 5,833,008	\$ 5,833,008	3.0%	1.15x	\$ -	\$ 777,102
Private Equity	The 1818 Fund II, L.P.	140 Broadway, 16th Floor, New York, NY 10005	1993	\$ 15,000,000	\$ 12,862,874	\$ 23,988,308	\$ 23,988,308	12.2%	1.86x	\$ -	\$ 11,125,434
Private Equity	The Beacon Group III - Focus Value Fund, L.P.	N/A	1996	\$ 40,000,000	\$ 39,634,747	\$ 10,102,452	\$ 10,102,452	-18.2%	0.25x	\$ -	\$ (29,532,295)
Private Equity	The Fifth Alcuin Fund Limited Partnership	65 Sloane Street, London SW1X 9SH, United Kingdom	2021	\$ 13,085,699	\$ 4,261,098	\$ -	\$ 3,763,774	NM	NM	\$ 318,145	N/A
Private Equity	The Resolute Fund II, L.P.	399 Park Avenue, 30th Floor, New York, NY 10022	2007	\$ 60,000,000	\$ 61,670,887	\$ 85,432,018	\$ 85,432,018	7.5%	1.39x	\$ -	\$ 23,761,131



Section 6254.26 (b)

Fiscal Year-Ended June 30, 2022

Attachment 3

Functional Category	Name <sup>1</sup>	Address <sup>1</sup>	Vintage Year <sup>2</sup>	Commitment <sup>3</sup>	Contribution <sup>4</sup>	Distributions <sup>5</sup>	Distribution Plus Market Value <sup>6</sup>	Since Inception Net Return <sup>7</sup>	Investment Multiple <sup>8</sup>	Dollar amount of the total fees paid on a fiscal year-end basis <sup>9</sup>	Dollar amount of cash profit received on a fiscal year-end basis <sup>10</sup>
Private Equity	The Resolute Fund, L.P.	399 Park Avenue, 30th Floor, New York, NY 10022	2002	\$ 50,000,000	\$ 47,806,413	\$ 120,845,133	\$ 120,845,133	17.0%	2.53x	\$ -	\$ 73,038,720
Private Equity	The Veritas Capital Fund VIII, L.P.	9 West 57th Street, 32nd Floor, New York, NY 10019	2022	\$ 100,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	The Veritas Capital Vantage Fund, L.P.	9 West 57th Street, 32nd Floor, New York, NY 10019	2021	\$ 100,000,000	\$ 23,173,284	\$ -	\$ 19,723,343	NM	NM	\$ 3,687,298	N/A
Private Equity	Thoma Bravo Discover Fund III, L.P.	600 Montgomery Street, 20th Floor, San Francisco, CA 94111	2020	\$ 50,000,000	\$ 40,915,748	\$ -	\$ 43,857,084	8.8%	1.07x	\$ 1,352,754	N/A
Private Equity	Thoma Bravo Fund XIV, L.P.	600 Montgomery Street, 20th Floor, San Francisco, CA 94111	2020	\$ 100,000,000	\$ 94,144,216	\$ -	\$ 91,108,588	-3.8%	0.97x	\$ 2,816,915	N/A
Private Equity	Thoma Bravo Fund XV, L.P.	600 Montgomery Street, 20th Floor, San Francisco, CA 94111	2022	\$ 100,000,000	\$ 16,599,284	\$ -	\$ 16,363,406	NM	NM	\$ 904,172	N/A
Private Equity	Thomas H. Lee Equity Fund IV, L.P.	100 Federal Street, 35th Floor, Boston, MA 02110	1998	\$ 70,000,000	\$ 63,149,612	\$ 54,841,198	\$ 54,841,198	-2.6%	0.87x	\$ -	\$ (8,308,414)
Private Equity	Thomas H. Lee Equity Fund V, L.P.	100 Federal Street, 35th Floor, Boston, MA 02110	2000	\$ 45,000,000	\$ 47,123,524	\$ 79,014,823	\$ 79,014,823	13.7%	1.68x	\$ -	\$ 31,891,299
Private Equity	Thomas H. Lee Equity Fund VI, L.P.	100 Federal Street, 35th Floor, Boston, MA 02110	2006	\$ 60,000,000	\$ 59,938,866	\$ 99,651,791	\$ 99,651,791	8.1%	1.66x	\$ -	\$ 39,712,925
Private Equity	TPG Partners II, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	1997	\$ 75,000,000	\$ 76,009,954	\$ 132,273,911	\$ 132,273,911	9.9%	1.74x	\$ -	\$ 56,263,957
Private Equity	TPG Partners III, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2000	\$ 25,750,055	\$ 27,527,988	\$ 68,499,799	\$ 68,499,799	24.5%	2.49x	\$ -	\$ 40,971,811
Private Equity	TPG Partners IV, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2003	\$ 69,768,736	\$ 81,274,076	\$ 157,203,357	\$ 157,368,321	15.3%	1.94x	\$ 28,184	N/A
Private Equity	TPG Partners V, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2006	\$ 75,000,000	\$ 65,377,267	\$ 87,755,202	\$ 87,755,202	4.1%	1.34x	\$ -	\$ 22,377,935
Private Equity	TPG Partners VI, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2008	\$ 100,000,000	\$ 99,595,863	\$ 144,234,418	\$ 144,234,418	9.1%	1.45x	\$ -	\$ 44,638,554
Private Equity	Trilon Fund V, L.P.	9 South Street, 3rd Floor, London W1K 2XA, United Kingdom	2019	\$ 156,817,483	\$ 88,377,869	\$ 1,019,866	\$ 124,143,808	21.7%	1.40x	\$ 3,612,320	N/A
Private Equity	TSG 9, L.P.	712 Fifth Avenue, 35th Floor, New York, NY 10019	2022	\$ 100,000,000	\$ -	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Union Square Ventures 2004, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2005	\$ 10,000,000	\$ 8,900,000	\$ 122,376,122	\$ 122,971,014	68.0%	13.82x	\$ 3,201	N/A
Private Equity	Union Square Ventures 2008, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2008	\$ 10,000,000	\$ 9,500,000	\$ 38,487,741	\$ 48,549,825	22.3%	5.11x	\$ 145,770	N/A
Private Equity	Union Square Ventures 2012 Fund, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2011	\$ 11,000,000	\$ 10,285,000	\$ 232,382,203	\$ 266,629,189	54.7%	25.92x	\$ 116,414	N/A
Private Equity	Union Square Ventures Opportunity Fund, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2010	\$ 7,000,000	\$ 5,110,000	\$ 17,690,609	\$ 19,450,109	58.4%	3.81x	\$ -	N/A
Private Equity	USV 2014, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2014	\$ 8,250,000	\$ 7,672,500	\$ 12,391,890	\$ 48,105,468	37.2%	6.27x	\$ 172,445	N/A
Private Equity	USV 2016, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2016	\$ 9,000,000	\$ 7,290,000	\$ 17,047,048	\$ 50,174,734	64.7%	6.88x	\$ 253,390	N/A
Private Equity	USV 2019, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2019	\$ 9,000,000	\$ 6,480,000	\$ 3,586,573	\$ 20,109,140	85.3%	3.10x	\$ 283,293	N/A
Private Equity	USV Opportunity 2014, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2014	\$ 7,425,000	\$ 6,022,500	\$ 31,054,972	\$ 44,412,917	44.4%	7.37x	\$ 41,011	N/A
Private Equity	USV Opportunity 2019, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2019	\$ 11,250,000	\$ 6,975,000	\$ 393,848	\$ 7,984,186	6.5%	1.14x	\$ 106,274	N/A
Private Equity	Vestar Capital Partners IV, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	1999	\$ 25,000,000	\$ 24,468,267	\$ 43,362,057	\$ 43,362,057	13.5%	1.77x	\$ -	\$ 18,893,791
Private Equity	Vestar Capital Partners V, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	2005	\$ 75,000,000	\$ 76,707,066	\$ 93,397,012	\$ 93,397,012	2.9%	1.22x	\$ -	\$ 16,689,946
Private Equity	Vestar Equity Partners III, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	1997	\$ 17,500,000	\$ 17,154,331	\$ 19,588,323	\$ 19,588,323	2.6%	1.14x	\$ -	\$ 2,433,992
Private Equity	Vestar Equity Partners, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	1993	\$ 8,000,000	\$ 6,796,492	\$ 23,880,961	\$ 23,880,961	56.5%	3.51x	\$ -	\$ 17,084,469
Private Equity	Vinci Capital Partners III, L.P.	535 Madison Avenue, New York, NY 10022	2019	\$ 75,000,000	\$ 49,792,535	\$ 924,585	\$ 67,691,385	23.6%	1.36x	\$ 1,389,697	N/A
Private Equity	Vista Equity Partners Fund III, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2008	\$ 50,000,000	\$ 51,699,944	\$ 125,169,383	\$ 128,409,709	27.8%	2.48x	\$ 15,098	N/A
Private Equity	Vista Equity Partners Fund IV, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2011	\$ 100,000,000	\$ 99,758,577	\$ 127,954,738	\$ 196,922,078	14.7%	1.97x	\$ 668,557	N/A
Private Equity	Vista Equity Partners Fund V, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2014	\$ 200,000,000	\$ 281,041,552	\$ 301,955,660	\$ 573,791,673	20.2%	2.04x	\$ 1,998,821	N/A
Private Equity	Vista Equity Partners Fund VI, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2016	\$ 200,000,000	\$ 292,361,004	\$ 248,525,945	\$ 527,931,522	20.2%	1.81x	\$ 2,805,707	N/A
Private Equity	Vista Equity Partners Fund VII, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2019	\$ 200,000,000	\$ 148,809,498	\$ 1,461,309	\$ 202,808,713	16.4%	1.36x	\$ 3,320,710	N/A
Private Equity	Warburg Pincus Capital Company, L.P.	466 Lexington Avenue, New York, NY 10017	1986	\$ 50,000,000	\$ 50,000,000	\$ 218,432,276	\$ 218,432,276	18.4%	4.37x	\$ -	\$ 168,432,276
Private Equity	Warren Equity Partners Fund II, L.P.	320 1st Street N, Suite 608, Jacksonville Beach, FL 32250	2018	\$ 10,500,000	\$ 13,073,747	\$ 13,668,014	\$ 28,906,888	48.6%	2.21x	\$ 104,613	N/A
Private Equity	Warren Equity Partners Fund III, L.P.	320 1st Street N, Suite 608, Jacksonville Beach, FL 32250	2021	\$ 10,500,000	\$ 6,349,281	\$ -	\$ 6,979,069	NM	NM	\$ 198,243	N/A
Private Equity	Wayzata Opportunities Fund II, L.P.	701 East Lake Street, Suite 300, Wayzata, MN 55391	2007	\$ 75,000,000	\$ 23,175,000	\$ 100,495,702	\$ 100,495,702	16.5%	4.34x	\$ -	\$ 77,320,702
Private Equity	Wayzata Opportunities Fund III, L.P.	701 East Lake Street, Suite 300, Wayzata, MN 55391	2012	\$ 100,000,000	\$ 47,460,000	\$ 47,683,053	\$ 47,683,053	0.2%	1.00x	\$ -	\$ 223,053
Private Equity	Wayzata Opportunities Fund, LLC	701 East Lake Street, Suite 300, Wayzata, MN 55391	2005	\$ 40,000,000	\$ 37,428,325	\$ 62,803,809	\$ 62,803,809	8.4%	1.68x	\$ -	\$ 25,375,484
Private Equity	Webster Equity Partners V, L.P.	1000 Winter Street, Waltham, MA 02451	2021	\$ 125,000,000	\$ 37,312,500	\$ -	\$ 38,260,114	NM	NM	\$ 2,573,638	N/A
Private Equity	Welsh, Carson, Anderson & Stowe VI, L.P.	320 Park Avenue, Suite 2500, New York, NY 10022	1993	\$ 10,000,000	\$ 10,000,000	\$ 20,712,010	\$ 20,712,010	13.9%	2.07x	\$ -	\$ 10,712,010
Private Equity	Welsh, Carson, Anderson & Stowe VII, L.P.	320 Park Avenue, Suite 2500, New York, NY 10022	1995	\$ 20,000,000	\$ 20,000,000	\$ 43,513,904	\$ 43,513,904	17.7%	2.18x	\$ -	\$ 23,513,904
Private Equity	Welsh, Carson, Anderson & Stowe VIII, L.P.	320 Park Avenue, Suite 2500, New York, NY 10022	1998	\$ 25,000,000	\$ 25,000,000	\$ 32,204,360	\$ 32,204,360	3.1%	1.29x	\$ -	\$ 7,204,360
Private Equity	Weston Presidio Capital IV - Secondary	200 Clarendon Street, 50th Floor, Boston, MA 02116	2003	\$ 1,811,720	\$ 1,811,720	\$ 2,311,117	\$ 2,311,117	5.2%	1.28x	\$ -	\$ 499,397
Private Equity	Weston Presidio Capital IV, L.P.	200 Clarendon Street, 50th Floor, Boston, MA 02116	2000	\$ 9,665,712	\$ 9,665,712	\$ 11,401,437	\$ 11,401,437	3.0%	1.18x	\$ -	\$ 1,735,725
Private Equity	Weston Presidio Capital V, L.P.	200 Clarendon Street, 50th Floor, Boston, MA 02116	2005	\$ 35,000,000	\$ 34,660,903	\$ 79,153,937	\$ 79,153,937	15.3%	2.28x	\$ -	\$ 44,493,034
Private Equity	Whitman Heffernan & Rhein Fund II, L.P.	N/A	1992	\$ 14,200,000	\$ 14,232,703	\$ 8,329,230	\$ 8,329,230	-23.4%	0.59x	\$ -	\$ (5,903,473)
Private Equity	William Blair Mezzanine Capital Fund II, L.P.	222 West Adams Street, Chicago, IL 60606	1997	\$ 10,000,000	\$ 10,000,000	\$ 16,954,398	\$ 16,954,398	11.8%	1.70x	\$ -	\$ 8,954,398
Private Equity	Worldview Technology Partners I, L.P.	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	1996	\$ 8,500,000	\$ 8,500,000	\$ 32,237,243	\$ 32,237,243	68.6%	3.79x	\$ -	\$ 23,737,243
Private Equity	Worldview Technology Partners II, L.P.	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	1998	\$ 5,000,000	\$ 5,000,000	\$ 8,406,737	\$ 8,406,737	10.1%	1.68x	\$ -	\$ 3,406,737
Private Equity	Worldview Technology Partners III, L.P.	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	1999	\$ 10,000,000	\$ 10,000,000	\$ 1,532,976	\$ 1,532,976	-22.6%	0.15x	\$ -	\$ (8,467,024)
Private Equity	Worldview Technology Partners IV, L.P.	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	2000	\$ 12,086,682	\$ 11,300,783	\$ 5,670,097	\$ 5,670,097	-9.2%	0.50x	\$ -	\$ (5,630,687)
Private Equity	Wynnchurch Capital Partners V, L.P.	6250 North River Road, Suite 10-100, Rosemont, IL 60018	2020	\$ 75,000,000	\$ 30,487,065	\$ -	\$ 41,451,259	37.3%	1.36x	\$ 1,783,891	N/A

<sup>1</sup> Name and address of the alternative investment fund.

<sup>2</sup> Vintage year of the alternative investment fund based on LACERA/alternative investment fund first takedown of capital.

<sup>3</sup> Since-inception dollar amount of commitments to the alternative investment fund.

<sup>4</sup> Since-inception dollar amount of cash contributions to the alternative investment fund.

<sup>5</sup> Since-inception dollar amount of cash distributions received from the alternative investment fund.

<sup>6</sup> Since-inception dollar amount of cash distributions received plus the remaining value of the alternative investment fund.

<sup>7</sup> Since-inception net returns for Private Equity, Real Assets, Real Estate were calculated by LACERA's custodian bank using all the outflows to and inflows from the underlying fund investments, including cash flows for expenses and fees paid by the Portfolio to those underlying fund investments. The terminal values used are the capital account balances as of the reporting period, as stated by the General Partners of the underlying fund investment, whether at cost or fair value. If the underlying fund investment's terminal value is prior to the reporting period, the internal rate of return (IRR) was calculated as of the last valuation date indicated by the fund manager. Hedge Fund, Fixed Income, and Global Equity (excluding JANA Strategic Investment Fund V) are cumulative geometric returns for holding periods less than 12 months of the alternative investment fund and annualized geometric return for holding periods greater than 12 months. JANA Strategic Investment Fund V (Global Equity) is a money-weighted return provided by the alternative investment fund. Performance results marked "NM" signifies not meaningful due to recency of the fund.

<sup>8</sup> Since-inception investment multiple is calculated by the sum of market value of the alternative investment fund as of the fiscal year-end and the cumulative distribution divided by the cumulative contribution. Performance results marked "NM" signifies not meaningful due to recency of the fund.

<sup>9</sup> Dollar amount of total management fees and costs paid or accrued to the alternative investment manager on an annual fiscal year-end basis. Data sources included the following: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, calculation using the respective management fee rate, pro rata share of the alternative investment fund's total management fee, and estimations based on alternative investment fund's operating expense ratios obtained from the most recent audited financial statement. Negative values indicate giveback of previously accrued or paid fees.


<sup>10</sup> Annual fiscal year-end dollar amount of cash profit received from the alternative investment fund for evergreen Hedge Fund and Illiquid Credit managers. The since-inception total cash profit after final liquidation are reported for the remaining asset categories as they are more appropriate due to the long-term nature of the investments. All periods prior to the final liquidation are reported as not applicable.

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**FOR INFORMATION ONLY**

December 1, 2022

TO: Trustees – Board of Investments

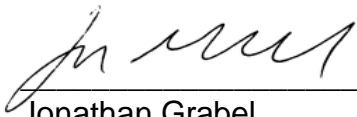
FROM: Jude Pérez, Principal Investment Officer 

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **LACERA QUARTERLY PERFORMANCE BOOK**

Attached is LACERA's quarterly performance book as of September 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  
September 30, 2022

review

A nighttime photograph of the California State Capitol building, illuminated with warm lights. The building's dome is prominent, and the surrounding city lights and streets are visible in the foreground. The image is partially obscured by the large, semi-transparent 'review' text.

# Table of Contents

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

total fund

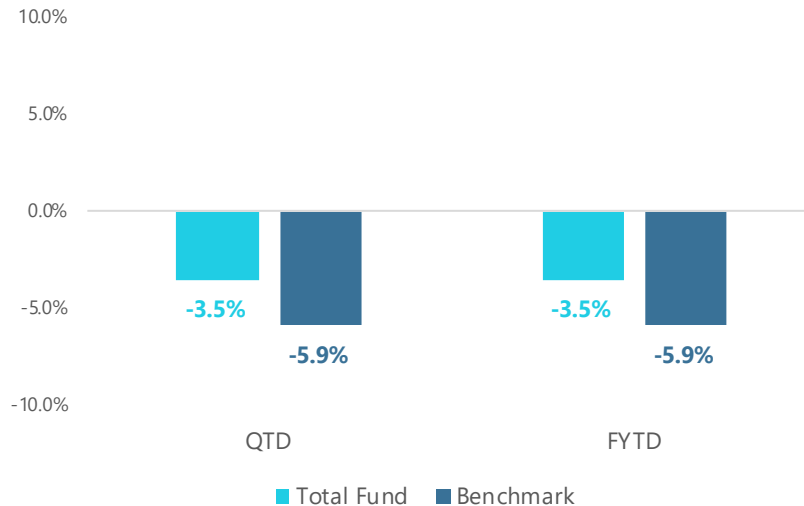
# Quarterly Snapshot

for the quarter ended September 30, 2022

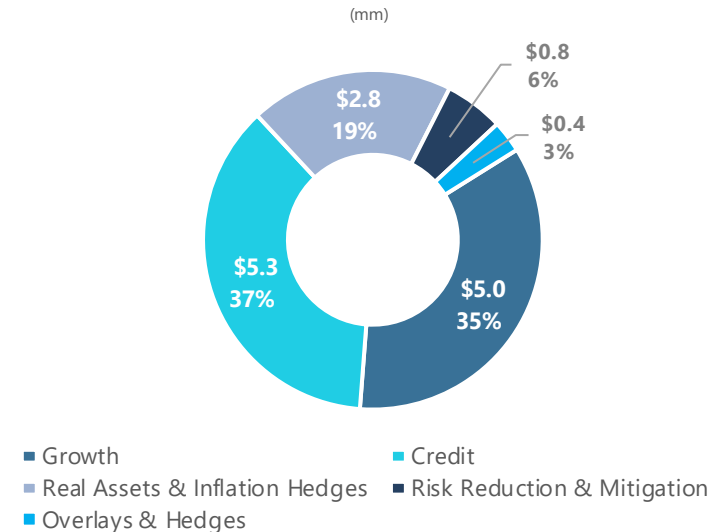


Los Angeles County Employees Retirement Association

## Performance (net)



## Public Markets Fees<sup>1</sup>



### Ending Market Value

67,616

↓ -4%  
from prior quarter

### Sharpe Ratio<sup>2</sup>

0.7

↓ -24%  
from prior quarter

### Batting Average<sup>3</sup>

52%

↑ 29%  
from prior quarter

### Standard Deviation<sup>2</sup>

9.4

↑ 9%  
from prior quarter

### Tracking Error<sup>2</sup>

2.4

↑ 7%  
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.

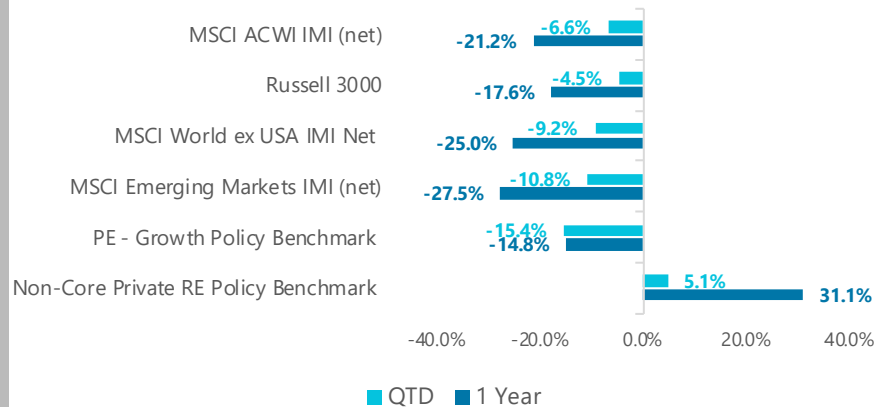
# Market Environment

for the quarter ended September 30, 2022

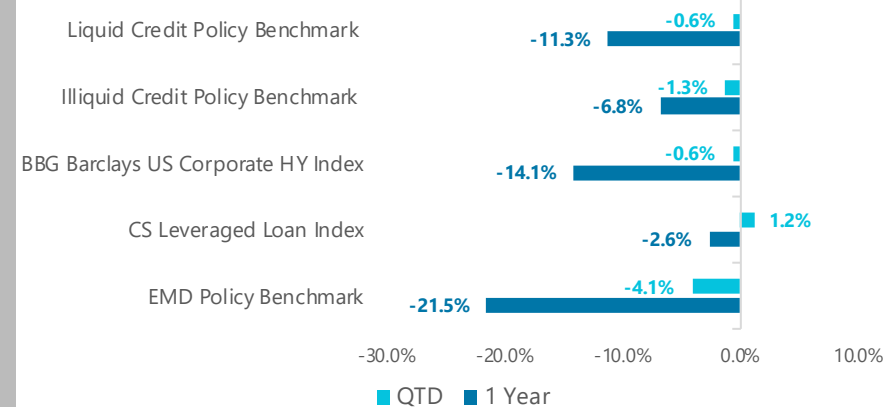


Los Angeles County Employees Retirement Association

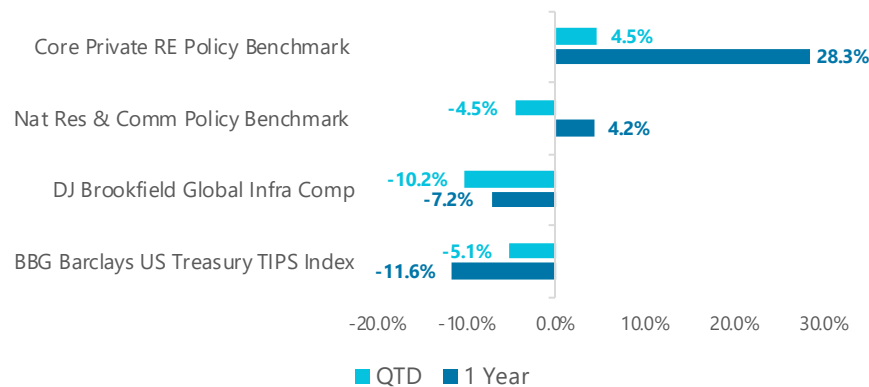
## Growth



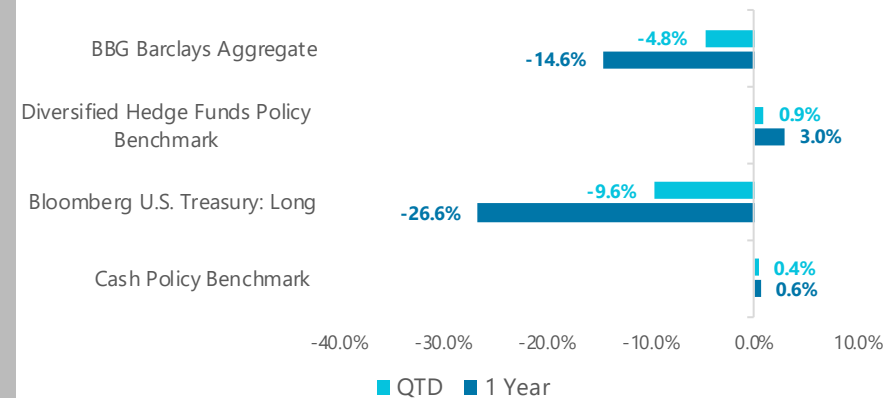
## Credit



## Real Assets & Inflation Hedges



## Risk Reduction & Mitigation



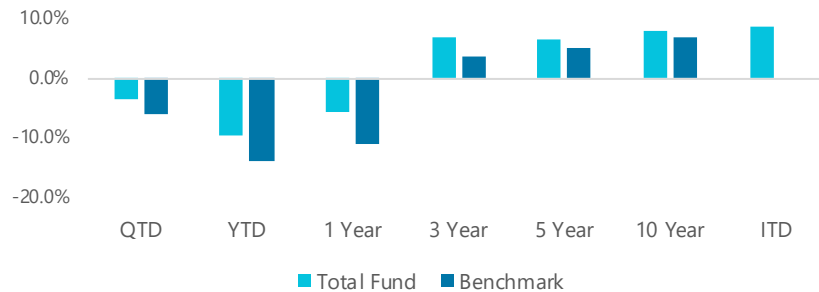
# Summary

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

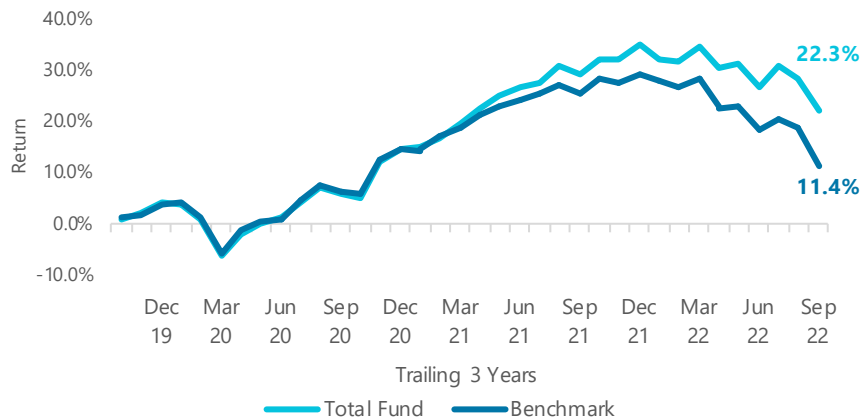
## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>Total Fund</b>	<b>-3.5%</b>	<b>-9.4%</b>	<b>-5.5%</b>	<b>6.9%</b>	<b>6.6%</b>	<b>7.7%</b>	<b>8.4%</b>
Benchmark	-5.9%	-13.9%	-11.1%	3.7%	5.0%	6.8%	--
Excess	2.4%	4.5%	5.7%	3.3%	1.6%	1.0%	--

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

## Cumulative Return



## Functional Category

	QTD	FYTD	1 Year	3 Year
<b>Growth</b>	<b>-4.9%</b>	<b>-4.9%</b>	<b>-9.5%</b>	<b>10.4%</b>
Growth Policy Benchmark	-8.5%	-8.5%	-16.7%	6.1%
Excess	3.5%	3.5%	7.1%	4.3%
<b>Credit</b>	<b>-0.6%</b>	<b>-0.6%</b>	<b>-5.9%</b>	<b>2.7%</b>
Credit Policy Benchmark	-0.9%	-0.9%	-9.2%	0.3%
Excess	0.4%	0.4%	3.3%	2.4%
<b>Real Assets &amp; Inflation Hedges</b>	<b>-2.1%</b>	<b>-2.1%</b>	<b>9.2%</b>	<b>7.6%</b>
RA & IH Policy Benchmark	-3.1%	-3.1%	6.4%	7.4%
Excess	1.0%	1.0%	2.8%	0.1%
<b>Risk Reduction &amp; Mitigation</b>	<b>-3.7%</b>	<b>-3.7%</b>	<b>-10.7%</b>	<b>-1.2%</b>
RR & M Policy Benchmark	-4.0%	-4.0%	-11.5%	-2.2%
Excess	0.2%	0.2%	0.8%	1.0%
<b>Overlays &amp; Hedges</b>	<b>13.5%</b>	<b>13.5%</b>	<b>235.7%</b>	<b>--</b>

## Peer Ranking (gross)

	QTD		1 Year		3 Year		5 Year		10 Year	
Total Fund	-3.4%	34	-5.1%	13	7.3%	20	6.9%	24	8.0%	27
60/40 Portfolio	-5.8%	95	-18.4%	96	1.2%	87	2.7%	88	4.9%	90
S&P 500 Index	-4.9%	78	-15.5%	87	8.2%	11	9.2%	5	11.7%	4
5th Percentile	-2.6%		-2.9%		9.8%		9.1%		9.6%	
25th Percentile	-3.2%		-6.3%		7.0%		6.9%		8.1%	
50th Percentile	-4.0%		-9.1%		6.1%		6.1%		7.4%	
75th Percentile	-4.8%		-13.4%		4.0%		4.7%		6.7%	
95th Percentile	-6.0%		-18.1%		-2.7%		0.4%		3.0%	



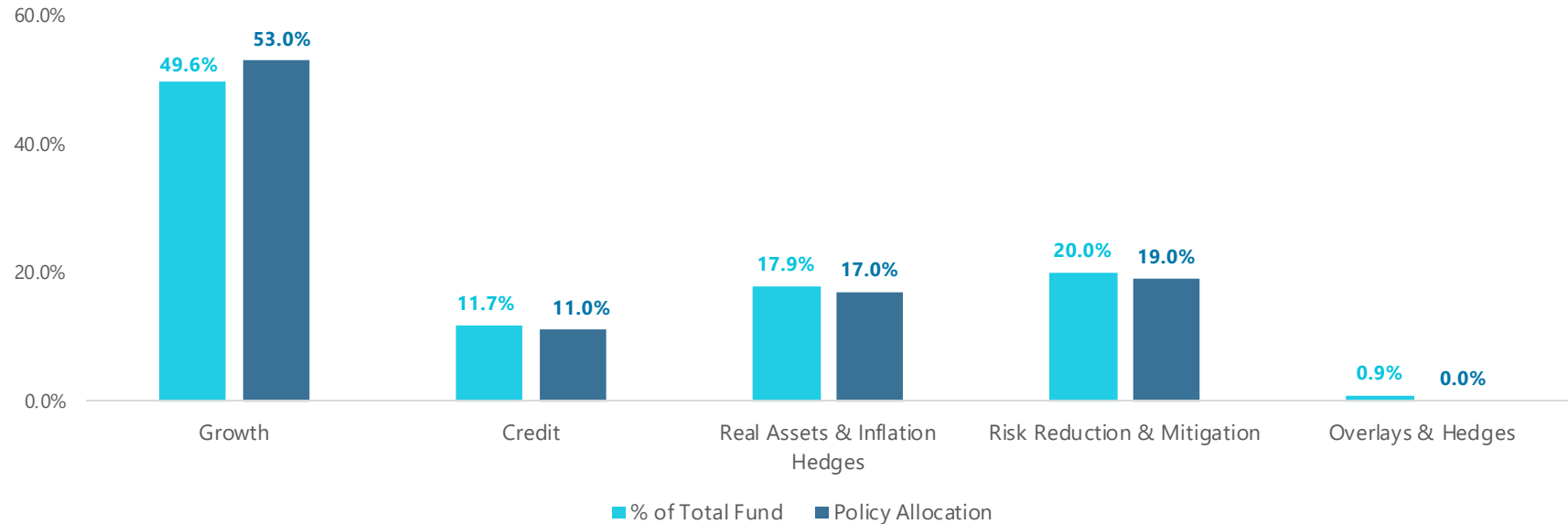
# Asset Allocation

for the quarter ended September 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)
<b>Total Fund</b>	<b>67,616</b>	<b>100.0%</b>	<b>100.0%</b>		
Growth	33,535	49.6%	53.0%	-3.4%	-2,301
Credit	7,883	11.7%	11.0%	0.7%	445
Real Assets & Inflation Hedges	12,075	17.9%	17.0%	0.9%	580
Risk Reduction & Mitigation	13,536	20.0%	19.0%	1.0%	689
Overlays & Hedges	587	0.9%	0.0%	0.9%	587

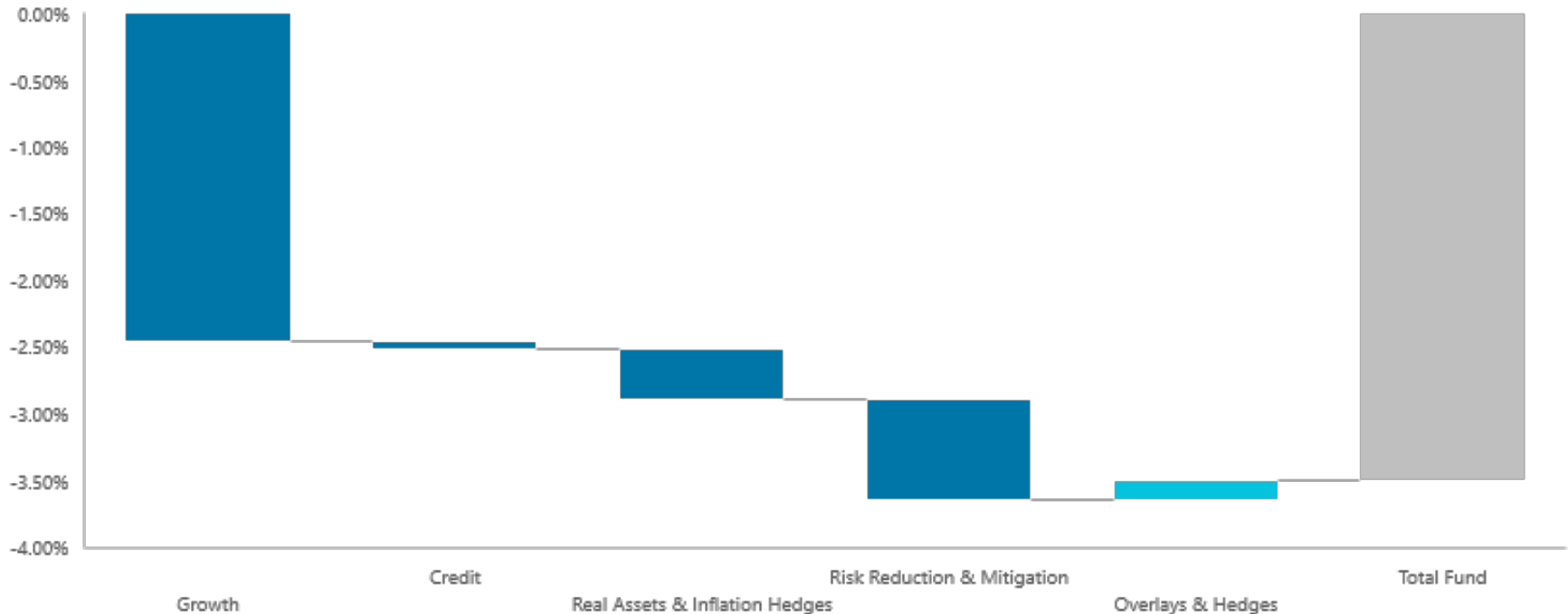
# Contribution to Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
Growth	-2.46%	BTC Passive Currency Hedge	0.78%	SSGA MSCI ACWI IMI	-1.34%
Credit	-0.07%	Real Estate - Real Assets	0.31%	Private Equity - Growth	-0.58%
Real Assets & Inflation Hedges	-0.38%	Real Estate - Growth	0.07%	BlackRock Long Treasury Bonds	-0.46%
Risk Reduction & Mitigation	-0.75%	Parametric RA & IH Overlay	0.05%	DWS Infrastructure	-0.39%
Overlays & Hedges	0.15%	Parametric GE Region	0.05%	JPMAM Strategic Beta US	-0.26%
Total Fund	-3.50%				

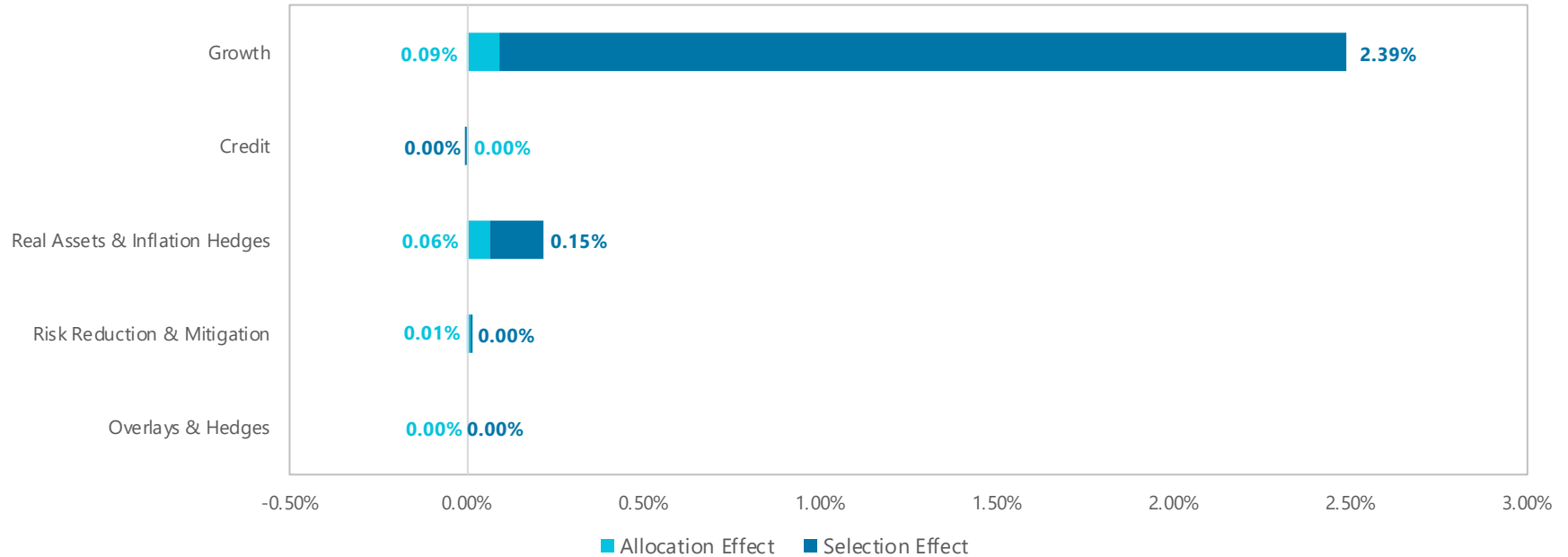
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



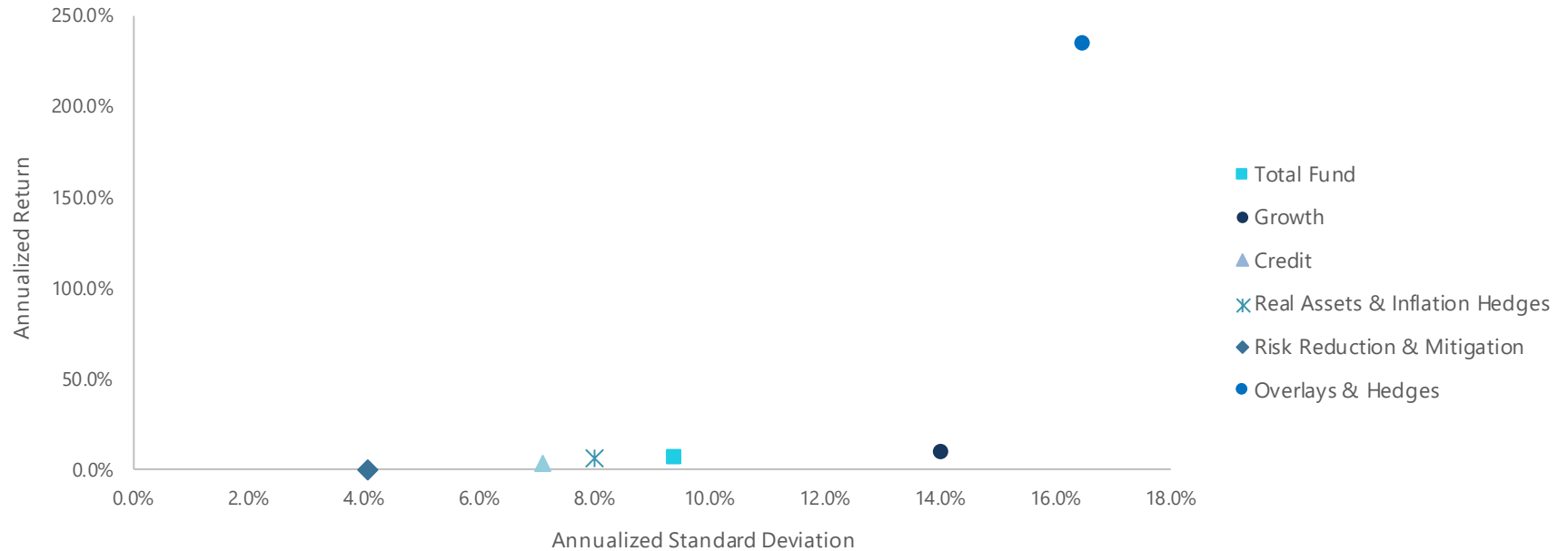
	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>Total Fund</b>	<b>67,616</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-3.5%</b>	<b>-5.9%</b>	<b>0.23%</b>	<b>2.55%</b>	<b>2.35%</b>
Growth	33,535	49.6%	53.0%	-4.9%	-8.5%	0.09%	2.39%	1.88%
Credit	7,883	11.7%	11.0%	-0.6%	-0.9%	0.00%	0.00%	0.03%
Real Assets & Inflation Hedges	12,075	17.9%	17.0%	-2.1%	-3.1%	0.06%	0.15%	0.19%
Risk Reduction & Mitigation	13,536	20.0%	19.0%	-3.7%	-4.0%	0.01%	0.00%	0.06%
Overlays & Hedges	587	0.9%	0.0%	13.5%	--	--	--	--

1. Total Value Add includes Interaction Effect.

# Risk vs. Return

for the quarter ended September 30, 2022

## 3 Year (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Total Fund</b>	<b>6.9%</b>	<b>9.4%</b>	<b>0.70</b>	<b>1.34</b>	<b>0.96</b>	<b>2.4%</b>
Growth	10.2%	14.0%	0.71	0.78	0.93	4.3%
Credit	3.2%	7.1%	0.38	0.56	0.96	3.2%
Real Assets & Inflation Hedges	6.5%	8.0%	0.74	(0.12)	0.93	2.3%
Risk Reduction & Mitigation	0.3%	4.1%	(0.10)	1.11	0.94	0.8%
Overlays & Hedges	235.7%	16.5%				

1. Functional composites risk statistics are since inception.

# Performance Detail

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Annualized Net Returns<sup>1</sup>

	% of Total Fund	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
<b>Total Fund</b>	<b>100.0%</b>	<b>67,616</b>	<b>70,407</b>	<b>-3.5%</b>	<b>-9.4%</b>	<b>-5.5%</b>	<b>6.9%</b>	<b>6.6%</b>	<b>7.7%</b>	<b>8.4%</b>	<b>Dec-1988</b>
<b>Total Fund Policy Benchmark</b>				<b>-5.9%</b>	<b>-13.9%</b>	<b>-11.1%</b>	<b>3.7%</b>	<b>5.0%</b>	<b>6.8%</b>	<b>--</b>	
<b>Growth</b>	<b>49.6%</b>	<b>33,535</b>	<b>35,331</b>	<b>-4.9%</b>	<b>-14.9%</b>	<b>-9.5%</b>	<b>10.4%</b>	<b>--</b>	<b>--</b>	<b>10.2%</b>	<b>Apr-2019</b>
<b>Growth Policy Benchmark</b>				<b>-8.5%</b>	<b>-20.2%</b>	<b>-16.7%</b>	<b>6.1%</b>	<b>--</b>	<b>--</b>	<b>7.0%</b>	
Global Equity	29.5%	19,936	21,343	-6.5%	-25.0%	-20.0%	4.1%	--	--	4.7%	Apr-2019
<b>Global Equity Policy Benchmark</b>				<b>-6.6%</b>	<b>-25.7%</b>	<b>-21.2%</b>	<b>3.6%</b>	<b>--</b>	<b>--</b>	<b>4.0%</b>	
Private Equity - Growth	18.5%	12,522	12,901	-3.2%	5.6%	11.4%	24.0%	--	--	21.3%	Jan-2019
<b>PE - Growth Policy Benchmark</b>				<b>-15.4%</b>	<b>-14.3%</b>	<b>-14.8%</b>	<b>8.1%</b>	<b>--</b>	<b>--</b>	<b>7.0%</b>	
Non-Core Private Real Estate	1.6%	1,077	1,087	4.7%	18.2%	20.4%	15.0%	12.6%	12.2%	4.8%	Jan-1996
<b>Non-Core Private RE Policy Benchmark</b>				<b>5.1%</b>	<b>22.6%</b>	<b>31.1%</b>	<b>14.7%</b>	<b>12.7%</b>	<b>13.4%</b>	<b>11.7%</b>	
<b>Credit</b>	<b>11.7%</b>	<b>7,883</b>	<b>7,824</b>	<b>-0.6%</b>	<b>-7.6%</b>	<b>-5.9%</b>	<b>2.7%</b>	<b>--</b>	<b>--</b>	<b>3.2%</b>	<b>Apr-2019</b>
<b>Credit Policy Benchmark</b>				<b>-0.9%</b>	<b>-9.1%</b>	<b>-9.2%</b>	<b>0.3%</b>	<b>--</b>	<b>--</b>	<b>1.6%</b>	
Liquid Credit	6.7%	4,533	4,581	-1.1%	-11.9%	-11.6%	--	--	--	-11.6%	Oct-2021
<b>Liquid Credit Policy Benchmark</b>				<b>-0.6%</b>	<b>-11.6%</b>	<b>-11.3%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-11.3%</b>	
Illiquid Credit	5.0%	3,350	3,243	0.0%	-0.7%	3.7%	10.8%	--	--	10.0%	Apr-2019
<b>Illiquid Credit Policy Benchmark</b>				<b>-1.3%</b>	<b>-6.2%</b>	<b>-6.8%</b>	<b>1.4%</b>	<b>--</b>	<b>--</b>	<b>3.8%</b>	
<b>Real Assets &amp; Inflation Hedges</b>	<b>17.9%</b>	<b>12,075</b>	<b>12,539</b>	<b>-2.1%</b>	<b>3.7%</b>	<b>9.2%</b>	<b>7.6%</b>	<b>--</b>	<b>--</b>	<b>6.5%</b>	<b>Apr-2019</b>
<b>RA &amp; IH Policy Benchmark</b>				<b>-3.1%</b>	<b>1.0%</b>	<b>6.4%</b>	<b>7.4%</b>	<b>--</b>	<b>--</b>	<b>7.0%</b>	
Core Private Real Estate	6.6%	4,471	4,323	5.0%	21.7%	29.1%	10.8%	9.2%	9.1%	7.4%	Oct-1985
<b>Core Private RE Policy Benchmark</b>				<b>4.5%</b>	<b>20.6%</b>	<b>28.3%</b>	<b>12.0%</b>	<b>10.0%</b>	<b>10.6%</b>	<b>7.2%</b>	
Natural Resources & Commodities	3.7%	2,476	2,958	-3.4%	7.5%	11.3%	12.3%	6.5%	-1.6%	-1.2%	Jul-2007
<b>Nat Res &amp; Comm Policy Benchmark</b>				<b>-4.5%</b>	<b>0.0%</b>	<b>4.2%</b>	<b>11.0%</b>	<b>5.4%</b>	<b>-2.8%</b>	<b>-2.5%</b>	
Infrastructure	4.9%	3,305	3,327	-7.6%	-11.0%	-3.6%	4.0%	--	--	5.6%	Jun-2019
<b>DJ Brookfield Global Infra Comp</b>				<b>-10.2%</b>	<b>-13.1%</b>	<b>-7.2%</b>	<b>-0.7%</b>	<b>--</b>	<b>--</b>	<b>1.0%</b>	
TIPS	2.7%	1,823	1,931	-5.6%	-13.7%	-11.6%	0.7%	--	--	1.7%	May-2019
<b>Bloomberg U.S. Treasury: U.S. TIPS</b>				<b>-5.1%</b>	<b>-13.6%</b>	<b>-11.6%</b>	<b>0.8%</b>	<b>--</b>	<b>--</b>	<b>1.8%</b>	
<b>Risk Reduction &amp; Mitigation</b>	<b>20.0%</b>	<b>13,536</b>	<b>14,020</b>	<b>-3.7%</b>	<b>-10.8%</b>	<b>-10.7%</b>	<b>-1.2%</b>	<b>--</b>	<b>--</b>	<b>0.3%</b>	<b>Apr-2019</b>
<b>RR &amp; M Policy Benchmark</b>				<b>-4.0%</b>	<b>-11.9%</b>	<b>-11.5%</b>	<b>-2.2%</b>	<b>--</b>	<b>--</b>	<b>-0.5%</b>	
Investment Grade Bonds	7.8%	5,292	5,556	-4.7%	-14.7%	-14.9%	-3.1%	-0.1%	1.4%	5.1%	Nov-1994
<b>BBG BC Aggregate Bond Index</b>				<b>-4.8%</b>	<b>-14.6%</b>	<b>-14.6%</b>	<b>-3.3%</b>	<b>-0.3%</b>	<b>0.9%</b>	<b>4.6%</b>	
Diversified Hedge Funds	6.3%	4,281	4,196	1.3%	4.3%	5.3%	7.1%	--	--	6.8%	Apr-2019
<b>Diversified Hedge Funds Policy Benchmark</b>				<b>0.9%</b>	<b>2.3%</b>	<b>3.0%</b>	<b>3.1%</b>	<b>--</b>	<b>--</b>	<b>3.3%</b>	
Long-Term Government Bonds	4.3%	2,874	1,210	-10.2%	-28.5%	--	--	--	--	-28.3%	Nov-2021
<b>Bloomberg U.S. Treasury: Long</b>				<b>-9.6%</b>	<b>-28.8%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-29.6%</b>	
Cash	1.6%	1,088	1,067	0.9%	1.8%	2.2%	1.4%	1.7%	1.1%	1.8%	Jun-2001
<b>Cash Policy Benchmark</b>				<b>0.4%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>0.6%</b>	<b>1.1%</b>	<b>0.7%</b>	<b>1.4%</b>	
<b>Overlays &amp; Hedges</b>	<b>0.9%</b>	<b>587</b>	<b>692</b>	<b>13.5%</b>	<b>211.2%</b>	<b>235.7%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>235.7%</b>	<b>Oct-2021</b>
Cash Overlay	0.6%	424	525	-19.3%	28.8%	25.9%	-12.8%	--	--	-11.0%	Aug-2019
<b>Total Overlay Policy BM</b>				<b>-5.7%</b>	<b>-20.4%</b>	<b>-17.0%</b>	<b>1.9%</b>	<b>--</b>	<b>--</b>	<b>1.9%</b>	
Currency Hedge	0.2%	163	167	3.3%	8.1%	8.7%	--	--	--	8.7%	Oct-2021
<b>50% FX Hedge Custom Benchmark</b>				<b>3.3%</b>	<b>8.2%</b>	<b>8.8%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>8.8%</b>	

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

# growth

# Summary

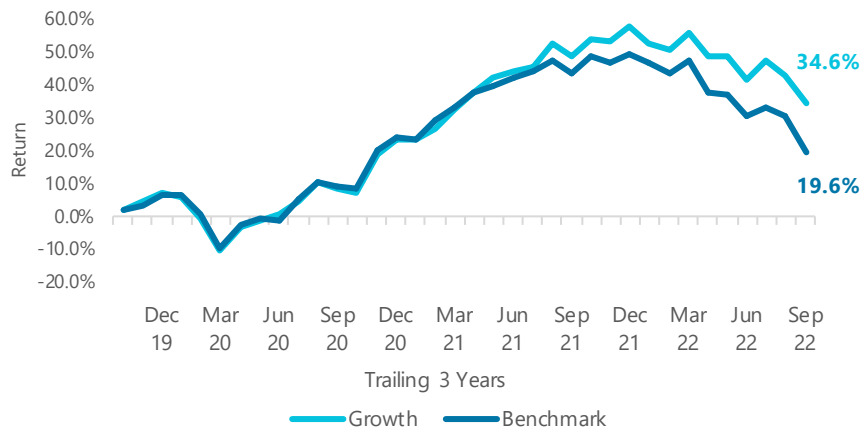
for the quarter ended September 30, 2022

## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>Growth</b>	<b>-4.9%</b>	<b>-14.9%</b>	<b>-9.5%</b>	<b>10.4%</b>	--	--	<b>10.2%</b>
Benchmark	-8.5%	-20.2%	-16.7%	6.1%	--	--	7.0%
Excess	3.5%	5.3%	7.1%	4.3%	--	--	3.3%

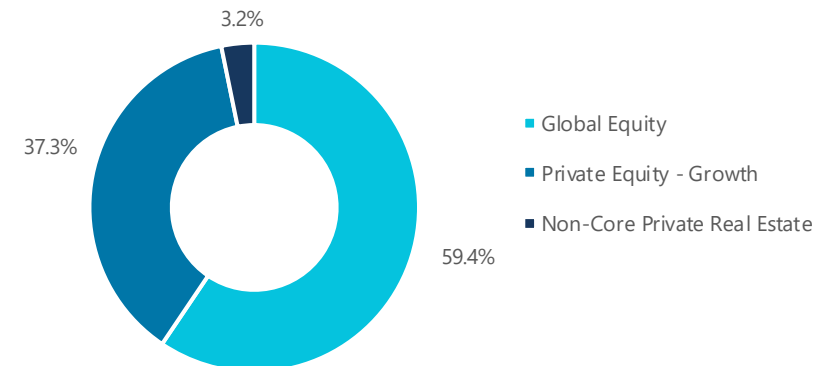
## Cumulative Return



## Functional Category

	QTD	FYTD	1 Year	3 Year
<b>Global Equity</b>	<b>-6.5%</b>	<b>-6.5%</b>	<b>-20.0%</b>	<b>4.1%</b>
Global Equity Policy Benchmark	-6.6%	-6.6%	-21.2%	3.6%
Excess	0.2%	0.2%	1.2%	0.5%
<b>Private Equity - Growth</b>	<b>-3.2%</b>	<b>-3.2%</b>	<b>11.4%</b>	<b>24.0%</b>
PE - Growth Policy Benchmark	-15.4%	-15.4%	-14.8%	8.1%
Excess	12.2%	12.2%	26.2%	15.9%
<b>Non-Core Private Real Estate</b>	<b>4.7%</b>	<b>4.7%</b>	<b>20.4%</b>	<b>15.0%</b>
Non-Core Private RE Policy Benchmark	5.1%	5.1%	31.1%	14.7%
Excess	-0.4%	-0.4%	-10.7%	0.3%

## Exposure



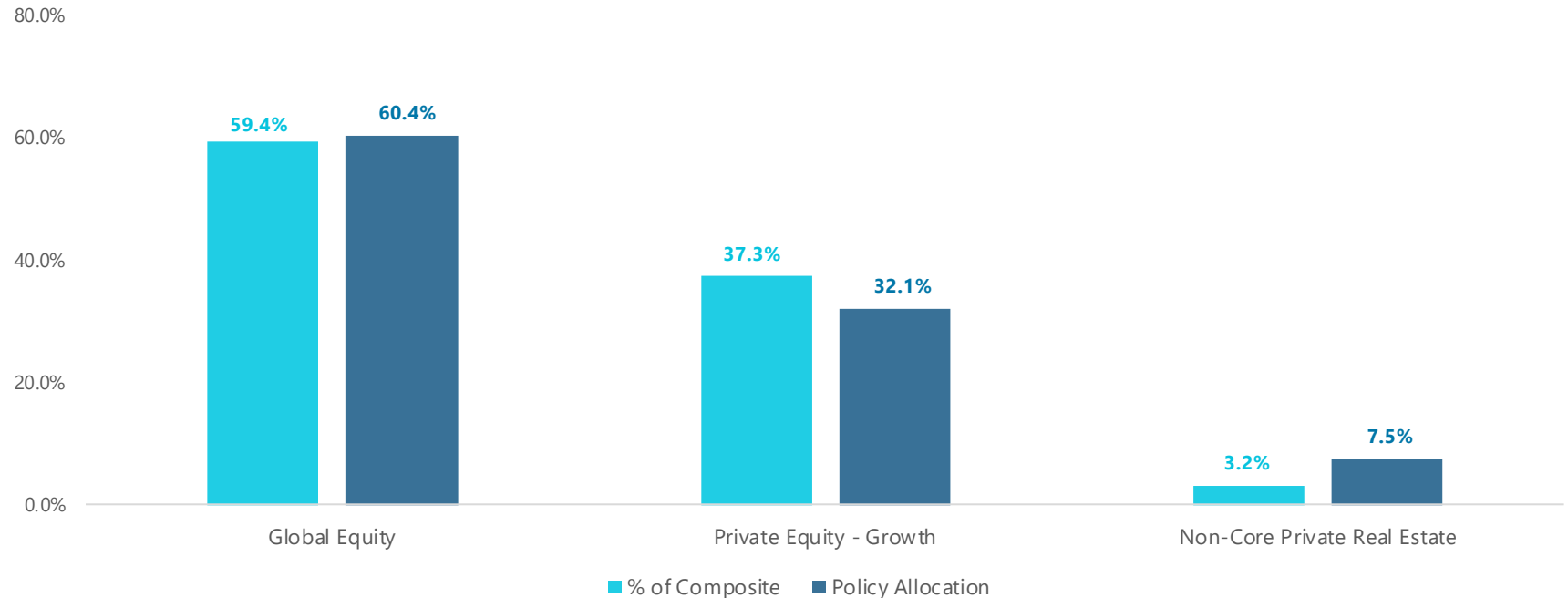
# Asset Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Actual vs. Policy



	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
<b>Growth</b>	<b>33,535</b>	<b>100.0%</b>	<b>100.0%</b>		
Global Equity	19,936	59.4%	60.4%	-0.9%	-313
Private Equity - Growth	12,522	37.3%	32.1%	5.3%	1,764
Non-Core Private Real Estate	1,077	3.2%	7.5%	-4.3%	-1,452



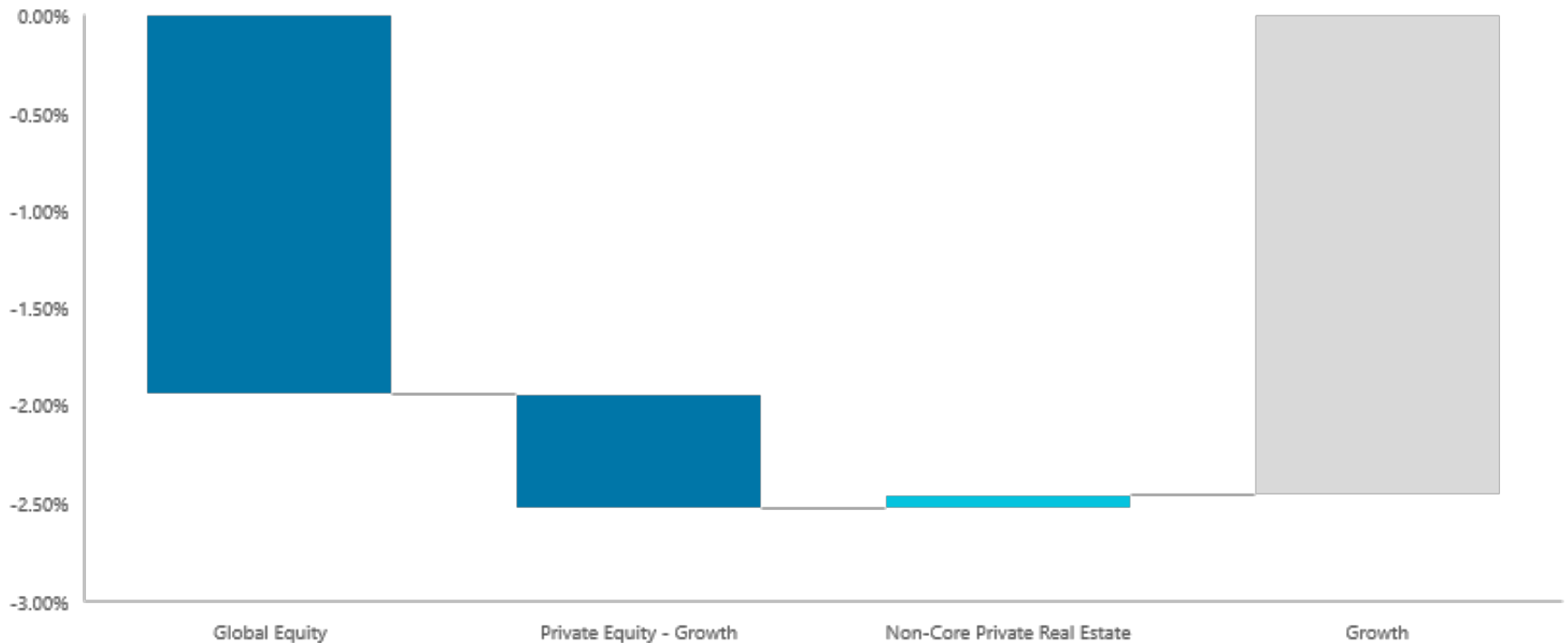
# Contribution to Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
Global Equity	-1.94%	Real Estate - Growth	0.07%	SSGA MSCI ACWI IMI	-1.34%
Private Equity - Growth	-0.59%	Parametric GE Region	0.05%	Private Equity - Growth	-0.58%
Non-Core Private Real Estate	0.07%	Cevian Capital II - Activist	0.01%	JPMAM Strategic Beta US	-0.26%
Growth	-2.46%			Lazard Emerging Markets	-0.08%
				JPMAM Strategic Beta Non-US	-0.07%

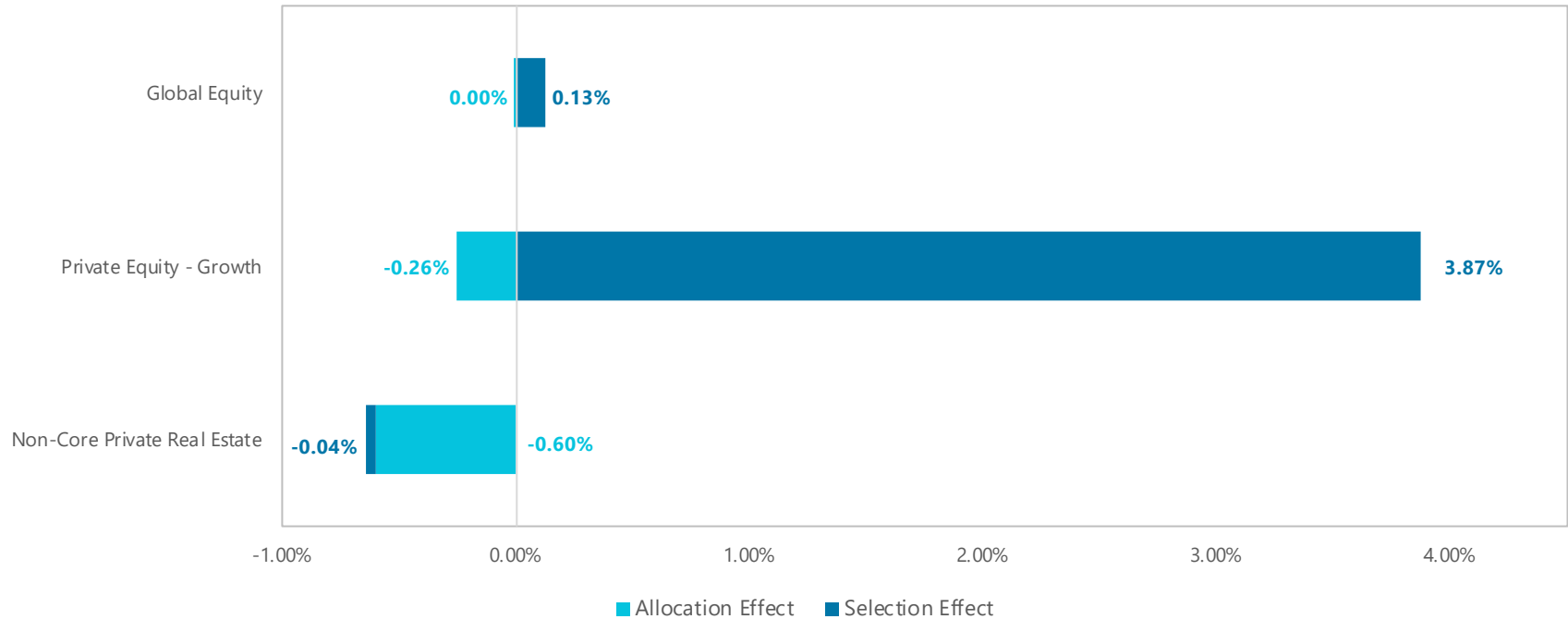
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>Growth</b>	<b>33,535</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-4.9%</b>	<b>-8.5%</b>	<b>-0.86%</b>	<b>3.96%</b>	<b>3.52%</b>
Global Equity	19,936	59.4%	60.4%	-6.5%	-6.6%	0.00%	0.13%	0.10%
Private Equity - Growth	12,522	37.3%	32.1%	-3.2%	-15.4%	-0.26%	3.87%	4.05%
Non-Core Private Real Estate	1,077	3.2%	7.5%	4.7%	5.1%	-0.60%	-0.04%	-0.62%

1. Total Value Add includes Interaction Effect.

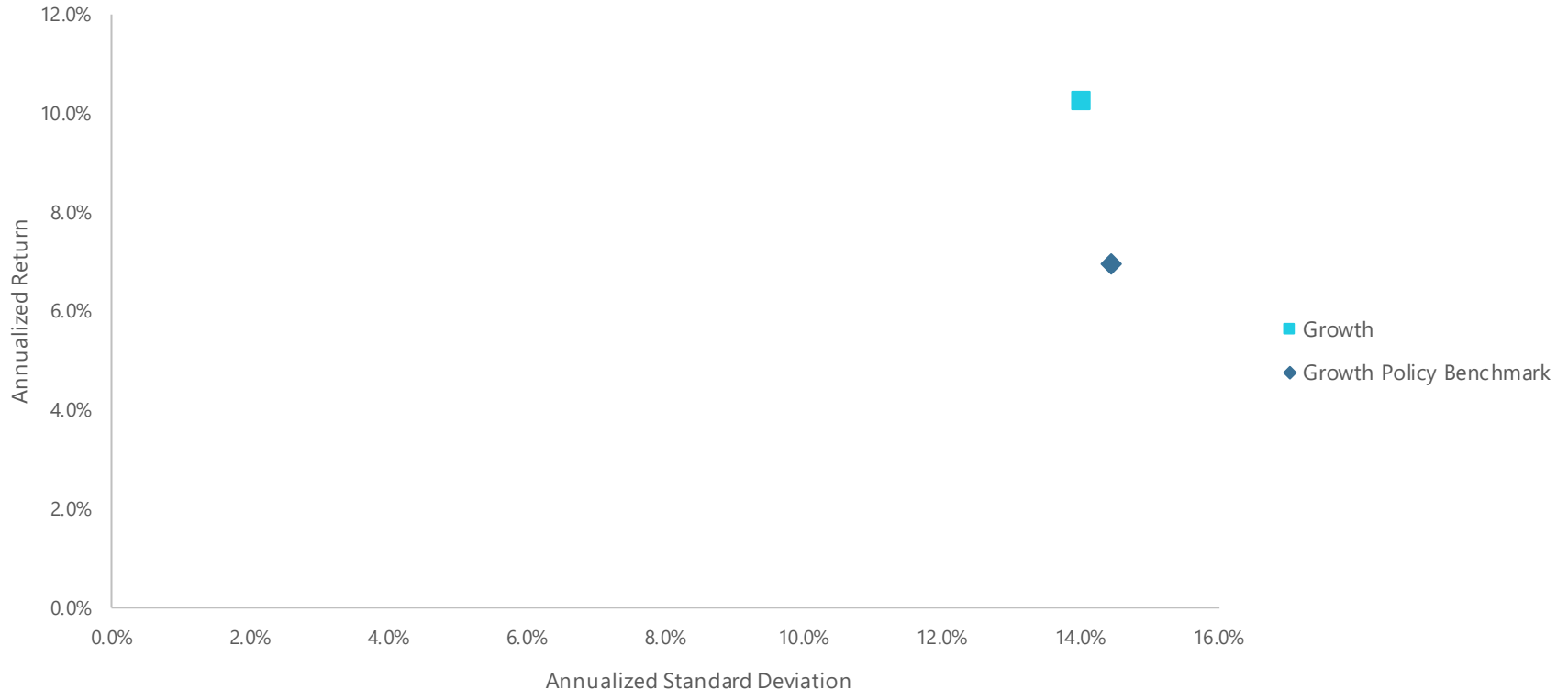
# Risk vs. Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Growth</b>	<b>10.2%</b>	<b>14.0%</b>				
Growth Policy Benchmark	7.0%	14.4%	0.71	0.78	0.93	4.3%

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

# Performance Detail

for the quarter ended September 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	Inception Date
<b>Growth</b>	<b>100.0%</b>	<b>33,535</b>	<b>35,331</b>	<b>-4.9%</b>	<b>-14.9%</b>	<b>-9.5%</b>	<b>10.4%</b>	--	--	<b>10.2%</b>	<b>Apr-2019</b>
Growth Policy Benchmark				-8.5%	-20.2%	-16.7%	6.1%	--	--	7.0%	
<b>Global Equity</b>	<b>59.4%</b>	<b>19,936</b>	<b>21,343</b>	<b>-6.5%</b>	<b>-25.0%</b>	<b>-20.0%</b>	<b>4.1%</b>	--	--	<b>4.7%</b>	<b>Apr-2019</b>
Global Equity Policy Benchmark				-6.6%	-25.7%	-21.2%	3.6%	--	--	4.0%	
<b>Passive</b>											
SSGA MSCI ACWI IMI	37.8%	12,667	13,120	-6.8%	-25.4%	-20.5%	--	--	--	1.3%	Jan-2020
<b>Factor Based</b>											
JPMAM Strategic Beta Non-US	1.4%	482	533	-9.4%	-25.1%	-23.2%	--	--	--	-1.2%	Aug-2020
JPMAM Strategic Beta US	11.1%	3,717	3,901	-4.7%	-23.7%	-15.6%	--	--	--	8.9%	Jul-2020
<b>Active</b>											
Acadian Developed Markets	1.5%	488	531	-8.1%	-25.9%	-23.2%	2.0%	1.3%	6.5%	3.5%	Apr-2006
BTC Euro Tilts	1.3%	444	483	-8.1%	-26.5%	-21.3%	1.1%	-0.1%	5.2%	2.2%	Jan-2007
Cevian Capital II - Activist	1.1%	364	359	1.3%	-12.0%	-6.5%	8.0%	4.5%	--	6.4%	Oct-2016
CGT International Equity	0.9%	310	343	-9.6%	-34.8%	-34.0%	-1.8%	0.9%	5.0%	4.6%	Nov-1994
Comercap US Small Cap - EMP	0.2%	73	77	-5.1%	-16.1%	-11.0%	7.9%	--	--	5.0%	Oct-2018
Frontier US SMID Growth	0.7%	231	242	-4.6%	-26.1%	-21.8%	4.1%	3.5%	9.6%	9.3%	Jun-2002
Genesis Emerging Markets	0.0%	0	491	-0.6%	-23.5%	-27.0%	-2.7%	-0.6%	1.9%	3.0%	Sep-2007
Global Alpha	0.4%	144	162	-11.2%	-29.8%	-30.3%	-1.3%	--	--	0.8%	Nov-2018
Jana JSI Fund V - Activist	0.2%	66	118	-6.6%	-13.3%	-7.5%	10.6%	10.1%	--	15.3%	Oct-2016
Lazard Emerging Markets	1.0%	322	374	-14.1%	-32.3%	-31.7%	-1.7%	-1.0%	--	0.7%	Feb-2013
Parametric GE Market Cap	0.3%	112	134	-9.7%	-9.7%	--	--	--	--	8.2%	Oct-2021
Parametric GE Region	0.3%	117	80	32.8%	-8.0%	--	--	--	--	-6.9%	Dec-2021
Symphony Financial - Activist	0.6%	207	204	1.5%	-21.5%	-19.7%	3.8%	8.4%	--	10.6%	Nov-2016
Systematic US Small Cap Value	0.5%	167	174	-4.0%	-19.4%	-13.2%	5.9%	--	--	2.9%	Jul-2018
<b>Private Equity - Growth</b>	<b>37.3%</b>	<b>12,522</b>	<b>12,901</b>	<b>-3.2%</b>	<b>5.6%</b>	<b>11.4%</b>	<b>24.0%</b>	--	--	<b>21.3%</b>	<b>Jan-2019</b>
PE - Growth Policy Benchmark				-15.4%	-14.3%	-14.8%	8.1%	--	--	7.0%	
<b>Non-Core Private Real Estate</b>	<b>3.2%</b>	<b>1,077</b>	<b>1,087</b>	<b>4.7%</b>	<b>18.2%</b>	<b>20.4%</b>	<b>15.0%</b>	<b>12.6%</b>	<b>12.2%</b>	<b>4.8%</b>	<b>Jan-1996</b>
Non-Core Private RE Policy Benchmark				5.1%	22.6%	31.1%	14.7%	12.7%	13.4%	11.7%	

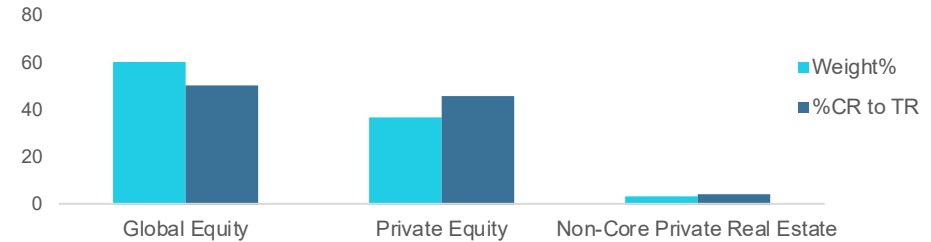
# Growth Risk Summary

for the quarter ended September 30, 2022

## Risk Summary

	Value
<b>Total Risk</b>	<b>21.27</b>
Benchmark Risk	20.11
Active Risk	1.86
Portfolio Beta	1.06

## Contribution to Risk

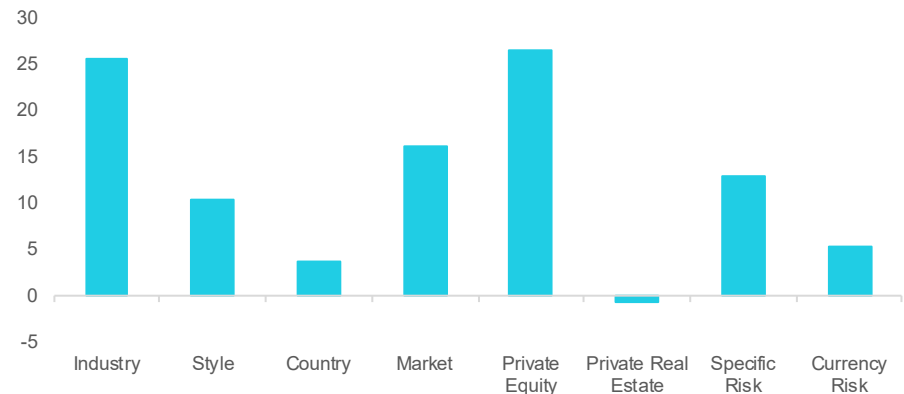


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
<b>Growth</b>	<b>33,198</b>	<b>100.00</b>	<b>21.27</b>	<b>21.27</b>	<b>100.00</b>
Global Equity	19,884	59.90	18.80	10.64	50.02
Private Equity	12,276	36.98	28.58	9.81	46.12
Non-Core Private Real Estate	1,038	3.13	42.80	0.82	3.86

## Risk Decomposition

Risk Source	Portfolio Risk		Active Risk	
	Contribution	%Risk	Contribution	%Risk
<b>Total Risk</b>	<b>21.27</b>	<b>100.00</b>	<b>1.86</b>	<b>100.00</b>
Local Market Risk	20.37	95.78	1.76	94.82
Common Factor Risk	20.33	95.59	1.52	81.85
Specific Risk	0.04	0.19	0.24	12.97
Currency Risk	0.90	4.22	0.10	5.18

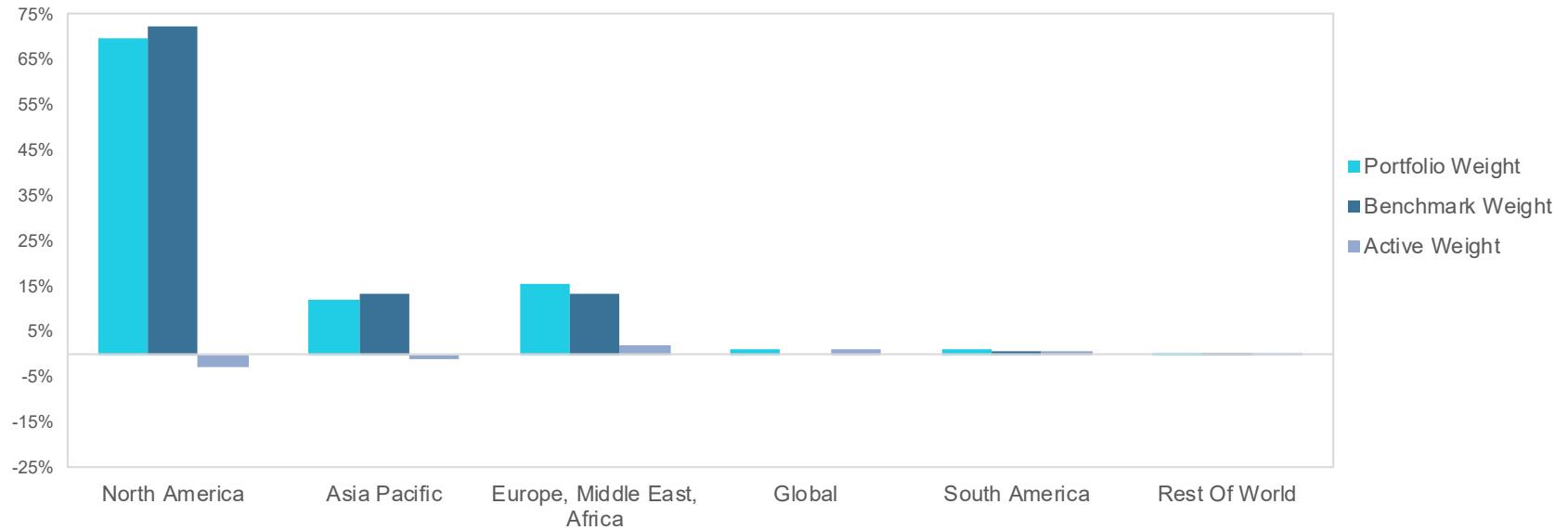
## Active Risk from Common Factors



# Growth Risk Summary

for the quarter ended September 30, 2022

## Portfolio Allocation By Region

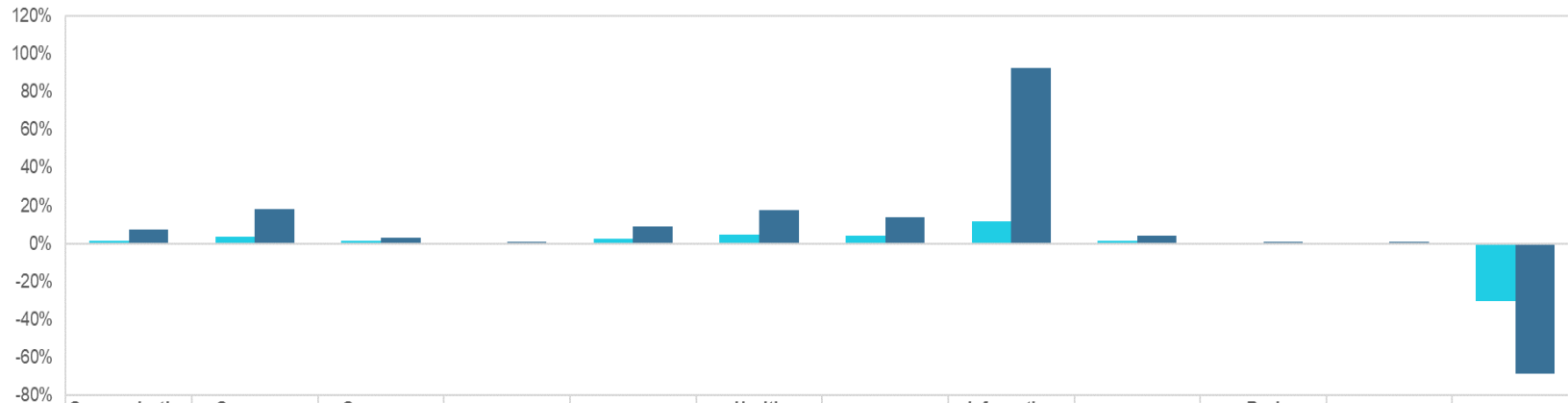


Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
<b>Total Fund</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>21.27</b>	<b>1.86</b>	<b>100.00</b>	<b>0.02</b>
North America	69.58%	72.55%	-2.96%	23.43	1.43	77.18	0.06
Asia Pacific	12.21%	13.20%	-1.00%	16.05	0.18	9.74	-0.04
Europe, Middle East, Africa	15.58%	13.41%	2.17%	22.29	0.23	12.46	0.02
Global	1.12%	0.00%	1.12%	21.49	-0.03	-1.75	-0.03
South America	1.16%	0.61%	0.55%	32.57	0.04	2.34	0.04
Rest Of World	0.35%	0.24%	0.12%	16.57	0.00	0.03	-0.03

# Growth Risk Summary

for the quarter ended September 30, 2022

## Portfolio Allocation By GICS Sector



	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Real Estate	Utilities	Others
■ Active Weight	1.44%	3.77%	1.48%	0.19%	2.23%	4.53%	4.16%	11.57%	1.23%	-0.20%	-0.09%	-30.30%
■ Active Risk Contribution	7.54%	17.97%	2.96%	0.82%	9.17%	17.77%	13.81%	92.60%	4.05%	1.14%	0.70%	-68.52%

■ Active Weight ■ Active Risk Contribution

# Growth – Global Equity Acadian Developed Markets

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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)	37,662.3	64,057.5
No. Of Issues	615.0	0.0
Dividend Yield	5.1	3.7
Return on Equity	25.9	18.1
Price to Sales	2.6	2.7
Price to Book	5.0	3.5
PE Ratio	8.5	13.4

## Top Holdings (% of assets)

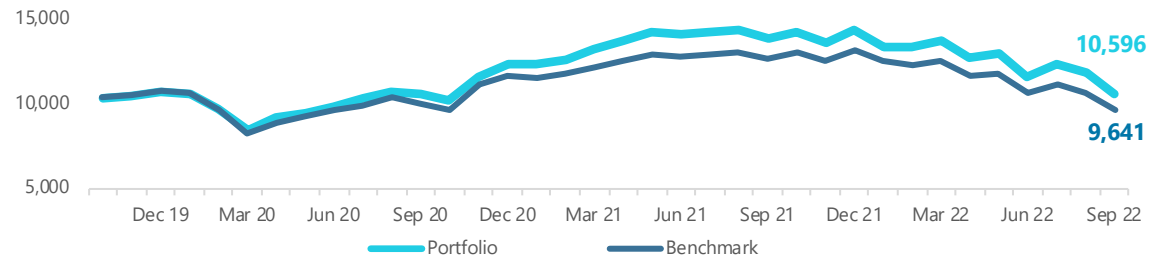
ROCHE HOLDING AG GENUSSCHEIN	3.6%
NOVO NORDISK A/S B	3.0%
WOLTERS KLUWER	2.0%
BHP GROUP LTD	1.9%
SOUTH32 LTD DI	1.7%
<b>Top 5 Holdings</b>	<b>12.1%</b>

## Performance (net)<sup>1</sup>

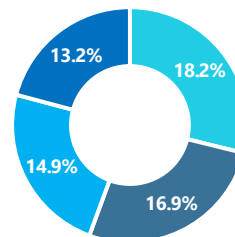
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Acadian Developed Markets</b>	<b>488.3</b>	<b>-8.1%</b>	<b>-23.2%</b>	<b>2.0%</b>	<b>1.3%</b>
MSCI EAFE + Canada Net Index		-9.2%	-23.9%	-1.2%	-0.4%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Acadian Developed Markets</b>	<b>-8.0%</b>	<b>51</b>	<b>-22.9%</b>	<b>52</b>	<b>2.3%</b>	<b>44</b>	<b>1.7%</b>	<b>52</b>
Median	-8.0%		-22.2%		1.8%		2.3%	

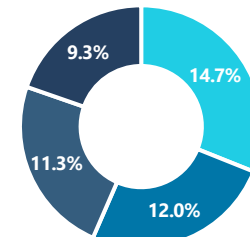
## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



- HEALTH CARE
- INDUSTRIALS
- FINANCIALS
- MATERIALS



- JAPAN
- CANADA
- AUSTRALIA
- SWITZERLAND

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 September 30, 2022

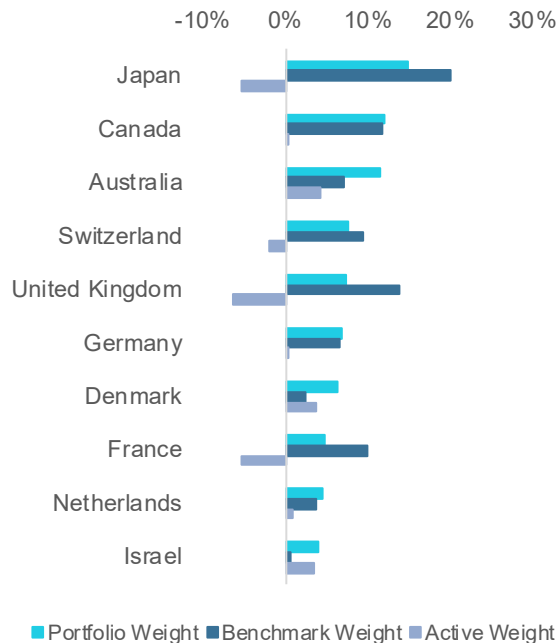


Los Angeles County Employees Retirement Association

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>19.78</b>
Benchmark Risk	18.26
Active Risk	5.08
Portfolio Beta	1.05

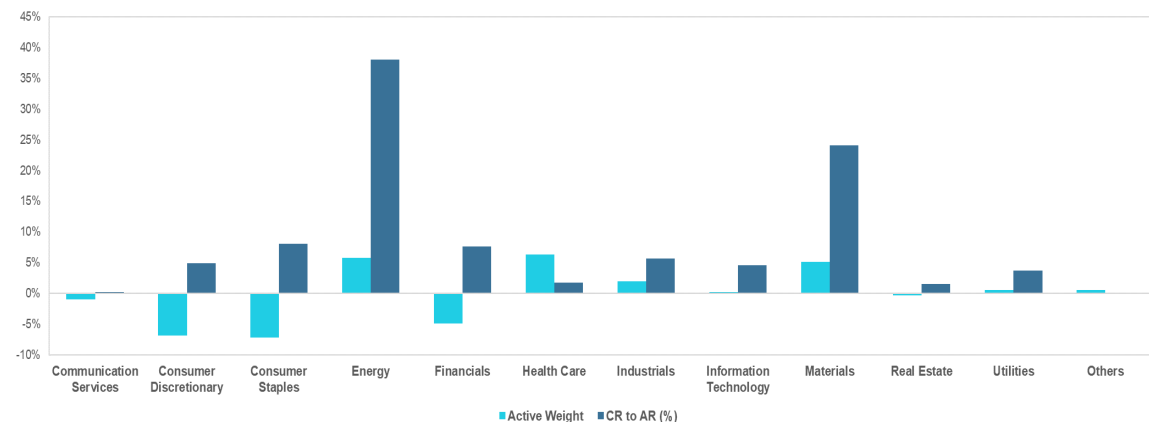
### Top Countries by Weight%



### 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%	0.12%	1.25%	46.31	5.58	0.258
SOUTH32 LIMITED	1.58%	0.08%	1.50%	42.19	5.28	0.210
EQUINOR ASA	1.60%	0.23%	1.37%	40.74	4.83	0.211
MEG ENERGY CORP	0.64%	0.00%	0.64%	63.03	4.13	0.359
BIRCHCLIFF ENERGY LTD	0.72%	0.00%	0.72%	59.73	3.96	0.310
ADARO ENERGY INDONESIA TBK PT	0.86%	0.00%	0.86%	48.57	3.55	0.241
CRESCENT POINT ENERGY CORP	0.46%	0.00%	0.46%	67.06	3.18	0.381
BHP GROUP LTD	1.92%	0.91%	1.01%	36.91	3.08	0.186
PILBARA MINERALS LTD	0.70%	0.00%	0.70%	61.75	3.06	0.252
WHITEHAVEN COAL LTD	0.59%	0.00%	0.59%	55.41	3.05	0.294

### Portfolio Risk by GICS Sector



# Growth – Global Equity BTC Europe Alpha Tilts

for the quarter ended September 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)

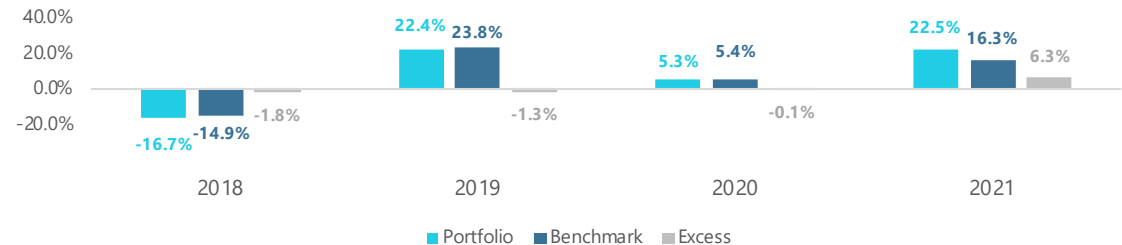
Standard Deviation	19.2%
Benchmark Standard Deviation	19.3%
Sharpe Ratio	0.16
Information Ratio	0.55
Beta	0.99
Tracking Error	1.9%

## Performance (net)<sup>1</sup>

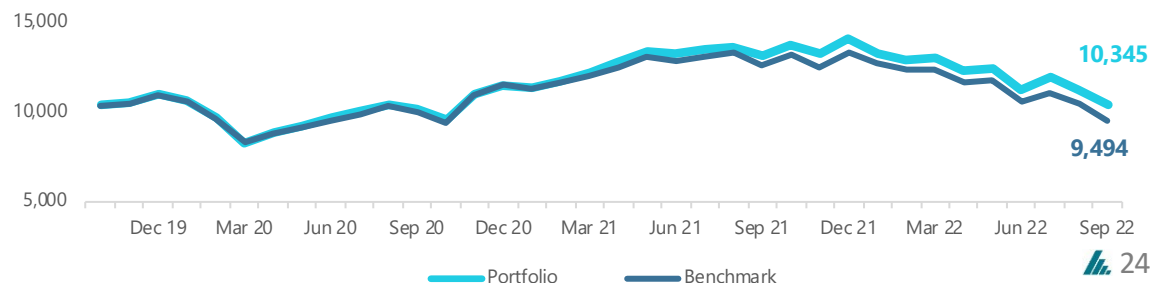
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>BTC Euro Tilts</b>	<b>443.7</b>	<b>-8.1%</b>	<b>-21.3%</b>	<b>1.1%</b>	<b>-0.1%</b>
MSCI EUROPE		-10.1%	-24.8%	-1.7%	-1.2%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: Intl Equity Developed Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>BTC Euro Tilts</b>	<b>-8.0%</b>	<b>34</b>	<b>-20.9%</b>	<b>27</b>	<b>1.6%</b>	<b>18</b>	<b>0.3%</b>	<b>37</b>
Median	-9.2%		-24.2%		-1.0%		0.4%	

## 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 September 30, 2022

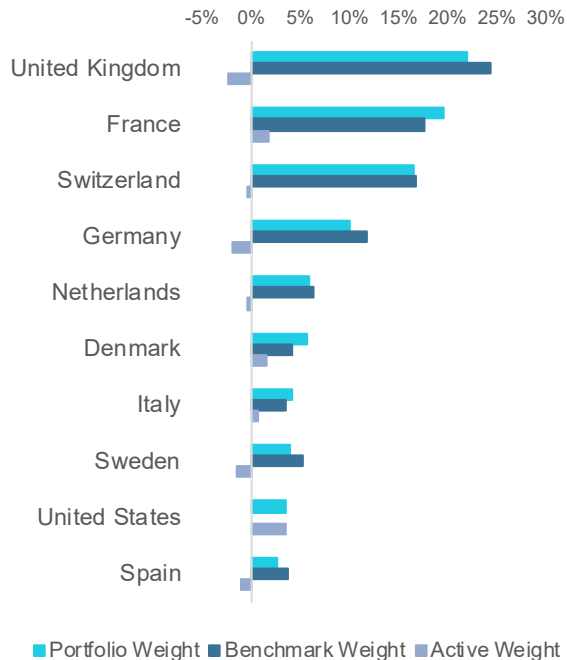


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>19.60</b>
Benchmark Risk	20.33
Active Risk	1.51
Portfolio Beta	0.96

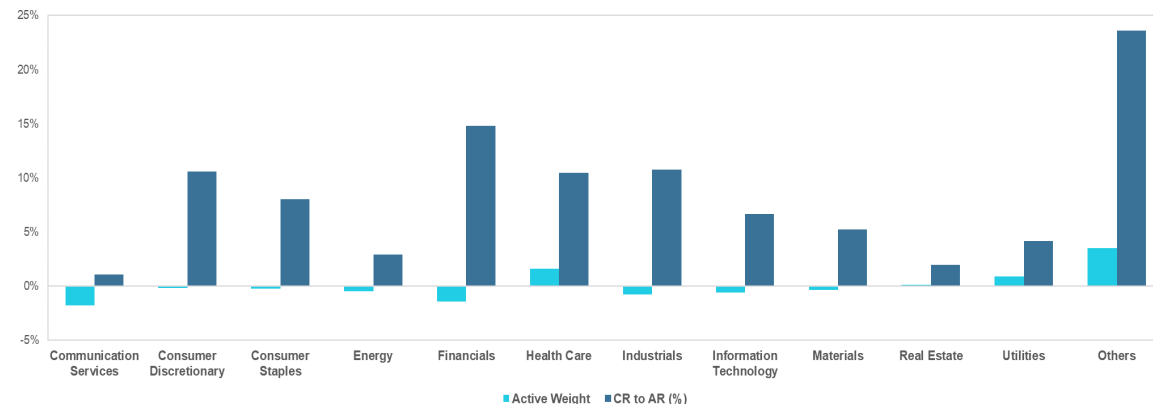
## Top Countries by Weight%



## 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	3.09%	0.00%	3.09%	0.00	21.02	0.000
NOVARTIS AG	3.56%	2.13%	1.43%	19.50	6.81	-0.031
BEIERSDORF AG	1.28%	0.13%	1.15%	22.88	5.13	-0.036
ASML HOLDING NV	1.41%	2.21%	-0.81%	39.05	3.99	-0.178
BRITISH AMERICAN TOBACCO PLC	2.01%	1.00%	1.01%	23.87	3.92	-0.044
TRYG A/S	1.23%	0.10%	1.14%	25.30	3.58	-0.055
COCA-COLA EUROPACIFIC	1.08%	0.11%	0.97%	27.06	3.41	-0.050
ENGIE	1.43%	0.27%	1.16%	34.36	3.25	-0.061
PROSUS NV	0.00%	0.56%	-0.56%	43.61	3.06	-0.186
HERMES INTERNATIONAL SCA	1.81%	0.48%	1.33%	32.43	2.74	-0.072

## Portfolio Risk by GICS Sector



# Growth – Global Equity Capital Group Developed Markets

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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)	89,772.5	64,057.5
No. Of Issues	166.0	0.0
Dividend Yield	2.5	3.7
Return on Equity	20.5	18.1
Price to Sales	5.0	2.7
Price to Book	6.2	3.5
PE Ratio	21.2	13.4

## Top Holdings (% of assets)

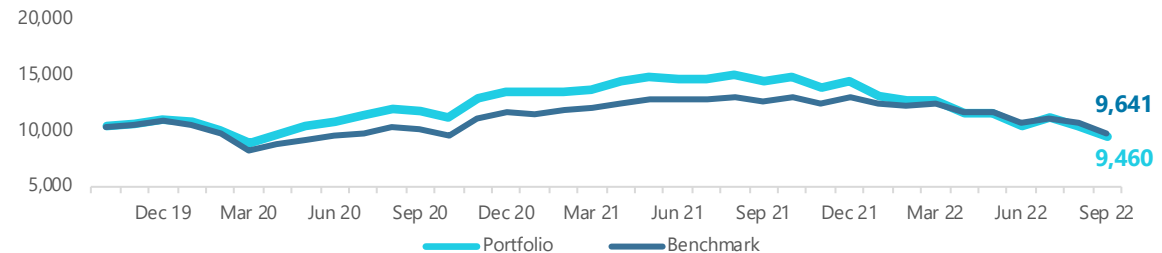
ASML HOLDING NV	4.4%
NOVO NORDISK A/S B	3.6%
LVMH MOET HENNESSY LOUIS VUI	3.2%
EVOLUTION AB	2.7%
ASTRAZENECA PLC	2.3%
<b>Top 5 Holdings</b>	<b>16.2%</b>

## Performance (net)<sup>1</sup>

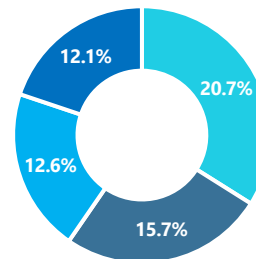
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Capital Group Developed Markets</b>	<b>310.0</b>	<b>-9.6%</b>	<b>-34.0%</b>	<b>-1.8%</b>	<b>0.9%</b>
EAFE Custom Benchmark		-9.2%	-23.9%	-1.2%	-0.4%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Capital Group Developed Markets</b>	<b>-9.5%</b>	<b>68</b>	<b>-33.8%</b>	<b>99</b>	<b>-1.5%</b>	<b>84</b>	<b>1.3%</b>	<b>56</b>
Median	-8.0%		-22.2%		1.8%		2.3%	

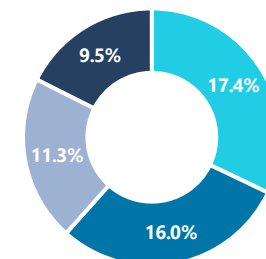
## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



- INFORMATION TECHNOLOGY
- HEALTH CARE
- INDUSTRIALS
- CONSUMER DISCRETIONARY



- FRANCE
- JAPAN
- UNITED KINGDOM
- NETHERLANDS

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 September 30, 2022

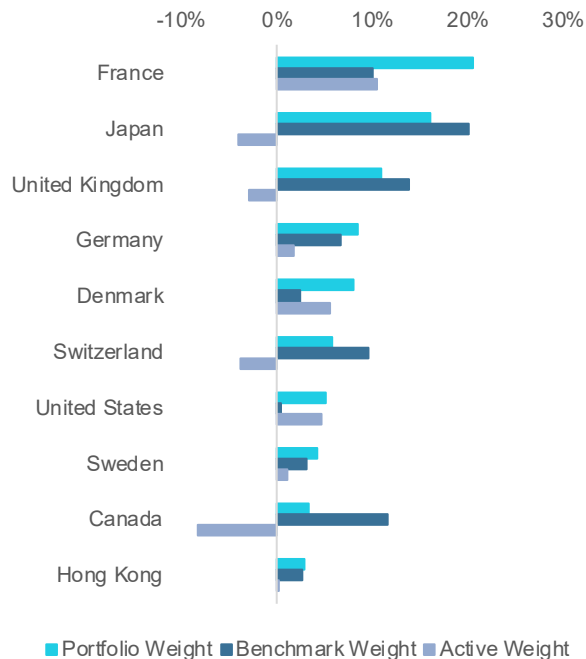


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>19.26</b>
Benchmark Risk	18.26
Active Risk	4.49
Portfolio Beta	1.03

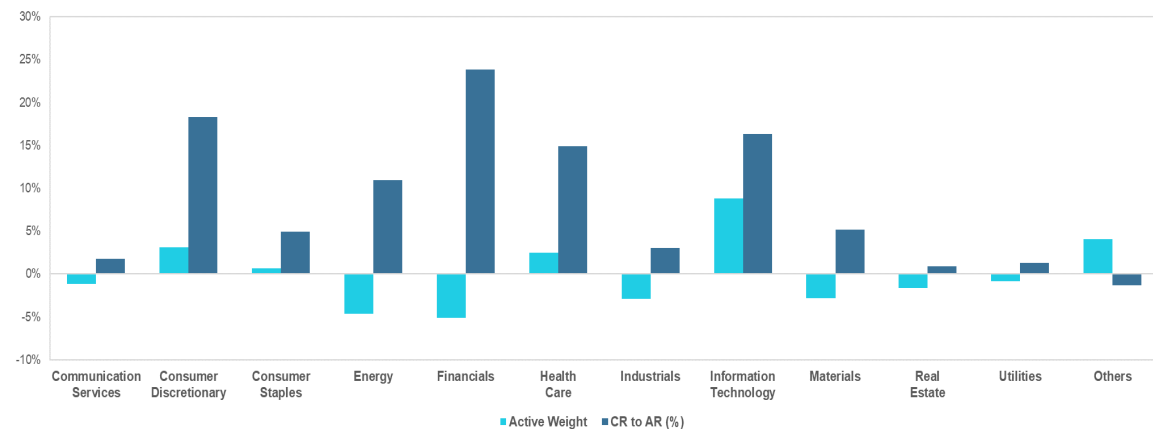
## Top Countries by Weight%



## Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
EVOLUTIONAB (PUBL)	2.72%	0.11%	2.61%	51.66	10.93	0.207
COMMON STOC	4.43%	0.00%	4.43%	40.87	9.91	0.120
GENMAB A/S	2.03%	0.15%	1.87%	33.90	5.32	0.147
NOVO NORDISK A/S	3.60%	1.20%	2.40%	28.93	4.52	0.104
SHELL PLC	0.00%	1.35%	-1.35%	32.88	3.40	-0.094
OCADO GROUP PLC	1.10%	0.02%	1.08%	52.80	3.27	0.156
LVMH MOET HENNESSY LOUIS VUITTON	3.23%	1.20%	2.03%	28.23	2.67	0.079
HAMAMATSU PHOTONICS KK	1.92%	0.04%	1.88%	27.11	2.53	0.080
KEYENCE CORP	1.84%	0.47%	1.38%	29.06	2.51	0.101
BHP GROUP LTD	0.00%	0.91%	-0.91%	36.91	1.89	-0.074

## Portfolio Risk by GICS Sector



# Growth – Global Equity

## Cevian Capital II

for the quarter ended September 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	16.7%
Benchmark Standard Deviation	17.1%
Sharpe Ratio	0.39
Information Ratio	0.43
Beta	0.83
Tracking Error	9.5%

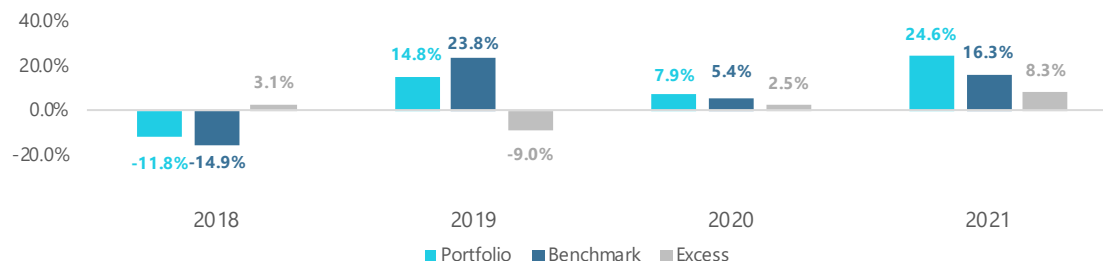
### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Cevian Capital II - Activist</b>	<b>363.7</b>	<b>1.3%</b>	<b>-6.5%</b>	<b>8.0%</b>	<b>4.5%</b>
MSCI EUROPE		-10.1%	-24.8%	-1.7%	-1.2%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

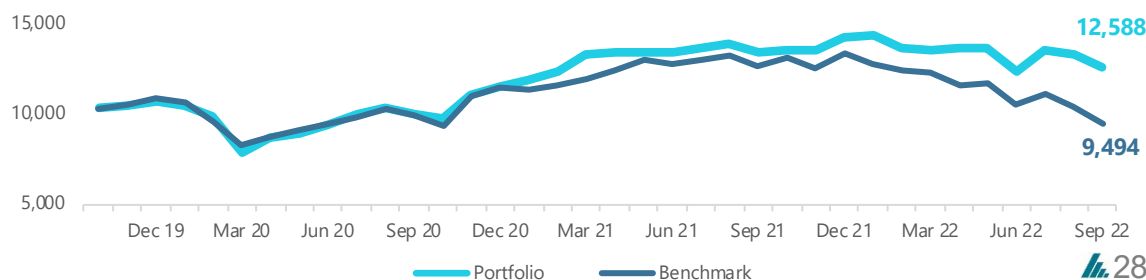
  

Universe data: Europe Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Cevian Capital II - Activist</b>	<b>1.6%</b>	<b>2</b>	<b>-5.5%</b>	<b>5</b>	<b>9.1%</b>	<b>3</b>	<b>5.8%</b>	<b>5</b>
Median	-9.2%		-24.2%		-1.0%		-0.4%	

### 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 September 30, 2022

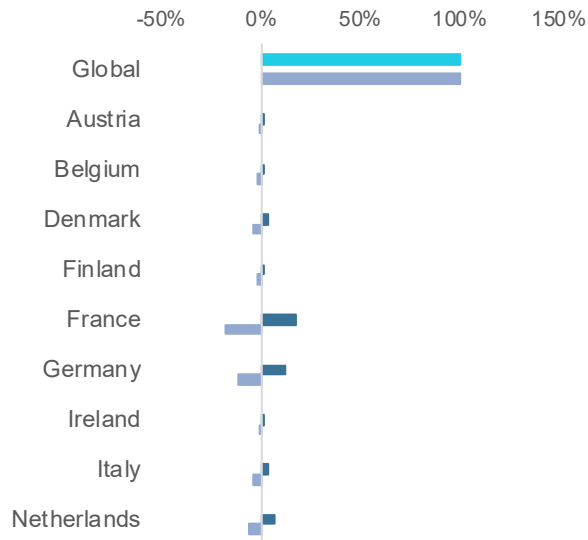


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>23.60</b>
Benchmark Risk	20.33
Active Risk	8.93
Portfolio Beta	1.08

## Top Countries by Weight%



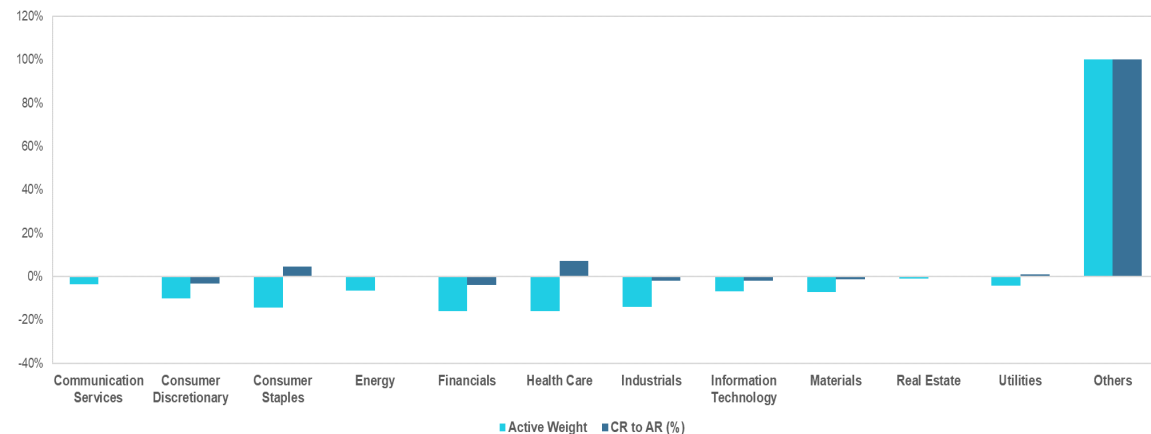
■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

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

## 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%	23.60	100.00	0.125
ROCHE HOLDING AG	0.00%	2.96%	-2.96%	23.99	2.00	-0.024
NESTLE SA	0.00%	3.93%	-3.93%	18.32	1.92	-0.008
ASTRAZENECA PLC	0.00%	2.21%	-2.21%	27.45	1.49	-0.024
NOVO NORDISK A/S	0.00%	2.13%	-2.13%	28.93	1.33	-0.020
NOVARTIS AG	0.00%	2.13%	-2.13%	19.50	1.13	-0.011
UNILEVER PLC	0.00%	1.45%	-1.45%	21.98	0.79	-0.013
DIAGEO PLC	0.00%	1.24%	-1.24%	22.89	0.45	0.004
SANOFI SA	0.00%	1.12%	-1.12%	24.58	0.40	0.004
BRITISH AMERICAN TOBACCO PLC	0.00%	1.00%	-1.00%	23.87	0.36	0.003

## Portfolio Risk by GICS Sector



■ Active Weight ■ CR to AR (%)

# Growth – Global Equity CornerCap US Small Cap

for the quarter ended September 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)	2,340.4	266.1
No. Of Issues	347.0	0.0
Dividend Yield	1.8	1.4
Return on Equity	13.6	10.9
Price to Sales	2.6	12.0
Price to Book	2.6	5.3
PE Ratio	13.1	30.7

## Top Holdings (% of assets)

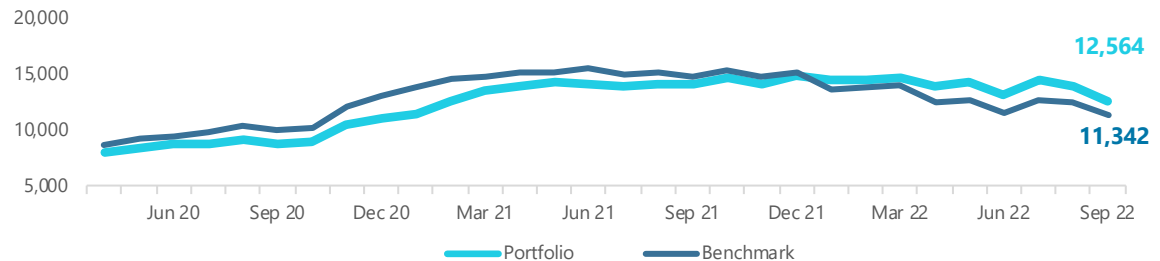
SANMINA CORP	0.5%
OPTION CARE HEALTH INC	0.5%
CHORD ENERGY CORP	0.5%
OVINTIV INC	0.5%
MIDLAND STATES BANCORP INC	0.5%
<b>Top 5 Holdings</b>	<b>2.6%</b>

## Performance (net)<sup>1</sup>

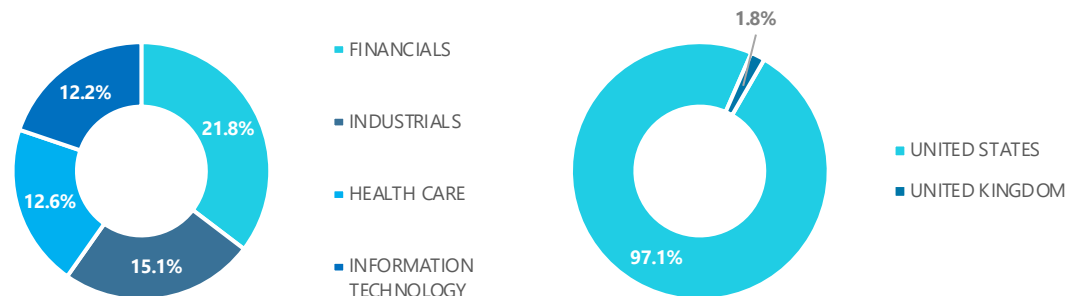
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Cornercap US Small Cap - EMP</b>	<b>72.7</b>	<b>-5.1%</b>	<b>-11.0%</b>	<b>7.9%</b>	<b>--</b>
RUSSELL 2000		-2.2%	-23.5%	4.3%	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Cornercap US Small Cap - EMP</b>	<b>-5.0%</b>	<b>78</b>	<b>-10.5%</b>	<b>10</b>	<b>8.2%</b>	<b>19</b>	<b>--</b>	<b>--</b>
Median	-2.8%		-16.2%		6.0%		--	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

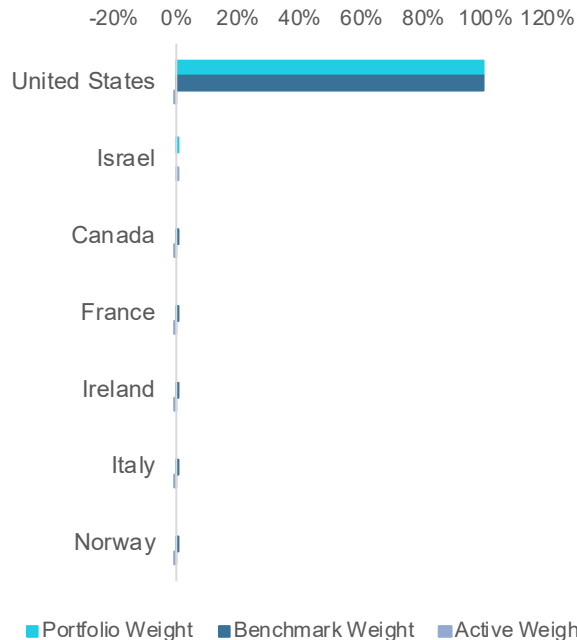


Los Angeles County Employees Retirement Association

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>24.33</b>
Benchmark Risk	26.01
Active Risk	5.48
Portfolio Beta	0.92

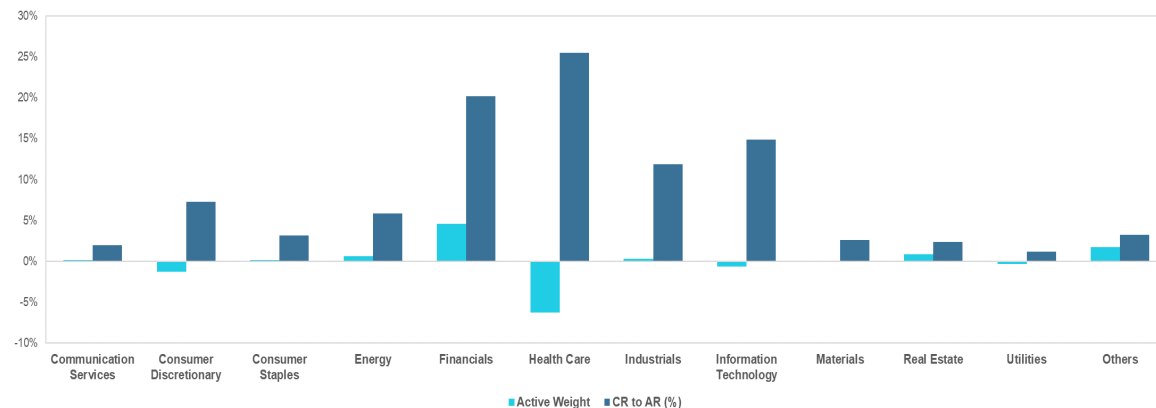
### Top Countries by Weight%



### Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
SHOCKWAVE MEDICAL INC	0.00%	0.45%	-0.45%	58.20	1.71	-0.311
OVINTIV INC	0.53%	0.00%	0.53%	59.68	1.32	0.033
PROPETRO HOLDING CORP	0.42%	0.03%	0.39%	68.48	1.32	0.080
MIDLAND STS BANCORP INC	0.49%	0.02%	0.46%	30.96	1.25	0.044
BIOHAVEN PHARMACEUTICAL HLDG CO	0.00%	0.44%	-0.44%	51.20	1.18	-0.252
APA CORP	0.36%	0.00%	0.36%	61.45	1.17	0.076
MERCANTILE BANK CORP	0.42%	0.02%	0.40%	31.01	1.14	0.050
HORIZON BANCORP INC	0.47%	0.03%	0.44%	30.00	1.13	0.036
KARUNA THERAPEUTICS INC	0.00%	0.31%	-0.31%	53.61	1.12	-0.304
CHART INDUSTRIES INC	0.00%	0.31%	-0.31%	48.41	1.10	-0.185

### Portfolio Risk by GICS Sector



# Growth – Global Equity Frontier US SMID Growth

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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)	6,817.9	5,508.6
No. Of Issues	136.0	0.0
Dividend Yield	0.7	1.6
Return on Equity	12.5	14.4
Price to Sales	3.1	7.3
Price to Book	8.6	4.4
PE Ratio	25.0	22.2

## Top Holdings (% of assets)

BUILDERS FIRSTSOURCE INC	2.3%
WOLFSPEED INC	2.3%
MACOM TECHNOLOGY SOLUTIONS H	2.0%
LPL FINANCIAL HOLDINGS INC	1.8%
KBR INC	1.7%

### Top 5 Holdings

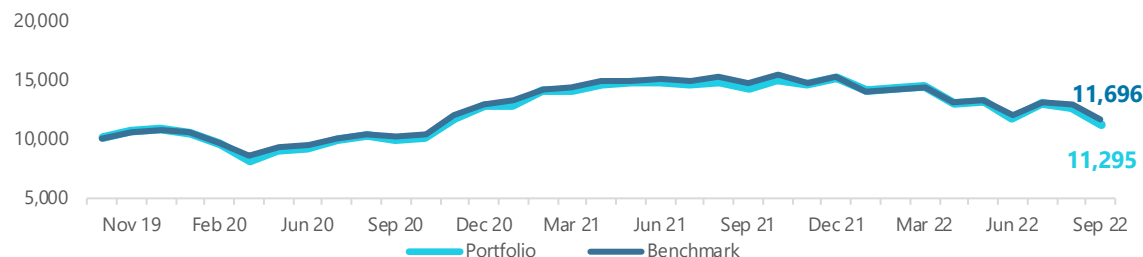
10.1%

## Performance (net)<sup>1</sup>

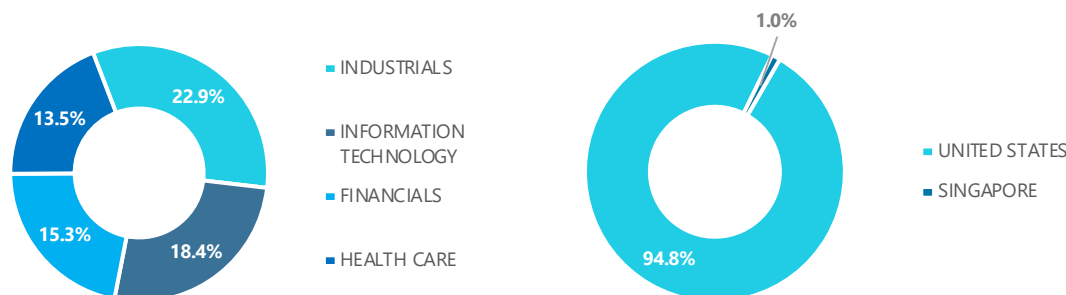
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Frontier US SMID Growth</b>	<b>230.6</b>	<b>-4.6%</b>	<b>-21.8%</b>	<b>4.1%</b>	<b>3.5%</b>
RUSSELL 2500		-2.8%	-21.1%	5.4%	5.5%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Frontier US SMID Growth</b>	<b>-4.4%</b>	<b>68</b>	<b>-21.2%</b>	<b>73</b>	<b>4.9%</b>	<b>71</b>	<b>4.3%</b>	<b>69</b>
Median	-2.8%		-16.2%		6.0%		5.5%	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.

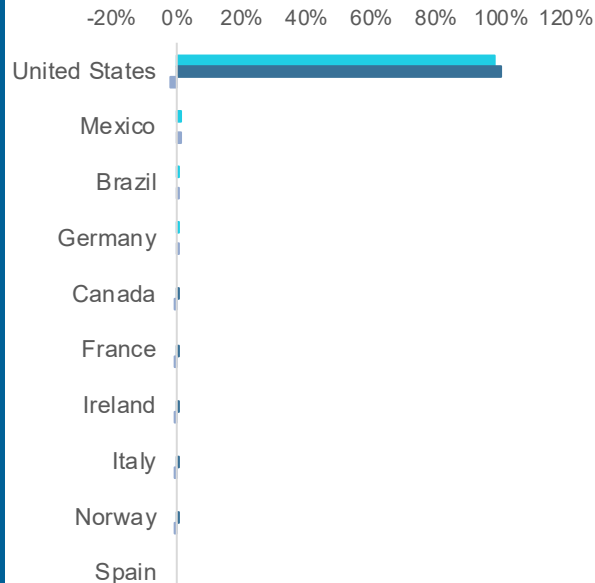
# Growth Risk Analysis – Global Equity Frontier US SMID Growth

for the quarter ended September 30, 2022

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>27.84</b>
Benchmark Risk	25.01
Active Risk	4.69
Portfolio Beta	1.10

## Top Countries by Weight%

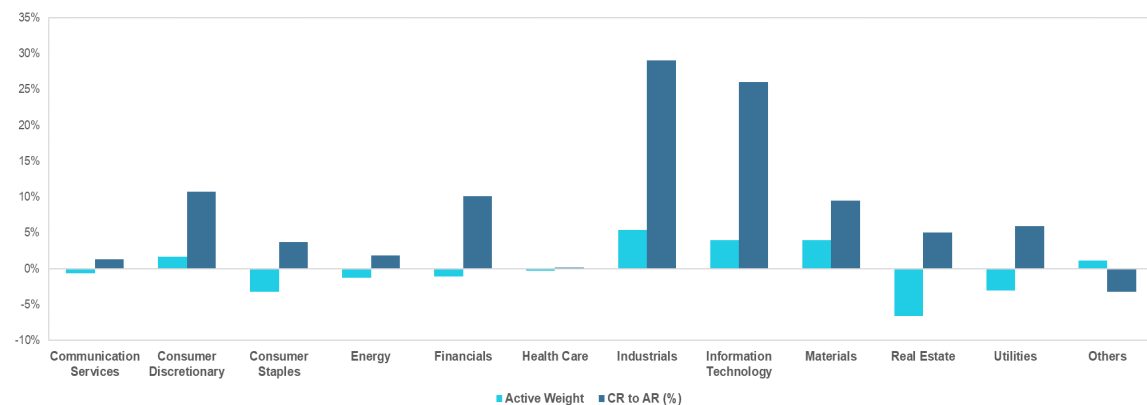


■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

## 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	1.72%	0.05%	1.67%	75.22	9.59	0.405
WOLFSPEED INC	2.27%	0.24%	2.03%	56.43	8.37	0.329
MACOM TECHNOLOGY SOLUTIONS HLDS	2.00%	0.05%	1.95%	38.49	4.17	0.236
ALBEMARLE CORP	1.71%	0.00%	1.71%	46.35	3.69	0.237
BUILDERS FIRST SOURCE INC	2.28%	0.18%	2.09%	42.51	3.61	0.217
CAESARS ENTERTAINMENT INC	1.11%	0.00%	1.11%	57.43	3.49	0.283
MRC GLOBAL INC	1.31%	0.01%	1.30%	57.34	3.40	0.258
DANA INC	1.11%	0.03%	1.08%	49.43	3.18	0.273
CONTROLADORA VUELA	0.92%	0.00%	0.92%	61.51	3.14	0.295
SM ENERGY CO	1.07%	0.09%	0.98%	72.87	2.98	0.278

## Portfolio Risk by GICS Sector



■ Active Weight ■ CR to AR (%)

# Growth – Global Equity

## Global Alpha

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### 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)	2,007.1	2,167.2
No. Of Issues	66.0	0.0
Dividend Yield	3.2	4.1
Return on Equity	10.5	13.2
Price to Sales	12.2	6.2
Price to Book	2.0	2.7
PE Ratio	15.8	13.4

### Top Holdings (% of assets)

BIFFA PLC	4.6%
ORMAT TECHNOLOGIES INC	3.5%
L OCCITANE INTERNATIONAL SA	3.5%
RAFFLES MEDICAL GROUP LTD	3.4%
LOOMIS AB	3.2%
<b>Top 5 Holdings</b>	<b>18.2%</b>

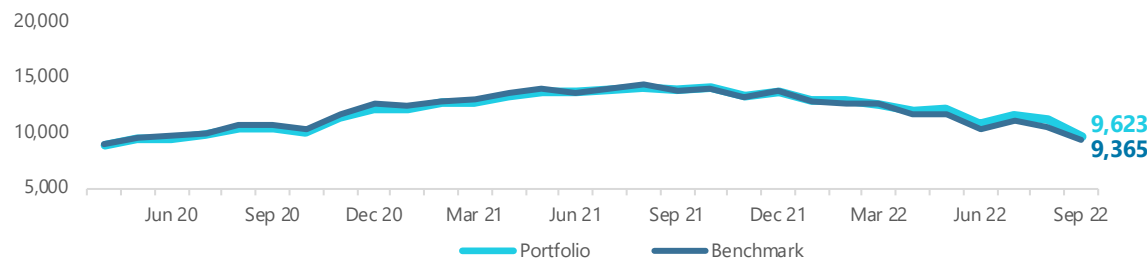
### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Global Alpha</b>	<b>143.8</b>	<b>-11.2%</b>	<b>-30.3%</b>	<b>-1.3%</b>	<b>--</b>
MSCI EAFE SMALL CAP NET		-9.8%	-32.1%	-2.2%	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

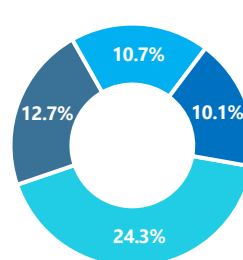
  

Universe data: International Equity Funds Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Global Alpha</b>	<b>-11.1%</b>	<b>87</b>	<b>-29.8%</b>	<b>88</b>	<b>-0.5%</b>	<b>68</b>	<b>--</b>	<b>--</b>
Median	-8.0%		-22.2%		1.8%		--	

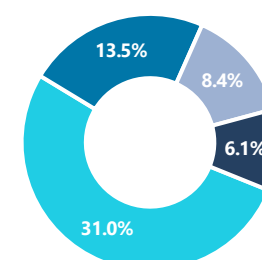
### Growth of \$10,000



### Top Exposures (% of assets)<sup>2</sup>



- INDUSTRIALS
- CONSUMER DISCRETIONARY
- CONSUMER STAPLES
- FINANCIALS



- JAPAN
- UNITED KINGDOM
- FRANCE
- UNITED STATES

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

# Growth Risk Analysis – Global Equity

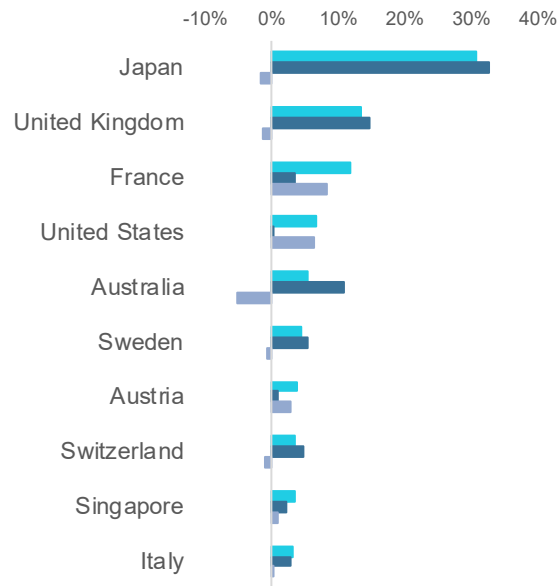
## Global Alpha

for the quarter ended September 30, 2022

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>19.52</b>
Benchmark Risk	20.32
Active Risk	4.27
Portfolio Beta	0.94

### Top Countries by Weight%

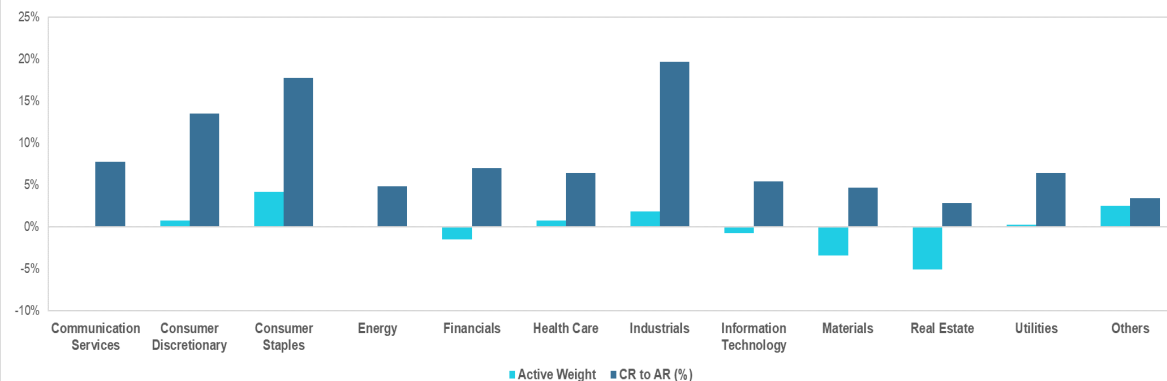


■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

### 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	3.49%	0.00%	3.49%	37.11	10.33	0.068
BIFFA PLC	4.54%	0.07%	4.47%	42.61	9.07	0.028
ORMAT TECHNOLOGIES INC	3.56%	0.00%	3.56%	35.72	6.80	0.023
INTERNET INITIATIVE JAPAN INC	2.73%	0.07%	2.66%	36.99	6.54	0.047
RAFFLES MEDICAL GROUP LTD	3.41%	0.04%	3.37%	30.68	5.41	0.010
SEGA SAMMY HOLDINGS INC	2.99%	0.10%	2.89%	30.51	5.25	0.019
ASICS CORP	2.57%	0.12%	2.44%	42.52	5.22	0.033
AIN HOLDINGS	1.65%	0.05%	1.60%	34.81	3.32	0.030
NORWAY ROYAL SALMON ASA	1.81%	0.01%	1.81%	53.55	3.27	0.019
SOPRA STERIA GROUP SA	2.98%	0.09%	2.89%	30.61	2.61	-0.020

### Portfolio Risk by GICS Sector



# Growth – Global Equity

## JPMorgan Strategic Beta Non-US

for the quarter ended September 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)	63,458.3	59,248.5
No. Of Issues	1,661.0	0.0
Dividend Yield	4.4	3.7
Return on Equity	19.6	17.6
Price to Sales	2.9	3.7
Price to Book	3.0	3.6
PE Ratio	10.9	12.8

### Top Holdings (% of assets)

ISHARES MSCI INDIA ETF	4.4%
TAIWAN SEMICONDUCTOR MANUFAC	1.4%
NESTLE SA REG	1.4%
ROCHE HOLDING AG GENUSSSCHEIN	1.1%
TENCENT HOLDINGS LTD	1.0%
<b>Top 5 Holdings</b>	<b>9.3%</b>

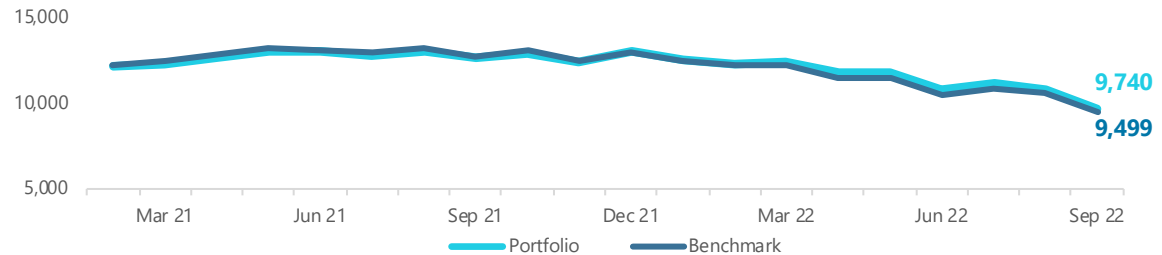
### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>JPMAM Strategic Beta Non-US</b>	<b>482.5</b>	<b>-9.4%</b>	<b>-23.2%</b>	--	--
MSCI ACWI ex USA IMI Net		-9.7%	-25.7%	--	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

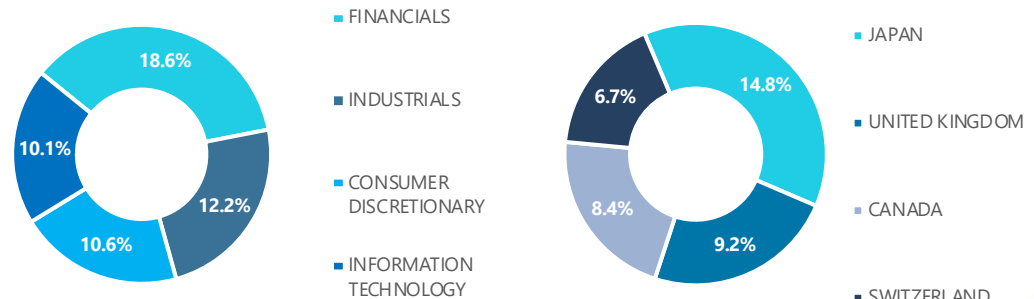
  

Universe data: International Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>JPMAM Strategic Beta Non-US</b>	<b>-9.4%</b>	<b>47</b>	<b>-23.1%</b>	<b>26</b>	--	--	--	--
Median	-9.4%		-25.8%		--		--	

### Growth of \$10,000



### Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

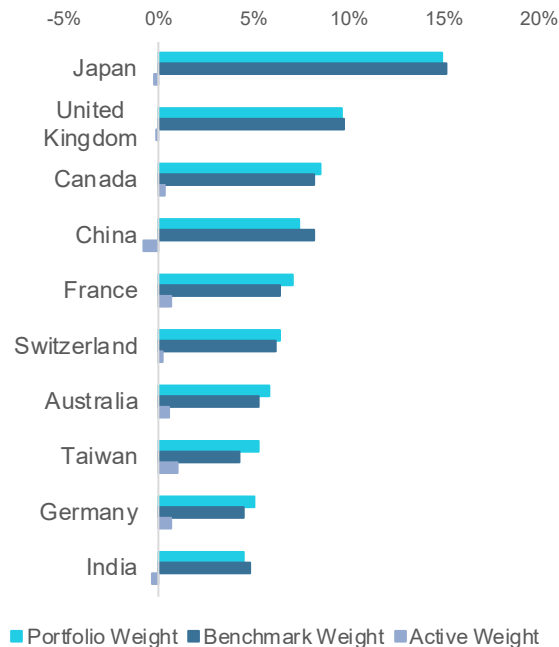


Los Angeles County Employees Retirement Association

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>17.72</b>
Benchmark Risk	17.94
Active Risk	0.91
Portfolio Beta	0.99

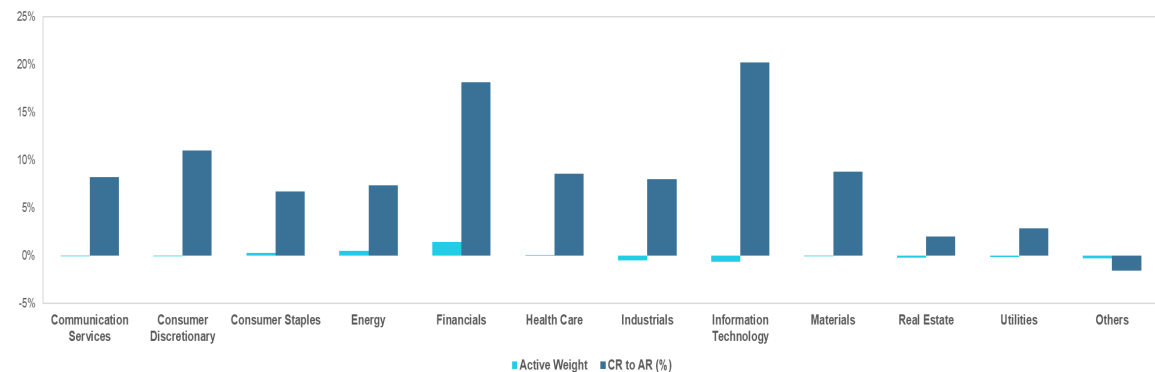
### Top Countries by Weight%



### Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ASML HOLDING NV	0.01%	0.76%	-0.75%	39.05	9.87	-0.168
ALIBABA GROUP HOLDING LTD	0.00%	0.66%	-0.66%	48.59	9.62	-0.181
AURELIUS EQUITY OPPORTUNITIES SE	0.80%	0.00%	0.80%	40.87	6.61	0.028
VALE SA COMMON STOC	0.26%	0.00%	0.26%	51.20	1.92	0.019
YUAN RENMINBI	0.42%	0.00%	0.42%	5.06	1.68	-0.011
UNILEVER PLC	0.45%	0.00%	0.45%	21.98	1.53	-0.017
PINDUODUO INC	0.08%	0.14%	-0.06%	60.40	1.20	-0.236
AKER BP ASA	0.15%	0.04%	0.11%	52.62	1.19	0.052
NETEASE INC	0.00%	0.14%	-0.14%	39.35	1.17	-0.126
MITSUBISHI UFJ FINANCIAL GRO	0.26%	0.00%	0.26%	22.52	1.05	-0.011

### Portfolio Risk by GICS Sector



# Growth – Global Equity

## JPMorgan Strategic Beta US

for the quarter ended September 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 the U.S. at lower volatility and cost than active strategies.

Inception Date: July 2020

### Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	406,186.2	468,563.2
No. Of Issues	951.0	0.0
Dividend Yield	1.5	1.4
Return on Equity	30.0	30.6
Price to Sales	4.3	4.6
Price to Book	22.0	23.2
PE Ratio	17.2	18.9

### Top Holdings (% of assets)

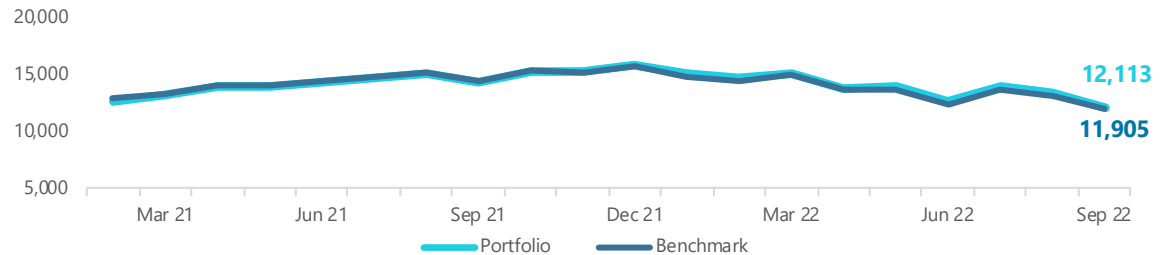
APPLE INC	6.2%
MICROSOFT CORP	4.6%
AMAZON.COM INC	2.9%
TESLA INC	2.0%
ALPHABET INC CL A	1.6%
<b>Top 5 Holdings</b>	<b>17.4%</b>

### Performance (net)<sup>1</sup>

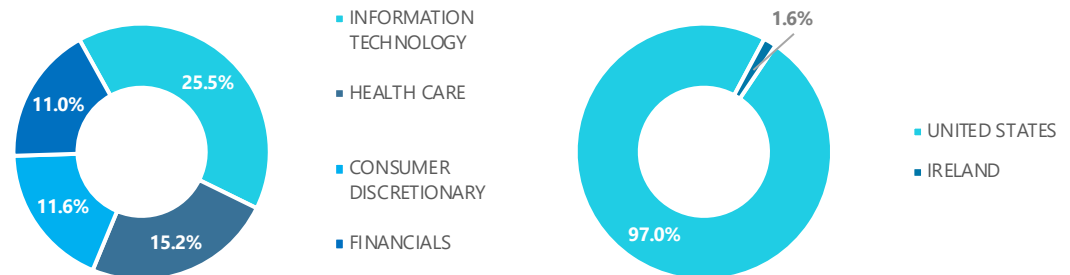
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>JPMAM Strategic Beta US</b>	<b>3,716.9</b>	<b>-4.7%</b>	<b>-15.6%</b>	--	--
MSCI USA IMI Gross		-4.4%	-17.6%	--	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: U.S. Equities Total Large Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>JPMAM Strategic Beta US</b>	<b>-4.7%</b>	<b>47</b>	<b>-15.6%</b>	<b>50</b>	--	--	--	--
Median	-4.8%		-15.6%		--		--	

### Growth of \$10,000



### Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

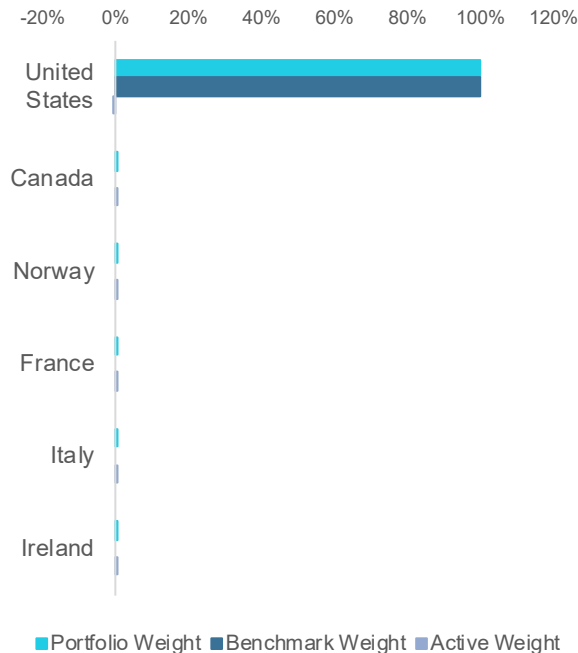


Los Angeles County Employees Retirement Association

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>20.23</b>
Benchmark Risk	20.78
Active Risk	0.89
Portfolio Beta	0.97

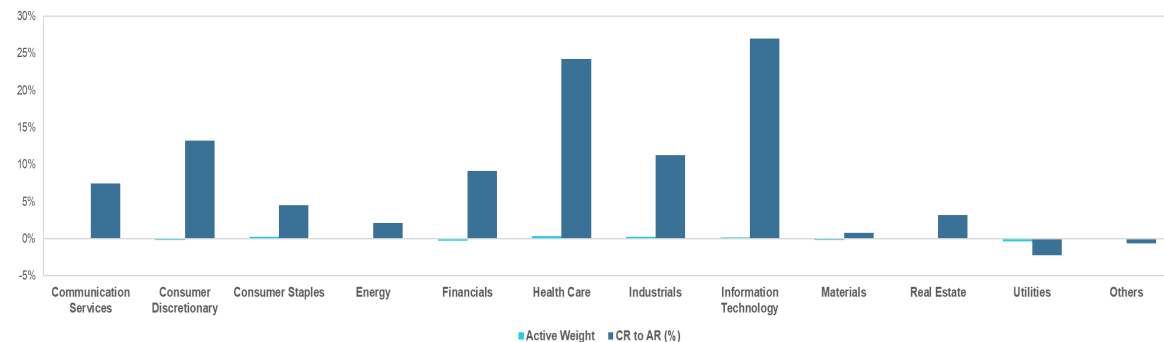
### Top Countries by Weight%



### Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
JPMORGAN CHASE & CO	0.00%	0.86%	-0.86%	28.46	3.77	-0.170
SNOWFLAKE INC	0.06%	0.11%	-0.05%	57.89	1.44	-0.397
CLOUDFLARE INC	0.00%	0.04%	-0.03%	65.81	1.26	-0.457
TWILIO INC	0.00%	0.03%	-0.03%	58.23	1.18	-0.446
PALANTIR TECHNOLOGIES INC	0.00%	0.04%	-0.04%	59.62	1.09	-0.389
BILL COM HLDGS INC	0.00%	0.03%	-0.03%	60.22	1.07	-0.406
ZSCALER INC	0.00%	0.04%	-0.04%	54.21	1.07	-0.375
BLOCK INC	0.05%	0.08%	-0.03%	56.60	1.00	-0.415
THE TRADE DESK INC	0.04%	0.07%	-0.04%	58.22	1.00	-0.363
PINTEREST INC	0.00%	0.04%	-0.04%	56.50	0.99	-0.361

### Portfolio Risk by GICS Sector



# Growth – Global Equity Lazard Emerging Markets

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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)	25,043.2	79,705.1
No. Of Issues	51.0	0.0
Dividend Yield	5.5	3.8
Return on Equity	14.3	18.1
Price to Sales	6.3	4.4
Price to Book	1.9	4.1
PE Ratio	14.3	11.2

## Top Holdings (% of assets)

PROSUS NV	8.6%
JPMORGAN EMERGING MARKETS INVE	6.5%
TEMPLETON EMERGING MARKETS INV	5.7%
CITIC SECURITIES CO LTD H	5.6%
FIDELITY CHINA SPECIAL SITUATI	5.6%
<b>Top 5 Holdings</b>	<b>32.0%</b>

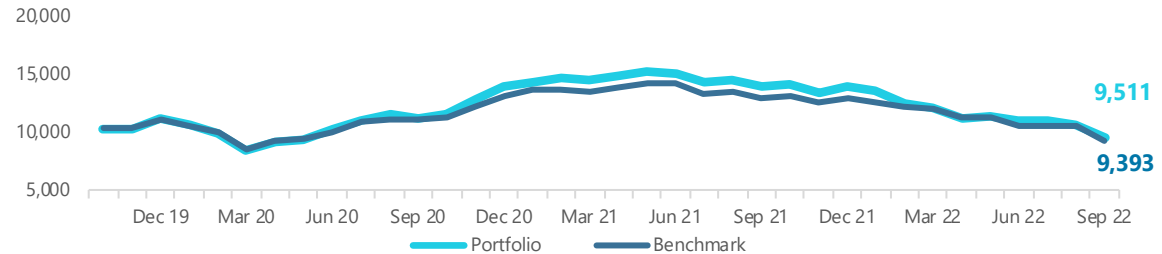
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Lazard Emerging Markets</b>	<b>321.5</b>	<b>-14.1%</b>	<b>-31.7%</b>	<b>-1.7%</b>	<b>-1.0%</b>
MSCI EMERGING MARKETS		-11.6%	-28.1%	-2.1%	-1.8%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

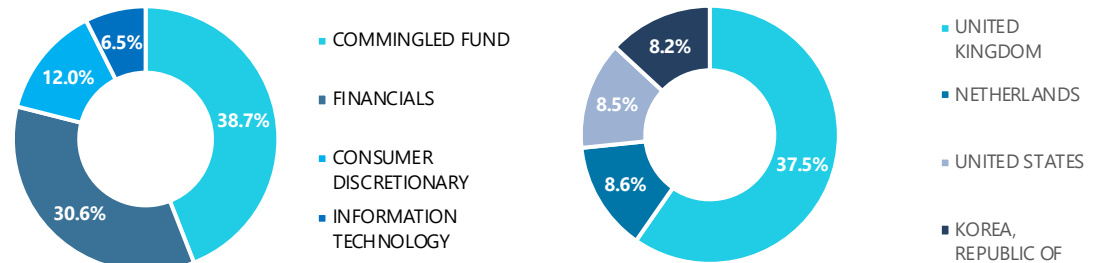
  

Universe data: Intl Equity Emerging Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Lazard Emerging Markets</b>	<b>-14.0%</b>	<b>100</b>	<b>-31.3%</b>	<b>74</b>	<b>-1.0%</b>	<b>57</b>	<b>-0.4%</b>	<b>47</b>
Median	-9.8%		-27.7%		-0.4%		-0.5%	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

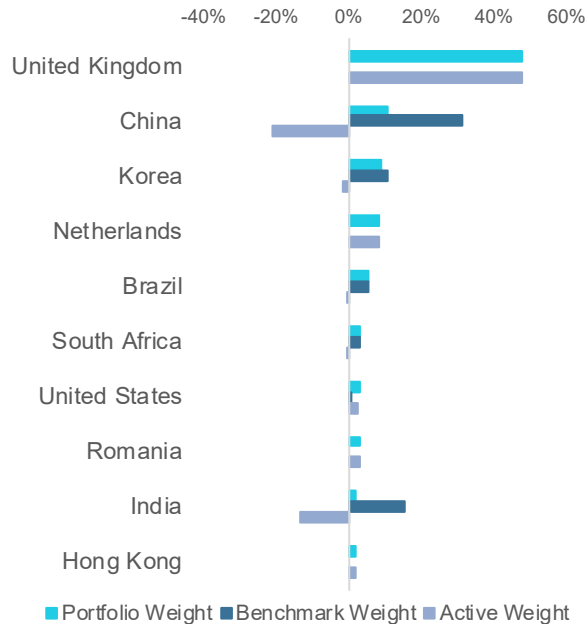


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>20.27</b>
Benchmark Risk	18.41
Active Risk	10.76
Portfolio Beta	0.94

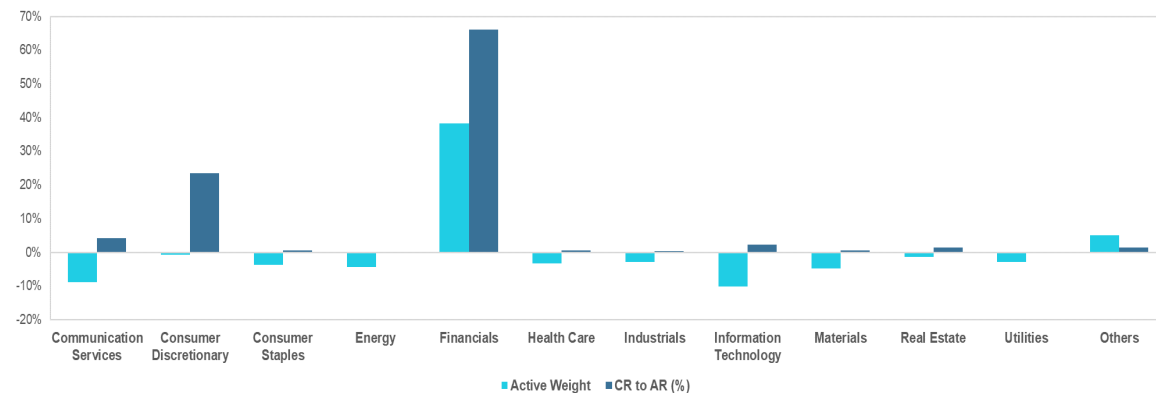
## Top Countries by Weight%



## 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	8.59%	0.00%	8.59%	43.61	14.18	0.157
JPMORGAN EMERGING MK	6.52%	0.00%	6.52%	29.98	9.72	0.140
FIDELITY CHINA SPECIAL SITUATIONS PLC	5.56%	0.00%	5.56%	39.84	9.36	0.161
TEMPLETON EMERG MARKETS INV TRUST	5.74%	0.00%	5.74%	30.45	7.68	0.124
VINACAPITAL VIETNAM OPPORTUNITY FD	4.18%	0.00%	4.18%	29.83	6.00	0.134
ASIA DRAGON TRUST PLC	2.66%	0.00%	2.66%	30.90	3.75	0.131
SCHRODER ASIA PAC	2.84%	0.00%	2.84%	28.46	3.73	0.121
TENCENT HOLDINGS LTD	0.16%	3.70%	-3.53%	37.95	3.60	-0.130
ABERDEEN NEW INDIA INV TRUST PLC	2.24%	0.00%	2.24%	33.20	3.54	0.150
UTILICO EMERGING MARKETS TRUST PLC	2.53%	0.00%	2.53%	30.04	3.51	0.129

## 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 September 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)	269,176.6	269,003.4
No. Of Issues	6,611.0	0.0
Dividend Yield	2.3	2.3
Return on Equity	24.2	24.1
Price to Sales	4.5	4.5
Price to Book	14.2	14.3
PE Ratio	16.1	16.3

## Top Holdings (% of assets)

APPLE INC	3.8%
MICROSOFT CORP	2.8%
AMAZON.COM INC	1.7%
TESLA INC	1.2%
ALPHABET INC CL A	1.0%
<b>Top 5 Holdings</b>	<b>10.4%</b>

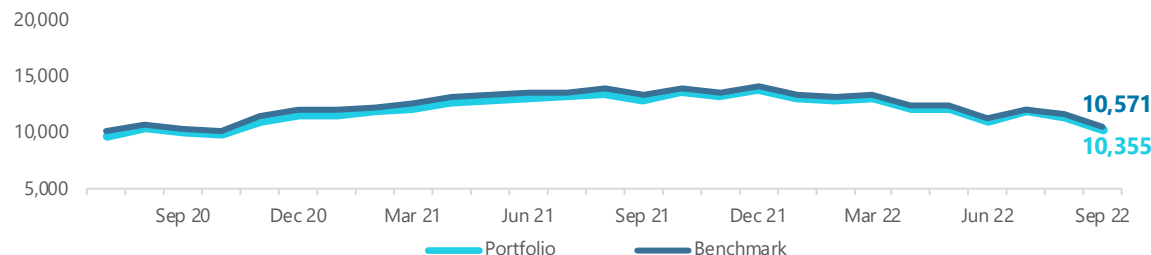
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>SSGA MSCI ACWI IMI</b>	<b>12,667.3</b>	<b>-6.8%</b>	<b>-20.5%</b>	--	--
MSCI ACWI IMI Net		-6.6%	-21.2%	--	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

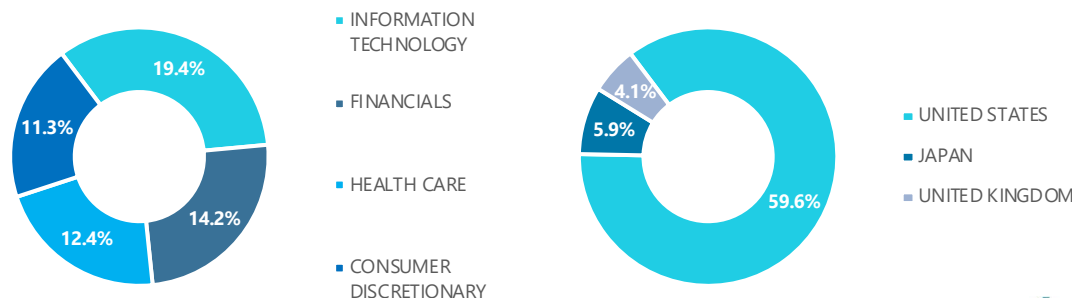
  

Universe data: Global Equity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>SSGA MSCI ACWI IMI</b>	<b>-6.8%</b>	<b>58</b>	<b>-20.5%</b>	<b>49</b>	--	--	--	--
Median	-6.2%		-20.7%		--	--	--	--

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

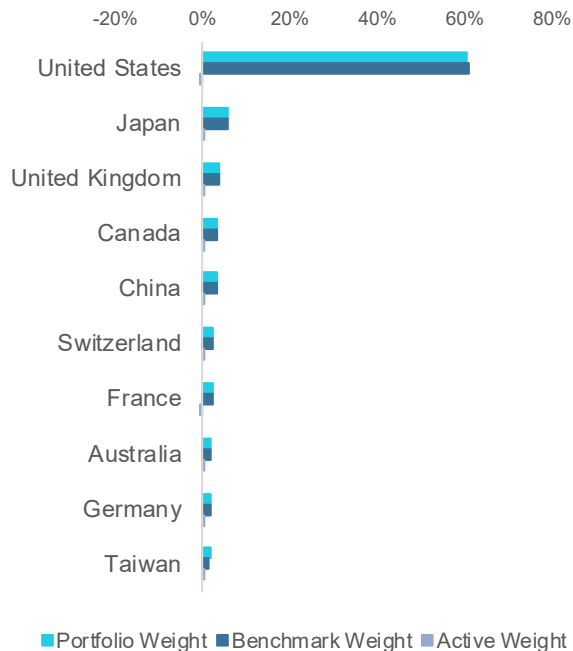


Los Angeles County Employees Retirement Association

### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>19.12</b>
Benchmark Risk	19.11
Active Risk	0.22
Portfolio Beta	1.00

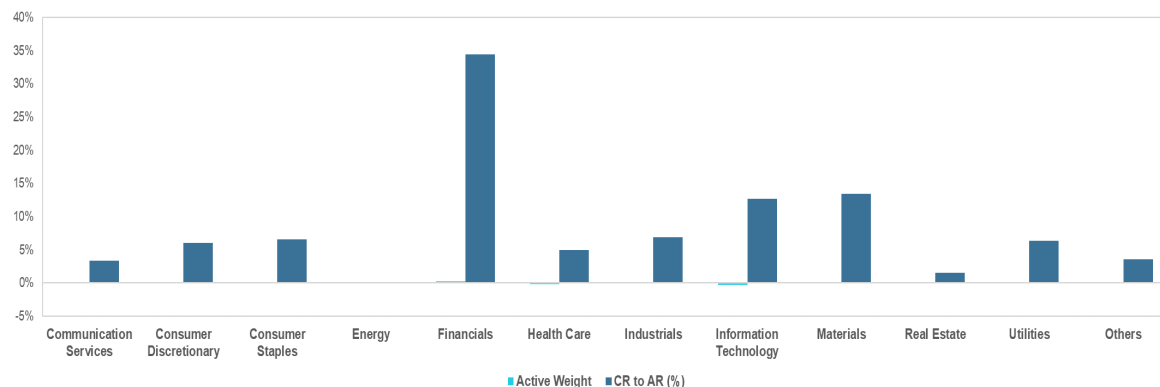
### Top Countries by Weight%



### 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	0.29%	0.00%	0.29%	40.87	18.29	0.145
ASML HOLDING NV	0.01%	0.30%	-0.29%	39.05	8.10	-0.057
RELIANCE INDUSTRIES LTD	0.00%	0.15%	-0.15%	31.00	3.87	-0.053
USD Future Cash Offset	-1.36%	0.00%	-1.36%	0.00	2.84	0.000
VALE SA COMMON STOC	0.08%	0.00%	0.08%	51.20	2.46	0.069
HOUSING DEVELOPMENT FINANCE COR	0.00%	0.08%	-0.08%	32.59	2.32	-0.058
AL RAJHI BANK	0.00%	0.07%	-0.07%	28.73	2.24	-0.065
BAJAJ FINANCE LTD	0.00%	0.04%	-0.04%	39.71	2.00	-0.102
ICICI BANK LTD	0.00%	0.09%	-0.09%	31.00	1.95	-0.042
SAUDI NATIONAL BANK SJSC	0.00%	0.06%	-0.06%	27.16	1.83	-0.061

### Portfolio Risk by GICS Sector



# Growth – Global Equity Symphony Financial

for the quarter ended September 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)

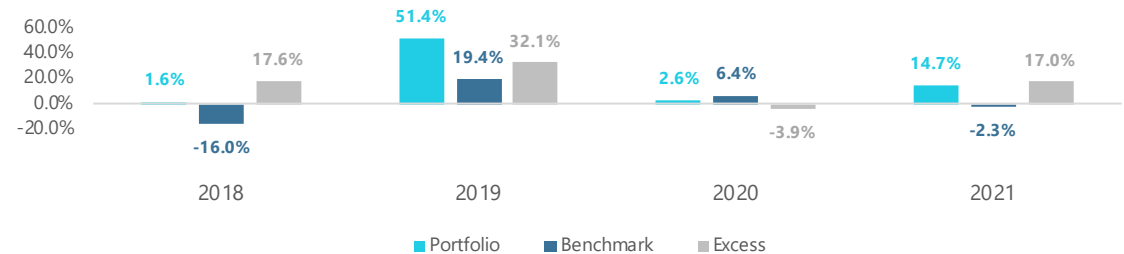
Standard Deviation	22.1%
Benchmark Standard Deviation	14.0%
Sharpe Ratio	0.51
Information Ratio	0.53
Beta	0.89
Tracking Error	18.3%

## Performance (net)<sup>1</sup>

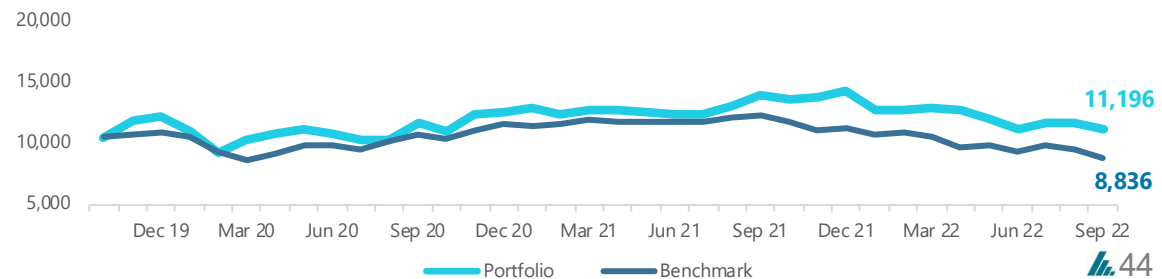
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Symphony Financial - Activist</b>	<b>206.9</b>	<b>1.5%</b>	<b>-19.7%</b>	<b>3.8%</b>	<b>8.4%</b>
MSCI Japan Small Cap		-4.5%	-27.6%	-4.0%	-2.3%
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

Universe data: Intl Equity Developed Mkt Funds (Active)	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Symphony Financial - Activist</b>	<b>1.6%</b>	<b>2</b>	<b>-16.4%</b>	<b>14</b>	<b>7.3%</b>	<b>5</b>	<b>11.3%</b>	<b>1</b>
Median	-9.0%		-24.2%		-1.0%		-0.4%	

## 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 September 30, 2022

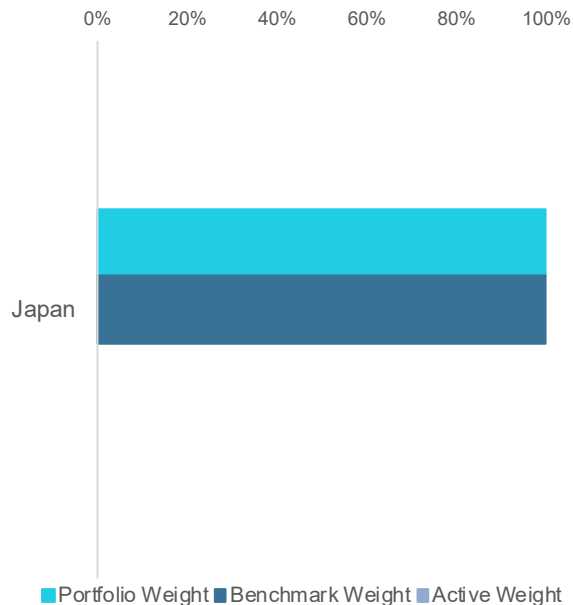


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>20.50</b>
Benchmark Risk	15.37
Active Risk	11.79
Portfolio Beta	1.09

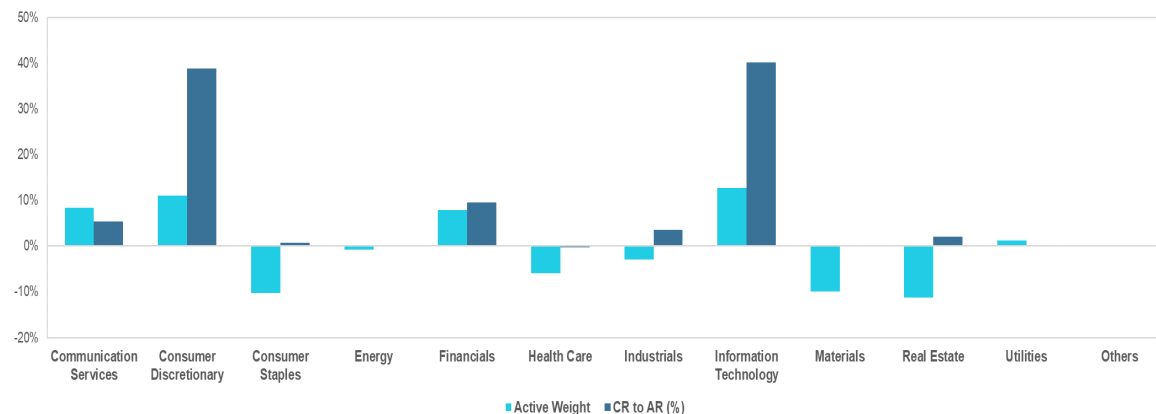
## Top Countries by Weight%



## Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
NAGAWA	23.56%	0.05%	23.51%	33.45	36.77	0.203
INFOMART	12.76%	0.09%	12.67%	52.26	29.80	0.296
RIKEN KEIKI	9.92%	0.05%	9.87%	43.42	12.17	0.164
JAPAN SECURITIES FINANCE CO LTD	14.60%	0.08%	14.53%	28.90	9.28	0.094
UNDISCLOSED – ENTERTAINMENT <sup>1</sup>	10.56%	0.10%	10.45%	28.04	5.66	0.083
ZUIKO	5.91%	0.00%	5.91%	28.95	2.00	0.059
KOMATSU MATERE CO LTD	4.05%	0.00%	4.05%	33.47	1.76	0.070
NISHIO RENT ALL	9.45%	0.06%	9.39%	23.81	1.51	0.038
DENYO	2.06%	0.00%	2.06%	27.26	0.43	0.044
SINKO INDUSTRIES LTD	1.23%	0.00%	1.23%	28.07	0.19	0.037

## Portfolio Risk by GICS Sector



<sup>1</sup> Security name undisclosed due to confidentiality reasons.

# Growth – Global Equity Systematic US Small Cap Value

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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)	3,737.9	2,566.1
No. Of Issues	149.0	0.0
Dividend Yield	3.5	1.4
Return on Equity	17.7	10.9
Price to Sales	1.8	12.0
Price to Book	6.9	5.3
PE Ratio	11.9	30.7

## Top Holdings (% of assets)

FIRST CITIZENS BCSHS CL A	3.5%
CROSS COUNTRY HEALTHCARE INC	2.1%
MAGNOLIA OIL + GAS CORP A	2.0%
ICF INTERNATIONAL INC	1.5%
NORTHWESTERN CORP	1.5%

**Top 5 Holdings** **10.6%**

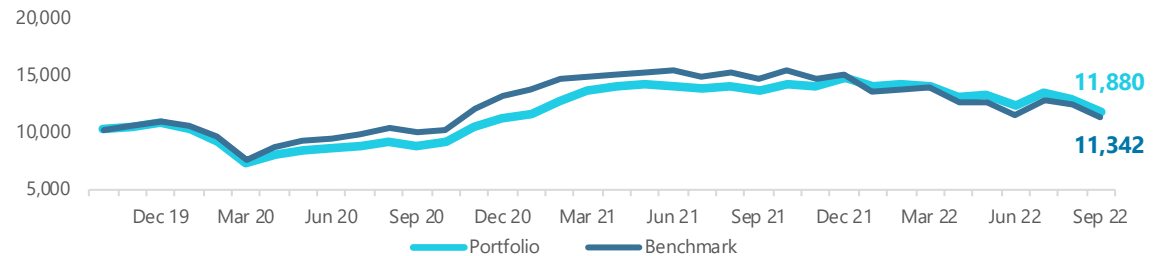
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Systematic US Small Cap Value</b>	<b>166.7</b>	<b>-4.0%</b>	<b>-13.2%</b>	<b>5.9%</b>	--
RUSSELL 2000		-2.2%	-23.5%	4.3%	--
Growth Policy Benchmark		-8.5%	-16.7%	6.1%	--

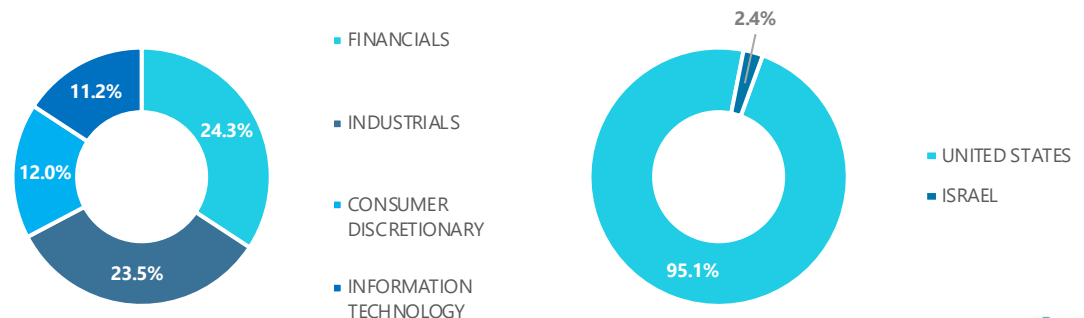
  

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Systematic US Small Cap Value</b>	<b>-3.8%</b>	<b>62</b>	<b>-12.7%</b>	<b>20</b>	<b>6.5%</b>	<b>33</b>	--	--
Median	-2.8%		-16.2%		6.0%		--	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

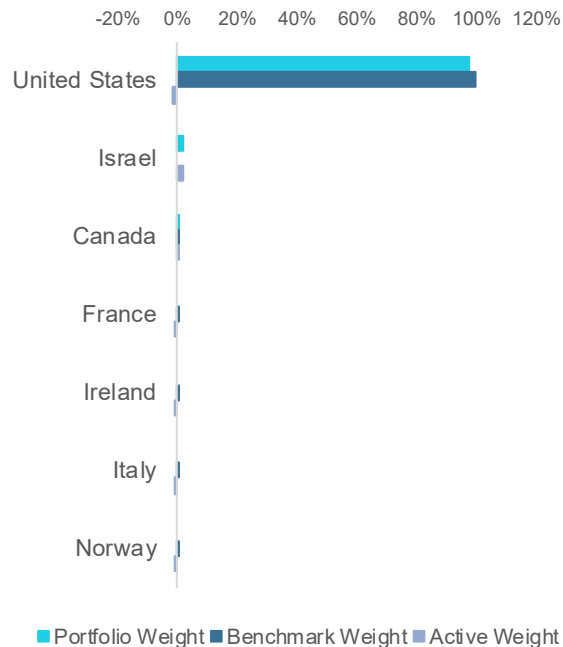


Los Angeles County Employees Retirement Association

## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>22.64</b>
Benchmark Risk	26.01
Active Risk	6.90
Portfolio Beta	0.84

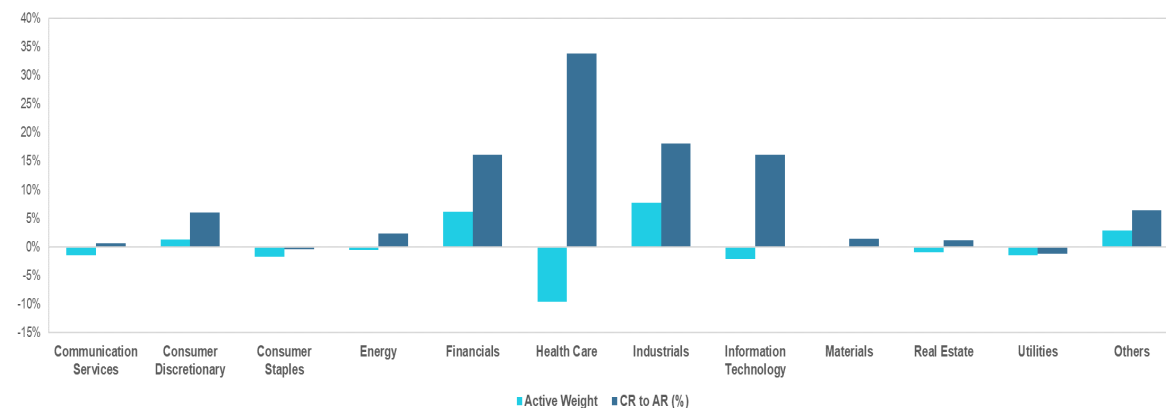
## Top Countries by Weight%



## Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
FIRST CITIZENS BANCSHARES INC NRTH	3.49%	0.00%	3.49%	33.64	5.15	-0.052
NORTHWESTERN CORP	1.52%	0.13%	1.39%	24.38	2.51	-0.029
WASHINGTON FEDERAL INC	1.31%	0.09%	1.23%	28.82	2.41	-0.018
WEBSTER FINANCIAL CORP	1.42%	0.00%	1.42%	33.06	2.09	-0.052
CROSS COUNTRY HEALTHCARE INC	2.14%	0.05%	2.09%	55.66	1.95	-0.089
ICF INTERNATIONAL INC	1.53%	0.09%	1.43%	27.62	1.89	-0.063
LAKELAND BANCORP INC	0.94%	0.05%	0.89%	27.66	1.78	-0.015
SILICON MOTION TECHNOLOGY CORP	1.20%	0.00%	1.20%	43.06	1.72	-0.055
UNITED COMMUNITY BANKS INC	1.10%	0.16%	0.94%	31.62	1.71	-0.028
CURTISS-WRIGHT CORP	1.18%	0.00%	1.18%	27.81	1.69	-0.054

## Portfolio Risk by GICS Sector

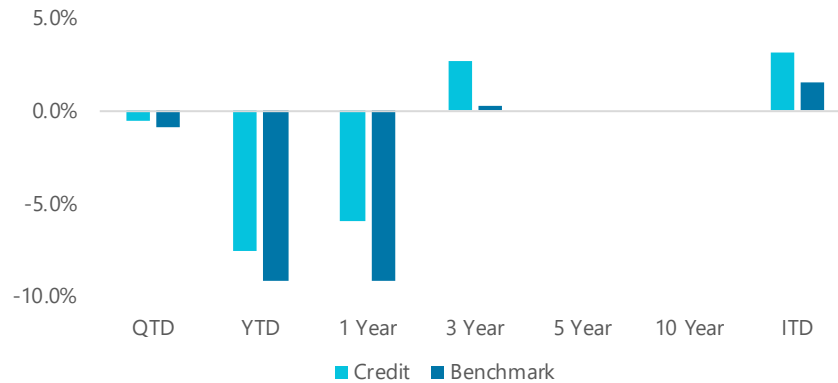


credit

# Summary

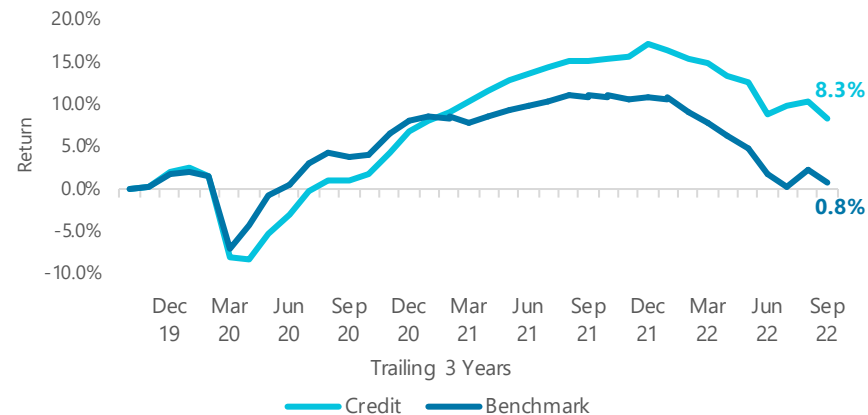
for the quarter ended September 30, 2022

## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>Credit</b>	<b>-0.6%</b>	<b>-7.6%</b>	<b>-5.9%</b>	<b>2.7%</b>	--	--	<b>3.2%</b>
Benchmark	-0.9%	-9.1%	-9.2%	0.3%	--	--	1.6%
Excess	0.4%	1.6%	3.3%	2.4%	--	--	1.6%

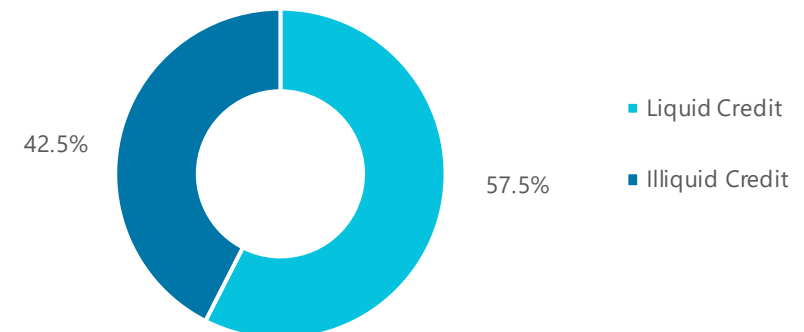
## Cumulative Return



## Functional Category

	QTD	FYTD	1 Year	3 Year
<b>Liquid Credit</b>	<b>-1.1%</b>	<b>-1.1%</b>	<b>-11.6%</b>	--
Liquid Credit Policy Benchmark	-0.6%	-0.6%	-11.3%	--
Excess	-0.4%	-0.4%	-0.3%	--
<b>Illiquid Credit</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.7%</b>	<b>10.8%</b>
Illiquid Credit Policy Benchmark	-1.3%	-1.3%	-6.8%	1.4%
Excess	1.3%	1.3%	10.5%	9.5%

## Exposure



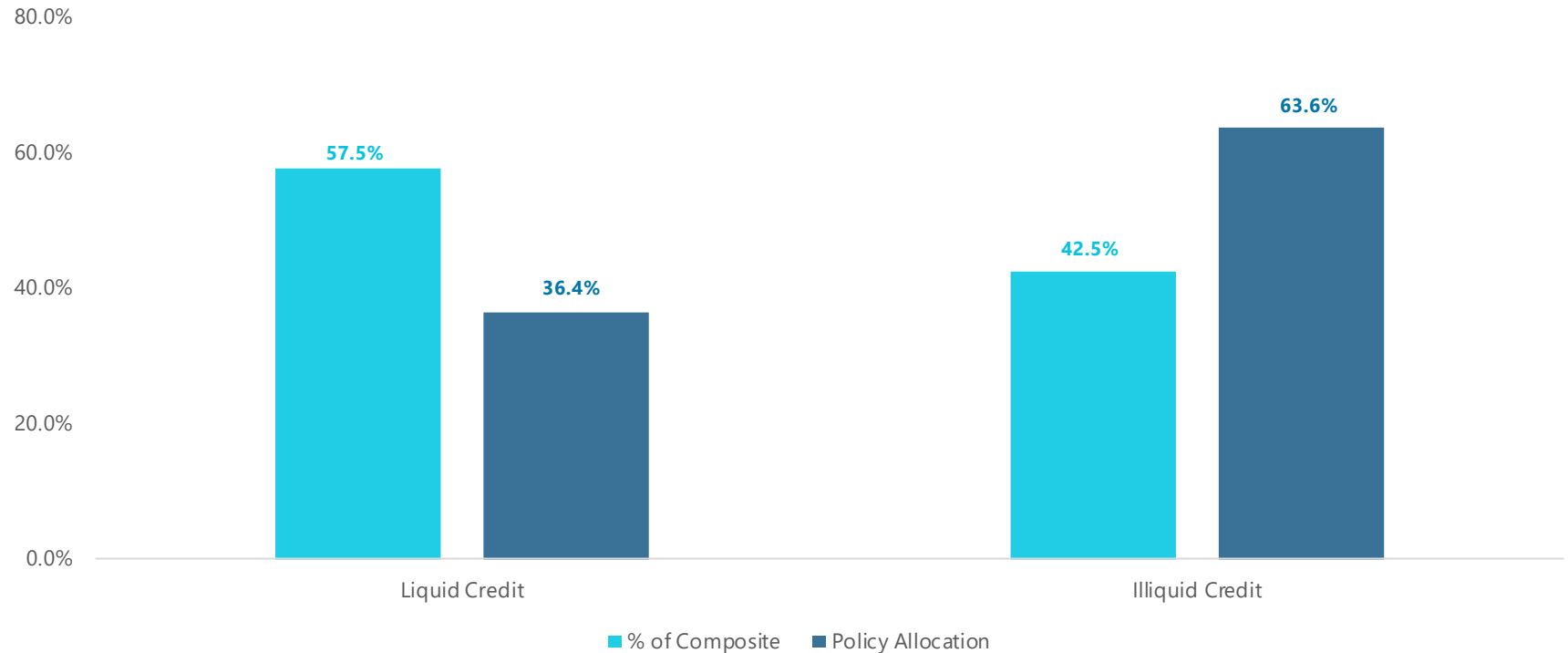
# Asset Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Actual vs. Policy



	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
<b>Credit</b>	<b>7,883</b>	<b>100.0%</b>	<b>100.0%</b>		
Liquid Credit	4,533	57.5%	36.4%	21.1%	1,667
Illiquid Credit	3,350	42.5%	63.6%	-21.1%	-1,667

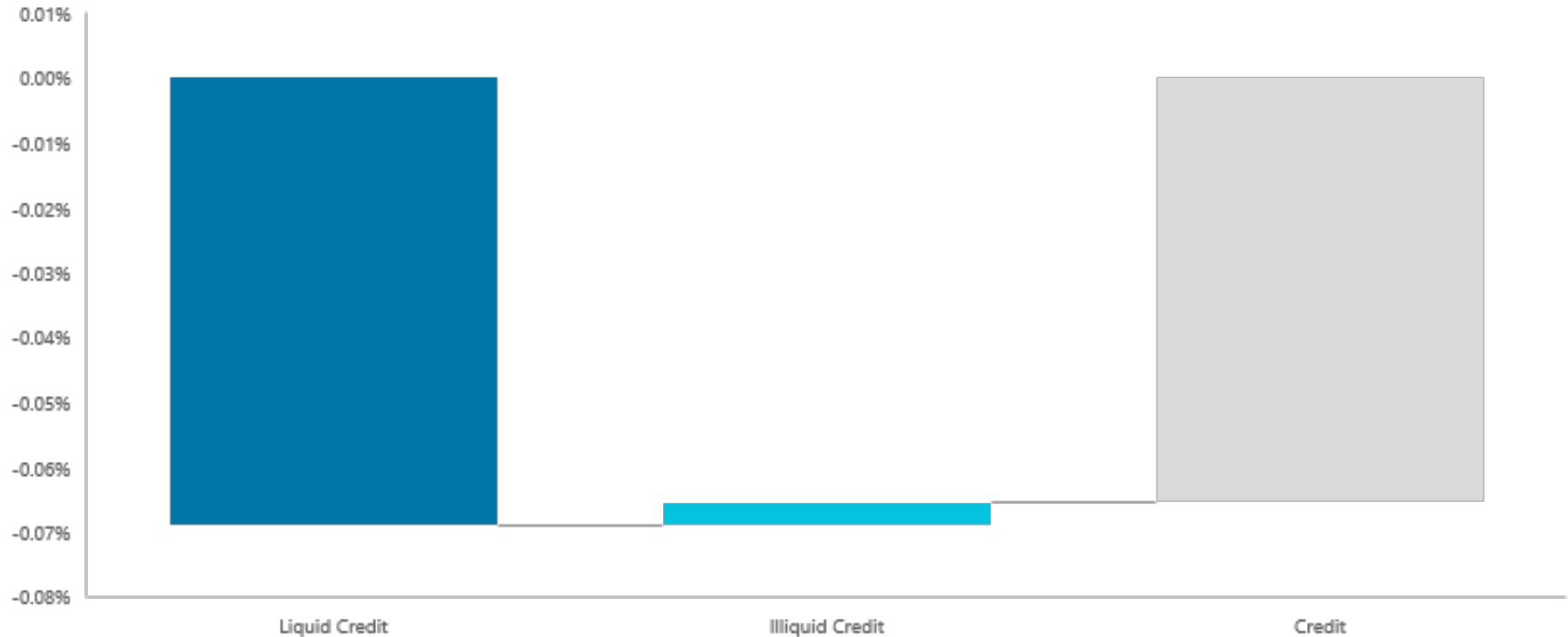
# Contribution to Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
Liquid Credit	-0.07%	Credit Suisse Bank Loans	0.02%	Ashmore Investment Management	-0.03%
Illiquid Credit	0.00%	BlackRock/Tennenbaum	0.01%	Brigade Cap Mgmt	-0.02%
Credit	-0.07%			abrdn	-0.02%
				BlackRock HY ETF	-0.01%
				PIMCO Tac Opps	-0.01%

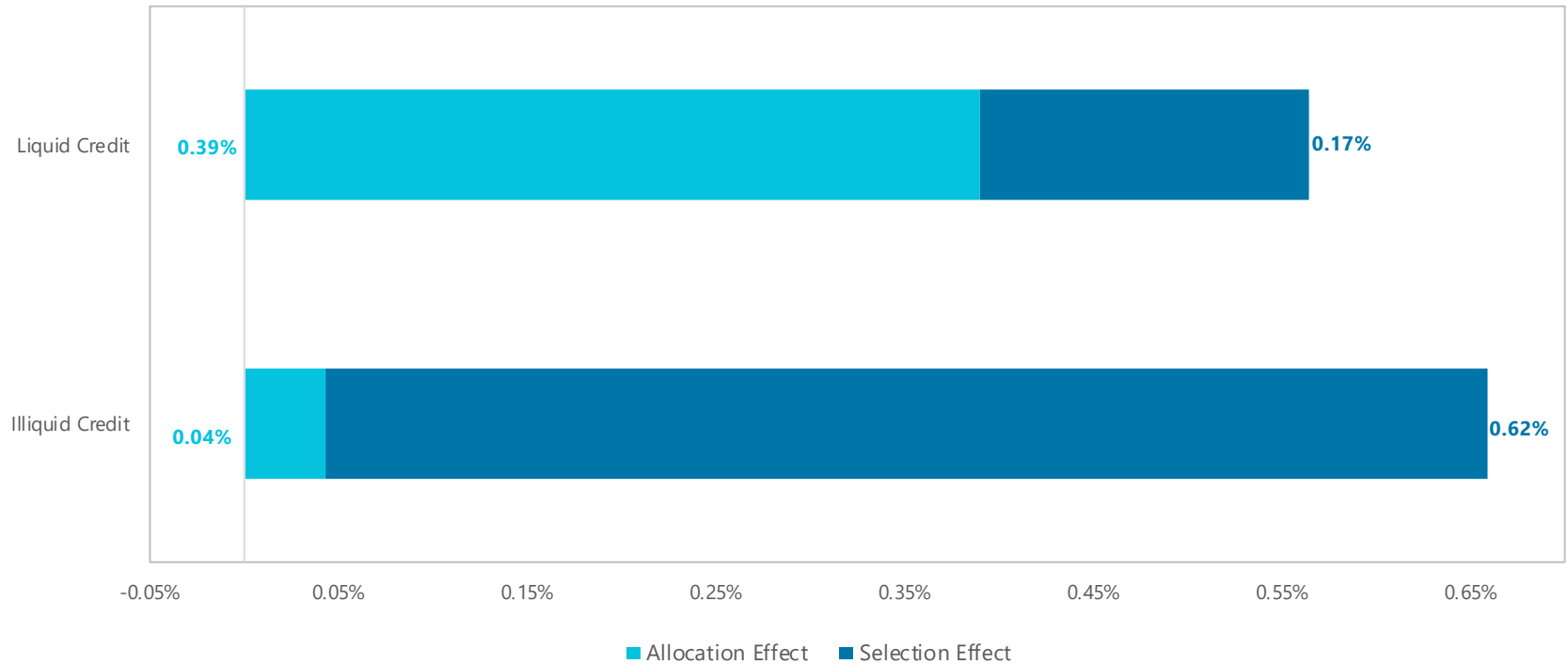
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



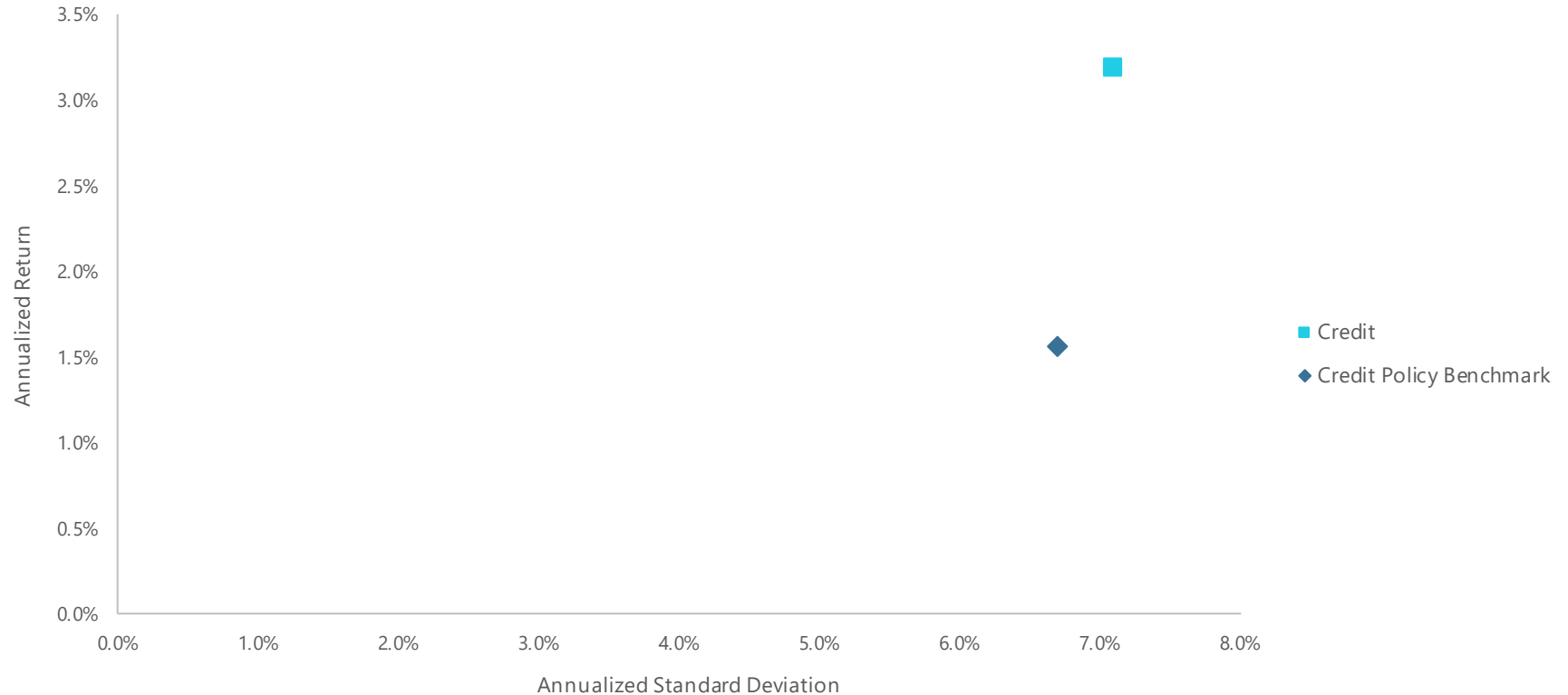
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>Credit</b>	<b>7,883</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.6%</b>	<b>-0.9%</b>	<b>0.43%</b>	<b>0.79%</b>	<b>0.36%</b>
Liquid Credit	4,533	57.5%	36.4%	-1.1%	-0.6%	0.39%	0.17%	-0.20%
Illiquid Credit	3,350	42.5%	63.6%	0.0%	-1.3%	0.04%	0.62%	0.56%

1. Total Value Add includes Interaction Effect.

# Risk vs. Return

for the quarter ended September 30, 2022

## Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Credit</b>	<b>3.2%</b>	<b>7.1%</b>				
Credit Policy Benchmark	1.6%	6.7%	0.38	0.56	0.96	3.2%

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

# Performance Detail

for the quarter ended September 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	Inception Date
<b>Credit</b>	<b>100.0%</b>	<b>7,883</b>	<b>7,824</b>	<b>-0.6%</b>	<b>-7.6%</b>	<b>-5.9%</b>	<b>2.7%</b>	--	--	<b>3.2%</b>	<b>Apr-2019</b>
Credit Policy Benchmark				-0.9%	-9.1%	-9.2%	0.3%	--	--	1.6%	
<b>Liquid Credit</b>	<b>57.5%</b>	<b>4,533</b>	<b>4,581</b>	<b>-1.1%</b>	<b>-11.9%</b>	<b>-11.6%</b>	--	--	--	<b>-11.6%</b>	<b>Oct-2021</b>
Liquid Credit Policy Benchmark				-0.6%	-11.6%	-11.3%	--	--	--	-11.3%	
abrdn	4.3%	340	356	-4.4%	-23.3%	-24.6%	-7.3%	-3.5%	--	-2.6%	Jul-2017
Ashmore Investment Management	3.9%	311	330	-5.7%	-24.8%	-27.0%	-9.3%	-5.2%	--	-4.2%	Jun-2017
Bain Capital	5.2%	407	407	0.2%	-3.3%	-2.5%	3.1%	3.3%	--	3.3%	Jun-2014
Beach Point	3.4%	269	273	-1.3%	-15.2%	-14.8%	-1.3%	1.4%	--	3.5%	Mar-2014
BlackRock HY ETF	7.0%	553	561	-1.3%	-14.9%	-14.2%	--	--	--	-2.2%	Feb-2020
Brigade Cap Mgmt	7.8%	616	632	-2.5%	-13.2%	-12.5%	1.8%	2.0%	4.0%	5.6%	Jul-2010
Credit Suisse Bank Loans	14.1%	1,115	1,103	1.2%	-3.7%	-3.0%	--	--	--	5.5%	Apr-2020
Crescent Capital	6.2%	489	489	0.0%	-6.1%	-5.4%	3.1%	3.3%	--	3.1%	May-2014
Pinebridge Investments	5.5%	432	432	-0.1%	-15.0%	-14.2%	--	--	--	-13.2%	Sep-2021
<b>Illiquid Credit</b>	<b>42.5%</b>	<b>3,350</b>	<b>3,243</b>	<b>0.0%</b>	<b>-0.7%</b>	<b>3.7%</b>	<b>10.8%</b>	--	--	<b>10.0%</b>	<b>Apr-2019</b>
Illiquid Credit Policy Benchmark				-1.3%	-6.2%	-6.8%	1.4%	--	--	3.8%	
Beach Point - Fund II	0.2%	16	12	--	--	--	--	--	--	--	Jun-2014
Beach Point - Fund III	2.0%	162	180	-3.0%	-7.9%	12.1%	13.6%	11.1%	--	11.5%	Jun-2017
Grosvenor OPCRD 2 HFOF	0.4%	29	31	-0.7%	5.0%	7.0%	4.8%	3.9%	--	5.6%	Mar-2016
Lake Vineyard	3.4%	268	134	-2.2%	--	--	--	--	--	-1.6%	Apr-2022
Magnetar	10.5%	826	840	0.2%	-0.9%	5.2%	--	--	--	20.5%	Aug-2020
Napier Park	10.2%	806	805	0.2%	-4.8%	-3.1%	--	--	--	16.9%	Apr-2020
PIMCO Tac Opps	3.5%	275	282	-2.4%	-5.5%	-1.0%	6.0%	--	--	5.9%	Nov-2018
Private Equity - Credit	2.7%	216	221	-1.8%	8.3%	12.3%	15.4%	--	--	13.4%	Jan-2019
Real Estate - Credit	1.4%	112	109	0.9%	7.7%	13.1%	9.7%	9.4%	8.6%	8.9%	Oct-2011
BlackRock/Tennenbaum	8.1%	640	630	1.6%	4.2%	6.1%	7.1%	7.3%	--	7.2%	Nov-2014



# Liquid Credit Risk Summary

for the quarter ended September 30, 2022

## Risk Summary

	Value
<b>Total Risk</b>	<b>6.01</b>
Benchmark Risk	5.67
Active Risk	0.61
Portfolio Beta	1.06
Cont. to Eff. Duration	2.80
Convexity	0.14
Yield to Worst (%)	10.31
OAS to Sw ap (bp)	504

## Risk Decomposition

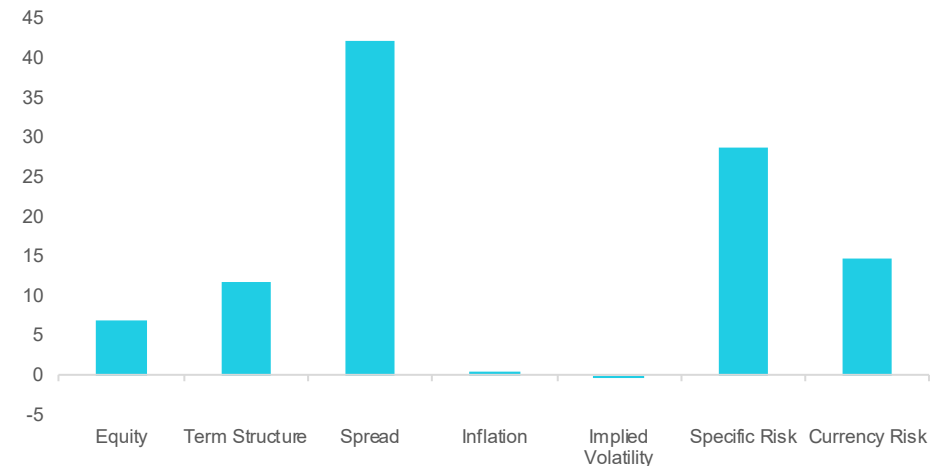
Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
<b>Total Risk</b>	<b>6.01</b>	<b>100.00</b>	<b>0.61</b>	<b>100.00</b>
Local Market Risk	5.80	96.40	0.52	85.44
Common Factor Risk	5.78	96.04	0.35	57.08
Specific Risk	0.02	0.36	0.17	28.36
Currency Risk	0.22	3.60	0.09	14.56

## Contribution to Risk



	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
<b>Liquid Credit</b>	<b>4,398</b>	<b>100.00</b>	<b>6.01</b>	<b>6.01</b>	<b>100.00</b>
High Yield	1,825	41.50	7.32	2.93	48.65
Bank Loans	1,921	43.68	4.81	1.87	31.09
Emerging Market Debt	652	14.82	9.49	1.22	20.26

## Active Risk from Common Factors



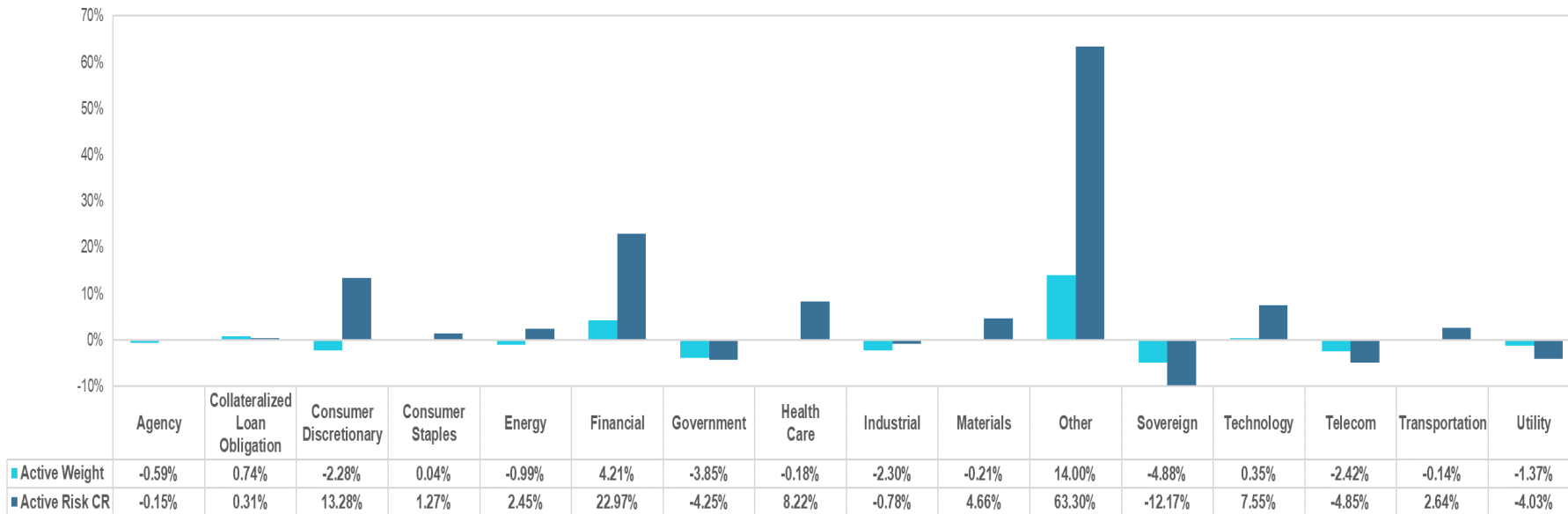
# Liquid Credit Risk Summary

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

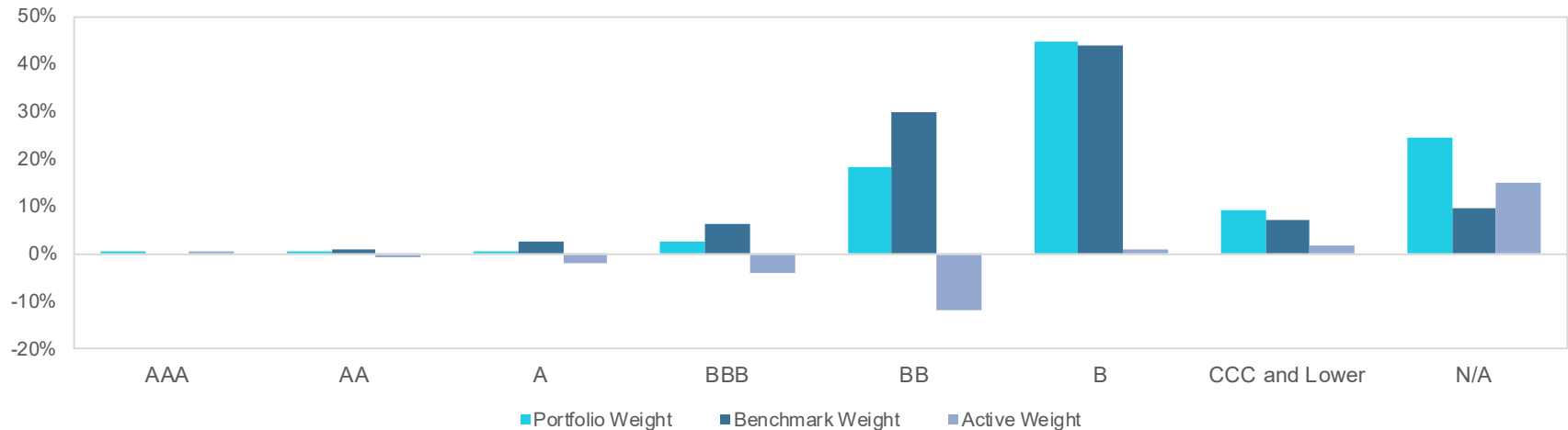
## Portfolio Allocation By Bond Sector



# Liquid Credit Risk Summary

for the quarter ended September 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				
<b>Credit</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>6.01</b>	<b>0.61</b>	<b>100.00</b>	<b>2.80</b>
AAA	0.13%	0.00%	0.13%	13.55	0.00	-0.60%	0.02
AA	0.30%	0.98%	-0.68%	10.43	0.02	-0.1%	0.03
A	0.69%	2.42%	-1.72%	10.64	0.04	-1.1%	0.09
BBB	2.45%	6.32%	-3.87%	5.99	0.06	-9.5%	0.14
BB	18.07%	29.69%	-11.62%	6.12	0.19	-25.1%	0.75
B	44.83%	43.90%	0.93%	6.38	0.24	42.9%	0.84
CCC and Lower	9.05%	7.28%	1.78%	10.02	0.05	16.4%	0.21
N/A	24.49%	9.43%	15.06%	4.82	0.02	76.5%	0.70

# Credit – Liquid Credit

## Aberdeen Asset Management

for the quarter ended September 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	11.1%
Benchmark Standard Deviation	9.3%
Sharpe Ratio	-0.29
Information Ratio	-0.45
Beta	1.17
Tracking Error	2.6%

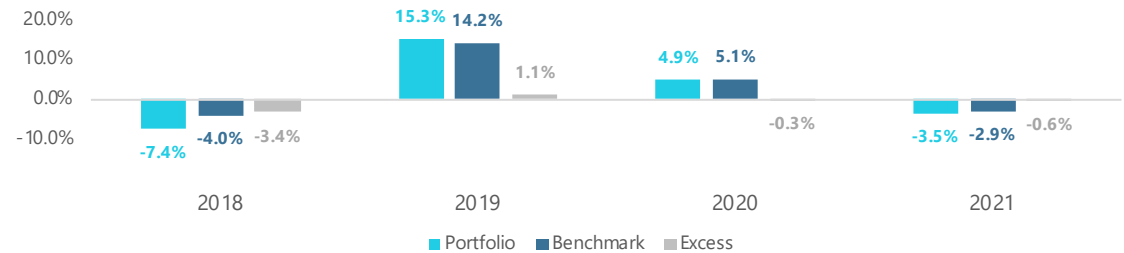
### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>abrdn</b>	<b>340.1</b>	<b>-4.4%</b>	<b>-24.6%</b>	<b>-7.3%</b>	<b>-3.5%</b>
EMD Custom Benchmark		-4.1%	-21.5%	-5.9%	-2.2%
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

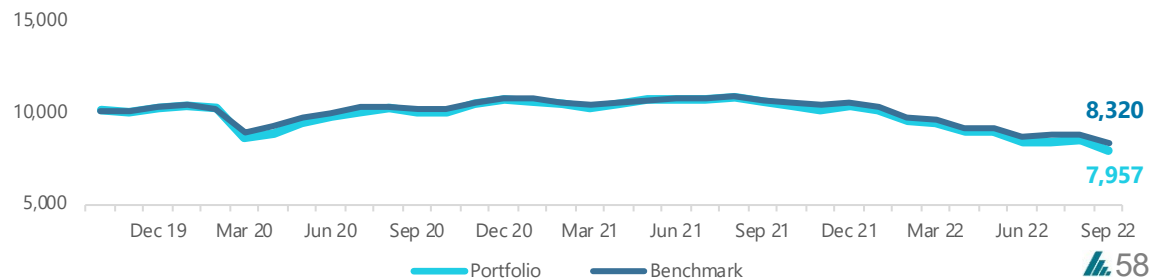
  

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>abrdn</b>	<b>-4.3%</b>	<b>65</b>	<b>-24.3%</b>	<b>93</b>	<b>-7.0%</b>	<b>95</b>	<b>-3.1%</b>	<b>97</b>
Median	-2.9%		-10.0%		-1.2%		0.6%	

### Calendar Year Returns



### Growth of \$10,000



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

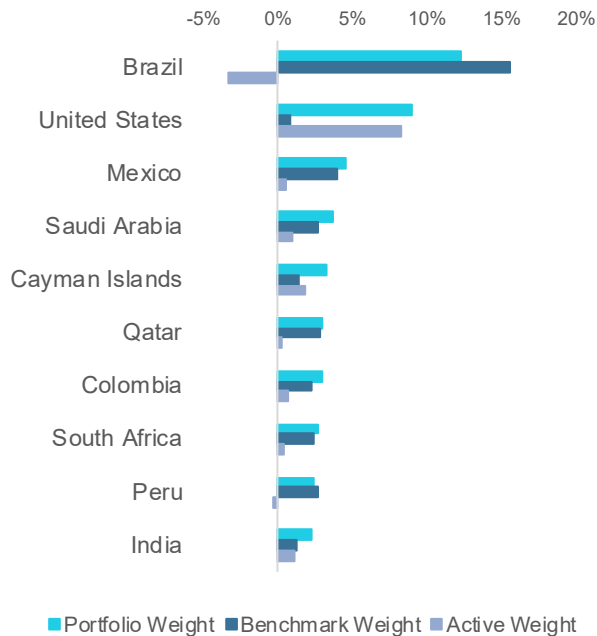
# Credit Risk Analysis – Liquid Credit Aberdeen Asset Management

for the quarter ended September 30, 2022

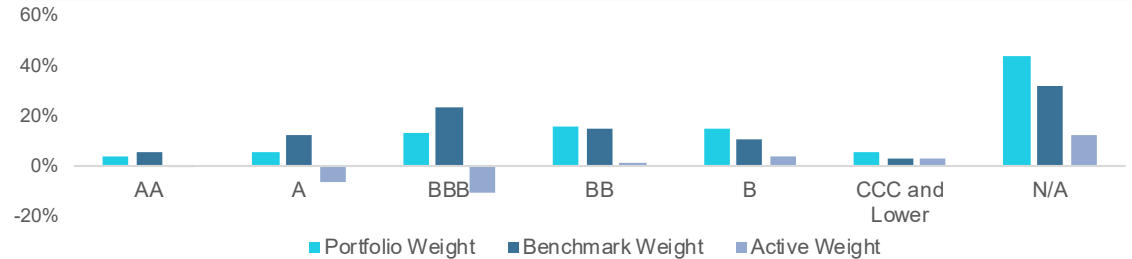
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>10.32</b>
Benchmark Risk	7.45
Active Risk	3.76
Portfolio Beta	1.33
Cont. to Eff. Duration	5.23
Yield to Worst (%)	10.73
OAS to Swap (bp)	513

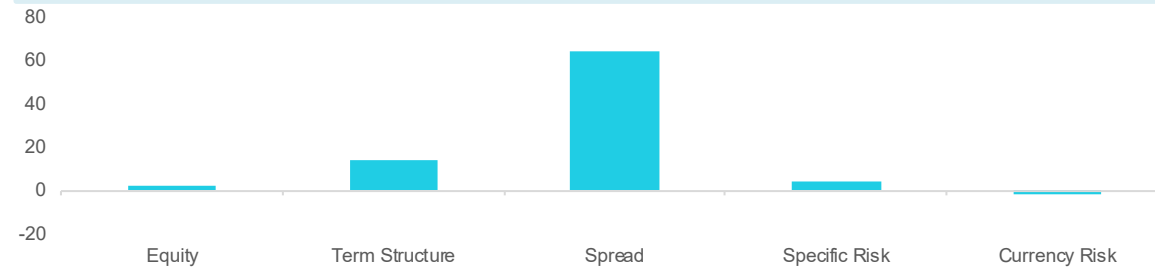
## Top Countries by Weight%



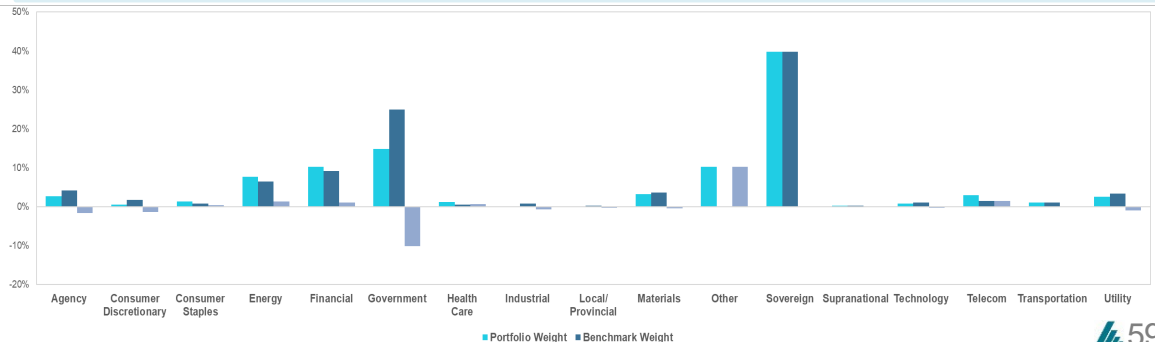
## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit Ashmore

for the quarter ended September 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)

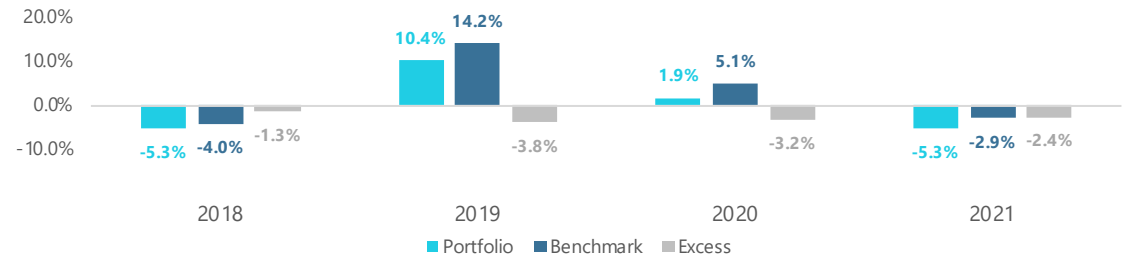
Standard Deviation	13.2%
Benchmark Standard Deviation	9.3%
Sharpe Ratio	-0.33
Information Ratio	-0.56
Beta	1.39
Tracking Error	4.6%

## Performance (net)<sup>1</sup>

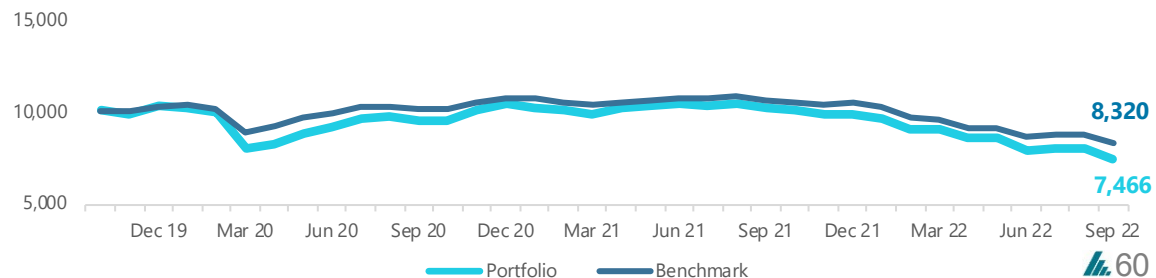
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Ashmore Investment Management</b>	<b>311.3</b>	<b>-5.7%</b>	<b>-27.0%</b>	<b>-9.3%</b>	<b>-5.2%</b>
EMD Custom Benchmark		-4.1%	-21.5%	-5.9%	-2.2%
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Ashmore Investment Management</b>	<b>-5.6%</b>	<b>85</b>	<b>-26.7%</b>	<b>94</b>	<b>-8.8%</b>	<b>98</b>	<b>-4.6%</b>	<b>98</b>
Median	-2.9%		-10.0%		-1.2%		0.6%	

## Calendar Year Returns



## Growth of \$10,000



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

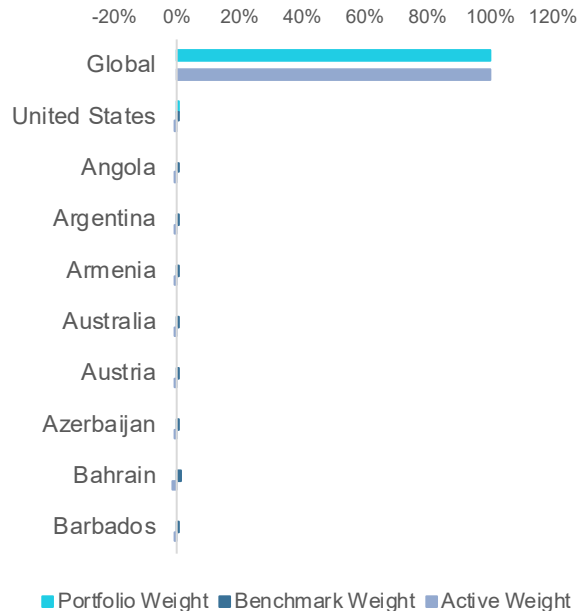
# Credit Risk Analysis – Liquid Credit Ashmore

for the quarter ended September 30, 2022

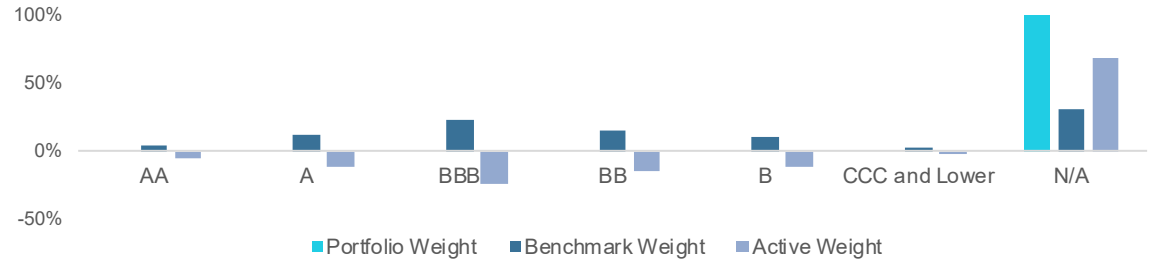
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>9.65</b>
Benchmark Risk	7.45
Active Risk	5.31
Portfolio Beta	1.08
Cont. to Eff. Duration	5.51
Yield to Worst (%)	0.00
OAS to Swap (bp)	-428

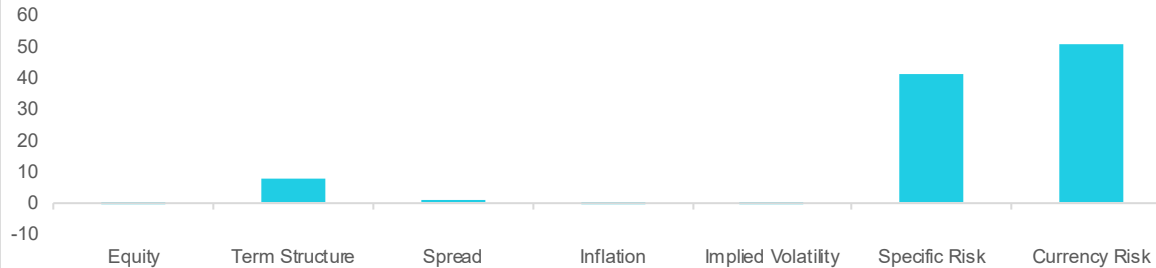
## Top Countries by Weight%



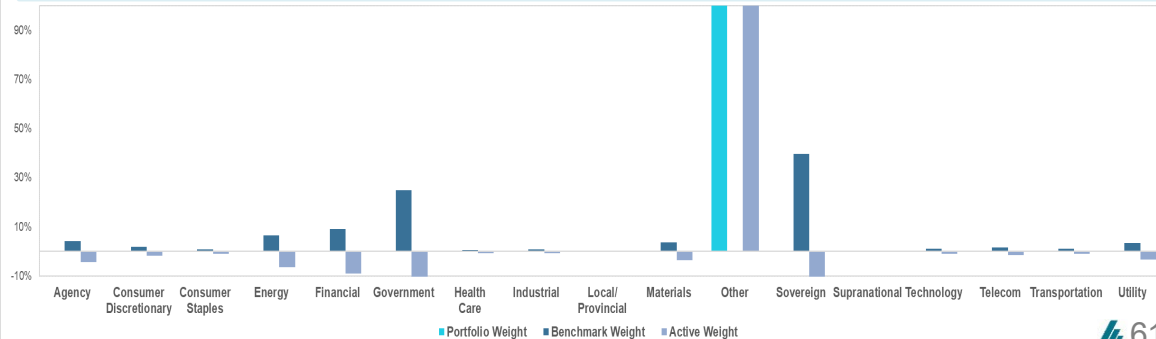
## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit Bain Capital

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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	551.0	0.0
Effective Duration	0.2	4.2
Convexity	0.0	0.1
Coupon Rate	5.9	5.8
Yield to Maturity	8.1	9.3
Current Yield	6.3	6.9
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	0.9%
NAVICURE INC	0.7%
CHAMBER BIDCO LIMITED	0.7%
CST BUYER COMPANY	0.6%
<b>Top 5 Holdings</b>	<b>3.8%</b>

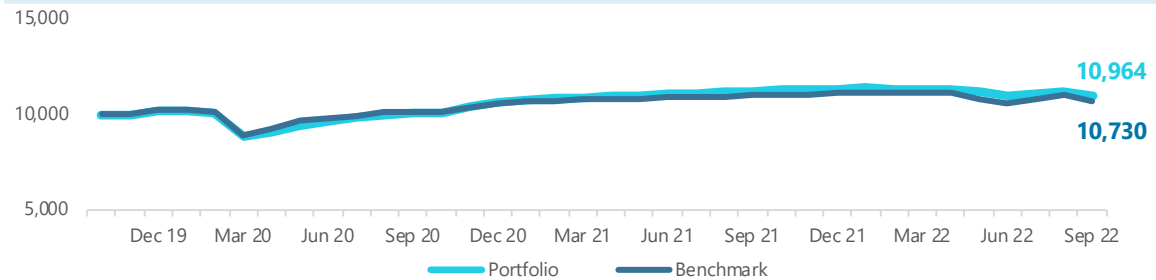
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Bain Capital</b>	<b>407.5</b>	<b>0.2%</b>	<b>-2.5%</b>	<b>3.1%</b>	<b>3.3%</b>
Bank Loans Custom Benchmark		1.2%	-2.6%	2.4%	3.2%
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

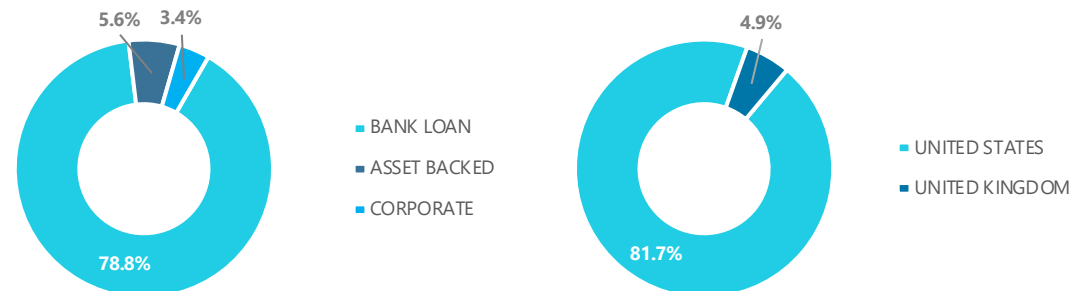
  

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Bain Capital</b>	<b>0.4%</b>	<b>22</b>	<b>-2.0%</b>	<b>33</b>	<b>3.7%</b>	<b>19</b>	<b>3.9%</b>	<b>14</b>
Median	-2.9%		-10.0%		-1.2%		0.6%	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.



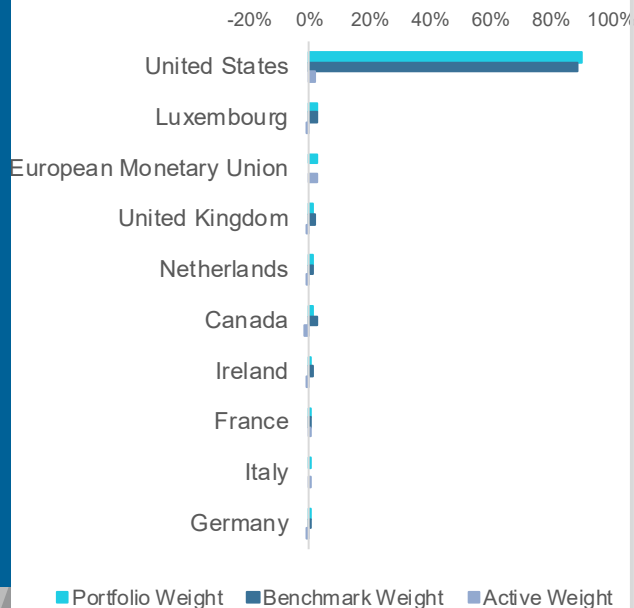
# Credit Risk Analysis – Liquid Credit Bain Capital

for the quarter ended September 30, 2022

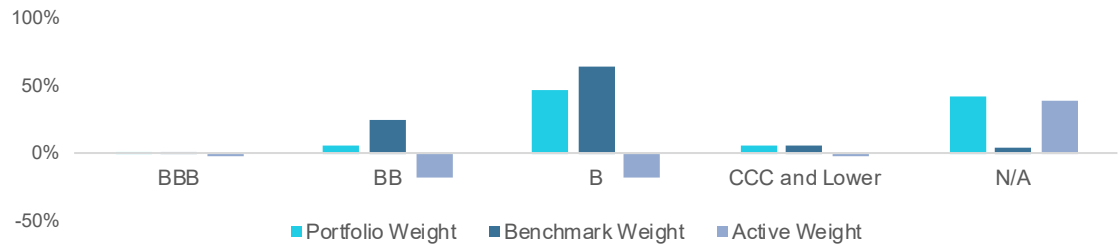
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>3.60</b>
Benchmark Risk	5.33
Active Risk	1.90
Portfolio Beta	0.66
Cont. to Eff. Duration	0.54
Yield to Worst (%)	8.25
OAS to Swap (bp)	510

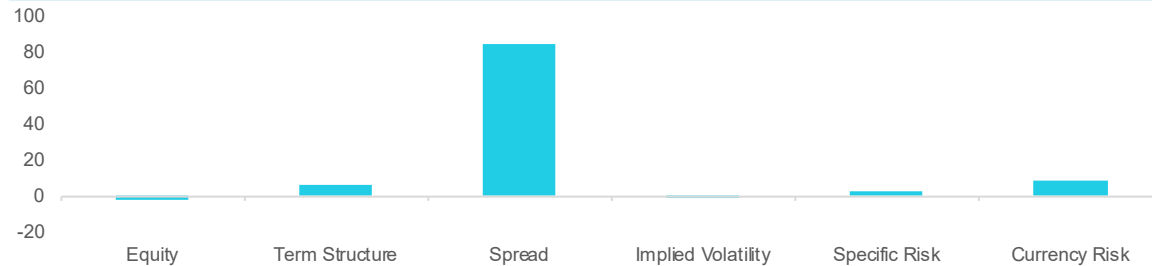
## Top Countries by Weight%



## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit Beach Point

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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	262.0	0.0
Effective Duration	4.0	4.2
Convexity	0.1	0.1
Coupon Rate	5.8	5.8
Yield to Maturity	9.7	9.3
Current Yield	7.0	6.9
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	1.6%
MPH ACQUISITION HOLDINGS	1.4%
COMPASS GROUP DIVERSIFIE	1.3%
SANDSTONE PEAK LTD.	1.2%
<b>Top 5 Holdings</b>	<b>7.4%</b>

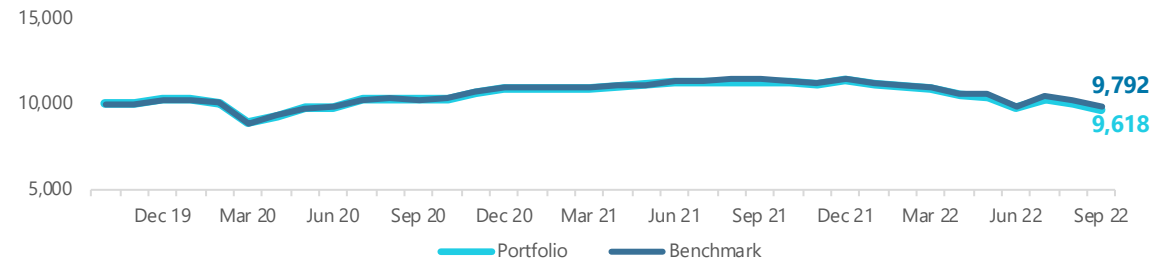
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Beach Point</b>	<b>269.0</b>	<b>-1.3%</b>	<b>-14.8%</b>	<b>-1.3%</b>	<b>1.4%</b>
Beachpoint Custom Benchmark		-0.6%	-14.1%	-0.7%	1.4%
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

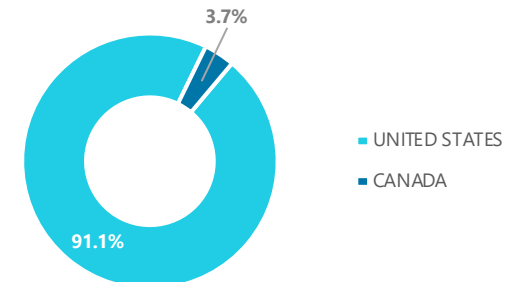
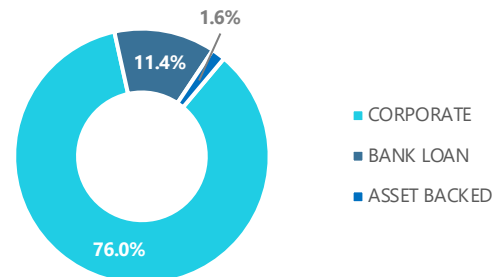
  

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Beach Point</b>	<b>-1.2%</b>	<b>40</b>	<b>-14.4%</b>	<b>73</b>	<b>-0.8%</b>	<b>47</b>	<b>1.9%</b>	<b>24</b>
Median	-2.9%		-10.0%		-1.2%		0.6%	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.

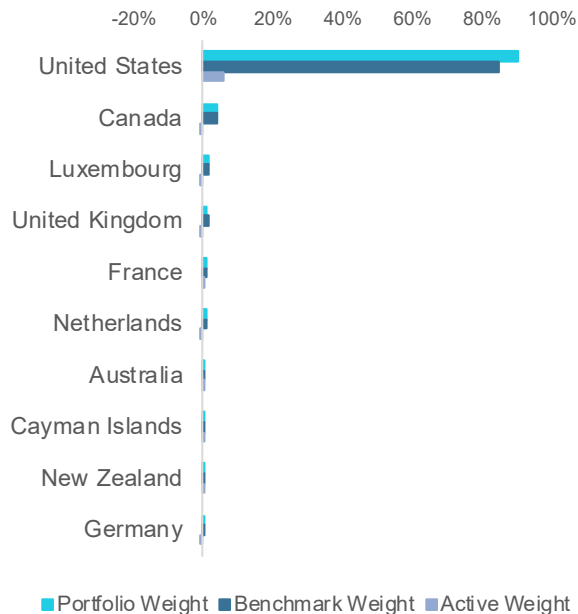
# Credit Risk Analysis – Liquid Credit Beach Point

for the quarter ended September 30, 2022

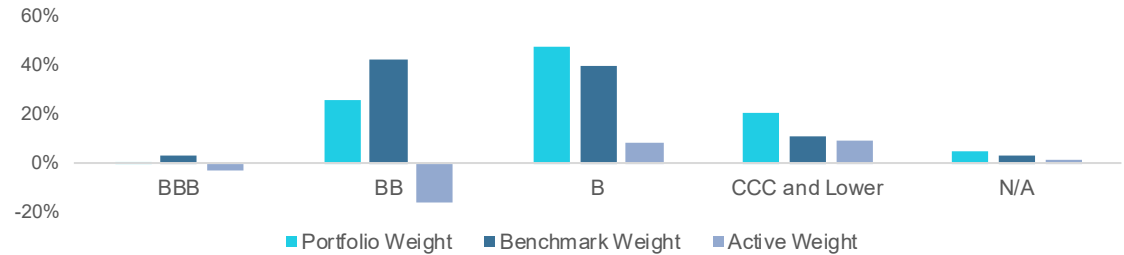
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>7.82</b>
Benchmark Risk	6.80
Active Risk	1.57
Portfolio Beta	1.13
Cont. to Eff. Duration	4.07
Yield to Worst (%)	9.43
OAS to Swap (bp)	520

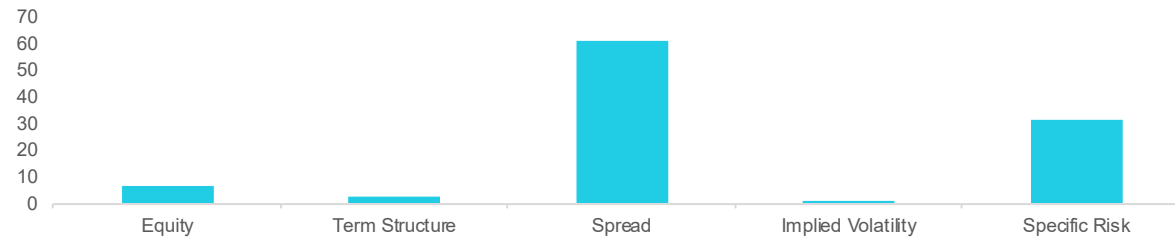
## Top Countries by Weight%



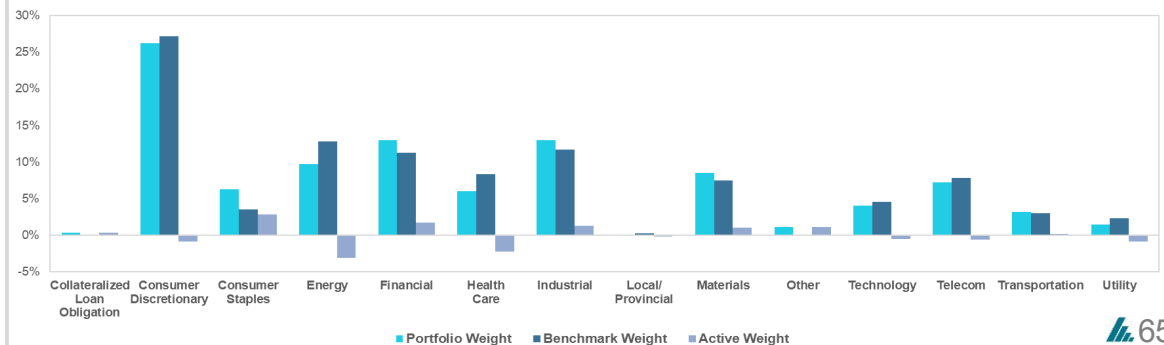
## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit Brigade Capital

for the quarter ended September 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	0.0
Effective Duration	4.0	4.2
Convexity	0.4	0.1
Coupon Rate	6.6	5.8
Yield to Maturity	11.8	9.3
Current Yield	8.3	6.9
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

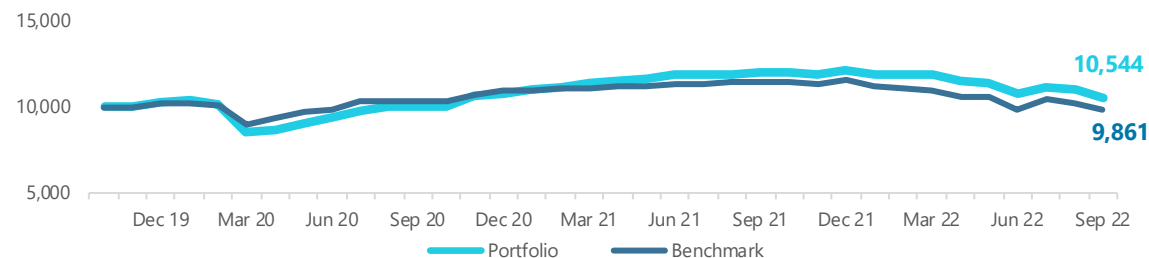
## Top Holdings (% of assets)

CORNERSTONE CHEMICAL CO	1.9%
EPIC Y GRADE SERVICES, LP	1.8%
RAIN CII CARBON LLC/CII	1.2%
BAFFINLAND IRON CORP/LP	1.1%
LIFESCAN GLOBAL CORP	1.1%
<b>Top 5 Holdings</b>	<b>7.1%</b>

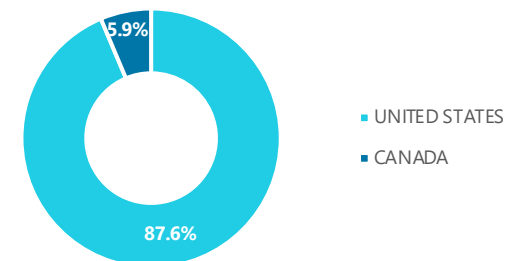
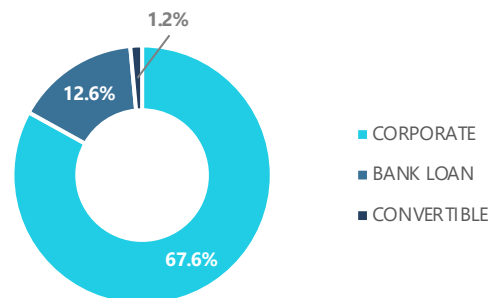
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year			
Brigade Cap Mgmt	615.9	-2.5%	-12.5%	1.8%	2.0%			
Brigade Custom Benchmark		-0.6%	-14.1%	-0.5%	1.6%			
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--			
Universe data: US Fixed Income Funds								
	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Brigade Cap Mgmt	-2.4%	48	-12.1%	61	2.3%	21	2.6%	16
Median	-2.9%		-10.0%		-1.2%		0.6%	

## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

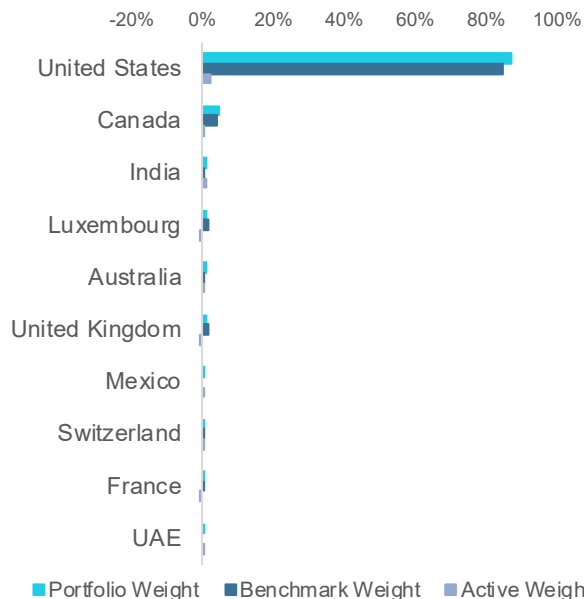


Los Angeles County Employees Retirement Association

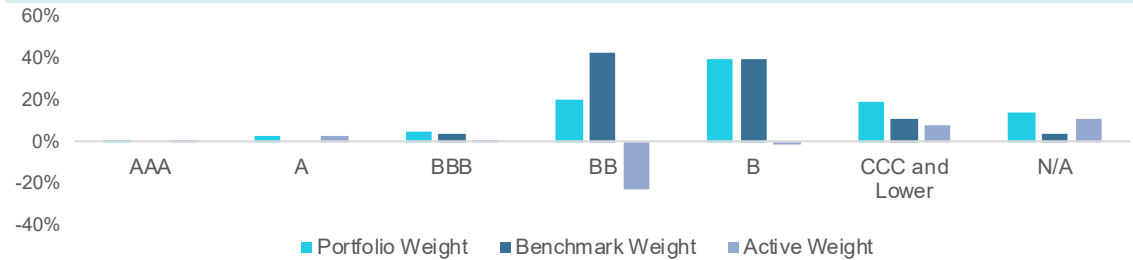
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>7.95</b>
Benchmark Risk	6.80
Active Risk	1.98
Portfolio Beta	1.14
Cont. to Eff. Duration	4.04
Yield to Worst (%)	10.06
OAS to Sw ap (bp)	579

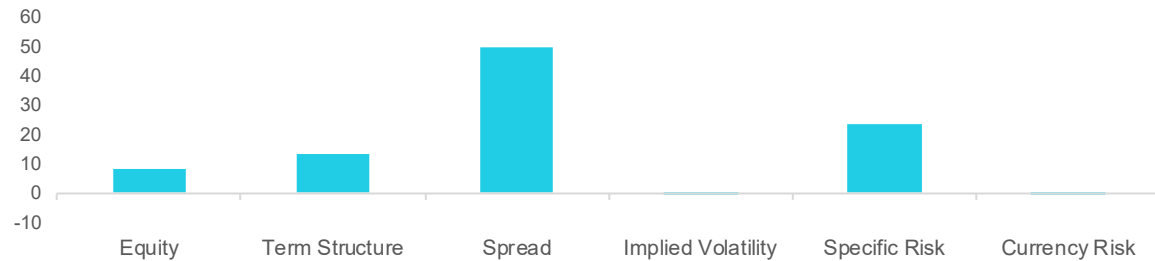
## Top Countries by Weight%



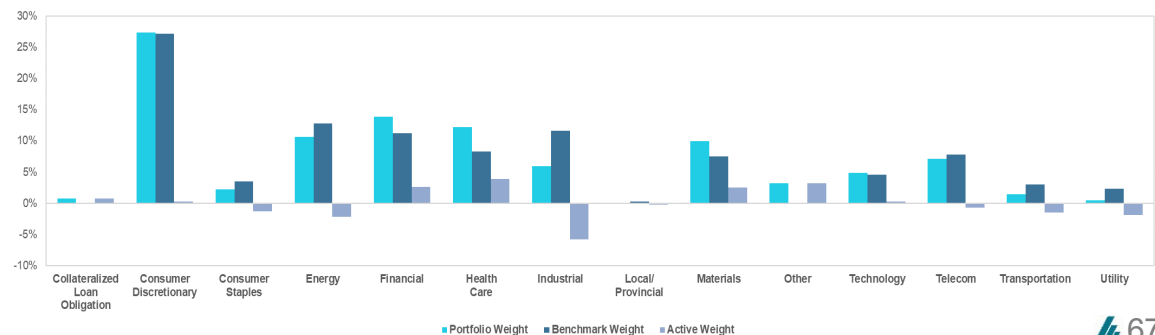
## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit

## Credit Suisse

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### 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	498.0	0.0
Effective Duration	0.2	4.2
Convexity	0.0	0.1
Coupon Rate	6.4	5.8
Yield to Maturity	9.2	9.3
Current Yield	6.9	6.9
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

### Top Holdings (% of assets)

FINASTRA USA, INC.	0.8%
POLARIS NEWCO, LLC	0.7%
WILLIAM MORRIS ENDEAVOR ENTMT	0.7%
MEDLINE BORROWER, LP	0.7%
NFP CORP	0.7%
<b>Top 5 Holdings</b>	<b>3.6%</b>

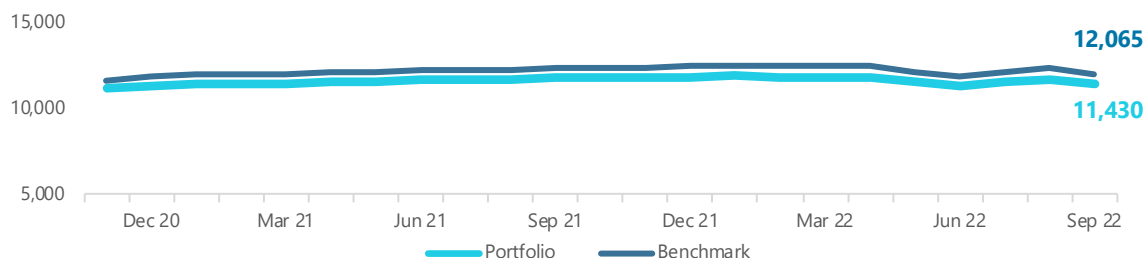
### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Credit Suisse Bank Loans</b>	<b>1,115.4</b>	<b>1.2%</b>	<b>-3.0%</b>	--	--
CS Leveraged Loan Index		1.2%	-2.6%	--	--
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

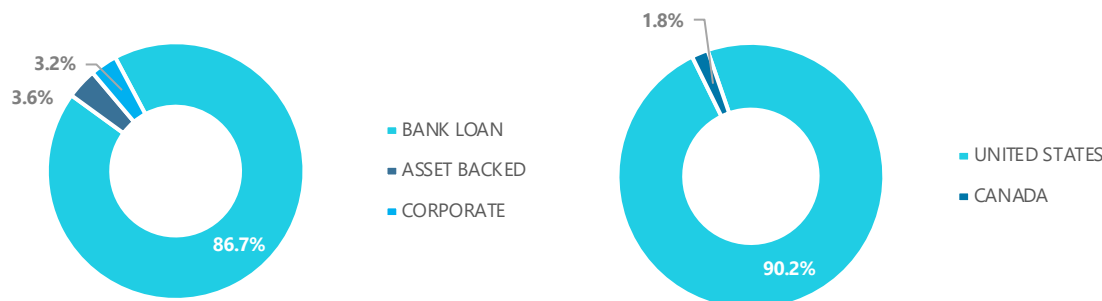
  

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Credit Suisse Bank Loans</b>	<b>1.2%</b>	<b>13</b>	<b>-2.8%</b>	<b>34</b>	--	--	--	--
Median	-2.9%		-10.0%		--	--	--	--

### Growth of \$10,000



### Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.

# Credit Risk Analysis – Liquid Credit

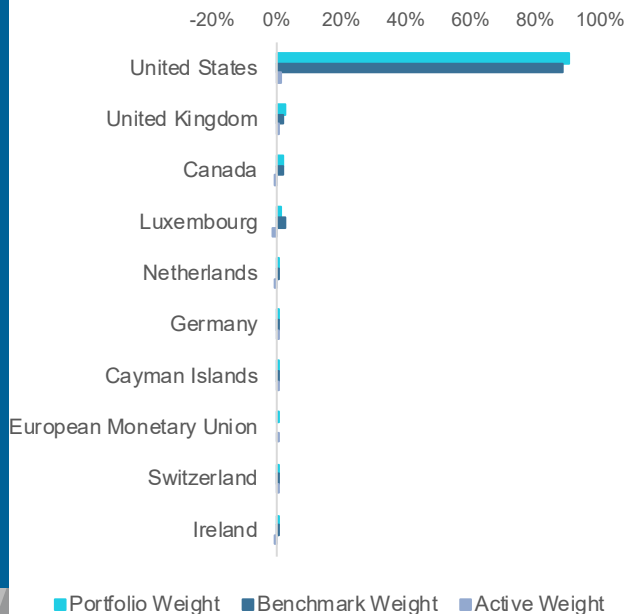
## Credit Suisse

for the quarter ended September 30, 2022

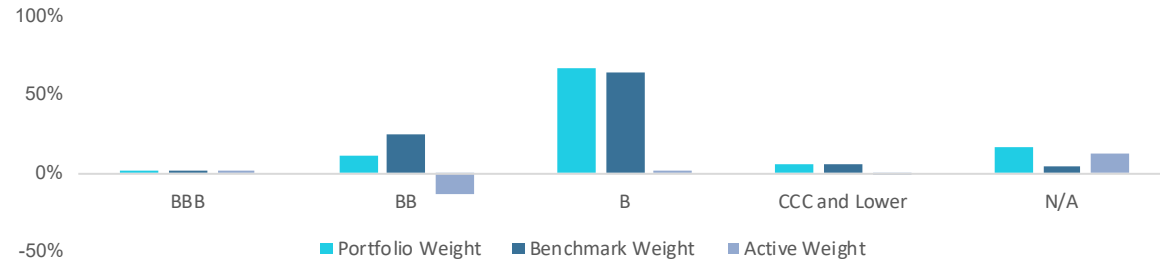
### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>4.62</b>
Benchmark Risk	5.33
Active Risk	0.94
Portfolio Beta	0.86
Cont. to Eff. Duration	0.59
Yield to Worst (%)	6.37
OAS to Swap (bp)	489

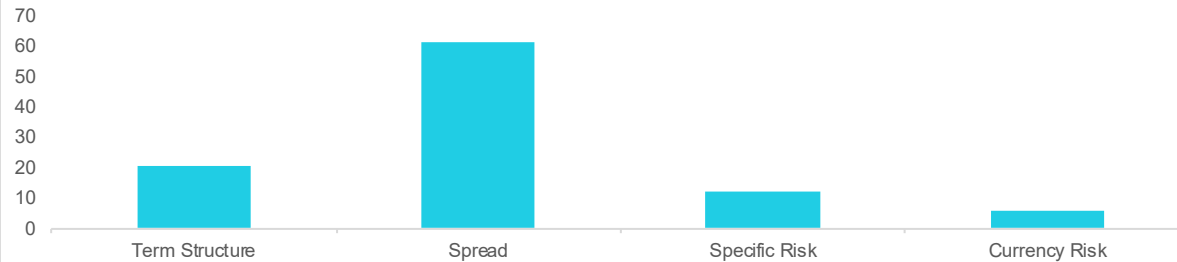
### Top Countries by Weight%



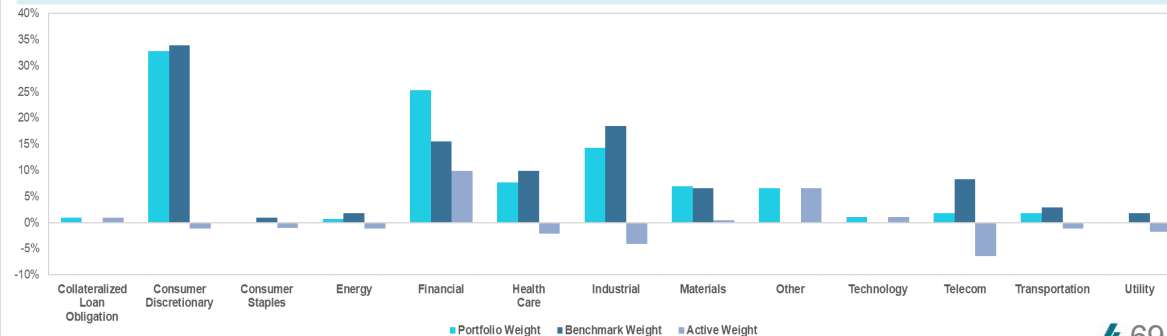
### Allocation by Moody's Rating



### Active Risk from Common Factors



### Portfolio Risk by Bond Sector



# Credit – Liquid Credit Crescent Capital

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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	139.0	0.0
Effective Duration	0.3	4.2
Convexity	0.0	0.1
Coupon Rate	7.8	5.8
Yield to Maturity	10.9	9.3
Current Yield	8.5	6.9
Rating – Moody's	B-2	B-1
Rating – S & P	B-	BB-

## Top Holdings (% of assets)

THE KNOT WORLDWIDE INC	2.0%
MAGNATE WORLDWIDE LLC	1.9%
EVERGREEN ACQCO 1 LP	1.8%
BARRACUDA NETWORKS INC	1.7%
KAMC HOLDINGS INC	1.6%

**Top 5 Holdings** **8.9%**

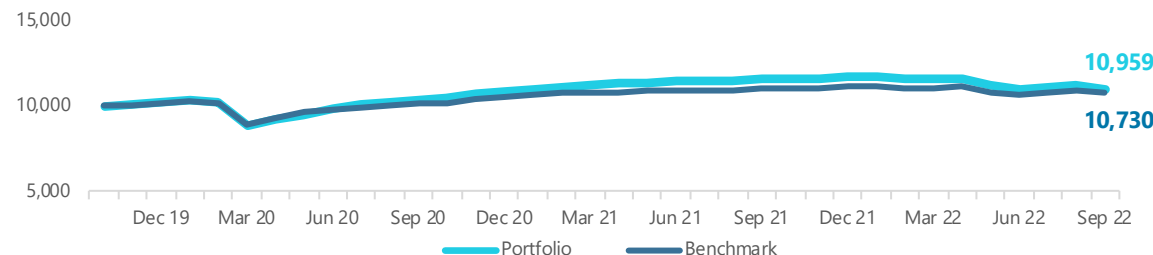
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Crescent Capital</b>	<b>488.6</b>	<b>0.0%</b>	<b>-5.4%</b>	<b>3.1%</b>	<b>3.3%</b>
Bank Loans Custom Benchmark		1.2%	-2.6%	2.4%	3.2%
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

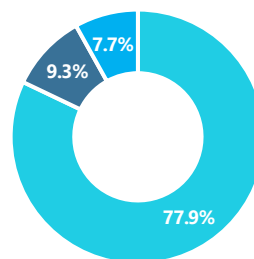
  

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Crescent Capital</b>	<b>0.1%</b>	<b>24</b>	<b>-5.0%</b>	<b>38</b>	<b>3.6%</b>	<b>19</b>	<b>3.8%</b>	<b>14</b>
Median	-2.9%		-10.0%		-1.2%		0.6%	

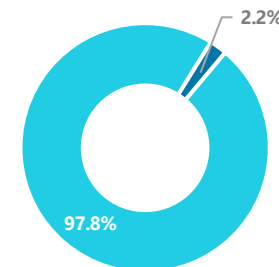
## Growth of \$10,000



## Top Exposures (% of assets)<sup>2</sup>



■ BANK LOAN  
■ CORPORATE  
■ ASSET BACKED



■ UNITED STATES  
■ CANADA

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 September 30, 2022

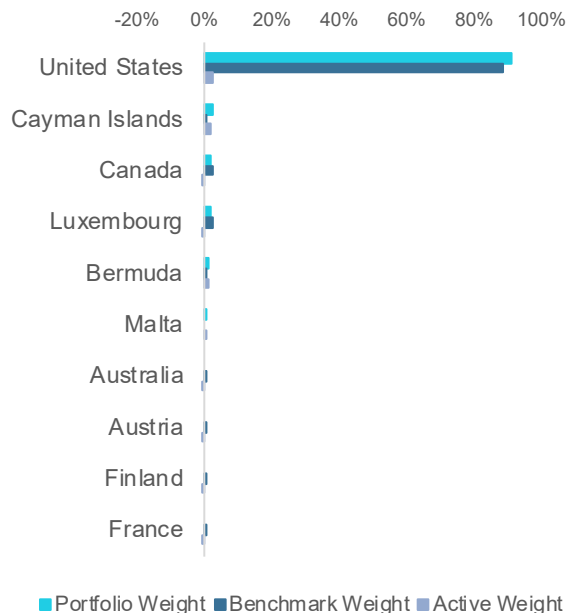


Los Angeles County Employees Retirement Association

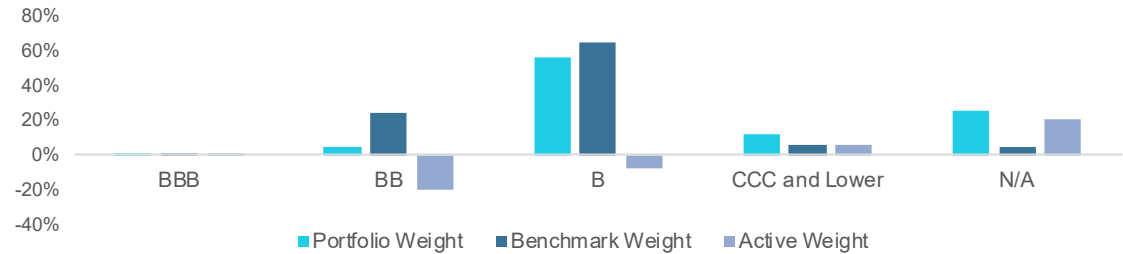
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>6.30</b>
Benchmark Risk	5.33
Active Risk	1.56
Portfolio Beta	1.15
Cont. to Eff. Duration	0.62
Yield to Worst (%)	45.59
OAS to Swap (bp)	637

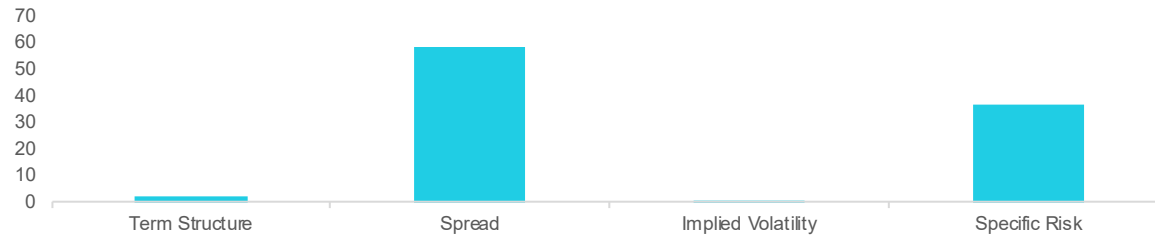
## Top Countries by Weight%



## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector



# Credit – Liquid Credit Pinebridge

for the quarter ended September 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	0.0
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-2	AA

## Top Holdings (% of assets)

AMERICAN AIRLINES INC	1.2%
OCCIDENTAL PETROLEUM COR	1.0%
ALTICE FINANCING SA	0.9%
CCO HLDGS LLC/CAP CORP	0.8%
HOLLY NRG PRTNR/FIN CORP	0.7%

## Top 5 Holdings

4.6%

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

1. Universe data is gross-of-fees.

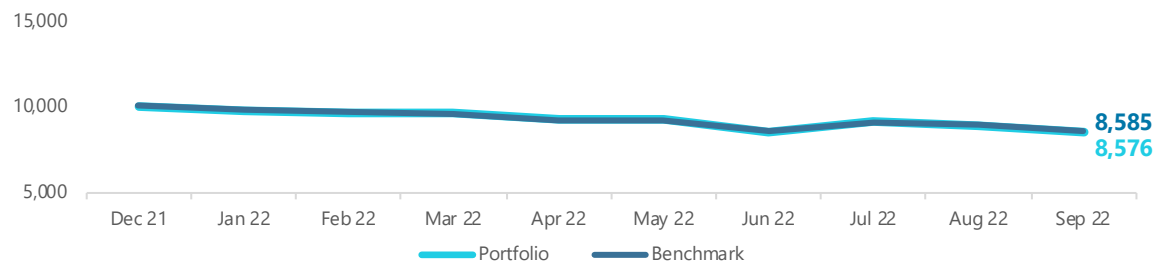
## Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Pinebridge Investments</b>	<b>431.6</b>	<b>-0.1%</b>	<b>-14.2%</b>	--	--
BBG BARC US Corp HY Idx		-0.6%	-14.1%	--	--
Credit Policy Benchmark		-0.9%	-9.2%	0.3%	--

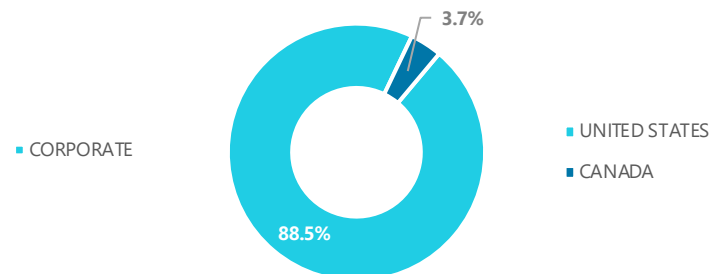
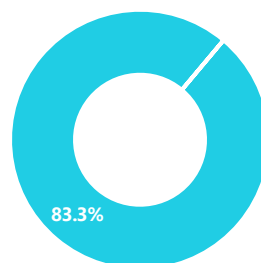
  

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Pinebridge Investments</b>	<b>-10.6%</b>	<b>82</b>	--	--	--	--	--	--
Median	-4.6%		--		--		--	

## Growth of \$10,000



## Top Exposures (% of assets)



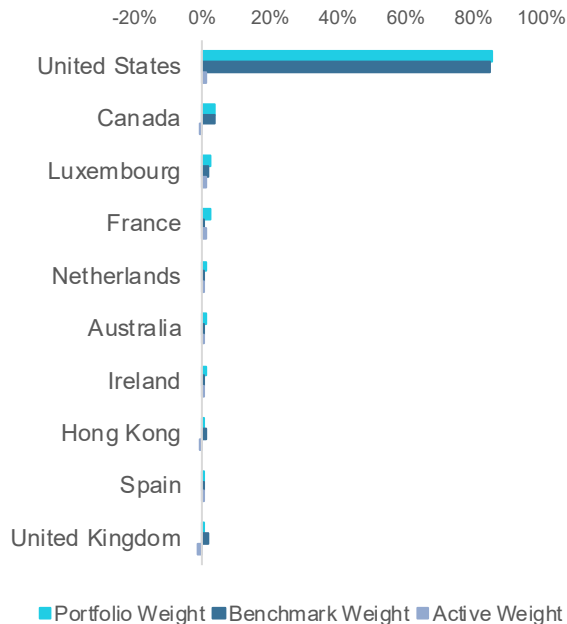
# Credit Risk Analysis – Liquid Credit Pinebridge

for the quarter ended September 30, 2022

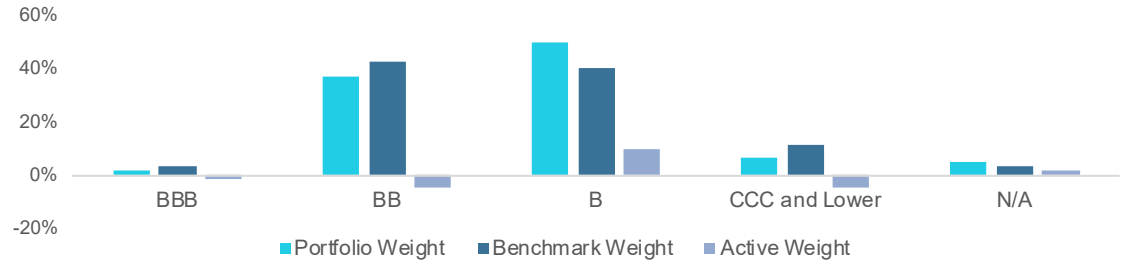
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>7.03</b>
Benchmark Risk	6.80
Active Risk	0.68
Portfolio Beta	1.03
Cont. to Eff. Duration	4.32
Yield to Worst (%)	8.90
OAS to Swap (bp)	454

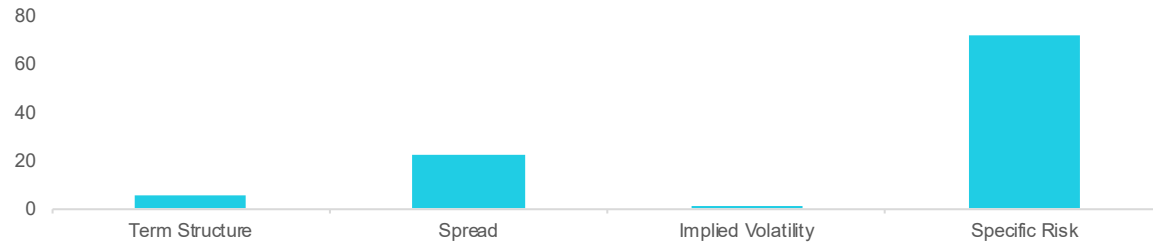
## Top Countries by Weight%



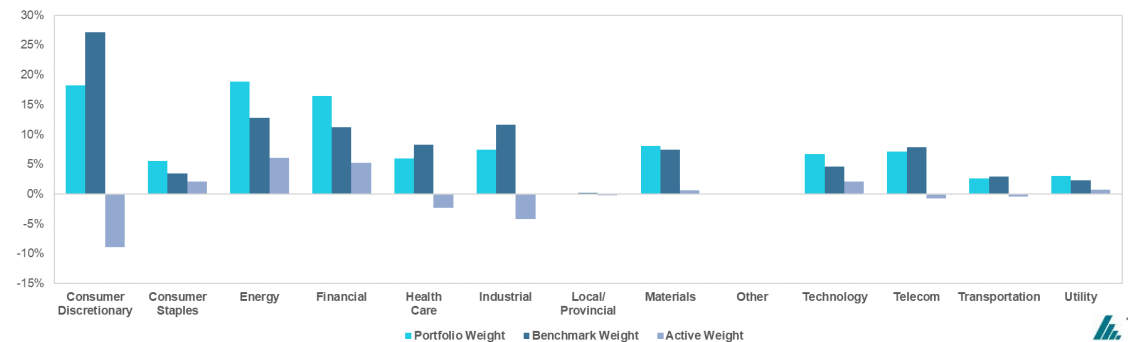
## Allocation by Moody's Rating



## Active Risk from Common Factors



## Portfolio Risk by Bond Sector

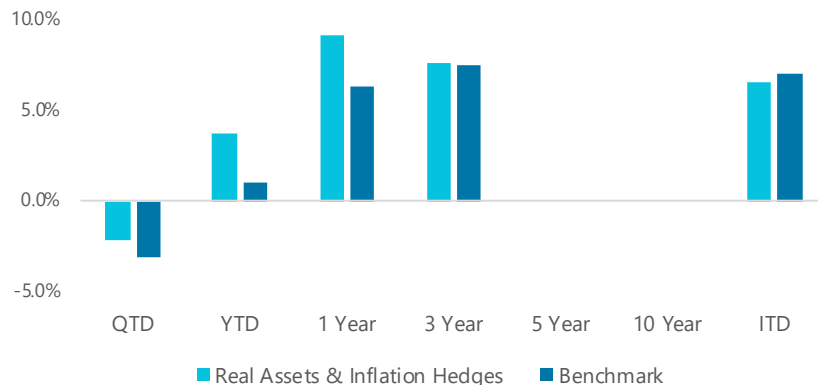


# real assets & inflation hedges

# Summary

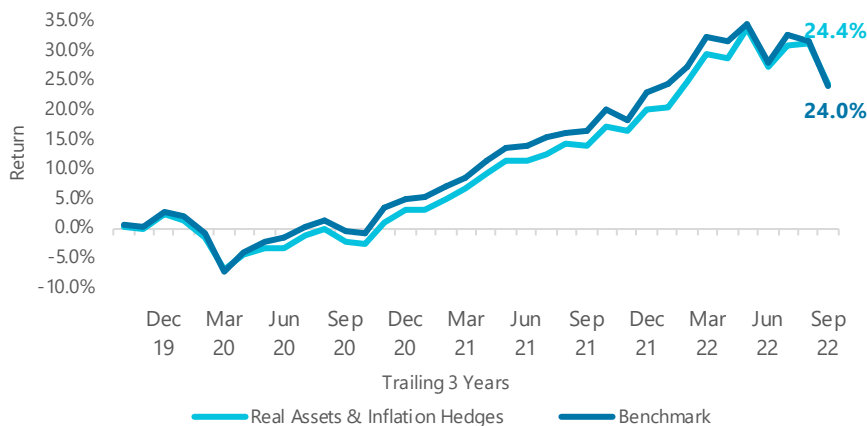
for the quarter ended September 30, 2022

## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>Real Assets &amp; Inflation Hedges</b>	<b>-2.1%</b>	<b>3.7%</b>	<b>9.2%</b>	<b>7.6%</b>	--	--	<b>6.5%</b>
Benchmark	-3.1%	1.0%	6.4%	7.4%	--	--	7.0%
Excess	1.0%	2.8%	2.8%	0.1%	--	--	-0.4%

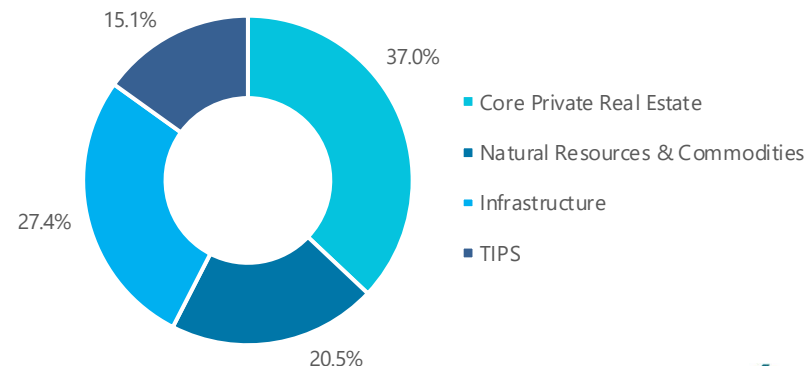
## Cumulative Return



## Functional Category

	QTD	FYTD	1 Year	3 Year
<b>Core Private Real Estate</b>	<b>5.0%</b>	<b>5.0%</b>	<b>29.1%</b>	<b>10.8%</b>
Core Private RE Policy Benchmark	4.5%	4.5%	28.3%	12.0%
Excess	0.5%	0.5%	0.8%	-1.3%
<b>Natural Resources &amp; Commodities</b>	<b>-3.4%</b>	<b>-3.4%</b>	<b>11.3%</b>	<b>12.3%</b>
Nat Res & Comm Policy Benchmark	-4.5%	-4.5%	4.2%	11.0%
Excess	1.1%	1.1%	7.1%	1.4%
<b>Infrastructure</b>	<b>-7.6%</b>	<b>-7.6%</b>	<b>-3.6%</b>	<b>4.0%</b>
DJ Brookfield Global Infra Comp	-10.2%	-10.2%	-7.2%	-0.7%
Excess	2.6%	2.6%	3.6%	4.7%
<b>TIPS</b>	<b>-5.6%</b>	<b>-5.6%</b>	<b>-11.6%</b>	<b>0.7%</b>
BBG BARC US Tsy TIPS Idx	-5.1%	-5.1%	-11.6%	0.8%
Excess	-0.5%	-0.5%	0.0%	-0.1%

## Exposure



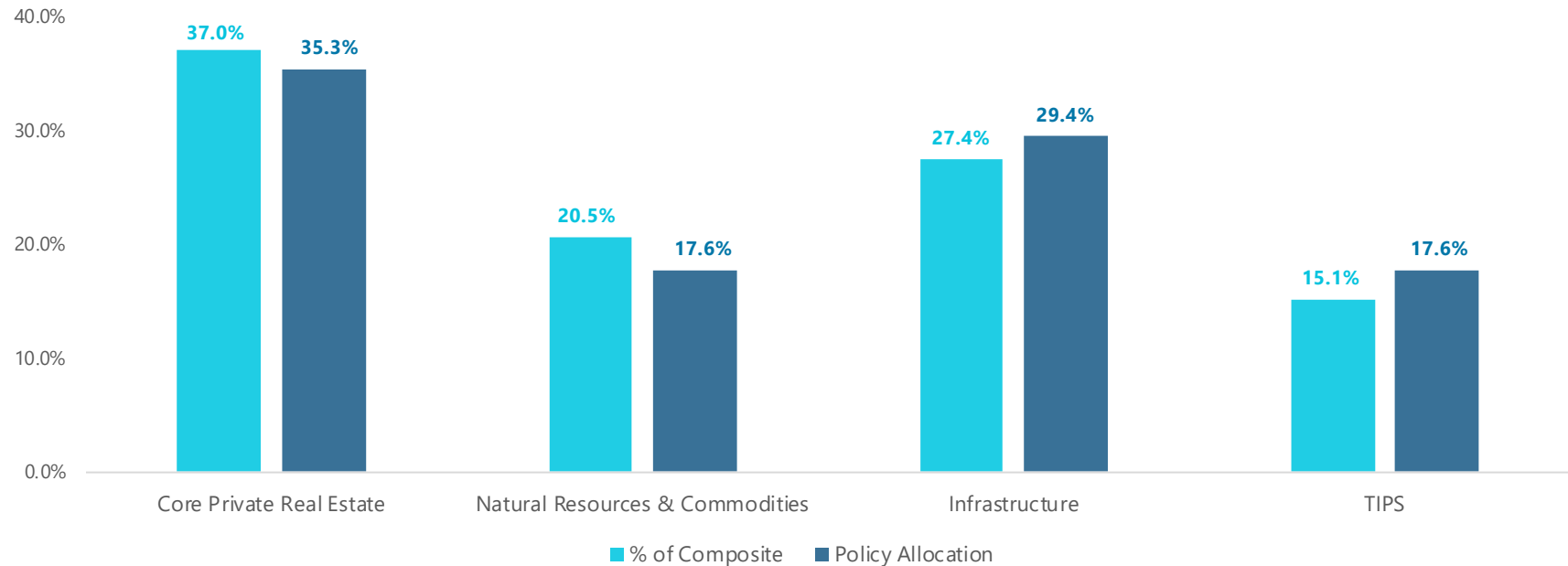
# Asset Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Actual vs. Policy

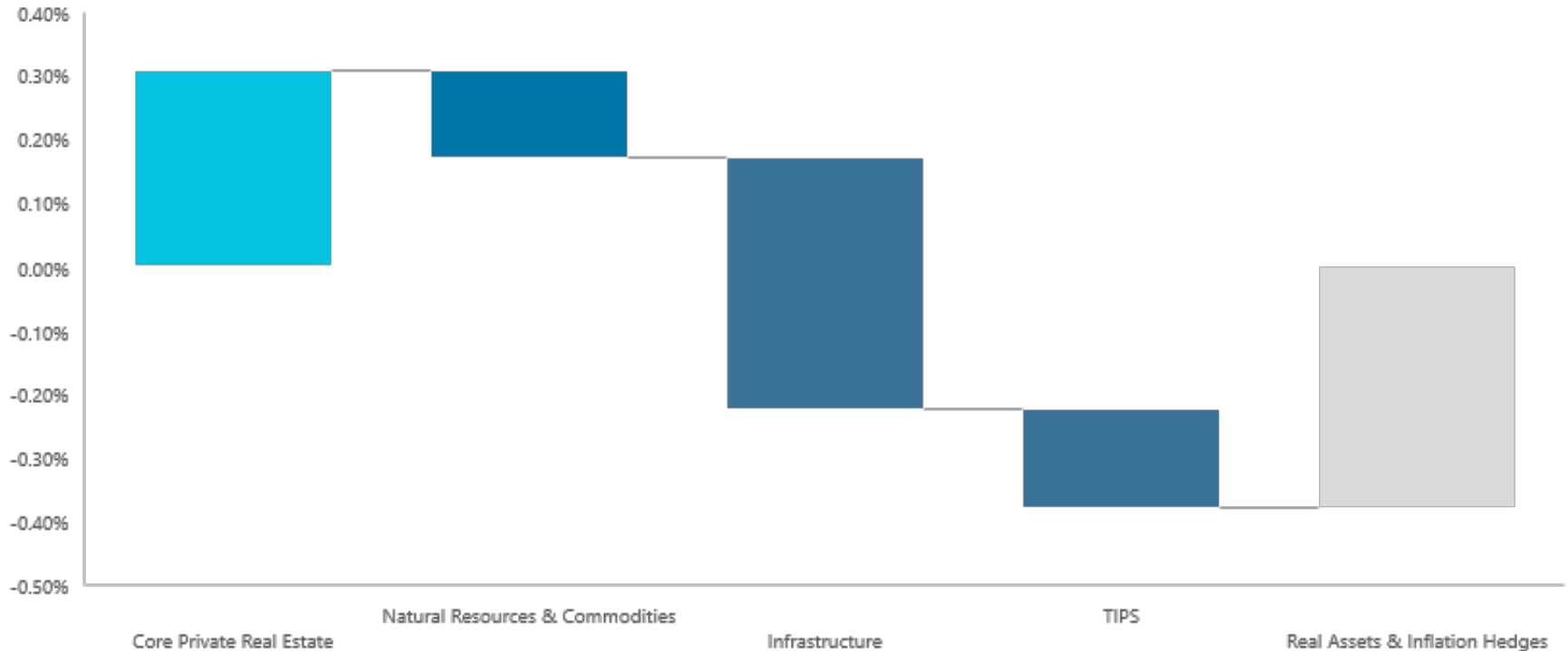


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,075</b>	<b>100.0%</b>	<b>100.0%</b>		
Core Private Real Estate	4,471	37.0%	35.3%	1.7%	209
Natural Resources & Commodities	2,476	20.5%	17.6%	2.9%	346
Infrastructure	3,305	27.4%	29.4%	-2.0%	-247
TIPS	1,823	15.1%	17.6%	-2.6%	-308

# Contribution to Return

for the quarter ended September 30, 2022

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
Core Private Real Estate	0.31%	Real Estate - Real Assets	0.31%	DWS Infrastructure	-0.39%
Natural Resources & Commodities	-0.14%			BlackRock TIPS	-0.15%
Infrastructure	-0.40%			DWS Natural Resources	-0.04%
TIPS	-0.15%			Credit Suisse Commodity	-0.02%
Real Assets & Inflation Hedges	-0.38%			PIMCO Commodity Plus	-0.01%

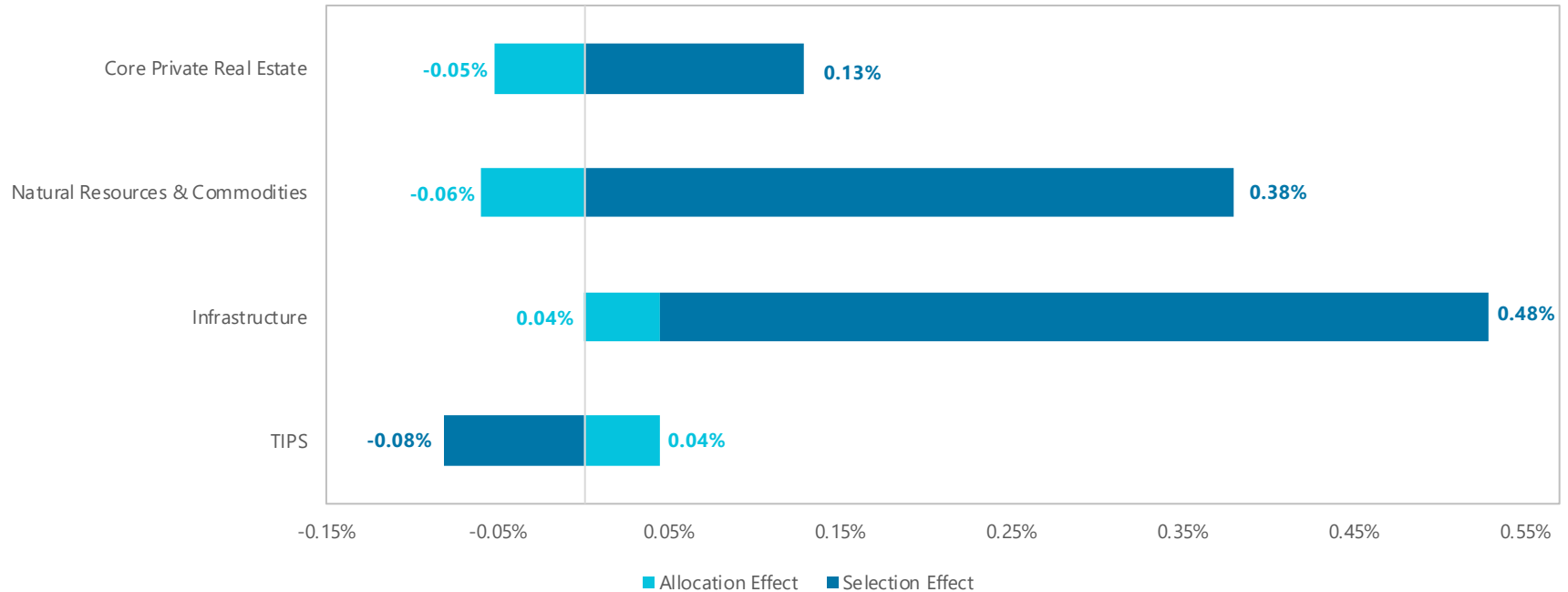
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,075</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-2.1%</b>	<b>-3.1%</b>	<b>-0.02%</b>	<b>0.91%</b>	<b>0.97%</b>
Core Private Real Estate	4,471	37.0%	35.3%	5.0%	4.5%	-0.05%	0.13%	0.04%
Natural Resources & Commodities	2,476	20.5%	17.6%	-3.4%	-4.5%	-0.06%	0.38%	0.16%
Infrastructure	3,305	27.4%	29.4%	-7.6%	-10.2%	0.04%	0.48%	0.80%
TIPS	1,823	15.1%	17.6%	-5.6%	-5.1%	0.04%	-0.08%	-0.03%

1. Total Value Add includes Interaction Effect.



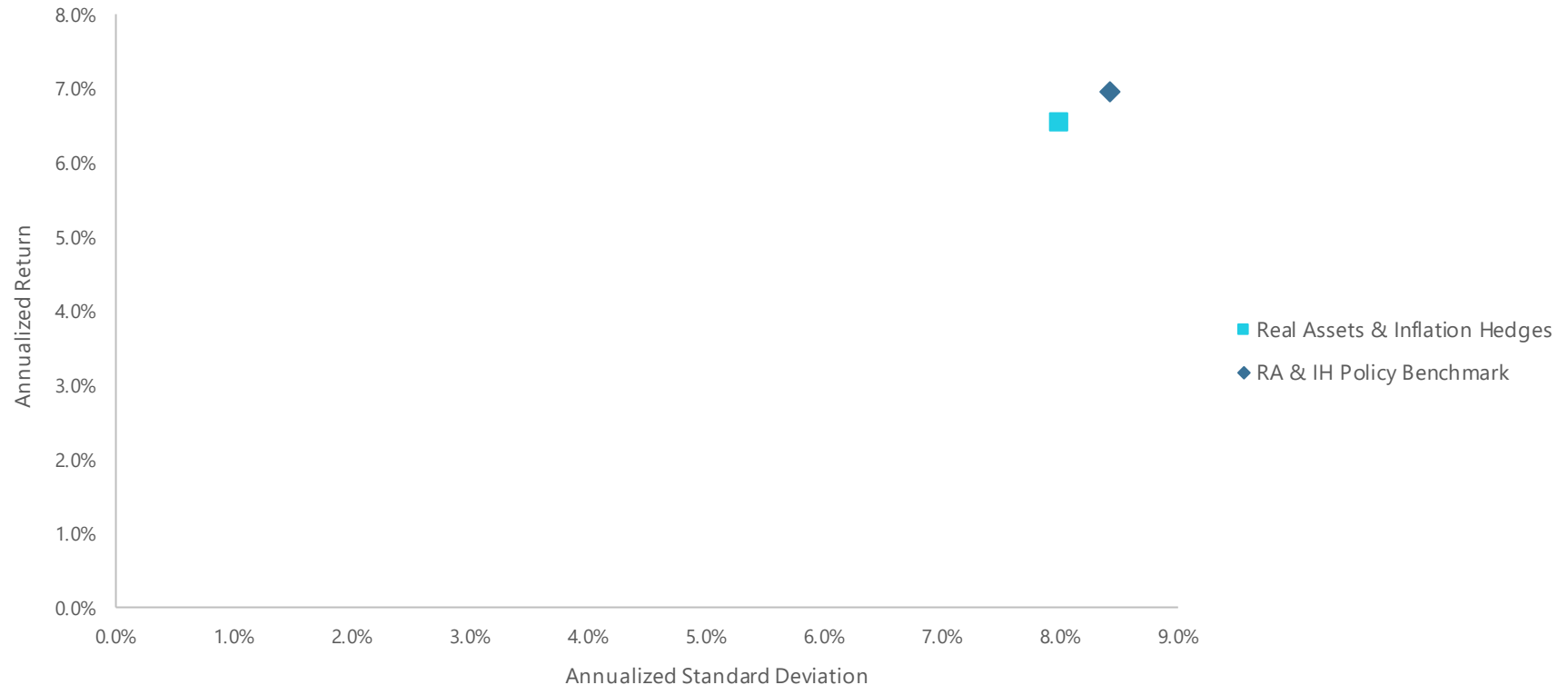
# Risk vs. Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Real Assets & Inflation Hedges	6.5%	8.0%				
RA & IH Policy Benchmark	7.0%	8.4%	0.74	(0.12)	0.93	2.3%

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

# Performance Detail

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Annualized Net Returns<sup>1</sup>

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
<b>Real Assets &amp; Inflation Hedges</b> RA & IH Policy Benchmark	<b>100.0%</b>	<b>12,075</b>	<b>12,539</b>	<b>-2.1%</b> -3.1%	<b>3.7%</b> 1.0%	<b>9.2%</b> 6.4%	<b>7.6%</b> 7.4%	-- --	-- --	<b>6.5%</b> 7.0%	<b>Apr-2019</b>
<b>Core Private Real Estate</b> Core Private RE Policy Benchmark	<b>37.0%</b>	<b>4,471</b>	<b>4,323</b>	<b>5.0%</b> 4.5%	<b>21.7%</b> 20.6%	<b>29.1%</b> 28.3%	<b>10.8%</b> 12.0%	<b>9.2%</b> 10.0%	<b>9.1%</b> 10.6%	<b>7.4%</b> 7.2%	<b>Oct-1985</b>
<b>Natural Resources &amp; Commodities</b> Nat Res & Comm Policy Benchmark	<b>20.5%</b>	<b>2,476</b>	<b>2,958</b>	<b>-3.4%</b> -4.5%	<b>7.5%</b> 0.0%	<b>11.3%</b> 4.2%	<b>12.3%</b> 11.0%	<b>6.5%</b> 5.4%	<b>-1.6%</b> -2.8%	<b>-1.2%</b> -2.5%	<b>Jul-2007</b>
Cibus Enterprise II	0.0%	4	4	-6.9%	--	--	--	--	--	-6.9%	Jun-2022
Cibus Fund II	0.1%	17	18	-6.3%	--	--	--	--	--	-6.3%	Jun-2022
Credit Suisse Commodity	3.6%	434	551	-3.4%	15.4%	14.4%	15.2%	7.7%	-1.5%	-2.2%	Mar-2011
DWS Natural Resources	5.5%	663	934	-3.3%	-3.6%	4.2%	10.1%	--	--	10.2%	Jun-2019
HiTecVision New Energy	0.5%	59	0	--	--	--	--	--	--	-4.6%	Sep-2022
Neuberger Berman/Gresham	4.0%	486	541	-4.7%	15.5%	13.5%	13.7%	7.6%	-1.2%	-0.7%	Jul-2007
Orion Mine Finance Fund III	1.0%	116	108	-3.5%	3.0%	5.6%	--	--	--	5.6%	Sep-2021
Orion Mining Royalty Fund I	0.2%	18	15	-5.2%	-4.0%	6.7%	--	--	--	6.6%	Sep-2021
PIMCO Commodity Plus	1.0%	121	213	-3.3%	14.2%	13.4%	14.6%	7.8%	-0.7%	-0.7%	Jul-2007
Private Equity - Real Assets	0.7%	82	85	-2.0%	9.0%	18.8%	-8.7%	--	--	-9.6%	Jan-2019
TIAA-CREF Global Agriculture I	1.7%	205	211	-2.8%	13.5%	--	--	--	--	13.5%	Dec-2021
TIAA-CREF Global Agriculture II	2.2%	271	278	-2.4%	9.6%	--	--	--	--	9.6%	Dec-2021
<b>Infrastructure</b> DJ Brookfield Global Infra Comp	<b>27.4%</b>	<b>3,305</b>	<b>3,327</b>	<b>-7.6%</b> -10.2%	<b>-11.0%</b> -13.1%	<b>-3.6%</b> -7.2%	<b>4.0%</b> -0.7%	-- --	-- --	<b>5.6%</b> 1.0%	<b>Jun-2019</b>
Antin Mid Cap	0.2%	25	17	-6.6%	-20.8%	--	--	--	--	-20.6%	Dec-2021
Axiom Infrastructure	1.6%	194	193	1.4%	0.5%	--	--	--	--	0.5%	Dec-2021
Axiom Infrastructure Canada	0.0%	0	0	--	--	--	--	--	--	-100.0%	Nov-2021
DIF CIF III	0.0%	5	7	2.9%	--	--	--	--	--	2.0%	Jun-2022
DIF Infrastructure VI	0.7%	88	66	-2.4%	-0.7%	5.1%	--	--	--	16.8%	Mar-2021
DWS Infrastructure	21.6%	2,606	2,668	-9.4%	-13.6%	-6.0%	3.3%	--	--	5.0%	Jun-2019
Grain Communications Opportunity III	0.3%	32	27	-3.7%	-11.0%	-14.7%	--	--	--	-100.0%	Feb-2021
Grain Spectrum Holdings III	0.4%	48	47	-0.2%	-0.4%	-0.6%	--	--	--	-1.1%	Nov-2020
KKR DCIF	1.7%	200	200	0.7%	--	--	--	--	--	0.7%	Apr-2022
Pan-European Infrastructure Fund III	0.5%	58	52	-3.5%	-1.5%	-2.5%	--	--	--	-1.0%	Nov-2020
Partners Grp Direct Infra 2020	0.4%	48	50	-2.4%	--	--	--	--	--	-0.2%	Jan-2022
<b>TIPS</b> Blackrock TIPS Bloomberg U.S. Treasury: U.S. TIPS	<b>15.1%</b>	<b>1,823</b>	<b>1,931</b>	<b>-5.6%</b> -5.1%	<b>-13.7%</b> -13.6%	<b>-11.6%</b> -11.6%	<b>0.7%</b> 0.8%	-- --	-- --	<b>1.7%</b> 1.8%	<b>May-2019</b>

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

# Real Assets & Inflation Hedges

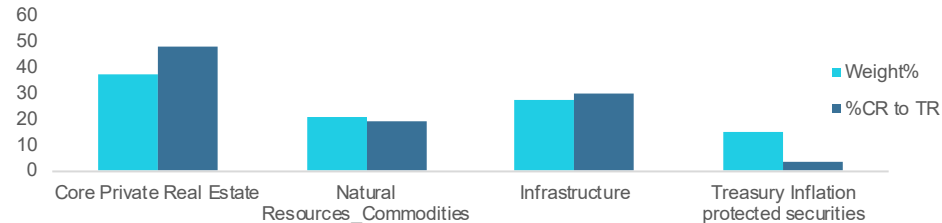
## Risk Summary

for the quarter ended September 30, 2022

### Risk Summary

	Value
<b>Total Risk</b>	<b>14.90</b>
Benchmark Risk	14.42
Active Risk	2.35
Portfolio Beta	1.02

### Contribution to Risk

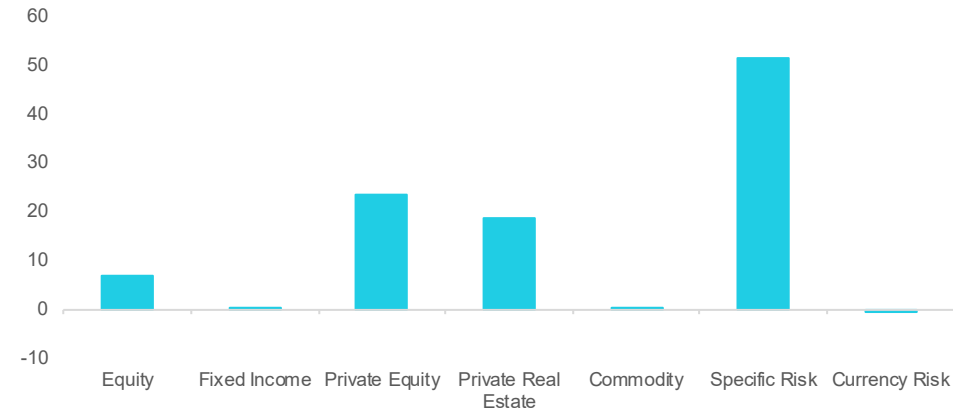


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,060</b>	<b>100.00</b>	<b>14.90</b>	<b>14.90</b>	<b>100.00</b>
Core Private Real Estate	4,471	37.07	21.83	7.17	48.13
Natural Resources Commodities	2,510	20.82	17.54	2.81	18.85
Infrastructure	3,253	26.98	18.42	4.46	29.91
Treasury Inflation protected securities	1,825	15.14	6.53	0.46	3.11

### Risk Decomposition

Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
<b>Total Risk</b>	<b>14.90</b>	<b>100.00</b>	<b>2.35</b>	<b>100.00</b>
Common Factor Risk	14.09	94.60	1.15	48.92
Specific Risk	0.08	0.57	1.21	51.23
Currency Risk	0.72	4.83	0.00	-0.16

### Active Risk from Common Factors

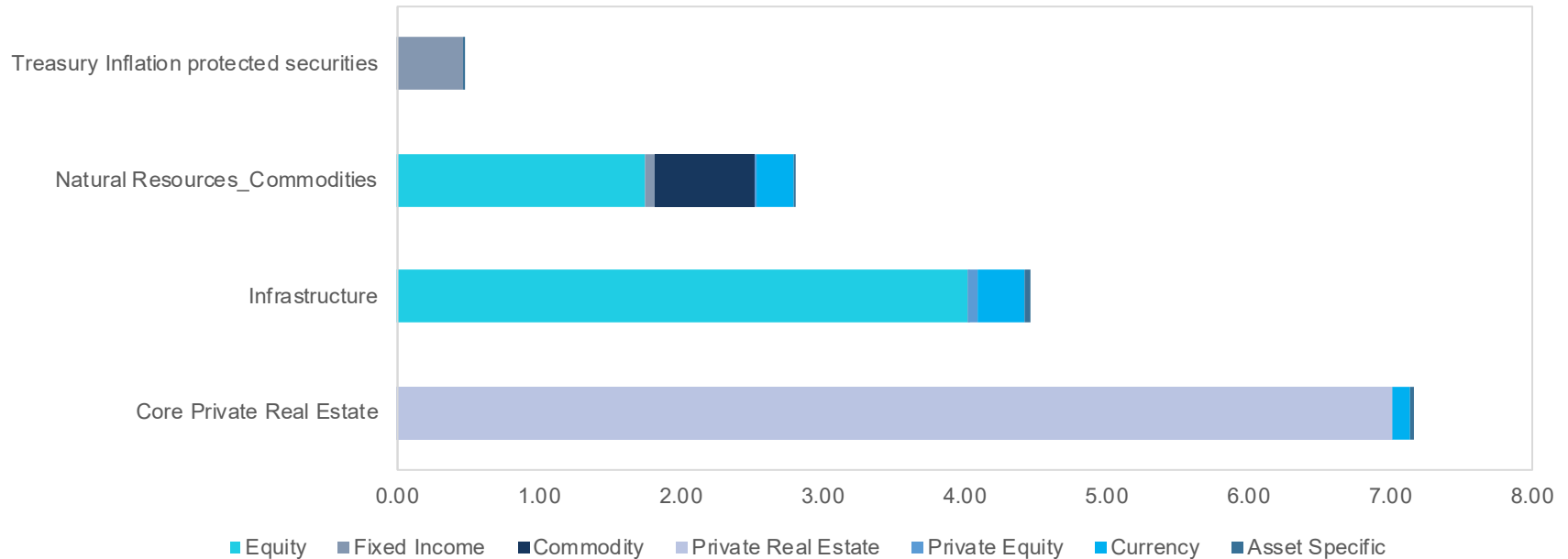


# Real Assets & Inflation Hedges

## Risk Summary

for the quarter ended September 30, 2022

### Risk Contribution Breakdown by Risk Type



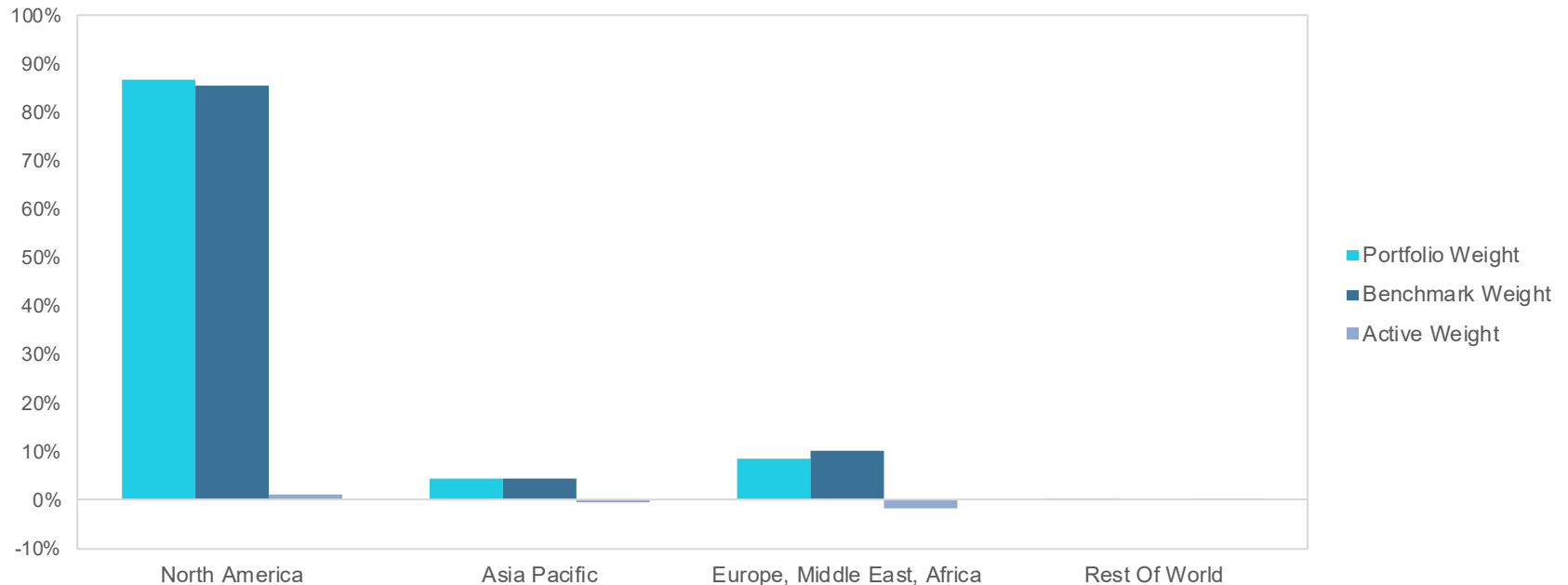
Functional Category	Port Risk Contribution	Equity	Fixed Income	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
<b>Total Fund</b>	<b>14.90</b>	<b>5.77</b>	<b>0.53</b>	<b>0.70</b>	<b>7.01</b>	<b>0.09</b>	<b>0.72</b>	<b>0.08</b>
Core Private Real Estate	7.17	0.00	0.00	0.00	7.01	0.00	0.12	0.04
Infrastructure	4.46	4.02	0.00	0.00	0.00	0.06	0.33	0.04
Natural Resources_Commodities	2.81	1.75	0.06	0.70	0.00	0.02	0.26	0.01
Treasury Inflation protected securities	0.46	0.00	0.46	0.00	0.00	0.00	0.00	0.00

# Real Assets & Inflation Hedges

## Risk Summary

for the quarter ended September 30, 2022

### Portfolio Allocation By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
<b>Total Fund</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>14.90</b>	<b>2.35</b>	<b>100.00</b>	<b>0.02</b>
North America	86.87%	85.45%	1.42%	14.59	2.07	87.85	0.03
Asia Pacific	4.31%	4.32%	-0.01%	17.30	0.06	2.49	-0.01
Europe, Middle East, Africa	8.68%	10.23%	-1.55%	23.42	0.22	9.17	0.00
Rest Of World	0.14%	0.00%	0.14%	36.26	0.01	0.49	0.08

# Real Assets & Inflation Hedges

## Natural Resources & Commodities

### Credit Suisse

for the quarter ended September 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	16.2%
Benchmark Standard Deviation	16.6%
Sharpe Ratio	0.44
Information Ratio	1.04
Beta	0.98
Tracking Error	0.9%

#### Top Holdings (% of assets)

US TREASURY FRN	15.1%
GOLD 100 OZ FUTR DEC22	13.3%
US TREASURY FRN	12.9%
NATURAL GAS FUTR NOV22	12.6%
US TREASURY FRN	11.7%
<b>Top 5 Holdings</b>	<b>65.6%</b>

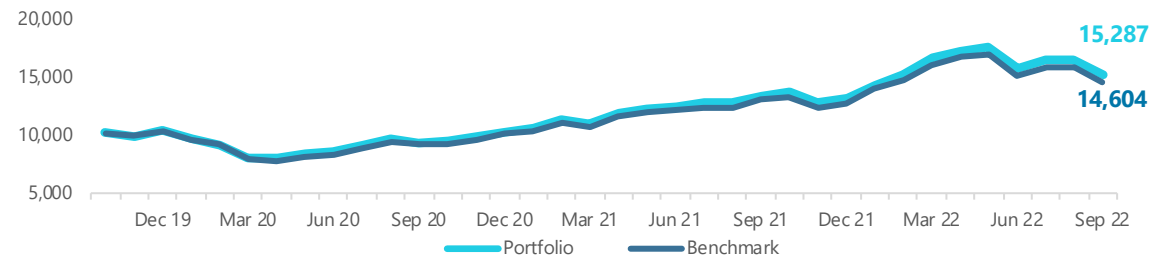
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Credit Suisse Commodity</b>	<b>433.8</b>	<b>-3.4%</b>	<b>14.4%</b>	<b>15.2%</b>	<b>7.7%</b>
Bloomberg Commodity Index Total Return		-4.1%	11.8%	13.5%	7.0%
RA & IH Policy Benchmark		-3.1%	6.4%	7.4%	--

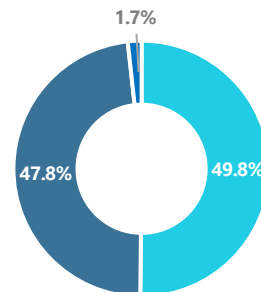
  

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Credit Suisse Commodity</b>	<b>-3.3%</b>	<b>60</b>	<b>14.7%</b>	<b>39</b>	<b>15.5%</b>	<b>38</b>	<b>7.9%</b>	<b>52</b>
Median	0.0%		9.8%		12.4%		8.4%	

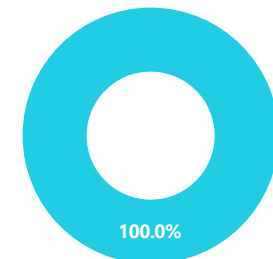
#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



■ FUTURES  
■ AGENCY  
■ US TREASURY



■ 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 September 30, 2022

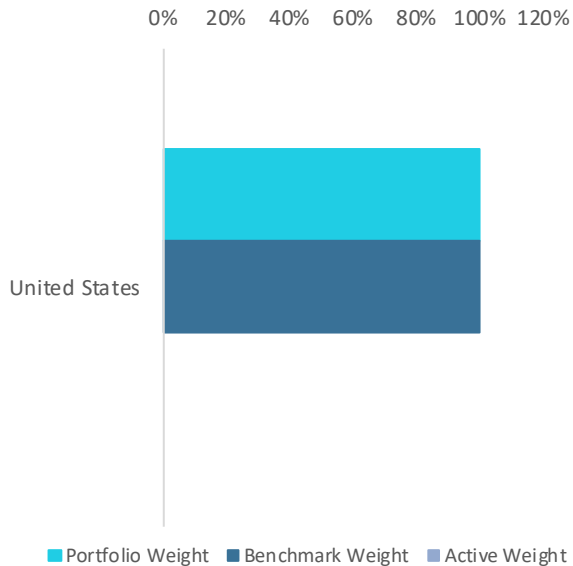


Los Angeles County Employees Retirement Association

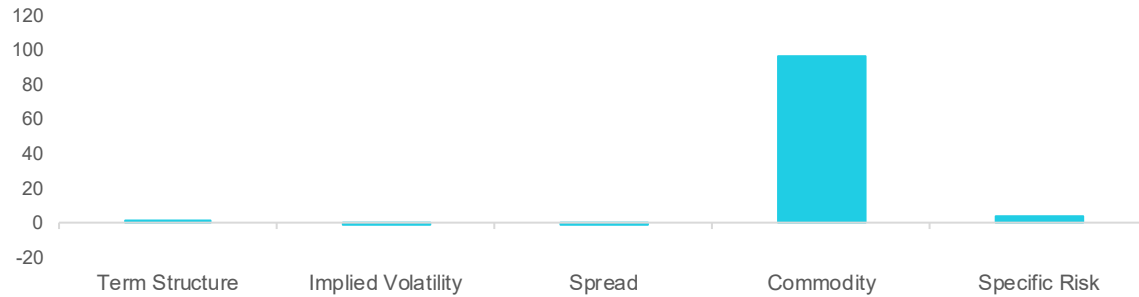
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>18.74</b>
Benchmark Risk	19.50
Active Risk	5.74
Portfolio Beta	0.92

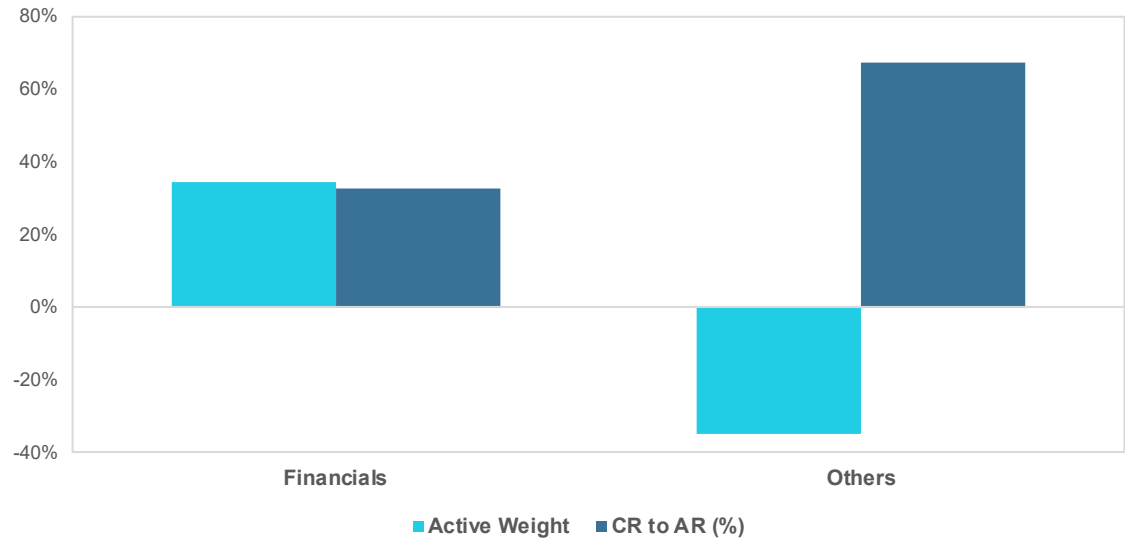
#### Top Countries by Weight%



#### Active Risk from Common Factors



#### Portfolio Risk by Sector



# Real Assets & Inflation Hedges

## Natural Resources & Commodities

### DWS

for the quarter ended September 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	24.7%
Benchmark Standard Deviation	24.7%
Sharpe Ratio	0.49
Information Ratio	-0.47
Beta	0.99
Tracking Error	4.2%

#### Top Holdings (% of assets)

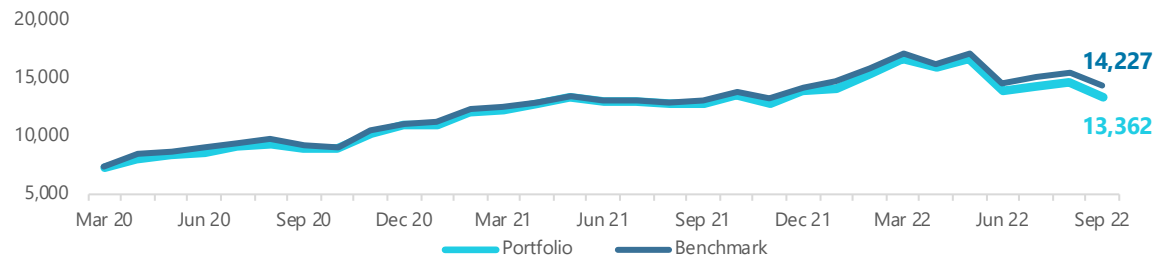
NUTRIEN LTD	9.7%
CHEVRON CORP	8.7%
CORTEVA INC	6.8%
BUNGE LTD	5.4%
AGNICO EAGLE MINES LTD	5.0%
<b>Top 5 Holdings</b>	<b>35.6%</b>

#### Performance (net)<sup>1</sup>

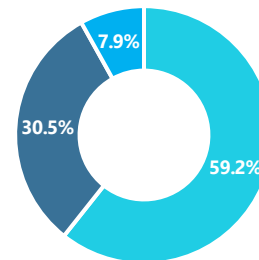
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>DWS Natural Resources</b>	<b>663.4</b>	<b>-3.3%</b>	<b>4.2%</b>	<b>10.1%</b>	<b>--</b>
S&P Glb LargeMidCap Commod & Resources		-1.3%	9.7%	12.5%	--
RA & IH Policy Benchmark		-3.1%	6.4%	7.4%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>DWS Natural Resources</b>	<b>-3.3%</b>	<b>60</b>	<b>4.3%</b>	<b>61</b>	<b>10.4%</b>	<b>58</b>	<b>--</b>	<b>--</b>
Median	0.0%		9.8%		12.4%		--	

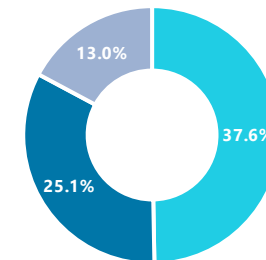
#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



■ MATERIALS  
■ ENERGY  
■ CONSUMER STAPLES



■ UNITED STATES  
■ CANADA  
■ UNITED KINGDOM

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 September 30, 2022

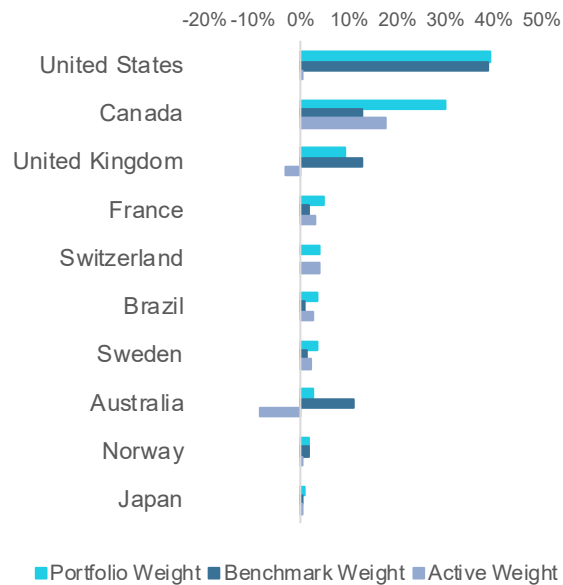


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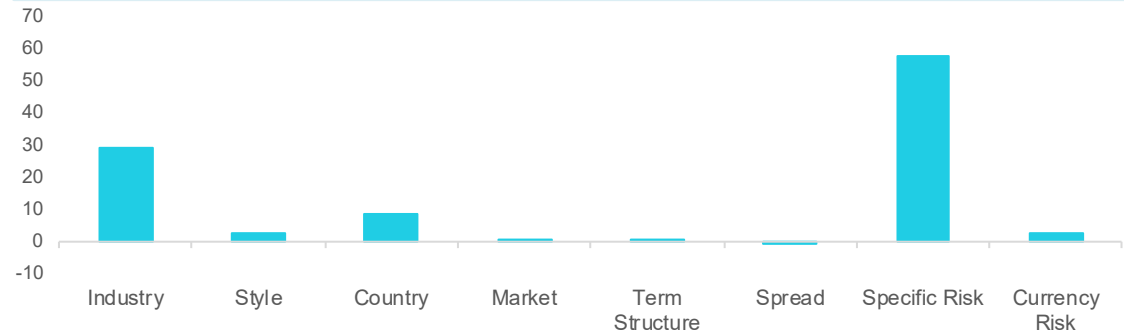
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>25.00</b>
Benchmark Risk	25.30
Active Risk	5.09
Portfolio Beta	0.97

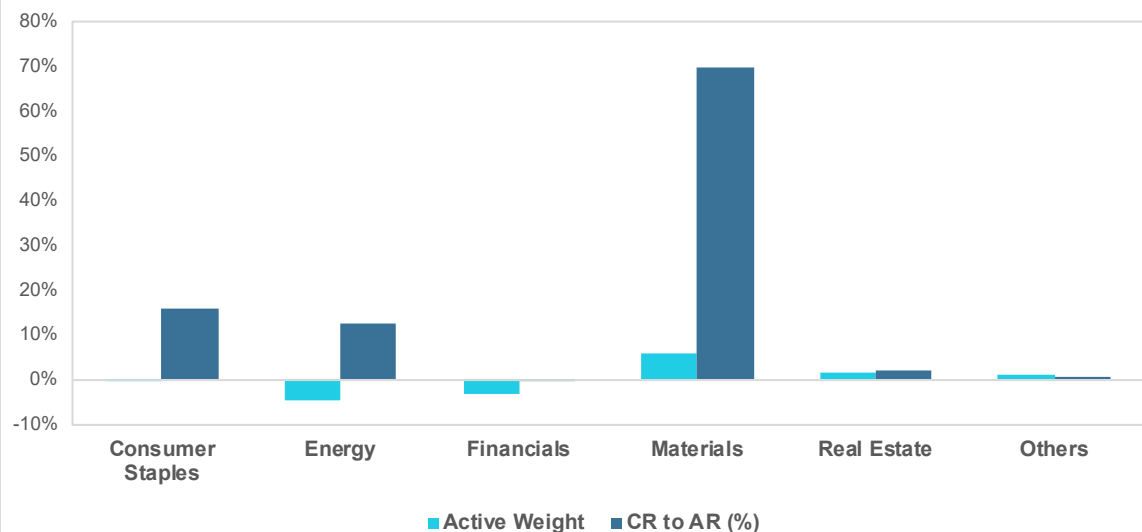
#### Top Countries by Weight%



#### Active Risk from Common Factors



#### Portfolio Risk by Sector



# Real Assets & Inflation Hedges

## Natural Resources & Commodities

### Neuberger Berman / Gresham

for the quarter ended September 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	0.13
Information Ratio	0.50
Beta	1.05
Tracking Error	4.9%

#### Top Holdings (% of assets)

GOLD 100 OZ FUTR DEC22	10.0%
NATURAL GAS FUTR NOV22	9.8%
SOYBEAN FUTURE NOV22	7.2%
CORN FUTURE DEC22	7.1%
BRENT CRUDE FUTR MAR23	5.5%

**Top 5 Holdings** **39.5%**

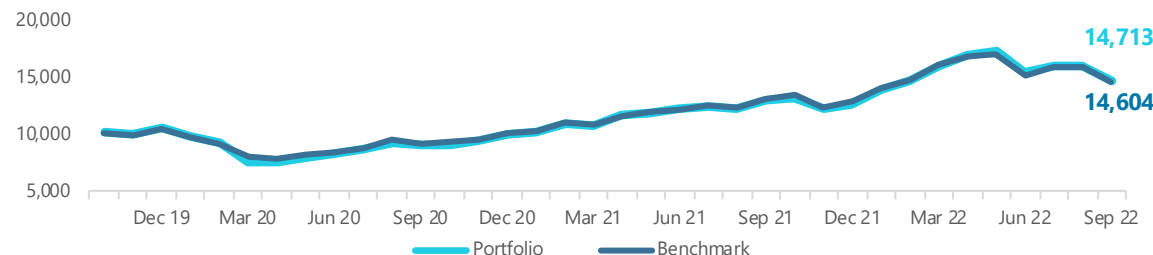
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Neuberger Berman/Gresham</b>	<b>486.4</b>	<b>-4.7%</b>	<b>13.5%</b>	<b>13.7%</b>	<b>7.6%</b>
Bloomberg Commodity Index Total Return		-4.1%	11.8%	13.5%	7.0%
RA & IH Policy Benchmark		-3.1%	6.4%	7.4%	--

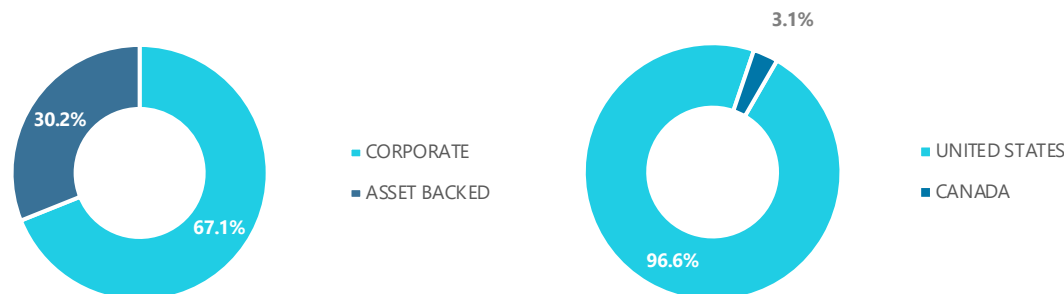
  

Universe data: Commodities Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Neuberger Berman/Gresham</b>	<b>-4.6%</b>	<b>61</b>	<b>13.9%</b>	<b>41</b>	<b>14.2%</b>	<b>41</b>	<b>8.0%</b>	<b>52</b>
Median	0.0%		9.8%		12.4%		8.4%	

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



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 September 30, 2022

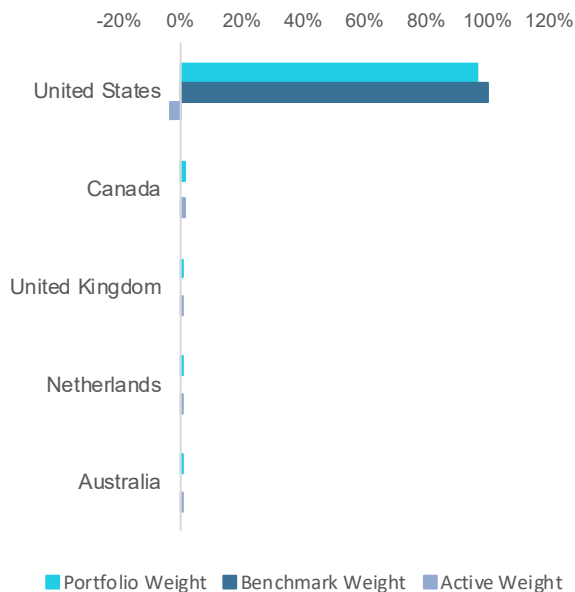


Los Angeles County Employees Retirement Association

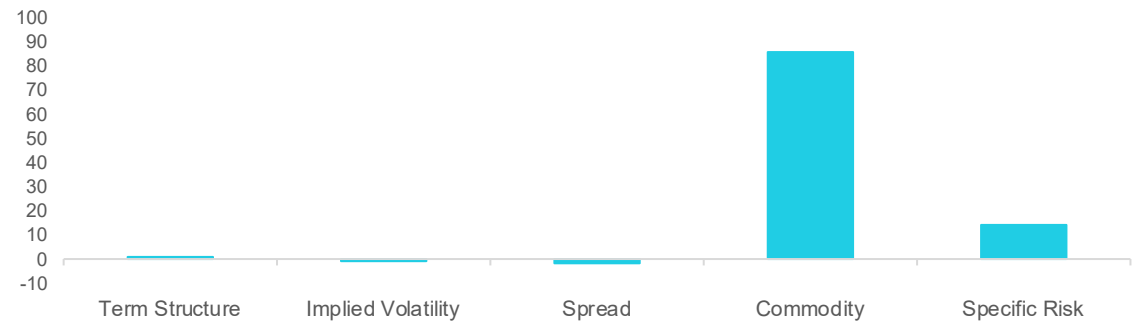
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>16.14</b>
Benchmark Risk	20.50
Active Risk	5.35
Portfolio Beta	0.78

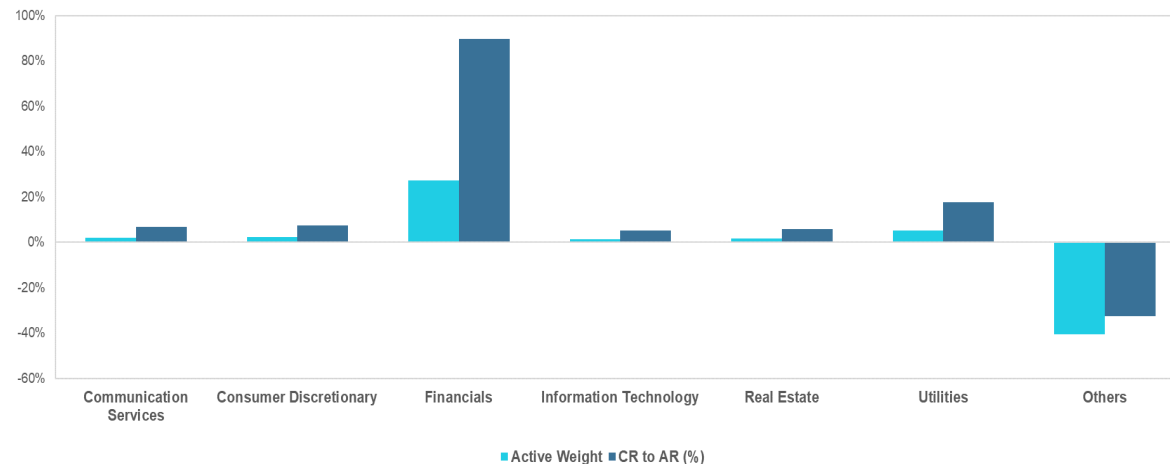
#### Top Countries by Weight%



#### Active Risk from Common Factors



#### Portfolio Risk by Sector



# Real Assets & Inflation Hedges

## Natural Resources & Commodities

### PIMCO

for the quarter ended September 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	0.01
Information Ratio	0.52
Beta	1.05
Tracking Error	2.5%

#### Top Holdings (% of assets)

SWU0SY268 TRS USD R E	22.5%
SWU0SY235 TRS USD R E	21.8%
SWU0JI123 TRS USD R E	19.4%
SWU0SY425 TRS USD R E	13.2%
US 10YR NOTE	13.0%

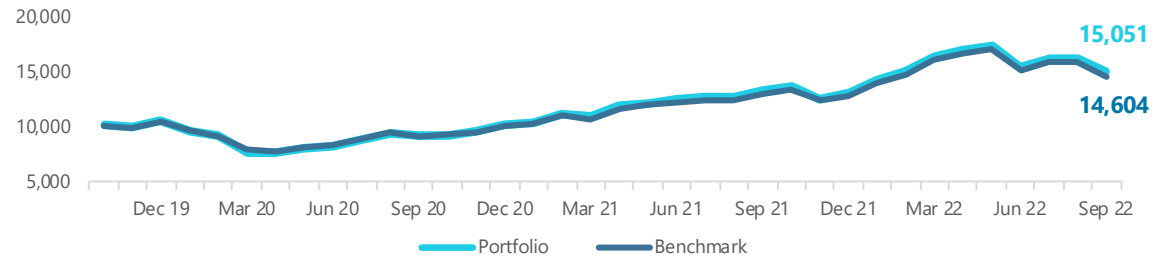
**Top 5 Holdings** **90.0%**

#### Performance (net)<sup>1</sup>

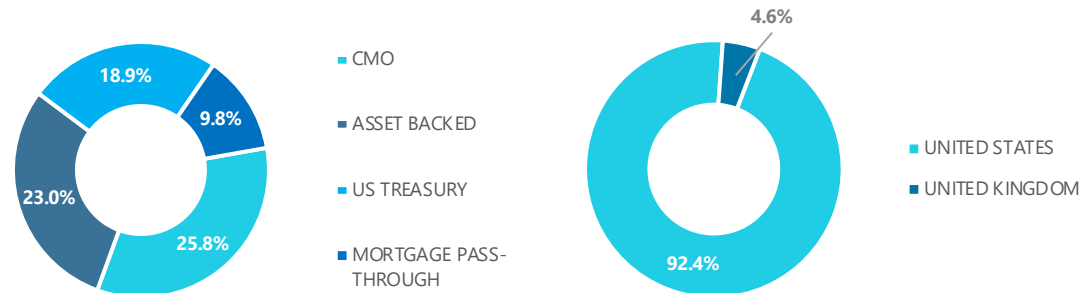
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>PIMCO Commodity Plus</b>	<b>121.1</b>	<b>-3.3%</b>	<b>13.4%</b>	<b>14.6%</b>	<b>7.8%</b>
Bloomberg Commodity Index Total Return		-4.1%	11.8%	13.5%	7.0%
RA & IH Policy Benchmark		-3.1%	6.4%	7.4%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>PIMCO Commodity Plus</b>	<b>-3.3%</b>	<b>60</b>	<b>13.8%</b>	<b>41</b>	<b>15.0%</b>	<b>40</b>	<b>8.2%</b>	<b>51</b>
Median	0.0%		9.8%		12.4%		8.4%	

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



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

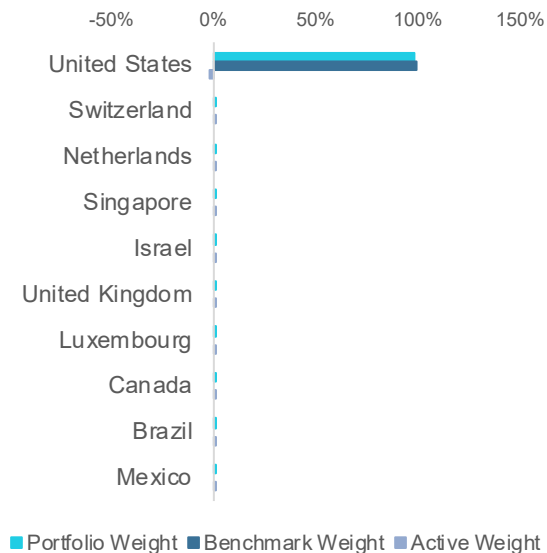
### PIMCO

for the quarter ended September 30, 2022

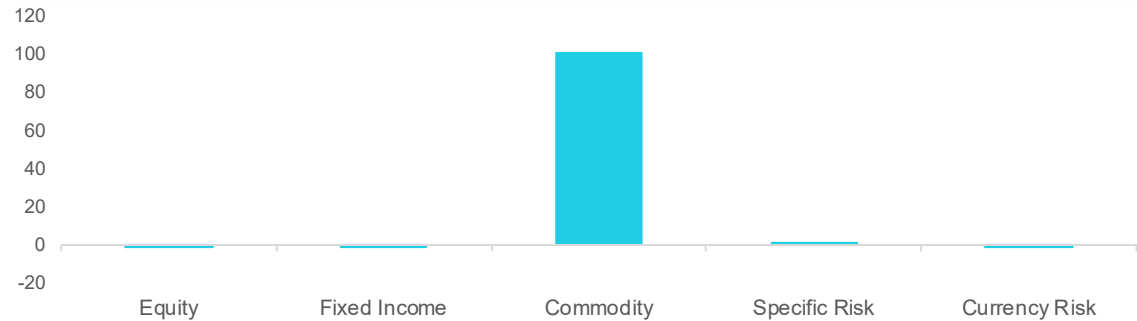
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>2.05</b>
Benchmark Risk	19.50
Active Risk	19.30
Portfolio Beta	0.02

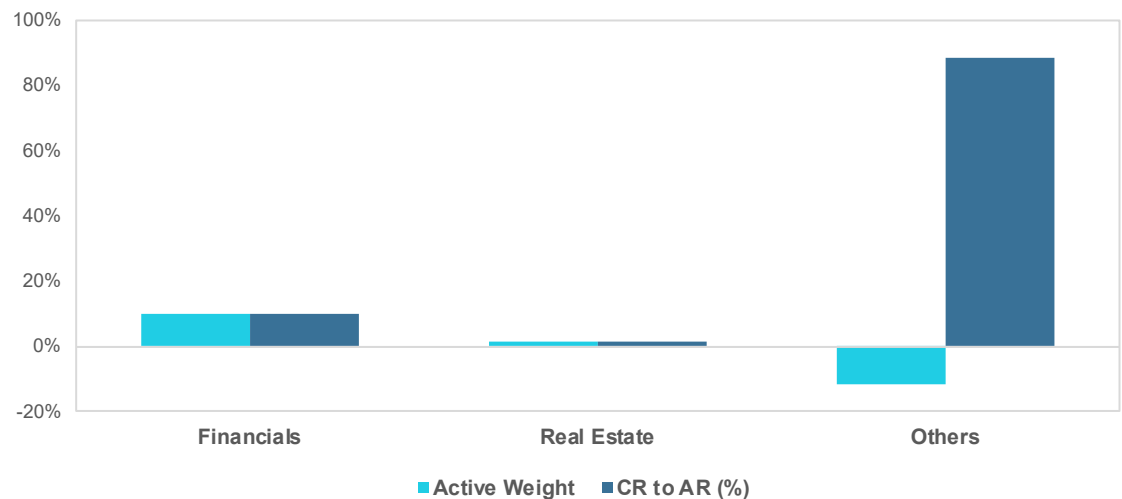
#### Top Countries by Weight%



#### Active Risk from Common Factors



#### Portfolio Risk by Sector



# Real Assets & Inflation Hedges

## Infrastructure

### DWS

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

#### 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)	40,079.7	36,613.4
No. Of Issues	48.0	0.0
Dividend Yield	2.8	3.4
Return on Equity	16.6	15.8
Price to Sales	4.6	4.5
Price to Book	2.9	28.0
PE Ratio	27.2	24.5

#### Top Holdings (% of assets)

AMERICAN TOWER CORP	8.1%
SEMPRA ENERGY	5.8%
ENBRIDGE INC	5.6%
CROWN CASTLE INC	4.8%
SBA COMMUNICATIONS CORP	4.7%

#### Top 5 Holdings

29.1%

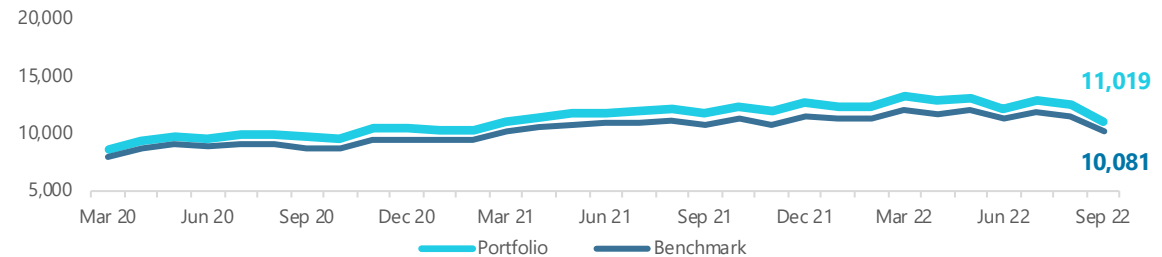
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>DWS Infrastructure</b>	<b>2,606.0</b>	<b>-9.4%</b>	<b>-6.0%</b>	<b>3.3%</b>	--
DJ Brookfield Global Infra Comp		-10.2%	-7.2%	--	--
RA & IH Policy Benchmark		-3.1%	6.4%	7.4%	--

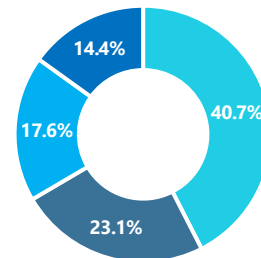
  

Universe data: Infrastructure	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>DWS Infrastructure</b>	<b>-9.3%</b>	--	<b>-5.9%</b>	--	<b>3.5%</b>	--	--	--
Median	--	--	--	--	--	--	--	--

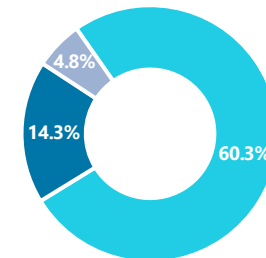
#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



UTILITIES  
ENERGY  
REAL ESTATE  
INDUSTRIALS



UNITED STATES  
CANADA  
UNITED KINGDOM

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

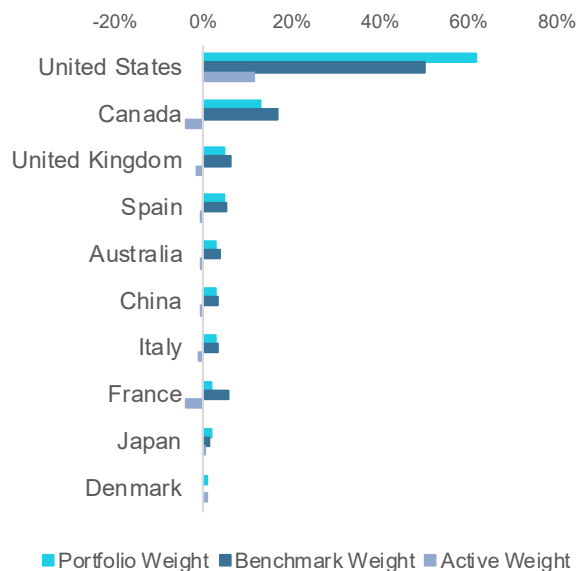
### DWS

for the quarter ended September 30, 2022

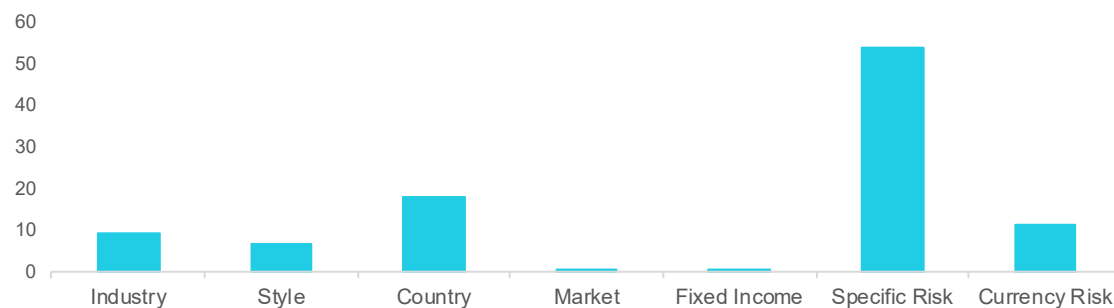
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>18.17</b>
Benchmark Risk	18.40
Active Risk	2.18
Portfolio Beta	0.98

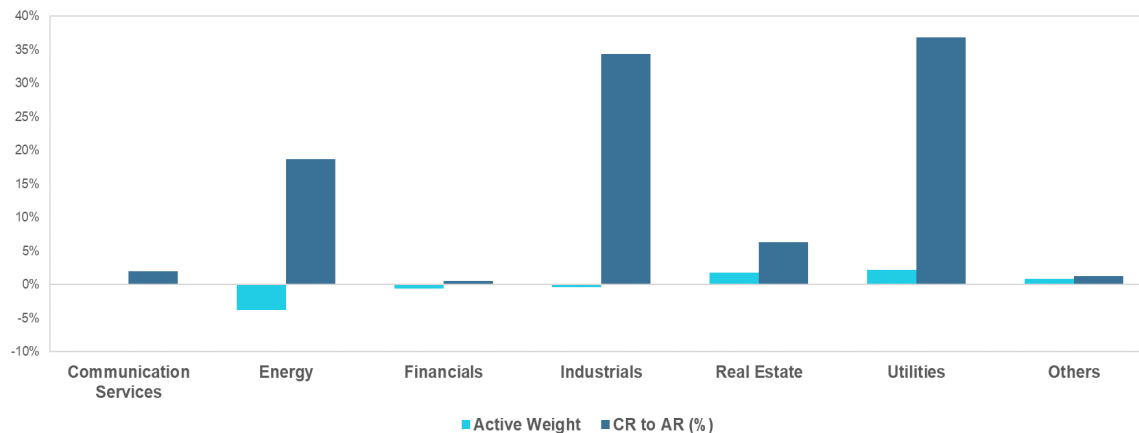
#### Top Countries by Weight%



#### Active Risk from Common Factors



#### Portfolio Risk by Sector



# Real Assets & Inflation Hedges

## TIPS

### BlackRock

for the quarter ended September 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	6.7%
Benchmark Standard Deviation	6.7%
Sharpe Ratio	0.17
Information Ratio	-0.13
Beta	1.00
Tracking Error	0.7%

#### Top Holdings (% of assets)

TSY INFL IX N/B	5.3%
TSY INFL IX N/B	4.7%
TSY INFL IX N/B	4.1%
TSY INFL IX N/B	3.9%
TSY INFL IX N/B	3.7%

**Top 5 Holdings** **21.7%**

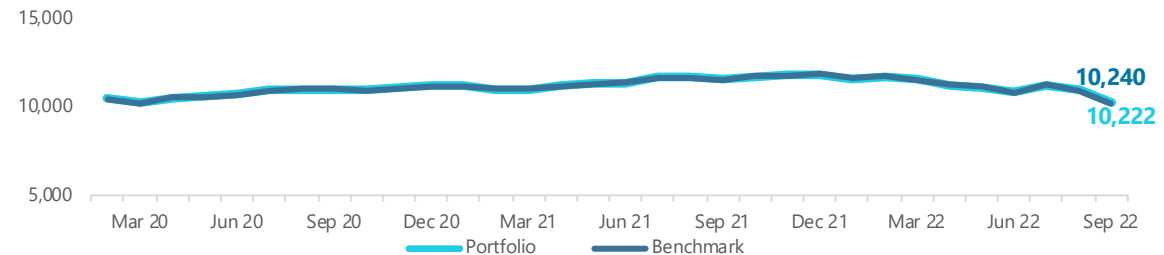
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>BlackRock TIPS</b>	<b>1,822.5</b>	<b>-5.6%</b>	<b>-11.6%</b>	<b>0.7%</b>	--
Bloomberg U.S. Treasury: U.S. TIPS		-5.1%	-11.6%	0.8%	--
Real Assets & Inflation Hedges Policy BM		-3.1%	6.4%	7.4%	--

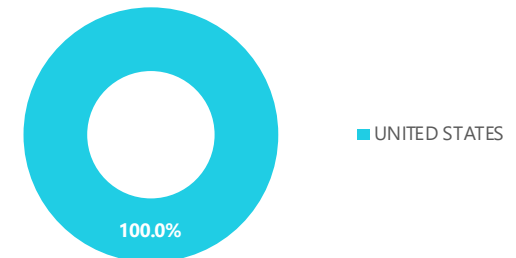
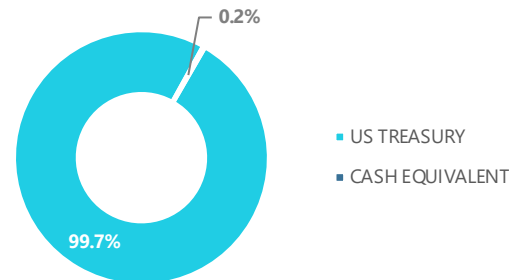
  

Universe data: Inflation Linked Bond Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>BlackRock TIPS</b>	<b>-5.6%</b>	--	<b>-11.6%</b>	--	<b>0.7%</b>	--	--	--
Median	--	--	--	--	--	--	--	--

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



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

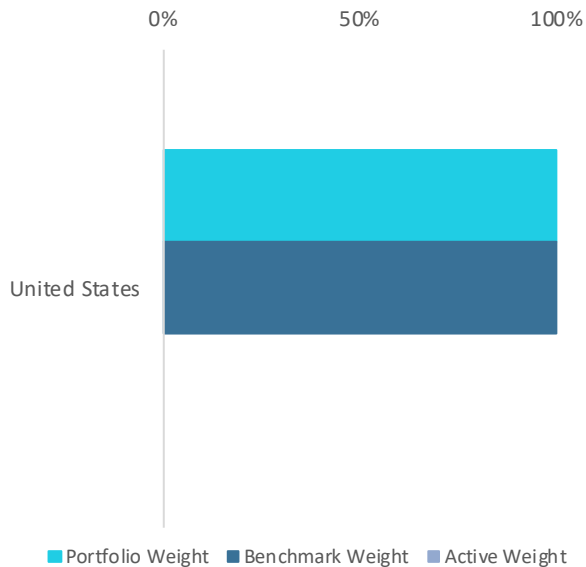
BlackRock

for the quarter ended September 30, 2022

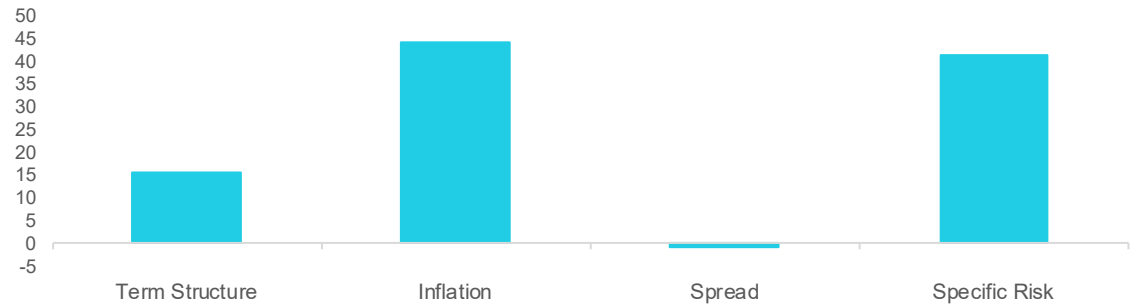
## Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>6.53</b>
Benchmark Risk	6.55
Active Risk	0.04
Portfolio Beta	1.00

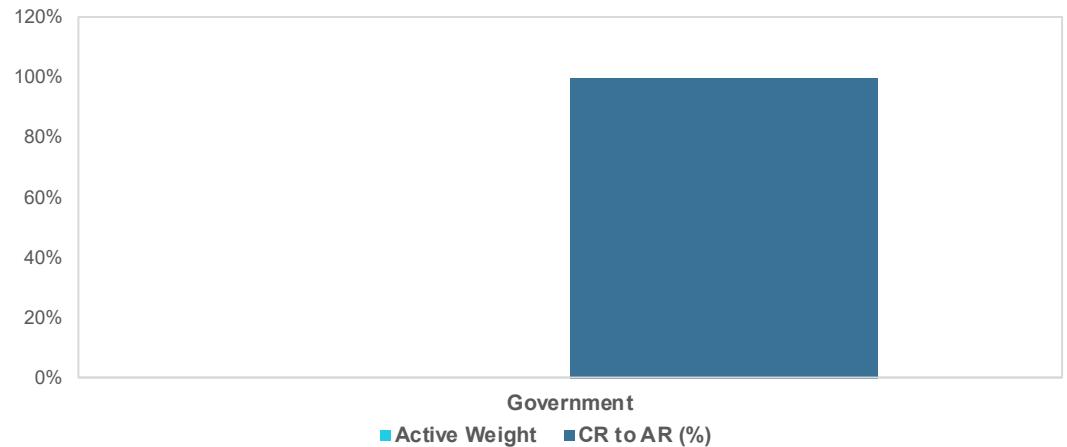
## Top Countries by Weight%



## Active Risk from Common Factors



## Portfolio Risk by Sector

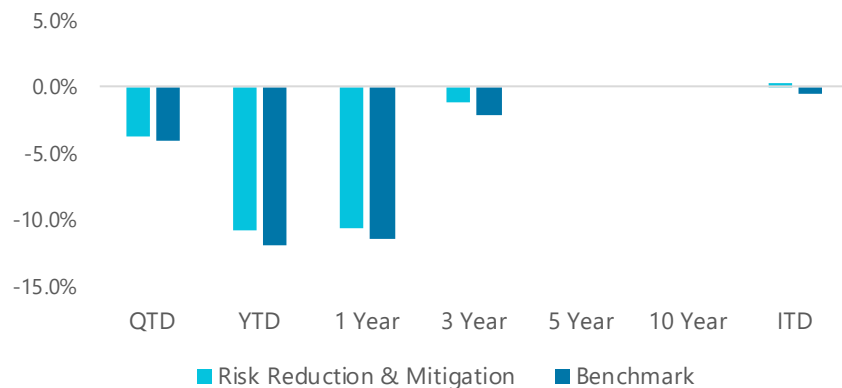


# risk reduction & mitigation

# Summary

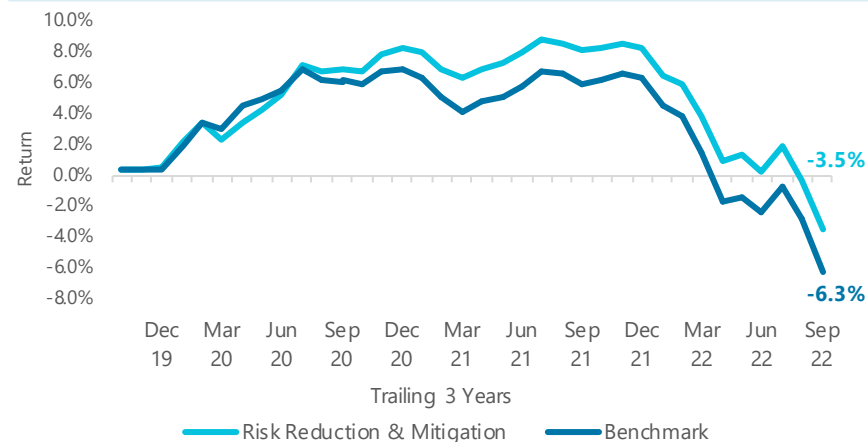
for the quarter ended September 30, 2022

## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>Risk Reduction &amp; Mitigation</b>	<b>-3.7%</b>	<b>-10.8%</b>	<b>-10.7%</b>	<b>-1.2%</b>	<b>--</b>	<b>--</b>	<b>0.3%</b>
Benchmark	-4.0%	-11.9%	-11.5%	-2.2%	--	--	-0.5%
Excess	0.2%	1.1%	0.8%	1.0%	--	--	0.9%

## Cumulative Return

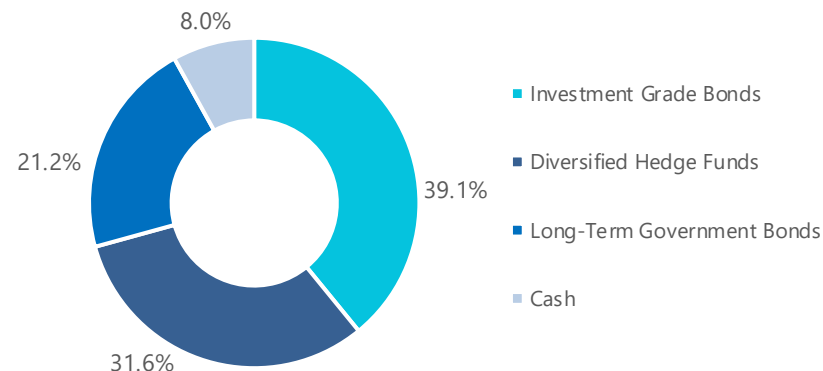


## Functional Category<sup>1</sup>

	QTD	FYTD	1 Year	3 Year
<b>Investment Grade Bonds</b>	<b>-4.7%</b>	<b>-4.7%</b>	<b>-14.9%</b>	<b>-3.1%</b>
BBG BC Aggregate Bond Index	-4.8%	-4.8%	-14.6%	-3.3%
Excess	0.0%	0.0%	-0.3%	0.2%
<b>Diversified Hedge Funds</b>	<b>1.3%</b>	<b>1.3%</b>	<b>5.3%</b>	<b>7.1%</b>
Diversified Hedge Funds Policy Benchmark	0.9%	0.9%	3.0%	3.1%
Excess	0.3%	0.3%	2.3%	4.0%
<b>Long-Term Government Bonds</b>	<b>-10.2%</b>	<b>-10.2%</b>	<b>--</b>	<b>--</b>
Bloomberg U.S. Treasury: Long	-9.6%	-9.6%	--	--
Excess	-0.6%	-0.6%	--	--
<b>Cash</b>	<b>0.9%</b>	<b>0.9%</b>	<b>2.2%</b>	<b>1.4%</b>
Cash Policy Benchmark	0.4%	0.4%	0.6%	0.6%
Excess	0.5%	0.5%	1.5%	0.9%

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

## Exposure



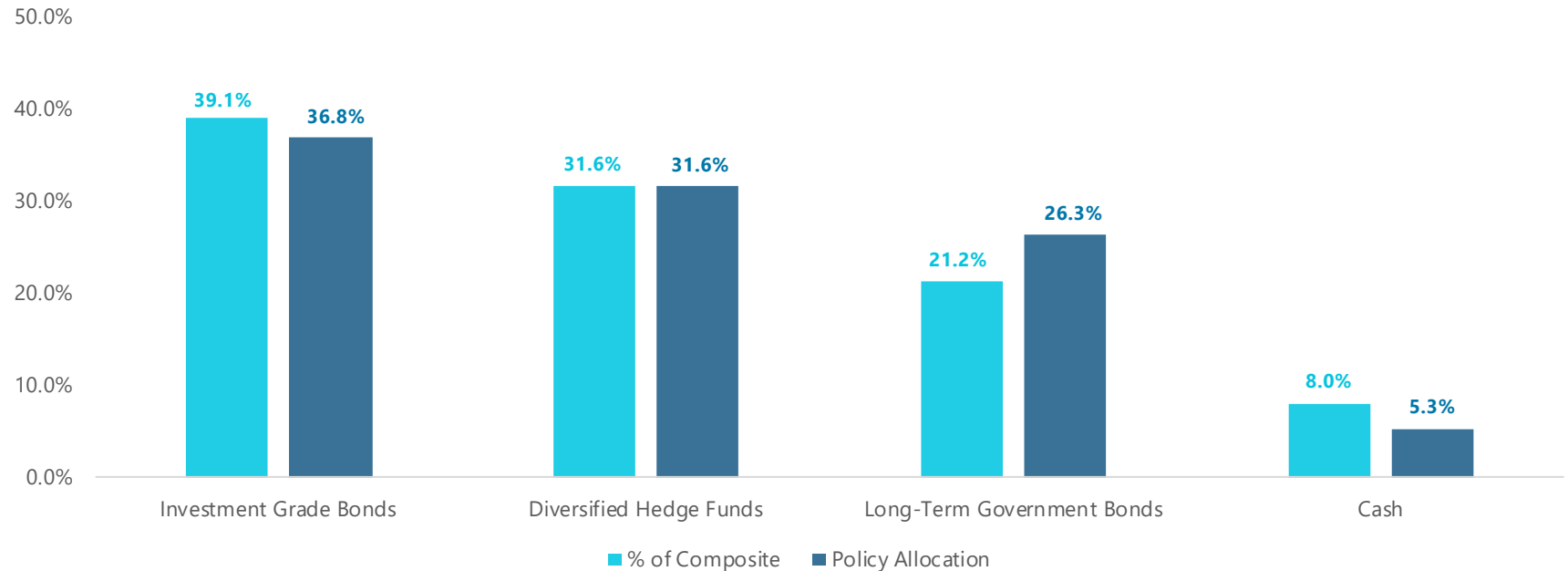
# Asset Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Actual vs. Policy

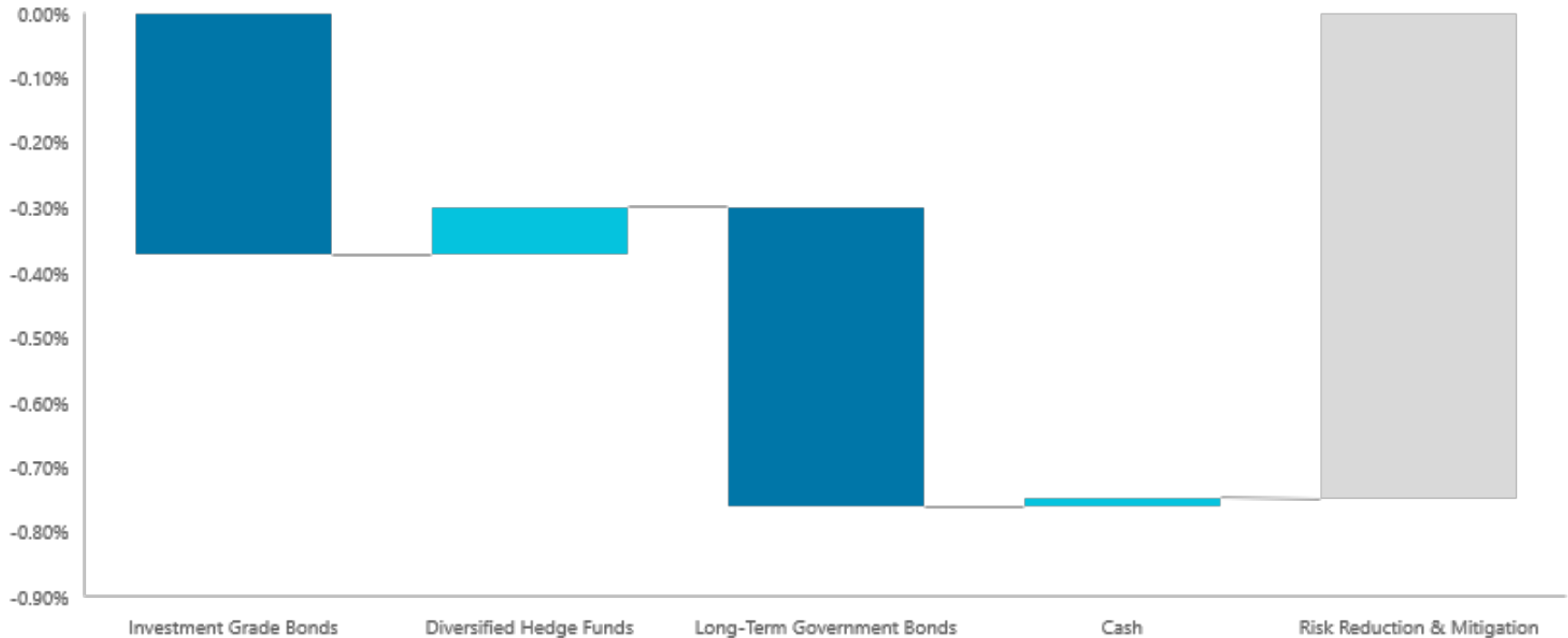


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
<b>Risk Reduction &amp; Mitigation</b>	<b>13,536</b>	<b>100.0%</b>	<b>100.0%</b>		
Investment Grade Bonds	5,292	39.1%	36.8%	2.3%	306
Diversified Hedge Funds	4,281	31.6%	31.6%	0.0%	7
Long-Term Government Bonds	2,874	21.2%	26.3%	-5.1%	-688
Cash	1,088	8.0%	5.3%	2.8%	376

# Contribution to Return

for the quarter ended September 30, 2022

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
Investment Grade Bonds	-0.38%	Brevan Howard Master Fund	0.03%	BlackRock Long Treasury Bonds	-0.46%
Diversified Hedge Funds	0.08%	Capula GRV	0.03%	BTC US Debt Index Fund	-0.20%
Long-Term Government Bonds	-0.46%	Cash	0.01%	Allspring/Wells	-0.11%
Cash	0.01%	Hudson Bay	0.01%	Pugh Capital Mgmt	-0.06%
Risk Reduction & Mitigation	-0.75%	HBK Multi-strategy	0.01%	Sparta	-0.01%

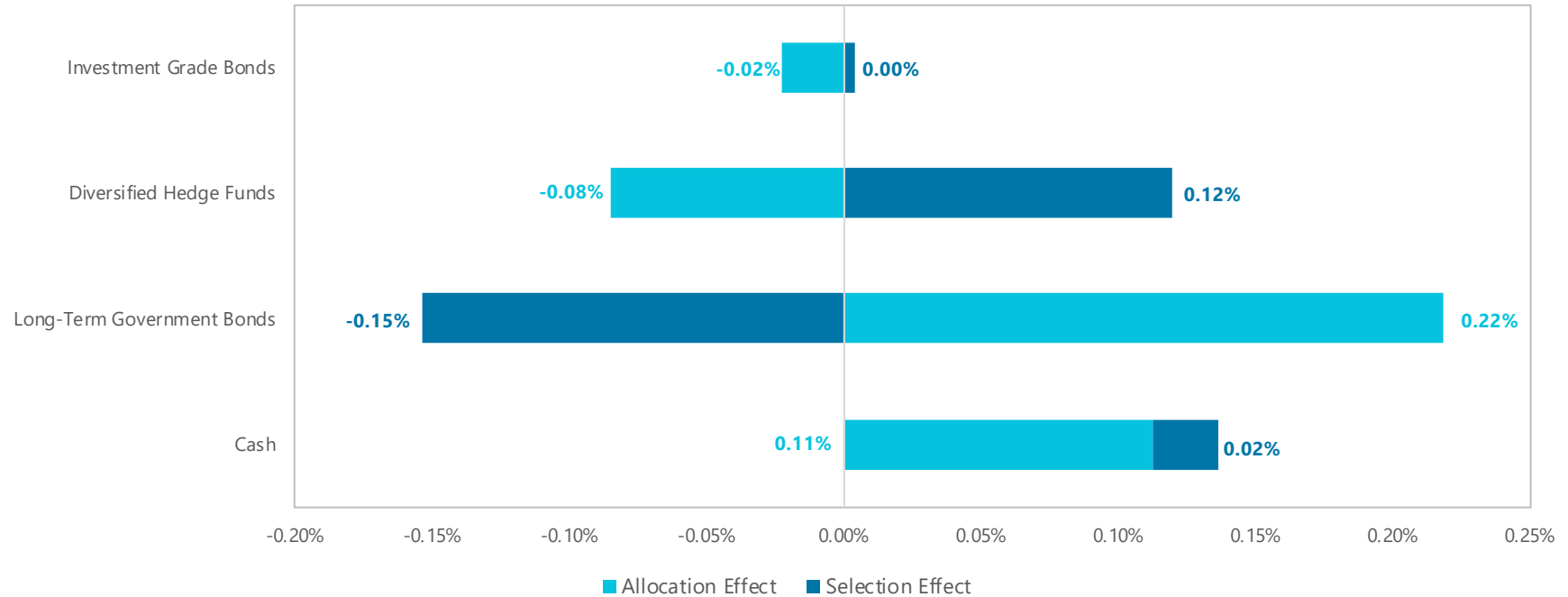
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>Risk Reduction &amp; Mitigation</b>	<b>13,536</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-3.7%</b>	<b>-4.0%</b>	<b>0.22%</b>	<b>-0.01%</b>	<b>0.22%</b>
Investment Grade Bonds	5,292	39.1%	36.8%	-4.7%	-4.8%	-0.02%	0.00%	-0.02%
Diversified Hedge Funds	4,281	31.6%	31.6%	1.3%	0.9%	-0.08%	0.12%	0.03%
Long-Term Government Bonds	2,874	21.2%	26.3%	-10.2%	-9.6%	0.22%	-0.15%	0.07%
Cash	1,088	8.0%	5.3%	0.9%	0.4%	0.11%	0.02%	0.15%

1. Total Value Add includes Interaction Effect.

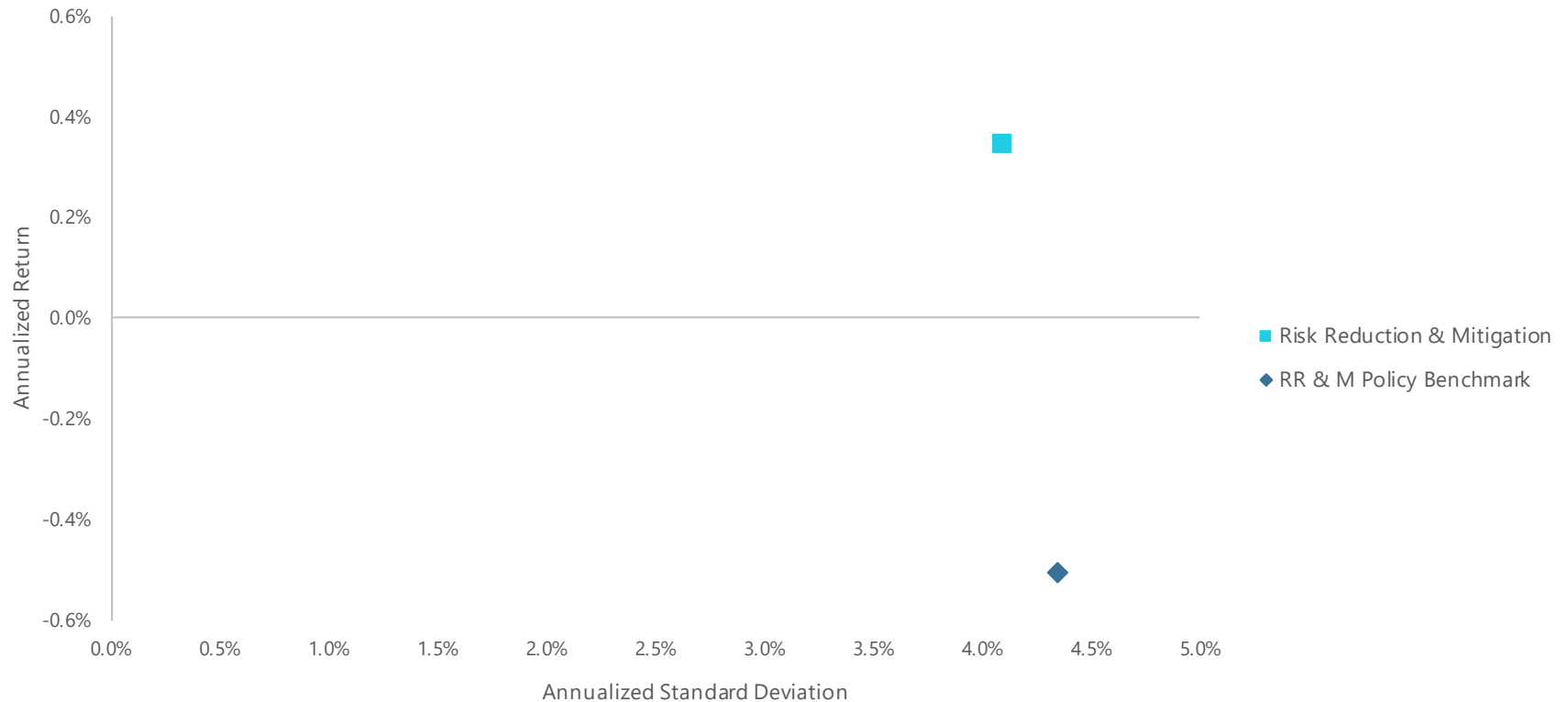
# Risk vs. Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Risk Reduction &amp; Mitigation</b>	<b>0.3%</b>	<b>4.1%</b>				
RR & M Policy Benchmark	-0.5%	4.3%	(0.10)	1.11	0.94	0.8%

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

# Performance Detail

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Annualized Net Returns<sup>1</sup>

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD	Inception Date
<b>Risk Reduction &amp; Mitigation</b> <a href="#">RR &amp; M Policy Benchmark</a>	<b>100.0%</b>	<b>13,536</b>	<b>14,020</b>	<b>-3.7%</b> <a href="#">-4.0%</a>	<b>-10.8%</b> <a href="#">-11.9%</a>	<b>-10.7%</b> <a href="#">-11.5%</a>	<b>-1.2%</b> <a href="#">-2.2%</a>	-- <a href="#">--</a>	-- <a href="#">--</a>	<b>0.3%</b> <a href="#">-0.5%</a>	<b>Apr-2019</b>
<b>Investment Grade Bonds</b> <a href="#">BBG BARC Agg</a>	<b>39.1%</b>	<b>5,292</b>	<b>5,556</b>	<b>-4.7%</b> <a href="#">-4.8%</a>	<b>-14.7%</b> <a href="#">-14.6%</a>	<b>-14.9%</b> <a href="#">-14.6%</a>	<b>-3.1%</b> <a href="#">-3.3%</a>	<b>-0.1%</b> <a href="#">-0.3%</a>	<b>1.4%</b> <a href="#">0.9%</a>	<b>5.1%</b> <a href="#">4.6%</a>	<b>Nov-1994</b>
Allspring/Wells	11.9%	1,605	1,686	-4.8%	-14.7%	-14.7%	-2.7%	0.1%	1.3%	3.7%	Mar-2004
BTC US Debt Index Fund	21.1%	2,856	2,998	-4.7%	-14.5%	-14.5%	-3.2%	-0.2%	1.0%	3.8%	Nov-1999
MHLP	0.1%	11	12	1.2%	3.6%	4.9%	5.2%	7.6%	5.2%	5.4%	Apr-2005
Pugh Capital Mgmt	6.1%	819	861	-4.8%	-14.8%	-14.9%	-3.1%	-0.2%	1.0%	3.1%	Jul-2005
<b>Diversified Hedge Funds</b> <a href="#">Diversified Hedge Funds Policy Benchmark</a>	<b>31.6%</b>	<b>4,281</b>	<b>4,196</b>	<b>1.3%</b> <a href="#">0.9%</a>	<b>4.3%</b> <a href="#">2.3%</a>	<b>5.3%</b> <a href="#">3.0%</a>	<b>7.1%</b> <a href="#">3.1%</a>	-- <a href="#">--</a>	-- <a href="#">--</a>	<b>6.8%</b> <a href="#">3.3%</a>	<b>Apr-2019</b>
AM Asia Strategies	1.6%	221	220	0.7%	-1.9%	0.0%	--	--	--	-1.5%	Jun-2021
Brevan Howard Master Fund	4.8%	648	625	3.6%	18.0%	18.4%	--	--	--	10.8%	Apr-2021
Capula GRV	4.6%	626	608	3.1%	9.2%	9.3%	6.4%	--	--	6.3%	Dec-2018
Caxton Global Investments	2.2%	292	289	0.9%	13.9%	18.0%	--	--	--	10.7%	Feb-2021
DK Institutional Partners	3.6%	487	486	0.1%	-1.2%	-1.0%	5.4%	--	--	4.9%	May-2018
Grosvenor HFOF	0.2%	34	45	-6.4%	-11.8%	-10.1%	4.6%	3.8%	3.7%	3.7%	Nov-2011
HBK Multi-strategy	4.1%	555	549	1.1%	-0.2%	2.3%	5.5%	--	--	4.8%	Jun-2018
Hudson Bay	4.7%	641	632	1.4%	1.6%	3.0%	--	--	--	11.2%	Jul-2020
Polar	3.4%	462	459	0.5%	-0.1%	-0.4%	--	--	--	11.0%	May-2020
Stable Asset Management	2.3%	315	281	-2.3%	-2.2%	-2.1%	--	--	--	-1.8%	Aug-2021
<b>Long-Term Government Bonds</b> <a href="#">Bloomberg U.S. Treasury: Long</a> <a href="#">BlackRock Long Treasury Bonds</a>	<b>21.2%</b>	<b>2,874</b>	<b>1,210</b>	<b>-10.2%</b> <a href="#">-9.6%</a> <a href="#">-10.2%</a>	<b>-28.5%</b> <a href="#">-28.8%</a> <a href="#">-28.5%</a>	-- <a href="#">--</a> <a href="#">--</a>	-- <a href="#">--</a> <a href="#">--</a>	-- <a href="#">--</a> <a href="#">--</a>	-- <a href="#">--</a> <a href="#">--</a>	<b>-28.3%</b> <a href="#">-29.6%</a> <a href="#">-28.3%</a>	<b>Nov-2021</b> <a href="#">Nov-2021</a> <a href="#">Nov-2021</a>
<b>Cash</b> <a href="#">Cash Policy BM</a>	<b>8.0%</b>	<b>1,088</b>	<b>1,067</b>	<b>0.9%</b> <a href="#">0.4%</a>	<b>1.8%</b> <a href="#">0.6%</a>	<b>2.2%</b> <a href="#">0.6%</a>	<b>1.4%</b> <a href="#">0.6%</a>	<b>1.7%</b> <a href="#">1.1%</a>	<b>1.1%</b> <a href="#">0.7%</a>	<b>1.8%</b> <a href="#">1.4%</a>	<b>Jun-2001</b>

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



# Risk Reduction & Mitigation

## Risk Summary

for the quarter ended September 30, 2022

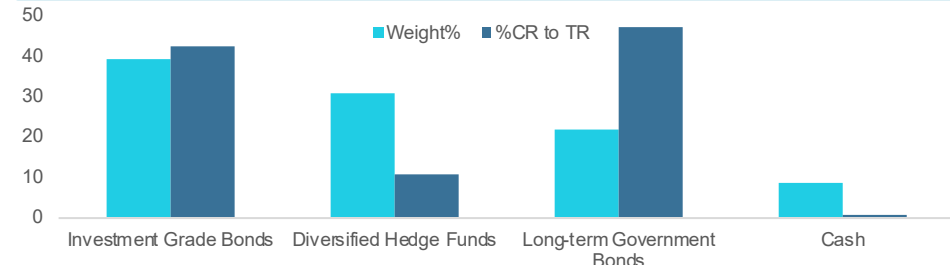
### Risk Summary

	Value
<b>Total Risk</b>	<b>5.46</b>
Benchmark Risk	5.42
Active Risk	1.25
Portfolio Beta	0.98
Cont. to Eff. Duration	6.57
Convexity	5.46
Yield to Worst (%)	4.27
OAS to Sw ap (bp)	59

### Risk Decomposition

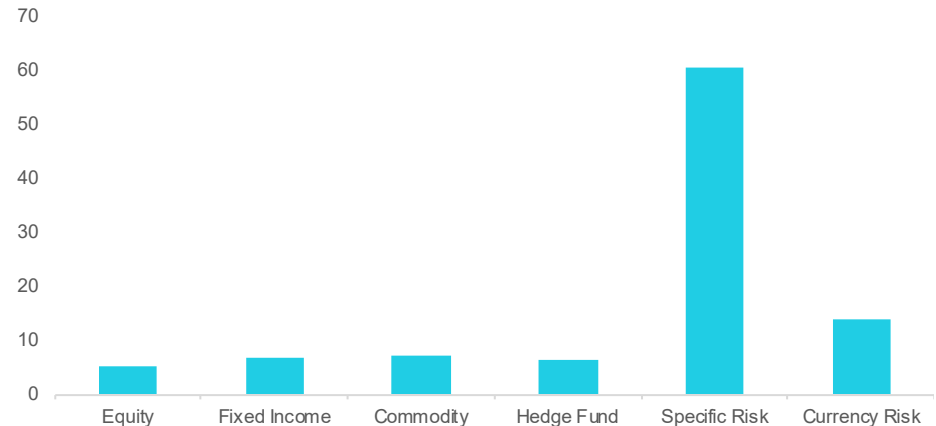
Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
<b>Total Risk</b>	<b>5.46</b>	<b>100.00</b>	<b>1.25</b>	<b>100.00</b>
Local Market Risk	5.36	98.11	1.08	86.11
Common Factor Risk	5.19	94.93	0.32	25.69
Specific Risk	0.17	3.18	0.76	60.42
Currency Risk	0.10	1.89	0.17	13.89

### Contribution to Risk



Risk Reduction & Mitigation	(mm)	Weight%	Total Risk	Contribution	%CR to TR
<b>Total</b>	<b>13,197</b>	<b>100.00</b>	<b>5.46</b>	<b>5.46</b>	<b>100.00</b>
Investment Grade Bonds	5,172	39.19	6.10	2.31	42.20
Diversified Hedge Funds	4,064	30.80	4.03	0.59	10.73
Long-term Government Bonds	2,871	21.76	12.46	2.57	47.03
Cash	1,090	8.26	0.03	0.00	0.03

### Active Risk from Common Factors



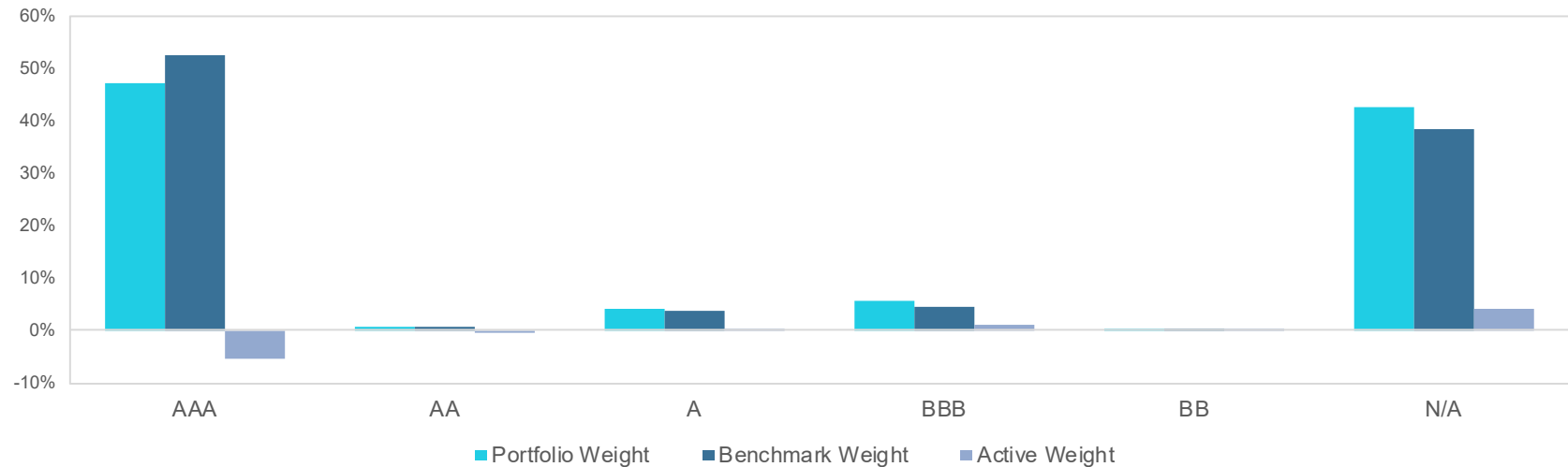
# Risk Reduction & Mitigation Risk Summary

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Portfolio Allocation By Moody's Rating



Rating	Weight%			Total Risk	Active Risk CR	% of Active TR	CR to Effective Duration
	Portfolio	Benchmark	Active				
<b>Risk Reduction &amp; Mitigation</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>5.46</b>	1.25	<b>100.00</b>	<b>6.57</b>
AAA	47.10%	52.38%	-5.28%	8.99	0.05	5.5%	5.07
AA	0.69%	0.77%	-0.08%	6.29	0.00	0.0%	0.05
A	3.95%	3.90%	0.04%	5.59	0.00	0.1%	0.26
BBB	5.63%	4.46%	1.17%	6.13	0.01	0.8%	0.39
BB	0.14%	0.12%	0.02%	7.86	0.00	0.0%	0.01
N/A	42.49%	38.36%	4.13%	3.13	1.19	93.6%	0.79

# Risk Reduction & Mitigation

## Investment Grade Bonds

### Allspring/Wells

for the quarter ended September 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	923.0	0.0
Effective Duration	6.3	6.1
Convexity	0.6	0.7
Coupon Rate	2.8	2.6
Yield to Maturity	4.7	4.5
Current Yield	3.1	2.9
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA	AA-2

#### Top Holdings (% of assets)

US TREASURY N/B	2.9%
US TREASURY N/B	2.3%
US TREASURY N/B	2.2%
US TREASURY N/B	1.6%
US TREASURY N/B	1.5%
<b>Top 5 Holdings</b>	<b>10.5%</b>

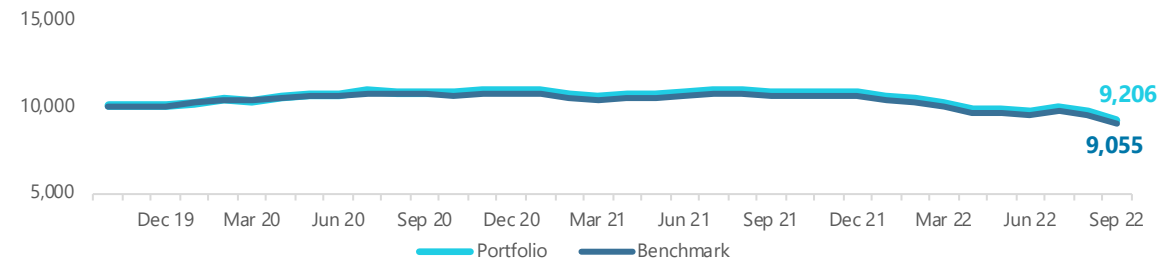
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Allspring/Wells</b>	<b>1,605.1</b>	<b>-4.8%</b>	<b>-14.7%</b>	<b>-2.7%</b>	<b>0.1%</b>
BBG BARC Agg		-4.8%	-14.6%	-3.3%	-0.3%
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

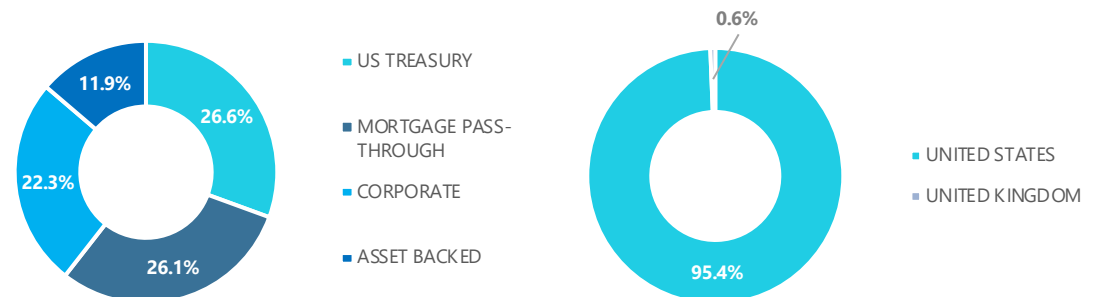
  

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Allspring/Wells</b>	<b>-4.8%</b>	<b>64</b>	<b>-14.6%</b>	<b>65</b>	<b>-2.6%</b>	<b>63</b>	<b>0.2%</b>	<b>63</b>
Median	-3.6%		-11.9%		-1.8%		0.5%	

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



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

# Risk Reduction & Mitigation Risk Analysis

## Investment Grade Bonds

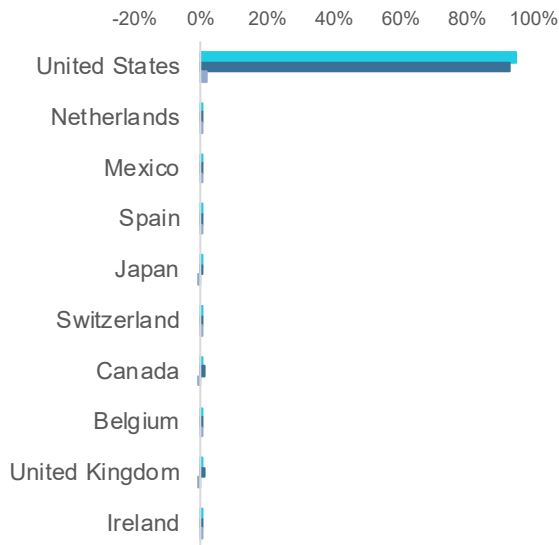
### Allspring/Wells

for the quarter ended September 30, 2022

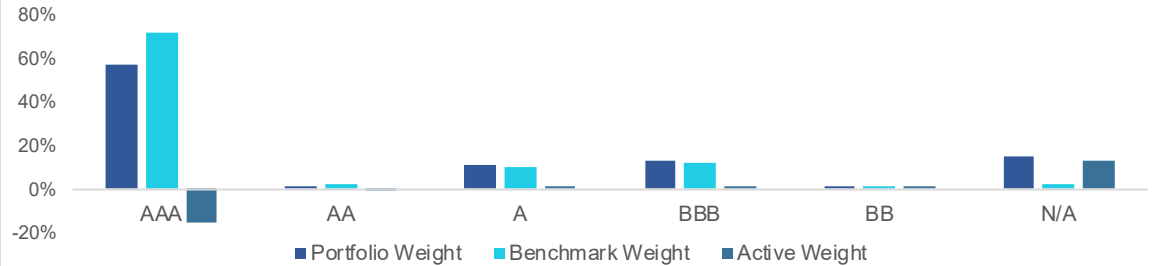
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>6.29</b>
Benchmark Risk	6.04
Active Risk	0.53
Portfolio Beta	1.04
Cont. to Eff. Duration	6.99
Yield to Worst (%)	4.58
OAS to Swap (bp)	74

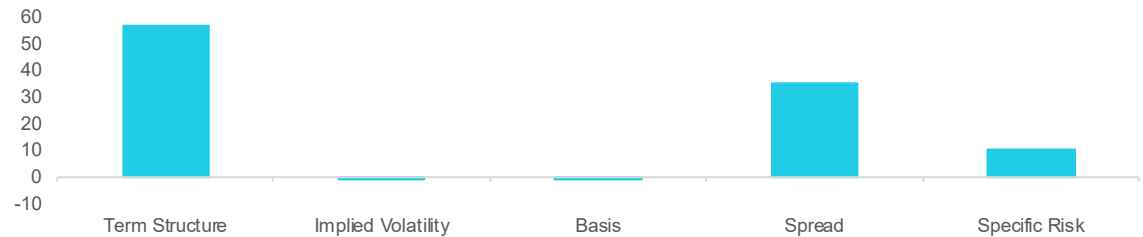
#### Top Countries by Weight%



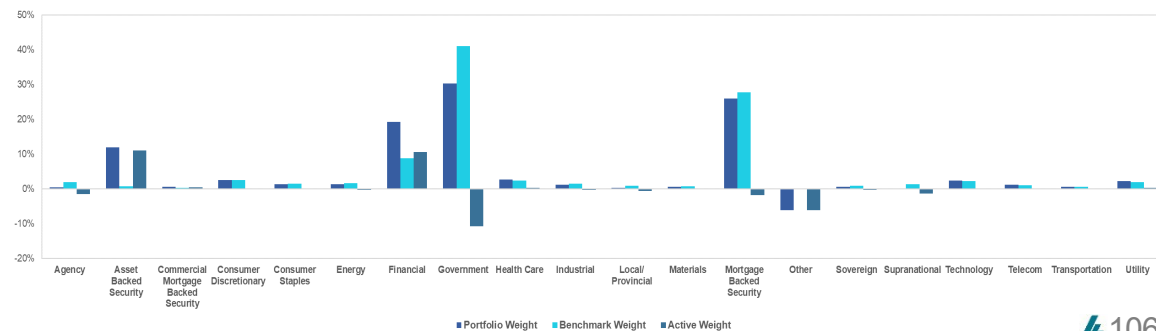
#### Allocation by Moody's Rating



#### Active Risk from Common Factors



#### Portfolio Risk by Bond Sector



# Risk Reduction & Mitigation

## Investment Grade Bonds

### Pugh Capital

for the quarter ended September 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	260.0	0.0
Effective Duration	6.3	6.1
Convexity	0.6	0.7
Coupon Rate	3.0	2.6
Yield to Maturity	4.7	4.5
Current Yield	3.3	2.9
Rating – Moody's	AAA-2	AA-2
Rating – S & P	AA-	AA-

#### Top Holdings (% of assets)

US TREASURY N/B	4.7%
US TREASURY N/B	3.2%
US TREASURY N/B	2.2%
US TREASURY N/B	1.8%
US TREASURY N/B	1.8%
<b>Top 5 Holdings</b>	<b>13.8%</b>

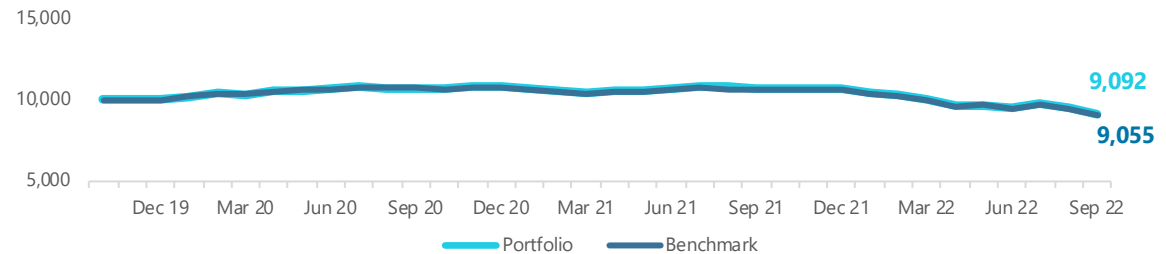
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Pugh Capital Mgmt</b>	<b>819.4</b>	<b>-4.8%</b>	<b>-14.9%</b>	<b>-3.1%</b>	<b>-0.2%</b>
BBG BARC Agg		-4.8%	-14.6%	-3.3%	-0.3%
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

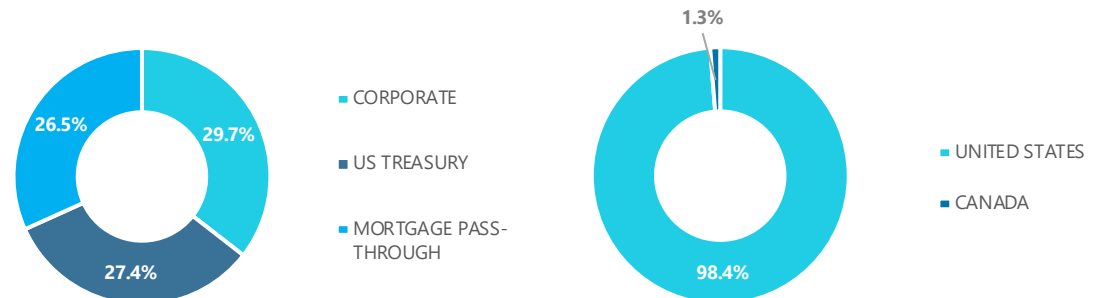
  

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Pugh Capital Mgmt</b>	<b>-4.8%</b>	<b>64</b>	<b>-14.8%</b>	<b>65</b>	<b>-3.0%</b>	<b>69</b>	<b>0.0%</b>	<b>66</b>
Median	-3.6%		-11.9%		-1.8%		0.5%	

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.

# Risk Reduction & Mitigation Risk Analysis

## Investment Grade Bonds

### Pugh Capital

for the quarter ended September 30, 2022

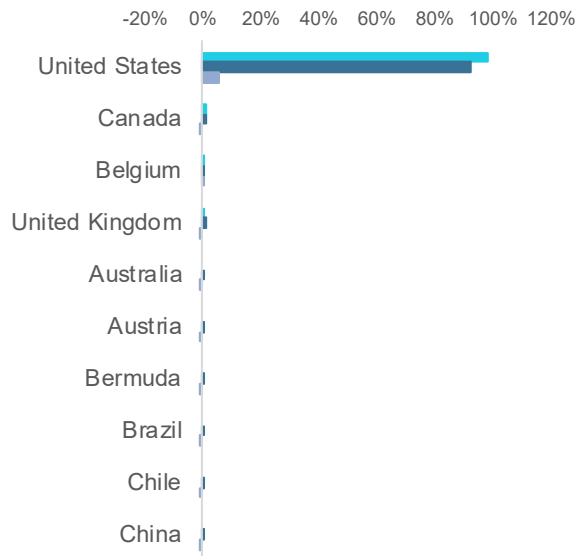


Los Angeles County Employees Retirement Association

#### Portfolio Risk Summary

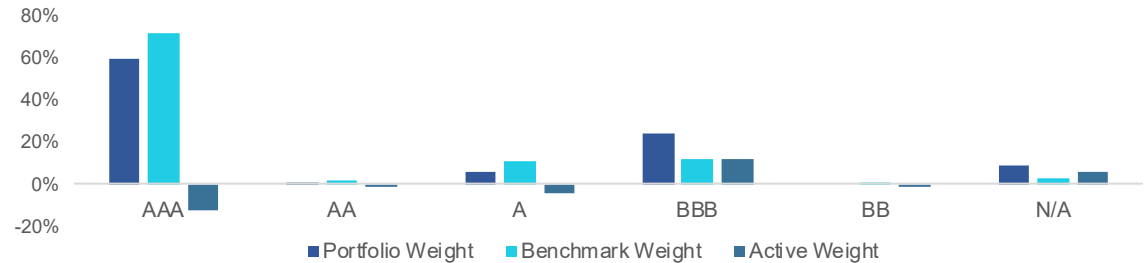
	Value
<b>Total Risk</b>	<b>6.06</b>
Benchmark Risk	6.04
Active Risk	0.37
Portfolio Beta	1.00
Cont. to Eff. Duration	6.47
Yield to Worst (%)	4.74
OAS to Swap (bp)	83

#### Top Countries by Weight%

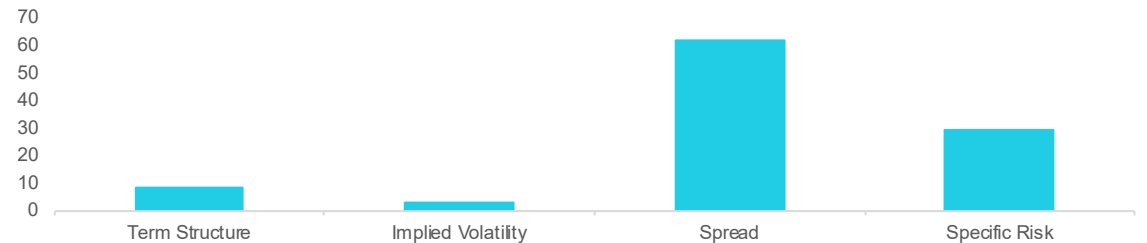


■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

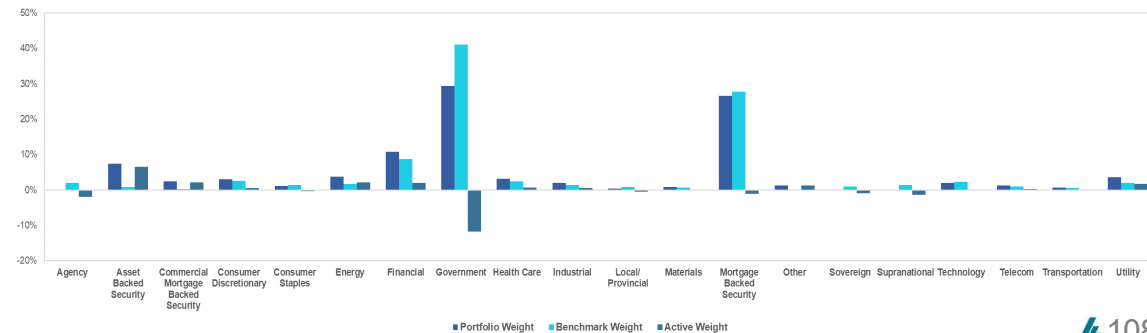
#### Allocation by Moody's Rating



#### Active Risk from Common Factors



#### Portfolio Risk by Bond Sector



■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

# Risk Reduction & Mitigation

## Long-term Government Bonds

### BlackRock

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

#### Strategy

Seeks investment results that correspond generally to the price and yield performance of long duration U.S. government bonds.

Inception Date: Nov 2021

#### Portfolio Characteristics

Standard Deviation	3.7%
Benchmark Standard Deviation	3.7%
Sharpe Ratio	-0.80
Information Ratio	-0.73
Beta	0.99
Tracking Error	0.4%

#### Top Holdings (% of assets)

US TREASURY N/B	4.7%
US TREASURY N/B	3.2%
US TREASURY N/B	2.2%
US TREASURY N/B	1.8%
US TREASURY N/B	1.8%
<b>Top 5 Holdings</b>	<b>13.8%</b>

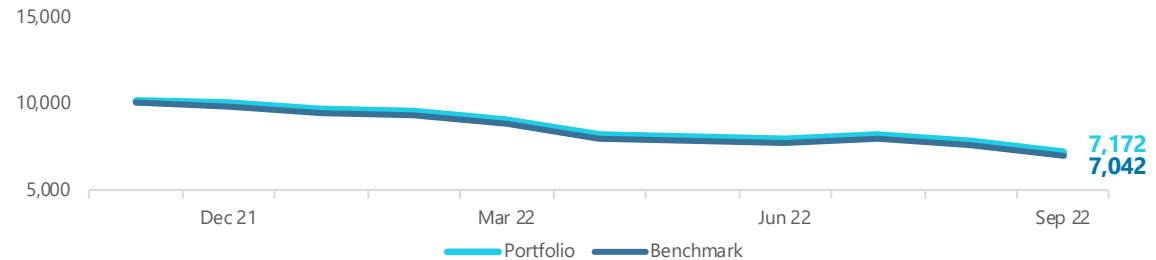
#### Performance (net)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>BlackRock Long Treasury Bonds</b>	<b>2,874.4</b>	<b>-10.2%</b>	--	--	--
Bloomberg U.S. Treasury: Long		-9.6%	--	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

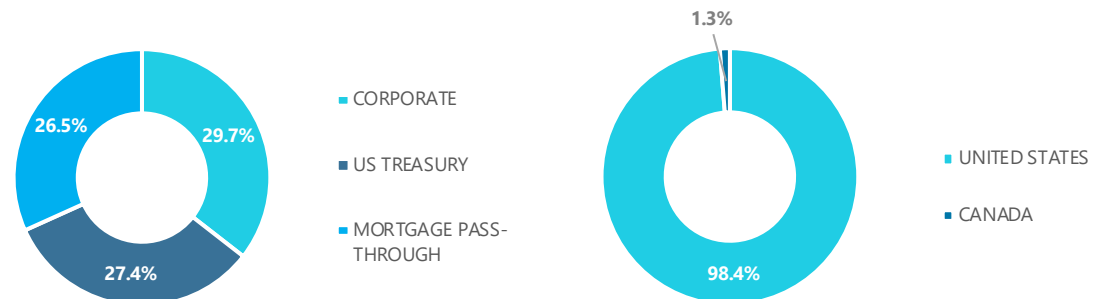
  

Universe data: US Fixed Income Funds - Long	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>BlackRock Long Treasury Bonds</b>	<b>-10.2%</b>	<b>89</b>	--	--	--	--	--	--
Median	-8.6%		--	--	--	--	--	--

#### Growth of \$10,000



#### Top Exposures (% of assets)<sup>2</sup>



1. Universe data is gross-of-fees.

2. Charts display top exposures and may not add up to 100%.

# Risk Reduction & Mitigation Risk Analysis

## Long-term Government Bonds

### BlackRock

for the quarter ended September 30, 2022

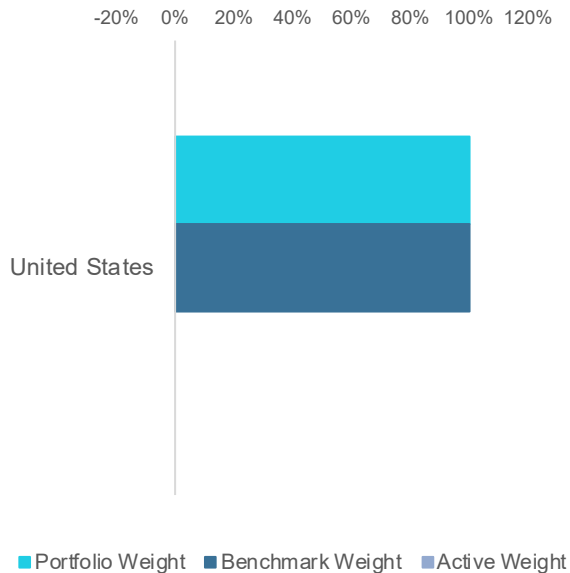


Los Angeles County Employees Retirement Association

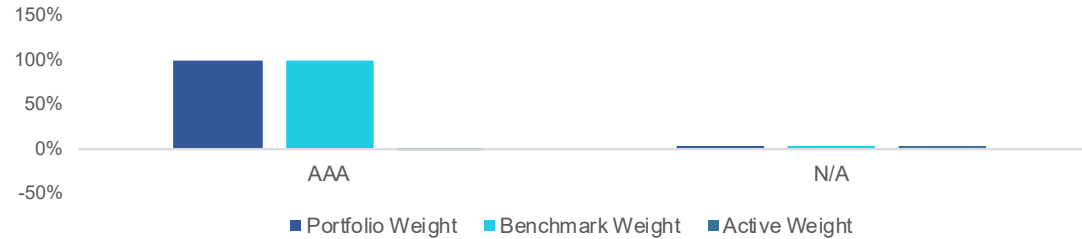
#### Portfolio Risk Summary

	Value
<b>Total Risk</b>	<b>12.46</b>
Benchmark Risk	12.46
Active Risk	0.03
Portfolio Beta	1.00
Cont. to Eff. Duration	16.26
Yield to Worst (%)	3.98
OAS to Swap (bp)	45

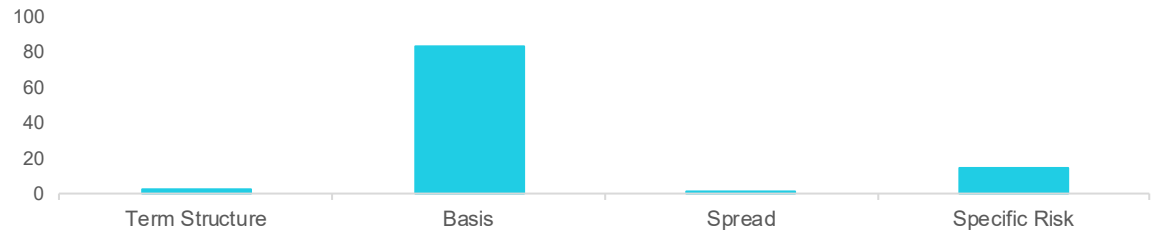
#### Top Countries by Weight%



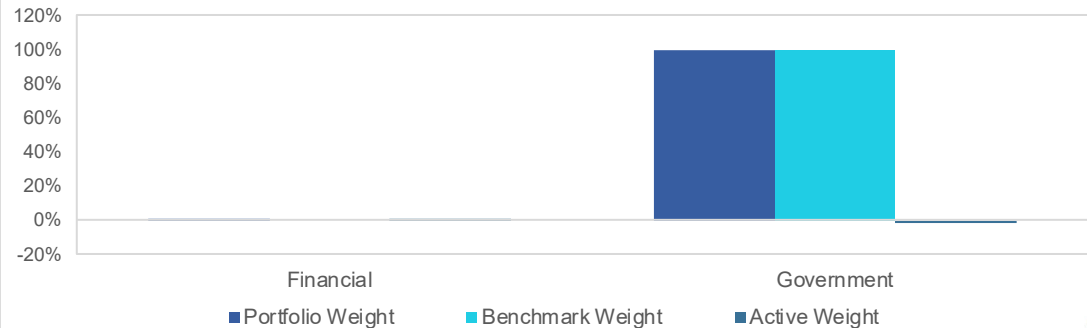
#### Allocation by Moody's Rating



#### Active Risk from Common Factors



#### Portfolio Risk by Bond Sector





# Risk Reduction & Mitigation

## Diversified Hedge Funds

### AM Asia Strategies Fund

for the quarter ended September 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)

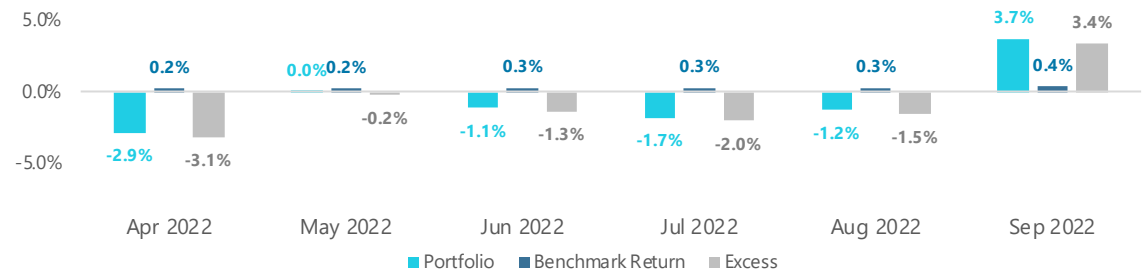
Standard Deviation	1.7%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.20
Information Ratio	-0.20
Beta	9.38
Tracking Error	5.9%

#### Performance (net all)<sup>1</sup>

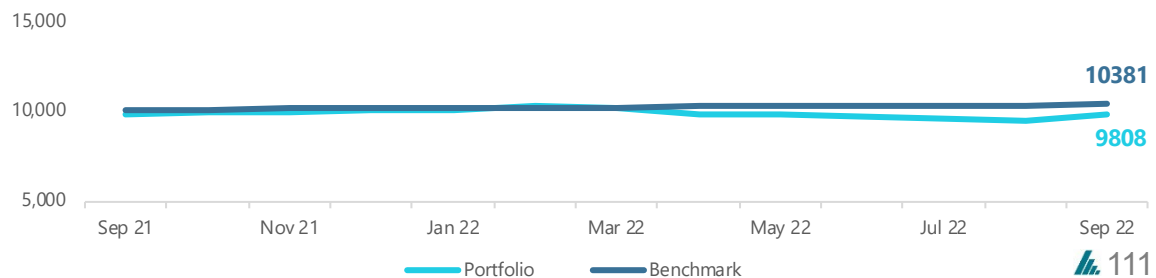
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>AM Asia Strategies</b>	<b>221.5</b>	<b>0.7%</b>	<b>0.0%</b>	--	--
Custom Hedge Fund Benchmark		0.9%	3.0%	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>AM Asia Strategies</b>	<b>0.7%</b>	<b>41</b>	<b>0.0%</b>	<b>47</b>	--	--	--	--
Median	0.1%		-1.1%		--		--	

#### 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 September 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)

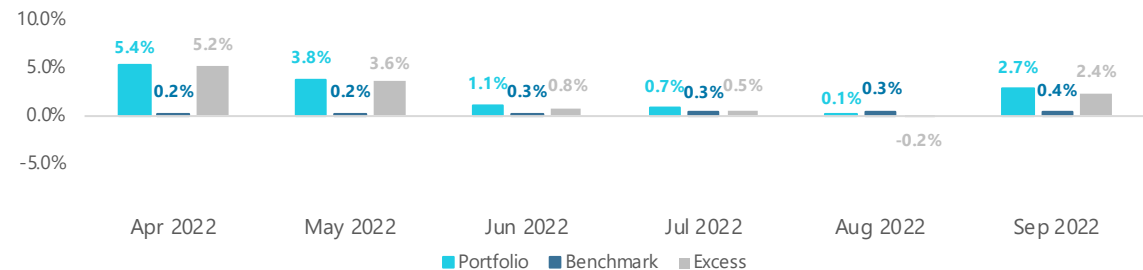
Standard Deviation	5.5%
Benchmark Standard Deviation	0.1%
Sharpe Ratio	1.63
Information Ratio	1.26
Beta	-16.16
Tracking Error	5.5%

#### Performance (net all)<sup>1</sup>

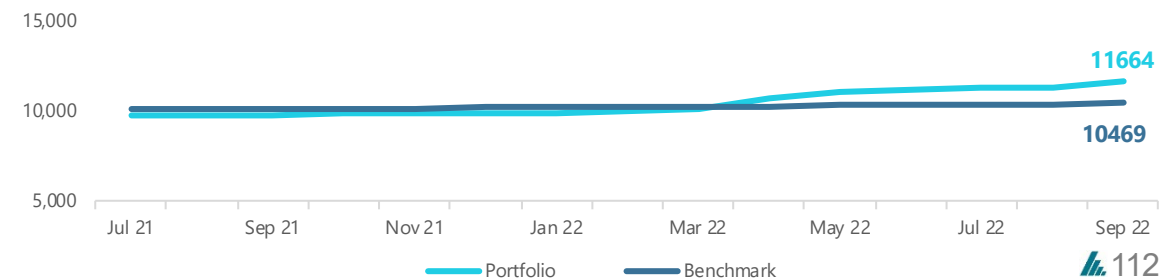
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Brevan Howard Master Fund</b>	<b>647.6</b>	<b>3.6%</b>	<b>18.4%</b>	--	--
Custom Hedge Fund Benchmark		0.9%	3.0%	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Brevan Howard Master Fund</b>	<b>3.6%</b>	<b>15</b>	<b>18.4%</b>	<b>17</b>	--	--	--	--
Median	0.1%		-1.1%		--		--	

#### 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 September 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	1.9%
Benchmark Standard Deviation	0.4%
Sharpe Ratio	2.74
Information Ratio	1.40
Beta	-1.25
Tracking Error	1.9%

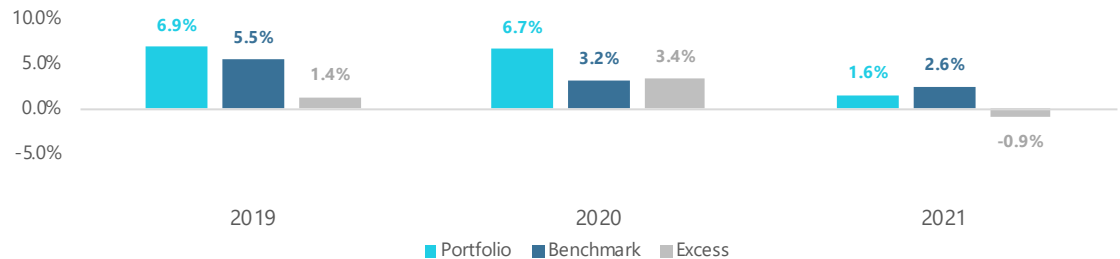
#### Performance (net all)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Capula GRV</b>	<b>626.2</b>	<b>3.1%</b>	<b>9.3%</b>	<b>6.4%</b>	--
Custom Hedge Fund Benchmark		0.9%	3.0%	3.1%	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

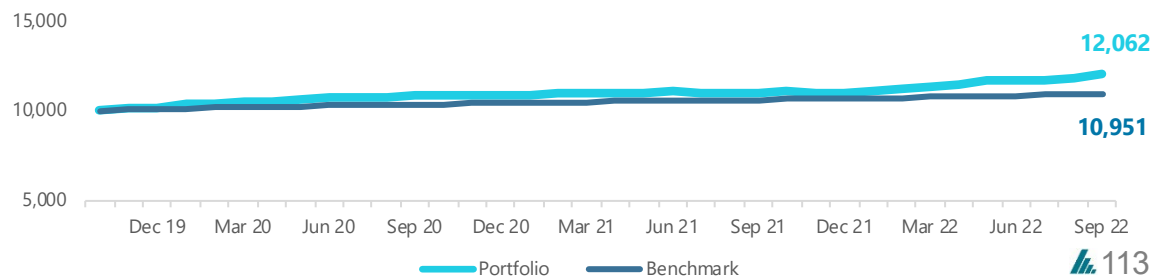
  

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Capula GRV</b>	<b>3.1%</b>	<b>18</b>	<b>9.3%</b>	<b>30</b>	<b>6.5%</b>	<b>39</b>	--	--
Median	0.1%		-1.1%		4.4%		--	

#### 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 September 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)

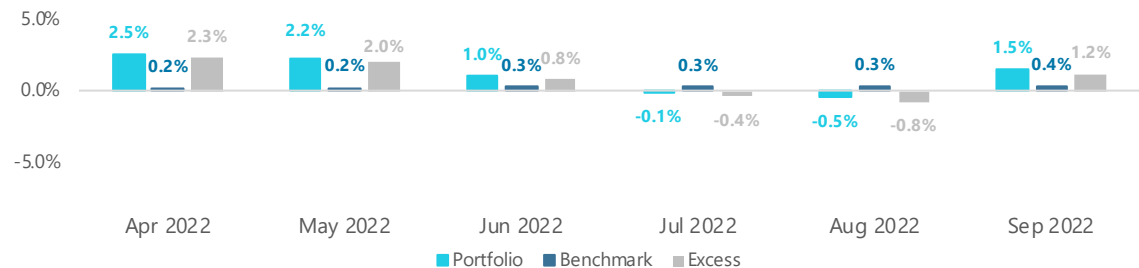
Standard Deviation	5.3%
Benchmark Standard Deviation	0.1%
Sharpe Ratio	1.78
Information Ratio	1.39
Beta	-4.45
Tracking Error	5.3%

#### Performance (net all)<sup>1</sup>

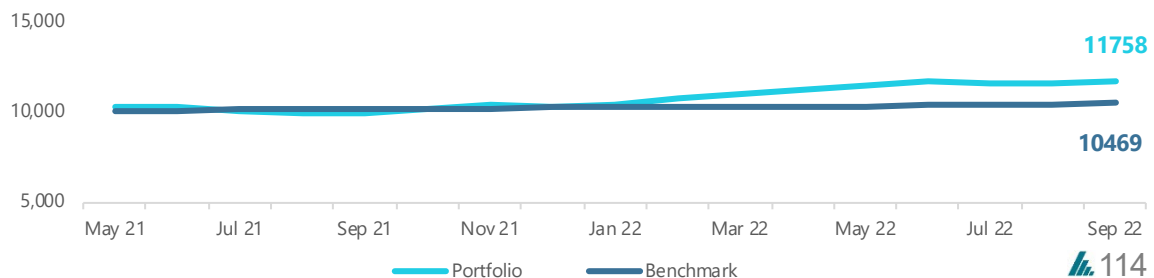
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Caxton Global Investments</b>	<b>292.1</b>	<b>0.9%</b>	<b>18.0%</b>	--	--
Custom Hedge Fund Benchmark		0.9%	3.0%	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Caxton Global Investments</b>	<b>0.9%</b>	<b>37</b>	<b>18.0%</b>	<b>19</b>	--	--	--	--
Median	0.1%		-1.1%		--		--	

#### 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 September 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)

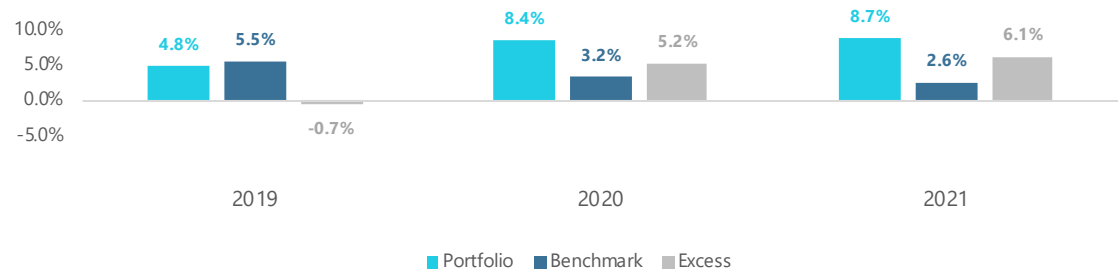
Standard Deviation	4.7%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.82
Information Ratio	0.17
Beta	-3.07
Tracking Error	4.8%

#### Performance (net all)<sup>1</sup>

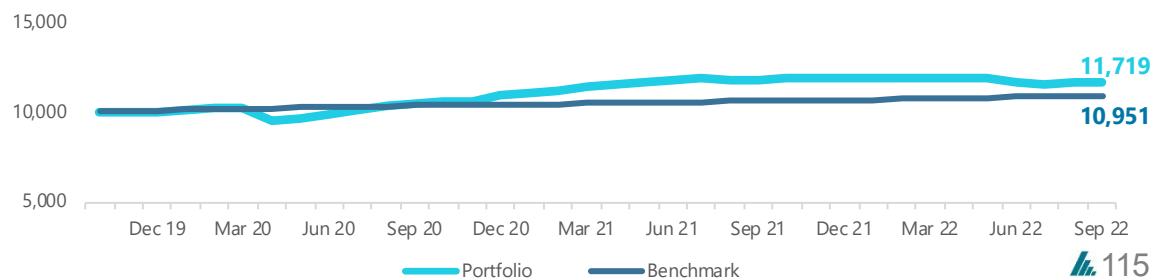
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>DK Institutional Partners</b>	<b>486.7</b>	<b>0.1%</b>	<b>-1.0%</b>	<b>5.4%</b>	--
Custom Hedge Fund Benchmark		0.9%	3.0%	3.1%	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>DK Institutional Partners</b>	<b>0.1%</b>	<b>51</b>	<b>-1.0%</b>	<b>50</b>	<b>5.4%</b>	<b>45</b>	--	--
Median	0.1%		-1.1%		4.4%		--	

#### 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 September 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)

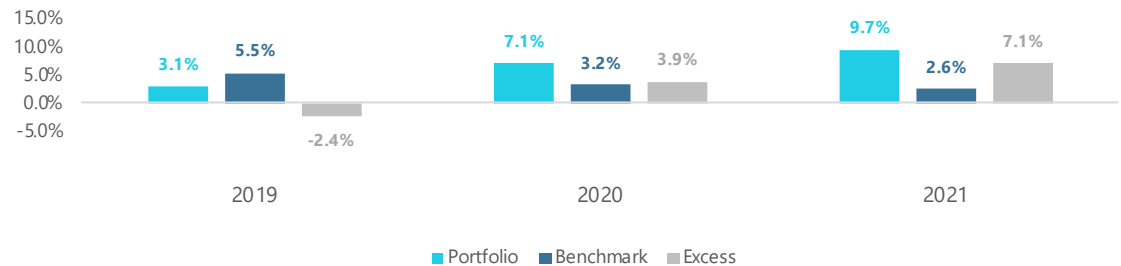
Standard Deviation	5.8%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.64
Information Ratio	0.11
Beta	-2.23
Tracking Error	5.9%

#### Performance (net all)<sup>1</sup>

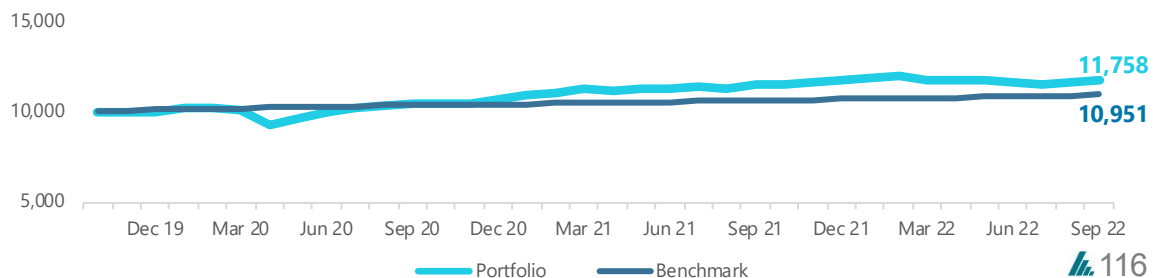
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>HBK Multi-strategy</b>	<b>555.1</b>	<b>1.1%</b>	<b>2.3%</b>	<b>5.5%</b>	--
Custom Hedge Fund Benchmark		0.9%	3.0%	3.1%	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>HBK Multi-strategy</b>	<b>1.1%</b>	<b>34</b>	<b>2.3%</b>	<b>40</b>	<b>5.6%</b>	<b>44</b>	--	--
Median	0.1%		-1.1%		4.4%		--	

#### 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 September 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)

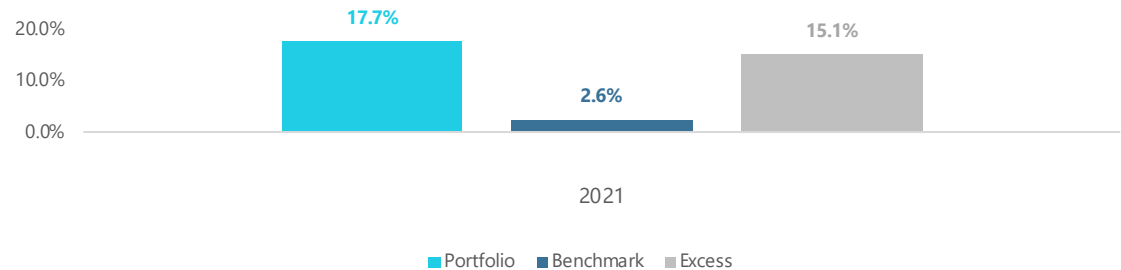
Standard Deviation	4.8%
Benchmark Standard Deviation	0.1%
Sharpe Ratio	2.17
Information Ratio	1.75
Beta	0.91
Tracking Error	4.8%

#### Performance (net all)<sup>1</sup>

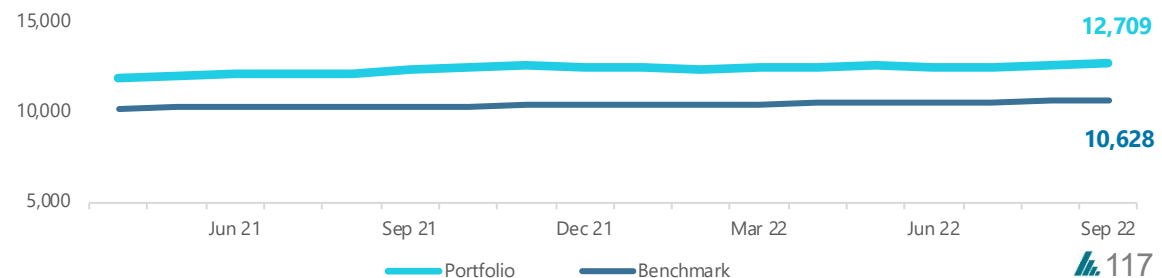
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Hudson Bay</b>	<b>641.1</b>	<b>1.4%</b>	<b>3.0%</b>	--	--
Custom Hedge Fund Benchmark		0.9%	3.0%	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Hudson Bay</b>	<b>1.4%</b>	<b>32</b>	<b>3.0%</b>	<b>39</b>	--	--	--	--
Median	0.1%		-1.1%		--	--	--	--

#### 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 September 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	5.3%
Benchmark Standard Deviation	0.2%
Sharpe Ratio	1.52
Information Ratio	1.07
Beta	0.16
Tracking Error	5.3%

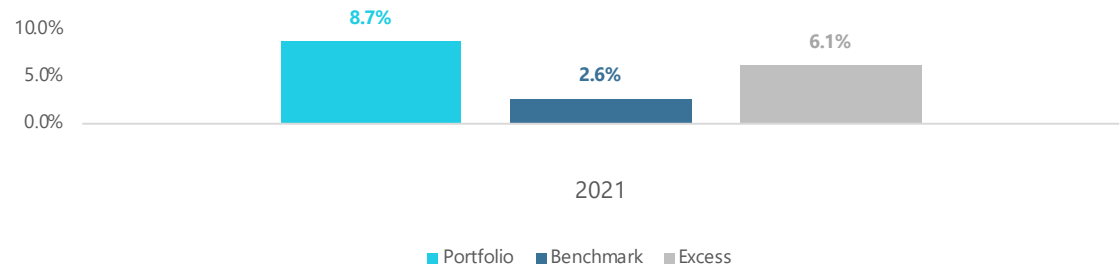
#### Performance (net all)<sup>1</sup>

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
<b>Polar</b>	<b>461.7</b>	<b>0.5%</b>	<b>-0.4%</b>	--	--
Custom Hedge Fund Benchmark		0.9%	3.0%	--	--
RR & M Policy Benchmark		-4.0%	-11.5%	-2.2%	--

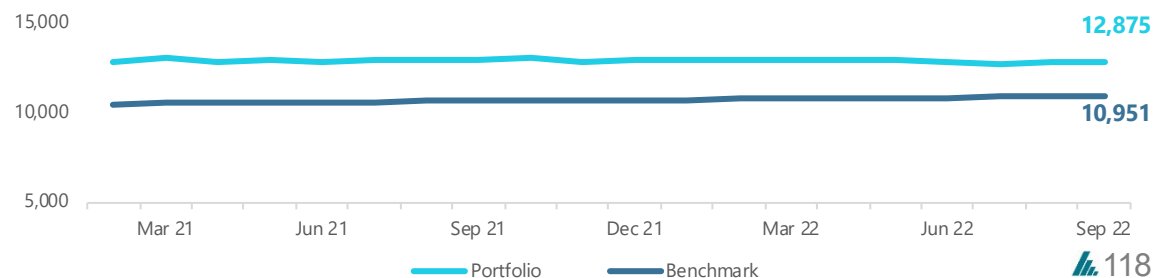
  

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
<b>Polar</b>	<b>-2.2%</b>	<b>72</b>	<b>-1.8%</b>	<b>56</b>	--	--	--	--
Median	0.1%		-1.1%		--		--	

#### 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

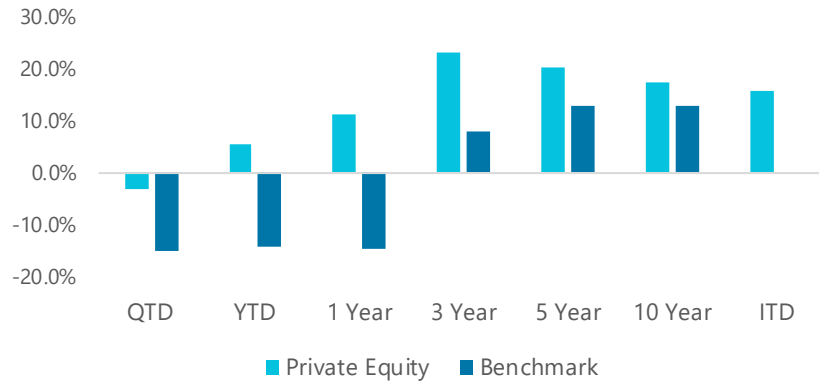
## Private Equity

for the quarter ended September 30, 2022



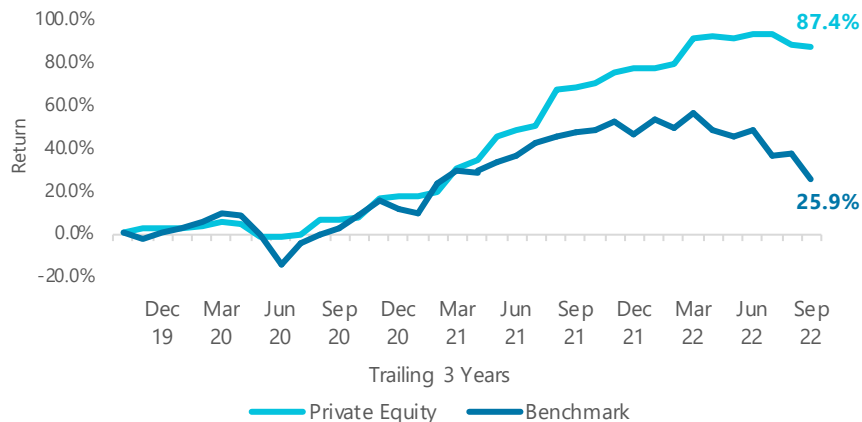
Los Angeles County Employees Retirement Association

### Performance (net)



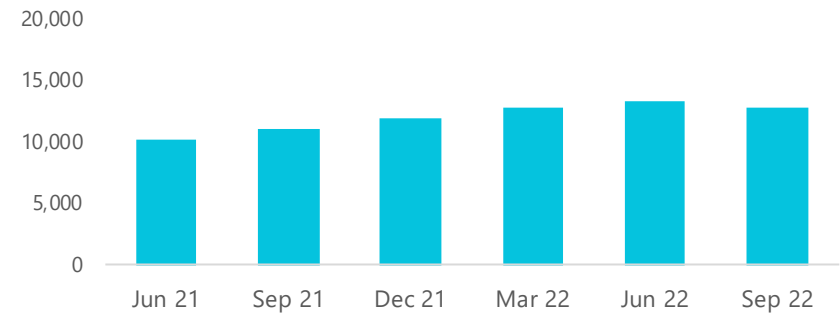
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Equity	-3.2%	5.7%	11.4%	23.3%	20.2%	17.3%	15.6%
Benchmark	-15.2%	-14.1%	-14.6%	8.0%	12.8%	13.0%	--
Excess	12.0%	19.7%	26.0%	15.3%	7.4%	4.3%	--

### Cumulative Return

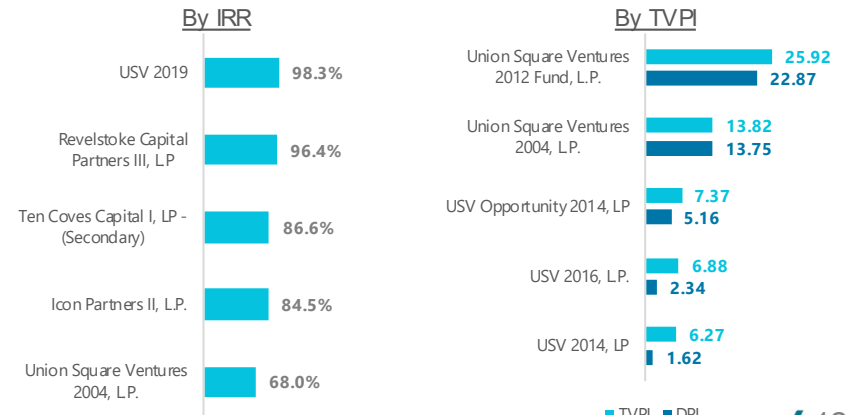


### Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	13,207	11,037	6,055
Net Cash Flow	34	516	859
Gain/Loss	-420	1,268	5,907
Ending Market Value	12,821	12,821	12,821



### Top Performing Investments (since inception)



TVPI DPI

# Historical Returns

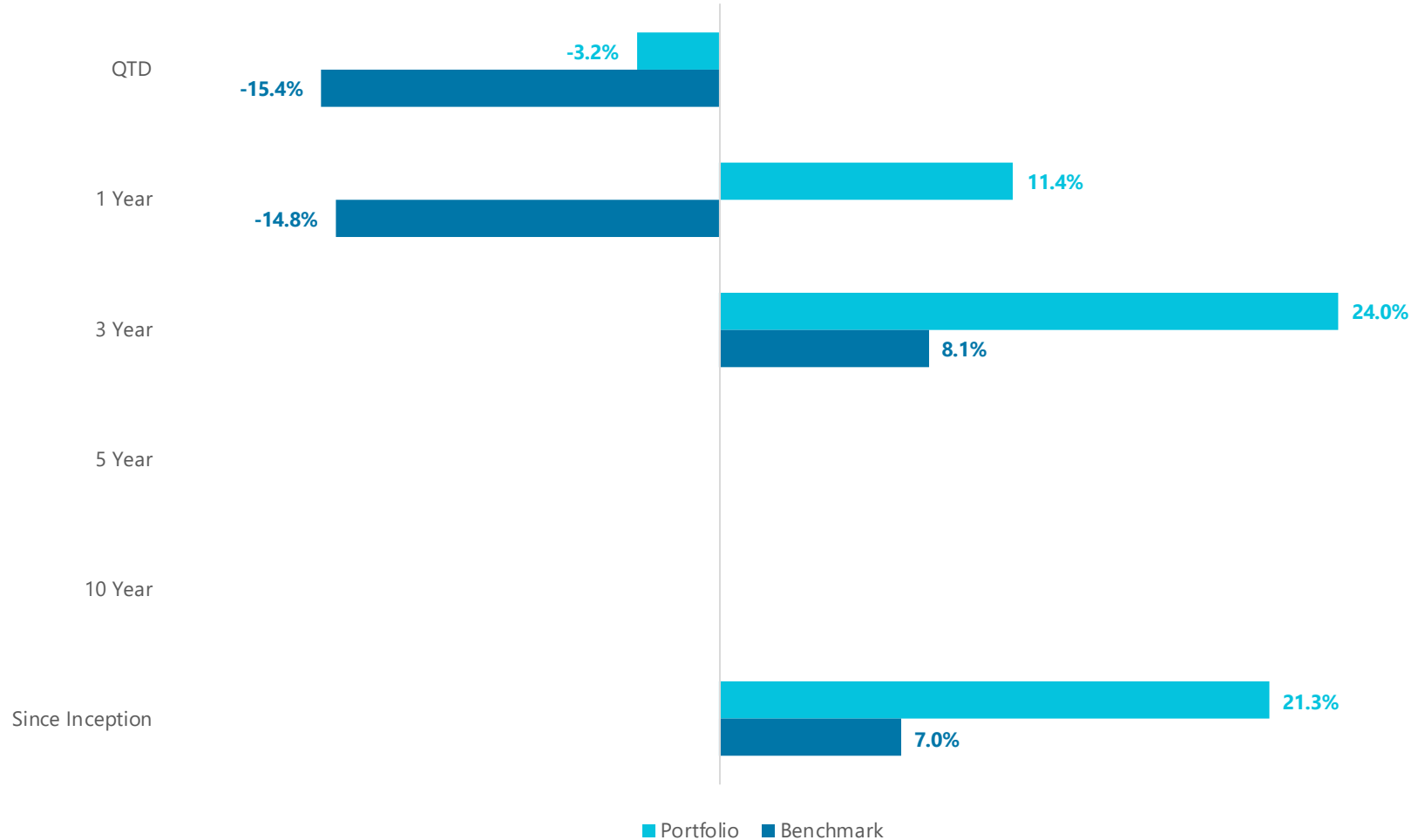
## Private Equity – Growth

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### Time-Weighted Returns (net)<sup>1</sup>



# Performance by Strategy

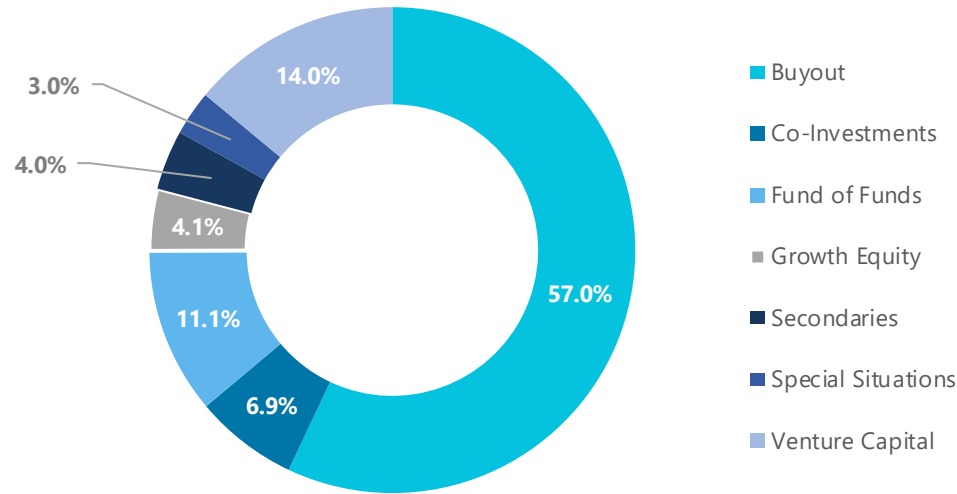
## Private Equity – Growth

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Strategy<sup>1,2</sup>



	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	14,068.0	12,585.7	13,949.5	7,117.9	21,067.4	8,481.7	1.11x	1.67x	14.1%	1.62
Co-Investments	12	1,174.8	1,132.9	1,004.8	858.4	1,863.1	730.2	0.89x	1.64x	18.4%	1.56
Fund of Funds	16	1,423.8	1,303.8	1,492.0	1,380.8	2,872.8	1,569.0	1.14x	2.20x	14.9%	1.70
Growth Equity	21	1,343.3	1,059.5	1,490.7	515.0	2,005.7	946.3	1.41x	1.89x	86.9%	1.75
Secondaries	15	803.0	651.6	366.4	495.1	861.5	209.9	0.56x	1.32x	17.6%	1.37
Special Situations	22	1,165.0	1,012.0	1,054.5	372.3	1,426.9	414.8	1.04x	1.41x	9.3%	1.17
Venture Capital	104	2,253.4	1,919.2	2,555.0	1,744.8	4,299.8	2,380.6	1.33x	2.24x	21.8%	2.13
<b>Total Growth Portfolio</b>	<b>389</b>	<b>22,231.3</b>	<b>19,664.8</b>	<b>21,913.0</b>	<b>12,484.3</b>	<b>34,397.3</b>	<b>14,732.6</b>	<b>1.11x</b>	<b>1.75x</b>	<b>16.4%</b>	<b>1.78</b>

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

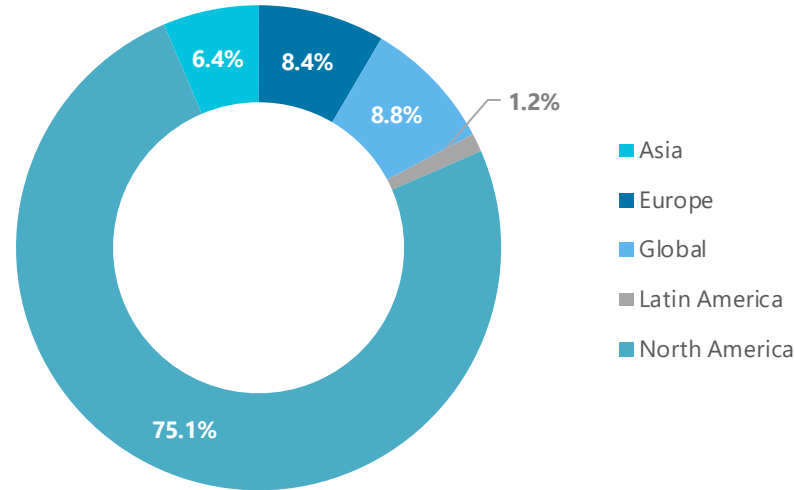
## Private Equity – Growth

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Geography<sup>1,2</sup>



	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	688.2	426.4	799.2	1,225.5	537.3	0.62x	1.78x	16.2%	1.48
Europe	34	2,141.0	2,107.5	2,187.6	1,053.2	3,240.8	1,133.2	1.04x	1.54x	15.4%	1.37
Global	25	2,162.1	1,276.2	793.6	1,097.6	1,891.2	615.0	0.62x	1.48x	16.2%	1.41
Latin America	2	200.0	183.1	51.3	154.1	205.4	22.2	0.28x	1.12x	4.6%	1.02
North America	314	16,902.2	15,409.7	18,454.2	9,380.3	27,834.5	12,424.8	1.20x	1.81x	16.5%	1.81
<b>Total Growth Portfolio</b>	<b>389</b>	<b>22,231.3</b>	<b>19,664.8</b>	<b>21,913.0</b>	<b>12,484.3</b>	<b>34,397.3</b>	<b>14,732.6</b>	<b>1.11x</b>	<b>1.75x</b>	<b>16.4%</b>	<b>1.78</b>

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 September 30, 2022



Los Angeles County Employees Retirement Association

### By Vintage Year<sup>1,2,3</sup>

	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	--	--	--	--	--	--	--	--	--	--	NA
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	--	--	--	--	--	--	--	--	--	--	NA
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	2nd
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	0.8	946.0	290.7	1.44x	1.44x	7.3%	1.19	2nd
1999	21	361.0	369.7	436.6	0.1	436.7	67.0	1.18x	1.18x	3.4%	0.96	2nd
2000	25	374.9	387.3	575.0	0.2	575.2	187.9	1.48x	1.49x	8.7%	1.07	2nd
2001	15	404.3	442.4	834.2	3.4	837.6	395.2	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	305.8	339.2	700.6	1.2	701.9	362.7	2.07x	2.07x	21.3%	1.60	1st
2004	7	333.4	392.2	744.2	2.3	746.5	354.3	1.90x	1.90x	19.5%	1.58	1st
2005	15	496.2	506.2	1,039.0	3.0	1,042.1	535.8	2.05x	2.06x	13.3%	1.64	2nd
2006	28	1,495.8	1,607.3	2,559.4	44.3	2,603.7	996.4	1.59x	1.62x	9.0%	1.26	2nd
2007	11	514.7	461.1	778.4	31.9	810.3	349.1	1.69x	1.76x	11.4%	1.20	2nd
2008	10	625.6	700.2	1,228.9	33.4	1,262.2	562.0	1.75x	1.80x	13.3%	1.21	2nd
2009	0	--	--	--	--	--	--	--	--	--	--	NA
2010	2	450.0	471.4	681.7	297.8	979.5	508.1	1.45x	2.08x	16.2%	1.51	2nd
2011	7	391.0	413.5	796.8	166.7	963.5	549.9	1.93x	2.33x	18.7%	1.52	2nd
2012	7	435.0	580.8	1,054.5	130.6	1,185.0	604.2	1.82x	2.04x	22.0%	1.71	2nd
2013	10	888.5	972.4	1,142.8	573.9	1,716.7	744.3	1.18x	1.77x	15.0%	1.35	3rd
2014	11	1,237.9	1,376.4	1,428.5	1,226.1	2,654.6	1,278.2	1.04x	1.93x	17.8%	1.52	3rd
2015	10	1,087.0	1,215.0	1,245.7	1,575.0	2,820.8	1,605.8	1.03x	2.32x	24.9%	1.93	2nd
2016	12	1,117.1	1,278.9	879.6	1,373.5	2,253.0	974.1	0.69x	1.76x	18.5%	1.45	3rd
2017	8	594.0	567.2	322.7	760.7	1,083.4	516.2	0.57x	1.91x	23.4%	1.66	3rd
2018	9	1,242.8	1,117.6	327.7	1,389.4	1,717.2	599.5	0.29x	1.54x	22.8%	1.56	3rd
2019	32	2,540.3	2,155.2	420.0	2,691.3	3,111.2	956.0	0.19x	1.44x	22.8%	1.50	3rd
2020	10	1,013.5	684.9	98.4	734.0	832.3	147.5	0.14x	1.22x	19.4%	1.44	3rd
2021	35	2,770.9	1,175.3	47.3	1,191.7	1,238.9	63.6	0.04x	1.05x	7.3%	1.29	2nd
2022	6	1,412.7	263.5	0.0	253.2	253.2	(10.3)	0.00x	0.96x	-5.7%	1.16	2nd
<b>Total Growth Portfolio</b>	<b>389</b>	<b>22,231.3</b>	<b>19,664.8</b>	<b>21,913.0</b>	<b>12,484.3</b>	<b>34,397.3</b>	<b>14,732.6</b>	<b>1.11x</b>	<b>1.75x</b>	<b>16.4%</b>	<b>1.78</b>	

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

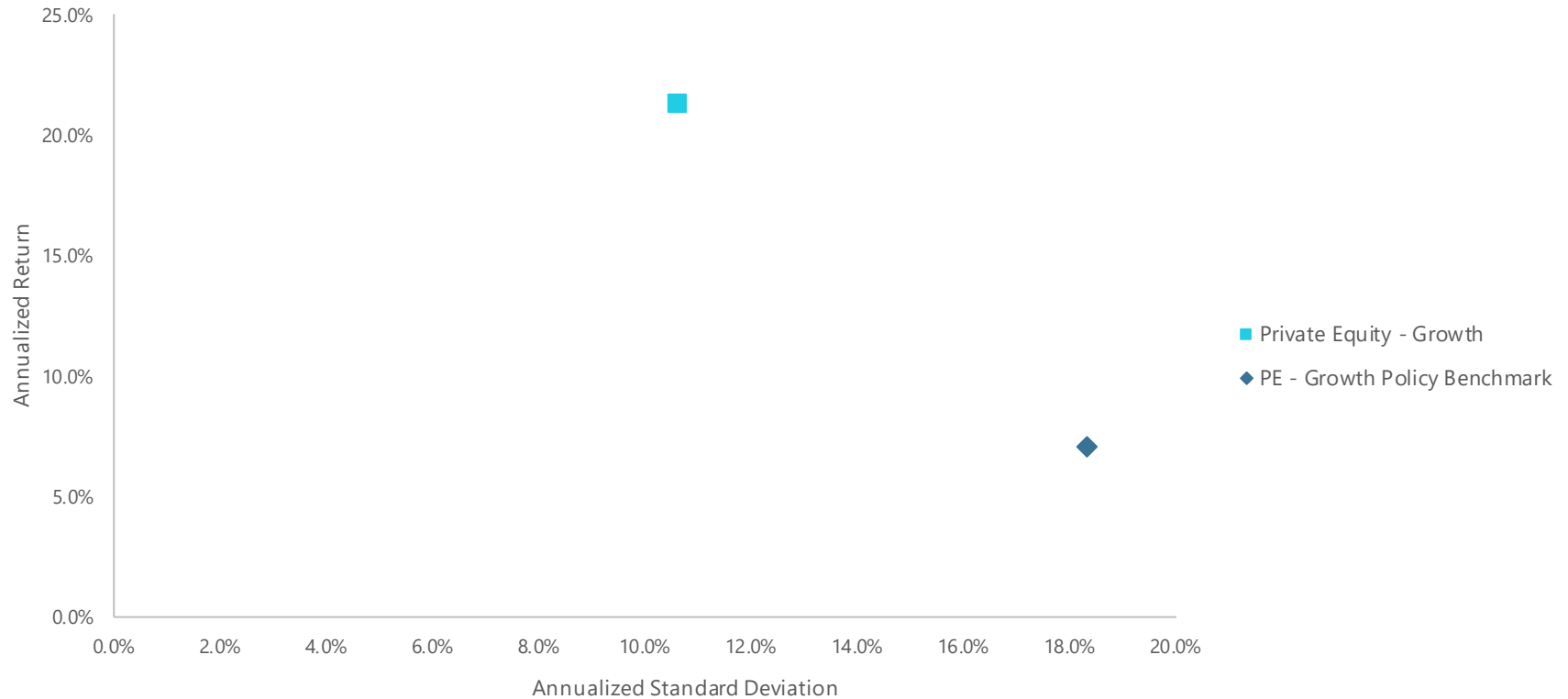
## Private Equity – Growth

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Private Equity - Growth</b>	<b>21.3%</b>	<b>10.6%</b>				
PE - Growth Policy Benchmark	7.0%	18.3%	1.79	0.79	0.19	18.1%

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

# Annual Cash Flow Activity

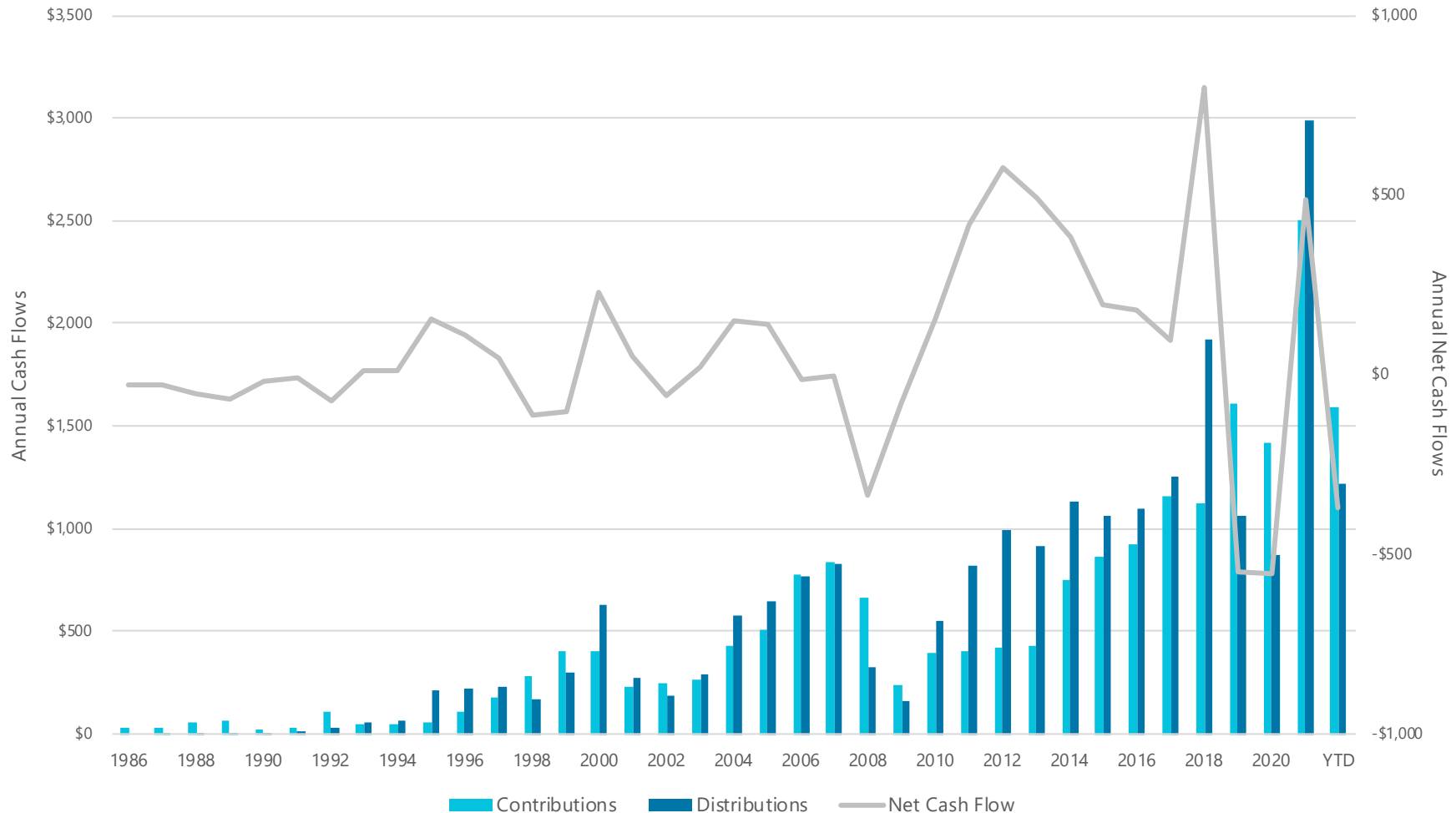
## Private Equity

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Year (mm)





# Summary

## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### Performance (net)



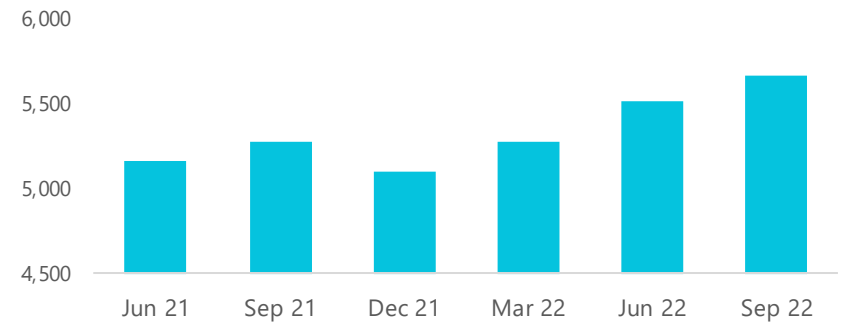
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Estate	4.9%	20.7%	27.0%	11.2%	9.6%	9.5%	8.2%
Benchmark	4.5%	20.4%	28.0%	12.2%	10.1%	10.5%	--
Excess	0.4%	0.4%	-0.9%	-1.0%	-0.5%	-1.0%	--

### Cumulative Return

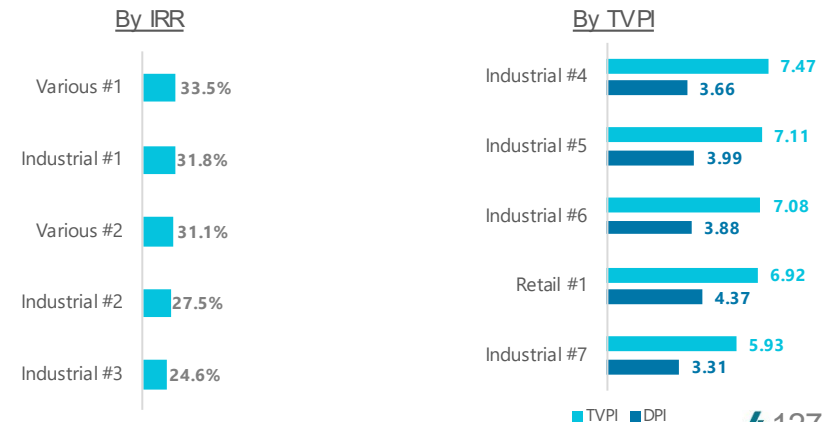


### Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	5,519	5,277	6,209
Net Cash Flow	-128	-901	-2,265
Gain/Loss	269	1,284	1,715
Ending Market Value	5,660	5,660	5,660



### Top Performing Investments (since inception)<sup>1</sup>



1. Property names removed due to confidentiality reasons.

# Historical Returns

## Real Estate

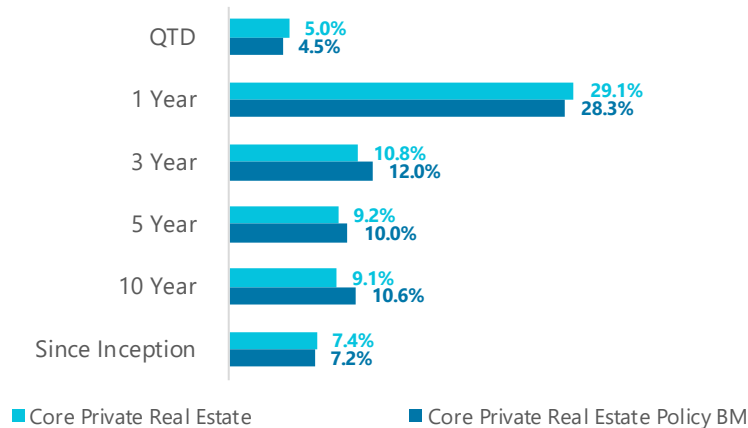
for the quarter ended September 30, 2022



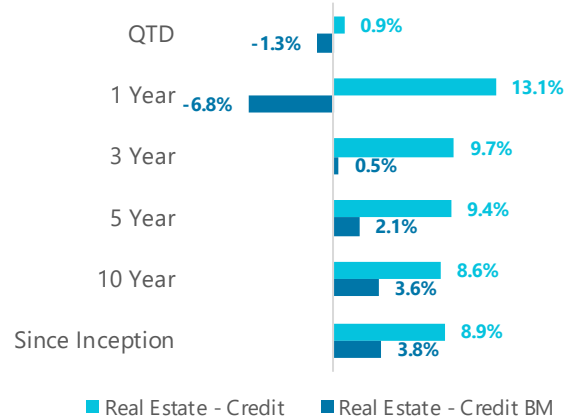
Los Angeles County Employees Retirement Association

### Time-Weighted Returns (net)

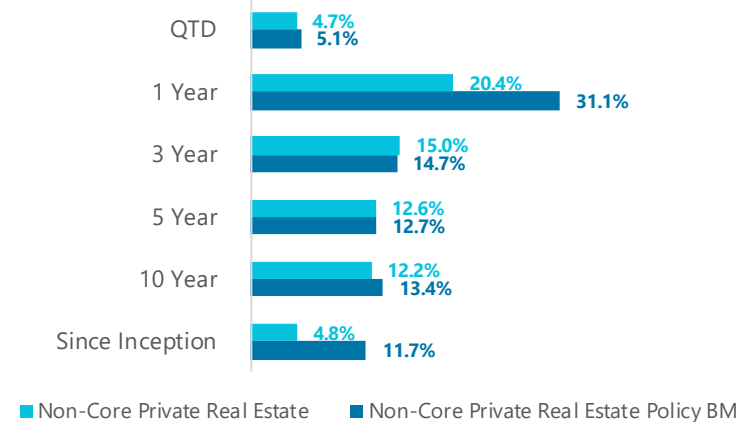
#### Core



#### Debt



#### Non-Core



# Performance by Strategy

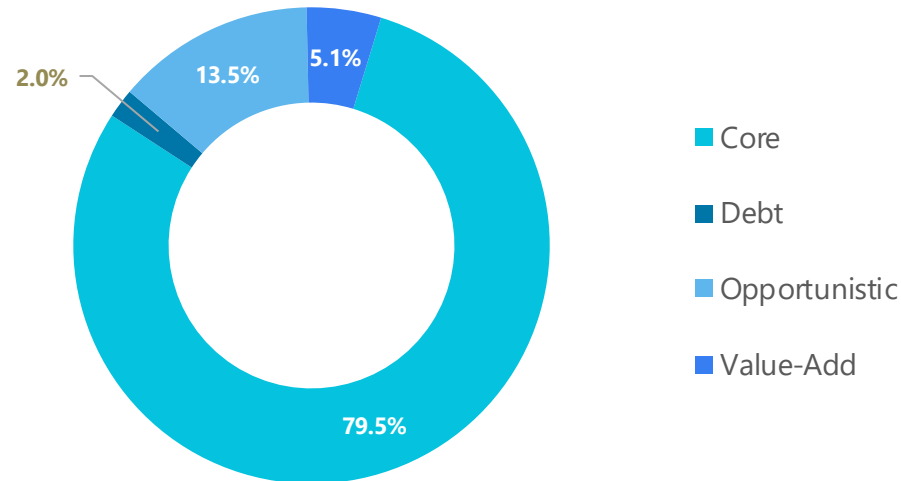
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Strategy<sup>1,2</sup>



	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	79	423.0	7,359.8	6,537.5	4,550.8	11,088.3	3,728.5	0.89x	1.51x	9.0%	1.21
Debt	7	0.0	155.9	77.5	113.8	191.3	35.3	0.50x	1.23x	8.2%	1.18
Opportunistic	15	975.0	1,102.7	724.9	773.2	1,498.1	395.4	0.66x	1.36x	7.0%	1.04
Value-Add	12	454.6	588.2	214.5	289.4	503.9	(84.3)	0.36x	0.86x	-3.6%	0.63
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>

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

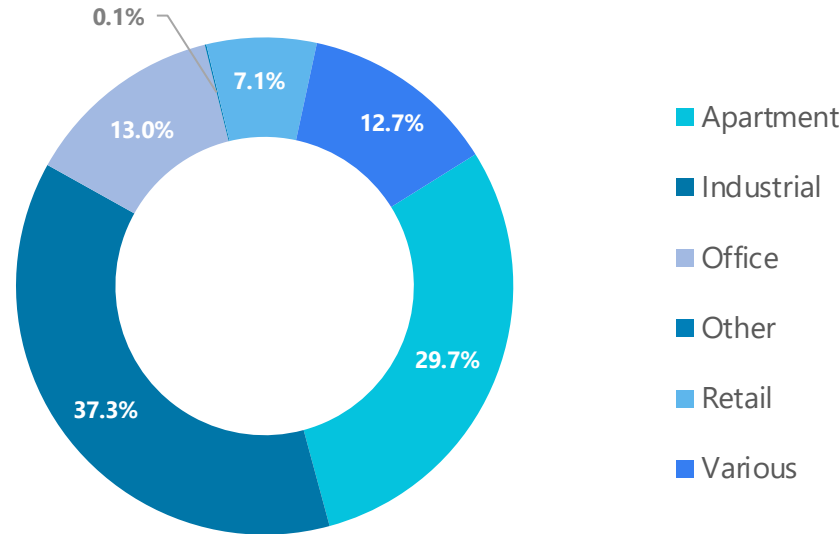
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Property Type<sup>1,2,3</sup>



	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	36	384.0	3,079.3	2,512.1	1,699.8	4,211.9	1,132.6	0.82x	1.37x	8.7%	1.20
Industrial	21	223.0	1,682.5	1,278.6	2,136.5	3,415.1	1,732.6	0.76x	2.03x	13.6%	1.79
Office	19	0.0	1,998.2	1,874.1	746.5	2,620.6	622.3	0.94x	1.31x	6.3%	1.10
Other	4	100.0	170.1	199.0	5.7	204.7	34.6	1.17x	1.20x	4.0%	0.76
Retail	15	0.0	1,247.1	1,260.7	409.3	1,670.0	423.0	1.01x	1.34x	6.6%	0.85
Various	18	1,145.5	1,029.5	430.0	729.3	1,159.3	129.8	0.42x	1.13x	2.6%	0.84
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>

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

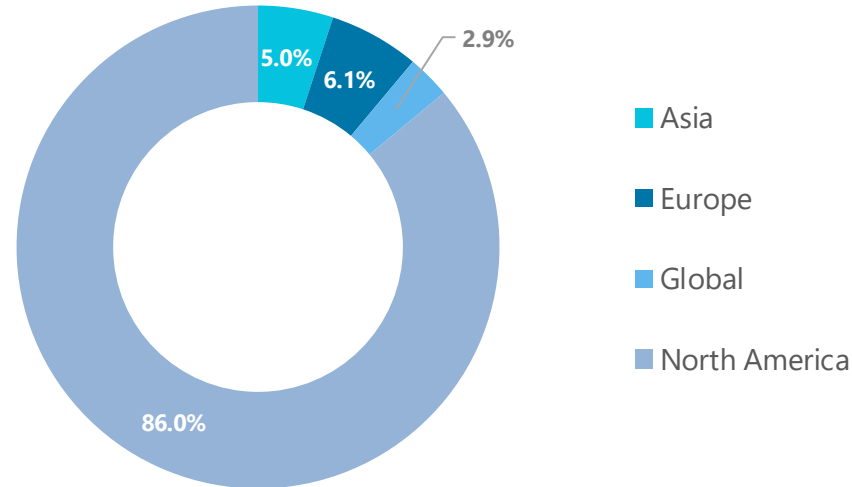
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Geography (non-US)<sup>1,2</sup>



	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	304.1	107.3	288.1	395.4	91.3	0.35x	1.30x	6.2%	1.13
Europe	10	434.8	595.8	358.9	346.8	705.7	109.8	0.60x	1.18x	4.1%	0.89
Global	4	358.8	248.1	209.6	166.0	375.6	127.5	0.84x	1.51x	12.4%	1.16
North America	95	759.0	8,058.7	6,878.7	4,926.3	11,805.0	3,746.3	0.85x	1.46x	8.5%	1.18
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>

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

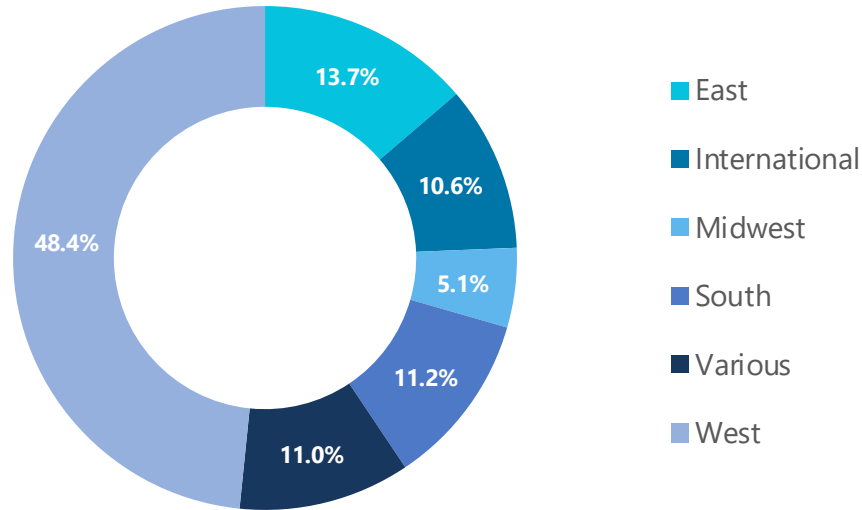
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Geography (US NCREIF)<sup>1,2</sup>



	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	26	0.0	2,469.7	2,242.8	785.8	3,028.6	558.9	0.91x	1.23x	5.9%	0.91
International	13	685.8	865.3	466.2	608.9	1,075.1	209.8	0.54x	1.24x	5.0%	0.97
Midwest	10	0.0	591.5	485.4	292.0	777.4	186.0	0.82x	1.31x	5.8%	0.89
South	11	0.0	1,183.8	1,033.2	638.6	1,671.9	488.1	0.87x	1.41x	8.8%	1.05
Various	10	782.7	662.0	341.5	630.6	972.1	310.1	0.52x	1.47x	7.4%	1.08
West	43	384.0	3,434.5	2,985.3	2,771.1	5,756.4	2,321.9	0.87x	1.68x	9.9%	1.50
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>

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 September 30, 2022



Los Angeles County Employees Retirement Association

### By Vintage Year<sup>1,2,3</sup>

	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	130.9	428.4	178.5	1.19x	1.71x	6.4%	4.69	NA	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.
1991	3	0.0	32.8	123.0	92.5	215.4	182.6	3.75x	6.57x	12.4%	13.97	NA	
1992	0	0.0	--	--	--	--	--	--	--	--	--	NA	
1993	0	0.0	--	--	--	--	--	--	--	--	--	NA	
1994	1	0.0	15.3	67.0	38.8	105.8	90.5	4.37x	6.90x	13.0%	1.49	NA	
1995	1	0.0	39.2	110.6	75.3	185.9	146.7	2.82x	4.75x	11.7%	1.28	NA	
1996	1	0.0	24.0	38.8	32.5	71.4	47.4	1.62x	2.97x	7.8%	0.82	NA	
1997	1	0.0	18.3	67.1	75.9	143.0	124.7	3.66x	7.81x	16.0%	2.19	NA	
1998	1	0.0	48.8	66.0	49.4	115.4	66.6	1.35x	2.36x	6.4%	0.71	NA	
1999	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2000	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2001	1	0.0	143.4	76.4	94.2	170.6	27.2	0.53x	1.19x	4.7%	0.76	NA	
2002	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2003	1	0.0	142.7	131.2	69.4	200.5	57.8	0.92x	1.40x	4.4%	0.72	NA	
2004	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2005	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2006	0	0.0	--	--	--	--	--	--	--	--	--	NA	
2007	3	33.8	454.5	401.8	1.4	403.2	(51.4)	0.88x	0.89x	-5.4%	0.55	4th	
2008	1	150.0	150.0	95.5	0.7	96.2	(53.8)	0.64x	0.64x	-5.7%	0.34	4th	
2009	1	16.9	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	152.0	5.5	157.5	60.4	1.57x	1.62x	9.6%	0.92	3rd	
2011	4	15.7	213.5	114.9	22.0	136.9	(76.6)	0.54x	0.64x	-47.5%	0.29	4th	
2012	3	134.0	438.6	185.0	176.3	361.3	(77.3)	0.42x	0.82x	-4.8%	0.67	4th	
2013	7	100.0	469.9	580.6	118.0	698.7	228.7	1.24x	1.49x	9.0%	1.03	3rd	
2014	15	246.9	980.1	802.6	678.2	1,480.8	500.7	0.82x	1.51x	8.9%	1.22	3rd	
2015	9	0.0	952.8	745.1	787.0	1,532.1	579.3	0.78x	1.61x	13.9%	1.55	2nd	
2016	7	150.0	483.7	214.8	574.7	789.5	305.7	0.44x	1.63x	14.5%	1.52	2nd	
2017	12	174.0	1,339.6	878.0	944.8	1,822.8	483.3	0.66x	1.36x	11.6%	1.28	3rd	
2018	10	150.0	376.7	189.1	276.3	465.4	88.7	0.50x	1.24x	8.8%	1.18	3rd	
2019	25	407.7	2,381.9	2,109.0	1,415.2	3,524.2	1,142.3	0.89x	1.48x	9.3%	1.08	3rd	
2020	2	0.0	71.6	77.0	4.8	81.9	10.2	1.08x	1.14x	5.6%	1.14	3rd	
2021	2	173.5	59.8	2.9	63.0	65.9	6.1	0.05x	1.10x	12.3%	1.35	3rd	
2022	0	0.0	--	--	--	--	--	--	--	--	--	NA	
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>		

# Leverage Exposure

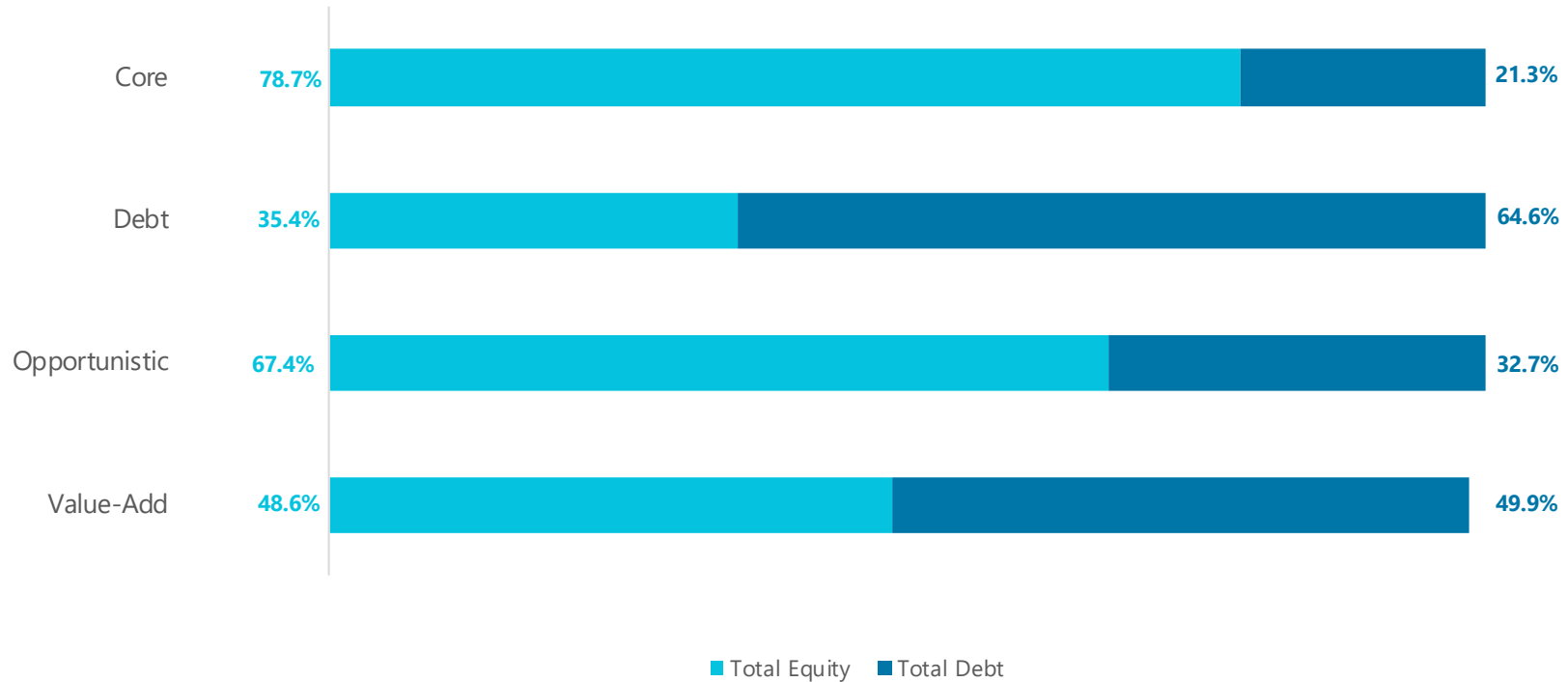
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### Leverage Exposure<sup>1,2</sup>



	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	79	423.0	7,359.8	6,537.5	4,550.8	11,088.3	3,728.5	0.89x	1.51x	9.0%	1.21	7,556.4	27,927.2	21.3%	78.7%
Debt	7	0.0	155.9	77.5	113.8	191.3	35.3	0.50x	1.23x	8.2%	1.18	165.8	90.7	64.6%	35.4%
Opportunistic	15	975.0	1,102.7	724.9	773.2	1,498.1	395.4	0.66x	1.36x	7.0%	1.04	5,748.1	11,852.1	32.7%	67.4%
Value-Add	12	454.6	588.2	214.5	289.4	503.9	(84.3)	0.36x	0.86x	-3.6%	0.63	74,261.5	72,286.2	49.9%	48.6%
<b>Total Real Estate</b>	<b>113</b>	<b>1,852.5</b>	<b>9,206.7</b>	<b>7,554.5</b>	<b>5,727.1</b>	<b>13,281.6</b>	<b>4,074.9</b>	<b>0.82x</b>	<b>1.44x</b>	<b>8.4%</b>	<b>1.16</b>	<b>87,731.7</b>	<b>112,156.3</b>	<b>43.4%</b>	<b>55.5%</b>

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

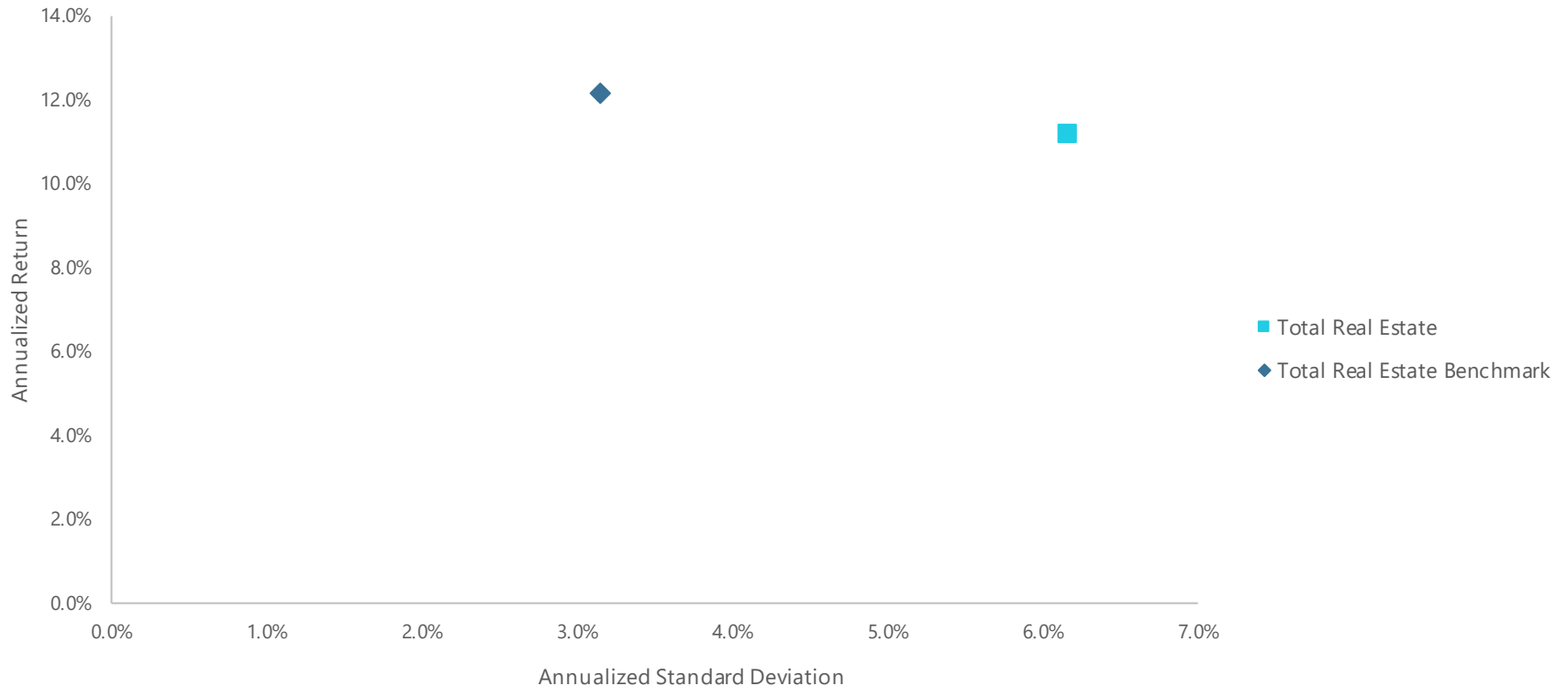
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### 3 Year (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Total Real Estate</b>	<b>11.2%</b>	<b>6.2%</b>				
Total Real Estate Benchmark	12.2%	3.1%	1.66	(0.19)	1.01	18.2%

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

# Annual Cash Flow Activity

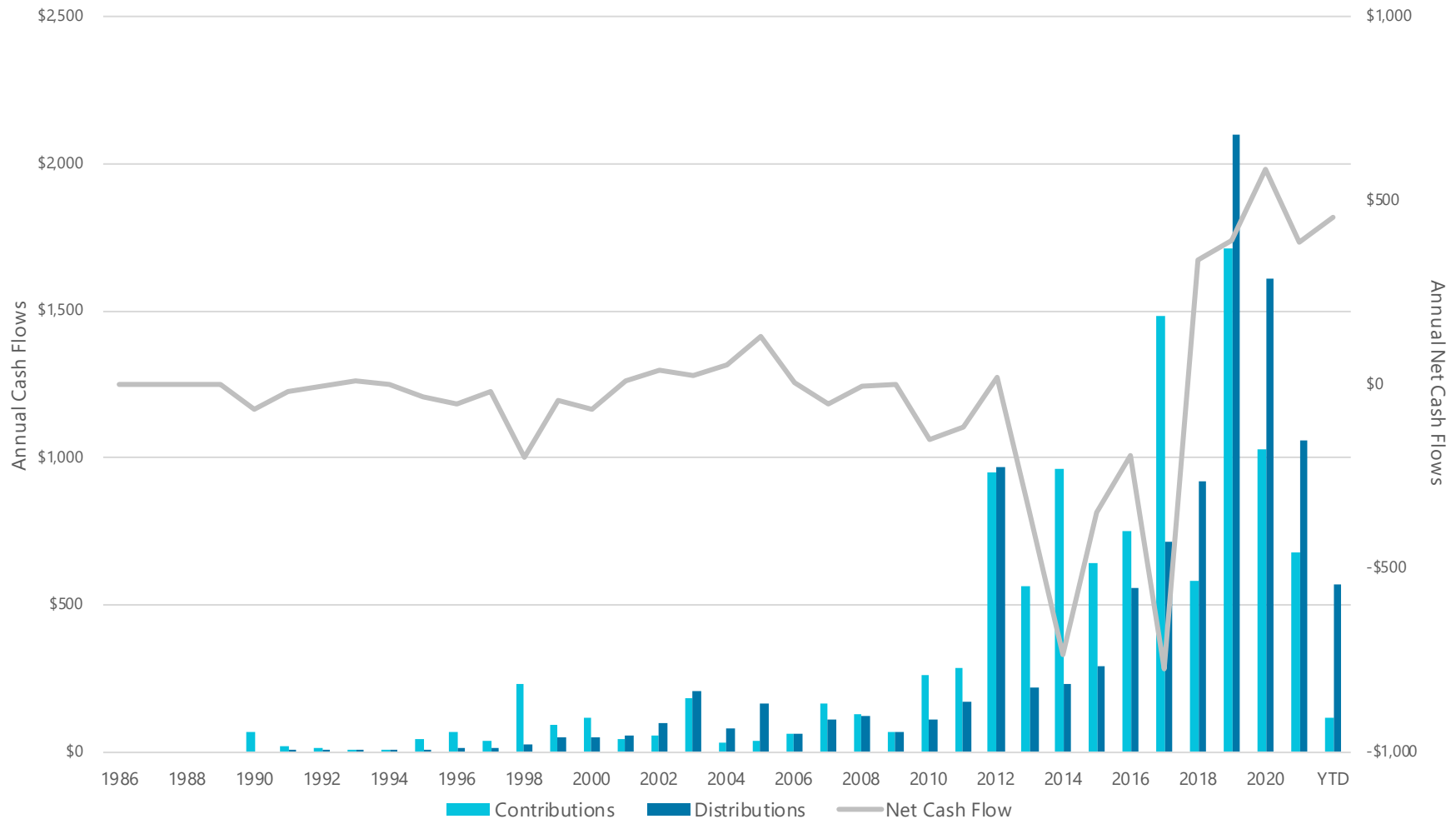
## Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Year (mm)



# Summary

Private Real Assets ex. Real Estate  
for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Performance (net)<sup>1</sup>



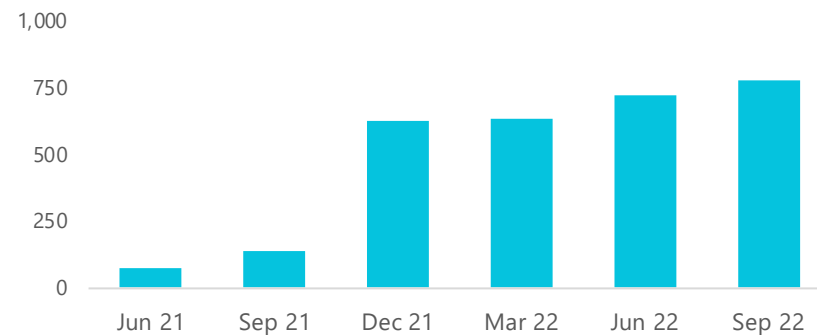
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Natural Resources & Commodities	-3.1%	8.9%	15.5%	-9.6%	--	--	-8.6%
Benchmark	-15.1%	11.2%	10.2%	12.4%	--	--	14.9%
Excess	12.0%	-2.3%	5.3%	-22.0%	--	--	-23.5%

## Cumulative Return<sup>1</sup>

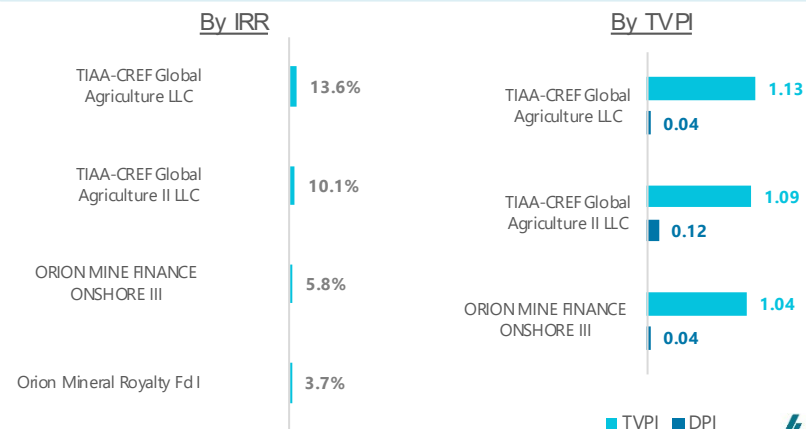


## Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	719	138	109
Net Cash Flow	76	568	637
Gain/Loss	-23	66.0	25.5
Ending Market Value	772	772	772



## Top Performing Investments (since inception)<sup>1</sup>



1. Private natural resources & commodities funds reflect early-stage life cycle performance.

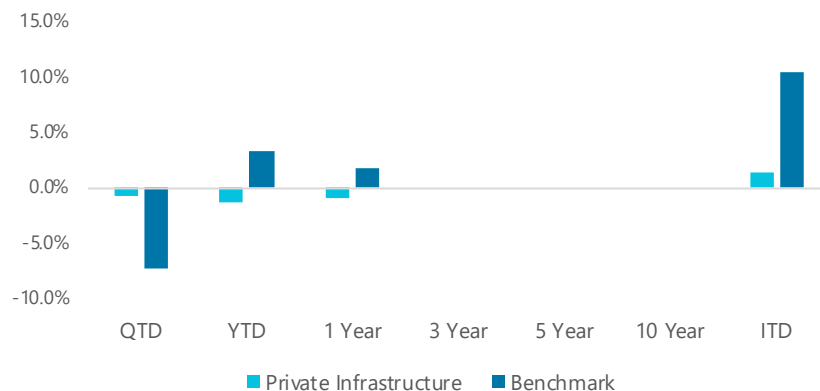
# Summary

Private Real Assets ex. Real Estate  
for the quarter ended September 30, 2022



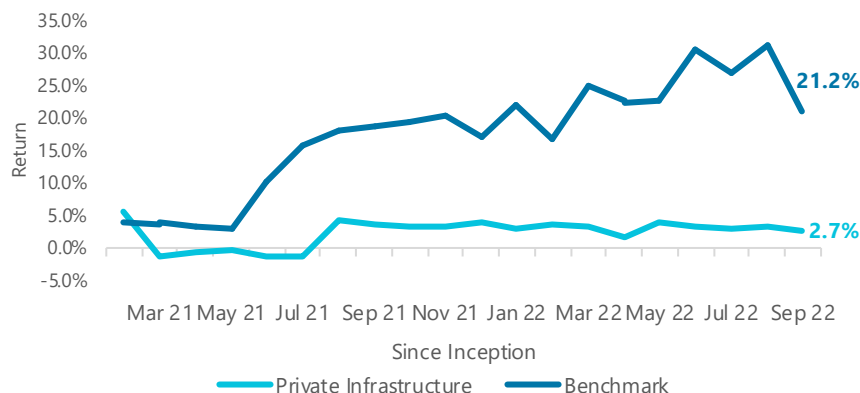
Los Angeles County Employees Retirement Association

## Performance (net)<sup>1</sup>



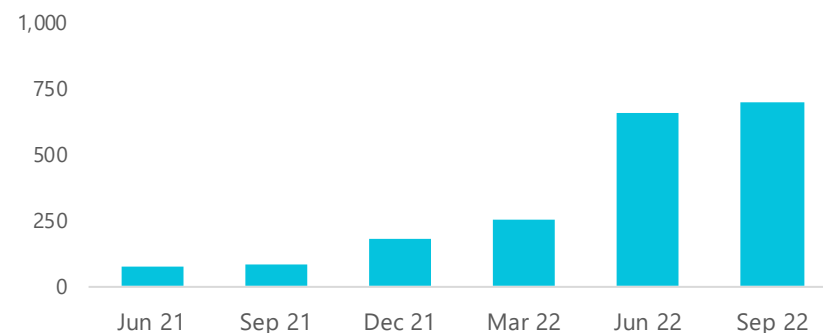
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Infrastructure	-0.7%	-1.2%	-0.9%	--	--	--	1.4%
Benchmark	-7.2%	3.3%	1.8%	--	--	--	10.5%
Excess	6.5%	-4.6%	-2.8%	--	--	--	-9.1%

## Cumulative Return<sup>1</sup>

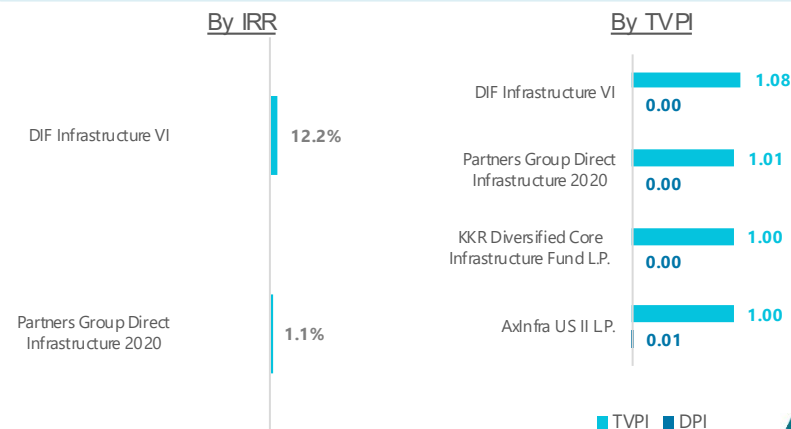


## Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	659	85	--
Net Cash Flow	45	620	--
Gain/Loss	-5	-6	--
Ending Market Value	699	699	--



## Top Performing Investments (since inception)<sup>1</sup>



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

# Historical Returns

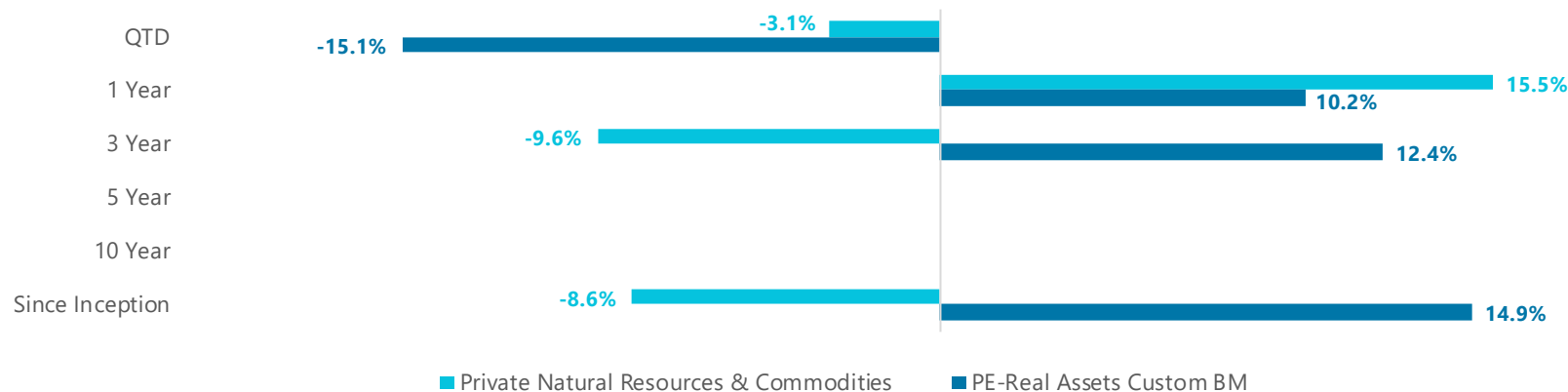
Private Real Assets ex. Real Estate  
for the quarter ended September 30, 2022



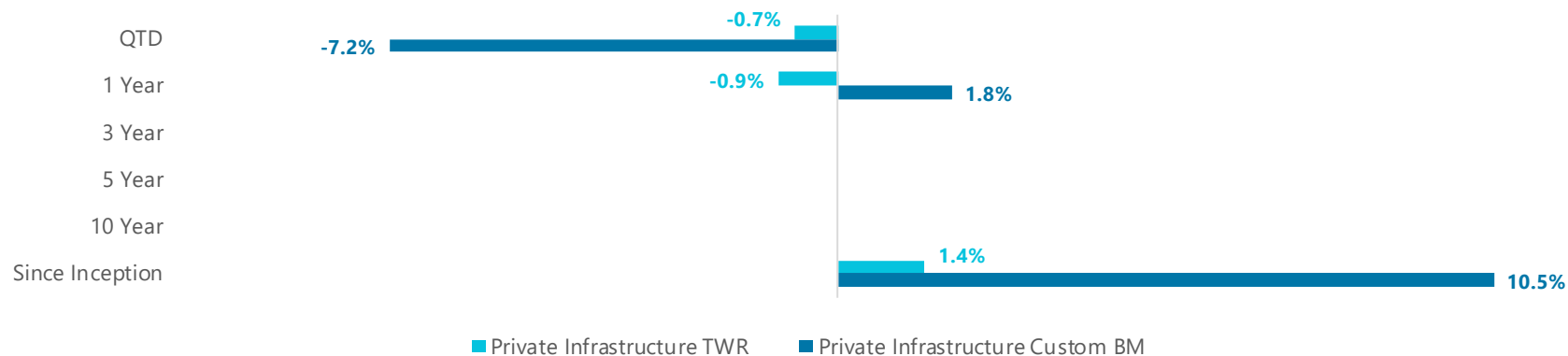
Los Angeles County Employees Retirement Association

## Time-Weighted Returns (net)<sup>1</sup>

### Private Natural Resources & Commodities



### Private Infrastructure



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

# Performance by Strategy

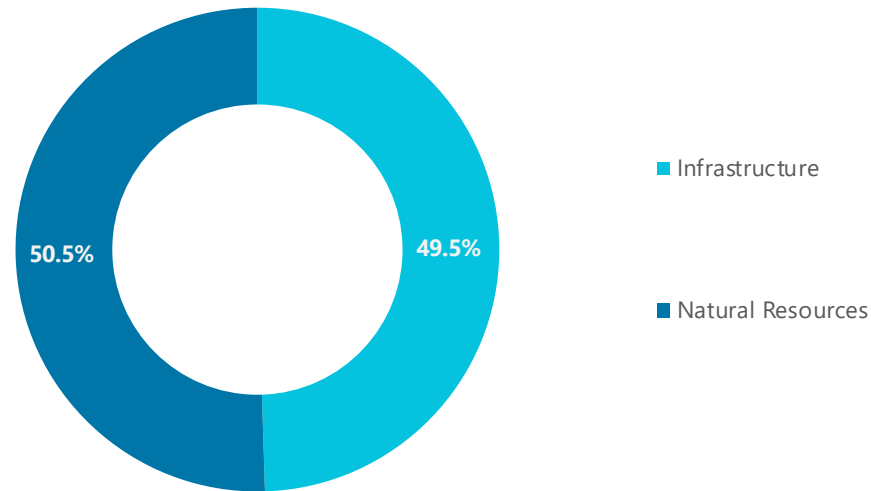
## Private Real Assets ex. Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Strategy<sup>1</sup>



	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	10	1,712.9	715.0	9.8	698.4	708.2	(6.7)	0.01x	0.99x	-1.5%	1.12
Natural Resources	8	1,100.0	827.5	161.9	712.4	874.3	46.8	0.20x	1.06x	4.1%	1.03
<b>Total Private Real Assets ex. Real Estate</b>	<b>18</b>	<b>2,812.9</b>	<b>1,542.5</b>	<b>171.7</b>	<b>1,410.8</b>	<b>1,582.5</b>	<b>40.0</b>	<b>0.11x</b>	<b>1.03x</b>	<b>2.6%</b>	<b>1.07</b>

1. Based on best available cash flow adjusted market values.

# Performance by Geography

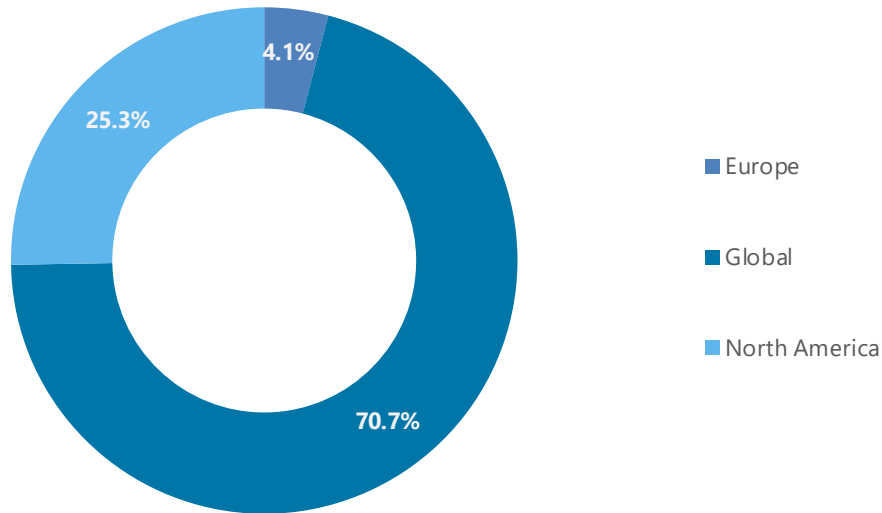
## Private Real Assets ex. Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Geography<sup>1</sup>



	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	98.0	65.5	5.8	57.5	63.3	(2.3)	0.09x	0.97x	-3.8%	0.93
Global	11	1,991.9	991.4	48.0	996.9	1,044.9	53.5	0.05x	1.05x	8.4%	1.16
North America	6	723.1	485.6	117.9	356.5	474.4	(11.2)	0.24x	0.98x	-1.5%	0.94
<b>Total Private Real Assets ex. Real Estate</b>	<b>18</b>	<b>2,812.9</b>	<b>1,542.5</b>	<b>171.7</b>	<b>1,410.8</b>	<b>1,582.5</b>	<b>40.0</b>	<b>0.11x</b>	<b>1.03x</b>	<b>2.6%</b>	<b>1.07</b>

1. Based on best available cash flow adjusted market values.

# Performance by Vintage Year

## Private Real Assets ex. Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### By Vintage Year<sup>1</sup>

	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	250.0	--	--	--	--	--	--	--	--	--
2014	2	450.0	434.7	58.5	353.2	411.7	(23.0)	0.13x	0.95x	-2.0%	0.86
2020	3	304.9	199.4	5.8	192.9	198.7	(0.7)	0.03x	1.00x	-0.3%	1.00
2021	6	811.0	394.0	7.5	385.3	392.7	(1.3)	0.02x	1.00x	-0.6%	1.12
2022	5	946.9	276.4	1.0	274.1	275.1	(1.3)	0.00x	1.00x	-0.6%	1.21
<b>Total Private Real Assets ex. Real Estate</b>	<b>18</b>	<b>2,812.9</b>	<b>1,542.5</b>	<b>171.7</b>	<b>1,410.8</b>	<b>1,582.5</b>	<b>40.0</b>	<b>0.11x</b>	<b>1.03x</b>	<b>2.6%</b>	<b>1.07</b>

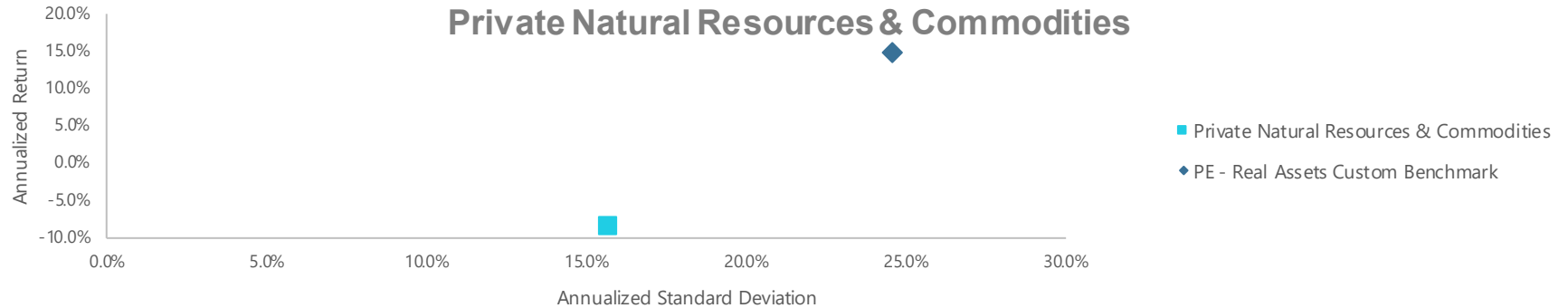
1. Based on best available cash flow adjusted market values.



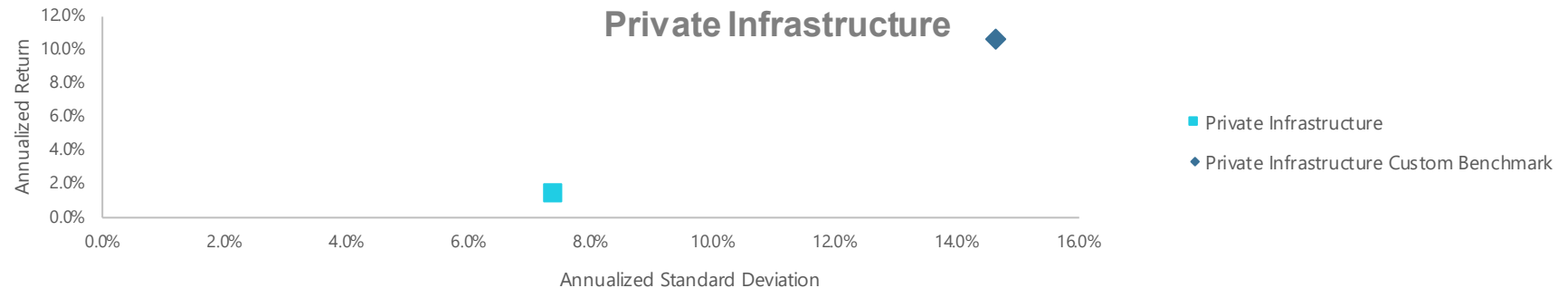
# Risk vs. Return

Private Real Assets ex. Real Estate  
for the quarter ended September 30, 2022

## Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Private Natural Resources &amp; Commodities</b>	<b>-8.6%</b>	<b>15.7%</b>				
PE - Real Assets Custom Benchmark	14.9%	24.6%	(0.54)	(0.93)	0.00	25.4%



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Private Infrastructure</b>	<b>1.4%</b>	<b>7.4%</b>				
Private Infrastructure Custom Benchmark	10.5%	14.7%	0.18	(0.54)	0.00	17.0%

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

# Annual Cash Flow Activity

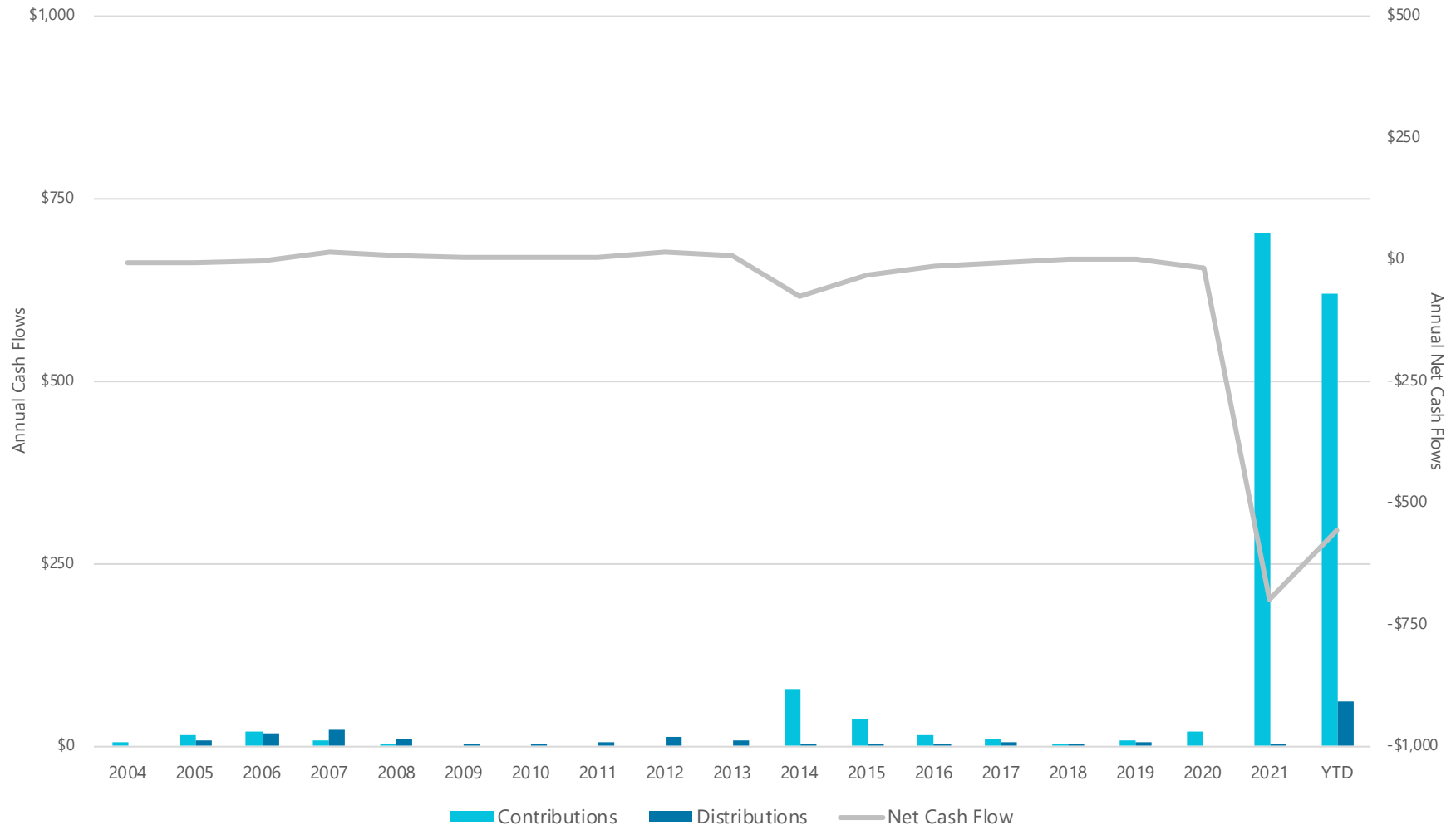
Private Real Assets ex. Real Estate

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## By Year (mm)



# Summary

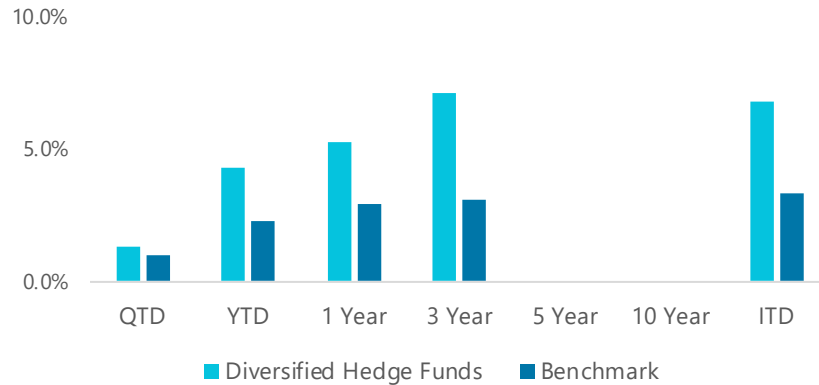
## Diversified Hedge Funds

for the quarter ended September 30, 2022



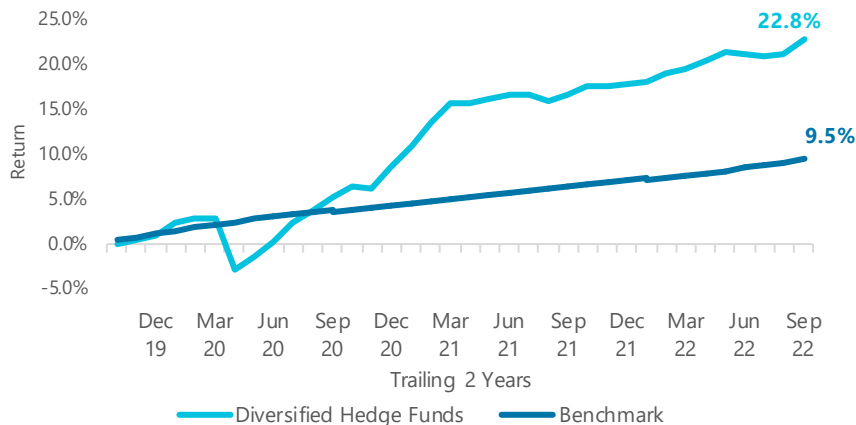
Los Angeles County Employees Retirement Association

### Performance (net all)



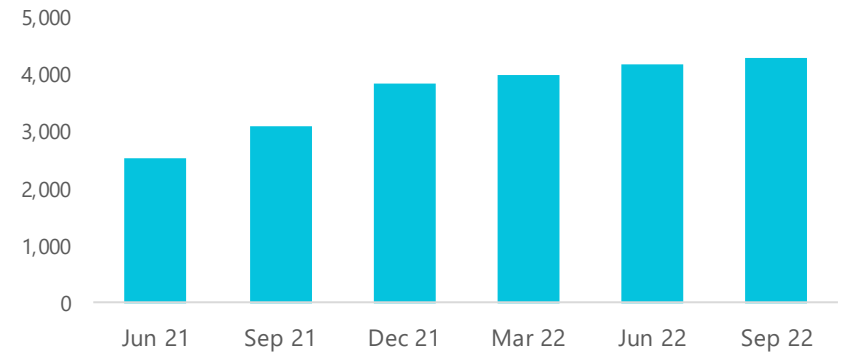
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	1.3%	4.3%	5.3%	7.1%	--	--	6.8%
Benchmark	0.9%	2.3%	3.0%	3.1%	--	--	3.3%
Excess	0.3%	2.0%	2.3%	4.0%	--	--	3.4%

### Cumulative Return

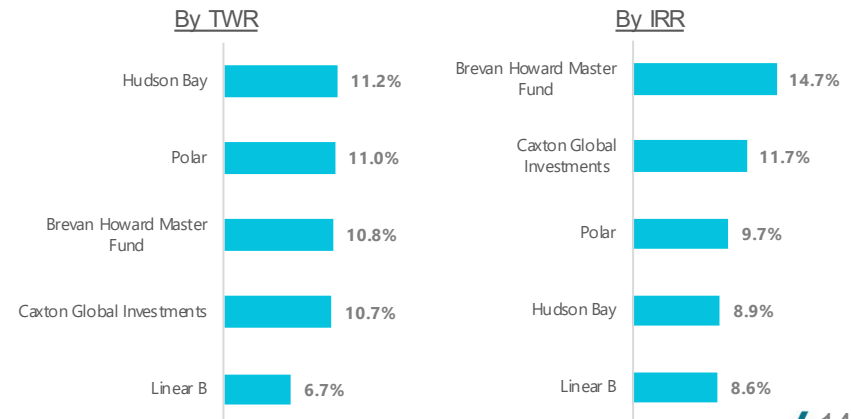


### Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	4,196	3,098	1,694
Net Cash Flow	31	980	2,070
Gain/Loss	54	204	518
Ending Market Value	4,281	4,281	4,281



### Top Performing Investments (since inception)



# Risk vs. Return

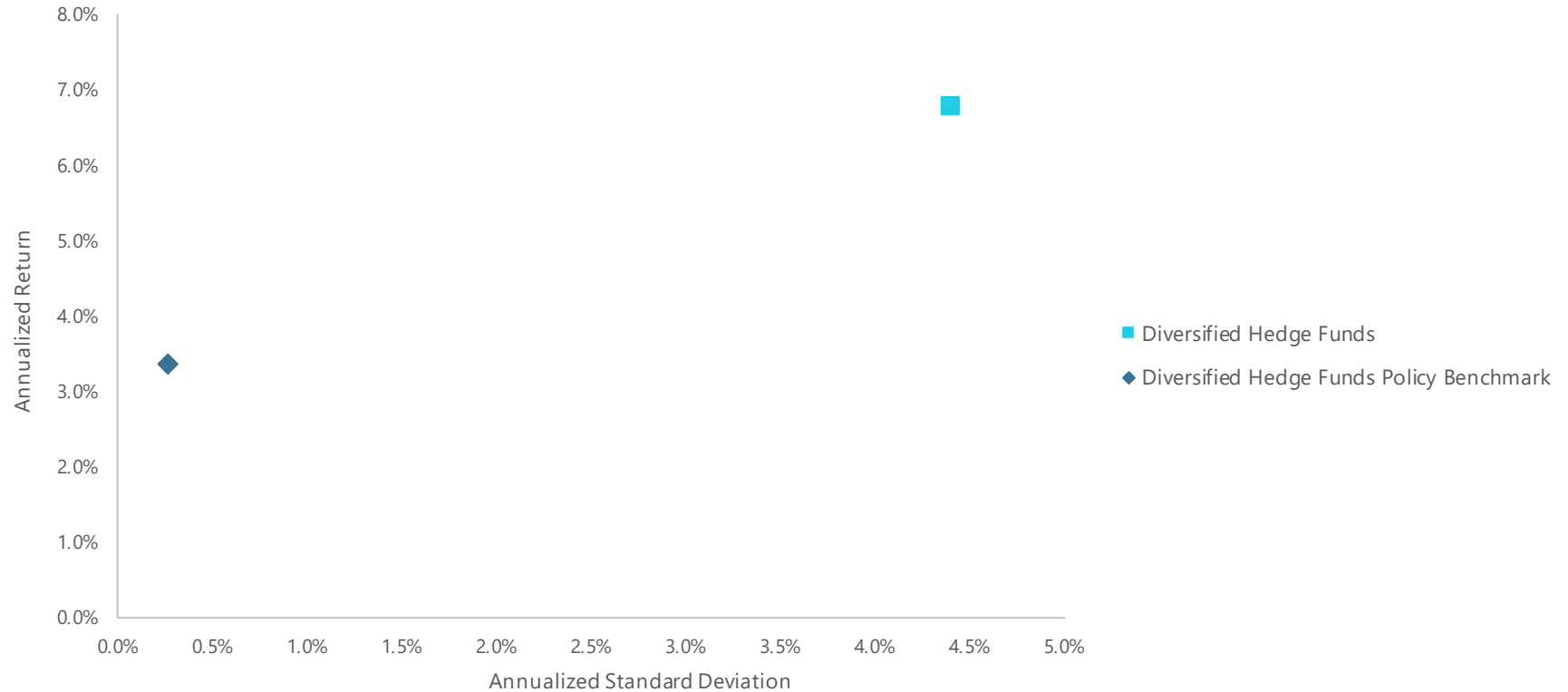
## Diversified Hedge Funds

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

### Since Inception (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>Diversified Hedge Funds</b>	<b>6.8%</b>	<b>4.4%</b>				
Diversified Hedge Funds Policy Benchmark	3.3%	0.3%	1.32	0.77	(8.46)	4.5%

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

# Performance Detail

## Diversified Hedge Funds

for the quarter ended September 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	Inception Date
<b>Diversified Hedge Funds</b>	<b>100.0%</b>	<b>4,281</b>	<b>4,196</b>	<b>1.3%</b>	<b>4.3%</b>	<b>5.3%</b>	<b>7.1%</b>	<b>--</b>	<b>--</b>	<b>6.8%</b>	<b>Apr-2019</b>
Diversified Hedge Funds Policy Benchmark				0.9%	2.3%	3.0%	3.1%	--	--	3.3%	
<b>LACERA HF Direct</b>	<b>91.8%</b>	<b>3,932</b>	<b>3,869</b>	<b>1.6%</b>	<b>4.9%</b>	<b>5.9%</b>	<b>7.1%</b>	<b>--</b>	<b>--</b>	<b>5.1%</b>	<b>Apr-2019</b>
Custom Hedge Fund Benchmark				0.9%	2.3%	3.0%	3.1%	--	--	4.1%	Apr-2019
AM Asia Strategies	5.2%	221	220	0.7%	-1.9%	0.0%	--	--	--	-1.5%	Jun-2021
Brevan Howard Master Fund	15.1%	648	625	3.6%	18.0%	18.4%	--	--	--	10.8%	Apr-2021
Capula GRV	14.6%	626	608	3.1%	9.2%	9.3%	6.4%	--	--	6.3%	Dec-2018
Caxton Global Investments	6.8%	292	289	0.9%	13.9%	18.0%	--	--	--	10.7%	Feb-2021
DK Institutional Partners	11.4%	487	486	0.1%	-1.2%	-1.0%	5.4%	--	--	4.9%	May-2018
HBK Multi-strategy	13.0%	555	549	1.1%	-0.2%	2.3%	5.5%	--	--	4.8%	Jun-2018
Hudson Bay	15.0%	641	632	1.4%	1.6%	3.0%	--	--	--	11.2%	Jul-2020
Polar	10.8%	462	459	0.5%	-0.1%	-0.4%	--	--	--	11.0%	May-2020
<b>HF Emerging Managers Program</b>	<b>7.4%</b>	<b>315</b>	<b>281</b>	<b>-2.3%</b>	<b>-2.2%</b>	<b>-2.1%</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-1.8%</b>	<b>Aug-2021</b>
Custom Hedge Fund Benchmark				0.9%	2.3%	3.0%	--	--	--	2.9%	
Stable Asset Management	7.4%	315	281	-2.3%	-2.2%	-2.1%	--	--	--	-1.8%	Aug-2021
Stable Fund Investments	7.4%	315	281	-2.2%	-2.1%	-2.0%	--	--	--	-1.8%	Aug-2021
Amundsen	1.4%	60	62	-1.9%	-10.1%	-7.0%	--	--	--	-6.5%	Sep-2021
Clear Sky	1.7%	72	72	-0.6%	--	--	--	--	--	2.3%	Apr-2022
Linear B	1.6%	70	68	1.8%	7.3%	8.1%	--	--	--	6.7%	Aug-2021
Quarry	0.9%	40	0	--	--	--	--	--	--	0.0%	Sep-2022
Sparta	1.1%	47	51	-7.0%	-4.8%	-5.3%	--	--	--	-5.0%	Sep-2021
Trutino	0.6%	26	28	-7.6%	-5.7%	-12.5%	--	--	--	-10.8%	Aug-2021

# emerging manager program

# Emerging Manager Program

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Annualized Net Returns

	Ending Market Value (mm)	QTD TWR	1 Year TWR	3 Year TWR	5 Year TWR	ITD TWR	ITD IRR	Inception Date
<b>Growth</b>								
<b>Global Equity</b>								
Corner Cap	72.7	-5.1%	-11.0%	7.9%	--	4.9%	5.0%	Sep-2018
Global Equity Policy Benchmark		-6.6%	-21.2%	3.6%	--	4.0%	4.0%	
<b>Private Equity</b>								
J.P. Morgan Emerging Managers Program	84.6	0.0%	-5.2%	30.3%	24.5%	26.6%	22.8%	Jan-2010
J.P. Morgan Emerging Managers Program II	94.2	-0.2%	-5.8%	25.0%	22.7%	31.2%	38.0%	Apr-2014
J.P. Morgan Emerging Managers Program III	116.0	1.0%	10.5%	40.5%	34.7%	33.0%	36.2%	Jan-2017
J.P. Morgan Emerging Managers Program IV	189.2	-0.4%	11.1%	20.2%	--	20.3%	19.6%	Nov-2018
Total Private Equity Custom Benchmark		-15.2%	-14.6%	8.0%	12.8%	13.6%	13.6%	
<b>Non-Core Private Real Estate</b>								
Cityview Bay Area Fund II	80.2	0.0%	5.2%	4.0%	5.4%	--	11.1%	Oct-2012
Cityview Western Fund I, L.P.	213.2	0.2%	28.8%	17.3%	14.8%	-51.4%	16.0%	Jun-2016
CVBAF II Union City Co-Invest	23.8	0.2%	3.2%	6.4%	3.1%	5.7%	5.9%	Nov-2015
Non-Core Private RE Policy Benchmark		5.1%	31.1%	14.7%	12.7%	11.7%	11.7%	
<b>Real Assets &amp; Inflation Hedges</b>								
<b>Core Private Real Estate</b>								
Cityview Core I.M.A	205.7	0.1%	5.8%	2.0%	5.6%	5.2%	5.4%	Jun-2014
Core Private RE Policy Benchmark		4.5%	28.3%	12.0%	10.0%	7.2%	7.2%	
<b>Risk Reduction &amp; Mitigation</b>								
<b>Hedge Funds</b>								
Stable Asset Management	315.3	-2.3%	-2.1%	--	--	-1.8%	-2.0%	Aug-2021
Custom Hedge Fund Benchmark		0.9%	-2.1%	--	--	2.9%	2.9%	

# risk reports



# Summary

for the quarter ended September 30, 2022

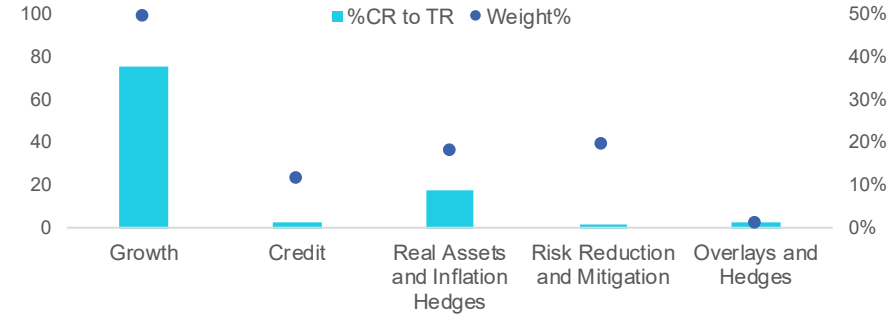


Los Angeles County Employees Retirement Association

## Risk Summary

	Value
<b>Total Risk</b>	<b>13.75</b>
Benchmark Risk	13.30
Active Risk	1.06
Portfolio Beta	1.03
Effective Duration	1.71

## Contribution to Risk

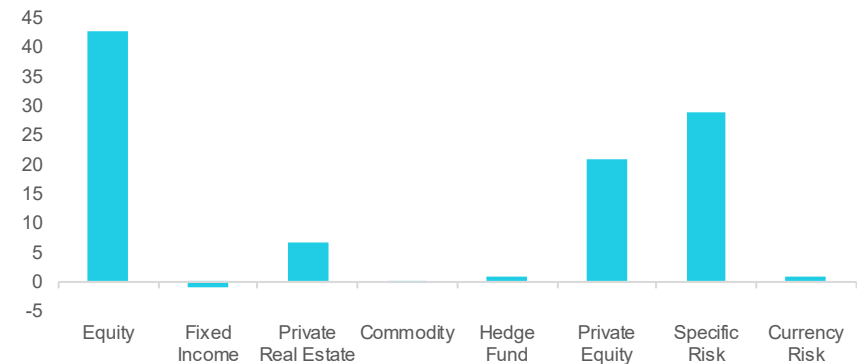


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
<b>Total Fund</b>	<b>66,995</b>	<b>100.0%</b>	<b>13.75</b>	<b>13.75</b>	<b>100.00</b>
Growth	33,198	49.6%	21.27	10.42	75.73
Credit	7,762	11.6%	4.65	0.41	3.01
Real Assets and Inflation Hedges	12,060	18.0%	14.90	2.40	17.45
Risk Reduction and Mitigation	13,197	19.7%	5.41	0.19	1.35
Overlays and Hedges	779	1.2%	37.79	0.34	2.45

## Risk Decomposition

Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
<b>Total Risk</b>	<b>13.75</b>	<b>100.00</b>	<b>1.00</b>	<b>1.06</b>	<b>100.00</b>	<b>1.00</b>
Local Market Risk	13.17	95.79	1.00	1.05	99.12	0.99
Common Factor Risk	13.15	95.61	1.00	0.74	70.20	0.83
Equity	10.13	73.68	0.95	0.45	42.76	0.66
Fixed Income	0.57	4.16	0.40	-0.01	-1.11	-0.09
Private Real Estate	1.46	10.62	0.69	0.07	6.77	0.32
Commodity	0.07	0.52	0.35	0.00	-0.02	0.00
Hedge Fund	0.00	0.01	0.01	0.01	0.99	0.10
Private Equity	0.90	6.55	0.26	0.22	20.95	0.46
Specific Risk	0.02	0.18	0.04	0.31	28.92	0.54
Currency Risk	0.58	4.21	0.55	0.01	0.88	0.07

## Active Risk from Risk Factors



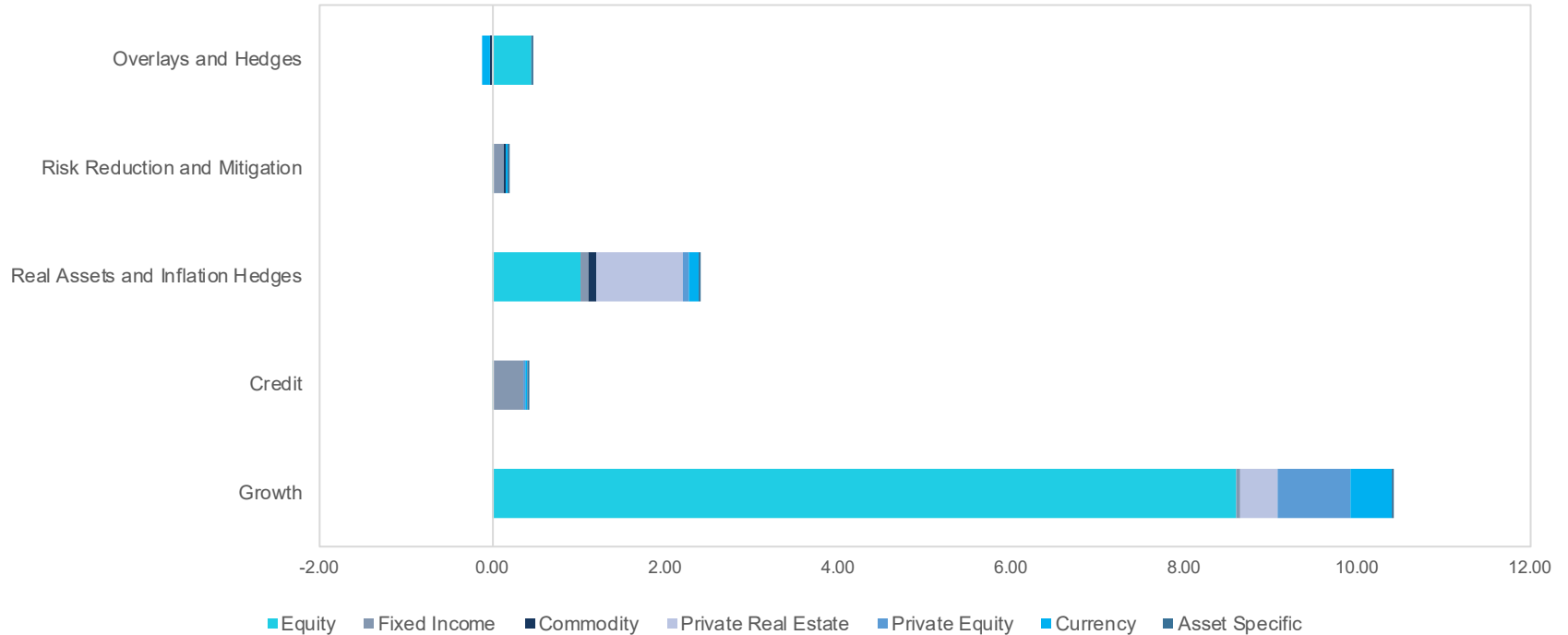
# Risk Contribution Breakdown

for the quarter ended September 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
<b>Total Fund</b>	<b>66,995</b>	<b>100.0%</b>	<b>13.75</b>	<b>100.00</b>	<b>13.75</b>	<b>10.13</b>	<b>0.58</b>	<b>0.07</b>	<b>1.46</b>	<b>0.90</b>	<b>0.58</b>	<b>0.02</b>
Growth	33,198	49.6%	21.27	75.73	10.42	8.60	0.04	0.00	0.44	0.85	0.47	0.02
Credit	7,762	11.6%	4.65	3.01	0.41	0.01	0.34	0.00	0.02	0.01	0.04	0.00
Real Assets and Inflation Hedges	12,060	18.0%	14.90	17.45	2.40	1.03	0.09	0.10	1.00	0.05	0.13	0.00
Risk Reduction and Mitigation	13,197	19.7%	5.41	1.35	0.19	0.03	0.11	0.00	0.00	0.00	0.04	0.00
Overlays and Hedges	779	1.2%	37.70	2.45	0.34	0.46	0.00	-0.03	0.00	0.00	-0.09	0.00

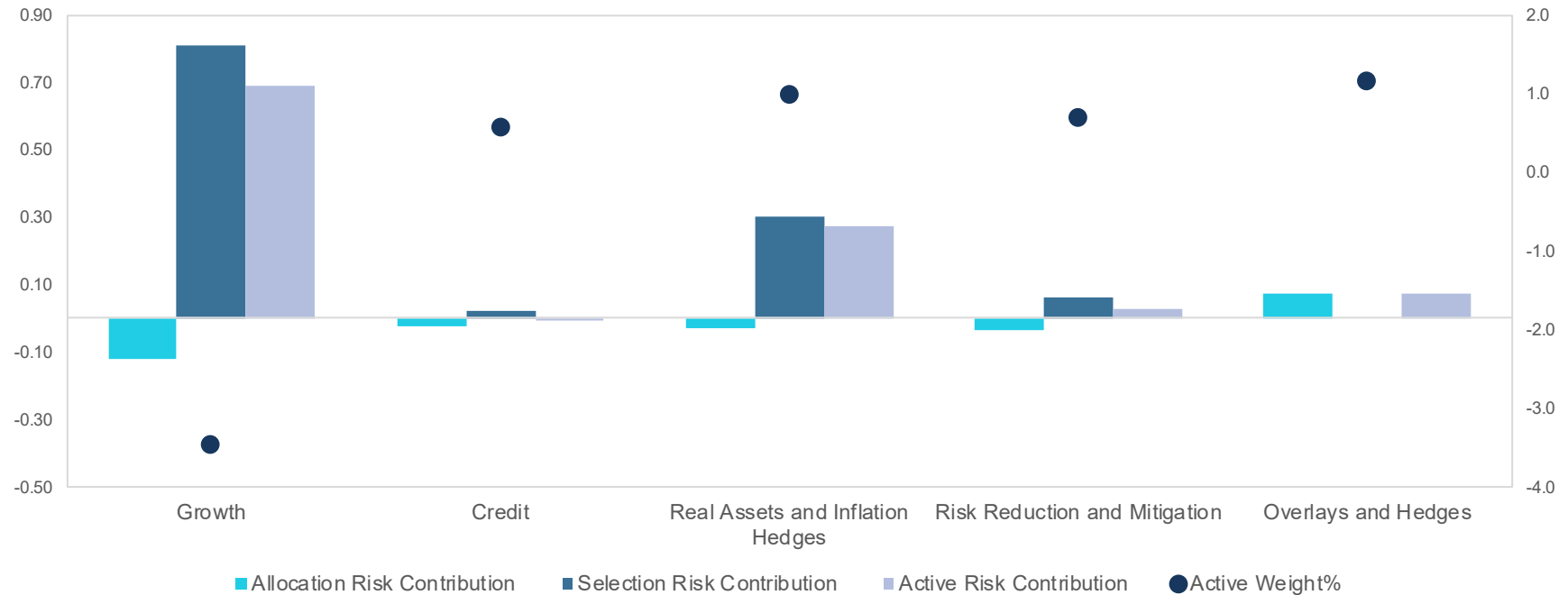
# Allocation Selection

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Active Total Risk



Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
<b>Active Total Risk</b>				<b>-0.13</b>			<b>1.20</b>	<b>1.06</b>
Growth	-3.45	7.25	0.48	-0.12	1.86	0.88	0.81	0.69
Credit	0.59	9.64	-0.44	-0.02	1.93	0.11	0.02	0.00
Real Assets and Inflation Hedges	1.00	6.49	-0.42	-0.03	2.46	0.68	0.30	0.27
Risk Reduction and Mitigation	0.70	13.88	-0.35	-0.03	1.18	0.27	0.06	0.03
Overlays and Hedges	1.17	28.75	0.22	0.07	0.00	0.00	0.00	0.07

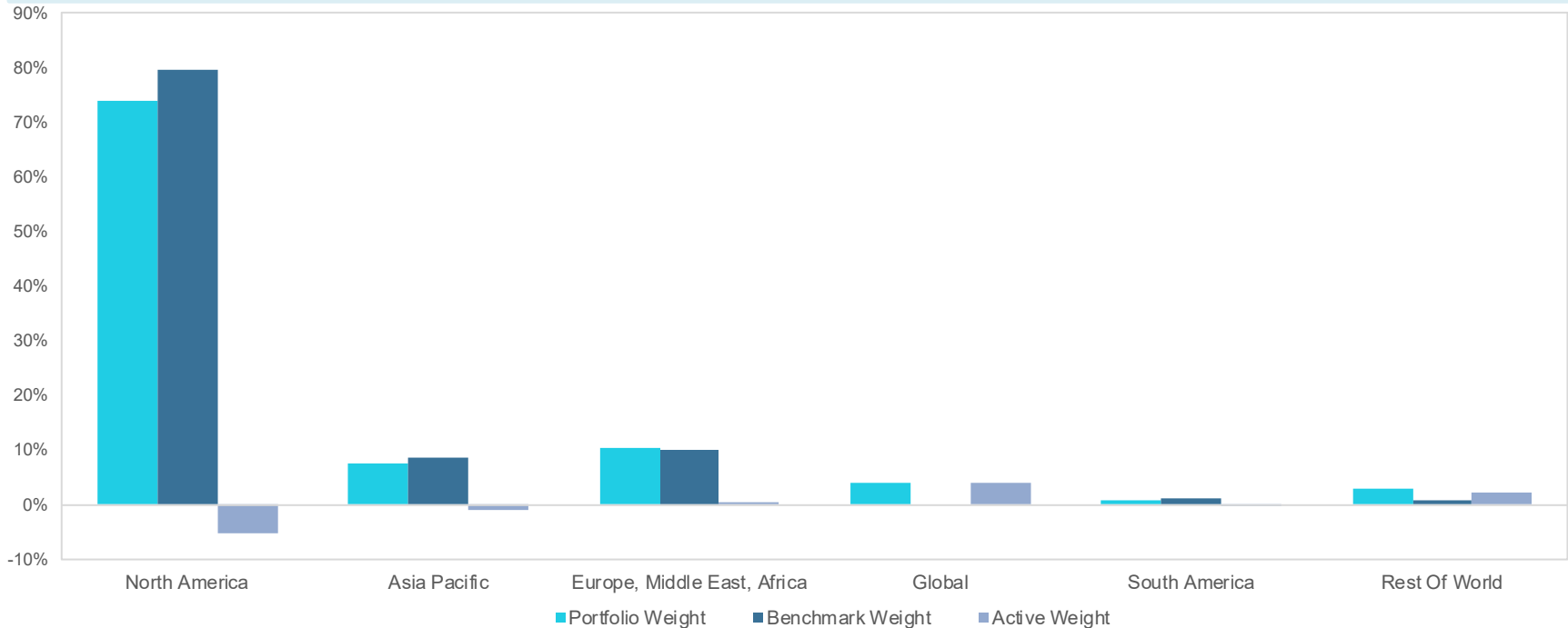
# Portfolio Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
<b>Total Fund</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>13.75</b>	<b>1.06</b>	<b>100.00</b>	<b>0.01</b>
North America	74.12%	79.51%	-5.39%	14.17	0.92	86.72	0.02
Asia Pacific	7.49%	8.50%	-1.01%	15.79	0.11	9.98	-0.01
Europe, Middle East, Africa	10.54%	10.20%	0.33%	21.08	0.20	18.71	0.02
Global	3.94%	0.00%	3.94%	6.85	-0.12	-11.79	-0.03
South America	0.81%	1.01%	-0.20%	27.25	0.05	4.33	-0.01
Rest Of World	3.10%	0.78%	2.33%	6.42	-0.08	-7.95	-0.04

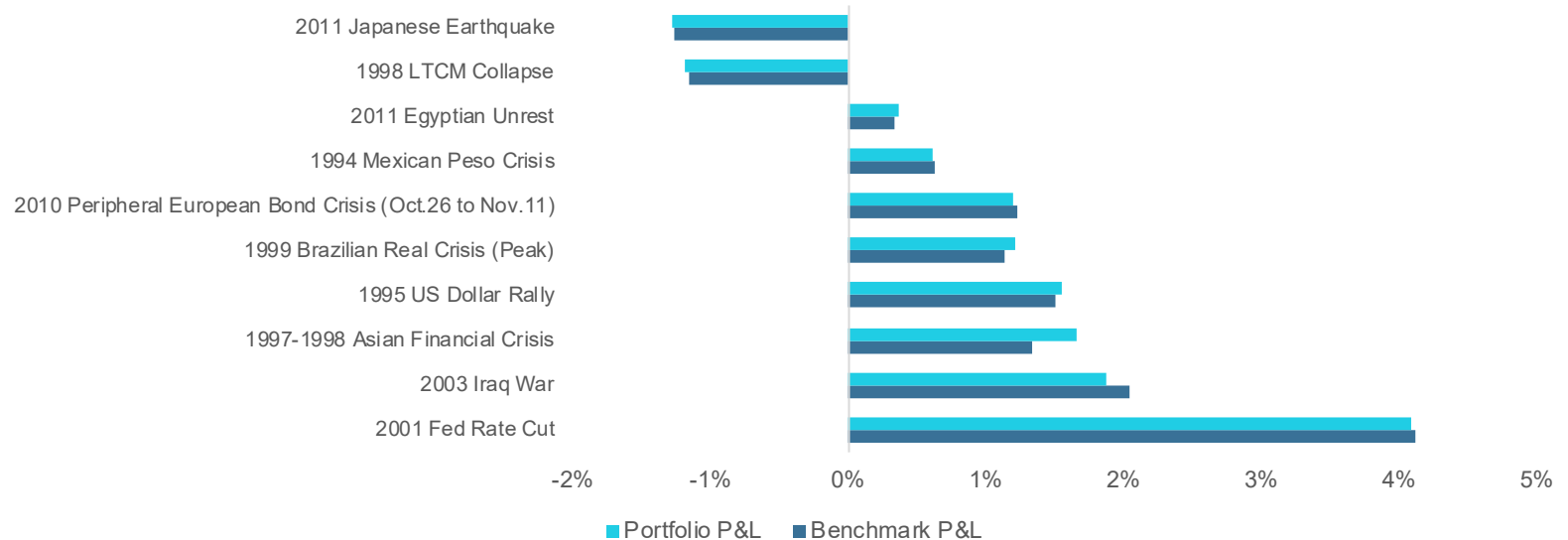
# Stress Tests

for the quarter ended September 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 (	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)

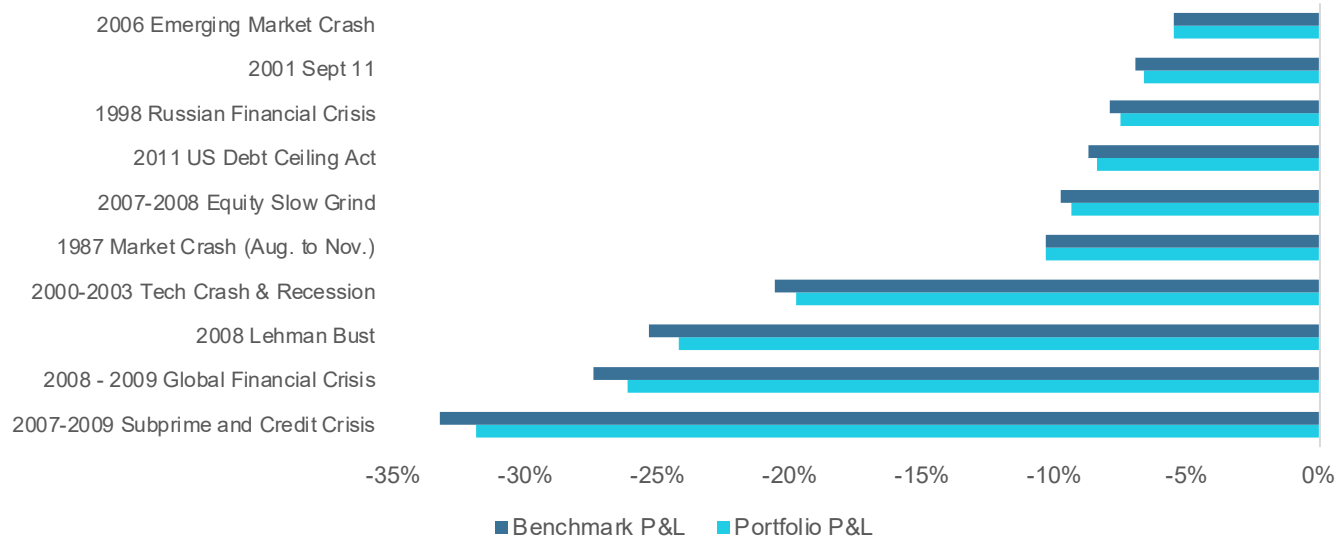
# Stress Tests

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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

				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	Risk-Adjusted Return	ER				
GROWTH	<b>GLOBAL EQUITY</b>							
	Acadian Developed Markets	488.3	0.7%	5	S-	3	B	3
	BTC Euro Tilts	443.7	0.7%	5	S+	4	B	3
	Capital Group Developed Markets	310.0	0.5%	3	S	2	B	3
	Cevian Capital II - Activist	363.7	0.5%	4	S	4	B	1
	Cornercap US SC - EMP	72.7	0.1%	4	S-	1	A	3
	Frontier US SMID Growth	230.6	0.3%	2	S	2	B	1
	Global Alpha	143.8	0.2%	3	S+	3	A	3
	JPMAM Strategic Beta Non-U.S.	482.5	0.7%	3	S	2	B	3
	JPMAM Strategic Beta U.S.	3,716.9	5.5%	3	S	2	B	3
	Lazard Emerging Markets	321.5	0.5%	2	S	3	B	1
	SSGA MSCI ACWI IMI	12,667.3	18.7%	3	S	—	B	5
	Symphony Financial - Activist	206.9	0.3%	4	S	2	B	3
	Systematic US Small Cap Value	166.7	0.2%	3	S-	2	A	3
CREDIT	<b>HIGH YIELD</b>							
	Beach Point	269.0	0.4%	5	S	3	B	3
	Brigade Cap Mgmt	615.9	0.9%	5	S	2	B	3
	Pinebridge Investments	431.6	0.6%	3	S	4	B	3
	<b>BANK LOANS</b>							
	Bain Capital Credit	407.5	0.6%	4	S	2	B	1
	Credit Suisse Bank Loans	1,115.4	1.6%	3	S	3	B	5
	Crescent Capital	488.6	0.7%	3	S	2	B	3
	<b>EMERGING MARKET DEBT</b>							
	Aberdeen Asset Management	340.1	0.5%	1	S	3	B	3
	Ashmore Investment Management	311.3	0.5%	1	S	3	B	3
REAL ASSETS & INFLATION HEDGES	<b>NATURAL RESOURCES &amp; COMMODITIES</b>							
	Credit Suisse Commodity	433.8	0.6%	4	S-	3	A	3
	DWS Natural Resources	663.4	1.0%	2	S	2	A	5
	Neuberger Berman/Gresham	486.4	0.7%	3	S	3	A	1
	Pimco Commodity Plus	121.1	0.2%	4	S-	3	C	1
	<b>INFRASTRUCTURE</b>							
	DWS Infrastructure	2,606.0	3.9%	2	S	2	A	5
	<b>TIPS</b>							
	Blackrock TIPS	1,822.5	2.7%	2	S+	—	B	5



			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	Risk-Adjusted Return	ER			
RISK REDUCTION & MITIGATION	<b>INVESTMENT GRADE BONDS</b>						
	Allspring/Wells	1,605.1 2.4%	3	S	3	B	5
	BTC US Debt Index Fund	2,856.1 4.2%	4	S+	—	B	5
	Pugh Capital Mgmt	819.4 1.2%	1	S	1	A	3
	<b>LONG-TERM GOVERNMENT BONDS</b>						
	BlackRock	2,874.4 4.3%	* 3	S+	—	B	5
OVERLAYS & HEDGES	<b>CASH</b>						
	SSGA Cash	779.5 1.2%	* 3	S+	—	A	5
	<b>OVERLAYS</b>						
	Parametric Cash Overlay	424.0 0.6%	—	S	—	A	5
	<b>HEDGES</b>						
	BTC Passive Currency Hedge	163.0 0.2%	—	S+	—	B	5

	Exceeds 3-Year Net Excess Return
	Meets 3-Year Net Excess Return
	Below 3-Year Net Excess Return

<b>For Organization and Partnership</b>	
	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



Los Angeles County Employees Retirement Association  
**PRIVATE MARKETS MANAGER SCORECARD**  
 3rd 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					
<b>GLOBAL/LARGE BUYOUT</b>							
Advent International Group	121.6	0.2%	5	S+	3	C	4
Blackstone Management	231.5	0.3%	1	S-	4	B	5
CVC Capital Partners	521.7	0.8%	4	S	4	A	4
Green Equity Investors	380.6	0.6%	5	S+	3	A	4
Hellman & Friedman	458.6	0.7%	2	S+	3	B	4
MBK	219.2	0.3%	1	S	4	A	2
Silver Lake Partners	507.2	0.8%	3	S+	3	A	5
Thoma Bravo LLC	151.3	0.2%	*	S+	3	B	3
Vista Equity Partners	824.8	1.2%	3	S-	3	A	2
<b>MID-MARKET BUYOUT</b>							
Accel-KKR Capital Partners	200.2	0.3%	3	S+	4	A	3
BlackFin Capital Partners	33.3	0.0%	2	S	3	B	3
Carlyle Group	234.4	0.3%	2	S+	4	B	4
Clearlake Capital	530.8	0.8%	5	S+	4	A	4
GHO Capital	96.1	0.1%	*	S	3	A	3
Gilde Partners	111.3	0.2%	5	S	2	A	5
Harvest Partners	113.5	0.2%	5	S	1	C	3
Marlin Equity	28.8	0.0%	1	S-	2	C	3
Novacap	10.7	0.0%	*	S	3	B	3
Onex Partners	328.9	0.5%	2	S	4	A	5
PAI	125.4	0.2%	5	S-	2	B	4
Revelstoke	140.1	0.2%	2	S	4	A	2
Riverside Capital	110.1	0.2%	1	S	3	C	3
Siris Capital Group	161.6	0.2%	3	S	3	A	4
Sterling Partners	120.7	0.2%	5	S	3	A	4
STG Partners	35.2	0.1%	*	S	3	A	3
Triton	123.1	0.2%	4	S-	3	C	5
TSG	0.0	0.0%	*	S+	3	C	2
Veritas Capital	19.7	0.0%	*	S+	3	B	3
Vinci Partners	66.8	0.1%	4	S	4	B	5
Webster Equity Partners	38.3	0.1%	*	S	3	B	3
Wynnchurch Capital	41.5	0.1%	*	S+	3	C	3
<b>SMALL BUYOUT</b>							
AE Industrial Partners	131.5	0.2%	5	S+	3	A	3
Atlantic Street Capital	37.3	0.1%	2	S	3	A	3
Clarion	21.5	0.0%	5	S+	2	B	4
Excellere Partners	118.5	0.2%	3	S-	3	A	3
Incline Equity Partners	36.3	0.1%	4	S-	2	C	4
Insignia Capital Partners	206.5	0.3%	4	S	1	B	5
Juggernaut Capital Partners	268.9	0.4%	4	S	3	A	4
Lightyear Capital	268.0	0.4%	5	S-	2	A	5
Livingbridge	57.9	0.1%	1	S+	4	A	3
Montefiore Investment	14.8	0.0%	*	S+	4	B	4
One Rock Capital Partners	185.3	0.3%	2	S	3	A	4
Palladium Equity Partners	82.8	0.1%	1	S-	4	C	2

PRIVATE EQUITY



Los Angeles County Employees Retirement Association  
**PRIVATE MARKETS MANAGER SCORECARD**  
 3rd 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					
PRIVATE EQUITY (continued)	<b>GROWTH EQUITY</b>						
	Australis Partners	84.7 0.1%	1	S-	4	B	5
	Great Hill Partners	-4.7 0.0%	*	S	4	A	4
	JMI Equity	4.0 0.0%	3	S	3	C	2
	RedBird Capital Partners	182.7 0.3%	2	S	4	A	3
	Summit Partners	77.3 0.1%	4	S+	4	A	4
	TA Associates	119.5 0.2%	5	S+	4	B	4
	Technology Crossover Ventures	4.1 0.0%	5	S	2	B	3
	<b>VENTURE CAPITAL</b>						
	BlueRun Ventures	109.0 0.2%	2	S	2	A	2
	Canaan Partners	168.3 0.2%	5	S+	3	A	4
	GGV Capital	536.3 0.8%	3	S	3	A	3
	Institutional Venture Partners	193.6 0.3%	4	S	1	C	4
	Joy Capital	84.3 0.1%	1	S-	2	B	4
	Lilly Asia Ventures	144.3 0.2%	2	S	4	B	2
	Primary Ventures	0.0 0.0%	*	S	2	C	4
	Sinovation Ventures	92.1 0.1%	1	S-	2	C	2
	Storm Ventures LLC	269.2 0.4%	4	S	3	A	4
	Union Square	151.2 0.2%	5	S-	1	B	5
	<b>SPECIAL SITUATIONS</b>						
	Alchemy Partners	30.2 0.0%	5	S	3	B	4
	Black Diamond	147.4 0.2%	1	S	3	B	4
	Centerbridge	169.9 0.3%	3	S	4	A	2
	<b>FUND OF FUNDS</b>						
	Gateway	909.1 1.3%	5	S	3	B	4
	MS GTB Capital Partners	286.4 0.4%	1	S	4	A	2
	J.P. Morgan	480.8 0.7%	3	S+	+	B	4



Los Angeles County Employees Retirement Association

## PRIVATE MARKETS MANAGER SCORECARD

3rd Quarter 2022

<div>L/CERA</div> <div>Los Angeles County Employees Retirement Association</div> <div>PRIVATE MARKETS MANAGER SCORECARD</div> <div>3rd Quarter 2022</div>			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						
REAL ESTATE	COMMINGLED FUNDS							
	AERMONT Real Estate Fund IV	29.0	0.0%	2	S	4	B	3
	AEW Value Investors Asia III	31.0	0.0%	2	S	4	B	4
	AG Asia Realty Fund IV	82.0	0.1%	*	S-	3	B	3
	AG Europe Realty Fund II	49.0	0.1%	2	S-	3	B	3
	Bain Capital Real Estate Fund I	78.0	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	44.0	0.1%	2	S	4	A	3
	CapMan Nordic Real Estate Fund III	24.0	0.0%	*	S	4	A	3
	Capri Urban Investors	1.0	0.0%	4	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.	185.0	0.3%	5	S	3	B	3
	Core Property Index Fund	131.0	0.2%	4	S	2	A	5
	Europa Fund IV	10.0	0.0%	1	S	3	A	2
	Heitman Asia-Pacific Property Investors	38.0	0.1%	2	S	4	B	4
	Invesco Real Estate Asia Fund	154.0	0.2%	3	S	4	B	5
	Prologis European Logistics Fund (PELF)	219.0	0.3%	4	S	4	A	1
	RREEF Core Plus Industrial Fund (CPIF)	306.0	0.5%	5	S-	3	B	5
	Starwood Capital Hospitality Fund	19.0	0.0%	1	S	3	C	3
	TPG Real Estate Partners III	45.0	0.1%	*	S	3	C	3
	SEPARATE ACCOUNTS							
	Cityview Core I.M.A.	205.0	0.3%	1	S	3	B	1
	Clarion I.M.A.	536.0	0.8%	5	S	4	B	4
	Clarion Takeover Core IMA	364.0	0.5%	*	S	4	B	4
	Clarion Takeover Value IMA	60.0	0.1%	*	S	4	B	3
	Clarion Takeover Value IMA Vintage 2012	12.0	0.0%	*	S	4	B	4
	Heitman I.M.A.	428.0	0.6%	4	S	3	B	4
	RREEF Core/High Return I.M.A. III	863.0	1.3%	1	S-	3	C	5
	RREEF Takeover I.M.A.	724.0	1.1%	4	S-	3	C	4
	Stockbridge I.M.A.	644.0	1.0%	4	S	3	B	4
	Stockbridge High I.M.A. Vintage 2014	113.0	0.2%	*	S	3	B	5
	Stockbridge Value I.M.A. Vintage 2014	22.0	0.0%	*	S	3	B	3



Los Angeles County Employees Retirement Association  
**PRIVATE MARKETS MANAGER SCORECARD**  
 3rd 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					
<b>HEDGE FUNDS</b>							
AM Asia	221.5	0.3%	4	S-	2	A	5
Brevan Howard	647.6	1.0%	5	S+	2	A	2
Capula GRV	626.2	0.9%	5	S	1	A	3
Caxton	292.1	0.4%	5	S	3	B	3
DK Institutional Partners	486.7	0.7%	3	S	1	B	3
HBK Multistrategy	555.1	0.8%	4	S	1	B	3
Hudson Bay	641.1	0.9%	5	S	1	B	3
Polar	461.7	0.7%	4	S	2	B	4
Stable	315.3	0.5%	*	S	2	A	5
<b>ILLIQUID CREDIT</b>							
Barings	58.0	0.1%	5	S	3	A	5
Beach Point	446.3	0.7%	4	S	1	A	3
BlackRock/Tennenbaum	6,601.5	9.8%	3	S-	2	B	5
Glendon	124.2	0.2%	1	S	1	A	2
Magnetar	826.2	1.2%	*	S	2	A	3
Napier Park	806.5	1.2%	*	S	2	A	4
Oaktree	96.3	0.1%	5	S	2	B	2
PIMCO Tac Opps	396.4	0.6%	1	S-	1	C	3
Quadrant	55.8	0.1%	2	S	1	B	5
Silver Rock	268.1	0.4%	*	S	2	A	4

<b>For Organization and Partnership</b>	
	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

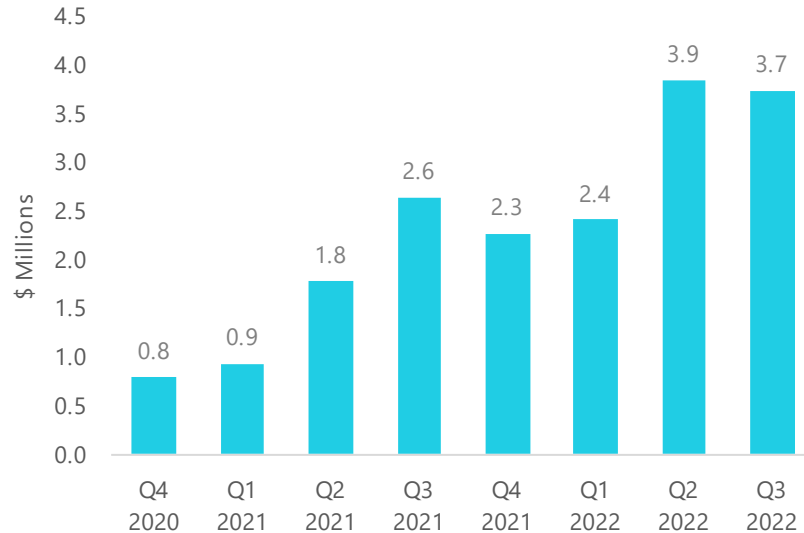
# Summary

Securities Lending Income  
for the quarter ended September 30, 2022

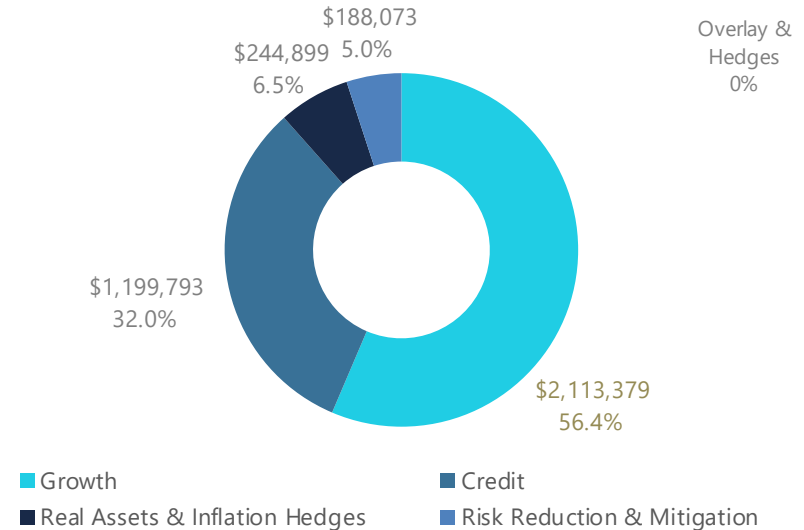


Los Angeles County Employees Retirement Association

## Earnings by Quarter



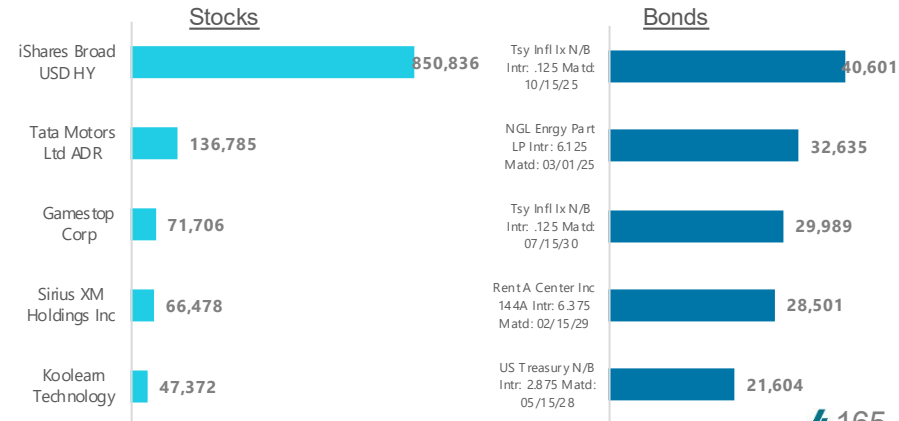
## Earnings by Functional Category



## Top Earning Funds

	% of Total Fund Earnings	Total Earnings	Cash Earnings	Non-Cash Earnings
SSGA MSCI ACWI IMI	44.2%	1,655,562	886,841	768,721
BlackRock HY ETF	22.7%	850,836	322,414	528,423
JPMAM Strategic Beta US	6.7%	250,771	145,622	105,149
BlackRock TIPS	3.9%	147,176	76,586	70,590
Allspring/Wells	3.6%	134,215	67,322	66,893

## Top Earning Securities



# Public Markets Manager Fees

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Growth

	Average Market Value (\$ mm)	Fees <sup>1</sup>	Annualized Effective Rate (bps)
<b>Active</b>			
Acadian Asset Management	\$531.7	\$502,729	37.8
BTC Europe Alpha Tilts	\$481.5	\$424,764	35.3
Capital Guardian	\$338.2	\$293,324	34.7
Cevian Capital	\$380.9	\$1,024,055	107.5
CornerCap	\$79.1	\$104,519	52.8
Frontier Capital Management	\$252.6	\$473,705	75.0
Global Alpha	\$161.1	\$289,214	71.8
Lazard Asset Management	\$352.8	\$566,750	64.3
Parametric GE Market Cap	\$888.2	\$55,787	2.5
Parametric GE Region	\$692.1	\$43,472	2.5
Symphony Financial	\$186.4	\$349,440	75.0
Systematic	\$178.9	\$245,962	55.0
<b>Subtotal:</b>	<b>\$4,523.6</b>	<b>\$4,373,720</b>	<b>38.7</b>
<b>Factor-Based</b>			
JPMAM Strategic Beta Non-US	\$523.0	\$44,974	3.4
JPMAM Strategic Beta US	\$4,025.7	\$346,177	3.4
<b>Subtotal:</b>	<b>\$4,548.7</b>	<b>\$391,151</b>	<b>3.4</b>
<b>Passive</b>			
SSGA MSCI ACWI IMI	\$13,577.3	\$272,358	0.8
<b>Subtotal:</b>	<b>\$13,577.3</b>	<b>\$272,358</b>	<b>0.8</b>

1. Reflects estimated investment management fees.



# Public Markets Manager Fees

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Credit

	Average Market Value (\$ mm)	Fees <sup>1</sup>	Annualized Effective Rate (bps)
<b>Liquid Credit</b>			
Aberdeen Standard Investments	\$357.7	\$346,110	38.7
Ashmore Investment Management	\$311.3	\$390,845	50.2
Bain Capital	\$407.5	\$512,790	50.3
Beach Point Capital	\$278.8	\$313,638	45.0
Brigade Capital Management	\$637.4	\$651,449	40.9
Credit Suisse Bank Loan	\$1,130.1	\$558,555	19.8
Crescent Capital Group	\$493.4	\$574,607	46.6
Pinebridge	\$447.0	\$368,747	33.0
<b>Subtotal:</b>	<b>\$4,063.0</b>	<b>\$3,716,742</b>	<b>36.6</b>
<b>Illiquid Credit</b>			
Beach Point Capital - Fund II	\$14.8	\$127,693	345.8
Beach Point Capital - Fund III	\$185.4	\$261,289	56.4
Tennenbaum Capital Partners	\$634.9	\$1,181,684	74.5
<b>Subtotal:<sup>2</sup></b>	<b>\$2,665.6</b>	<b>\$1,570,665</b>	<b>23.6</b>

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 September 30, 2022



Los Angeles County Employees Retirement Association

## Real Assets & Inflation Hedges

	Average Market Value (\$ mm)	Fees <sup>1</sup>	Annualized Effective Rate (bps)
<b>Natural Resources &amp; Commodities</b>			
Credit Suisse	\$529.1	\$339,979	25.7
DWS Natural Resources	\$2,268.0	\$350,714	6.2
Neuberger Berman/Gresham	\$539.2	\$508,707	37.7
PIMCO	\$189.0	\$216,663	45.8
<b>Subtotal:</b>	<b>\$3,525.5</b>	<b>\$1,416,063</b>	<b>16.1</b>
<b>Infrastructure</b>			
DWS Infrastructure	\$2,841.1	\$1,318,005	18.6
<b>Subtotal:</b>	<b>\$2,841.1</b>	<b>\$1,318,005</b>	<b>18.6</b>
<b>Treasury Inflation-Protected Securities</b>			
BlackRock TIPS	\$1,929.6	\$48,636	1.0
<b>Subtotal:</b>	<b>\$1,929.6</b>	<b>\$48,636</b>	<b>1.0</b>

1. Reflects estimated investment management fees.

# Public Markets Manager Fees

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Risk Reduction & Mitigation

	Average Market Value (\$ mm)	Fees <sup>1</sup>	Annualized Effective Rate (bps)
<b>Investment Grade Bonds</b>			
Allspring/Wells	\$1,669.3	\$386,160	9.3
Pugh Capital Management	\$853.3	\$284,405	13.3
<b>Subtotal:<sup>2</sup></b>	<b>\$5,493.5</b>	<b>\$734,216</b>	<b>5.3</b>
<b>Cash</b>			
SSGA Cash	\$699.1	\$69,905	4.0
<b>Subtotal:</b>	<b>\$699.1</b>	<b>\$69,905</b>	<b>4.0</b>

1. Reflects estimated investment management fees.

2. Includes BTC US Debt Index.

# Public Markets Manager Fees

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Overlays & Hedges

	Average Market Value (\$ mm)	Fees <sup>1</sup>	Annualized Effective Rate (bps)
<b>Overlays</b>			
Parametric Cash Overlay	\$3,201.3	\$201,071	2.5
<b>Subtotal:</b>	<b>\$3,201.3</b>	<b>\$201,071</b>	<b>2.5</b>
<b>Hedges</b>			
BlackRock Developed Markets Currency Hedge	\$6,210.5	\$234,809	1.5
<b>Subtotal:</b>	<b>\$6,210.5</b>	<b>\$234,809</b>	<b>1.5</b>

1. Reflects estimated investment management fees.

# Benchmark Definitions

## Current Composition

	Weight	Component
<b>Total Fund</b>		
Total Fund Policy Benchmark		
	53%	Growth Policy Benchmark
	11%	Credit Policy Benchmark
	17%	RA & IH Policy Benchmark
	19%	RR & M Policy Benchmark
<b>Growth</b>		
Growth Policy Benchmark		
	60%	Global Equity Policy Benchmark
	32%	Private Equity – Growth Policy BM
	8%	Non-Core Private RE Policy Benchmark
Global Equity Policy Benchmark		
	100%	MSCI ACWI IMI Net
Private Equity – Growth Policy BM		
	100%	MSCI ACWI IMI Net + 200 bps (3-month lagged)
Non-Core Private RE Policy Benchmark		
	100%	NFI ODCE + 225 bps (3-month lagged)
<hr/>		
EAFE Custom Index	100%	MSCI EAFE + Canada Net Index

# Benchmark Definitions

## Current Composition

	Weight	Component
<b>Credit</b>		
Credit Policy Benchmark		
	36%	Liquid Credit Policy Benchmark
	64%	Illiquid Credit Policy Benchmark
Liquid Credit Policy Benchmark		
	40%	Bloomberg U.S. Corporate High Yield
	40%	CS Leveraged Loan Index
	10%	JPMorgan EMBI Global Diversified Index
	5%	JPM GBI-EM Global Diversified Index
	5%	JPM CEMBI Broad Diversified
Illiquid Credit Policy Benchmark		
	100%	Liquid Credit Policy BM + 150 bps (1-month lagged)
Bank Loans Custom Benchmark	100%	CS Leveraged Loan Index
Beachpoint Custom Benchmark	100%	Bloomberg U.S. Corporate High Yield
Brigade Custom Index	100%	Bloomberg U.S. Corporate High Yield
EMD Custom Benchmark	50%	JPMorgan EMBI Global Diversified Index
	25%	JPM CEMBI Broad Diversified
	25%	JPM GBI-EM Global Diversified Index

# Benchmark Definitions

## Current Composition

	Weight	Component
<b>Real Assets &amp; Inflation Hedges</b>		
RA & IH Policy Benchmark		
	35%	Core Private RE Policy Benchmark
	18%	Nat Res & Comm Policy Benchmark
	29%	DJ Brookfield Global Infra Comp
	18%	Bloomberg U.S. Treasury: U.S. TIPS
Core Private RE Policy Benchmark		
	100%	NFI ODCE (3-month lagged)
Nat Res & Comm Policy Benchmark		
	33%	Bloomberg Commodity Index Total Return
	66%	S&P Global Natural Resources Index
<hr/>		
Private Equity – Real Assets Custom BM	100%	S&P Glb LargeMidCap Commod & Resources (3-month lagged)
Private Infrastructure Custom BM	100%	DJ Brookfield Global Infra Comp (3-month lagged)
<b>Risk Reduction &amp; Mitigation</b>		
RR & M Policy Benchmark		
	37%	Bloomberg U.S. Aggregate
	32%	Diversified Hedge Funds Policy Benchmark
	26%	Bloomberg U.S. Treasury: Long
	5%	FTSE 3-Month US Treasury Bill
Diversified Hedge Funds Policy Benchmark		
	100%	FTSE 3-Month US Treasury Bill + 250 bps (1-month lagged)
Cash Policy Benchmark		
	100%	FTSE 3-Month US Treasury Bill
<hr/>		
Custom Hedge Fund BM	100%	Diversified Hedge Funds Policy Benchmark

## 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.

### DISTRIBUTED TO PAID-IN (DPI)

A measure of distributions received relative to contributed capital.



## 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.

## 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.

## 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.

## 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 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.

## Y

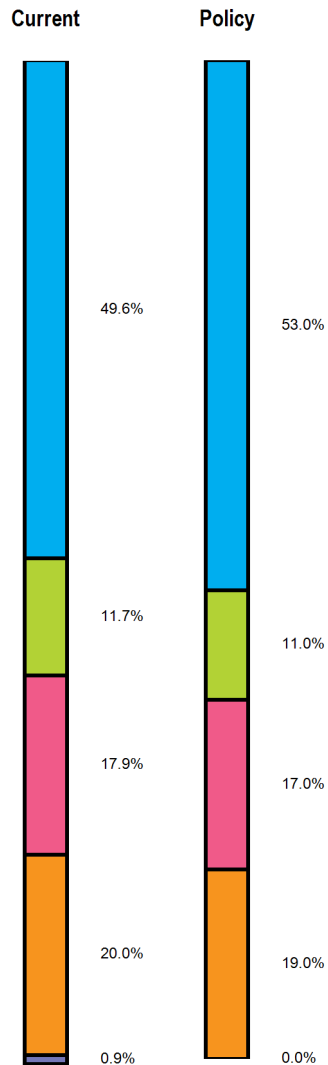
### YIELD TO MATURITY

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.

# Los Angeles County Employees Retirement Association

September 30, 2022

## Fund Evaluation Report



Allocation vs. Targets and Policy						
	Current Balance	Current Allocation	Policy	Difference	Policy Range	Within IPS Range?
<b>Growth</b>	<b>\$33,535,320,209</b>	<b>49.6%</b>	<b>53.0%</b>	<b>-3.4%</b>	<b>45.0% - 61.0%</b>	<b>Yes</b>
Global Equity	\$19,936,055,955	29.5%	32.0%	-2.5%	25.0% - 39.0%	Yes
Private Equity	\$12,522,246,548	18.5%	17.0%	1.5%	12.0% - 20.0%	Yes
Non-Core Private Real Estate	\$1,077,017,706	1.6%	4.0%	-2.4%	2.0% - 6.0%	No
<b>Credit</b>	<b>\$7,882,915,655</b>	<b>11.7%</b>	<b>11.0%</b>	<b>0.7%</b>	<b>8.0% - 14.0%</b>	<b>Yes</b>
Liquid Credit <sup>1</sup>	\$4,532,766,795	6.7%	4.0%	2.7%	1.0% - 7.0%	Yes
Illiquid Credit <sup>2</sup>	\$3,350,129,041	5.0%	7.0%	-2.0%	4.0% - 10.0%	Yes
<b>Real Assets and Inflation Hedges</b>	<b>\$12,074,851,582</b>	<b>17.9%</b>	<b>17.0%</b>	<b>0.9%</b>	<b>14.0% - 20.0%</b>	<b>Yes</b>
Core Private Real Estate	\$4,471,017,753	6.6%	6.0%	0.6%	3.0% - 9.0%	Yes
Natural Resources & Commodities	\$2,476,470,691	3.7%	3.0%	0.7%	1.0% - 5.0%	Yes
Infrastructure	\$3,304,837,104	4.9%	5.0%	-0.1%	2.0% - 6.0%	Yes
TIPS	\$1,822,526,034	2.7%	3.0%	-0.3%	0.0% - 6.0%	Yes
<b>Risk Reduction and Mitigation</b>	<b>\$13,535,747,854</b>	<b>20.0%</b>	<b>19.0%</b>	<b>1.0%</b>	<b>13.0% - 25.0%</b>	<b>Yes</b>
Investment Grade Bonds	\$5,292,126,637	7.8%	7.0%	0.8%	1.0% - 13.0%	Yes
Diversified Hedge Funds	\$4,281,188,211	6.3%	6.0%	0.3%	2.0% - 8.0%	Yes
Long-Term Government Bonds	\$2,874,416,411	4.3%	5.0%	-0.7%	0.0% - 10.0%	Yes
Cash	\$1,088,030,405	1.6%	1.0%	0.6%	0.0% - 3.0%	Yes
<b>Overlays and Hedges</b>	<b>\$586,941,393</b>	<b>0.9%</b>				
Cash Overlay	\$423,954,228	0.6%				
Currency Hedge	\$162,987,165	0.2%				
<b>Total<sup>3</sup></b>	<b>\$67,615,776,693</b>	<b>100.0%</b>	<b>100.0%</b>			

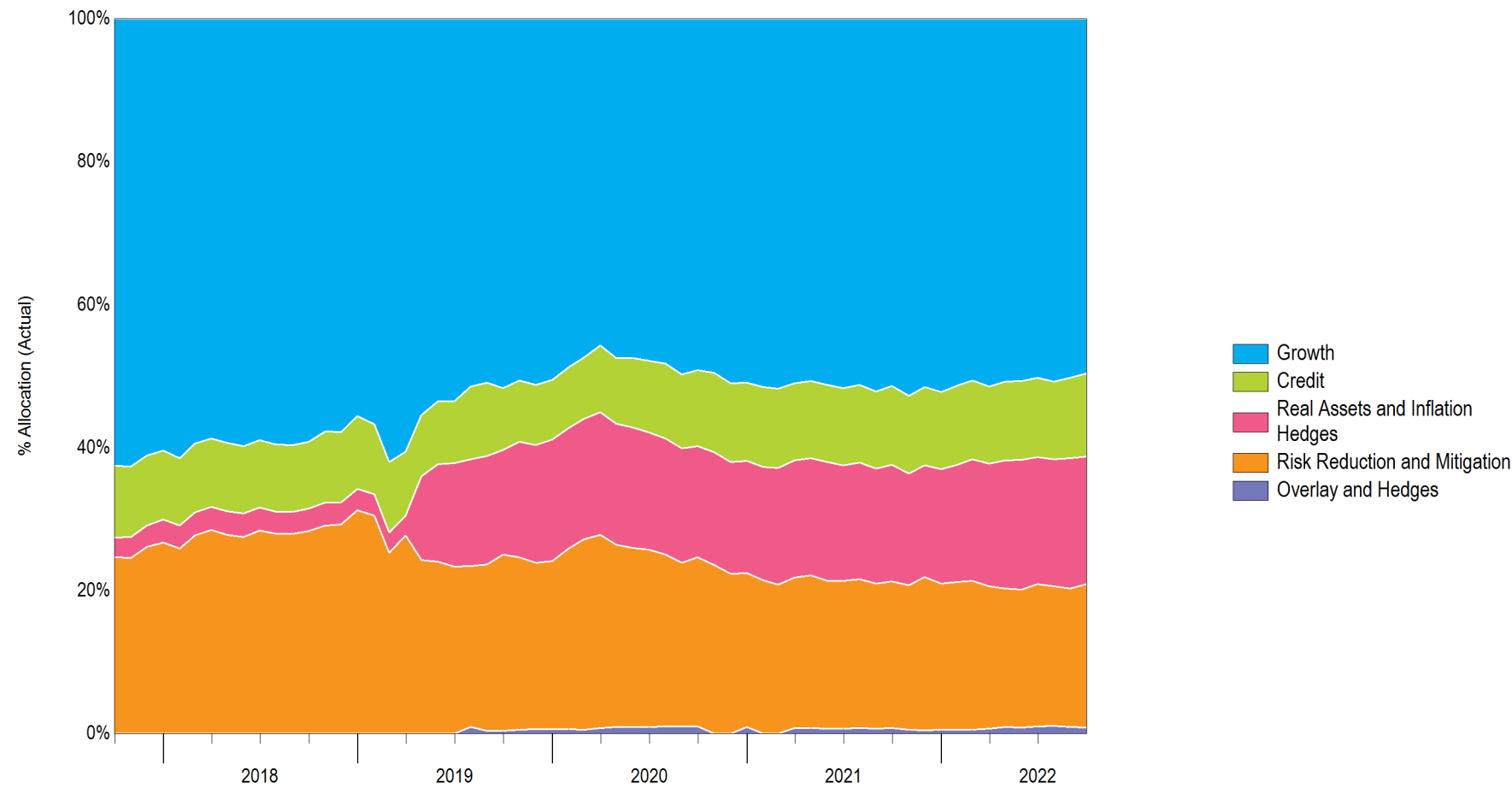
<sup>1</sup> Liquid Credit contains high yield, bank loans, and EM debt.

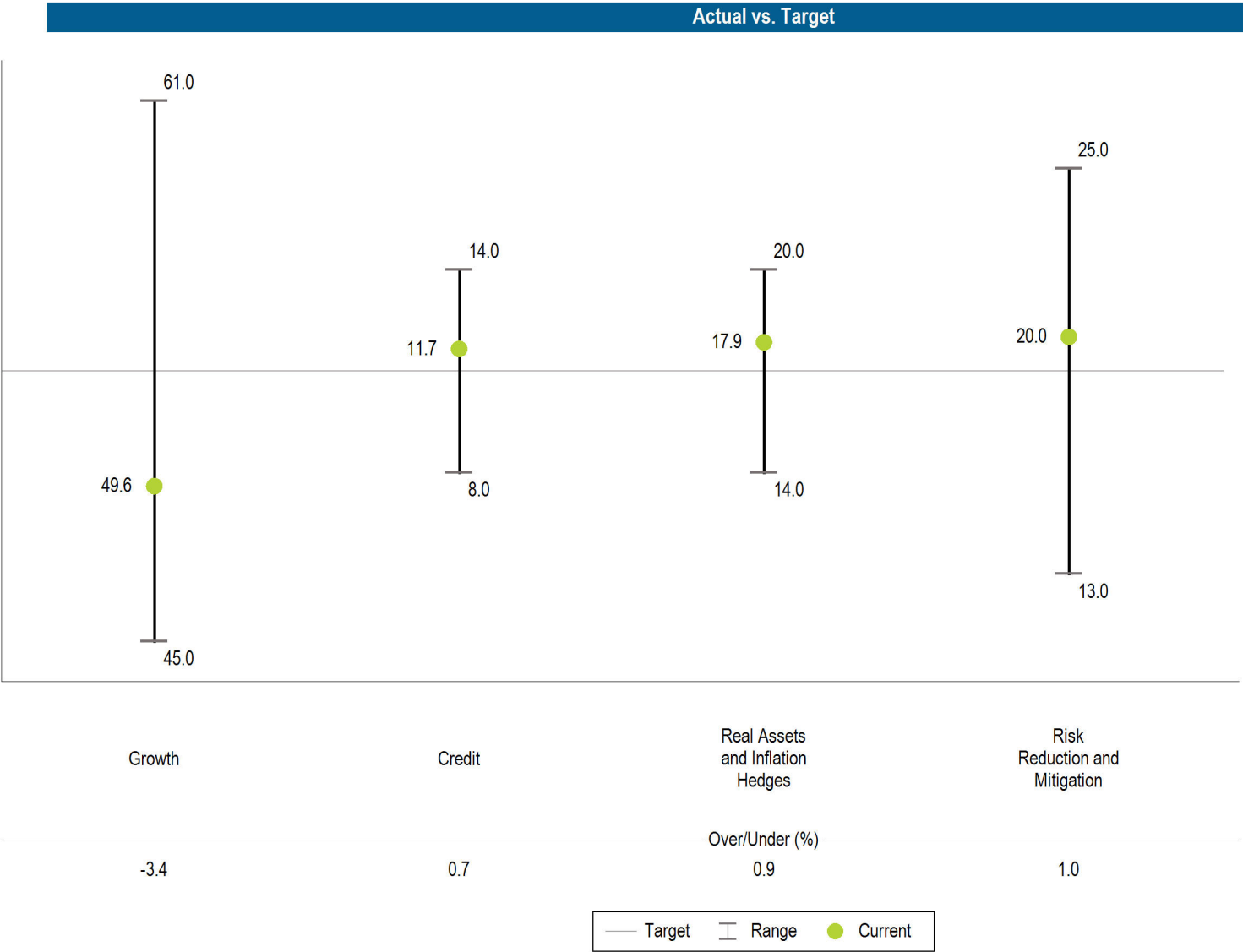
<sup>2</sup> Illiquid Credit contains credit hedge funds, real estate debt, private debt strategies and private equity-related debt.

<sup>3</sup> Totals may not add up due to rounding.

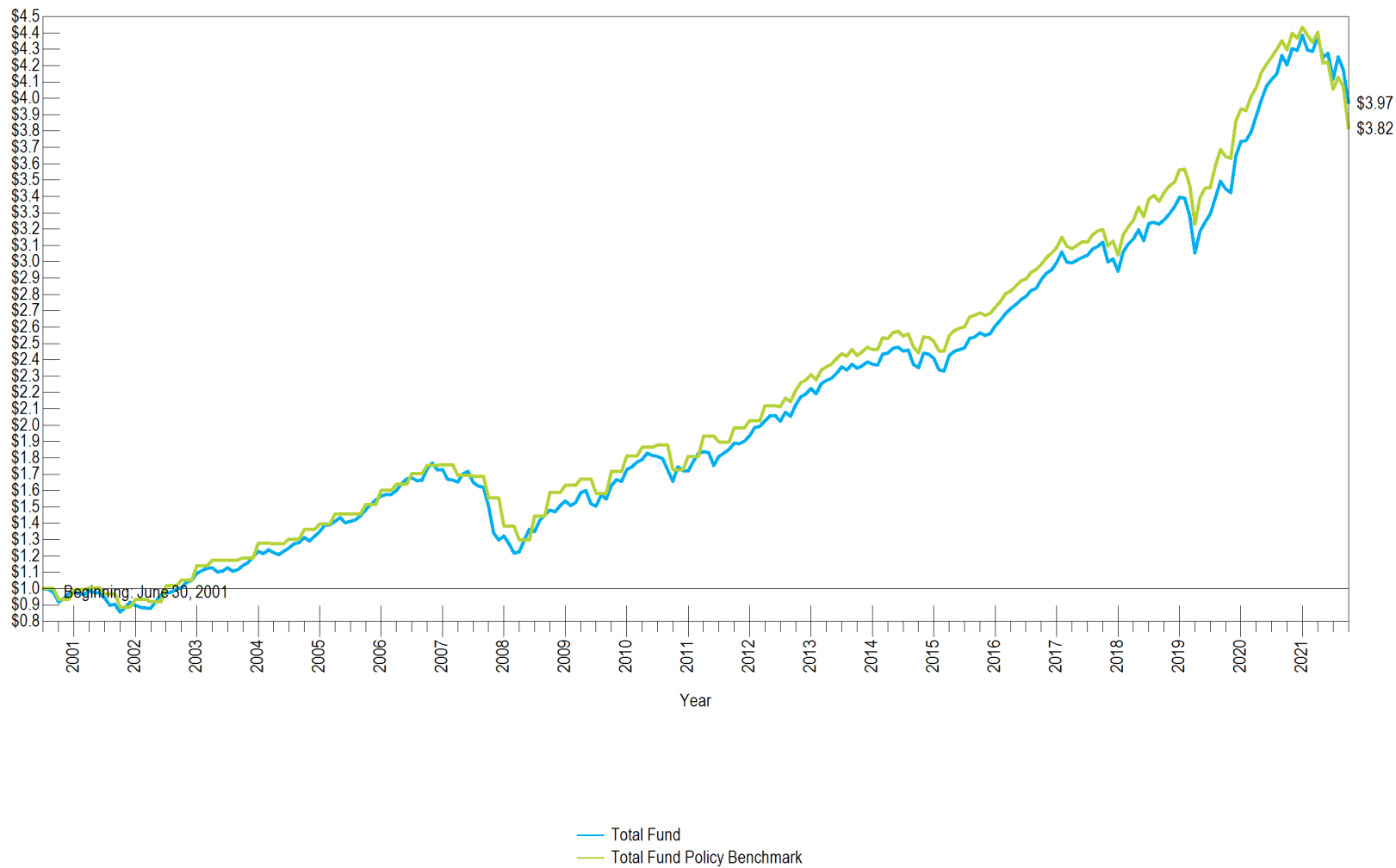
\* The Functional Framework became effective April 1, 2019.

**Asset Allocation History**  
5 Years Ending September 30, 2022





Growth of a Dollar





### Asset Class Performance Summary (Net)

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD <sup>1</sup> (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Total Fund (Net)</b>	<b>67,615,776,693</b>	<b>100.0</b>	<b>-4.8</b>	<b>-3.5</b>	<b>-3.5</b>	<b>-5.5</b>	<b>6.9</b>	<b>6.6</b>	<b>7.7</b>
<i>Total Fund Policy Benchmark</i>			<u>-6.3</u>	<u>-5.9</u>	<u>-5.9</u>	<u>-11.1</u>	<u>3.7</u>	<u>5.0</u>	<u>6.8</u>
Excess Return			1.5	2.4	2.4	5.6	3.2	1.6	0.9
<b>Growth (Net)</b>	<b>33,535,320,209</b>	<b>49.6</b>	<b>-5.9</b>	<b>-4.9</b>	<b>-4.9</b>	<b>-9.5</b>	<b>10.4</b>	--	--
<i>Growth Custom Blended Benchmark</i>			<u>-8.4</u>	<u>-8.5</u>	<u>-8.5</u>	<u>-16.7</u>	<u>6.1</u>	--	--
Excess Return			2.5	3.6	3.6	7.2	4.3		
<b>Credit (Net)</b>	<b>7,882,915,655</b>	<b>11.7</b>	<b>-1.9</b>	<b>-0.6</b>	<b>-0.6</b>	<b>-5.9</b>	<b>2.7</b>	--	--
<i>Credit Custom Blended Benchmark</i>			<u>-1.5</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-9.2</u>	<u>0.3</u>	--	--
Excess Return			-0.4	0.3	0.3	3.3	2.4		
<b>Real Assets and Inflation Hedges (Net)</b>	<b>12,074,851,582</b>	<b>17.9</b>	<b>-5.2</b>	<b>-2.1</b>	<b>-2.1</b>	<b>9.2</b>	<b>7.6</b>	--	--
<i>Real Assets &amp; Inflation Hedges Custom BM</i>			<u>-5.7</u>	<u>-3.1</u>	<u>-3.1</u>	<u>6.4</u>	<u>7.4</u>	--	--
Excess Return			0.5	1.0	1.0	2.8	0.2		
<b>Risk Reduction and Mitigation (Net)</b>	<b>13,535,747,854</b>	<b>20.0</b>	<b>-3.1</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-10.7</b>	<b>-1.2</b>	--	--
<i>Risk Reduction and Mitigation Custom Blended Benchmark</i>			<u>-3.5</u>	<u>-4.0</u>	<u>-4.0</u>	<u>-11.5</u>	<u>-2.2</u>	--	--
Excess Return			0.4	0.3	0.3	0.8	1.0		
<b>Overlay and Hedges (Net)</b>	<b>586,941,393</b>	<b>0.9</b>	<b>-6.2</b>	<b>13.5</b>	<b>13.5</b>	<b>235.7</b>	--	--	--

<sup>1</sup> 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 (%)
<b>Total Fund (Net)</b>	<b>67,615,776,693</b>	<b>100.0</b>	<b>-4.8</b>	<b>-3.5</b>	<b>-3.5</b>	<b>-5.5</b>	<b>6.9</b>	<b>6.6</b>	<b>7.7</b>
<b>Total Fund (Gross)</b>			<b>-4.8</b>	<b>-3.4</b>	<b>-3.4</b>	<b>-5.1</b>	<b>7.3</b>	<b>6.9</b>	<b>8.0</b>
<i>Total Fund Policy Benchmark</i>			<u>-6.3</u>	<u>-5.9</u>	<u>-5.9</u>	<u>-11.1</u>	<u>3.7</u>	<u>5.0</u>	<u>6.8</u>
Excess Return (vs. Net)			1.5	2.4	2.4	5.6	3.2	1.6	0.9
<b>Growth (Net)<sup>1</sup></b>	<b>33,535,320,209</b>	<b>49.6</b>	<b>-5.9</b>	<b>-4.9</b>	<b>-4.9</b>	<b>-9.5</b>	<b>10.4</b>	--	--
<b>Growth (Gross)</b>			<b>-5.9</b>	<b>-4.8</b>	<b>-4.8</b>	<b>-9.1</b>	<b>10.9</b>	--	--
<i>Growth Custom Blended Benchmark</i>			<u>-8.4</u>	<u>-8.5</u>	<u>-8.5</u>	<u>-16.7</u>	<u>6.1</u>	--	--
Excess Return (vs. Net)			2.5	3.6	3.6	7.2	4.3		
<b>Global Equity (Net)</b>	<b>19,936,055,955</b>	<b>29.5</b>	<b>-9.4</b>	<b>-6.5</b>	<b>-6.5</b>	<b>-20.0</b>	<b>4.1</b>	--	--
<b>Global Equity (Gross)</b>			<b>-9.4</b>	<b>-6.4</b>	<b>-6.4</b>	<b>-19.8</b>	<b>4.3</b>	--	--
<i>Global Equity Custom BM</i>			<u>-9.7</u>	<u>-6.6</u>	<u>-6.6</u>	<u>-21.2</u>	<u>3.6</u>	--	--
Excess Return (vs. Net)			0.3	0.1	0.1	1.2	0.5		
Acadian Developed Markets (Net)	488,253,458	0.7	-10.0	-8.1	-8.1	-23.2	2.0	1.3	6.5
Acadian Developed Markets (Gross)			-10.0	-8.0	-8.0	-22.9	2.3	1.7	6.9
<i>EAFE Custom Benchmark</i>			<u>-9.3</u>	<u>-9.2</u>	<u>-9.2</u>	<u>-23.9</u>	<u>-1.2</u>	<u>-0.4</u>	<u>3.6</u>
Excess Return (vs. Net)			-0.7	1.1	1.1	0.7	3.2	1.7	2.9
BTC Euro Tilts (Net)	443,660,054	0.7	-8.0	-8.1	-8.1	-21.3	1.1	-0.1	5.2
BTC Euro Tilts (Gross)			-8.0	-8.0	-8.0	-20.9	1.6	0.3	5.7
<i>MSCI EUROPE</i>			<u>-8.7</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-24.8</u>	<u>-1.7</u>	<u>-1.2</u>	<u>3.4</u>
Excess Return (vs. Net)			0.7	2.0	2.0	3.5	2.8	1.1	1.8

<sup>1</sup> Includes accounts that are lagged by 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 (%)
Capital Guardian (Net)	310,039,600	0.5	-9.7	-9.6	-9.6	-34.0	-1.8	0.9	5.0
Capital Guardian (Gross)			-9.7	-9.5	-9.5	-33.8	-1.5	1.3	5.3
<i>EAFE Custom Benchmark</i>			<u>-9.3</u>	<u>-9.2</u>	<u>-9.2</u>	<u>-23.9</u>	<u>-1.2</u>	<u>-0.4</u>	<u>3.6</u>
Excess Return (vs. Net)			-0.4	-0.4	-0.4	-10.1	-0.6	1.3	1.4
Cevian Capital (Net)	363,708,639	0.5	-5.8	1.3	1.3	-6.5	8.0	4.5	--
Cevian Capital (Gross)			-5.7	1.6	1.6	-5.5	9.1	5.8	--
<i>MSCI EUROPE</i>			<u>-8.7</u>	<u>-10.1</u>	<u>-10.1</u>	<u>-24.8</u>	<u>-1.7</u>	<u>-1.2</u>	--
Excess Return (vs. Net)			2.9	11.4	11.4	18.3	9.7	5.7	
CornerCap (Net)	72,657,064	0.1	-10.1	-5.1	-5.1	-11.0	7.9	--	--
CornerCap (Gross)			-10.1	-5.0	-5.0	-10.5	8.5	--	--
<i>Russell 2000</i>			<u>-9.6</u>	<u>-2.2</u>	<u>-2.2</u>	<u>-23.5</u>	<u>4.3</u>	--	--
Excess Return (vs. Net)			-0.5	-2.9	-2.9	12.5	3.6		
Frontier Capital Management (Net)	230,630,342	0.3	-11.0	-4.6	-4.6	-21.8	4.1	3.5	9.6
Frontier Capital Management (Gross)			-11.0	-4.4	-4.4	-21.2	4.9	4.3	10.5
<i>Russell 2500</i>			<u>-9.5</u>	<u>-2.8</u>	<u>-2.8</u>	<u>-21.1</u>	<u>5.4</u>	<u>5.5</u>	<u>9.6</u>
Excess Return (vs. Net)			-1.5	-1.8	-1.8	-0.7	-1.3	-2.0	0.0

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Global Alpha IE EMP (Net)	143,832,969	0.2	-13.5	-11.2	-11.2	-30.3	-1.3	--	--
Global Alpha IE EMP (Gross)			-13.5	-11.1	-11.1	-29.8	-0.5	--	--
<i>MSCI EAFE Small Cap</i>			<u>-11.5</u>	<u>-9.8</u>	<u>-9.8</u>	<u>-32.1</u>	<u>-2.2</u>	--	--
Excess Return (vs. Net)			-2.0	-1.4	-1.4	1.8	0.9		
JPMAM Strategic BETA NON-U.S. (Net)	482,485,448	0.7	-9.8	-9.4	-9.4	-23.2	--	--	--
JPMAM Strategic BETA NON-U.S. (Gross)			-9.8	-9.4	-9.4	-23.1	--	--	--
<i>MSCI ACWI ex USA IMI</i>			<u>-10.1</u>	<u>-9.7</u>	<u>-9.7</u>	<u>-25.7</u>	--	--	--
Excess Return (vs. Net)			0.3	0.3	0.3	2.5			
JPMAM Strategic BETA U.S. (Net)	3,716,910,492	5.5	-9.2	-4.7	-4.7	-15.6	--	--	--
JPMAM Strategic BETA U.S. (Gross)			-9.2	-4.7	-4.7	-15.6	--	--	--
<i>MSCI USA IMI Gross</i>			<u>-9.3</u>	<u>-4.4</u>	<u>-4.4</u>	<u>-17.6</u>	--	--	--
Excess Return (vs. Net)			0.1	-0.3	-0.3	2.0			
Lazard Emerging Markets (Net)	321,515,439	0.5	-11.6	-14.1	-14.1	-31.7	-1.7	-1.0	--
Lazard Emerging Markets (Gross)			-11.5	-14.0	-14.0	-31.2	-1.0	-0.4	--
<i>MSCI Emerging Markets</i>			<u>-11.7</u>	<u>-11.6</u>	<u>-11.6</u>	<u>-28.1</u>	<u>-2.1</u>	<u>-1.8</u>	--
Excess Return (vs. Net)			0.1	-2.5	-2.5	-3.6	0.4	0.8	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Parametric GE Market Cap (Net)	111,682,467	0.2	0.3	-9.7	-9.7	--	--	--	--
Parametric GE Market Cap (Gross)			0.3	-9.7	-9.7	--	--	--	--
Parametric GE Region (Net)	117,111,135	0.2	-5.9	32.8	32.8	--	--	--	--
Parametric GE Region (Gross)			-5.9	32.9	32.9	--	--	--	--
SSGA MSCI ACWI IMI (Net)	12,667,338,228	18.7	-9.7	-6.8	-6.8	-20.5	--	--	--
SSGA MSCI ACWI IMI (Gross)			-9.7	-6.8	-6.8	-20.5	--	--	--
<i>MSCI ACWI IMI Net (DAILY)</i>			<u>-9.7</u>	<u>-6.6</u>	<u>-6.6</u>	<u>-21.2</u>	--	--	--
Excess Return (vs. Net)			0.0	-0.2	-0.2	0.7			
Symphony Financial Partners (Net)	206,865,812	0.3	-3.7	1.5	1.5	-19.7	3.8	8.4	--
Symphony Financial Partners (Gross)			-3.7	1.6	1.6	-16.4	7.3	11.3	--
<i>MSCI Japan Small Cap</i>			<u>-7.4</u>	<u>-4.5</u>	<u>-4.5</u>	<u>-27.6</u>	<u>-4.0</u>	<u>-2.3</u>	--
Excess Return (vs. Net)			3.7	6.0	6.0	7.9	7.8	10.7	
Systematic Financial Management (Net)	166,692,982	0.2	-7.9	-4.0	-4.0	-13.2	5.9	--	--
Systematic Financial Management (Gross)			-7.9	-3.8	-3.8	-12.7	6.5	--	--
<i>Russell 2000</i>			<u>-9.6</u>	<u>-2.2</u>	<u>-2.2</u>	<u>-23.5</u>	<u>4.3</u>	--	--
Excess Return (vs. Net)			1.7	-1.8	-1.8	10.3	1.6		

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Private Equity - Growth (Net)</b>	<b>12,522,246,548</b>	<b>18.5</b>	<b>-0.4</b>	<b>-3.2</b>	<b>-3.2</b>	<b>11.4</b>	<b>24.0</b>	--	--
<b>Private Equity - Growth (Gross)</b>			<b>-0.4</b>	<b>-3.0</b>	<b>-3.0</b>	<b>12.7</b>	<b>25.3</b>	--	--
<i>Private Equity - Growth Custom BM</i>			<u>-8.5</u>	<u>-15.4</u>	<u>-15.4</u>	<u>-14.8</u>	<u>8.1</u>	--	--
Excess Return (vs. Net)			8.1	12.2	12.2	26.2	15.9		
<b>Non-Core Private Real Estate (Net)</b>	<b>1,077,017,706</b>	<b>1.6</b>	<b>0.3</b>	<b>4.7</b>	<b>4.7</b>	<b>20.4</b>	<b>15.0</b>	<b>12.6</b>	<b>12.2</b>
<b>Non-Core Private Real Estate (Gross)</b>			<b>0.3</b>	<b>4.8</b>	<b>4.8</b>	<b>20.9</b>	<b>16.3</b>	<b>14.1</b>	<b>14.5</b>
<i>Non-Core Private RE Policy BM</i>			<u>1.7</u>	<u>5.1</u>	<u>5.1</u>	<u>31.1</u>	<u>14.7</u>	<u>12.7</u>	<u>13.4</u>
Excess Return (vs. Net)			-1.4	-0.4	-0.4	-10.7	0.3	-0.1	-1.2
<b>Credit (Net)<sup>1</sup></b>	<b>7,882,915,655</b>	<b>11.7</b>	<b>-1.9</b>	<b>-0.6</b>	<b>-0.6</b>	<b>-5.9</b>	<b>2.7</b>	--	--
<b>Credit (Gross)</b>			<b>-1.9</b>	<b>-0.6</b>	<b>-0.6</b>	<b>-5.6</b>	<b>3.1</b>	--	--
<i>Credit Custom Blended Benchmark</i>			<u>-1.5</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-9.2</u>	<u>0.3</u>	--	--
Excess Return (vs. Net)			-0.4	0.3	0.3	3.3	2.4		
<b>Liquid Credit (Net)</b>	<b>4,532,766,795</b>	<b>6.7</b>	<b>-3.7</b>	<b>-1.1</b>	<b>-1.1</b>	<b>-11.6</b>	--	--	--
<b>Liquid Credit (Gross)</b>			<b>-3.7</b>	<b>-1.0</b>	<b>-1.0</b>	<b>-11.3</b>	--	--	--
<i>Liquid Credit Custom BM</i>			<u>-3.5</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-11.3</u>	--	--	--
Excess Return (vs. Net)			-0.2	-0.5	-0.5	-0.3			

<sup>1</sup> 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 (%)
<b>High Yield (Net)</b>	<b>1,869,922,237</b>	<b>2.8</b>	<b>-4.1</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-13.7</b>	<b>-0.6</b>	--	--
<b>High Yield (Gross)</b>			<b>-4.0</b>	<b>-1.4</b>	<b>-1.4</b>	<b>-13.5</b>	<b>-0.3</b>	--	--
<i>BBgBarc US High Yield TR</i>			<u>-4.0</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	<u>-0.5</u>	--	--
Excess Return (vs. Net)			-0.1	-0.9	-0.9	0.4	-0.1		
Beach Point (Net)	269,014,461	0.4	-4.3	-1.3	-1.3	-14.8	-1.3	1.4	--
Beach Point (Gross)			-4.2	-1.2	-1.2	-14.4	-0.8	1.9	--
<i>Beach Point Custom BM</i>			<u>-4.0</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	<u>-0.7</u>	<u>1.4</u>	--
Excess Return (vs. Net)			-0.3	-0.7	-0.7	-0.7	-0.6	0.0	
BlackRock HY ETF (Net)	553,128,991	0.8	-3.7	-1.3	-1.3	-14.2	--	--	--
BlackRock HY ETF (Gross)			-3.7	-1.3	-1.3	-14.2	--	--	--
<i>BBgBarc US High Yield TR</i>			<u>-4.0</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	--	--	--
Excess Return (vs. Net)			0.3	-0.7	-0.7	-0.1			
Brigade Capital Management (Net)	615,943,444	0.9	-4.2	-2.5	-2.5	-12.5	1.8	2.0	4.0
Brigade Capital Management (Gross)			-4.2	-2.4	-2.4	-12.1	2.3	2.6	4.7
<i>Brigade Custom Index</i>			<u>-4.0</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	<u>-0.5</u>	<u>1.6</u>	<u>3.4</u>
Excess Return (vs. Net)			-0.2	-1.9	-1.9	1.6	2.3	0.4	0.6
Pinebridge Investments (Net)	431,588,382	0.6	-4.2	-0.1	-0.1	-14.2	--	--	--
Pinebridge Investments (Gross)			-4.2	0.0	0.0	-13.9	--	--	--
<i>BBgBarc US High Yield TR</i>			<u>-4.0</u>	<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	--	--	--
Excess Return (vs. Net)			-0.2	0.5	0.5	-0.1			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Bank Loans (Net)</b>	<b>2,011,472,537</b>	<b>3.0</b>	<b>-2.5</b>	<b>0.7</b>	<b>0.7</b>	<b>-3.5</b>	<b>4.2</b>	<b>--</b>	<b>--</b>
<b>Bank Loans (Gross)</b>			<b>-2.5</b>	<b>0.8</b>	<b>0.8</b>	<b>-3.2</b>	<b>4.7</b>	<b>--</b>	<b>--</b>
<i>CS Leveraged Loan Index</i>			<u>-2.2</u>	<u>1.2</u>	<u>1.2</u>	<u>-2.6</u>	<u>2.1</u>	<b>--</b>	<b>--</b>
Excess Return (vs. Net)			-0.3	-0.5	-0.5	-0.9	2.1		
Bain Capital (Net)	407,460,061	0.6	-2.3	0.2	0.2	-2.5	3.1	3.3	--
Bain Capital (Gross)			-2.3	0.4	0.4	-1.9	3.7	3.9	--
<i>Bank Loans Custom Index</i>			<u>-2.2</u>	<u>1.2</u>	<u>1.2</u>	<u>-2.6</u>	<u>2.4</u>	<u>3.2</u>	<b>--</b>
Excess Return (vs. Net)			-0.1	-1.0	-1.0	0.1	0.7	0.1	
Credit Suisse Bank Loans (Net)	1,115,432,427	1.6	-2.7	1.2	1.2	-3.0	--	--	--
Credit Suisse Bank Loans (Gross)			-2.7	1.2	1.2	-2.8	--	--	--
<i>CS Leveraged Loan Index</i>			<u>-2.2</u>	<u>1.2</u>	<u>1.2</u>	<u>-2.6</u>	<b>--</b>	<b>--</b>	<b>--</b>
Excess Return (vs. Net)			-0.5	0.0	0.0	-0.4			
Crescent Capital Group (Net)	488,580,049	0.7	-2.2	0.0	0.0	-5.4	3.1	3.3	--
Crescent Capital Group (Gross)			-2.1	0.1	0.1	-5.0	3.6	3.8	--
<i>Bank Loans Custom Index</i>			<u>-2.2</u>	<u>1.2</u>	<u>1.2</u>	<u>-2.6</u>	<u>2.4</u>	<u>3.2</u>	<b>--</b>
Excess Return (vs. Net)			0.0	-1.2	-1.2	-2.8	0.7	0.1	



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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>EM Debt (Net)</b>	<b>651,372,021</b>	<b>1.0</b>	<b>-6.4</b>	<b>-5.0</b>	<b>-5.0</b>	<b>-25.7</b>	<b>-8.3</b>	<b>-4.3</b>	<b>--</b>
<b>EM Debt (Gross)</b>			<b>-6.3</b>	<b>-4.9</b>	<b>-4.9</b>	<b>-25.4</b>	<b>-7.8</b>	<b>-3.8</b>	<b>--</b>
<i>EMD Custom</i>			<u>-5.4</u>	<u>-4.1</u>	<u>-4.1</u>	<u>-21.5</u>	<u>-5.9</u>	<u>-2.2</u>	<b>--</b>
Excess Return (vs. Net)			-1.0	-0.9	-0.9	-4.2	-2.4	-2.1	
Aberdeen Asset Management (Net)	340,119,479	0.5	-6.1	-4.4	-4.4	-24.6	-7.3	-3.5	<b>--</b>
Aberdeen Asset Management (Gross)			-6.0	-4.3	-4.3	-24.3	-7.0	-3.1	<b>--</b>
<i>EMD Custom</i>			<u>-5.4</u>	<u>-4.1</u>	<u>-4.1</u>	<u>-21.5</u>	<u>-5.9</u>	<u>-2.2</u>	<b>--</b>
Excess Return (vs. Net)			-0.7	-0.3	-0.3	-3.1	-1.4	-1.3	
Ashmore Investment Management (Net)	311,252,542	0.5	-6.8	-5.7	-5.7	-27.0	-9.3	-5.2	<b>--</b>
Ashmore Investment Management (Gross)			-6.7	-5.6	-5.6	-26.7	-8.8	-4.6	<b>--</b>
<i>EMD Custom</i>			<u>-5.4</u>	<u>-4.1</u>	<u>-4.1</u>	<u>-21.5</u>	<u>-5.9</u>	<u>-2.2</u>	<b>--</b>
Excess Return (vs. Net)			-1.4	-1.6	-1.6	-5.5	-3.4	-3.0	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Illiquid Credit (Net)</b>	<b>3,350,129,041</b>	<b>5.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>3.7</b>	<b>10.8</b>	--	--
<b>Illiquid Credit (Gross)</b>			<b>0.6</b>	<b>-0.2</b>	<b>-0.2</b>	<b>4.0</b>	<b>11.5</b>	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	<u>1.4</u>	--	--
Excess Return (vs. Net)			0.9	1.3	1.3	10.5	9.4		
Beach Point - Fund III (Net)	161,548,935	0.2	-2.2	-3.0	-3.0	12.1	13.6	11.1	--
Beach Point - Fund III (Gross)			-2.2	-4.3	-4.3	16.8	18.5	15.8	--
<i>Opportunistic Custom Index 1 Month Lag</i>			<u>-0.4</u>	<u>-1.1</u>	<u>-1.1</u>	<u>-5.3</u>	<u>2.1</u>	<u>3.1</u>	--
Excess Return (vs. Net)			-1.8	-1.9	-1.9	17.4	11.5	8.0	
Grosvenor OPCRD 2 HFOF (Net)	28,855,904	0.0	-0.4	-0.7	-0.7	7.0	4.8	3.9	--
Grosvenor OPCRD 2 HFOF (Gross)			-0.4	-0.7	-0.7	7.0	4.8	3.9	--
<i>Grosvenor Custom Benchmark</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	<u>1.4</u>	<u>4.7</u>	--
Excess Return (vs. Net)			-0.1	0.6	0.6	13.8	3.4	-0.8	
Lake Vineyard (Net)	268,062,416	0.4	0.2	-2.2	-2.2	--	--	--	--
Lake Vineyard (Gross)			0.2	-2.2	-2.2	--	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	--	--	--	--
Excess Return (vs. Net)			0.5	-0.9	-0.9				
Magnetar Credit Fund (Net)	826,228,492	1.2	-0.2	0.2	0.2	5.2	--	--	--
Magnetar Credit Fund (Gross)			-0.2	0.2	0.2	5.2	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	--	--	--
Excess Return (vs. Net)			0.1	1.5	1.5	12.0			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Napier Park (Net)	806,472,014	1.2	2.3	0.2	0.2	-3.1	--	--	--
Napier Park (Gross)			2.3	0.2	0.2	-3.1	--	--	--
<i>Illiquid Credit Custom BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	--	--	--
Excess Return (vs. Net)			2.6	1.5	1.5	3.7			
PIMCO Tac Opps (Net)	275,325,411	0.4	0.2	-2.4	-2.4	-1.0	6.0	--	--
PIMCO Tac Opps (Gross)			0.2	-2.4	-2.4	-1.0	6.0	--	--
<i>PIMCO Tac Opps Custom BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	<u>-0.3</u>	--	--
Excess Return (vs. Net)			0.5	-1.1	-1.1	5.8	6.3		
Private Equity - Credit (Net)	216,352,353	0.3	0.0	-1.8	-1.8	12.3	15.4	--	--
Private Equity - Credit (Gross)			0.0	-1.8	-1.8	12.3	15.4	--	--
<i>PE-Credit Custom Benchmark</i>			<u>-1.4</u>	<u>-4.1</u>	<u>-4.1</u>	<u>-8.0</u>	<u>1.5</u>	--	--
Excess Return (vs. Net)			1.4	2.3	2.3	20.3	13.9		
Real Estate - Credit (Net)	111,600,539	0.2	0.0	0.9	0.9	13.1	9.7	9.4	8.6
Real Estate - Credit (Gross)			0.1	1.0	1.0	13.8	10.6	10.4	9.6
<i>RE Credit BM</i>			<u>-0.3</u>	<u>-1.3</u>	<u>-1.3</u>	<u>-6.8</u>	<u>0.5</u>	<u>2.1</u>	<u>3.6</u>
Excess Return (vs. Net)			0.3	2.2	2.2	19.9	9.2	7.3	5.0
Tennenbaum Capital (Net)	639,974,640	0.9	0.9	1.6	1.6	6.1	7.1	7.3	--
Tennenbaum Capital (Gross)			1.0	1.9	1.9	6.8	7.8	8.1	--
<i>CSFB Leveraged Loan Index 1 Month Lagged</i>			<u>1.5</u>	<u>1.3</u>	<u>1.3</u>	<u>0.2</u>	<u>3.0</u>	<u>3.6</u>	--
Excess Return (vs. Net)			-0.6	0.3	0.3	5.9	4.1	3.7	

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Real Assets and Inflation Hedges (Net)<sup>1</sup></b>	<b>12,074,851,582</b>	<b>17.9</b>	<b>-5.2</b>	<b>-2.1</b>	<b>-2.1</b>	<b>9.2</b>	<b>7.6</b>	<b>--</b>	<b>--</b>
<b>Real Assets and Inflation Hedges (Gross)</b>			<b>-5.2</b>	<b>-2.0</b>	<b>-2.0</b>	<b>9.5</b>	<b>7.9</b>	<b>--</b>	<b>--</b>
<i>Real Assets &amp; Inflation Hedges Custom BM</i>			<u>-5.7</u>	<u>-3.1</u>	<u>-3.1</u>	<u>6.4</u>	<u>7.4</u>	<b>--</b>	<b>--</b>
Excess Return (vs. Net)			0.5	1.0	1.0	2.8	0.2		
<b>Core Private Real Estate (Net)</b>	<b>4,471,017,753</b>	<b>6.6</b>	<b>-0.1</b>	<b>5.0</b>	<b>5.0</b>	<b>29.1</b>	<b>10.8</b>	<b>9.2</b>	<b>9.1</b>
<b>Core Private Real Estate (Gross)</b>			<b>-0.1</b>	<b>5.2</b>	<b>5.2</b>	<b>29.7</b>	<b>11.4</b>	<b>9.8</b>	<b>9.7</b>
<i>Core Private Real Estate Custom BM</i>			<u>1.5</u>	<u>4.5</u>	<u>4.5</u>	<u>28.3</u>	<u>12.0</u>	<u>10.0</u>	<u>10.6</u>
Excess Return (vs. Net)			-1.6	0.5	0.5	0.8	-1.2	-0.8	-1.5
<b>Natural Resources and Commodities (Net)</b>	<b>2,476,470,691</b>	<b>3.7</b>	<b>-6.1</b>	<b>-3.4</b>	<b>-3.4</b>	<b>11.3</b>	<b>12.3</b>	<b>6.5</b>	<b>-1.6</b>
<b>Natural Resources and Commodities (Gross)</b>			<b>-6.1</b>	<b>-3.4</b>	<b>-3.4</b>	<b>11.7</b>	<b>12.7</b>	<b>6.9</b>	<b>-1.2</b>
<i>Natural Resources &amp; Commodities Custom BM</i>			<u>-8.4</u>	<u>-4.5</u>	<u>-4.5</u>	<u>4.2</u>	<u>11.0</u>	<u>5.4</u>	<u>-2.8</u>
Excess Return (vs. Net)			2.3	1.1	1.1	7.1	1.3	1.1	1.2
<b>Public Natural Resources and Commodities (Net)</b>	<b>1,704,666,894</b>	<b>2.5</b>	<b>-8.2</b>	<b>-3.8</b>	<b>-3.8</b>	<b>9.7</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Public Natural Resources and Commodities (Gross)</b>			<b>-8.2</b>	<b>-3.7</b>	<b>-3.7</b>	<b>10.0</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Natural Resources &amp; Commodities Custom BM</i>			<u>-8.4</u>	<u>-4.5</u>	<u>-4.5</u>	<u>4.2</u>	<b>--</b>	<b>--</b>	<b>--</b>
Excess Return (vs. Net)			0.2	0.7	0.7	5.5			
Credit Suisse Commodity (Net)	433,777,810	0.6	-7.7	-3.4	-3.4	14.4	15.2	7.7	-1.5
Credit Suisse Commodity (Gross)			-7.7	-3.3	-3.3	14.7	15.5	7.9	-1.2
<i>Bloomberg Commodity Index TR USD</i>			<u>-8.1</u>	<u>-4.1</u>	<u>-4.1</u>	<u>11.8</u>	<u>13.5</u>	<u>7.0</u>	<u>-2.1</u>
Excess Return (vs. Net)			0.4	0.7	0.7	2.6	1.7	0.7	0.6

<sup>1</sup> Includes accounts that are lagged by 3-months and latest available adjusted for cash flows.

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
DWS Natural Resources (Net)	663,361,342	1.0	-8.4	-3.3	-3.3	4.2	10.1	--	--
DWS Natural Resources (Gross)			-8.4	-3.3	-3.3	4.3	10.4	--	--
<i>S&amp;P Global Large/MidCap Commodities &amp; Resources</i>			<u>-7.6</u>	<u>-1.3</u>	<u>-1.3</u>	<u>9.7</u>	<u>12.5</u>	--	--
Excess Return (vs. Net)			-0.8	-2.0	-2.0	-5.5	-2.4		
Neuberger Berman/ Gresham (Net)	486,427,325	0.7	-8.6	-4.7	-4.7	13.5	13.7	7.6	-1.2
Neuberger Berman/ Gresham (Gross)			-8.6	-4.6	-4.6	13.9	14.2	8.0	-0.8
<i>Bloomberg Commodity Index TR USD</i>			<u>-8.1</u>	<u>-4.1</u>	<u>-4.1</u>	<u>11.8</u>	<u>13.5</u>	<u>7.0</u>	<u>-2.1</u>
Excess Return (vs. Net)			-0.5	-0.6	-0.6	1.7	0.2	0.6	0.9
PIMCO Commodities (Net)	121,100,417	0.2	-7.8	-3.3	-3.3	13.4	14.6	7.8	-0.7
PIMCO Commodities (Gross)			-7.8	-3.3	-3.3	13.8	15.0	8.2	-0.3
<i>Bloomberg Commodity Index TR USD</i>			<u>-8.1</u>	<u>-4.1</u>	<u>-4.1</u>	<u>11.8</u>	<u>13.5</u>	<u>7.0</u>	<u>-2.1</u>
Excess Return (vs. Net)			0.3	0.8	0.8	1.6	1.1	0.8	1.4
<b>Private Natural Resources and Commodities (Net)</b>	<b>771,803,797</b>	<b>1.1</b>	<b>-0.3</b>	<b>-3.1</b>	<b>-3.1</b>	<b>15.5</b>	<b>-9.6</b>	<b>--</b>	<b>--</b>
<b>Private Natural Resources and Commodities (Gross)</b>			<b>-0.3</b>	<b>-3.0</b>	<b>-3.0</b>	<b>16.1</b>	<b>-7.9</b>	<b>--</b>	<b>--</b>
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	<u>10.2</u>	<u>12.4</u>	--	--
Excess Return (vs. Net)			15.1	12.0	12.0	5.3	-22.0		
Cibus Enterprise II (Net)	4,095,878	0.0	0.0	-6.9	-6.9	--	--	--	--
Cibus Enterprise II (Gross)			0.0	-6.9	-6.9	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	--	--	--	--
Excess Return (vs. Net)			15.4	8.2	8.2				

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

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Cibus Fund II (Net)	16,677,832	0.0	0.0	-6.3	-6.3	--	--	--	--
Cibus Fund II (Gross)			0.0	-6.3	-6.3	--	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	--	--	--	--
Excess Return (vs. Net)			15.4	8.8	8.8				
HiTecVision New Energy (Net)	58,778,884	0.1							
HiTecVision New Energy (Gross)									
Orion Mine Finance Fund III (Net)	115,532,245	0.2	0.0	-3.5	-3.5	5.6	--	--	--
Orion Mine Finance Fund III (Gross)			0.0	-3.5	-3.5	5.6	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	<u>10.2</u>	--	--	--
Excess Return (vs. Net)			15.4	11.6	11.6	-4.6			
Orion Mining Royalty Fund I (Net)	18,200,622	0.0	0.0	-5.2	-5.2	6.7	--	--	--
Orion Mining Royalty Fund I (Gross)			0.0	-5.2	-5.2	6.7	--	--	--
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	<u>10.2</u>	--	--	--
Excess Return (vs. Net)			15.4	9.9	9.9	-3.5			
PE - Real Assets & Inflation Hedges (Net)	82,122,034	0.1	0.0	-2.0	-2.0	18.8	-8.7	--	--
PE - Real Assets & Inflation Hedges (Gross)			0.0	-1.6	-1.6	24.2	-7.3	--	--
<i>PE - Real Assets Custom BM</i>			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	<u>10.2</u>	<u>12.4</u>	--	--
Excess Return (vs. Net)			15.4	13.1	13.1	8.6	-21.1		

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

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
TIAA-CREF Global Agriculture (Net)	205,330,793	0.3	0.0	-2.8	-2.8	--	--	--	--
TIAA-CREF Global Agriculture (Gross)			0.0	-2.8	-2.8	--	--	--	--
PE - Real Assets Custom BM			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	--	--	--	--
Excess Return (vs. Net)			15.4	12.3	12.3				
TIAA-CREF Global Agriculture II (Net)	271,065,510	0.4	0.0	-2.4	-2.4	--	--	--	--
TIAA-CREF Global Agriculture II (Gross)			0.0	-2.4	-2.4	--	--	--	--
PE - Real Assets Custom BM			<u>-15.4</u>	<u>-15.1</u>	<u>-15.1</u>	--	--	--	--
Excess Return (vs. Net)			15.4	12.7	12.7				
<b>Infrastructure (Net)</b>	<b>3,304,837,104</b>	<b>4.9</b>	<b>-9.7</b>	<b>-7.6</b>	<b>-7.6</b>	<b>-3.6</b>	<b>4.0</b>	--	--
<b>Infrastructure (Gross)</b>			<b>-9.7</b>	<b>-7.6</b>	<b>-7.6</b>	<b>-3.5</b>	<b>4.2</b>	--	--
DJ Brookfield Global Infrastructure Comp TR			<u>-12.3</u>	<u>-10.2</u>	<u>-10.2</u>	<u>-7.2</u>	<u>-0.7</u>	--	--
Excess Return (vs. Net)			2.6	2.6	2.6	3.6	4.7		
<b>Public Infrastructure (Net)</b>	<b>2,605,971,586</b>	<b>3.9</b>	<b>-11.9</b>	<b>-9.4</b>	<b>-9.4</b>	<b>-6.0</b>	<b>3.3</b>	--	--
<b>Public Infrastructure (Gross)</b>			<b>-11.9</b>	<b>-9.3</b>	<b>-9.3</b>	<b>-5.9</b>	<b>3.5</b>	--	--
DJ Brookfield Global Infrastructure Comp TR			<u>-12.3</u>	<u>-10.2</u>	<u>-10.2</u>	<u>-7.2</u>	<u>-0.7</u>	--	--
Excess Return (vs. Net)			0.4	0.8	0.8	1.2	4.0		
DWS Infrastructure (Net)	2,605,971,586	3.9	-11.9	-9.4	-9.4	-6.0	3.3	--	--
DWS Infrastructure (Gross)			-11.9	-9.3	-9.3	-5.9	3.5	--	--
DJ Brookfield Global Infrastructure Comp TR			<u>-12.3</u>	<u>-10.2</u>	<u>-10.2</u>	<u>-7.2</u>	<u>-0.7</u>	--	--
Excess Return (vs. Net)			0.4	0.8	0.8	1.2	4.0		

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 (%)
<b>Private Infrastructure (Net)</b>	<b>698,865,518</b>	<b>1.0</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-0.9</b>	--	--	--
<b>Private Infrastructure (Gross)</b>			<b>-0.6</b>	<b>-0.7</b>	<b>-0.7</b>	<b>-1.1</b>	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	<u>1.8</u>	--	--	--
Excess Return (vs. Net)			7.1	6.5	6.5	-2.7			
Antin Mid Cap (Net)	25,482,293	0.0	-2.6	-6.6	-6.6	--	--	--	--
Antin Mid Cap (Gross)			-2.6	-6.6	-6.6	--	--	--	--
<i>DJ Brookfield Global Infrastructure Comp TR</i>			<u>-12.3</u>	<u>-10.2</u>	<u>-10.2</u>	--	--	--	--
Excess Return (vs. Net)			9.7	3.6	3.6				
Axiom Infrastructure (Net)	194,259,930	0.3	0.0	1.4	1.4	--	--	--	--
Axiom Infrastructure (Gross)			0.2	1.6	1.6	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	--	--	--	--
Excess Return (vs. Net)			7.8	8.6	8.6				
DIF CIF III (Net)	4,571,556	0.0	-2.6	2.9	2.9	--	--	--	--
DIF CIF III (Gross)			-2.6	2.9	2.9	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	--	--	--	--
Excess Return (vs. Net)			5.2	10.1	10.1				
DIF Infrastructure VI (Net)	87,777,717	0.1	-2.6	-2.4	-2.4	5.1	--	--	--
DIF Infrastructure VI (Gross)			-2.6	-2.5	-2.5	3.8	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	<u>1.8</u>	--	--	--
Excess Return (vs. Net)			5.2	4.8	4.8	3.3			

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



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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Grain Communications Opportunity III (Net)	32,395,925	0.0	0.0	-3.7	-3.7	-14.7	--	--	--
Grain Communications Opportunity III (Gross)			0.0	-3.7	-3.7	-14.7	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	<u>1.8</u>	--	--	--
Excess Return (vs. Net)			7.8	3.5	3.5	-16.5			
Grain Spectrum Holdings III (Net)	47,702,433	0.1	0.0	-0.2	-0.2	-0.6	--	--	--
Grain Spectrum Holdings III (Gross)			0.0	-0.2	-0.2	-0.6	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	<u>1.8</u>	--	--	--
Excess Return (vs. Net)			7.8	7.0	7.0	-2.4			
KKR DCIF (Net)	200,284,241	0.3	0.0	0.7	0.7	--	--	--	--
KKR DCIF (Gross)			0.0	0.7	0.7	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	--	--	--	--
Excess Return (vs. Net)			7.8	7.9	7.9				
Pan European Infrastructure Fund III (Net)	57,923,570	0.1	-2.6	-3.5	-3.5	-2.5	--	--	--
Pan European Infrastructure Fund III (Gross)			-2.6	-3.5	-3.5	-2.5	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	<u>1.8</u>	--	--	--
Excess Return (vs. Net)			5.2	3.7	3.7	-4.3			
Partners Grp Direct Infra 2020 (Net)	48,467,852	0.1	0.0	-2.4	-2.4	--	--	--	--
Partners Grp Direct Infra 2020 (Gross)			-0.1	-2.5	-2.5	--	--	--	--
<i>Private Infrastructure Policy BM</i>			<u>-7.8</u>	<u>-7.2</u>	<u>-7.2</u>	--	--	--	--
Excess Return (vs. Net)			7.8	4.8	4.8				

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>TIPS (Net)<sup>1</sup></b>	<b>1,822,526,034</b>	<b>2.7</b>	<b>-7.0</b>	<b>-5.6</b>	<b>-5.6</b>	<b>-11.6</b>	<b>0.7</b>	--	--
<b>TIPS (Gross)</b>			<b>-7.0</b>	<b>-5.6</b>	<b>-5.6</b>	<b>-11.6</b>	<b>0.7</b>	--	--
<i>BBgBarc US TIPS TR</i>			<u>-6.6</u>	<u>-5.1</u>	<u>-5.1</u>	<u>-11.6</u>	<u>0.8</u>	--	--
Excess Return (vs. Net)			-0.4	-0.5	-0.5	0.0	-0.1		
Blackrock TIPS (Net)	1,822,526,034	2.7	-7.0	-5.6	-5.6	-11.6	0.7	--	--
Blackrock TIPS (Gross)			-7.0	-5.6	-5.6	-11.6	0.7	--	--
<i>BBgBarc US TIPS TR</i>			<u>-6.6</u>	<u>-5.1</u>	<u>-5.1</u>	<u>-11.6</u>	<u>0.8</u>	--	--
Excess Return (vs. Net)			-0.4	-0.5	-0.5	0.0	-0.1		
<b>Risk Reduction and Mitigation (Net)</b>	<b>13,535,747,854</b>	<b>20.0</b>	<b>-3.1</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-10.7</b>	<b>-1.2</b>	--	--
<b>Risk Reduction and Mitigation (Gross)</b>			<b>-3.1</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-10.7</b>	<b>-1.1</b>	--	--
<i>Risk Reduction and Mitigation Custom Blended Benchmark</i>			<u>-3.5</u>	<u>-4.0</u>	<u>-4.0</u>	<u>-11.5</u>	<u>-2.2</u>	--	--
Excess Return (vs. Net)			0.4	0.3	0.3	0.8	1.0		
<b>Investment Grade Bonds (Net)</b>	<b>5,292,126,637</b>	<b>7.8</b>	<b>-4.3</b>	<b>-4.7</b>	<b>-4.7</b>	<b>-14.9</b>	<b>-3.1</b>	<b>-0.1</b>	<b>1.4</b>
<b>Investment Grade Bonds (Gross)</b>			<b>-4.3</b>	<b>-4.7</b>	<b>-4.7</b>	<b>-14.9</b>	<b>-3.0</b>	<b>0.0</b>	<b>1.5</b>
<i>BBgBarc US Aggregate TR</i>			<u>-4.3</u>	<u>-4.8</u>	<u>-4.8</u>	<u>-14.6</u>	<u>-3.3</u>	<u>-0.3</u>	<u>0.9</u>
Excess Return (vs. Net)			0.0	0.1	0.1	-0.3	0.2	0.2	0.5
Allspring/Wells (Net)	1,605,104,966	2.4	-4.4	-4.8	-4.8	-14.7	-2.7	0.1	1.3
Allspring/Wells (Gross)			-4.4	-4.8	-4.8	-14.6	-2.6	0.2	1.4
<i>BBgBarc US Aggregate TR</i>			<u>-4.3</u>	<u>-4.8</u>	<u>-4.8</u>	<u>-14.6</u>	<u>-3.3</u>	<u>-0.3</u>	<u>0.9</u>
Excess Return (vs. Net)			-0.1	0.0	0.0	-0.1	0.6	0.4	0.4

<sup>1</sup> 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 (%)
BTC US Debt Index (Net)	2,856,115,734	4.2	-4.3	-4.7	-4.7	-14.5	-3.2	-0.2	1.0
BTC US Debt Index (Gross)			-4.3	-4.7	-4.7	-14.5	-3.2	-0.2	1.0
<i>BBgBarc US Aggregate TR</i>			<u>-4.3</u>	<u>-4.8</u>	<u>-4.8</u>	<u>-14.6</u>	<u>-3.3</u>	<u>-0.3</u>	<u>0.9</u>
Excess Return (vs. Net)			0.0	0.1	0.1	0.1	0.1	0.1	0.1
Member Home Loan Program (MHLPL) (Net)	11,465,457	0.0	0.4	1.2	1.2	4.9	5.2	7.6	5.2
Member Home Loan Program (MHLPL) (Gross)			0.4	1.3	1.3	5.2	5.5	7.9	5.4
Pugh Capital Management (Net)	819,440,526	1.2	-4.5	-4.8	-4.8	-14.9	-3.1	-0.2	1.0
Pugh Capital Management (Gross)			-4.5	-4.8	-4.8	-14.8	-3.0	0.0	1.2
<i>BBgBarc US Aggregate TR</i>			<u>-4.3</u>	<u>-4.8</u>	<u>-4.8</u>	<u>-14.6</u>	<u>-3.3</u>	<u>-0.3</u>	<u>0.9</u>
Excess Return (vs. Net)			-0.2	0.0	0.0	-0.3	0.2	0.1	0.1
<b>Long-Term Government Bonds (Net)</b>	<b>2,874,416,411</b>	<b>4.3</b>	<b>-8.2</b>	<b>-10.2</b>	<b>-10.2</b>	--	--	--	--
<b>Long-Term Government Bonds (Gross)</b>			<b>-8.2</b>	<b>-10.2</b>	<b>-10.2</b>	--	--	--	--
<i>Bloomberg U.S. Treasury: Long</i>			<u>-7.9</u>	<u>-9.6</u>	<u>-9.6</u>	--	--	--	--
Excess Return (vs. Net)			-0.3	-0.6	-0.6				
Blackrock Long Treasury Bonds (Net)	2,874,416,411	4.3	-8.2	-10.2	-10.2	--	--	--	--
Blackrock Long Treasury Bonds (Gross)			-8.2	-10.2	-10.2	--	--	--	--
<i>Bloomberg U.S. Treasury: Long</i>			<u>-7.9</u>	<u>-9.6</u>	<u>-9.6</u>	--	--	--	--
Excess Return (vs. Net)			-0.3	-0.6	-0.6				

Total Fund | September 30, 2022

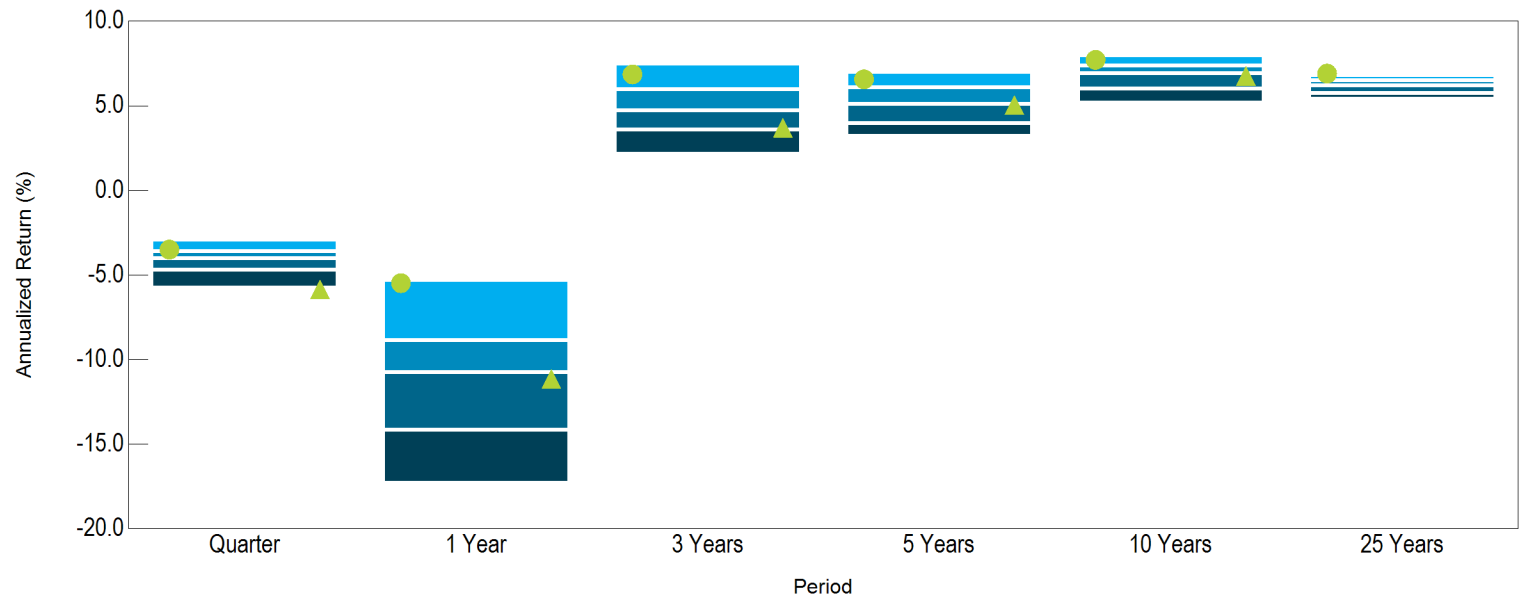
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Diversified Hedge Fund Portfolio (Net)</b>	<b>4,281,188,211</b>	<b>6.3</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>5.3</b>	<b>7.1</b>	--	--
<b>Diversified Hedge Fund Portfolio (Gross)</b>			<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>5.3</b>	<b>7.1</b>	--	--
<i>Diversified Hedge Funds Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			1.0	0.4	0.4	2.3	4.0		
<b>LACERA HF Direct (Net)</b>	<b>3,931,982,295</b>	<b>5.8</b>	<b>1.5</b>	<b>1.6</b>	<b>1.6</b>	<b>5.9</b>	<b>7.1</b>	--	--
<b>LACERA HF Direct (Gross)</b>			<b>1.5</b>	<b>1.6</b>	<b>1.6</b>	<b>5.9</b>	<b>7.1</b>	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			1.1	0.7	0.7	2.9	4.0		
AM Asia Strategies Fund (Net)	221,488,031	0.3	3.7	0.7	0.7	0.0	--	--	--
AM Asia Strategies Fund (Gross)			3.7	0.7	0.7	0.0	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			3.3	-0.2	-0.2	-3.0			
Brevan Howard Master Fund (Net)	647,612,457	1.0	2.7	3.6	3.6	18.4	--	--	--
Brevan Howard Master Fund (Gross)			2.7	3.6	3.6	18.4	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			2.3	2.7	2.7	15.4			
Capula GRV (Net)	626,241,744	0.9	2.0	3.1	3.1	9.3	6.4	--	--
Capula GRV (Gross)			2.0	3.1	3.1	9.3	6.4	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			1.6	2.2	2.2	6.3	3.3		

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Caxton Global Investments (Net)	292,116,303	0.4	1.5	0.9	0.9	18.0	--	--	--
Caxton Global Investments (Gross)			1.5	0.9	0.9	18.0	--	--	--
Hedge Fund Custom BM			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			1.1	0.0	0.0	15.0			
DK Institutional Partners (Net)	486,660,315	0.7	0.8	0.1	0.1	-1.0	5.4	--	--
DK Institutional Partners (Gross)			0.8	0.1	0.1	-1.0	5.4	--	--
Hedge Fund Custom BM			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			0.4	-0.8	-0.8	-4.0	2.3		
HBK Multistrategy (Net)	555,068,290	0.8	0.6	1.1	1.1	2.3	5.5	--	--
HBK Multistrategy (Gross)			0.6	1.1	1.1	2.3	5.5	--	--
Hedge Fund Custom BM			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	<u>3.1</u>	--	--
Excess Return (vs. Net)			0.2	0.2	0.2	-0.7	2.4		
Hudson Bay Fund (Net)	641,098,425	0.9	0.9	1.4	1.4	3.0	--	--	--
Hudson Bay Fund (Gross)			0.9	1.4	1.4	3.0	--	--	--
Hedge Fund Custom BM			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			0.5	0.5	0.5	0.0			
Polar (Net)	461,696,730	0.7	0.4	0.5	0.5	-0.4	--	--	--
Polar (Gross)			0.4	0.5	0.5	-0.4	--	--	--
Hedge Fund Custom BM			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			0.0	-0.4	-0.4	-3.4			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Hedge Fund Emerging Managers Program (Net)</b>	<b>315,258,671</b>	<b>0.5</b>	<b>0.6</b>	<b>-2.3</b>	<b>-2.3</b>	<b>-2.1</b>	--	--	--
<b>Hedge Fund Emerging Managers Program (Gross)</b>			<b>0.6</b>	<b>-2.2</b>	<b>-2.2</b>	<b>-1.8</b>	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			0.2	-3.2	-3.2	-5.1			
<b>Stable Asset Management (Net)</b>	<b>315,258,671</b>	<b>0.5</b>	<b>0.6</b>	<b>-2.3</b>	<b>-2.3</b>	<b>-2.1</b>	--	--	--
<b>Stable Asset Management (Gross)</b>			<b>0.6</b>	<b>-2.2</b>	<b>-2.2</b>	<b>-1.8</b>	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			0.2	-3.2	-3.2	-5.1			
<b>Stable Fund Investments (Net)</b>	<b>315,258,671</b>	<b>0.5</b>	<b>0.6</b>	<b>-2.2</b>	<b>-2.2</b>	<b>-2.0</b>	--	--	--
<b>Stable Fund Investments (Gross)</b>			<b>0.6</b>	<b>-2.2</b>	<b>-2.2</b>	<b>-2.0</b>	--	--	--
<i>Hedge Fund Custom BM</i>			<u>0.4</u>	<u>0.9</u>	<u>0.9</u>	<u>3.0</u>	--	--	--
Excess Return (vs. Net)			0.2	-3.1	-3.1	-5.0			
<b>Cash (Net)</b>	<b>1,088,030,405</b>	<b>1.6</b>	<b>0.3</b>	<b>0.9</b>	<b>0.9</b>	<b>2.2</b>	<b>1.4</b>	<b>1.7</b>	<b>1.1</b>
<b>Cash (Gross)</b>			<b>0.3</b>	<b>0.9</b>	<b>0.9</b>	<b>2.2</b>	<b>1.5</b>	<b>1.8</b>	<b>1.2</b>
<i>Cash Custom BM</i>			<u>0.2</u>	<u>0.4</u>	<u>0.4</u>	<u>0.6</u>	<u>0.6</u>	<u>1.2</u>	<u>0.7</u>
Excess Return (vs. Net)			0.1	0.5	0.5	1.6	0.8	0.5	0.4
SSGA Cash (Net)			0.3	0.6	0.6	0.8	--	--	--
SSGA Cash (Gross)			0.3	0.6	0.6	0.8	--	--	--
<i>Cash Custom BM</i>			<u>0.2</u>	<u>0.4</u>	<u>0.4</u>	<u>0.6</u>	--	--	--
Excess Return (vs. Net)			0.1	0.2	0.2	0.2			

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Overlay and Hedges (Net)</b>	<b>586,941,393</b>	<b>0.9</b>	<b>-6.2</b>	<b>13.5</b>	<b>13.5</b>	<b>235.7</b>	--	--	--
<b>Overlay and Hedges (Gross)</b>			<b>-6.2</b>	<b>13.6</b>	<b>13.6</b>	<b>237.6</b>	--	--	--
<b>Cash Overlay (Net)</b>	<b>423,954,228</b>	<b>0.6</b>	<b>-26.5</b>	<b>-19.3</b>	<b>-19.3</b>	<b>25.9</b>	--	--	--
<b>Cash Overlay (Gross)</b>			<b>-26.5</b>	<b>-19.2</b>	<b>-19.2</b>	<b>26.5</b>	--	--	--
Cash Overlay (Net)	423,954,228	0.6	-26.5	-19.3	-19.3	25.9	--	--	--
Cash Overlay (Gross)			-26.5	-19.2	-19.2	26.5	--	--	--
<i>Total Overlay Policy BM</i>			<i>-7.9</i>	<i>-5.7</i>	<i>-5.7</i>	<i>-17.0</i>	--	--	--
Excess Return (vs. Net)			-18.6	-13.6	-13.6	42.9			
<b>Currency Hedge (Net)</b>	<b>162,987,165</b>	<b>0.2</b>	<b>1.9</b>	<b>3.3</b>	<b>3.3</b>	<b>8.7</b>	--	--	--
<b>Currency Hedge (Gross)</b>			<b>1.9</b>	<b>3.3</b>	<b>3.3</b>	<b>8.8</b>	--	--	--
Currency Hedge (Net)	162,987,165	0.2	1.9	3.3	3.3	8.7	--	--	--
Currency Hedge (Gross)			1.9	3.3	3.3	8.8	--	--	--

#### InvMetrics Public DB > \$1B Net Return Comparison Ending September 30, 2022



	Quarter		1 Year		3 Years		5 Years		10 Years		25 Years	
<b>Return (Rank)</b>	<b>-2.9 (23)</b>		<b>-5.5 (6)</b>		<b>6.9 (12)</b>		<b>6.6 (11)</b>		<b>7.7 (8)</b>		<b>6.9 (3)</b>	
<b>5th Percentile</b>	-2.9		-5.3		7.5		7.0		8.0		6.8	
<b>25th Percentile</b>	-3.6		-8.8		6.0		6.1		7.4		6.5	
<b>Median</b>	-4.0		-10.7		4.7		5.1		7.0		6.2	
<b>75th Percentile</b>	-4.7		-14.1		3.6		4.0		6.1		5.8	
<b>95th Percentile</b>	-5.7		-17.3		2.2		3.2		5.2		5.5	
<b># of Portfolios</b>	59		59		57		57		54		28	
<b>Total Fund</b>	-3.5	(23)	-5.5	(6)	6.9	(12)	6.6	(11)	7.7	(8)	6.9	(3)
<b>Total Fund Policy Benchmark</b>	-5.9	(98)	-11.1	(52)	3.7	(73)	5.0	(53)	6.8	(56)	--	(--)



### Benchmark History As of September 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.

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**FOR INFORMATION ONLY**

December 1, 2022

TO: Trustees – Board of Investments

FROM: Jude Pérez, Principal Investment Officer 

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: **OPEB QUARTERLY PERFORMANCE BOOK**

Attached is the OPEB Master Trust quarterly performance book as of September 30, 2022. The report includes both performance and risk sections utilizing data from our platform providers, Solovis and MSCI BarraOne, respectively.

Noted and Reviewed:



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Jonathan Grabel  
Chief Investment Officer

Attachments





Los Angeles County Employees Retirement Association

# Investments Division

## OPEB MASTER TRUST

## PERFORMANCE REPORT

For the quarter ended  
September 30, 2022

review



# Table of Contents

**01** OPEB TRUST

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**02** RISK REPORTS

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**03** APPENDIX

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opeb trust



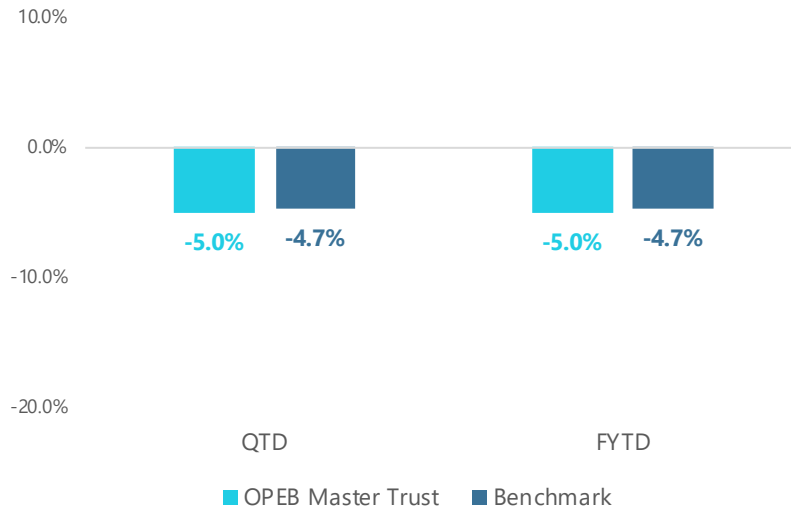
# Quarterly Snapshot

for the quarter ended September 30, 2022



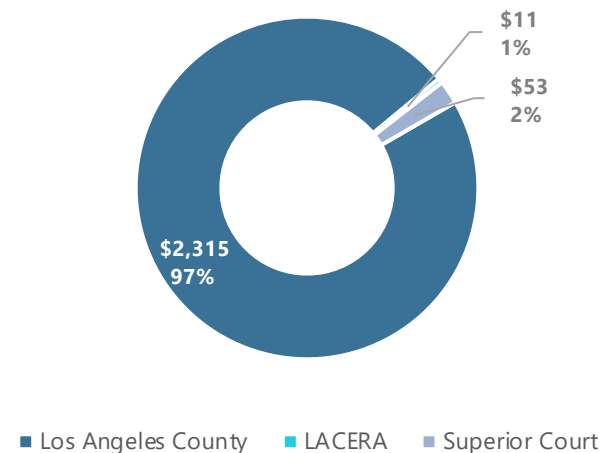
Los Angeles County Employees Retirement Association

## Performance (net)



## Sub-Trust Ownership

(mm)



### Ending Market Value

2,378

↓ -1%  
from prior quarter

### Sharpe Ratio<sup>1</sup>

0.2

↓ -45%  
from prior quarter

### Batting Average<sup>2</sup>

40%

↑ 7%  
from prior quarter

### Standard Deviation<sup>1</sup>

14.6

↑ 9%  
from prior quarter

### Tracking Error<sup>1</sup>

1.1

↑ 274%  
from prior quarter

1. 3-year annualized.

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

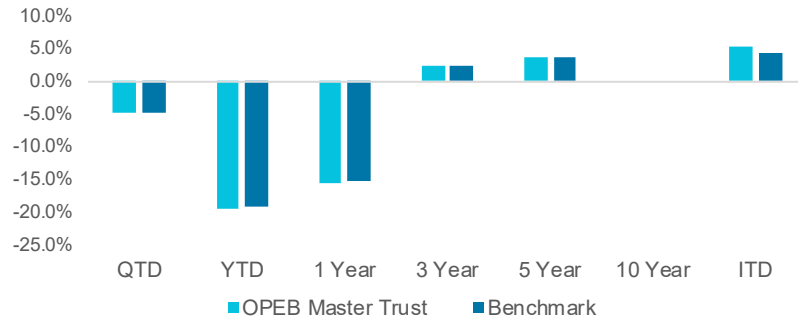
# Summary

for the quarter ended September 30, 2022



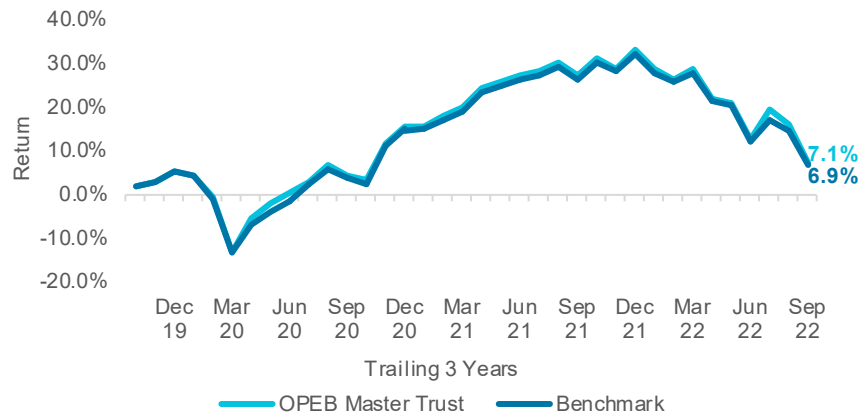
Los Angeles County Employees Retirement Association

## Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
<b>OPEB Master Trust</b>	<b>-5.0%</b>	<b>-19.4%</b>	<b>-15.7%</b>	<b>2.3%</b>	<b>3.8%</b>	<b>--</b>	<b>5.2%</b>
Benchmark	-4.7%	-19.2%	-15.2%	2.2%	3.6%	--	4.3%
Excess	-0.3%	-0.2%	-0.4%	0.1%	0.2%	--	0.8%
Sub-Trusts							
Los Angeles County	-5.0%	-19.4%	-15.7%	2.3%	3.8%	--	4.7%
LACERA	-5.0%	-19.5%	-15.8%	2.3%	3.8%	--	4.7%
Superior Court	-5.2%	-19.4%	-15.6%	2.2%	3.7%	--	5.4%

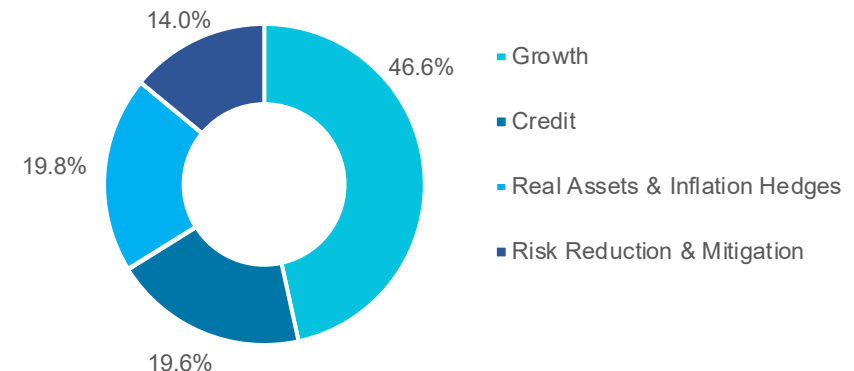
## Cumulative Return



## Functional Category

	QTD	FYTD	1 Year	3 Year	5 Year
<b>OPEB Growth</b>	<b>-6.6%</b>	<b>-6.6%</b>	<b>-21.0%</b>	<b>3.9%</b>	<b>4.4%</b>
OPEB Growth Policy Benchmark	-7.1%	-7.1%	-21.5%	3.5%	4.1%
Excess	0.5%	0.5%	0.6%	0.4%	0.4%
<b>OPEB Credit</b>	<b>-0.3%</b>	<b>-0.3%</b>	<b>-10.1%</b>	<b>-1.0%</b>	<b>--</b>
OPEB Credit Policy Benchmark	-0.4%	-0.4%	-10.2%	-0.6%	--
Excess	0.1%	0.1%	0.1%	-0.4%	--
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>-7.7%</b>	<b>-7.7%</b>	<b>-9.5%</b>	<b>1.9%</b>	<b>--</b>
OPEB RA & IH Policy Benchmark	-2.4%	-2.4%	-4.7%	3.6%	--
Excess	-5.3%	-5.3%	-4.8%	-1.7%	--
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>-3.7%</b>	<b>-3.7%</b>	<b>-11.7%</b>	<b>-2.4%</b>	<b>0.6%</b>
OPEB RR & M Policy Benchmark	-4.9%	-4.9%	-12.8%	-2.9%	0.2%
Excess	1.2%	1.2%	1.1%	0.5%	0.4%

## Exposure



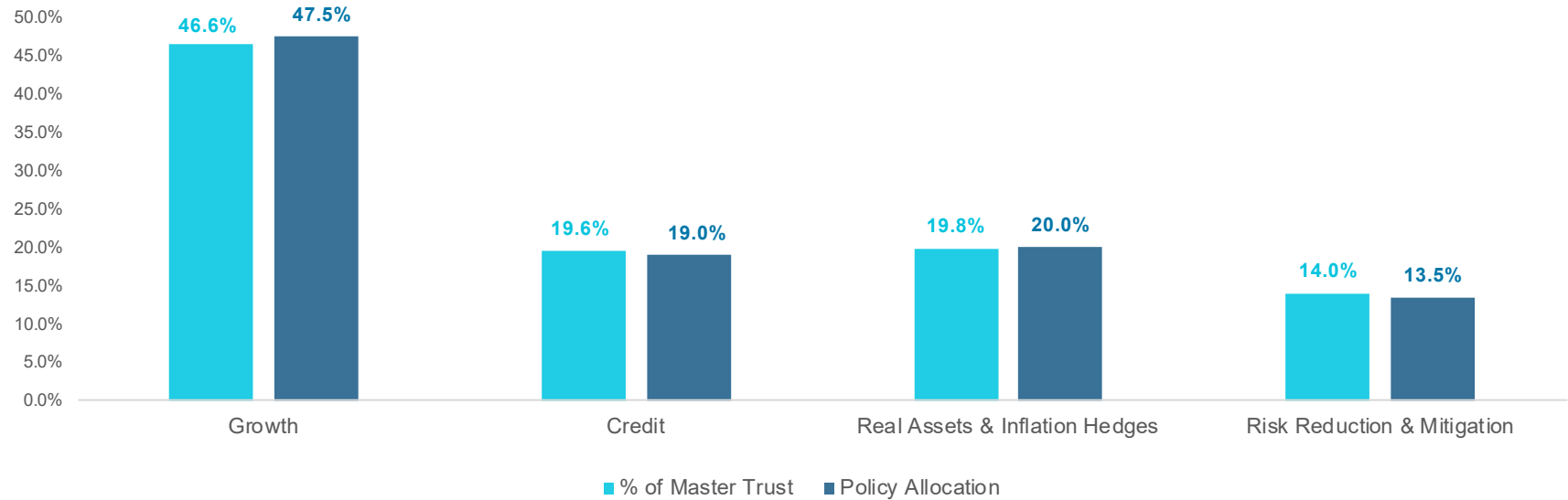
# Asset Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Actual vs. Policy



	Ending Market Value (mm)	% of Master Trust	Policy Allocation	Over / Under (%)	Over / Under (mm)
<b>OPEB Master Trust</b>	<b>2,378</b>	<b>100.0%</b>	<b>100.0%</b>		
Growth	1,107	46.6%	47.5%	-0.9%	-22
Credit	465	19.6%	19.0%	0.6%	13
Real Assets & Inflation Hedges	472	19.8%	20.0%	-0.2%	-4
Risk Reduction & Mitigation	333	14.0%	13.5%	0.5%	12
Operational Cash	0	0.0%			

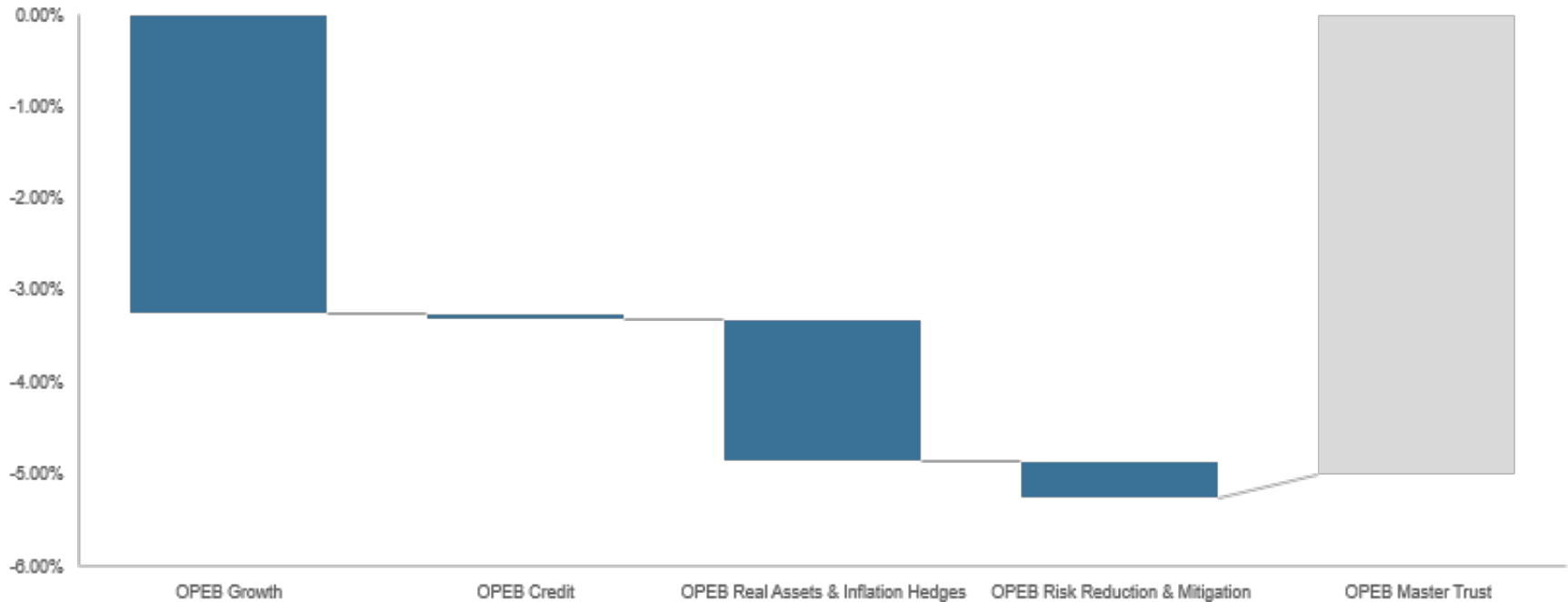
# Contribution to Return

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Contribution to Return



Functional Category		Contributors		Detractors	
OPEB Growth	-3.26%	OPEB BlackRock Bank Loans	0.18%	OPEB Global Equities	-3.26%
OPEB Credit	-0.06%	OPEB SSGA Cash	0.01%	OPEB BTC REITs	-1.05%
OPEB Real Assets & Inflation Hedges	-1.54%			OPEB BTC IG Bonds	-0.36%
OPEB Risk Reduction & Mitigation	-0.40%			OPEB BTC TIPS	-0.30%
OPEB Master Trust	-5.02%			OPEB BTC EM Debt	-0.19%

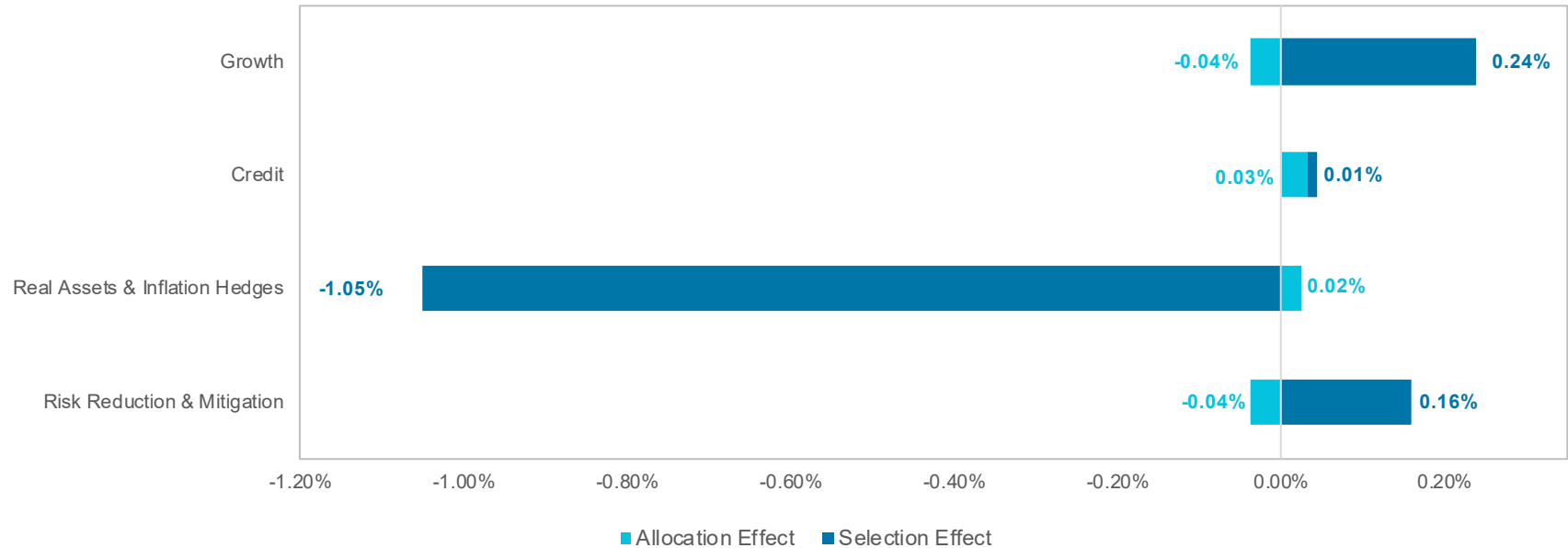
# Return Attribution

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## QTD Performance Attribution<sup>1</sup>



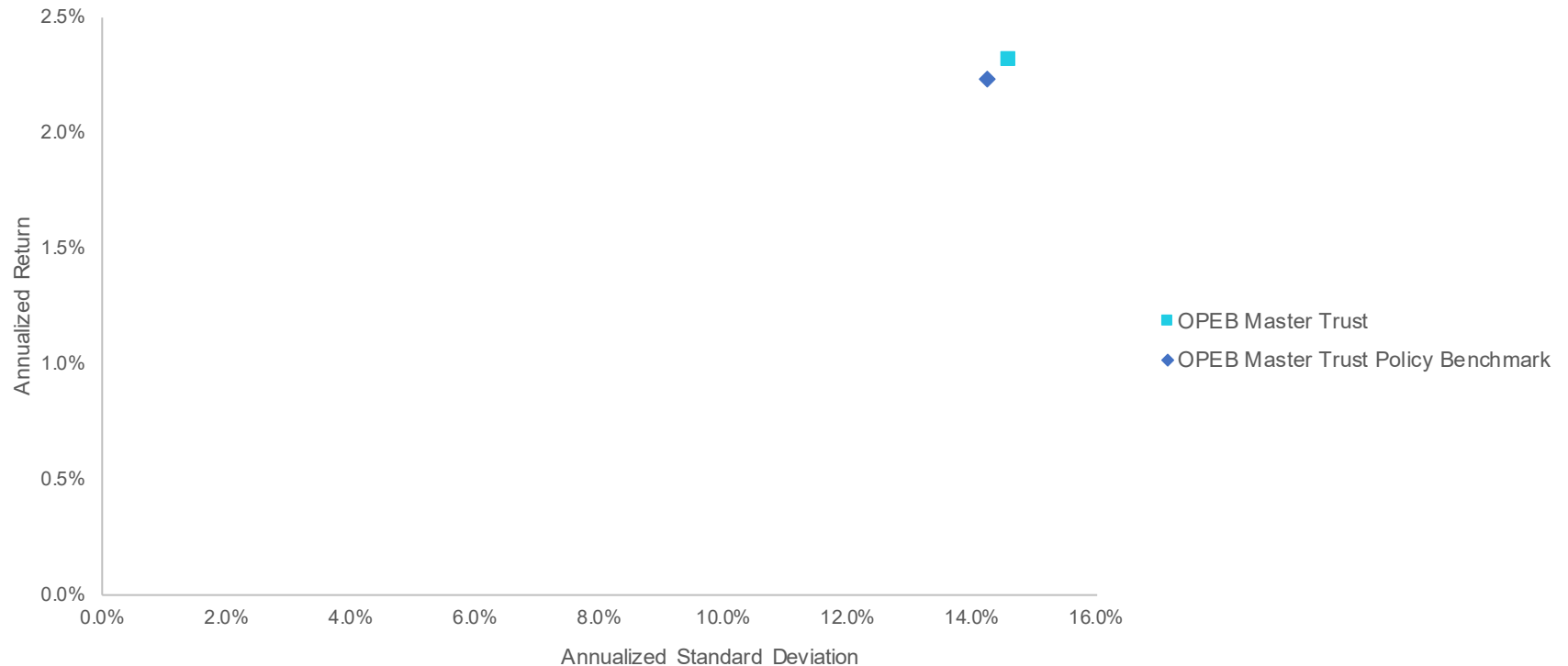
	Ending Market Value (mm)	% of Master Trust	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
<b>OPEB Master Trust</b>	<b>2,378</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-5.0%</b>	<b>-4.7%</b>	<b>-0.02%</b>	<b>-0.64%</b>	<b>-0.69%</b>
Growth	1,107	46.6%	47.5%	-6.6%	-7.1%	-0.04%	0.24%	0.21%
Credit	465	19.6%	19.0%	-0.3%	-0.4%	0.03%	0.01%	0.04%
Real Assets & Inflation Hedges	472	19.8%	20.0%	-7.7%	-2.4%	0.02%	-1.05%	-1.05%
Risk Reduction & Mitigation	333	14.0%	13.5%	-3.7%	-4.9%	-0.04%	0.16%	0.11%
Operational Cash	0	0.0%						

1. Total Value Add includes Interaction Effect.

# Risk vs. Return

for the quarter ended September 30, 2022

## 3 Year (Annualized)<sup>1</sup>



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
<b>OPEB Master Trust</b>	<b>2.3%</b>	<b>14.6%</b>				
OPEB Master Trust Policy Benchmark	2.2%	14.3%	0.19	0.07	1.02	1.1%

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

# Performance Detail

for the quarter ended September 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	Inception Date
<b>OPEB Master Trust</b>	<b>100.0%</b>	<b>2,378</b>	<b>2,394</b>	<b>-5.0%</b>	<b>-19.4%</b>	<b>-15.7%</b>	<b>2.3%</b>	<b>3.8%</b>	--	<b>5.2%</b>	<b>Feb-2013</b>
OPEB Master Trust Policy Benchmark				-4.7%	-19.2%	-15.2%	2.2%	3.6%	--	4.3%	
Sub-Trusts											
Los Angeles County	97.3%	2,315	2,327	-5.0%	-19.4%	-15.7%	2.3%	3.8%	--	4.7%	Feb-2013
LACERA	0.4%	11	11	-5.0%	-19.5%	-15.8%	2.3%	3.8%	--	4.7%	Feb-2013
Superior Court	2.2%	53	56	-5.2%	-19.4%	-15.6%	2.2%	3.7%	--	5.4%	Jul-2016
<b>OPEB Growth</b>	<b>46.6%</b>	<b>1,107</b>	<b>1,200</b>	<b>-6.6%</b>	<b>-25.6%</b>	<b>-21.0%</b>	<b>3.9%</b>	<b>4.4%</b>	--	<b>7.4%</b>	<b>Jul-2016</b>
OPEB Growth Policy Benchmark				-7.1%	-26.1%	-21.5%	3.5%	4.1%	--	7.0%	
OPEB Global Equities	46.6%	1,107	1,200	-6.6%	-25.6%	-21.0%	3.9%	4.4%	--	5.7%	Mar-2014
MSCI ACWI IMI Net				-6.6%	-25.7%	-21.2%	3.6%	4.2%	--	5.4%	
<b>OPEB Credit</b>	<b>19.6%</b>	<b>465</b>	<b>476</b>	<b>-0.3%</b>	<b>-10.0%</b>	<b>-10.1%</b>	<b>-1.0%</b>	--	--	<b>0.8%</b>	<b>Jul-2018</b>
OPEB Credit Policy Benchmark				-0.4%	-10.6%	-10.2%	-0.6%	--	--	1.2%	
OPEB Liquid Credit	19.6%	465	476	-0.3%	-10.1%	-10.1%	--	--	--	-10.1%	Sep-2021
OPEB Liquid Credit Policy Benchmark				-0.3%	-10.6%	-10.2%	--	--	--	-10.2%	
OPEB BlackRock Bank Loans	9.9%	235	239	1.9%	-3.1%	-2.5%	1.7%	--	--	2.4%	Jul-2018
S&P/LSTA Leverage Loan				1.4%	-3.3%	-2.5%	2.2%	--	--	2.7%	
OPEB BTC EM Debt LC	3.8%	91	94	-4.9%	-18.5%	-20.7%	-7.4%	--	--	-3.7%	Jul-2018
JPM GBI-EM Global Diversified				-4.7%	-18.6%	-20.6%	-7.1%	--	--	-3.3%	
OPEB BTC High Yield Bonds	5.9%	139	143	-0.9%	-14.9%	-14.4%	-1.0%	--	--	1.3%	Jul-2018
BBG BARC US Corp HY				-0.6%	-14.7%	-14.1%	-0.5%	--	--	1.7%	
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>19.8%</b>	<b>472</b>	<b>475</b>	<b>-7.7%</b>	<b>-16.8%</b>	<b>-9.5%</b>	<b>1.9%</b>	--	--	<b>3.3%</b>	<b>Jul-2018</b>
OPEB RA & IH Policy Benchmark				-2.4%	-12.4%	-4.7%	3.6%	--	--	4.5%	
OPEB BTC Commodities	4.0%	94	93	-4.2%	14.0%	12.2%	13.6%	--	--	7.1%	Jul-2018
Bloomberg Commodity Index Total Return				-4.1%	13.6%	11.8%	13.5%	--	--	7.1%	
OPEB BTC REITS	9.8%	234	241	-10.5%	-29.4%	-17.3%	-3.5%	--	--	1.2%	Jul-2018
DJ US SELECT REAL ESTATE SECURITIES				-10.4%	-29.4%	-17.2%	-3.3%	--	--	1.4%	
OPEB BTC TIPS	6.1%	144	141	-5.1%	-13.6%	-11.6%	0.9%	--	--	2.1%	Jul-2018
Bloomberg U.S. Treasury: U.S. TIPS				-5.1%	-13.6%	-11.6%	0.8%	--	--	2.0%	
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>14.0%</b>	<b>333</b>	<b>242</b>	<b>-3.7%</b>	<b>-11.6%</b>	<b>-11.7%</b>	<b>-2.4%</b>	<b>0.6%</b>	--	<b>0.7%</b>	<b>Jul-2016</b>
OPEB RR & M Policy Benchmark				-4.9%	-12.8%	-12.8%	-2.9%	0.2%	--	0.3%	
OPEB BTC Investment Grade Bonds	11.2%	266	193	-4.8%	-14.5%	-14.6%	-3.2%	--	--	0.0%	Jul-2018
BBG BARC Agg				-4.8%	-14.6%	-14.6%	-3.3%	--	--	0.0%	
OPEB SSGA Cash	2.8%	67	49	0.5%	0.7%	0.7%	0.8%	1.5%	--	1.1%	Feb-2013
OPEB Cash Policy Benchmark				0.4%	0.6%	0.6%	0.7%	1.2%	--	0.8%	

# risk reports



# Summary

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## Risk Summary

	Value
<b>Total Risk</b>	<b>11.90</b>
Benchmark Risk	12.11
Active Risk	1.26
Portfolio Beta	0.98
Effective Duration	1.54

## Contribution to Risk

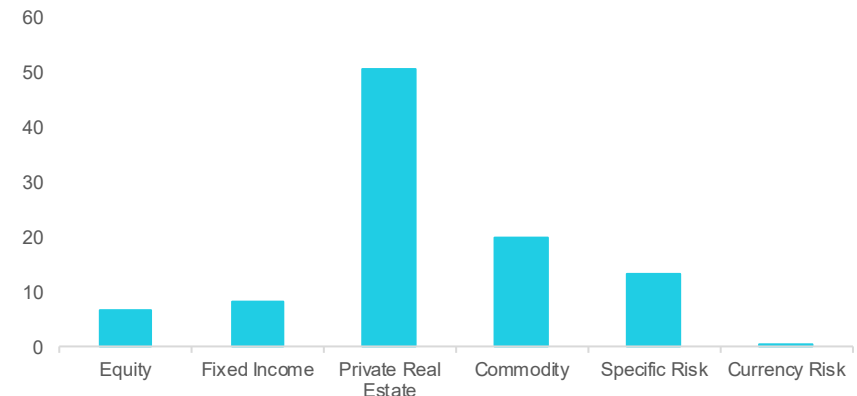


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
<b>Total Fund</b>	<b>2,378</b>	<b>100.0%</b>	<b>11.90</b>	<b>11.90</b>	<b>100.00</b>
Growth	1,107	46.6%	19.03	8.74	73.49
Credit	465	19.6%	4.69	0.73	6.10
Real Assets and Inflation Hedges	472	19.9%	12.74	2.31	19.46
Risk Reduction and Mitigation	333	14.0%	4.56	0.11	0.95

## Risk Decomposition

Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
<b>Total Risk</b>	<b>11.90</b>	<b>100.00</b>	<b>1.00</b>	<b>1.26</b>	<b>100.00</b>	<b>1.00</b>
Local Market Risk	11.28	94.77	1.00	1.26	99.89	1.00
Common Factor Risk	11.23	94.41	1.00	1.09	86.49	0.93
Equity	10.33	86.86	0.99	0.09	6.94	0.06
Fixed Income	0.90	7.54	0.61	0.11	8.49	0.27
Private Real Estate	0.00	0.00	0.00	0.64	50.75	0.49
Commodity	0.00	0.00	0.00	0.25	19.81	0.43
Specific Risk	0.04	0.35	0.06	0.17	13.40	0.37
Currency Risk	0.62	5.23	0.59	0.00	0.11	0.02

## Active Risk from Risk Factors



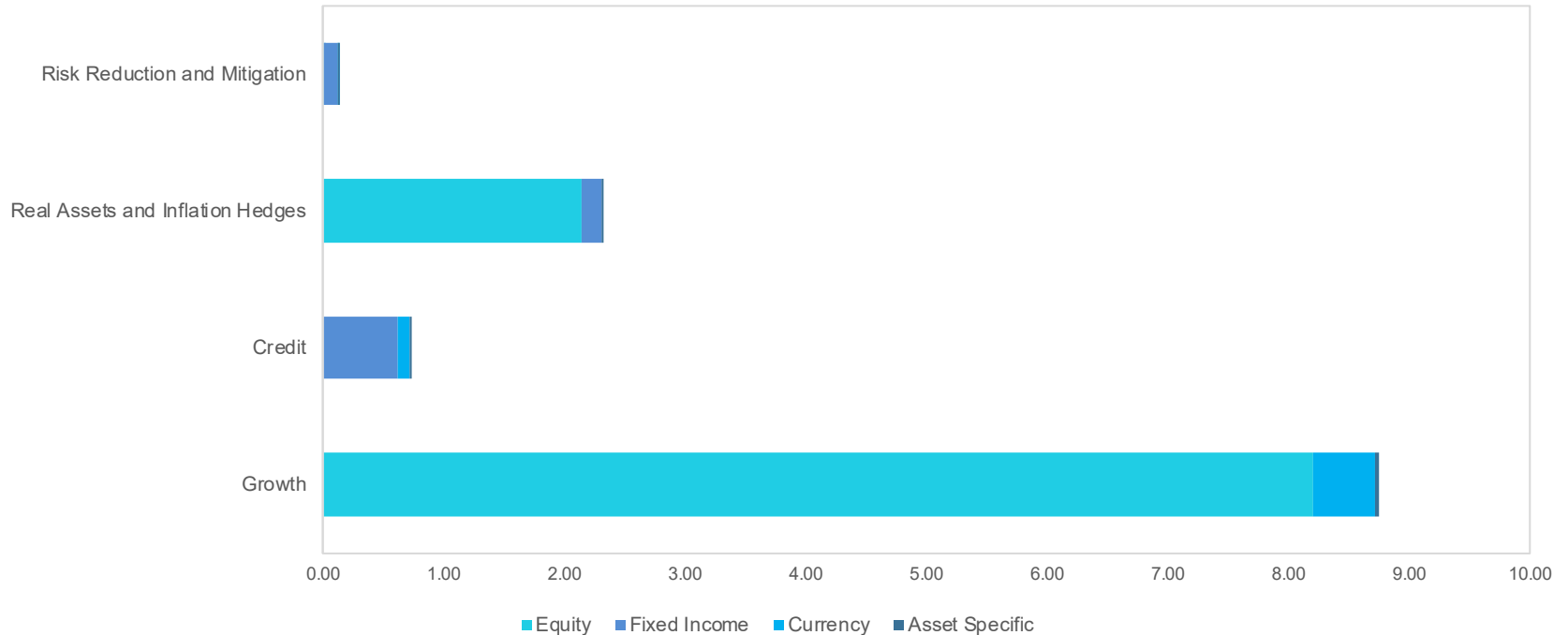
# Risk Contribution Breakdown

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## By Risk Type

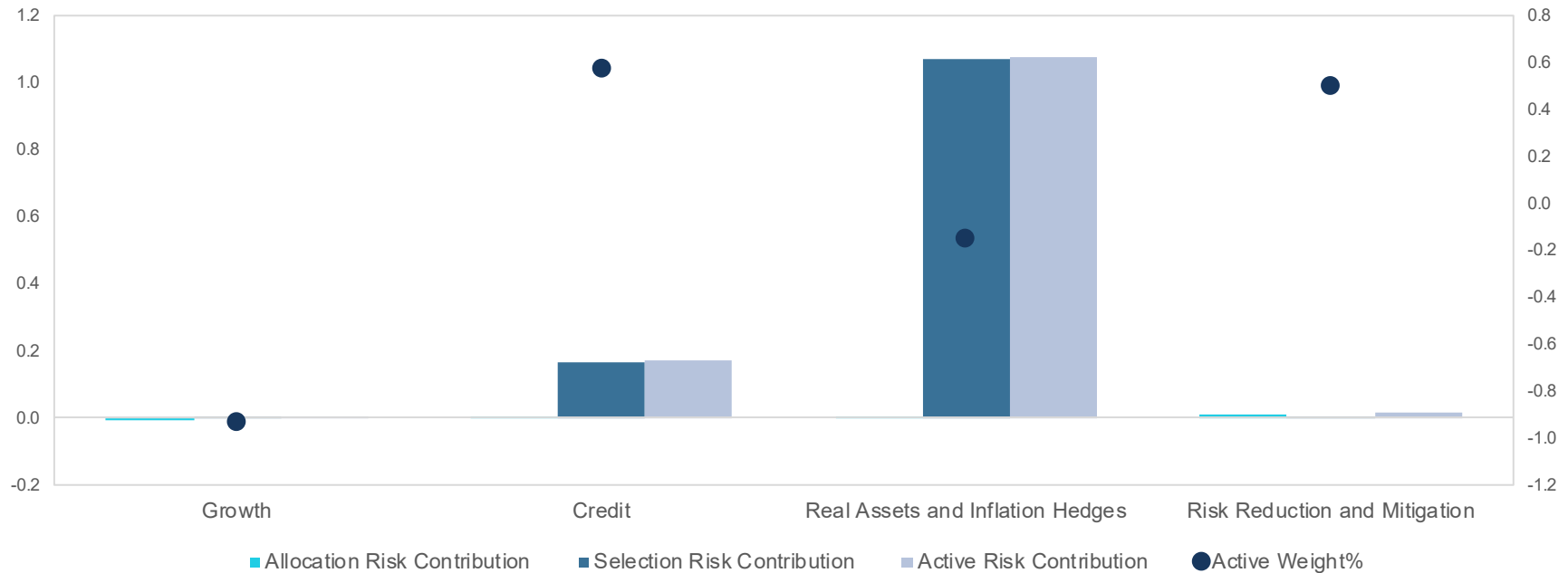


Functional Category	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Currency	Asset Specific
<b>Total Fund</b>	<b>2,378</b>	<b>100.0%</b>	<b>11.90</b>	<b>100.00</b>	<b>11.90</b>	<b>10.33</b>	<b>0.90</b>	<b>0.62</b>	<b>0.04</b>
Growth	1,107	46.6%	19.03	73.49	8.74	8.20	0.00	0.52	0.03
Credit	465	19.6%	4.69	6.10	0.73	0.00	0.61	0.11	0.01
Real Assets and Inflation Hedges	472	19.9%	12.74	19.46	2.31	2.13	0.17	0.00	0.01
Risk Reduction and Mitigation	333	14.0%	4.56	0.95	0.11	0.00	0.11	0.00	0.00

# Allocation Selection

for the quarter ended September 30, 2022

## Active Total Risk



Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
<b>Active Total Risk</b>				<b>0.02</b>			<b>1.24</b>	<b>1.26</b>
Growth	-0.93	7.52	0.01	0.00	0.08	0.12	0.00	0.00
Credit	0.57	8.28	0.14	0.01	2.40	0.35	0.16	0.17
Real Assets and Inflation Hedges	-0.15	6.05	-0.50	0.00	6.05	0.89	1.07	1.08
Risk Reduction and Mitigation	0.50	12.87	0.19	0.01	1.87	0.00	0.00	0.01

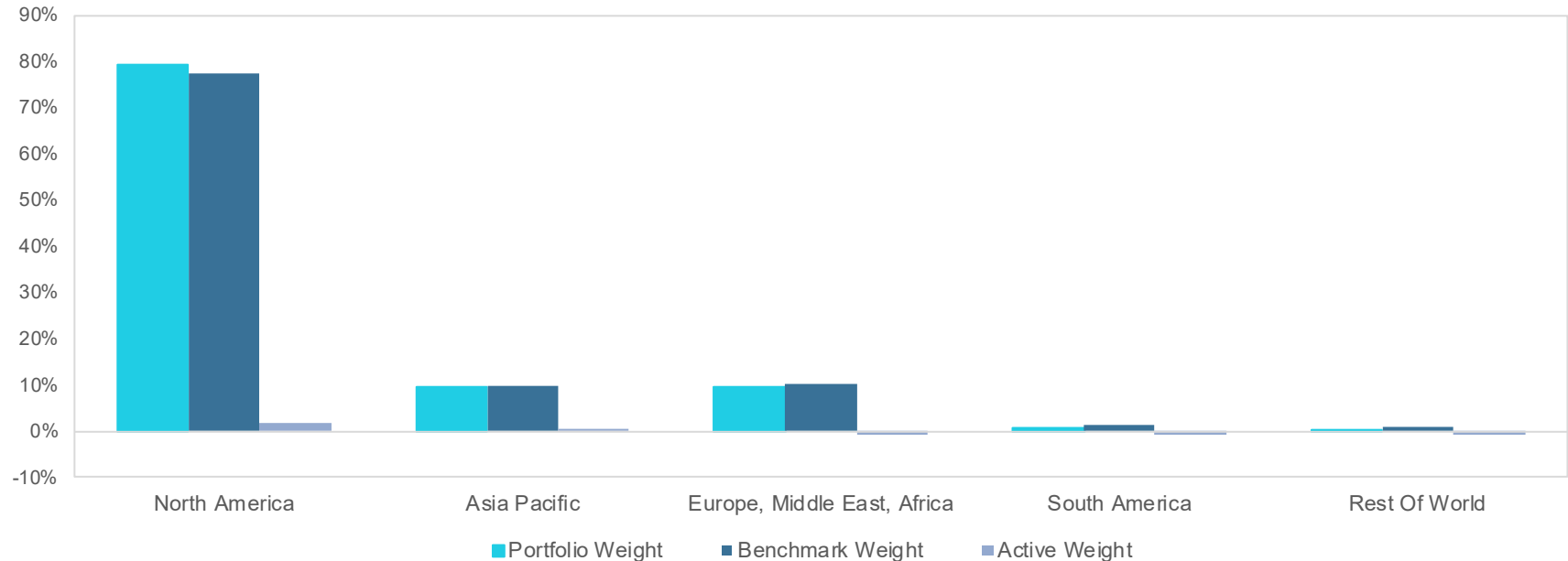
# Portfolio Allocation

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
<b>Total Fund</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>	<b>11.90</b>	<b>1.26</b>	<b>100.00</b>	<b>0.01</b>
North America	79.30%	77.34%	1.96%	11.45	1.16	91.53	0.01
Asia Pacific	9.82%	9.66%	0.17%	13.98	0.02	1.66	0.01
Europe, Middle East, Africa	9.65%	10.48%	-0.83%	17.57	0.09	7.35	-0.02
South America	0.84%	1.42%	-0.59%	21.41	0.00	-0.06	0.00
Rest Of World	0.39%	1.10%	-0.71%	8.35	-0.01	-0.48	0.01

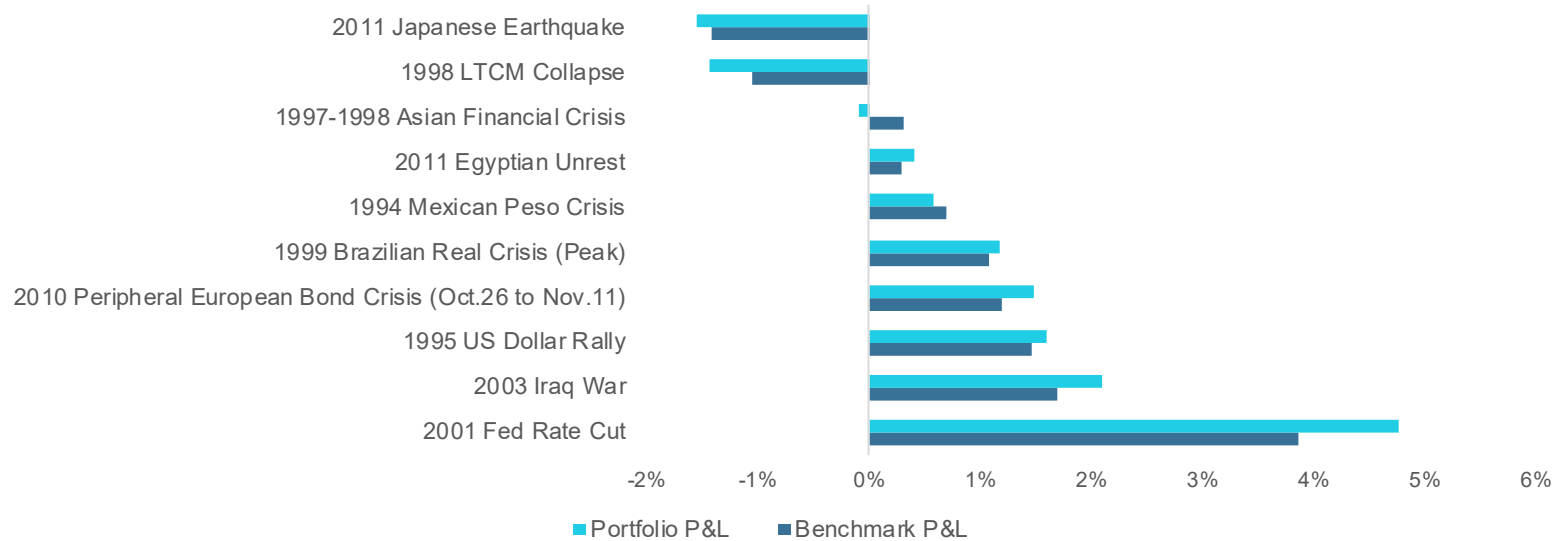
# Stress Tests

for the quarter ended September 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	4.76%	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	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)

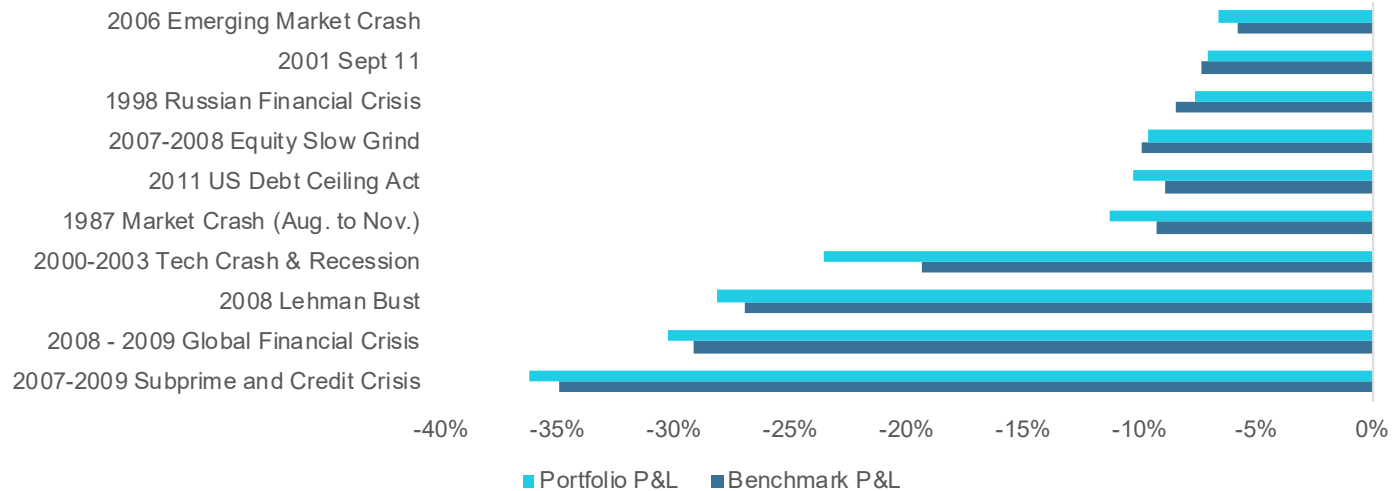
# Stress Tests

for the quarter ended September 30, 2022



Los Angeles County Employees Retirement Association

## 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

# Benchmark Definitions

## Current Composition

	Weight	Component
<b>Master Trust</b>		
OPEB Master Trust Policy Benchmark		
	48%	OPEB Growth Policy Benchmark
	19%	OPEB Credit Policy Benchmark
	20%	OPEB RA & IH Policy Benchmark
	14%	OPEB RR & M Policy Benchmark
<b>Growth</b>		
OPEB Growth Policy Benchmark		
	95%	MSCI ACWI IMI Net
	5%	OPEB Private Equity Custom Benchmark
<b>Credit</b>		
OPEB Credit Policy Benchmark		
	87%	OPEB Liquid Credit Policy Benchmark
	13%	OPEB Illiquid Credit Policy Benchmark
OPEB Liquid Credit Policy Benchmark		
	38%	Bloomberg U.S. Corporate High Yield
	46%	CS Leveraged Loan Index
	8%	JPMorgan EMBI Global Diversified Index
	4%	JPM GBI-EM Global Diversified Index
	4%	JPM CEMBI Broad Diversified
<b>Real Assets &amp; Inflation Hedges</b>		
OPEB RA & IH Policy Benchmark		
	45%	OPEB Real Estate Custom Benchmark
	5%	S&P Global Natural Resources Index
	15%	Bloomberg Commodity Index Total Return
	5%	DJ Brookfield Global Infra Comp
	30%	Bloomberg U.S. Treasury: U.S. TIPS
<b>Risk Reduction &amp; Mitigation</b>		
OPEB RR & M Policy Benchmark		
	67%	Bloomberg U.S. Aggregate
	19%	Bloomberg U.S. Treasury: Long
	15%	OPEB Cash Policy Benchmark
OPEB Cash Policy Benchmark		
	100%	FTSE 3-Month US Treasury Bill



## 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.

## 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

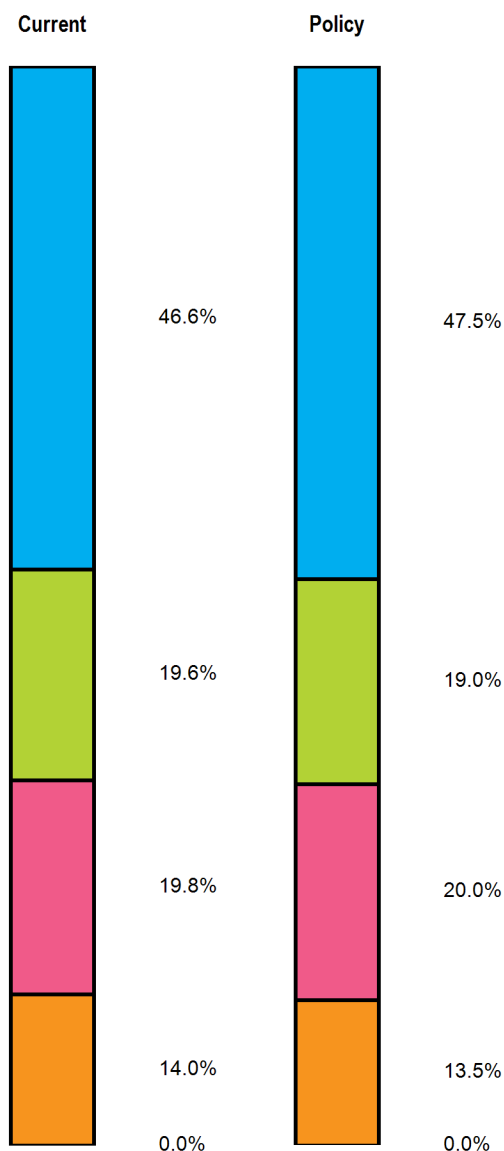
The return a bond earns on the price at which it was purchased if it were held to maturity. It assumes that coupon payments can be reinvested at the yield to maturity.

# LACERA: OPEB Master Trust

September 30, 2022

## Fund Evaluation Report

Total Fund | As of September 30, 2022

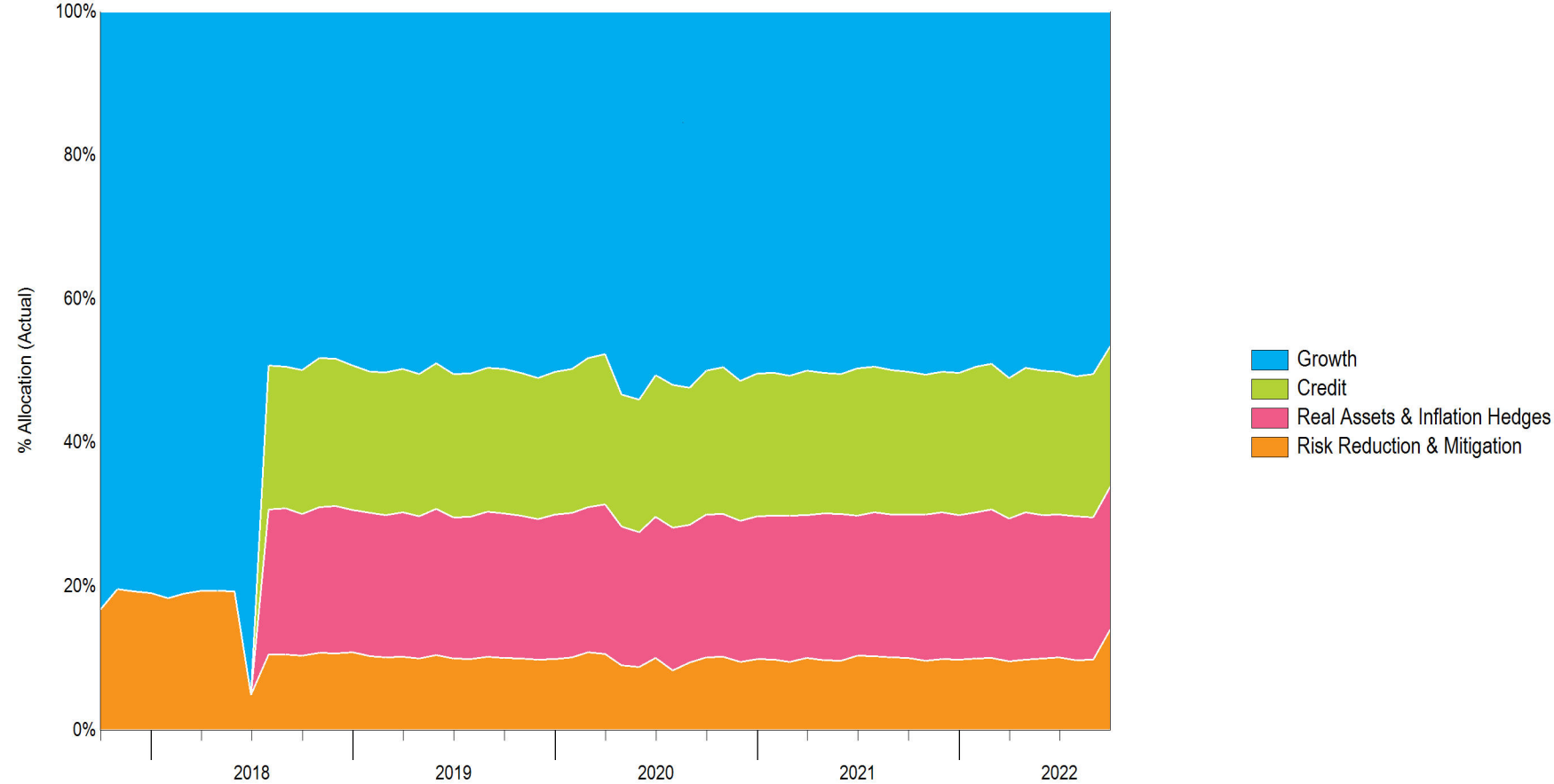


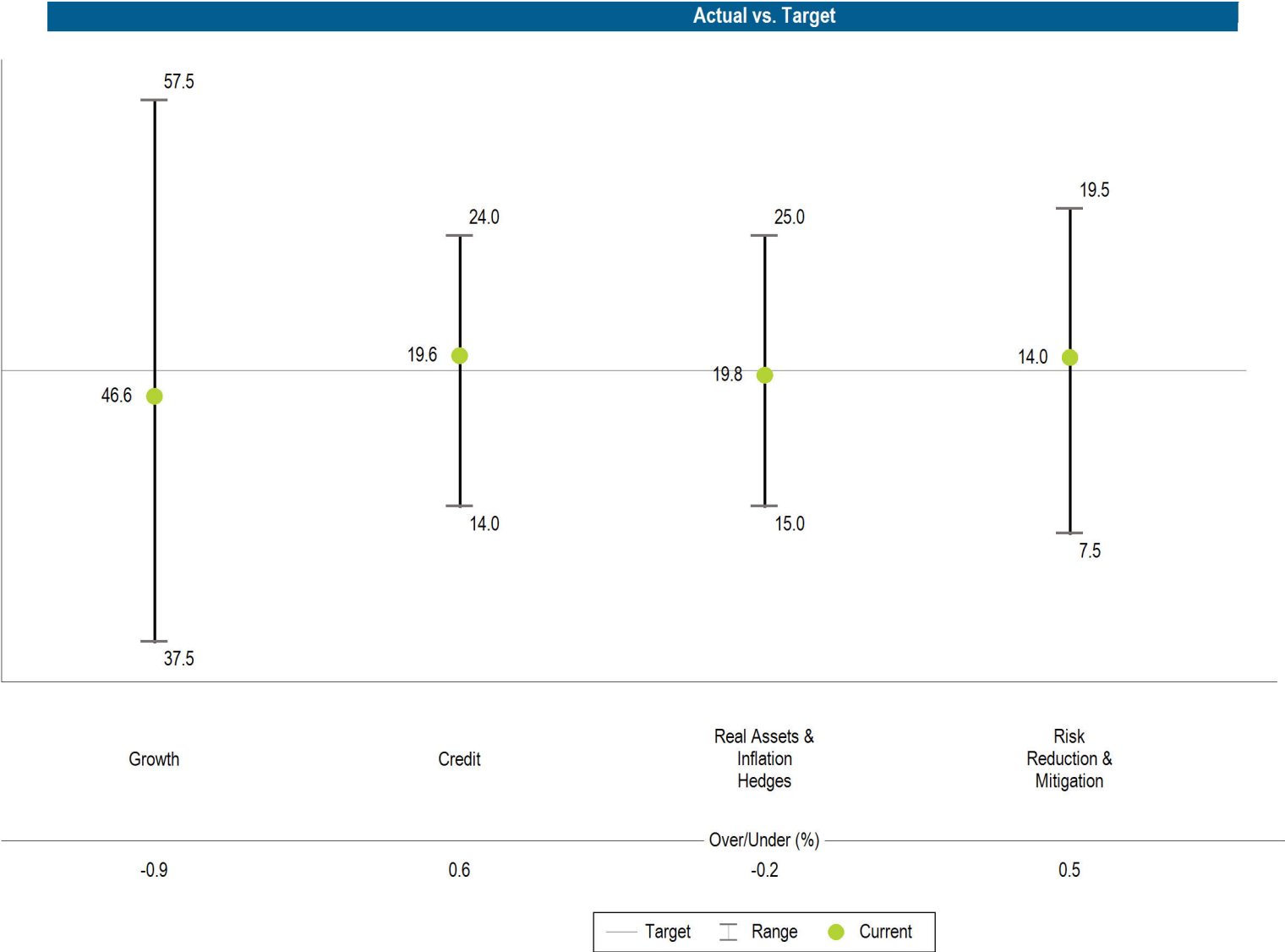
		Allocation vs. Target		Policy	Policy Range	Within IPS Range?
		Current Balance	Current Allocation			
<span style="color: blue;">■</span>	<b>Growth</b>	<b>\$1,107,232,533</b>	<b>46.6%</b>	<b>47.5%</b>	<b>37.5% - 57.5%</b>	<b>Yes</b>
	Global Equity	\$1,107,232,533	46.6%	45.0%	35.0% - 55.0%	Yes
	Private Equity	\$0	0.0%	2.5%		
<span style="color: green;">■</span>	<b>Credit</b>	<b>\$465,257,175</b>	<b>19.6%</b>	<b>19.0%</b>	<b>14.0% - 24.0%</b>	<b>Yes</b>
	Liquid Credit	\$465,257,175	19.6%	16.5%	11.5% - 21.5%	Yes
	Illiquid Credit	\$0	0.0%	2.5%		
<span style="color: pink;">■</span>	<b>Real Assets &amp; Inflation Hedges</b>	<b>\$471,965,194</b>	<b>19.8%</b>	<b>20.0%</b>	<b>15.0% - 25.0%</b>	<b>Yes</b>
	Real Estate	\$233,529,772	9.8%	9.0%	5.0% - 13.0%	Yes
	Natural Resources	\$0	0.0%	1.0%		
	Commodities	\$94,370,736	4.0%	3.0%	1.0% - 5.0%	Yes
	Infrastructure	\$0	0.0%	1.0%		
	TIPS	\$144,064,686	6.1%	6.0%	2.0% - 10.0%	Yes
<span style="color: orange;">■</span>	<b>Risk Reduction &amp; Mitigation</b>	<b>\$333,031,036</b>	<b>14.0%</b>	<b>13.5%</b>	<b>7.5% - 19.5%</b>	<b>Yes</b>
	Investment Grade Bonds	\$265,988,245	11.2%	9.0%	5.0% - 13.0%	Yes
	Long-Term Government Bonds	\$0	0.0%	2.5%		
	Cash	\$66,941,740	2.8%	2.0%	0.0% - 4.0%	Yes
	<b>Operational Cash<sup>2</sup></b>	<b>\$373,833</b>	<b>0.0%</b>	<b>0.0%</b>		
	<b>Total<sup>1</sup></b>	<b>\$2,378,289,497</b>	<b>100.0%</b>	<b>100.0%</b>		

<sup>1</sup>Total market value includes cash held at the participant level.

<sup>2</sup> includes unsettled trade activity.

Asset Allocation History  
5 Years Ending September 30, 2022







Trailing Net Performance							
	Market Value <sup>1</sup> (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
<b>Total Fund (Net)</b>	<b>2,378,289,497</b>	<b>100.0</b>	<b>-5.0</b>	<b>-5.0</b>	<b>-15.7</b>	<b>2.3</b>	<b>3.8</b>
<b>Total Fund (Gross)</b>			<b>-5.0</b>	<b>-5.0</b>	<b>-15.6</b>	<b>2.4</b>	<b>3.8</b>
<i>Custom OPEB Master Trust BM</i>			<u>-4.7</u>	<u>-4.7</u>	<u>-15.2</u>	<u>2.2</u>	<u>3.6</u>
Excess Return (vs. Net)			-0.3	-0.3	-0.5	0.1	0.2
<b>Growth (Net)</b>	<b>1,107,232,533</b>	<b>46.6</b>	<b>-6.6</b>	<b>-6.6</b>	<b>-21.0</b>	<b>3.9</b>	<b>4.4</b>
<b>Growth (Gross)</b>			<b>-6.6</b>	<b>-6.6</b>	<b>-21.0</b>	<b>3.9</b>	<b>4.5</b>
OPEB Global Equity (Net)	1,107,232,533	46.6	-6.6	-6.6	-21.0	3.9	4.4
OPEB Global Equity (Gross)			-6.6	-6.6	-21.0	3.9	4.5
<i>MSCI ACWI IMI Net (DAILY)</i>			<u>-6.6</u>	<u>-6.6</u>	<u>-21.2</u>	<u>3.6</u>	<u>4.2</u>
Excess Return (vs. Net)			0.0	0.0	0.2	0.3	0.2
<b>Credit (Net)</b>	<b>465,257,175</b>	<b>19.6</b>	<b>-0.3</b>	<b>-0.3</b>	<b>-10.1</b>	<b>-1.0</b>	<b>--</b>
<b>Credit (Gross)</b>			<b>-0.3</b>	<b>-0.3</b>	<b>-10.0</b>	<b>-0.9</b>	<b>--</b>
<b>Liquid Credit (Net)</b>	<b>465,257,175</b>	<b>19.6</b>	<b>-0.3</b>	<b>-0.3</b>	<b>-10.1</b>	<b>--</b>	<b>--</b>
<b>Liquid Credit (Gross)</b>			<b>-0.3</b>	<b>-0.3</b>	<b>-10.0</b>	<b>--</b>	<b>--</b>
<i>OPEB Liquid Credit BM</i>			<u>-0.3</u>	<u>-0.3</u>	<u>-10.2</u>	<b>--</b>	<b>--</b>
Excess Return (vs. Net)			0.0	0.0	0.1		
OPEB BTC Bank Loans (Net)	235,079,551	9.9	1.9	1.9	-2.5	1.7	--
OPEB BTC Bank Loans (Gross)			1.9	1.9	-2.9	1.6	--
<i>S&amp;P/LSTA Leveraged Loan TR</i>			<u>1.4</u>	<u>1.4</u>	<u>-2.5</u>	<u>2.2</u>	<b>--</b>
Excess Return (vs. Net)			0.5	0.5	0.0	-0.5	

Fiscal Year begins July 1.

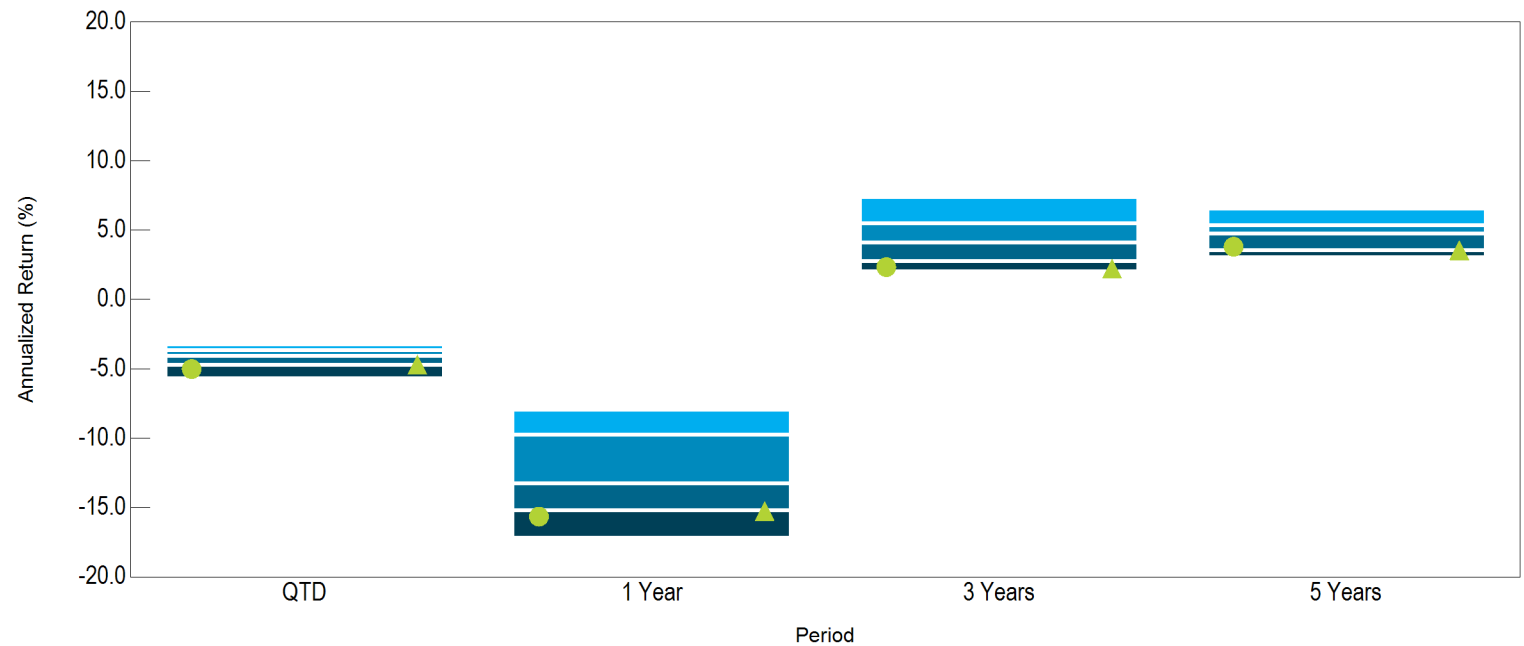
<sup>1</sup>Total market value includes cash held at the participant level.

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)	90,928,615	3.8	-4.9	-4.9	-20.7	-7.4	--
OPEB BTC EM Debt LC (Gross)			-4.8	-4.8	-20.6	-7.3	--
<i>JPM GBI-EM Global Diversified Index</i>			<u>-4.7</u>	<u>-4.7</u>	<u>-20.6</u>	<u>-7.1</u>	--
Excess Return (vs. Net)			-0.2	-0.2	-0.1	-0.3	
OPEB BTC High Yield Bonds (Net)	139,249,009	5.9	-0.9	-0.9	-14.4	-1.0	--
OPEB BTC High Yield Bonds (Gross)			-0.8	-0.8	-14.3	-0.9	--
<i>BBgBarc US High Yield TR</i>			<u>-0.6</u>	<u>-0.6</u>	<u>-14.1</u>	<u>-0.4</u>	--
Excess Return (vs. Net)			-0.3	-0.3	-0.3	-0.6	
<b>Real Assets &amp; Inflation Hedges (Net)</b>	<b>471,965,193</b>	<b>19.8</b>	<b>-7.7</b>	<b>-7.7</b>	<b>-9.5</b>	<b>1.9</b>	<b>--</b>
<b>Real Assets &amp; Inflation Hedges (Gross)</b>			<b>-7.7</b>	<b>-7.7</b>	<b>-9.4</b>	<b>2.0</b>	<b>--</b>
OPEB BTC Commodities (Net)	94,370,736	4.0	-4.2	-4.2	12.2	13.6	--
OPEB BTC Commodities (Gross)			-4.2	-4.2	11.7	13.5	--
<i>Bloomberg Commodity Index TR USD</i>			<u>-4.1</u>	<u>-4.1</u>	<u>11.8</u>	<u>13.5</u>	--
Excess Return (vs. Net)			-0.1	-0.1	0.4	0.1	
OPEB BTC REITs (Net)	233,529,772	9.8	-10.5	-10.5	-17.3	-3.5	--
OPEB BTC REITs (Gross)			-10.4	-10.4	-17.2	-3.3	--
<i>DJ US Select REIT TR USD</i>			<u>-10.4</u>	<u>-10.4</u>	<u>-17.2</u>	<u>-3.3</u>	--
Excess Return (vs. Net)			-0.1	-0.1	-0.1	-0.2	
OPEB BTC TIPS (Net)	144,064,686	6.1	-5.1	-5.1	-11.6	0.9	--
OPEB BTC TIPS (Gross)			-5.1	-5.1	-11.6	0.9	--
<i>BBgBarc US TIPS TR</i>			<u>-5.1</u>	<u>-5.1</u>	<u>-11.6</u>	<u>0.8</u>	--
Excess Return (vs. Net)			0.0	0.0	0.0	0.1	

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
<b>Risk Reduction &amp; Mitigation (Net)</b>	<b>333,031,036</b>	<b>14.0</b>	<b>-3.7</b>	<b>-3.7</b>	<b>-11.7</b>	<b>-2.4</b>	<b>0.6</b>
<b>Risk Reduction &amp; Mitigation (Gross)</b>			<b>-3.7</b>	<b>-3.7</b>	<b>-11.7</b>	<b>-2.4</b>	<b>0.6</b>
OPEB BTC Investment Grade Bonds (Net)	265,988,245	11.2	-4.8	-4.8	-14.6	-3.2	--
OPEB BTC Investment Grade Bonds (Gross)			-4.8	-4.8	-14.6	-3.2	--
BBgBarc US Aggregate TR			<u>-4.8</u>	<u>-4.8</u>	<u>-14.6</u>	<u>-3.3</u>	--
Excess Return (vs. Net)			0.0	0.0	0.0	0.1	
OPEB Cash (Net)	66,941,740	2.8	0.5	0.5	0.7	0.8	1.5
OPEB Cash (Gross)			0.5	0.5	0.8	0.9	1.5
Custom Cash BM			<u>0.4</u>	<u>0.4</u>	<u>0.6</u>	<u>0.7</u>	<u>1.2</u>
Excess Return (vs. Net)			0.1	0.1	0.1	0.1	0.3
<b>Operational Cash (Net)</b>	<b>373,833</b>	<b>0.0</b>					
<b>Operational Cash (Gross)</b>							

#### InvMetrics Public DB \$1-5B (net) USD Return Comparison



	Return (Rank)							
	QTD	1 Year	3 Years	5 Years				
5th Percentile	-3.2	-8.0	7.4	6.5				
25th Percentile	-3.6	-9.7	5.5	5.4				
Median	-4.1	-13.2	4.2	4.8				
75th Percentile	-4.7	-15.2	2.8	3.6				
95th Percentile	-5.6	-17.1	2.1	3.1				
# of Portfolios	36	36	35	35				
● Total Fund	-5.0	(86)	-15.7	(83)	2.3	(90)	3.8	(72)
▲ Custom OPEB Master Trust BM	-4.7	(75)	-15.2	(78)	2.2	(94)	3.6	(76)

### Benchmark History As of September 30, 2022

#### Total Fund

10/01/2021	Present	Custom OBEP Master Trust BM
2/28/2013	9/30/21	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").

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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.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

**FOR INFORMATION ONLY**

December 5, 2022

TO: Trustees,  
Board of Investments

FROM: Christine Roseland *CR*  
Senior Staff Counsel

FOR: December 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 December 14, 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 December 5, 2022



	Project/ Investment	Description	Amount	Board Approval Date	Completion Status	% Complete	Notes
EQUITIES	Leading Edge Investment Advisors (LEIA)	Investment Management Agreement for Global Equity Emerging Manager Program	\$500,000,000	October 12, 2022	In Progress	<div><div></div></div> 10%	Legal negotiations in process.
	New Alpha Asset Management (New Alpha)	Investment Management Agreement for Global Equity Emerging Manager Program	\$500,000,000	October 12, 2022	In Progress	<div><div></div></div> 10%	Legal negotiations in process.
OPEB	Hamilton Lane	Investment Management Agreement	\$500,000,000	August 10, 2022	In Progress	<div><div></div></div> 30%	Legal negotiations in process.
	BlackRock Institutional Trust Company, N.A.	Investment Management Agreement for Long-Term U.S. Treasury Bond	\$70,000,000	September 14, 2022	Complete	<div><div></div></div> 100%	Completed.
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	<div><div></div></div> 35%	Legal negotiations in process.



**FOR INFORMATION ONLY**

November 23, 2022

TO: Each Trustee  
Board of Retirement  
Board of Investments

FROM: Barry W. Lew   
Legislative Affairs Officer

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

SUBJECT: **2022 Year-End Legislative Report**

**INTRODUCTION**

This report presents a year-end summary of bills on which LACERA took a position and of enacted bills that may require implementation by LACERA.

The California State Legislature adjourned on August 31, 2022. Any bills that were not passed by the Legislature before adjournment are dead and would not carry over to the next legislative session since 2022 is the second year of the 2021-22 two-year session. September 30, 2022 was the last day for the Governor to sign or veto bills. Unless otherwise noted, the bills signed into law become effective January 1, 2023.

The 2nd session of the 117th Congress (2021-22) is expected to conclude on January 3, 2023, and staff will continue monitoring the federal legislation in this report.

**BOARD-ADOPTED POSITIONS**

The following is a summary of the disposition of bills introduced in the 2021 legislative year that carried over into 2022 as well as bills introduced in 2022 on which LACERA adopted a position. It does not include bills that were enacted in 2021. Staff worked with LACERA's legislative advocates to send support letters during the legislative cycle.

Support – 4	AB 1824, AB, 1971, AB 1944, HR 82, HR 2337, S 1302
Watch – 1	AB 826
Neutral – 1	AB 2493

## **I. California Legislation**

### ***AB 1824 (Committee on Public Employment and Retirement): Public Employees' Retirement***

Summary: Would include a corporation, a trust, or an estate in the definition of "beneficiary" for purposes of receiving an allowance earned but not yet paid; would specify that a member is not prohibited from receiving credit for a period of federal public service if federal law expressly permits the credit even though the member is already entitled to receive a pension or retirement allowance from that service; would authorize a retirement board to approve a number of days other than 60 days for purposes of accepting a retirement application before the effective date of retirement; would require that in connection with the calculation of a death benefit that the computation for any absence be based on the compensation of the position held by the member at the beginning of the absence.

Status: Chaptered by Secretary of State. (09/02/2022)

BOR Position: Support.

### ***AB 1971 (Cooper): County Employees Retirement Law of 1937***

Summary: Would authorize a member who returns to active service following an uncompensated leave of absence due to serious illness of a family member to purchase service credit for that period of absence; would authorize a retirement board under specified factors to grant members who are subject to a temporary mandatory furlough service credit to which members would have been entitled in the absence of the temporary mandatory furlough; would authorize a county retiree to serve as a nonsalaried member without reinstatement for service on a part-time board or commission; would provide that a member retired for service who subsequently files for and is granted disability retirement is eligible to change their retirement option.

Status: Chaptered by Secretary of State. (09/25/2022)

BOR Position: Support.

### ***AB 1944 (Lee and Garcia): Local Government; Open and Public Meetings***

Summary: Would require the agenda to identify any member of the legislative body that will participate in the meeting remotely. Would require 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: In committee. Hearing postponed by committee. (06/22/2022)7

BOR Position: Support.

***AB 826 (Irwin): Compensation and Compensation Earnable***

Summary: Would provide that compensation and compensation earnable include flexible benefits plan allowances paid by a county or district on behalf of its employees as part of a cafeteria plan, if certain requirements are met. Applies only in Ventura County to members who retire on or before December 31, 2025.

Status: Vetoed by Governor. (09/29/2022)

BOR Position: Watch.

***AB 2493 (Chen): County Employees' Retirement: Disallowed Compensation: Benefit Adjustments and Calculations***

Summary: Would require 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. Would require adjustments to contributions and benefit payments.

Status: In Assembly. Concurrence in Senate amendments pending. (08/31/2022)

BOR Position: Neutral.

## **II. Federal Legislation**

***HR 82 (Davis): Social Security Fairness Act of 2021***

Summary: Would amend the Social Security Act to repeal the Government Pension Offset and the Windfall Elimination Provision.

Status: In House. Placed on the House Union Calendar. (09/21/2022)

BOR Position: Support.

***HR 2337 (Neal): Public Servants Protection and Fairness Act of 2021***

Summary: Would amend the Social Security Act to provide an equitable Social Security formula for individuals with noncovered employment and to provide relief for individuals currently available by the Windfall Elimination Provision.

Status: Referred to the Subcommittee on Social Security. (04/01/2021)

BOR Position: Support.

***S 1302 (Brown): Social Security Fairness Act***

Summary: Would amend the Social Security Act to repeal the Government Pension Offset and the Windfall Elimination Provision.

Status: To Senate Committee on Finance. (04/22/2021)

BOR Position: Support.

**ENACTED LEGISLATION**

The following bills were enacted into law that pertained to the County Employees Retirement Law of 1937 (CERL), the Ralph M. Brown Act, and other retirement-related statutes. LACERA did not necessarily adopt positions on all these bills. Staff will notify and confer with LACERA's Division Managers regarding implementation.

***AB 551 (Rodriguez): Disability Retirement: Covid-19: Presumption***

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.

***AB 1824 (Committee on Public Employment and Retirement): Public Employees' Retirement***

Summary: Includes a corporation, a trust, or an estate in the definition of "beneficiary" for purposes of receiving an allowance earned but not yet paid; would specify that a member is not prohibited from receiving credit for a period of federal public service if federal law expressly permits the credit even though the member is already entitled to receive a pension or retirement allowance from that service; authorizes a retirement board to approve a number of days other than 60 days for purposes of accepting a retirement application before the effective date of retirement; requires that in connection with the calculation of a death benefit that the computation for any absence be based on the compensation of the position held by the member at the beginning of the absence.

***AB 1971 (Cooper): County Employees Retirement Law of 1937***

Summary: Authorizes a member who returns to active service following an uncompensated leave of absence due to serious illness of a family member to purchase service credit for that period of absence; authorizes a retirement board under specified factors to grant members who are subject to a temporary mandatory furlough service credit to which members would have been entitled in the absence of the temporary

mandatory furlough; authorizes a county retiree to serve as a nonsalaried member without reinstatement for service on a part-time board or commission; provides that a member retired for service who subsequently files for and is granted disability retirement is eligible to change their retirement option.

***AB 2449 (Rubio): Open Meetings: Local Agencies: Teleconferences***

Summary: Relates to law that authorizes a local agency to use teleconferencing without complying with specified teleconferencing requirements in specified circumstances when a declared state of emergency is in effect, or in other situations related to public health. Revises and recasts those teleconferencing provisions and, until January 1, 2026, authorizes a local agency to use teleconferencing without complying with certain teleconferencing requirements.

***AB 2647 (Levine): Local Government: Open Meetings***

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.

***SB 1100 (Cortese): Open Meetings: Orderly Conduct***

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.

**CONCLUSION**

In January 2023, the new 2023-24 legislative session will begin. Staff will keep the Boards apprised through the regular monthly legislative status reports.

**Reviewed and Approved:**



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**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  
Tony Roda, Williams & Jensen  
Naomi Padron, McHugh Koepke & Associates  
LACERA Division Managers

LACERA Legislative Report  
2021-22 Legislative Session  
Status as of November 23, 2022

PUBLIC RETIREMENT		
CA AB 551	<b>AUTHOR:</b> Rodriguez [D] <b>TITLE:</b> Disability Retirement: Covid-19: Presumption <b>INTRODUCED:</b> 02/10/2021 <b>LAST AMEND:</b> 06/28/2022 <b>DISPOSITION:</b> Enacted <b>SUMMARY:</b> 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. <b>STATUS:</b> 09/29/2022 Chaptered by Secretary of State. Chapter No. 2022-741	
CA AB 826	<b>AUTHOR:</b> Irwin [D] <b>TITLE:</b> Compensation and Compensation Earnable <b>INTRODUCED:</b> 02/16/2021 <b>LAST AMEND:</b> 08/03/2022 <b>DISPOSITION:</b> Vetoed <b>SUMMARY:</b> Provides that this bill, which would apply only in Ventura County, would provide 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. <b>STATUS:</b> 09/29/2022 Vetoed by GOVERNOR. <b>BOR_Position:</b> Watch 09/01/2021 <b>IBLC_Recommendation:</b> Watch 08/12/2021 <b>Staff_Recommendation:</b> Watch	
CA AB 1667	<b>AUTHOR:</b> Cooper [D] <b>TITLE:</b> State Teachers' Retirement System: Administration <b>INTRODUCED:</b> 01/19/2022 <b>LAST AMEND:</b> 08/25/2022 <b>DISPOSITION:</b> Enacted <b>SUMMARY:</b> 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. <b>STATUS:</b> 09/29/2022 Chaptered by Secretary of State. Chapter No. 2022-754	
CA AB 1722	<b>AUTHOR:</b> Cooper [D] <b>TITLE:</b> Public Employees' Retirement: Safety Members <b>INTRODUCED:</b> 01/27/2022	

	<b>DISPOSITION:</b>	Enacted
	<b>SUMMARY:</b>	
		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.
	<b>STATUS:</b>	
	09/18/2022	Chaptered by Secretary of State. Chapter No. 2022-404
CA AB 1824	<b>AUTHOR:</b>	Public Employment and Retirement Cmt
	<b>TITLE:</b>	Public Employees' Retirement
	<b>INTRODUCED:</b>	02/07/2022
	<b>LAST AMEND:</b>	08/01/2022
	<b>DISPOSITION:</b>	Enacted
	<b>SUMMARY:</b>	
		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.
	<b>STATUS:</b>	
	09/02/2022	Signed by GOVERNOR.
	09/02/2022	Chaptered by Secretary of State. Chapter No. 2022-231
	<b>Comments:</b>	
		Omnibus bill containing SACRS 2022 legislative proposals.
	<b>BOR_Position:</b>	Support 05/05/2022
	<b>IBLC_Recommendation:</b>	Support 04/06/2022
	<b>Staff_Recommendation:</b>	Support
CA AB 1971	<b>AUTHOR:</b>	Cooper [D]
	<b>TITLE:</b>	County Employees Retirement Law of 1937
	<b>INTRODUCED:</b>	02/10/2022
	<b>LAST AMEND:</b>	06/30/2022
	<b>DISPOSITION:</b>	Enacted
	<b>SUMMARY:</b>	
		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.
	<b>STATUS:</b>	
	09/25/2022	Chaptered by Secretary of State. Chapter No. 2022-524
	<b>Comments:</b>	
		Omnibus bill containing SACRS 2022 legislative proposals.
	<b>BOR_Position:</b>	Support 06/01/2022
	<b>IBLC_Recommendation:</b>	Support 05/05/2022
	<b>Staff_Recommendation:</b>	Support



CA AB 2443	<p><b>AUTHOR:</b> Cooley [D]  <b>TITLE:</b> Judges' Retirement System II: Benefits  <b>INTRODUCED:</b> 02/17/2022  <b>LAST AMEND:</b> 08/24/2022  <b>DISPOSITION:</b> Enacted  <b>SUMMARY:</b>  Relates to 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. Authorizes a judge who is not eligible to retire pursuant specified provisions to elect to retire and defer receipt of a monthly allowance, subject to specified formulations. Relates to the Public Employees' Medical and Hospital Care Act (PEMHCA).  <b>STATUS:</b>  09/25/2022 Chaptered by Secretary of State. Chapter No. 2022-531</p>
CA AB 2493	<p><b>AUTHOR:</b> Chen [R]  <b>TITLE:</b> County Employees' Retirement Disallowed Compensation  <b>INTRODUCED:</b> 02/17/2022  <b>LAST AMEND:</b> 08/17/2022  <b>DISPOSITION:</b> Failed - Adjourned  <b>SUMMARY:</b>  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.  <b>STATUS:</b>  08/31/2022 In SENATE. Read third time. Passed SENATE. *****To ASSEMBLY for concurrence. (40-0)  <b>Comments:</b>  Bill is dead because it did not pass the Legislature before adjournment.  <b>BOR_Position:</b> Neutral 07/06/2022  <b>IBLC_Recommendation:</b> Neutral 06/01/2022  <b>Staff_Recommendation:</b> Neutral</p>
US HR 2954	<p><b>SPONSOR:</b> Neal [D]  <b>TITLE:</b> Strong Retirement  <b>INTRODUCED:</b> 05/04/2021  <b>LAST AMEND:</b> 03/29/2022  <b>DISPOSITION:</b> Pending  <b>SUMMARY:</b>  Secures a Strong Retirement Act of 2021.  <b>STATUS:</b>  03/30/2022 In SENATE. Read second time.  03/30/2022 To SENATE Committee on FINANCE.  <b>Comments:</b>  Would gradually raise the age for mandatory distributions to age 75 by 2032.</p>
US HR 6241	<p><b>SPONSOR:</b> Thompson M [D]  <b>TITLE:</b> Use of Retirement Funds  <b>INTRODUCED:</b> 12/09/2021  <b>DISPOSITION:</b> Pending  <b>SUMMARY:</b>  Amends the Internal Revenue Code of 1986 to provide for rules for the use of</p>

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.

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**PUBLIC INVESTMENT**

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CA SB 1173

**AUTHOR:** Gonzalez [D]

**TITLE:** Public Retirement Systems: Fossil Fuels: Divestment

**INTRODUCED:** 02/17/2022

**LAST AMEND:** 04/21/2022

**DISPOSITION:** Failed - Adjourned

**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:** Failed - Adjourned

**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.

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**WORKERS COMPENSATION**


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CA AB 334

**AUTHOR:** Mullin [D]  
**TITLE:** Workers Compensation: Skin Cancer  
**INTRODUCED:** 01/27/2021  
**DISPOSITION:** Vetoed  
**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:**

09/29/2022 Vetoed by GOVERNOR.

CA AB 1751

**AUTHOR:** Daly [D]  
**TITLE:** Workers' Compensation: COVID-19: Critical Workers  
**INTRODUCED:** 02/01/2022  
**LAST AMEND:** 08/25/2022  
**DISPOSITION:** Enacted  
**SUMMARY:**

Extends specified workers' compensation provisions relating to COVID-19 until specified date. Expands the specified 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:**

09/29/2022 Chaptered by Secretary of State. Chapter No. 2022-758

CA SB 213

**AUTHOR:** Cortese [D]  
**TITLE:** Workers Compensation: Hospital Employees  
**INTRODUCED:** 01/12/2021  
**LAST AMEND:** 05/05/2022  
**DISPOSITION:** Failed - Adjourned  
**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:** Vetoed  
**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:**

09/29/2022 Vetoed by GOVERNOR.

CA SB 335

**AUTHOR:** Cortese [D]  
**TITLE:** Workers' Compensation: Liability  
**INTRODUCED:** 02/08/2021  
**LAST AMEND:** 03/10/2021  
**DISPOSITION:** Failed - Adjourned  
**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.

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**BROWN ACT**

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CA AB 1944

**AUTHOR:** Lee [D]  
**TITLE:** Local Government: Open and Public Meetings  
**INTRODUCED:** 02/10/2022  
**LAST AMEND:** 05/25/2022  
**DISPOSITION:** Failed - Adjourned  
**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:** Enacted

**SUMMARY:**

Relates to law that authorizes a local agency to use teleconferencing without complying with specified teleconferencing requirements in specified circumstances when a declared state of emergency is in effect, or in other situations related to public health. Revises and recasts those teleconferencing provisions and, until January 1, 2026, authorizes a local agency to use teleconferencing without complying with certain teleconferencing requirements.

**STATUS:**

09/13/2022 Chaptered by Secretary of State. Chapter No. 2022-285

CA AB 2647

**AUTHOR:** Levine [D]

**TITLE:** Local Government: Open Meetings

**INTRODUCED:** 02/18/2022

**LAST AMEND:** 08/04/2022

**DISPOSITION:** Enacted

**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:**

09/30/2022 Chaptered by Secretary of State. Chapter No. 2022-971

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

Signed by GOVERNOR.

08/22/2022

Chaptered by Secretary of State. Chapter No. 2022-171

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**PUBLIC RECORDS ACT**

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CA AB 343

**AUTHOR:**

Fong [R]

**TITLE:**

California Public Records Act Ombudsperson

**INTRODUCED:**

01/28/2021

**LAST AMEND:**

06/15/2022

**DISPOSITION:**

Failed - Adjourned

**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:**

Failed - Adjourned

**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.

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**SOCIAL SECURITY**

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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:**

09/19/2022

Subcommittee on SOCIAL SECURITY discharged.

09/20/2022

In HOUSE Committee on WAYS AND MEANS: Consideration and mark-up session held.

09/20/2022

In HOUSE Committee on WAYS AND MEANS: Ordered to be reported.

	09/21/2022	From HOUSE Committee on WAYS AND MEANS: Reported.
	09/21/2022	In HOUSE. Placed on HOUSE Union Calendar.
	<b>BOR_Position:</b>	Support 05/05/2021
	<b>IBLC_Recommendation:</b>	Support 04/15/2021
	<b>Staff_Recommendation:</b>	Support
US HR 2337	<b>SPONSOR:</b>	Neal [D]
	<b>TITLE:</b>	Noncovered Employment
	<b>INTRODUCED:</b>	04/01/2021
	<b>DISPOSITION:</b>	Pending
	<b>SUMMARY:</b>	
		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.
	<b>STATUS:</b>	
	04/01/2021	INTRODUCED.
	04/01/2021	To HOUSE Committee on WAYS AND MEANS.
	<b>BOR_Position:</b>	Support 09/01/2021
	<b>IBLC_Recommendation:</b>	Support 08/12/2021
	<b>Staff_Recommendation:</b>	Support
US HR 5723	<b>SPONSOR:</b>	Larson [D]
	<b>TITLE:</b>	Social Security System Benefits
	<b>INTRODUCED:</b>	10/26/2021
	<b>DISPOSITION:</b>	Pending
	<b>SUMMARY:</b>	
		Protects our Social Security system and improve benefits for current and future generations.
	<b>STATUS:</b>	
	10/26/2021	In HOUSE Committee on WAYS AND MEANS: Referred to Subcommittee on SOCIAL SECURITY.
US S 1302	<b>SPONSOR:</b>	Brown S [D]
	<b>TITLE:</b>	Pension Offset
	<b>INTRODUCED:</b>	04/22/2021
	<b>DISPOSITION:</b>	Pending
	<b>SUMMARY:</b>	
		Amends Title II of the Social Security Act to repeal the government pension offset and windfall elimination provisions.
	<b>STATUS:</b>	
	04/22/2021	INTRODUCED.
	04/22/2021	In SENATE. Read second time.
	04/22/2021	To SENATE Committee on FINANCE.
	<b>BOR_Position:</b>	Support 09/01/2021
	<b>IBLC_Recommendation:</b>	Support 08/12/2021
	<b>Staff_Recommendation:</b>	Support

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## HEALTHCARE

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US HR 4148	<b>SPONSOR:</b>	Malinowski [D]
	<b>TITLE:</b>	First Responders Medicare Option
	<b>INTRODUCED:</b>	06/24/2021
	<b>DISPOSITION:</b>	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.

US S 4312

**SPONSOR:** Brown S [D]  
**TITLE:** Health and Long Term Care Insurance Distributions  
**INTRODUCED:** 05/25/2022  
**DISPOSITION:** Pending  
**SUMMARY:**

Amends the Internal Revenue Code of 1986 to repeal the direct payment requirement on the exclusion from gross income of distributions from governmental plans for health and long term care insurance.

**STATUS:**

05/25/2022 INTRODUCED.  
05/25/2022 In SENATE. Read second time.  
05/25/2022 To SENATE Committee on FINANCE.

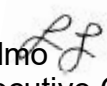


<b>PUBLIC RETIREMENT</b>	<b>AUTHOR</b>	<b>TITLE</b>	<b>PAGE</b>
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AB 826	Irwin (D)	Compensation and Compensation Earnable	1
AB 1667	Cooper (D)	State Teachers' Retirement System: Administration	1
AB 1722	Cooper (D)	Public Employees' Retirement: Safety Members	1
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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
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HR 2337	Neal (D)	Noncovered Employment	9
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S 1302	Brown S (D)	Pension Offset	9
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**FOR INFORMATION ONLY**

November 17, 2022

TO: Each Trustee  
Board of Retirement  
Board of Investments

FROM: Laura Guglielmo   
Assistant Executive Officer

FOR: Board of Retirement Meeting on December 7, 2022  
Board of Investments Meeting on December 14, 2022

SUBJECT: **FY 2021-2022 Final Budget Control Report**

Attached is a copy of the Final Budget Control Report for the LACERA Administrative, Retiree Health Care Benefits Program (RHCBP), and Other-Post Employment Benefits (OPEB) Trust Budget for FY 2021-2022.

**LACERA ADMINISTRATIVE BUDGET**

The Board of Retirement (BOR) and Board of Investments (BOI) adopted an Administrative Budget totaling \$114,807,486 in Fiscal Year 2021-2022. The budget was adjusted during the Mid-Year Budget Amendment process, however, LACERA's total operating budget of \$114,807,486 remained constant. The total operating expenses were \$100,759,503. This represents a budgetary savings of \$14,047,983 or 12.2% compared to the Board approved operating budget.

LACERA experienced an overall budgetary savings of approximately \$10.4 million in Salaries and Employee Benefits (S&EB), including approximately \$6.5 million in Salaries and Other Pays and approximately \$3.9 million in Total Employee Benefits. Significant variances within line items are discussed below:

- Permanent & County Temporary Salaries - Budgetary savings of approximately \$7.3 million, or 14.7% occurred due to higher than anticipated vacancy levels. LACERA hired or promoted 68 staff in 13 divisions but lost 35 individuals to attrition throughout FY 2021-2022.
- Intern Program – Budgetary savings of approximately \$303,000, or 97.3% occurred as a direct result of LACERA's primarily remote working conditions through May of 2022, which challenged our ability to provide the daily hands-on development desired.
- Rideshare Program – Budgetary savings of approximately \$60,000 or 95.5% occurred as a direct result of our primarily remote working conditions.
- Agency Temporary Salaries – Higher than anticipated costs totaling approximately \$1.1 million occurred as part of a pragmatic strategy to focus recruiting resources in business areas where Agency temporary staff are not a viable solution. Agency Temporary staff are also used for limited-term specialized projects, intermittent workload peaks and to backfill permanent staff on temporary medical leave.
- Variable Benefits – Budgetary savings of approximately \$5.4 million occurred in benefits such as Retirement, Healthcare (Megaflex, Options Plan), Savings Plan (401K) and Thrift Plan/Horizons (457) contributions, etc. Variable benefits are correlated with staffing costs and were impacted by our vacancies.

OPEB Contribution (Budget Surplus) – Consistent with the revised Budget Policy adopted by the BOR and BOI in June 2022, the Chief Executive Officer (CEO) authorized a discretionary additional contribution to pre-fund LACERA's OPEB Trust, utilizing budgetary savings at the fully authorized amount of just under \$1.5 million.

LACERA experienced overall budgetary savings in Services and Supplies (S&S) costs by approximately \$3.6 million. Significant variances within line items are discussed below:

- Transportation & Travel – Budgetary savings of approximately \$456,000, or 75.4%, is primarily attributable to pandemic-related travel restrictions and the cancellation of many in-person conferences and educational programs or shift to virtual programs.
- Building Costs – Budgetary savings of approximately \$1.9 million, or 25.0%, is primarily due to postponing the 7<sup>th</sup> floor renovation project to FY 2022-2023.
- Professional & Specialized Services - Budgetary savings totaling approximately \$875,000, or 22.8%, occurred due to lower than anticipated costs for Audit consulting services, LACERA's COVID testing program for staff, and Human Resources consulting services.
- Legal Fees & Services – Non-recurring legal costs associated with Board and CEO approved business purposes were approximately \$1.8 million, or 157.9%, more than anticipated.
- Educational Expense – Budgetary savings totaling approximately \$621,000, or 50.7%, are primarily attributable to pandemic-related cancellations of in-person educational programs.

The attached FY 2021-2022 Final Budget Control Report provides further details on the major factors contributing to the variances noted above. The variances noted reflect the amended budget approved by the BOR and BOI as part of the Mid-Year Budget Amendment.

#### **RETIREE HEALTH CARE BENEFITS PROGRAM (RHCBP) BUDGET**

The total operating expenses were \$9,236,963. This represents a budgetary savings of \$2,154,165, or 18.9%, compared to the RHCBP operating budget of \$11,391,128. A delay in hiring Retirement Benefit Specialists and lower than projected overhead charges is the main cause for the reduced budgetary expenditures.

#### **OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRUST BUDGET**

The total operating expenses were \$598,956. This represents budgetary savings of \$84,194, or 12.3%, compared to the OPEB Trust operating budget approved in the amount of \$683,150.

#### **NOTED AND REVIEWED:**

  
\_\_\_\_\_  
Luis Lugo  
Deputy Chief Executive Officer

Attachment

c: S. Kreimann

J. Popowich

LKG:LL:ku



**FISCAL YEAR 2021-2022**

**FINAL BUDGET CONTROL REPORT**

**BASED ON EXPENDITURES AS OF JUNE 30, 2022**

**ADMINISTRATIVE BUDGET**

**RETIREE HEALTHCARE BENEFITS PROGRAM (RHCBP) BUDGET**

**OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRUST BUDGET**

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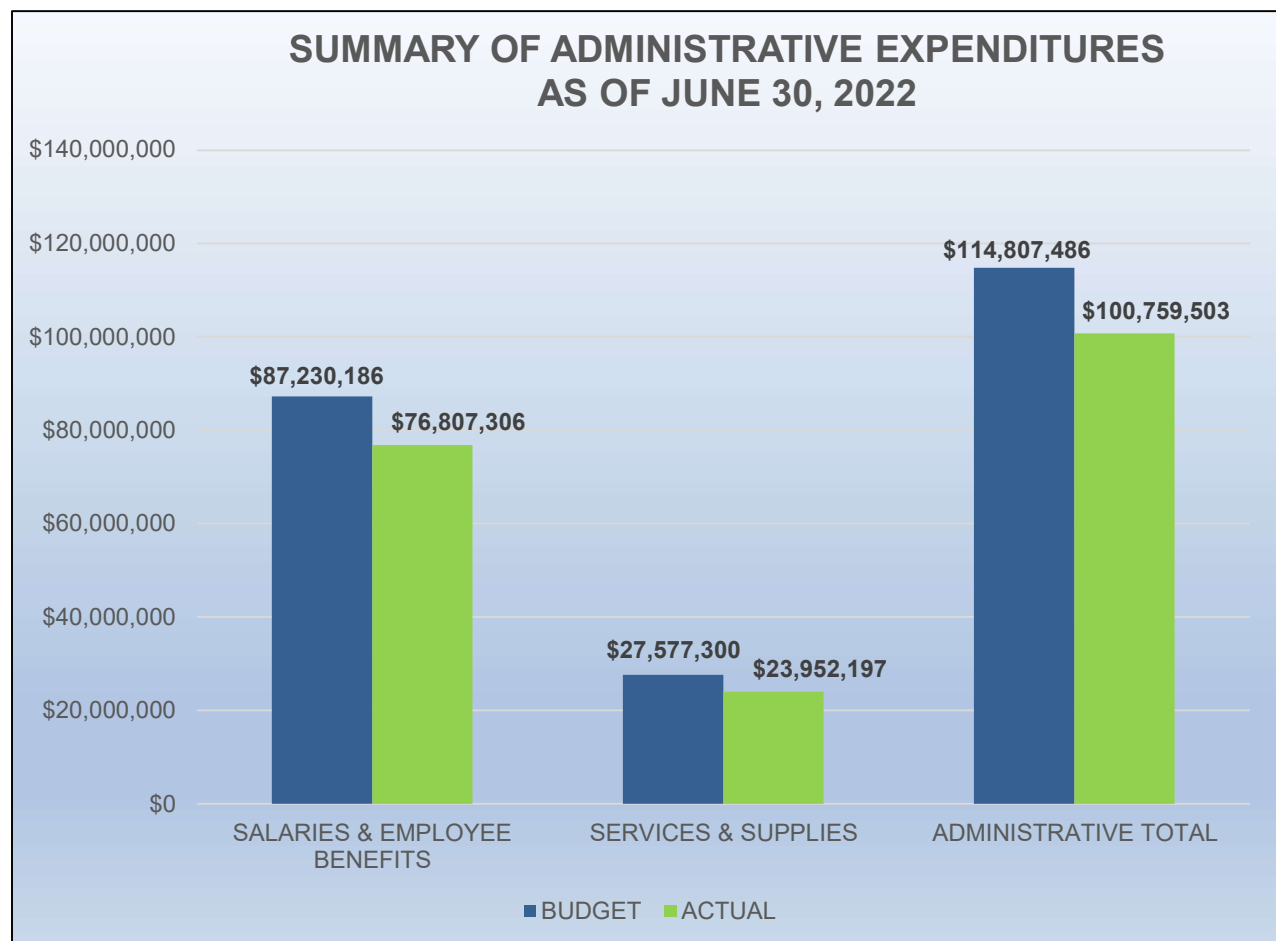
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## **SECTION I - ADMINISTRATIVE BUDGET SUMMARY**

LACERA's Fiscal Year 2021-2022 ended June 30, 2022 with actual administrative expenses of \$100,759,503 or 87.8% of the \$114,807,486 administrative approved budget. This represents budgetary savings of \$14,047,983 or 12.2%.

<b>SUMMARY OF ADMINISTRATIVE EXPENDITURES AS OF JUNE 30, 2022</b>					
<b>ADMINISTRATIVE EXPENSES</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>	<b>% UTILIZED</b>	<b>% OVER/ (UNUTILIZED)</b>
SALARIES & EMPLOYEE BENEFITS	\$87,230,186	\$76,807,306	(\$10,422,880)	88.1%	-11.9%
SERVICES & SUPPLIES	\$27,577,300	\$23,952,197	(\$3,625,103)	86.9%	-13.1%
<b>ADMINISTRATIVE TOTAL</b>	<b>\$114,807,486</b>	<b>\$100,759,503</b>	<b>(\$14,047,983)</b>	<b>87.8%</b>	<b>-12.2%</b>

\* All amounts rounded to the nearest dollar.



## Salaries and Employee Benefits (S&EB)

Salaries and Employee Benefits (S&EB) costs incurred as of June 30, 2022 were \$76,807,306 or 88.1% of the \$87,230,186 approved budget, adjusted at mid-year. This represents budgetary savings of \$10,422,880 or 11.9% of the \$87,230,186 administrative approved budget for this category. A summary of all S&EB expenses and explanations of significant variances are provided below.

SUMMARY OF SALARIES AND EMPLOYEE BENEFITS BASED ON EXPENDITURES AS OF JUNE 30, 2022					
	BUDGET	ACTUAL	OVER/(UNDER) BUDGET	% UTILIZED	% OVER/ (UNUTILIZED)
<b><u>SALARIES &amp; OTHER PAYS</u></b>					
Permanent / County Temporary	\$49,380,393	\$42,125,480	(\$7,254,913)	85.3%	-14.7%
Agency Temporary	4,001,700	5,084,512	1,082,812	127.1%	27.1%
LACERA Intern Program	312,000	8,488	(303,512)	2.7%	-97.3%
Stipends	65,000	50,631	(14,369)	77.9%	-22.1%
Overtime	888,900	961,790	72,890	108.2%	8.2%
Bilingual Bonus	21,600	15,650	(5,950)	72.5%	-27.5%
Transportation Allowance	14,400	7,200	(7,200)	0.0%	0.0%
Rideshare Allowance	70,300	3,132	(67,168)	4.5%	-95.5%
Sickleave Buyback	68,800	51,784	(17,016)	75.3%	-24.7%
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$54,823,093</b>	<b>\$48,308,667</b>	<b>(\$6,514,426)</b>	<b>88.1%</b>	<b>-11.9%</b>
<b><u>VARIABLE BENEFITS</u></b>					
Retirement	10,558,179	9,025,679	(1,532,500)	85.5%	-14.5%
FICA Contribution	866,851	690,564	(176,287)	79.7%	-20.3%
County Subsidy - Insurance	2,853,102	2,085,922	(767,180)	73.1%	-26.9%
Options Plan	4,422,034	3,720,403	(701,631)	84.1%	-15.9%
Life Insurance	18,182	17,490	(692)	96.2%	-3.8%
Health Insurance Temps	219,772	106,413	(113,359)	48.4%	-51.6%
Flexible Benefit Plan	16,178	19,930	3,752	123.2%	23.2%
Thrift Plan / Horizons	1,682,186	1,326,185	(356,001)	78.8%	-21.2%
Savings Plan	1,225,790	937,883	(287,907)	76.5%	-23.5%
Pension Savings Plan	37,462	13,632	(23,830)	36.4%	-63.6%
Megaflex	5,995,931	4,516,115	(1,479,816)	75.3%	-24.7%
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$27,895,666</b>	<b>\$22,460,215</b>	<b>(\$5,435,451)</b>	<b>80.5%</b>	<b>-19.5%</b>
<b>OPEB CONTRIBUTION</b>	<b>\$1,485,427</b>	<b>\$1,497,510</b>	<b>\$12,083</b>	<b>100.8%</b>	<b>0.8%</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>\$0</b>	<b>\$1,485,427</b>	<b>\$1,485,427</b>	<b>0%</b>	<b>0%</b>
<b>OTHER BENEFITS</b>	<b>\$3,026,000</b>	<b>\$3,055,487</b>	<b>\$29,487</b>	<b>101.0%</b>	<b>1.0%</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$32,407,094</b>	<b>\$28,498,639</b>	<b>(\$3,908,455)</b>	<b>87.9%</b>	<b>-12.1%</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$87,230,186</b>	<b>\$76,807,306</b>	<b>(\$10,422,880)</b>	<b>88.1%</b>	<b>-11.9%</b>

\* All amounts rounded to the nearest dollar.



## **Permanent Salaries & Variable Benefits**

Permanent Salaries expenditures were \$42,125,480 or 85.3% of the approved Permanent Salaries budget of \$49,380,393. This represents a budgetary savings of \$7,254,913. This variance is the result of LACERA's ambitious hiring plan. Although 68 staff members across 13 divisions were onboarded or promoted during the fiscal year, LACERA lost 35 staff members due to attrition.

Variable Benefit expenditures were \$22,460,215 or 80.5% of the approved Variable Benefits budget of \$27,895,666. These expenditures correlate to permanent salaries and were therefore lower than anticipated.

LACERA budgets S&EB for positions vacant at the start of the fiscal year at the first salary step and the anticipated hire date, which is generally six months unless otherwise stated. Salary savings occur due to staff attrition throughout the year as well as slower than anticipated hiring.

See table on page 4 for details related to vacant positions.

## **Other Variances**

### **Agency Temporary**

Agency Temporary staff expenditures were \$5,084,512 or 127.1% of the adopted budget of \$4,001,700. LACERA utilizes Agency temporary staff to meet short-term business needs, which may include workload spikes tied to special projects, backfilling staff on prolonged medical leave, and to meet normal workload while permanent staff are being recruited. In FY 2021-2022, LACERA relied more heavily on this resource as we focused our permanent hiring efforts in areas of the organization where temporary staff are not a viable solution. This strategy resulted in costs that were \$1,082,812 higher than budgeted for this line item.

### **Overtime**

Overtime expenditures were \$961,790 or 108.2% of the approved budget of \$888,900. Overtime expenditures were \$72,890 more than budgeted to address critical business and member service needs. Overtime was used to support ongoing systems maintenance and upgrades conducted after business hours, extended weekday and weekend hours to support members, and to address critical special projects such as COLA accumulation correction, and the Alameda Decision projects. Note that Los Angeles County experienced an unprecedented number of retirements during FY 2021-2022, driving work volume, while LACERA experienced similar increases in its own staff retirements.

### **LACERA Intern Program**

LACERA Intern Program expenditures were \$8,488 or 2.7% of the approved budget of \$312,000. This represents a budgetary savings of \$303,512. LACERA's Intern Program has been especially challenged by the COVID-19 pandemic because daily hands-on

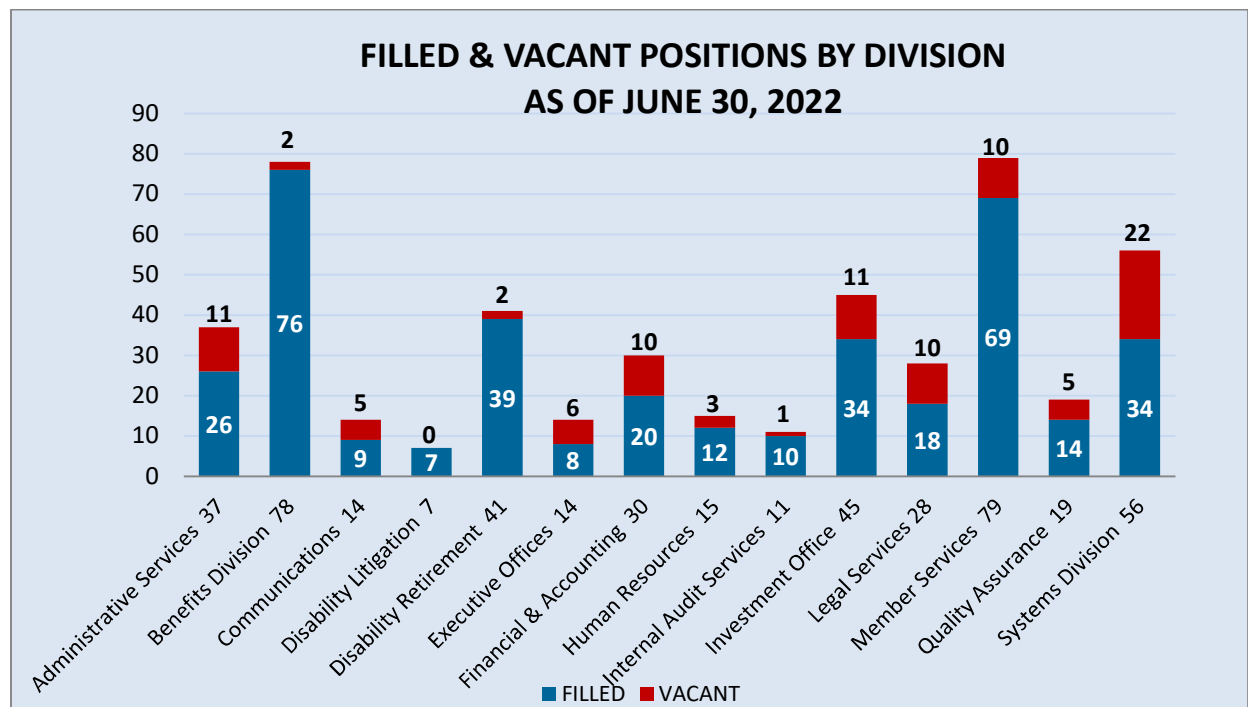
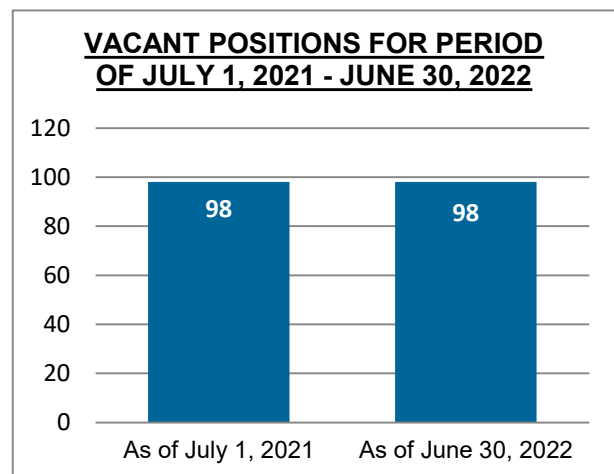
development was not possible in our primarily remote work environment. As a result, LACERA's recruitment efforts were focused on full-time permanent staff during this period.

## OPEB Contribution (Budget Surplus)

In June 2022, the Board of Retirement and Board of Investments adopted a new Budget Policy that authorizes LACERA's Chief Executive Officer (CEO) to make a discretionary supplemental contribution to LACERA's Other Post-Employment Benefits (OPEB) Trust of up to 100% of LACERA's budgeted OPEB contribution, utilizing budgetary savings if they exist. The purpose of this supplemental funding is to pre-fund the cost of benefits so the costs are not deferred to future generations of members, and to take advantage of the long-term investment returns. These surplus funds are not intended to be budgeted. The CEO authorized the use of budgetary savings of the fully authorized amount of \$1,485,427 to the OPEB Trust.

## Vacancies

LACERA began and ended FY 2021-2022 with 98 staff vacancies out of 474 budgeted positions, a vacancy rate of 20.7%. During this period 68 staff in 13 divisions were hired or promoted, offset by 35 staff members lost to attrition, leaving no net gain.



## **Services and Supplies (S&S)**

Services and Supplies (S&S) costs incurred as of June 30, 2022 were \$23,952,197 or 86.9% of the \$27,577,300 administrative approved budget representing budgetary savings totaling \$3,625,103 or 13.1% for this category. A summary of all S&S expenses and explanations of significant variances are provided below.

<b>SUMMARY OF SERVICES AND SUPPLIES BASED ON EXPENDITURES FOR AS OF JUNE 30, 2022</b>					
<b>S&amp;S CATEGORY</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>	<b>% UTILIZED</b>	<b>% OVER/ (UNUTILIZED)</b>
Auto Expenses	\$131,200	\$81,668	(\$49,532)	62.2%	-37.8%
Communications	630,000	584,479	(45,521)	92.8%	-7.2%
Transportation & Travel	604,500	148,647	(455,853)	24.6%	-75.4%
Postage	991,400	990,943	(457)	99.9%	0.0%
Stationery & Forms	645,300	567,123	(78,178)	87.9%	-12.1%
Office Supplies & Equipment	746,500	608,313	(138,187)	81.5%	-18.5%
Insurance	1,114,200	1,106,157	(8,043)	99.3%	-0.7%
Equipment Maintenance	437,800	363,940	(73,860)	83.1%	-16.9%
Equipment Rents & Leases	277,000	197,025	(79,975)	71.1%	-28.9%
Building Costs	7,472,400	5,604,859	(1,867,541)	75.0%	-25.0%
Parking Fees	377,000	449,990	72,990	119.4%	19.4%
Professional & Specialized Services	3,844,200	2,968,848	(875,352)	77.2%	-22.8%
Bank Services	200,500	203,372	2,872	101.4%	1.4%
Legal Fees & Services	1,127,500	2,908,118	1,780,618	257.9%	157.9%
Disability Fees & Services	2,665,500	2,252,937	(412,563)	84.5%	-15.5%
Computer Services & Support	4,689,100	4,215,697	(473,403)	89.9%	-10.1%
Educational Expenses	1,225,400	603,945	(621,455)	49.3%	-50.7%
Miscellaneous	397,800	96,135	(301,665)	24.2%	-75.8%
<b>TOTAL</b>	<b>\$27,577,300</b>	<b>\$23,952,197</b>	<b>(\$3,625,103)</b>	<b>86.9%</b>	<b>-13.1%</b>

\* All amounts rounded to the nearest dollar.

Legal Fees & Services expenditures were \$2,908,118, or 257.9%, of the annual budget for this category of \$1,127,500. These non-recurring Board and CEO-approved legal costs were \$1,780,618 more than anticipated.

Building Costs expenditures were \$5,604,859, or 75.0%, of the annual budget for this category of \$7,472,400. This budgetary savings of \$1,867,541, or 25.0%, occurred due to postponing the 7<sup>th</sup> Floor renovation project into FY 2022-2023.

Professional & Specialized Services expenditures were \$2,968,848 or 77.2% of the annual budget in this category of \$3,844,200. Some of the \$875,352 in budgetary savings in this line item are primarily attributed to lower than anticipated costs for Audit

services (\$373,510), COVID testing services (\$144,651) for LACERA staff, and Human Resources Consulting services (\$131,451).

Educational Expenses expenditures were \$603,945, or 49.3%, of the annual budget for this category of \$1,225,400. This budgetary savings of \$621,455 is attributable to pandemic-related cancellations and other travel restrictions.

Computer Services & Support expenditures were \$4,215,697, or 89.9%, of the annual budget for this category of \$4,689,100. This budgetary savings of \$473,403, or 10.1%, is primarily due to lower than anticipated costs for LAN Software & Licenses.

Transportation & Travel expenditures were \$148,647, or 24.6%, of the annual budget for this category of \$604,500. This budgetary savings of \$455,853, or 75.4%, is mainly due to the COVID-19 pandemic travel restrictions.

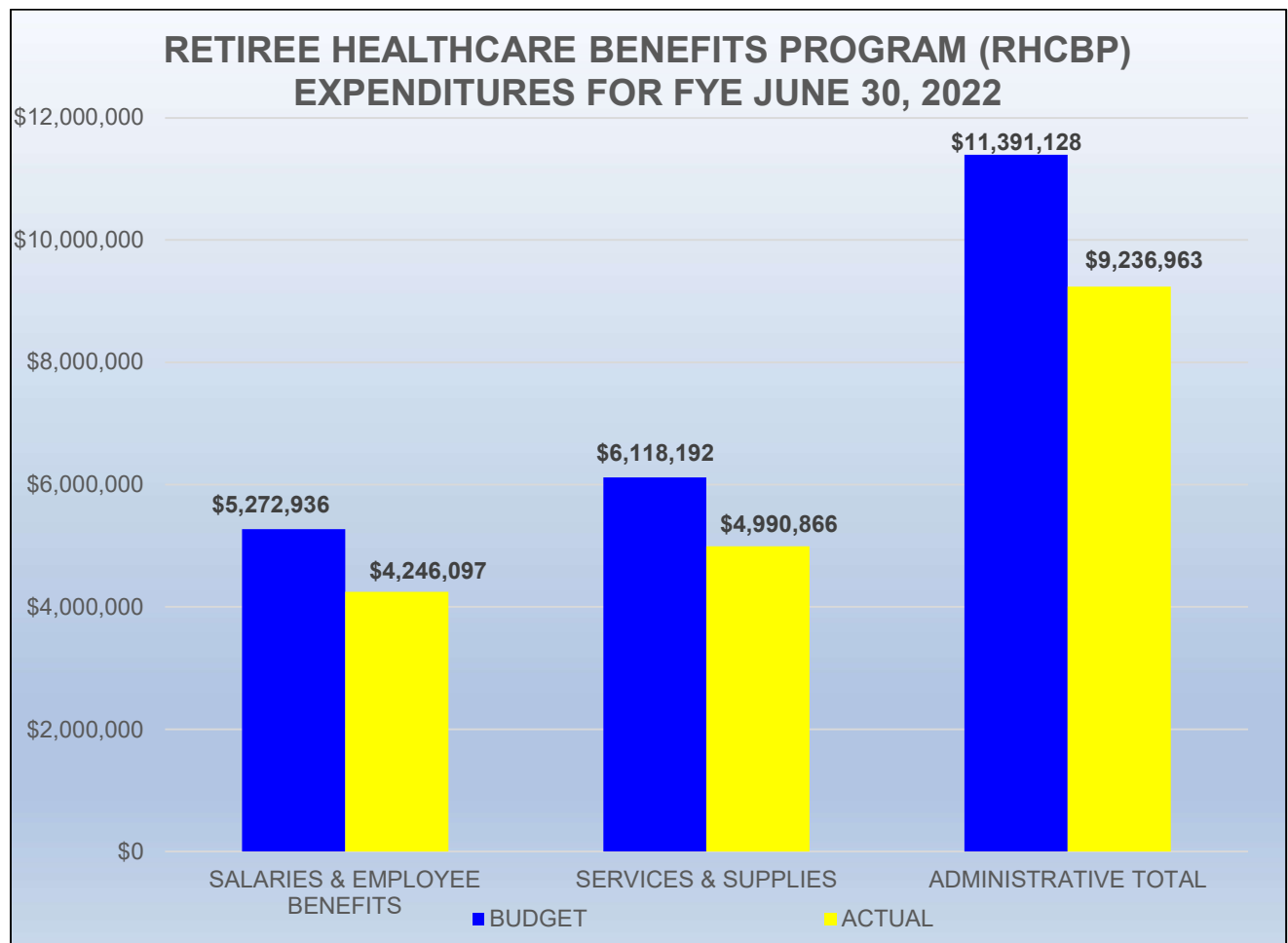
For additional details on LACERA expenses see Appendix A.

## **SECTION II - RETIREE HEALTHCARE BENEFITS BUDGET SUMMARY**

Following is a summary of the Retiree Healthcare Benefits Program Final Budget Control Report for Fiscal Year 2021-2022 for the period ending June 30, 2022. The total program administrative expenses were \$9,236,963, or 81.1%, of the \$11,391,128 administrative approved budget. This represents an under expenditure of \$2,154,165, or 18.9%, of the administrative approved budget.

<b>RETIREE HEALTHCARE BENEFITS PROGRAM (RHCBP) SUMMARY OF ADMINISTRATIVE EXPENDITURES AS OF JUNE 30, 2022</b>					
<b>RHCBP</b>	<b>BUDGET</b>	<b>ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>	<b>% UTILIZED</b>	<b>% OVER/ (UNUTILIZED)</b>
SALARIES & EMPLOYEE BENEFITS	\$5,272,936	\$4,246,097	(\$1,026,839)	80.5%	-19.5%
SERVICES & SUPPLIES	\$6,118,192	\$4,990,866	(\$1,127,326)	81.6%	-18.4%
<b>ADMINISTRATIVE TOTAL</b>	<b>\$11,391,128</b>	<b>\$9,236,963</b>	<b>(\$2,154,165)</b>	<b>81.1%</b>	<b>-18.9%</b>

\*All amounts rounded to the nearest dollar.



### **Salaries & Employee Benefits (S&EB):**

Salaries & Employee Benefits costs were \$4,246,097, or 80.5%, of the \$5,272,936 administrative approved budget. This represents an under expenditure of \$1,026,839, or 19.5%, of the administrative approved budget. This variance is primarily attributed to lower than anticipated costs for permanent salaries, variable benefits, and agency temporary staff. The result of recruitment delays in the hiring process, hiring plan changes, unplanned vacancies, and limited candidate pool reduced the S&EB costs resulting RHCBP to be under budget.

### **Services & Supplies (S&S):**

Services & Supplies costs were \$4,990,866, or 81.6%, of the \$6,118,192 administrative approved budget. This represents an expenditure of \$1,127,326, or 18.4%, of the \$6,118,192 approved budget and is primarily due to the following factors:

- Operational Costs of \$3,568,648 results in an under expenditure of \$964,144, or 22.2%, of the approved budget of \$4,532,792 is mainly due to lower than anticipated costs for Departmental Overhead. The overhead amount represents costs incurred by other LACERA Divisions to support the RHC mission. For FY 2021-2022, the RHC Departmental Overhead cost was lower than anticipated due to LACERA's overall under-expenditures in both S&EB and S&S.
- Professional & Specialized Services of \$1,119,868 results in an under expenditure of \$89,932, or 7.4%, of the approved budget of \$1,209,800 is mainly due to lower than anticipated cost for OPEB Valuation. OPEB Valuation costs of \$269,677 results in an under expenditure of \$68,623, or 20.3%, under the approved budget of \$338,300 is due to FY 2021-2022 late bills and expenses were not received and captured prior to the accrual deadline, which resulted in under expenditures and expenses booked as an FY 2022-2023 expense.
- Postage expenditure of \$266,316 results in an under expenditure of \$33,684, or 11.2%, of the approved budget of \$300,000 is mainly due to lower than anticipated cost for Special Retiree Mailings. Due to COVID-19 restrictions on public gatherings, face-to-face retiree wellness workshops were not held which resulted in invitations not mailed out.

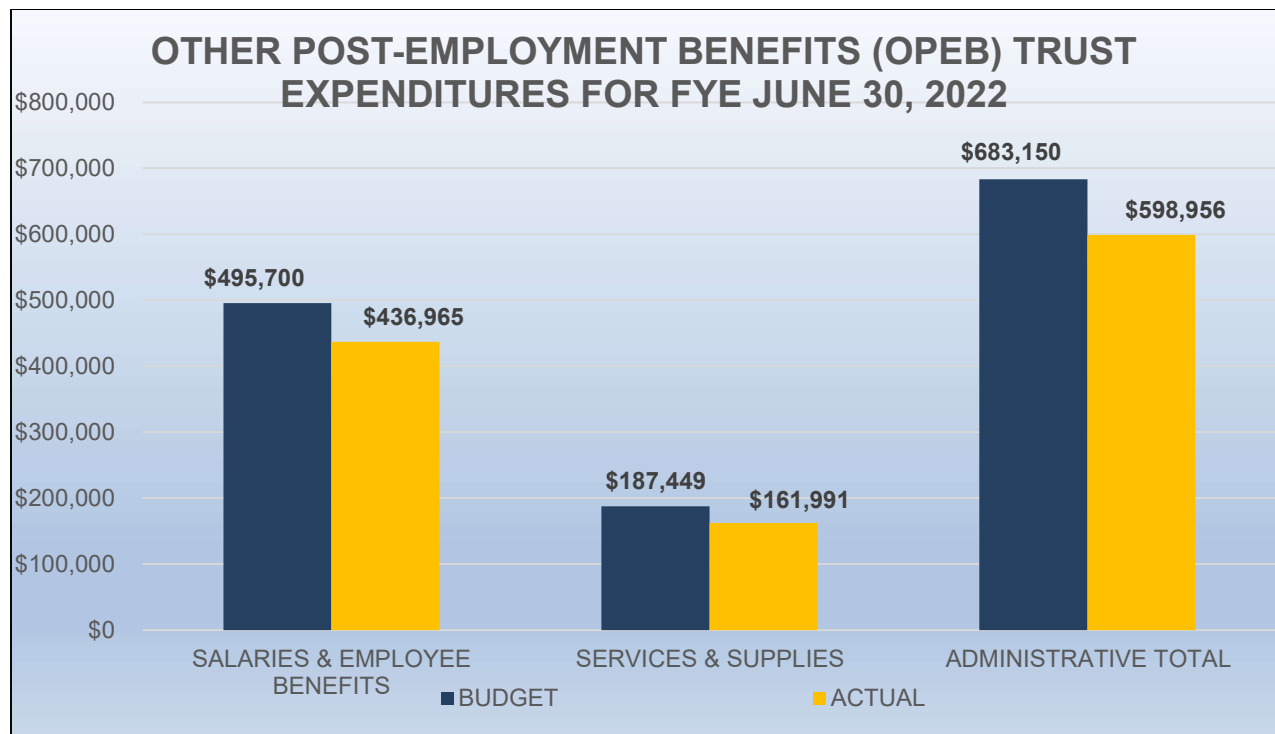
For additional details on RHCBP expenses see Appendix B.

### **SECTION III - OTHER POST-EMPLOYMENT BENEFITS BUDGET SUMMARY**

Following is a summary of the Final Budget Control Report for Other Post-Employment Benefits (OPEB) Trust for the period ending June 30, 2022. The total OPEB Trust administrative expenses were \$598,956, or 87.7%, of the \$683,150 administrative approved budget. This represents budgetary savings of \$84,194, or 12.3%, of the administrative approved budget.

OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRUST SUMMARY OF ADMINISTRATIVE EXPENDITURES AS OF JUNE 30, 2022					
OPEB TRUST	BUDGET	ACTUAL	OVER/(UNDER) BUDGET	% UTILIZED	% OVER/ (UNUTILIZED)
SALARIES & EMPLOYEE BENEFITS	\$495,700	\$436,965	(\$58,735)	88.2%	-11.8%
SERVICES & SUPPLIES	\$187,449	\$161,991	(\$25,458)	86.4%	-13.6%
<b>ADMINISTRATIVE TOTAL</b>	<b>\$683,150</b>	<b>\$598,956</b>	<b>(\$84,194)</b>	<b>87.7%</b>	<b>-12.3%</b>

\*All amounts rounded to the nearest dollar.



This budgetary savings is mainly attributed to lower than anticipated costs for salaries and employee benefits due to vacancies and OPEB Trust outside legal counsel fees that were not required during the period.

For additional details on OPEB Trust expenses see Appendix C.

# APPENDIX A

**FISCAL YEAR 2021-2022**  
**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**  
**(LACERA)**  
**BUDGET CONTROL REPORT**  
**BASED ON EXPENDITURES AS OF**  
**JUNE 30, 2022**

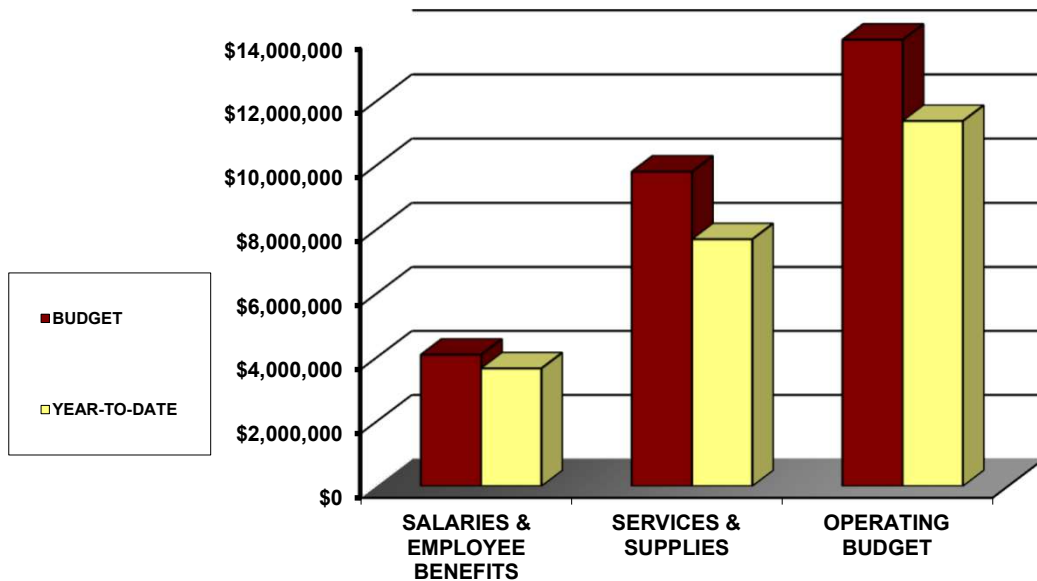


## ADMINISTRATIVE SERVICES

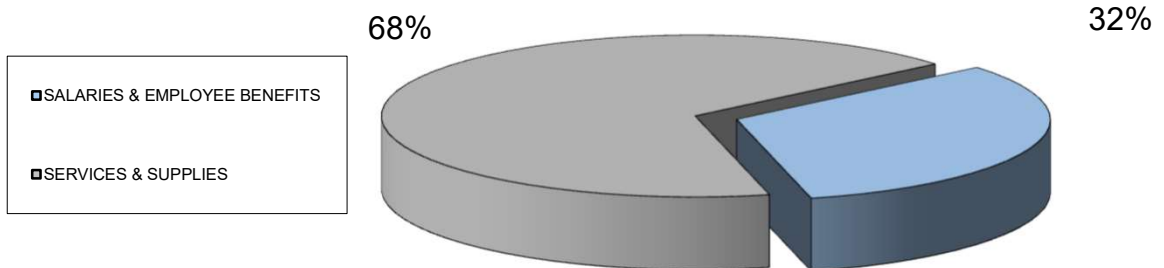
### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$4,109,837	\$3,682,280	(\$427,557)
SERVICES & SUPPLIES	\$9,822,300	\$7,716,827	(\$2,105,473)
<b>OPERATING BUDGET</b>	<b>\$13,932,137</b>	<b>\$11,399,107</b>	<b>(\$2,533,030)</b>

Budgeted Positions      37  
Filled Positions          26



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**ADMINISTRATIVE SERVICES DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$2,106,280	\$1,852,612	(\$253,668)
AGENCY TEMPORARY	587,000	456,645	(130,355)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	50,000	5,833	(44,167)
BILINGUAL BONUS	0	0	0
PAY IN LIEU OF SALARY REDUCTION	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	6,900	3,132	(3,768)
SICKLEAVE BUYBACK	7,300	3,729	(3,571)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$2,757,480</b>	<b>\$2,321,951</b>	<b>(\$435,529)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	442,123	415,240	(26,883)
FICA CONTRIBUTION	30,208	28,869	(1,339)
COUNTY SUBSIDY - INSURANCE	28,069	50,699	22,630
OPTIONS PLAN	499,198	421,467	(77,731)
LIFE INSURANCE	1,442	1,191	(251)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	16,178	19,930	3,752
THRIFT PLAN / HORIZONS	58,795	53,659	(5,136)
SAVINGS PLAN	13,461	19,094	5,633
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	42,157	58,534	16,377
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,131,631</b>	<b>\$1,068,682</b>	<b>(\$62,949)</b>
<b>OPEB CONTRIBUTION</b>	<b>72,676</b>	<b>69,701</b>	<b>(2,975)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>72,676</b>	<b>72,676</b>
<b>OTHER BENEFITS</b>	<b>148,050</b>	<b>149,270</b>	<b>1,220</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,352,357</b>	<b>\$1,360,329</b>	<b>\$7,972</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$4,109,837</b>	<b>\$3,682,280</b>	<b>(\$427,557)</b>

**FISCAL YEAR 2021-2022**

**ADMINISTRATIVE SERVICES DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$10,000	\$375	(\$9,625)
9103	GAS	1,000	852	(148)
9105	LICENSE FEES	500	242	(258)
9106	SPECIAL ORDER - AUTOMOBILE	100,000	68,667	(31,333)
	TOTAL	111,500	70,136	(41,364)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	1,100	97	(1,003)
9182	TRAVEL	6,900	0	(6,900)
	TOTAL	8,000	97	(7,903)
	<b>POSTAGE</b>			
9201	POSTAGE METER	300,000	300,000	0
9204	CALLER BOX SERVICE ANNUAL FEE	1,400	1,320	(80)
	TOTAL	301,400	301,320	(80)
	<b>STATIONERY AND FORMS</b>			
9264	MISC STATIONERY & FORMS	3,800	0	(3,800)
	TOTAL	3,800	0	(3,800)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	26,000	8,356	(17,644)
9305	SAFETY AND HEALTH SUPPLIES	28,500	27,503	(997)
9306	COMPUTER SUPPLIES	75,000	47,417	(27,583)
9307	STANDARD STOCK	125,000	99,912	(25,088)
9337	OFFICE FURNISHINGS	33,000	42,109	9,109
9352	ERGONOMIC ITEMS	1,000	438	(562)
	TOTAL	288,500	225,733	(62,767)
	<b>INSURANCE</b>			
9381	FIDUCIARY INSURANCE	326,200	323,898	(2,302)
9382	UMBRELLA POLICY	26,400	23,212	(3,188)
9384	EARTHQUAKE/FLOOD	68,000	67,204	(796)
9386	CRIME INSURANCE POLICY	19,500	23,630	4,130
9387	BUSINESS PACKAGE	61,000	58,259	(2,741)
9388	EMPLOYMENT PRACTICE LIABILITY INSURANCE	119,000	118,154	(846)
9390	CYBER LIABILITY INSURANCE	485,000	484,139	(861)
9391	TERRORISM INSURANCE	9,100	7,661	(1,439)
	TOTAL	1,114,200	1,106,157	(8,043)

**FISCAL YEAR 2021-2022**

**ADMINISTRATIVE SERVICES DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

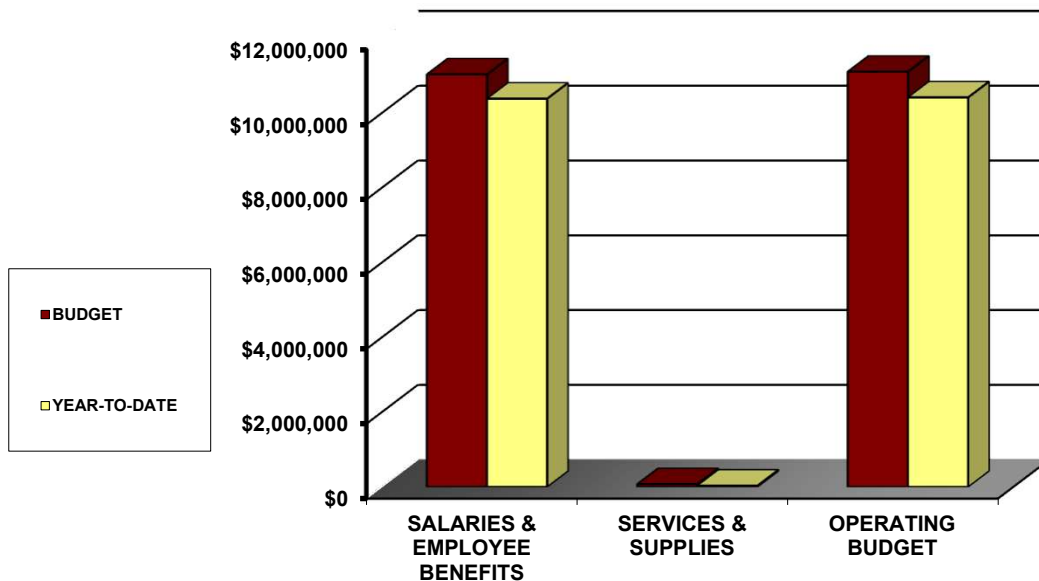
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>EQUIPMENT MAINTENANCE</b>			
9401	FAX MACHINES	\$1,000	\$0	(\$1,000)
9423	TIME CLOCK MAINTENANCE	300	0	(300)
9426	SECURITY SYSTEM (PANIC BUTTONS)	2,000	1,125	(875)
	TOTAL	3,300	1,125	(2,175)
	<b>EQUIPMENT RENTS AND LEASES</b>			
9452	MAILING EQUIPMENT	32,000	25,786	(6,214)
9463	PRODUCTION COPIERS - LEASES	245,000	171,240	(73,760)
	TOTAL	277,000	197,025	(79,975)
	<b>BUILDING COSTS</b>			
9476	BUILDING OPERATIONAL COSTS	5,877,400	5,413,907	(463,493)
9477	OVERTIME HVAC/LIGHTING	120,000	82,441	(37,559)
9480	FACILITIES MAINTENANCE	175,000	44,092	(130,908)
9481	RENOVATION PROJECTS	1,300,000	64,420	(1,235,580)
	TOTAL	7,472,400	5,604,859	(1,867,541)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9552	BUSINESS CONTINUITY SERVICES (IBM)	30,000	15,000	(15,000)
9553	ARCHIVE/ OFF-SITE STORAGE	55,000	78,484	23,484
9677	SHREDDING SERVICE	25,000	22,539	(2,461)
9685	COURIER SERVICE	25,000	15,660	(9,340)
9686	FURNITURE OFF-SITE STORAGE	18,000	19,934	1,934
9688	UNIVERSAL MAIL DELIVERY SERVICE	8,000	7,387	(613)
9689	NEXT DAY MAIL DELIVERY SERVICE	60,000	35,143	(24,857)
	TOTAL	221,000	194,148	(26,852)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	1,000	1,758	758
9962	REGISTRATION FEES	6,000	4,094	(1,906)
9963	EDUCATIONAL MATERIALS	700	99	(601)
	TOTAL	7,700	5,951	(1,749)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	10,000	10,275	275
9990	RIDESHARE	3,500	0	(3,500)
	TOTAL	13,500	10,275	(3,225)
	<b>GRAND TOTAL</b>	<b>\$9,822,300</b>	<b>\$7,716,827</b>	<b>(\$2,105,473)</b>

## BENEFITS DIVISION

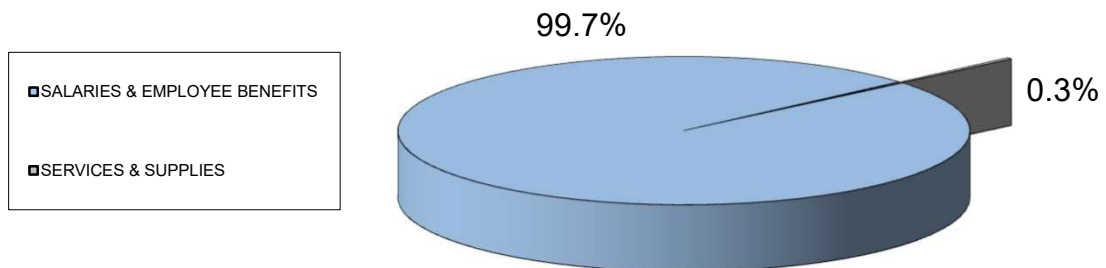
### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$11,031,844	\$10,383,285	(\$648,559)
SERVICES & SUPPLIES	\$72,000	\$34,953	(\$37,047)
<b>OPERATING BUDGET</b>	<b>\$11,103,844</b>	<b>\$10,418,238</b>	<b>(\$685,606)</b>

Budgeted Positions      78  
Filled Positions         76



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**BENEFITS DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$6,154,980	\$5,910,027	(\$244,953)
AGENCY TEMPORARY	71,900	69,194	(2,706)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	398,000	451,675	53,675
BILINGUAL BONUS	2,400	3,250	850
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	16,300	0	(16,300)
SICKLEAVE BUYBACK	12,000	14,534	2,534
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$6,655,580</b>	<b>\$6,448,680</b>	<b>(\$206,900)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,511,654	1,307,881	(203,773)
FICA CONTRIBUTION	110,565	98,728	(11,837)
COUNTY SUBSIDY - INSURANCE	175,687	105,871	(69,816)
OPTIONS PLAN	1,410,717	1,194,335	(216,382)
LIFE INSURANCE	6,929	7,086	157
HEALTH INSURANCE TEMPS	98,813	61,866	(36,947)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	234,466	191,707	(42,759)
SAVINGS PLAN	33,650	31,583	(2,067)
PENSION SAVINGS PLAN	14,954	6,360	(8,594)
MEGAFLEX	220,659	145,329	(75,330)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$3,818,095</b>	<b>\$3,150,744</b>	<b>(\$667,351)</b>
<b>OPEB CONTRIBUTION</b>	<b>183,782</b>	<b>220,373</b>	<b>36,591</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>183,782</b>	<b>183,782</b>
<b>OTHER BENEFITS</b>	<b>374,387</b>	<b>379,705</b>	<b>5,318</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$4,376,263</b>	<b>\$3,934,604</b>	<b>(\$441,659)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$11,031,844</b>	<b>\$10,383,285</b>	<b>(\$648,559)</b>

**FISCAL YEAR 2021-2022**

**BENEFITS DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

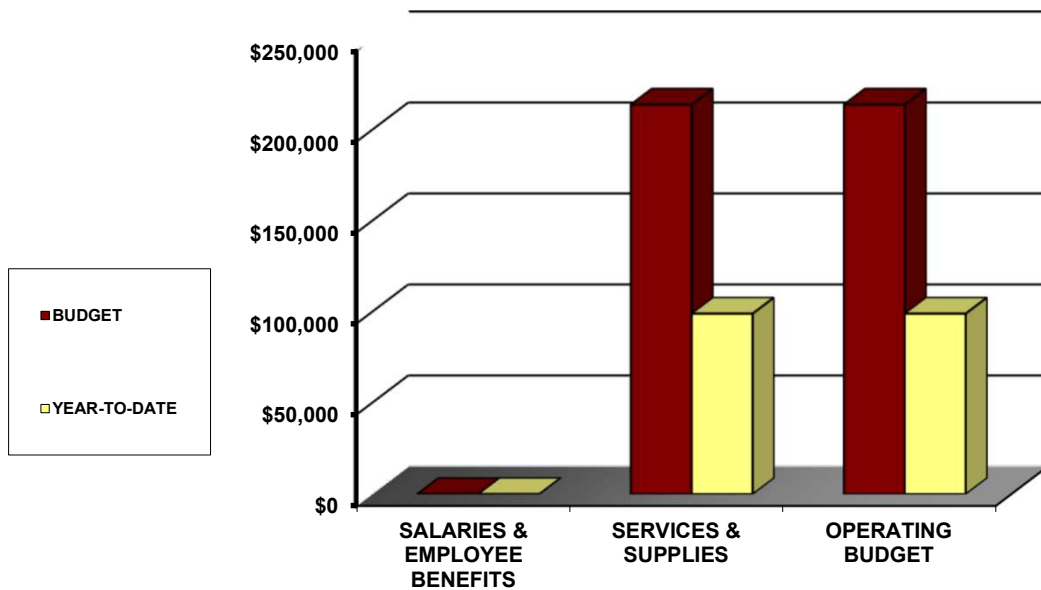
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$1,300	\$405	(\$895)
9182	TRAVEL	5,200	2,159	(3,041)
	TOTAL	6,500	2,564	(3,936)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	3,400	77	(3,323)
	TOTAL	3,400	77	(3,323)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9516	RECORD SEARCHES	6,000	87	(5,913)
9572	PENSION BENEFIT INFORMATION	15,000	10,014	(4,986)
9674	MEMBER VERIFICATION	25,000	18,776	(6,224)
	TOTAL	46,000	28,877	(17,123)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	2,400	390	(2,010)
9962	REGISTRATION FEES	11,600	3,045	(8,555)
9963	EDUCATIONAL MATERIALS	600	0	(600)
	TOTAL	14,600	3,435	(11,165)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	1,500	0	(1,500)
	TOTAL	1,500	0	(1,500)
	<b>GRAND TOTAL</b>	<b>\$72,000</b>	<b>\$34,953</b>	<b>(\$37,047)</b>

# BOARD OF RETIREMENT

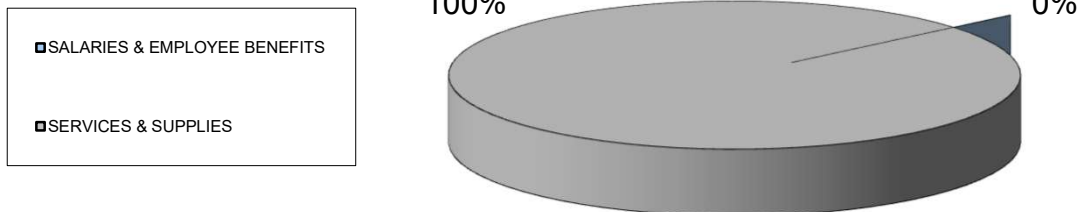
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$0	\$0	\$0
SERVICES & SUPPLIES	\$214,000	\$99,166	(\$114,834)
<b>OPERATING BUDGET</b>	<b>\$214,000</b>	<b>\$99,166</b>	<b>(\$114,834)</b>

Board of Retirement 12



### Total Expenditures by Category





**FISCAL YEAR 2021-2022**

**BOARD OF RETIREMENT**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

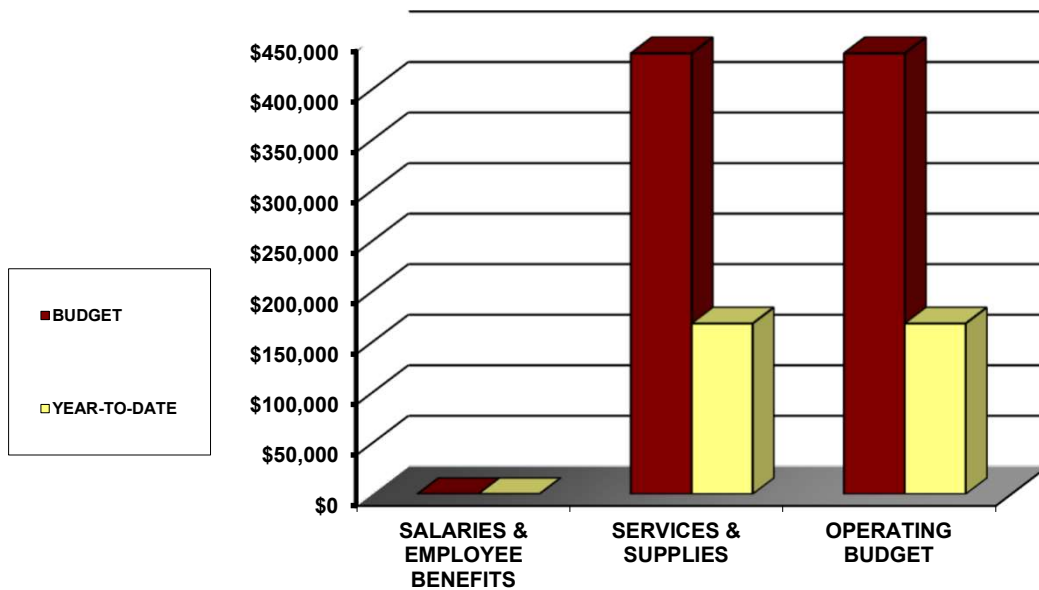
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>TRANSPORTATION AND TRAVEL</b>				
9181	TRANSPORTATION	\$10,000	\$3,045	(\$6,955)
9182	TRAVEL	75,000	32,752	(42,248)
	TOTAL	85,000	35,797	(49,203)
<b>EDUCATIONAL EXPENSES</b>				
9961	MEMBERSHIPS	44,000	36,770	(7,230)
9962	REGISTRATION FEES	30,000	6,600	(23,400)
9963	EDUCATIONAL MATERIALS	8,000	11,399	3,399
	TOTAL	82,000	54,769	(27,231)
<b>MISCELLANEOUS</b>				
9983	OFF-SITE BOARD MEETING EXPENSE	35,000	8,600	(26,400)
9984	FOOD/BEVERAGES	12,000	0	(12,000)
	TOTAL	47,000	8,600	(38,400)
<b>GRAND TOTAL</b>		<b>\$214,000</b>	<b>\$99,166</b>	<b>(\$114,834)</b>

# BOARD OF INVESTMENTS

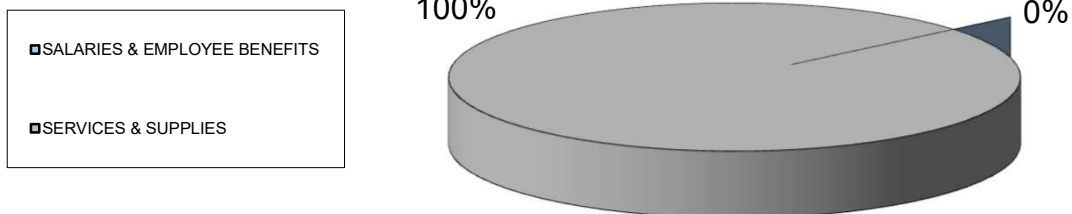
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$0	\$0	\$0
SERVICES & SUPPLIES	\$436,000	\$168,772	(\$267,228)
<b>OPERATING BUDGET</b>	<b>\$436,000</b>	<b>\$168,772</b>	<b>(\$267,228)</b>

Board of Investment 10



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**BOARD OF INVESTMENTS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

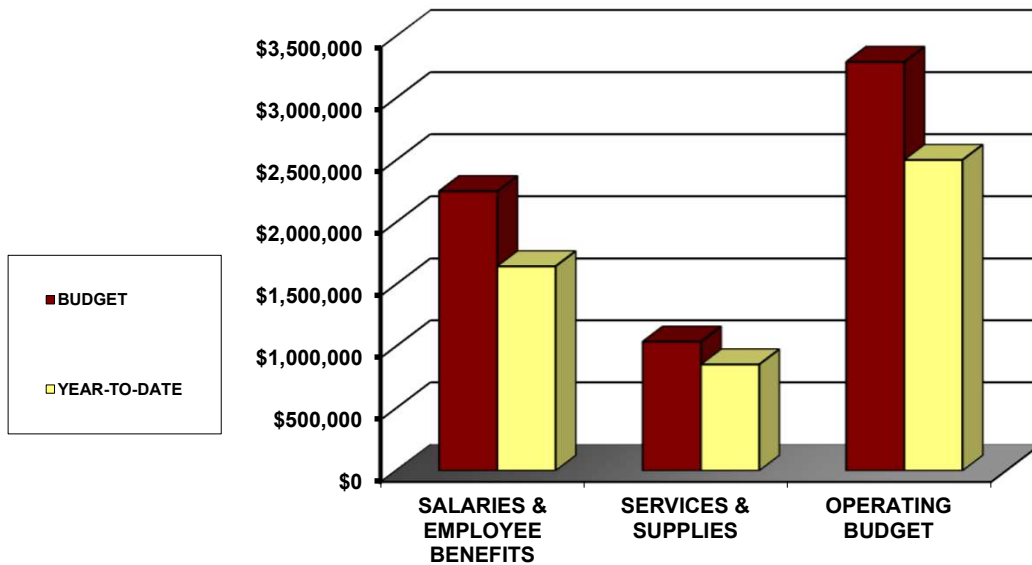
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$20,000	\$4,404	(\$15,596)
9182	TRAVEL	200,000	55,502	(144,498)
	TOTAL	220,000	59,906	(160,094)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	85,000	61,708	(23,292)
9962	REGISTRATION FEES	60,000	41,000	(19,000)
9963	EDUCATIONAL MATERIALS	5,000	2,158	(2,842)
	TOTAL	150,000	104,866	(45,134)
	<b>MISCELLANEOUS</b>			
9983	OFF-SITE BOARD MEETING EXPENSE	60,000	4,000	(56,000)
9984	FOOD/BEVERAGES	6,000	0	(6,000)
	TOTAL	66,000	4,000	(62,000)
	<b>GRAND TOTAL</b>	<b>\$436,000</b>	<b>\$168,772</b>	<b>(\$267,228)</b>

# COMMUNICATIONS

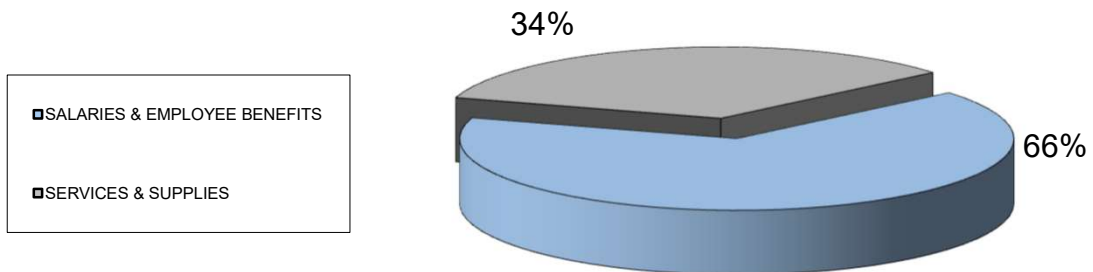
## BUDGET CONTROL REPORT - FISCAL YEAR 2020-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$2,253,791	\$1,649,138	(\$604,653)
SERVICES & SUPPLIES	\$1,041,500	\$856,878	(\$184,622)
<b>OPERATING BUDGET</b>	<b>\$3,295,291</b>	<b>\$2,506,016</b>	<b>(\$789,275)</b>

Budgeted Positions 14  
Filled Positions 9



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**COMMUNICATIONS**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,290,318	\$966,240	(\$324,078)
AGENCY TEMPORARY	79,600	1,213	(78,387)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	4,100	3,403	(697)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,000	0	(1,000)
SICKLEAVE BUYBACK	3,500	866	(2,634)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,378,518</b>	<b>\$971,722</b>	<b>(\$406,796)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	273,130	215,612	(57,518)
FICA CONTRIBUTION	20,337	15,095	(5,242)
COUNTY SUBSIDY - INSURANCE	100,031	48,382	(51,649)
OPTIONS PLAN	194,905	134,400	(60,505)
LIFE INSURANCE	126	187	61
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	40,215	21,176	(19,039)
SAVINGS PLAN	20,557	14,435	(6,122)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	111,000	75,490	(35,510)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$760,302</b>	<b>\$524,778</b>	<b>(\$235,524)</b>
<b>OPEB CONTRIBUTION</b>	<b>37,855</b>	<b>36,763</b>	<b>(1,092)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>37,855</b>	<b>37,855</b>
<b>OTHER BENEFITS</b>	<b>77,116</b>	<b>78,020</b>	<b>904</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$875,272</b>	<b>\$677,416</b>	<b>(\$197,856)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,253,791</b>	<b>\$1,649,138</b>	<b>(\$604,653)</b>

**FISCAL YEAR 2021-2022**

**COMMUNICATIONS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$800	\$0	(\$800)
9182	TRAVEL	6,700	0	(6,700)
	<b>TOTAL</b>	<b>7,500</b>	<b>0</b>	<b>(7,500)</b>
	<b>POSTAGE</b>			
9205	NEWSLETTER POSTAGE	180,000	179,921	(79)
9207	ANNUAL BENEFITS STATEMENT POSTAGE	95,000	67,981	(27,019)
9210	MISCELLANEOUS MAILINGS	25,000	2,281	(22,719)
	<b>TOTAL</b>	<b>300,000</b>	<b>250,183</b>	<b>(49,817)</b>
	<b>STATIONERY AND FORMS</b>			
9233	DISABILITY RETIREMENT APPEAL	5,000	0	(5,000)
9235	PLANS BROCHURES	80,000	25,416	(54,584)
9237	SURVIVOR - BROCHURES	2,500	1,003	(1,497)
9239	WITHDRAWAL/RECIPROCITY - BROCHURES	6,500	6,898	398
9240	ANNUAL REPORT	55,000	48,646	(6,354)
9242	ANNUAL BENEFITS STATEMENT	110,000	82,117	(27,883)
9246	FORMS	25,000	20,175	(4,825)
9249	LACERA CALENDARS	8,000	9,740	1,740
9253	NEW MEMBER WELCOME PACKAGE	10,000	0	(10,000)
9255	PRE-RET GUIDE	20,000	10,674	(9,326)
9256	POSTSCRIPT PRINTING	80,000	54,025	(25,975)
9259	RETIREEES - INSERTS	1,500	6,998	5,498
9261	SPOTLIGHT PRINTING	68,000	104,990	36,990
9262	SURVEY	1,500	1,729	229
9263	UNANTICIPATED PROJECTS	35,000	45,728	10,728
9265	SPECIALIZED MAILINGS	15,000	19,919	4,919
9266	DIRECT DEPOSIT BROCHURES	2,500	3,110	610
9267	Q & A BROCHURES	7,000	13,681	6,681
9268	TRANSFER BROCHURES	2,000	0	(2,000)
9269	DISABILITY RETIREMENT PACKETS	12,000	24,601	12,601
9274	STATIONERY	35,000	73,716	38,716
9280	ANNUAL BENEFIT STATEMENT PDF/CD'S	30,000	10,803	(19,197)
9281	ESTIMATE PACKAGE	2,000	3,153	1,153
9282	NEW RETIREE PACKAGE	3,000	0	(3,000)
9283	POWER OF ATTORNEY	15,000	0	(15,000)
9285	RETIREMENT UNIVERSITY	5,000	0	(5,000)
9286	COMMUNITY PROPERTY GUIDE	5,000	0	(5,000)
	<b>TOTAL</b>	<b>641,500</b>	<b>567,123</b>	<b>(74,378)</b>

**FISCAL YEAR 2021-2022**

**COMMUNICATIONS**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

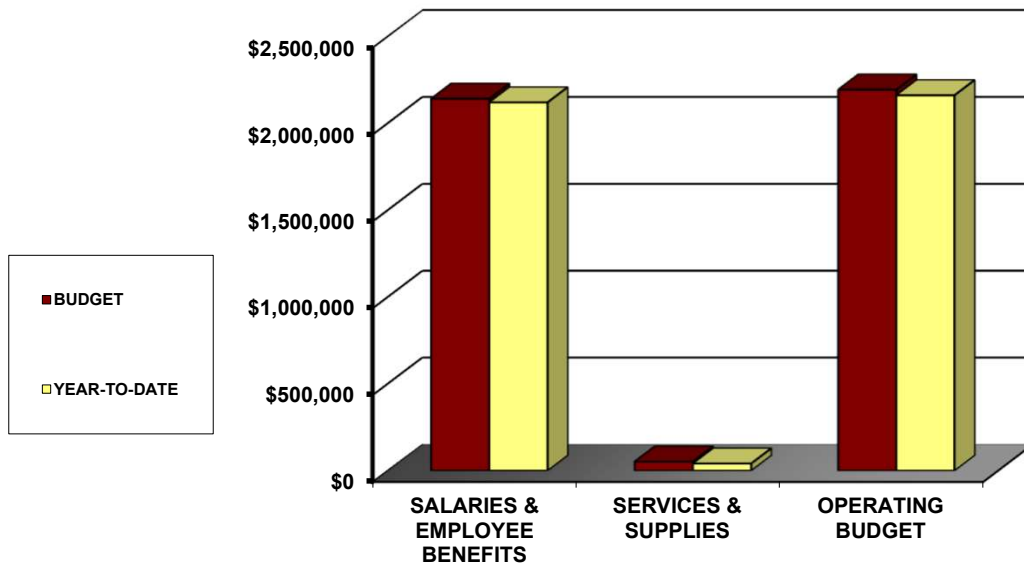
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	\$5,000	\$5,393	\$393
	TOTAL	5,000	5,393	393
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9627	NEWSLETTER MAILINGS	30,000	28,123	(1,877)
9628	HR CONFERENCE/FORUM	2,000	2,116	116
9719	CAMPAIGNS	10,000	0	(10,000)
9720	REBRANDING	20,000	0	(20,000)
	TOTAL	62,000	30,240	(31,760)
	<b>COMPUTER SERVICES &amp; SUPPORT</b>			
9837	MACINTOSH CONSULTING & SUPPORT	3,000	600	(2,400)
9840	MACINTOSH SOFTWARE PACKAGE	1,500	0	(1,500)
9855	MACINTOSH EQUIPMENT	10,000	2,400	(7,600)
	TOTAL	14,500	3,000	(11,500)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	400	0	(400)
9962	REGISTRATION FEES	6,000	328	(5,672)
9963	EDUCATIONAL MATERIALS	4,000	612	(3,388)
	TOTAL	10,400	940	(9,460)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	600	0	(600)
	TOTAL	600	0	(600)
	<b>GRAND TOTAL</b>	<b>\$1,041,500</b>	<b>\$856,878</b>	<b>(\$184,622)</b>

# DISABILITY LITIGATION

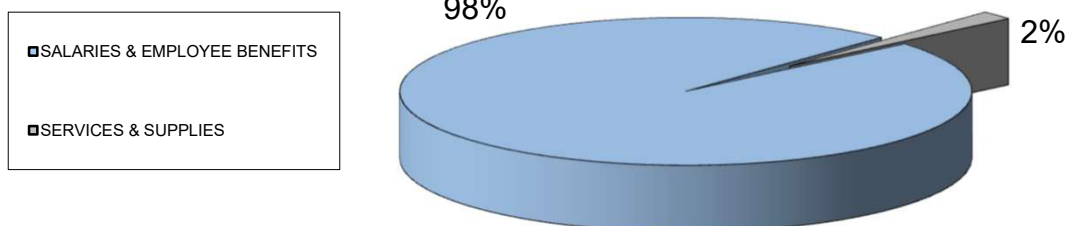
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$2,141,130	\$2,120,434	(\$20,696)
SERVICES & SUPPLIES	\$52,500	\$41,096	(\$11,404)
<b>OPERATING BUDGET</b>	<b>\$2,193,630</b>	<b>\$2,161,531</b>	<b>(\$32,099)</b>

Budgeted Positions 7  
Filled Positions 7



### Total Expenditures by Category





**FISCAL YEAR 2021-2022**

**DISABILITY LITIGATION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,294,960	\$1,274,122	(\$20,838)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	0	0	0
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	900	0	(900)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,295,860</b>	<b>\$1,274,122</b>	<b>(\$21,738)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	284,511	272,288	(12,223)
FICA CONTRIBUTION	21,408	19,492	(1,916)
COUNTY SUBSIDY - INSURANCE	89,703	80,318	(9,385)
OPTIONS PLAN	0	(357)	(357)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	53,535	43,417	(10,118)
SAVINGS PLAN	63,497	55,161	(8,336)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	217,232	215,429	(1,803)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$729,886</b>	<b>\$685,748</b>	<b>(\$44,138)</b>
<b>OPEB CONTRIBUTION</b>	<b>37,991</b>	<b>44,717</b>	<b>6,726</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>37,991</b>	<b>37,991</b>
<b>OTHER BENEFITS</b>	<b>77,393</b>	<b>77,856</b>	<b>463</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$845,270</b>	<b>\$846,313</b>	<b>\$1,043</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,141,130</b>	<b>\$2,120,434</b>	<b>(\$20,696)</b>

**FISCAL YEAR 2021-2022**

**DISABILITY LITIGATION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

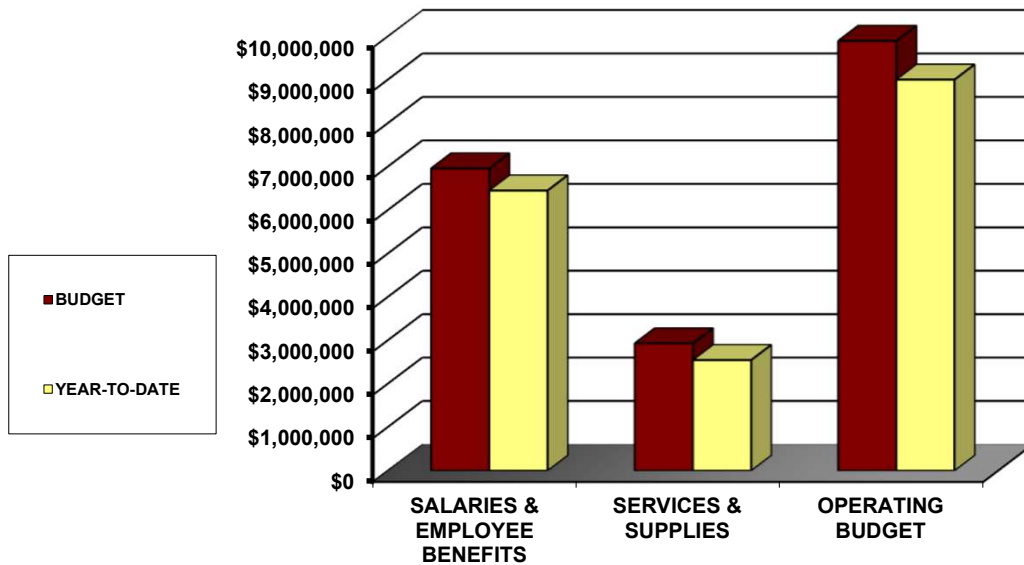
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$1,300	\$570	(\$730)
9103	GAS	1,400	928	(472)
9105	LICENSE FEES	300	0	(300)
	TOTAL	3,000	1,498	(1,502)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	1,300	177	(1,123)
9182	TRAVEL	5,500	4,200	(1,300)
	TOTAL	6,800	4,378	(2,422)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	1,500	1,652	152
	TOTAL	1,500	1,652	152
	<b>LEGAL FEES AND SERVICES</b>			
9772	OUTSIDE LEGAL COUNSEL	7,000	46	(6,954)
9777	LITIGATION SUPPORT	500	0	(500)
	TOTAL	7,500	46	(7,454)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	3,000	2,812	(189)
9962	REGISTRATION FEES	5,000	3,740	(1,260)
9963	EDUCATIONAL MATERIALS	25,000	26,972	1,972
	TOTAL	33,000	33,523	523
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	700	0	(700)
	TOTAL	700	0	(700)
	<b>GRAND TOTAL</b>	<b>\$52,500</b>	<b>\$41,096</b>	<b>(\$11,404)</b>

# DISABILITY RETIREMENT

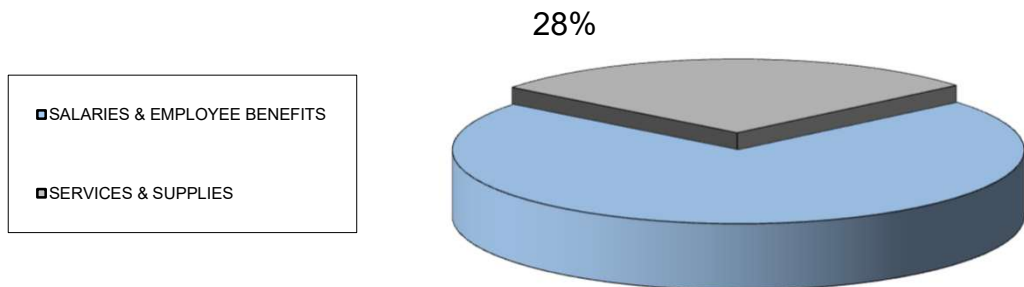
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$6,962,398	\$6,455,319	(\$507,079)
SERVICES & SUPPLIES	\$2,935,000	\$2,550,137	(\$384,863)
<b>OPERATING BUDGET</b>	<b>\$9,897,398</b>	<b>\$9,005,456</b>	<b>(\$891,942)</b>

Budgeted Positions 41  
Filled Positions 39



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**DISABILITY RETIREMENT**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$3,971,485	\$3,692,430	(\$279,055)
AGENCY TEMPORARY	143,000	43,941	(99,059)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	16,100	43,275	27,175
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	4,500	0	(4,500)
SICKLEAVE BUYBACK	6,000	3,429	(2,571)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$4,141,085</b>	<b>\$3,783,076</b>	<b>(\$358,009)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	975,679	868,638	(107,041)
FICA CONTRIBUTION	64,826	59,789	(5,037)
COUNTY SUBSIDY - INSURANCE	368,275	320,420	(47,855)
OPTIONS PLAN	296,468	230,801	(65,667)
LIFE INSURANCE	1,184	910	(274)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	121,173	101,517	(19,656)
SAVINGS PLAN	93,371	81,862	(11,509)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	546,466	503,944	(42,522)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$2,467,442</b>	<b>\$2,167,881</b>	<b>(\$299,562)</b>
<b>OPEB CONTRIBUTION</b>	<b>116,515</b>	<b>147,811</b>	<b>31,296</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>116,515</b>	<b>116,515</b>
<b>OTHER BENEFITS</b>	<b>237,356</b>	<b>240,036</b>	<b>2,680</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$2,821,313</b>	<b>\$2,672,243</b>	<b>(\$149,070)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$6,962,398</b>	<b>\$6,455,319</b>	<b>(\$507,079)</b>

**FISCAL YEAR 2021-2022**

**DISABILITY RETIREMENT**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

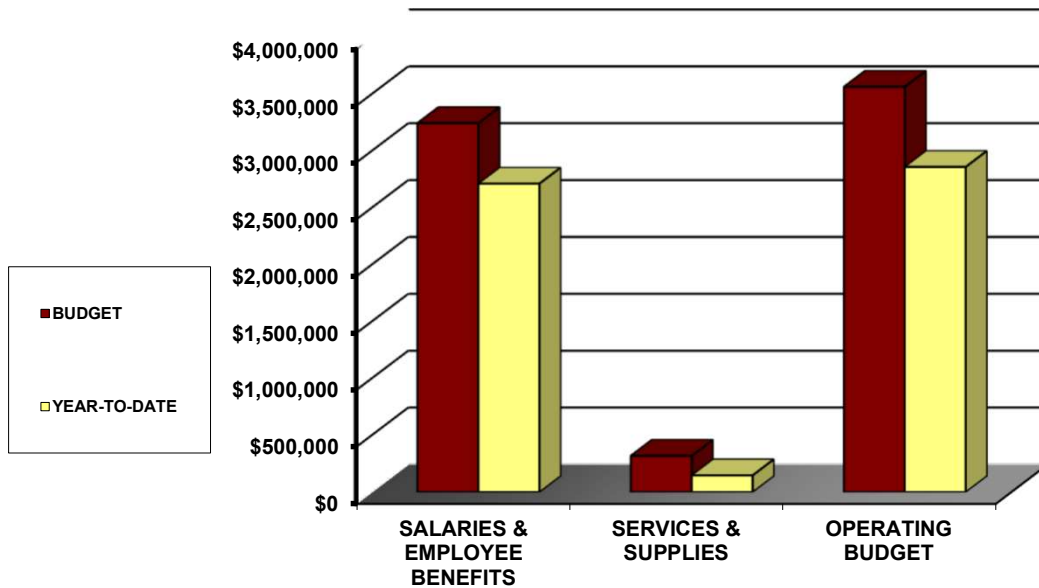
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$1,500	\$334	(\$1,166)
9182	TRAVEL	6,500	1,637	(4,863)
	TOTAL	8,000	1,970	(6,030)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	311	(5,689)
	TOTAL	6,000	311	(5,689)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9673	PHOTOCOPIES OF DOCUMENTS	215,000	254,105	39,105
9695	JOB ANALYST	9,500	17,230	7,730
	TOTAL	224,500	271,335	46,835
	<b>LEGAL FEES AND SERVICES</b>			
9772	OUTSIDE LEGAL COUNSEL	20,000	19,219	(781)
	TOTAL	20,000	19,219	(781)
	<b>DISABILITY FEES AND SERVICES</b>			
9802	HEARING OFFICER FEES	150,000	111,846	(38,154)
9803	MEDICAL FEES	2,400,000	2,104,011	(295,989)
9804	COURT REPORTER	25,000	24,273	(727)
9805	INVESTIGATIVE SERVICES	25,000	4,288	(20,712)
9806	DATABASE SEARCHES	500	192	(308)
9807	MEDICAL ADVISOR	65,000	8,327	(56,673)
	TOTAL	2,665,500	2,252,937	(412,563)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	200	0	(200)
9962	REGISTRATION FEES	10,000	4,264	(5,736)
9963	EDUCATIONAL MATERIALS	500	100	(400)
	TOTAL	10,700	4,364	(6,336)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	300	0	(300)
	TOTAL	300	0	(300)
	<b>GRAND TOTAL</b>	<b>\$2,935,000</b>	<b>\$2,550,137</b>	<b>(\$384,863)</b>

# EXECUTIVE OFFICE

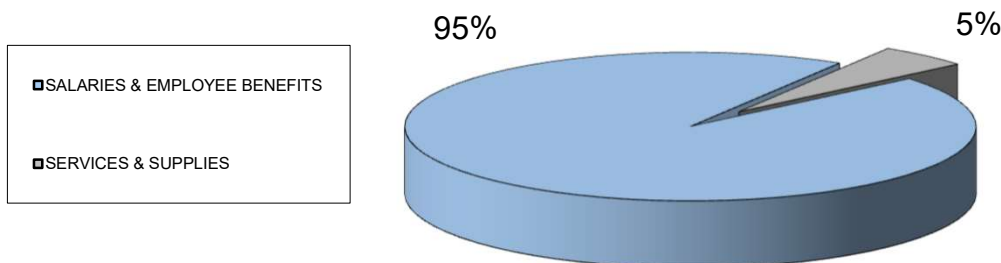
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$3,244,146	\$2,711,656	(\$532,490)
SERVICES & SUPPLIES	\$318,800	\$147,315	(\$171,485)
<b>OPERATING BUDGET</b>	<b>\$3,562,946</b>	<b>\$2,858,971</b>	<b>(\$703,975)</b>

Budgeted Positions 14  
Filled Positions 8



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**EXECUTIVE OFFICE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,908,555	\$1,556,341	(\$352,214)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	65,000	50,631	(14,369)
OVERTIME	25,600	472	(25,128)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	7,200	0	(7,200)
RIDESHARE ALLOWANCE	1,400	0	(1,400)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$2,007,755</b>	<b>\$1,607,443</b>	<b>(\$400,312)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	373,220	340,932	(32,288)
FICA CONTRIBUTION	31,831	27,150	(4,681)
COUNTY SUBSIDY - INSURANCE	185,249	123,081	(62,168)
OPTIONS PLAN	0	(572)	(572)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	61,013	46,070	(14,943)
SAVINGS PLAN	71,169	50,785	(20,384)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	329,139	273,704	(55,435)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,051,621</b>	<b>\$861,150</b>	<b>(\$190,471)</b>
<b>OPEB CONTRIBUTION</b>	<b>60,837</b>	<b>57,552</b>	<b>(3,285)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>60,837</b>	<b>60,837</b>
<b>OTHER BENEFITS</b>	<b>123,933</b>	<b>124,674</b>	<b>741</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,236,391</b>	<b>\$1,104,213</b>	<b>(\$132,178)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$3,244,146</b>	<b>\$2,711,656</b>	<b>(\$532,490)</b>

**FISCAL YEAR 2021-2022**

**EXECUTIVE OFFICE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$4,000	\$3,664	(\$336)
9103	GAS	6,500	3,759	(2,741)
9105	LICENSE FEES	1,800	887	(913)
	TOTAL	12,300	8,309	(3,991)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	3,000	1,300	(1,700)
9182	TRAVEL	14,000	12,559	(1,441)
	TOTAL	17,000	13,859	(3,141)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	4,500	868	(3,632)
	TOTAL	4,500	868	(3,632)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9672	IMPROVEMENT PROJECTS	80,000	6,000	(74,000)
9716	PUBLIC & MEDIA RELATIONS	125,000	81,900	(43,100)
	TOTAL	205,000	87,900	(117,100)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	30,000	14,178	(15,822)
9962	REGISTRATION FEES	24,000	4,035	(19,965)
9963	EDUCATIONAL MATERIALS	10,000	10,107	107
	TOTAL	64,000	28,320	(35,680)
	<b>MISCELLANEOUS</b>			
9982	EMPLOYEE RECOGNITION PROGRAM	5,000	1,100	(3,900)
9984	FOOD/BEVERAGES	5,000	650	(4,350)
9986	MISCELLANEOUS	6,000	6,309	309
	TOTAL	16,000	8,059	(7,941)
	<b>GRAND TOTAL</b>	<b>\$318,800</b>	<b>\$147,315</b>	<b>(\$171,485)</b>

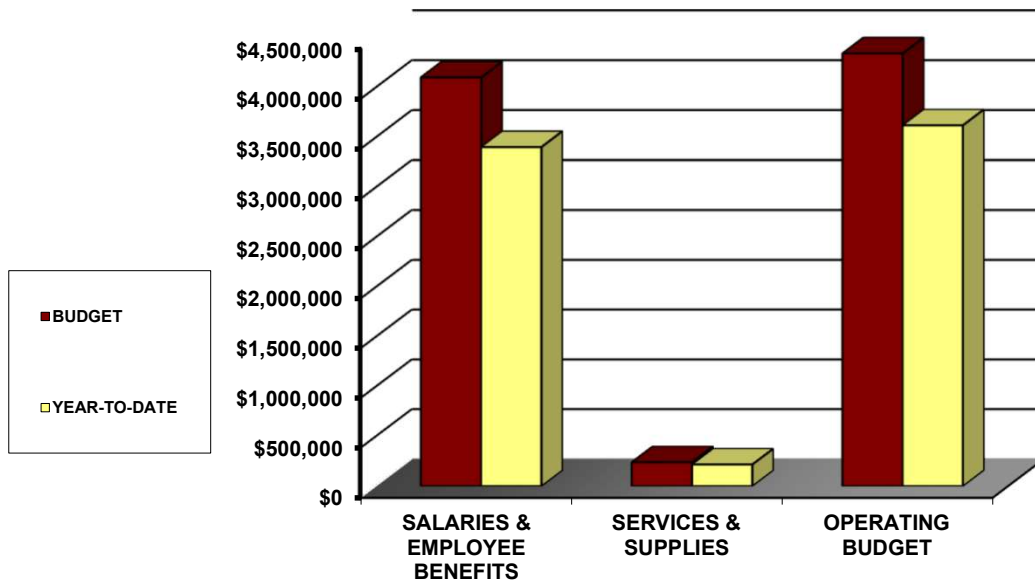


# FINANCIAL AND ACCOUNTING SERVICES

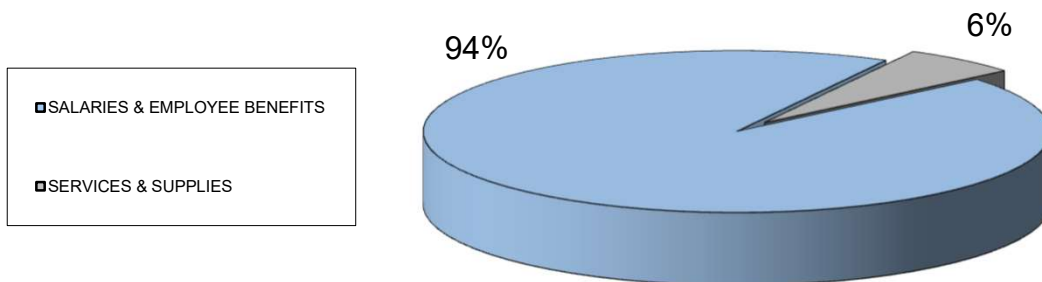
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$4,100,488	\$3,403,163	(\$697,325)
SERVICES & SUPPLIES	\$240,000	\$217,230	(\$22,770)
<b>OPERATING BUDGET</b>	<b>\$4,340,488</b>	<b>\$3,620,393</b>	<b>(\$720,095)</b>

Budgeted Positions 30  
Filled Positions 20



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**FINANCIAL AND ACCOUNTING SERVICES DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,942,091	\$1,742,257	(\$199,834)
AGENCY TEMPORARY	729,400	473,724	(255,676)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	67,900	40,904	(26,996)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	7,500	0	(7,500)
SICKLEAVE BUYBACK	12,000	4,964	(7,036)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$2,758,891</b>	<b>\$2,261,848</b>	<b>(\$497,043)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	475,607	391,361	(84,246)
FICA CONTRIBUTION	33,541	26,974	(6,567)
COUNTY SUBSIDY - INSURANCE	43,865	26,974	(16,891)
OPTIONS PLAN	460,739	348,957	(111,782)
LIFE INSURANCE	2,075	1,173	(902)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	84,267	61,198	(23,069)
SAVINGS PLAN	14,054	8,764	(5,290)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	54,403	34,551	(19,852)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,168,551</b>	<b>\$899,952</b>	<b>(\$268,599)</b>
<b>OPEB CONTRIBUTION</b>	<b>56,977</b>	<b>65,618</b>	<b>8,641</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>56,977</b>	<b>56,977</b>
<b>OTHER BENEFITS</b>	<b>116,069</b>	<b>118,767</b>	<b>2,698</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,341,597</b>	<b>\$1,141,315</b>	<b>(\$200,282)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$4,100,488</b>	<b>\$3,403,163</b>	<b>(\$697,325)</b>

**FISCAL YEAR 2021-2022**

**FINANCIAL AND ACCOUNTING SERVICES DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

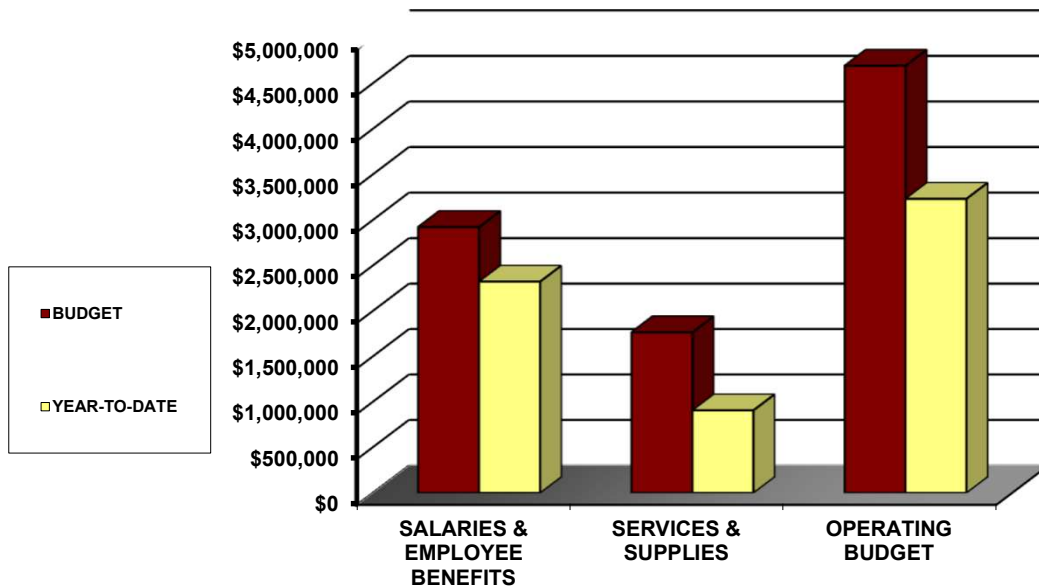
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,300	\$104	(\$2,196)
9182	TRAVEL	11,700	234	(11,466)
	TOTAL	14,000	338	(13,662)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	3,500	3,783	283
	TOTAL	3,500	3,783	283
	<b>BANK SERVICES</b>			
9753	BANK CHARGES - STATE STREET	200,500	203,372	2,872
	TOTAL	200,500	203,372	2,872
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	6,500	4,790	(1,710)
9962	REGISTRATION FEES	10,000	3,133	(6,867)
9963	EDUCATIONAL MATERIALS	2,500	449	(2,051)
	TOTAL	19,000	8,372	(10,628)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	3,000	1,365	(1,635)
	TOTAL	3,000	1,365	(1,635)
	<b>GRAND TOTAL</b>	<b>\$240,000</b>	<b>\$217,230</b>	<b>(\$22,770)</b>

# HUMAN RESOURCES

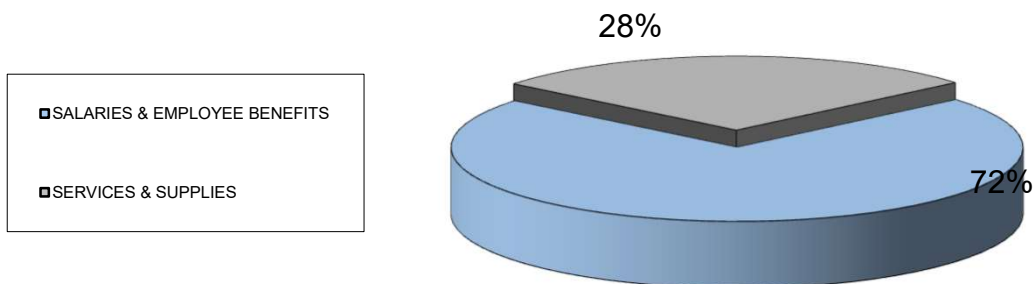
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$2,926,303	\$2,326,297	(\$600,006)
SERVICES & SUPPLIES	\$1,769,300	\$909,370	(\$859,930)
<b>OPERATING BUDGET</b>	<b>\$4,695,603</b>	<b>\$3,235,667</b>	<b>(\$1,459,936)</b>

Budgeted Positions 15  
Filled Positions 12



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**HUMAN RESOURCES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,513,977	\$1,286,858	(\$227,119)
AGENCY TEMPORARY	47,700	36,327	(11,373)
LACERA INTERN PROGRAM	312,000	8,488	(303,512)
STIPENDS	0	0	0
OVERTIME	2,900	1,310	(1,590)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,700	0	(1,700)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,878,277</b>	<b>\$1,332,984</b>	<b>(\$545,293)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	377,830	322,491	(55,339)
FICA CONTRIBUTION	25,509	20,210	(5,299)
COUNTY SUBSIDY - INSURANCE	122,504	116,027	(6,477)
OPTIONS PLAN	0	(418)	(418)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	49,425	45,486	(3,939)
SAVINGS PLAN	66,289	51,638	(14,651)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	271,568	247,402	(24,166)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$913,126</b>	<b>\$802,837</b>	<b>(\$110,289)</b>
<b>OPEB CONTRIBUTION</b>	<b>44,417</b>	<b>55,035</b>	<b>10,618</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>44,417</b>	<b>44,417</b>
<b>OTHER BENEFITS</b>	<b>90,483</b>	<b>91,024</b>	<b>541</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,048,025</b>	<b>\$993,313</b>	<b>(\$54,712)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,926,303</b>	<b>\$2,326,297</b>	<b>(\$600,006)</b>

**FISCAL YEAR 2021-2022**

**HUMAN RESOURCES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,400	\$0	(\$2,400)
9182	TRAVEL	6,600	0	(6,600)
	<b>TOTAL</b>	<b>9,000</b>	<b>0</b>	<b>(9,000)</b>
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	8,000	2,257	(5,743)
	<b>TOTAL</b>	<b>8,000</b>	<b>2,257</b>	<b>(5,743)</b>
	<b>PARKING FEES</b>			
9491	GATEWAY PLAZA	375,000	449,990	74,990
9492	MUSIC CENTER	2,000	0	(2,000)
	<b>TOTAL</b>	<b>377,000</b>	<b>449,990</b>	<b>72,990</b>
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9504	PAYROLL SERVICES	100,000	129,641	29,641
9510	FINGERPRINTING SERVICES	3,000	3,464	464
9511	SECURITY SERVICES - SHERIFF	16,000	906	(15,094)
9512	PAYROLL ENV, DUPLICATE W2'S - AUD	300	525	225
9513	PERSONNEL SRVCS - HUMAN RESOURCES	45,000	22,618	(22,382)
9547	HUMAN RESOURCES CONSULTING	150,000	18,549	(131,451)
9694	BACKGROUND CHECKS	3,000	3,941	941
9700	OHS PHYSICALS	1,000	0	(1,000)
9711	REQUEST FOR ACCOMMODATIONS	35,000	8,196	(26,804)
9718	LEAVE CASE MANAGEMENT PROGRAM	47,500	30,135	(17,365)
9721	ORGANIZATIONAL PROGRAMS	175,000	30,349	(144,651)
	<b>TOTAL</b>	<b>575,800</b>	<b>248,323</b>	<b>(327,477)</b>
	<b>COMPUTER SERVICES &amp; SUPPORT</b>			
9838	MISC SOFTWARE PACKAGES	55,000	25,370	(29,630)
	<b>TOTAL</b>	<b>55,000</b>	<b>25,370</b>	<b>(29,630)</b>

**FISCAL YEAR 2021-2022**

**HUMAN RESOURCES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

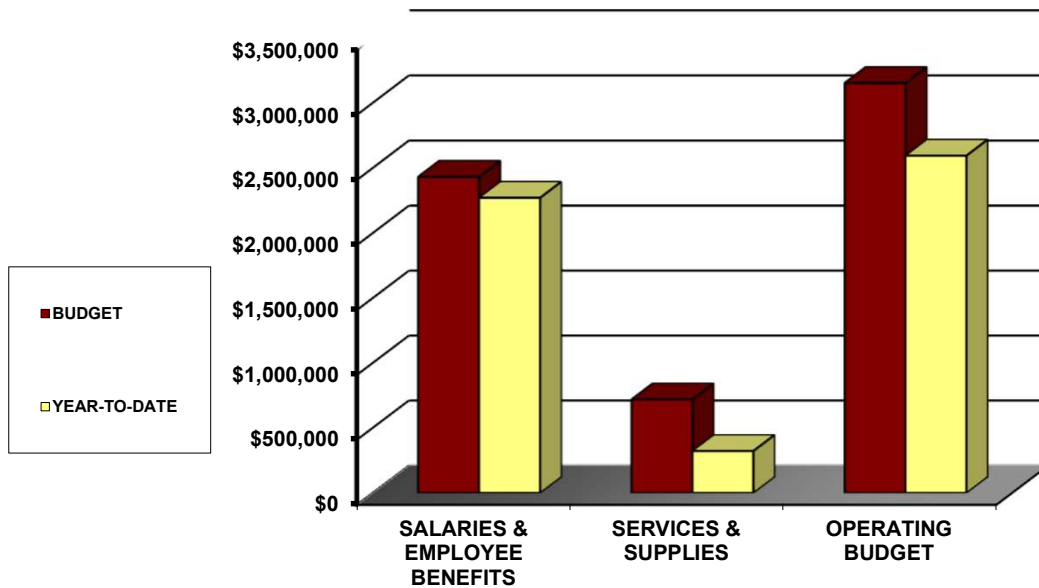
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	\$4,000	\$4,946	\$946
9962	REGISTRATION FEES	20,000	3,613	(16,387)
9963	EDUCATIONAL MATERIALS	6,000	4,187	(1,813)
9966	DEPARTMENTAL TRAINING	250,000	41,778	(208,222)
9967	TUITION REIMBURSEMENT PROGRAM	75,000	29,111	(45,889)
9968	MOU TRAINING ALLOCATION	100,000	20,860	(79,140)
9969	MENTORING PROGRAM	35,000	16,688	(18,313)
9970	FORUM	22,000	0	(22,000)
	<b>TOTAL</b>	<b>512,000</b>	<b>121,183</b>	<b>(390,817)</b>
	<b>MISCELLANEOUS</b>			
9981	RECRUITMENT	200,000	53,129	(146,871)
9986	MISCELLANEOUS	2,500	4,287	1,787
9989	WEB DAY	5,000	4,831	(169)
9991	MANAGEMENT OFFSITE	25,000	0	(25,000)
	<b>TOTAL</b>	<b>232,500</b>	<b>62,246</b>	<b>(170,254)</b>
	<b>GRAND TOTAL</b>	<b>\$1,769,300</b>	<b>\$909,370</b>	<b>(\$859,930)</b>

# INTERNAL AUDIT SERVICES

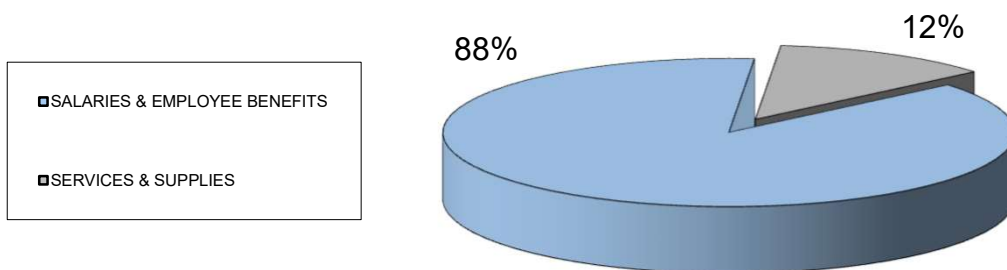
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$2,433,813	\$2,272,934	(\$160,879)
SERVICES & SUPPLIES	\$720,500	\$323,461	(\$397,039)
<b>OPERATING BUDGET</b>	<b>\$3,154,313</b>	<b>\$2,596,395</b>	<b>(\$557,918)</b>

Budgeted Positions 11  
Filled Positions 10



### Total Expenditures by Category





**FISCAL YEAR 2021-2022**

**INTERNAL AUDIT SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,454,721	\$1,360,723	(\$93,998)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	4,900	986	(3,914)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,500	0	(1,500)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,461,121</b>	<b>\$1,361,709</b>	<b>(\$99,412)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	335,340	300,624	(34,716)
FICA CONTRIBUTION	26,378	22,376	(4,002)
COUNTY SUBSIDY - INSURANCE	96,629	83,830	(12,799)
OPTIONS PLAN	0	(401)	(401)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	58,959	43,704	(15,255)
SAVINGS PLAN	63,665	52,829	(10,836)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	262,100	226,988	(35,112)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$843,072</b>	<b>\$729,950</b>	<b>(\$113,122)</b>
<b>OPEB CONTRIBUTION</b>	<b>42,678</b>	<b>51,136</b>	<b>8,458</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>42,678</b>	<b>42,678</b>
<b>OTHER BENEFITS</b>	<b>86,941</b>	<b>87,461</b>	<b>520</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$972,690</b>	<b>\$911,225</b>	<b>(\$61,465)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$2,433,813</b>	<b>\$2,272,934</b>	<b>(\$160,879)</b>

**FISCAL YEAR 2021-2022**

**INTERNAL AUDIT SERVICES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

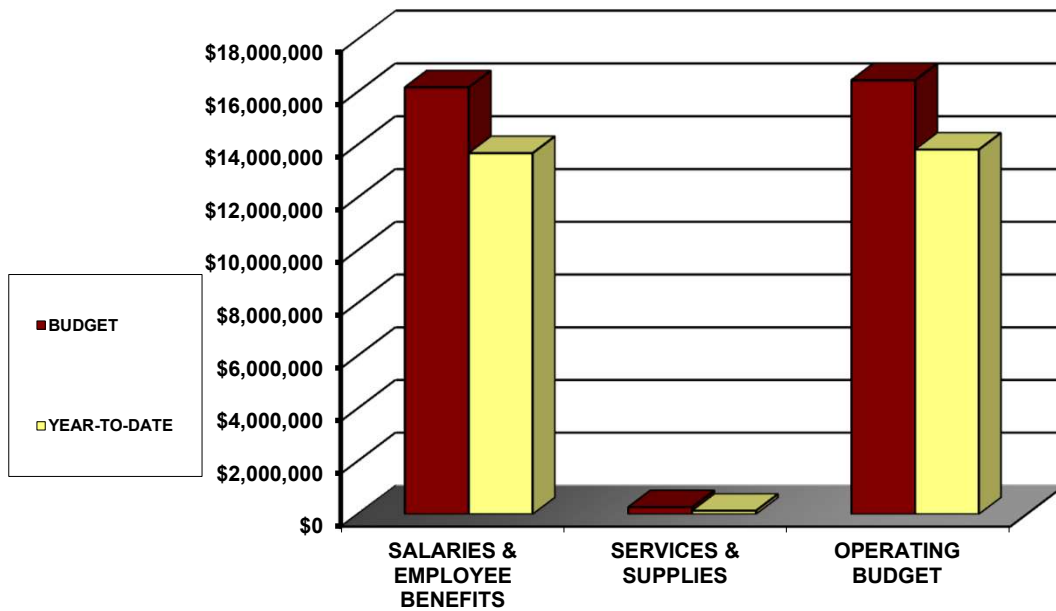
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,000	\$0	(\$2,000)
9182	TRAVEL	15,000	0	(15,000)
	TOTAL	17,000	0	(17,000)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	1,500	418	(1,082)
	TOTAL	1,500	418	(1,082)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9541	AUDITS	650,000	276,490	(373,510)
9702	AUDIT COMMITTEE CONSULTANT	21,000	19,125	(1,875)
	TOTAL	671,000	295,615	(375,385)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	8,000	6,096	(1,904)
9962	REGISTRATION FEES	20,000	19,377	(623)
9963	EDUCATIONAL MATERIALS	2,500	1,955	(545)
	TOTAL	30,500	27,428	(3,072)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	500	0	(500)
	TOTAL	500	0	(500)
	<b>GRAND TOTAL</b>	<b>\$720,500</b>	<b>\$323,461</b>	<b>(\$397,039)</b>

# INVESTMENT OFFICE

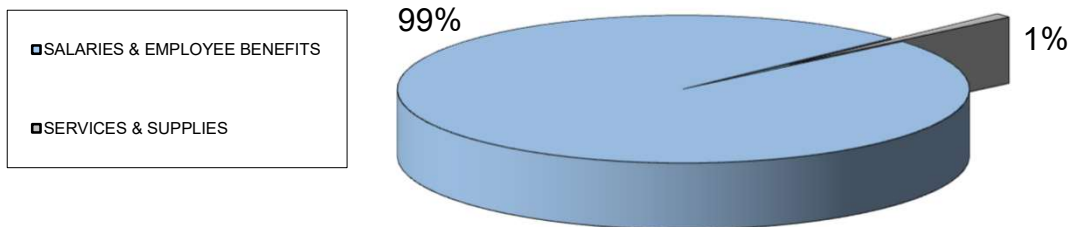
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$16,189,519	\$13,696,462	(\$2,493,057)
SERVICES & SUPPLIES	\$268,500	\$133,338	(\$135,162)
<b>OPERATING BUDGET</b>	<b>\$16,458,019</b>	<b>\$13,829,800</b>	<b>(\$2,628,219)</b>

Budgeted Positions 45  
Filled Positions 34



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**INVESTMENT OFFICE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$10,263,564	\$8,506,782	(\$1,756,782)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	1,000	0	(1,000)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	7,200	7,200	0
RIDESHARE ALLOWANCE	5,000	0	(5,000)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$10,276,764</b>	<b>\$8,513,982</b>	<b>(\$1,762,782)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,584,170	1,455,459	(128,711)
FICA CONTRIBUTION	196,259	141,130	(55,129)
COUNTY SUBSIDY - INSURANCE	657,236	459,684	(197,552)
OPTIONS PLAN	0	(2,832)	(2,832)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	317,034	248,065	(68,969)
SAVINGS PLAN	375,423	300,473	(74,950)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	1,868,119	1,440,230	(427,889)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$4,998,241</b>	<b>\$4,042,210</b>	<b>(\$956,031)</b>
<b>OPEB CONTRIBUTION</b>	<b>301,112</b>	<b>222,087</b>	<b>(79,025)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>301,112</b>	<b>301,112</b>
<b>OTHER BENEFITS</b>	<b>613,402</b>	<b>617,071</b>	<b>3,669</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$5,912,755</b>	<b>\$5,182,480</b>	<b>(\$730,275)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$16,189,519</b>	<b>\$13,696,462</b>	<b>(\$2,493,057)</b>

**FISCAL YEAR 2021-2022**

**INVESTMENT OFFICE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

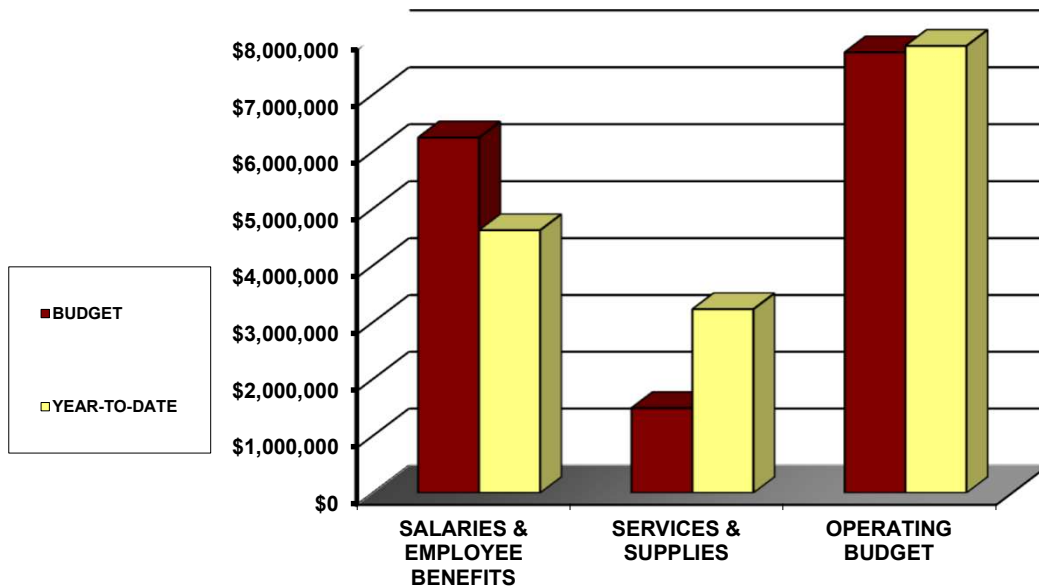
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>TRANSPORTATION AND TRAVEL</b>				
9181	TRANSPORTATION	\$20,500	\$3,028	(\$17,472)
9182	TRAVEL	120,500	14,069	(106,431)
	TOTAL	141,000	17,097	(123,903)
<b>OFFICE SUPPLIES AND EQUIPMENT</b>				
9302	SPECIAL ORDERS/MINOR EQUIP	4,500	30	(4,470)
	TOTAL	4,500	30	(4,470)
<b>EDUCATIONAL EXPENSES</b>				
9961	MEMBERSHIPS	80,000	98,582	18,582
9962	REGISTRATION FEES	20,000	3,650	(16,350)
9963	EDUCATIONAL MATERIALS	16,000	13,302	(2,698)
	TOTAL	116,000	115,534	(466)
<b>MISCELLANEOUS</b>				
9986	MISCELLANEOUS	7,000	677	(6,323)
	TOTAL	7,000	677	(6,323)
<b>GRAND TOTAL</b>		<b>\$268,500</b>	<b>\$133,338</b>	<b>(\$135,162)</b>

## LEGAL SERVICES

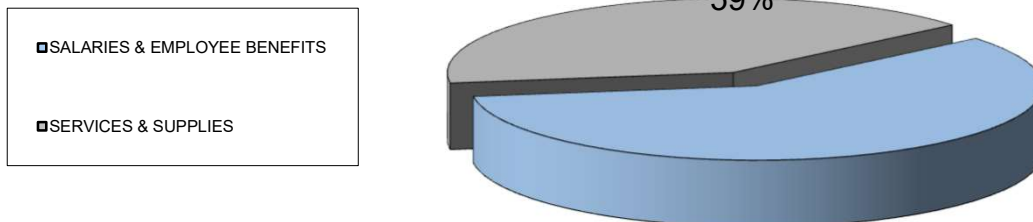
### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$6,252,924	\$4,625,206	(\$1,627,718)
SERVICES & SUPPLIES	\$1,495,100	\$3,236,550	\$1,741,450
<b>OPERATING BUDGET</b>	<b>\$7,748,024</b>	<b>\$7,861,756</b>	<b>\$113,732</b>

Budgeted Positions 28  
Filled Positions 18



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**LEGAL SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$3,630,372	\$2,598,365	(\$1,032,007)
AGENCY TEMPORARY	150,000	103,549	(46,451)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	30,000	20,897	(9,103)
BILINGUAL BONUS	2,400	1,000	(1,400)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	2,500	0	(2,500)
SICKLEAVE BUYBACK	0	0	0
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,815,272</b>	<b>\$2,723,811</b>	<b>(\$1,091,461)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	762,045	583,640	(178,405)
FICA CONTRIBUTION	61,707	43,564	(18,143)
COUNTY SUBSIDY - INSURANCE	399,165	270,501	(128,664)
OPTIONS PLAN	0	(990)	(990)
LIFE INSURANCE	0	0	0
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	102,432	79,224	(23,208)
SAVINGS PLAN	122,626	82,828	(39,798)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	669,969	425,724	(244,245)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$2,117,944</b>	<b>\$1,484,491</b>	<b>(\$633,453)</b>
<b>OPEB CONTRIBUTION</b>	<b>105,267</b>	<b>95,913</b>	<b>(9,354)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>105,267</b>	<b>105,267</b>
<b>OTHER BENEFITS</b>	<b>214,441</b>	<b>215,724</b>	<b>1,283</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$2,437,652</b>	<b>\$1,901,395</b>	<b>(\$536,257)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$6,252,924</b>	<b>\$4,625,206</b>	<b>(\$1,627,718)</b>

**FISCAL YEAR 2021-2022**

**LEGAL SERVICES**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>AUTO EXPENSES</b>			
9102	AUTO MAINTENANCE/REPAIR	\$2,000	\$1,008	(\$992)
9103	GAS	2,000	626	(1,374)
9105	LICENSE FEES	400	92	(308)
	<b>TOTAL</b>	<b>4,400</b>	<b>1,726</b>	<b>(2,674)</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	4,800	764	(4,036)
9182	TRAVEL	21,600	7,456	(14,144)
	<b>TOTAL</b>	<b>26,400</b>	<b>8,221</b>	<b>(18,179)</b>
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	1,616	(4,384)
	<b>TOTAL</b>	<b>6,000</b>	<b>1,616</b>	<b>(4,384)</b>
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9543	LEGISLATIVE CONSULTING	252,000	255,525	3,525
9673	PHOTOCOPIES OF DOCUMENTS	300	166	(134)
	<b>TOTAL</b>	<b>252,300</b>	<b>255,691</b>	<b>3,391</b>
	<b>LEGAL FEES AND SERVICES</b>			
9771	ATTORNEY FEES AWARDS	40,000	83,072	43,072
9772	OUTSIDE LEGAL COUNSEL	1,055,000	2,796,308	1,741,308
9777	LITIGATION SUPPORT	5,000	9,473	4,473
	<b>TOTAL</b>	<b>1,100,000</b>	<b>2,888,853</b>	<b>1,788,853</b>
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	13,500	8,391	(5,109)
9962	REGISTRATION FEES	19,000	5,981	(13,019)
9963	EDUCATIONAL MATERIALS	70,500	65,449	(5,051)
	<b>TOTAL</b>	<b>103,000</b>	<b>79,821</b>	<b>(23,179)</b>
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	3,000	622	(2,378)
	<b>TOTAL</b>	<b>3,000</b>	<b>622</b>	<b>(2,378)</b>
	<b>GRAND TOTAL</b>	<b>\$1,495,100</b>	<b>\$3,236,550</b>	<b>\$1,741,450</b>

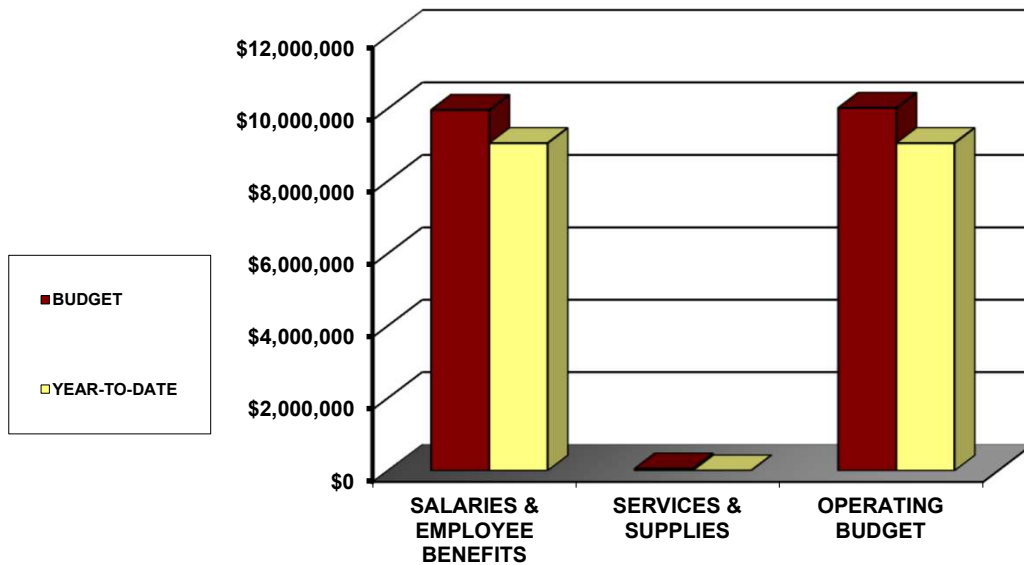


## MEMBER SERVICES

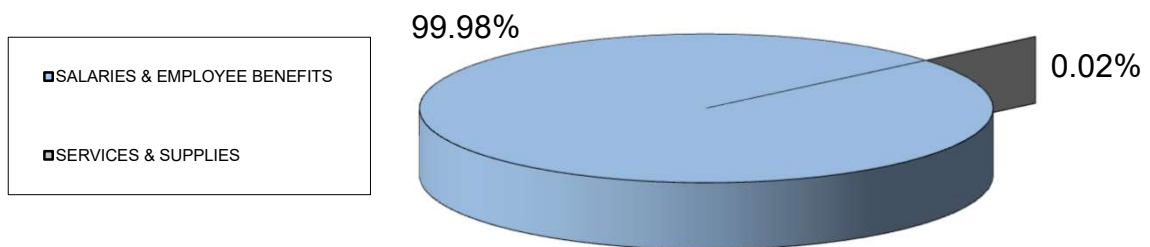
### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$9,971,630	\$9,054,053	(\$917,577)
SERVICES & SUPPLIES	\$55,500	\$2,122	(\$53,378)
<b>OPERATING BUDGET</b>	<b>\$10,027,130</b>	<b>\$9,056,175</b>	<b>(\$970,955)</b>

Budgeted Positions      79  
Filled Positions         69



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**MEMBER SERVICES**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$5,973,011	\$5,259,951	(\$713,060)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	133,800	221,062	87,262
BILINGUAL BONUS	16,800	11,400	(5,400)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	10,000	0	(10,000)
SICKLEAVE BUYBACK	15,000	12,569	(2,432)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$6,148,611</b>	<b>\$5,504,982</b>	<b>(\$643,629)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,346,685	1,201,660	(145,025)
FICA CONTRIBUTION	99,429	84,897	(14,532)
COUNTY SUBSIDY - INSURANCE	82,937	60,067	(22,870)
OPTIONS PLAN	1,195,290	1,095,030	(100,260)
LIFE INSURANCE	4,895	4,981	86
HEALTH INSURANCE TEMPS	120,959	44,547	(76,412)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	211,804	178,727	(33,077)
SAVINGS PLAN	30,007	20,415	(9,592)
PENSION SAVINGS PLAN	20,794	2,862	(17,932)
MEGAFLEX	162,470	99,865	(62,605)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$3,275,270</b>	<b>\$2,793,049</b>	<b>(\$482,221)</b>
<b>OPEB CONTRIBUTION</b>	<b>180,351</b>	<b>202,477</b>	<b>22,126</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>180,351</b>	<b>180,351</b>
<b>OTHER BENEFITS</b>	<b>367,397</b>	<b>373,194</b>	<b>5,797</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$3,823,018</b>	<b>\$3,549,071</b>	<b>(\$273,947)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$9,971,630</b>	<b>\$9,054,053</b>	<b>(\$917,577)</b>

# FISCAL YEAR 2021-2022

## MEMBER SERVICES

### DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF JUNE 30, 2022

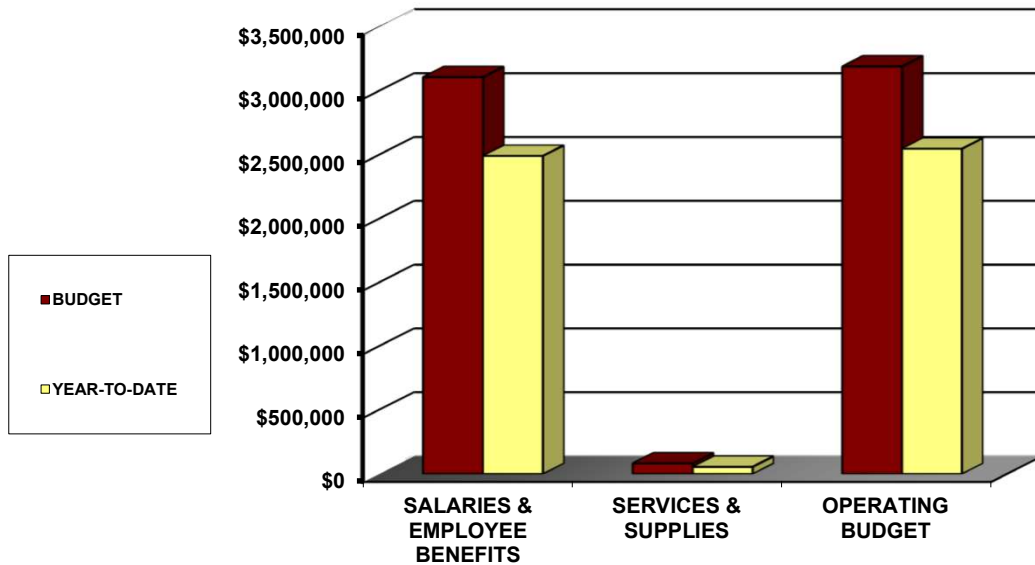
		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$7,000	\$0	(\$7,000)
9182	TRAVEL	14,700	0	(14,700)
	TOTAL	21,700	0	(21,700)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	12,500	1,972	(10,528)
	TOTAL	12,500	1,972	(10,528)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	1,200	0	(1,200)
9962	REGISTRATION FEES	15,000	150	(14,850)
9963	EDUCATIONAL MATERIALS	300	0	(300)
	TOTAL	16,500	150	(16,350)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	3,200	0	(3,200)
9992	FACILITIES RENTAL	1,600	0	(1,600)
	TOTAL	4,800	0	(4,800)
	<b>GRAND TOTAL</b>	<b>\$55,500</b>	<b>\$2,122</b>	<b>(\$53,378)</b>

# QUALITY ASSURANCE

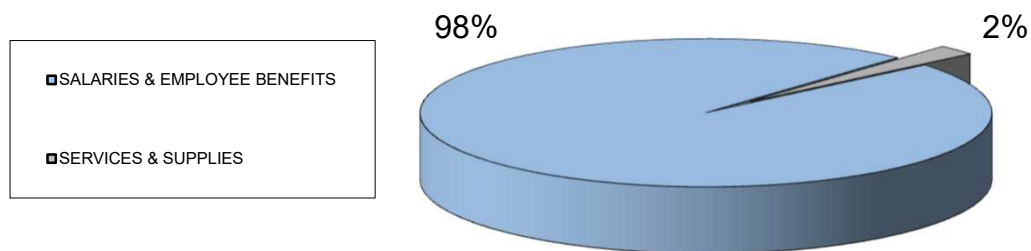
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$3,111,416	\$2,494,743	(\$616,673)
SERVICES & SUPPLIES	\$83,900	\$56,354	(\$27,546)
<b>OPERATING BUDGET</b>	<b>\$3,195,316</b>	<b>\$2,551,097</b>	<b>(\$644,219)</b>

Budgeted Positions 19  
Filled Positions 14



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**QUALITY ASSURANCE**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$1,821,199	\$1,432,437	(\$388,762)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	21,300	264	(21,036)
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	2,200	0	(2,200)
SICKLEAVE BUYBACK	1,000	0	(1,000)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$1,845,699</b>	<b>\$1,432,701</b>	<b>(\$412,998)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	460,817	349,072	(111,745)
FICA CONTRIBUTION	33,709	24,517	(9,192)
COUNTY SUBSIDY - INSURANCE	114,701	98,752	(15,949)
OPTIONS PLAN	22,153	3,631	(18,522)
LIFE INSURANCE	87	137	50
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	54,675	49,699	(4,976)
SAVINGS PLAN	63,725	52,604	(11,121)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	340,471	248,669	(91,802)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,090,338</b>	<b>\$827,081</b>	<b>(\$263,257)</b>
<b>OPEB CONTRIBUTION</b>	<b>57,745</b>	<b>58,878</b>	<b>1,133</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>57,745</b>	<b>57,745</b>
<b>OTHER BENEFITS</b>	<b>117,634</b>	<b>118,337</b>	<b>703</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,265,717</b>	<b>\$1,062,042</b>	<b>(\$203,675)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$3,111,416</b>	<b>\$2,494,743</b>	<b>(\$616,673)</b>

**FISCAL YEAR 2021-2022**

**QUALITY ASSURANCE**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

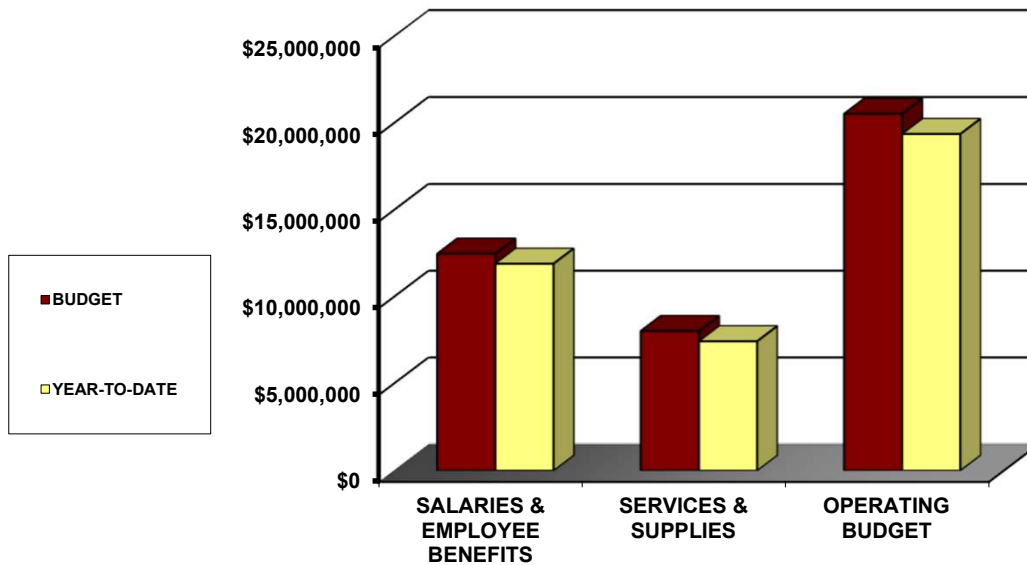
		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,500	\$0	(\$2,500)
9182	TRAVEL	9,500	0	(9,500)
	TOTAL	12,000	0	(12,000)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	2,000	235	(1,765)
	TOTAL	2,000	235	(1,765)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9715	COST EFFECTIVE MANAGEMENT (CEM)	50,000	50,000	0
	TOTAL	50,000	50,000	0
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	9,000	5,780	(3,220)
9962	REGISTRATION FEES	10,000	339	(9,661)
9963	EDUCATIONAL MATERIALS	500	0	(500)
	TOTAL	19,500	6,119	(13,381)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	400	0	(400)
	TOTAL	400	0	(400)
	<b>GRAND TOTAL</b>	<b>\$83,900</b>	<b>\$56,354</b>	<b>(\$27,546)</b>

## SYSTEMS DIVISION

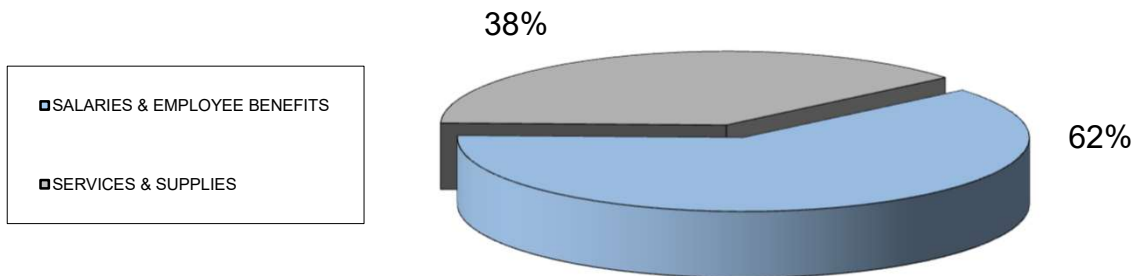
### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$12,500,951	\$11,932,335	(\$568,616)
SERVICES & SUPPLIES	\$8,052,400	\$7,458,627	(\$593,773)
<b>OPERATING BUDGET</b>	<b>\$20,553,351</b>	<b>\$19,390,963</b>	<b>(\$1,162,388)</b>

Budgeted Positions      56  
Filled Positions         34



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**SYSTEMS DIVISION**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$6,054,880	\$4,686,335	(\$1,368,545)
AGENCY TEMPORARY	2,193,100	3,899,919	1,706,819
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	133,300	171,708	38,408
BILINGUAL BONUS	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	8,900	0	(8,900)
SICKLEAVE BUYBACK	12,000	11,693	(307)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$8,402,180</b>	<b>\$8,769,655</b>	<b>\$367,475</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	1,355,367	1,000,781	(354,586)
FICA CONTRIBUTION	111,145	77,775	(33,370)
COUNTY SUBSIDY - INSURANCE	389,049	241,314	(147,735)
OPTIONS PLAN	342,564	297,352	(45,212)
LIFE INSURANCE	1,443	1,824	381
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	234,393	162,535	(71,858)
SAVINGS PLAN	194,295	115,413	(78,882)
PENSION SAVINGS PLAN	1,714	4,410	2,696
MEGAFLEX	900,178	520,256	(379,922)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$3,530,149</b>	<b>\$2,421,661</b>	<b>(\$1,108,488)</b>
<b>OPEB CONTRIBUTION</b>	<b>187,224</b>	<b>169,448</b>	<b>(17,776)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>187,224</b>	<b>187,224</b>
<b>OTHER BENEFITS</b>	<b>381,398</b>	<b>384,347</b>	<b>2,949</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$4,098,770</b>	<b>\$3,162,680</b>	<b>(\$936,090)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$12,500,951</b>	<b>\$11,932,335</b>	<b>(\$568,616)</b>



**FISCAL YEAR 2021-2022**

**SYSTEMS DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>COMMUNICATIONS</b>			
9121	MOBILE DEVICES SERVICE & EQUIPMENT	\$150,000	\$155,942	\$5,942
9124	ENTERPRISE INTERNET CONNECTION	165,000	134,570	(30,430)
9125	TELEPHONE CONNECTION	120,000	210,369	90,369
9130	REMOTE SUPPORT	30,000	6,805	(23,195)
9133	TELEPHONE SYSTEM SUPPLIES & MODIFICATION:	15,000	14,351	(649)
9135	TELEPHONE SYSTEM MAINTENANCE	150,000	62,442	(87,558)
	TOTAL	630,000	584,479	(45,521)
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	2,000	1,643	(357)
9182	TRAVEL	2,600	2,778	178
	TOTAL	4,600	4,421	(179)
	<b>POSTAGE</b>			
9208	MONTHLY RETIREE CHECK MAILING	390,000	439,440	49,440
	TOTAL	390,000	439,440	49,440
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	11,000	6,879	(4,121)
9332	COMPUTER MONITORS	80,000	84,705	4,705
9336	COMPUTER PRINTER	10,000	12,163	2,163
9344	COMPUTER ACCESSORIES	10,000	13,105	3,105
9345	COMPUTER PERIPHERALS	60,000	22,725	(37,275)
9347	STORAGE MEDIA	15,000	4,706	(10,294)
9348	BOARD MEMBER TECH SUPPORT	50,000	16,706	(33,294)
9353	DIVISIONAL IT SUPPLIES/EQUIPMENT	33,600	70,790	37,190
9354	REMOTE WORKFORCE EQUIPMENT	130,000	132,189	2,189
	TOTAL	399,600	363,967	(35,633)
	<b>EQUIPMENT MAINTENANCE</b>			
9411	AUDIOVISUAL MAINTENANCE	40,000	35,688	(4,312)
9412	KEY CARD SECURITY SYSTEM (DAS)	25,000	26,437	1,437
9414	LAN HARDWARE MAINTENANCE	75,000	58,670	(16,330)
9419	ON-SITE PRINTER MAINTENANCE	25,000	18,385	(6,615)
9424	EQUIP MAINT - UPS - SERVER ROOM	164,500	181,291	16,791
9436	EQUIP MAINT - AIR CONDITIONING	60,000	32,522	(27,478)
9438	AUDIOVISUAL ENHANCEMENTS	25,000	8,631	(16,369)
9439	SURVEILLANCE SYSTEM	5,000	1,128	(3,872)
9442	FIRE SUPPRESSION SYSTEM	5,000	0	(5,000)
9443	GENERATOR SYSTEM	10,000	63	(9,937)
	TOTAL	434,500	362,815	(71,685)

**FISCAL YEAR 2021-2022**

**SYSTEMS DIVISION**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9502	EDP CHARGES - ISD	\$99,500	\$200,755	\$101,255
9509	AUDITOR CONTROLLER - PAYROLL SERVICES	86,100	103,557	17,457
9550	ADVANCED WORKFLOW CONCEPTS	140,000	52,050	(87,950)
9574	KNOWLEDGE & DOC MGMT PROJECTS	300,000	276,367	(23,633)
9680	IRON MOUNTAIN MEDIA STORAGE	50,000	44,288	(5,712)
9681	RETIREE PAYROLL PRINTING	244,000	241,046	(2,954)
9692	HOTSITE SERVICES	40,000	36,654	(3,346)
9714	SECURITY ASSESSMENT & MONITORING	75,000	47,565	(27,435)
9717	CLOUD MIGRATION	412,000	427,147	15,147
9722	MAINFRAME SERVICES	90,000	77,290	(12,710)
	TOTAL	1,536,600	1,506,719	(29,881)
	<b>COMPUTER SERVICES &amp; SUPPORT</b>			
9831	LAN SOFTWARE & LIC - NEW	1,265,000	851,283	(413,717)
9832	LAN SOFTWARE & LIC - EXISTING	1,854,600	1,885,584	30,984
9833	MAINFRAME SOFTWARE & LIC - EXISTING	1,025,000	986,643	(38,357)
9843	LAN NETWORK HARDWARE - NEW	175,000	171,853	(3,147)
9879	CO-LOCATION	200,000	177,589	(22,411)
9882	BOARDROOM OPERATION MGMT SYSTEMS (I & II)	100,000	114,373	14,373
	TOTAL	4,619,600	4,187,326	(432,274)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	1,500	800	(700)
9962	REGISTRATION FEES	30,000	3,452	(26,548)
9963	EDUCATIONAL MATERIALS	5,000	4,917	(83)
	TOTAL	36,500	9,169	(27,331)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	1,000	291	(709)
	TOTAL	1,000	291	(709)
	<b>GRAND TOTAL</b>	<b>\$8,052,400</b>	<b>\$7,458,627</b>	<b>(\$593,773)</b>

# APPENDIX B

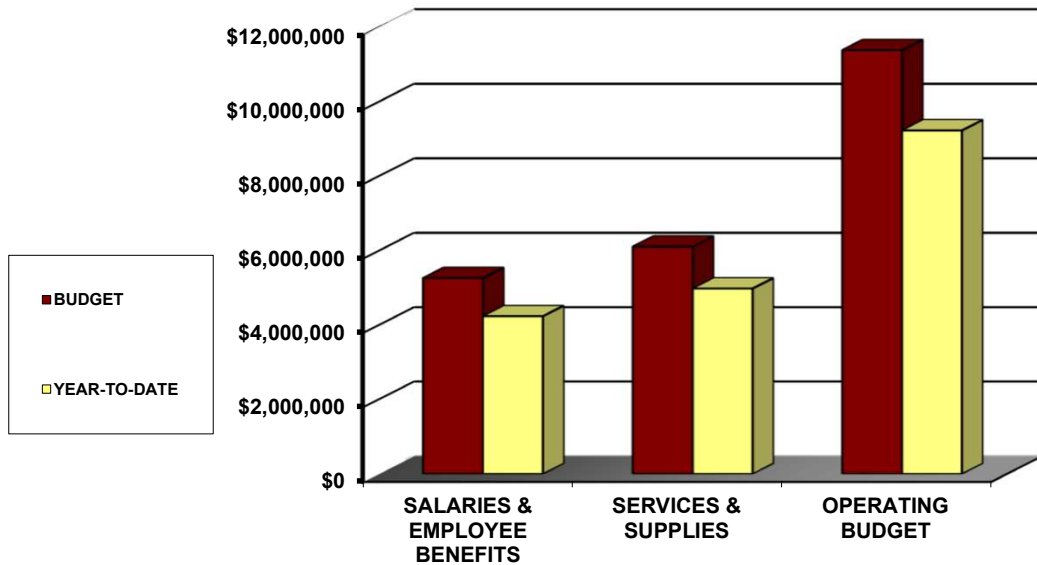
**FISCAL YEAR 2021-2022  
RETIREE HEALTHCARE BENEFITS PROGRAM  
BUDGET CONTROL REPORT  
BASED ON EXPENDITURES AS OF  
JUNE 30, 2022**

# RETIREE HEALTHCARE BENEFITS PROGRAM

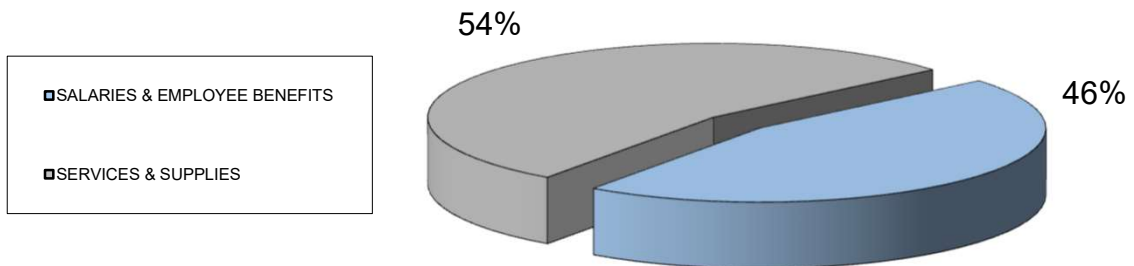
## BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$5,272,936	\$4,246,097	(\$1,026,839)
SERVICES & SUPPLIES	\$6,118,192	\$4,990,866	(\$1,127,326)
<b>OPERATING BUDGET</b>	<b>\$11,391,128</b>	<b>\$9,236,963</b>	<b>(\$2,154,165)</b>

Budgeted Positions 37  
Filled Positions 25



### Total Expenditures by Category



**FISCAL YEAR 2021-2022**

**RETIREE HEALTHCARE BENEFITS PROGRAM**

**SUMMARY OF SALARIES AND EMPLOYEE BENEFITS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

	<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
<b>SALARIES &amp; OTHER PAYS</b>			
PERMANENT / COUNTY TEMPORARY	\$2,814,534	\$2,471,718	(\$342,816)
AGENCY TEMPORARY	511,700	251,294	(260,406)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	118,500	121,935	3,435
BILINGUAL BONUS	3,600	2,900	(700)
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	3,600	0	(3,600)
SICKLEAVE BUYBACK	10,000	9,274	(726)
<b>TOTAL SALARIES &amp; OTHER PAYS</b>	<b>\$3,461,934</b>	<b>\$2,857,122</b>	<b>(\$604,812)</b>
<b>VARIABLE BENEFITS</b>			
RETIREMENT	621,150	526,180	(94,970)
FICA CONTRIBUTION	41,101	34,081	(7,020)
COUNTY SUBSIDY - INSURANCE	82,831	36,774	(46,057)
OPTIONS PLAN	567,583	416,075	(151,508)
LIFE INSURANCE	1,460	1,565	105
HEALTH INSURANCE TEMPS	129,777	10,925	(118,852)
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	100,857	74,237	(26,620)
SAVINGS PLAN	34,635	25,709	(8,926)
PENSION SAVINGS PLAN	9,301	2,118	(7,183)
MEGAFLEX	139,734	113,249	(26,485)
<b>TOTAL VARIABLE BENEFITS</b>	<b>\$1,728,430</b>	<b>\$1,240,912</b>	<b>(\$487,518)</b>
<b>OPEB CONTRIBUTION</b>	<b>82,573</b>	<b>65,490</b>	<b>(17,083)</b>
<b>OPEB CONTRIBUTION (BUDGET SURPLUS)</b>	<b>0</b>	<b>82,573</b>	<b>82,573</b>
<b>OTHER BENEFITS</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL EMPLOYEE BENEFITS</b>	<b>\$1,811,002</b>	<b>\$1,388,975</b>	<b>(\$422,027)</b>
<b>TOTAL SALARIES &amp; EMPLOYEE BENEFITS</b>	<b>\$5,272,936</b>	<b>\$4,246,097</b>	<b>(\$1,026,839)</b>

**FISCAL YEAR 2021-2022**

**RETIREE HEALTH CARE BENEFITS PROGRAM**

**DETAIL OF SERVICES AND SUPPLIES ACCOUNTS  
BASED ON EXPENDITURES AS OF JUNE 30, 2022**

		<b>BUDGET</b>	<b>YTD ACTUAL</b>	<b>OVER/(UNDER) BUDGET</b>
	<b>TRANSPORTATION AND TRAVEL</b>			
9181	TRANSPORTATION	\$2,600	\$236	(\$2,364)
9182	TRAVEL	25,900	5,933	(19,967)
	TOTAL	28,500	6,169	(22,331)
	<b>POSTAGE</b>			
9212	SPECIAL RETIREE MAILINGS	300,000	266,316	(33,684)
	TOTAL	300,000	266,316	(33,684)
	<b>OFFICE SUPPLIES AND EQUIPMENT</b>			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	335	(5,665)
	TOTAL	6,000	335	(5,665)
	<b>OPERATIONAL COSTS</b>			
9482	RENT	199,100	199,039	(61)
9483	DEPARTMENTAL OVERHEAD	4,333,692	3,369,608	(964,084)
	TOTAL	4,532,792	3,568,648	(964,144)
	<b>PROFESSIONAL AND SPECIALIZED SERVICES</b>			
9541	AUDITS	120,000	108,591	(11,409)
9545	HEALTH CARE CONSULTING	750,000	741,600	(8,400)
9572	PENSION BENEFIT INFORMATION	1,500	0	(1,500)
9573	OPEB VALUATION	338,300	269,677	(68,623)
	TOTAL	1,209,800	1,119,868	(89,932)
	<b>BANK SERVICES</b>			
9753	BANK CHARGES - STATE STREET	21,500	20,650	(850)
	TOTAL	21,500	20,650	(850)
	<b>EDUCATIONAL EXPENSES</b>			
9961	MEMBERSHIPS	4,000	2,800	(1,200)
9962	REGISTRATION FEES	15,000	6,080	(8,920)
9963	EDUCATIONAL MATERIALS	300	0	(300)
	TOTAL	19,300	8,880	(10,420)
	<b>MISCELLANEOUS</b>			
9986	MISCELLANEOUS	300	0	(300)
	TOTAL	300	0	(300)
	<b>GRAND TOTAL</b>	<b>\$6,118,192</b>	<b>\$4,990,866</b>	<b>(\$1,127,326)</b>

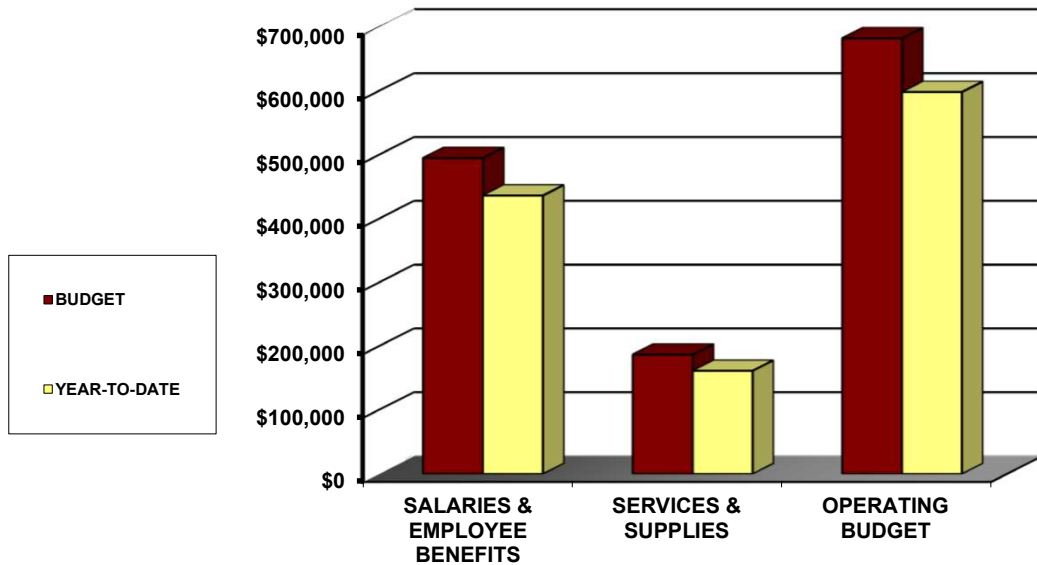
# APPENDIX C

**FISCAL YEAR 2021-2022  
OTHER POST-EMPLOYMENT BENEFITS (OPEB) TRUST  
BUDGET CONTROL REPORT  
BASED ON EXPENDITURES AS OF  
JUNE 30, 2022**

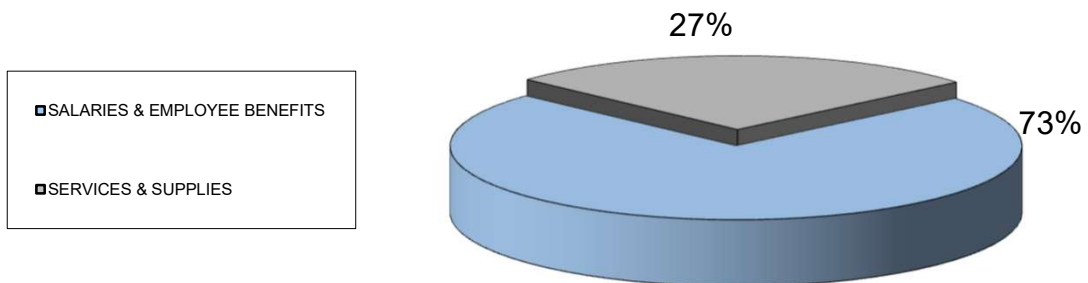
## OTHER POST-EMPLOYMENT BENEFITS TRUST

### BUDGET CONTROL REPORT - FISCAL YEAR 2021-2022 BASED ON EXPENDITURES AS OF JUNE 30, 2022

<u>CATEGORY</u>	<u>BUDGET</u>	<u>YEAR-TO-DATE</u>	<u>OVER / (UNDER) BUDGET</u>
SALARIES & EMPLOYEE BENEFITS	\$495,700	\$436,965	(\$58,735)
SERVICES & SUPPLIES	\$187,449	\$161,991	(\$25,458)
<b>OPERATING BUDGET</b>	<b>\$683,150</b>	<b>\$598,956</b>	<b>(\$84,194)</b>



### Total Expenditures by Category





**FOR INFORMATION ONLY**

Date: November 23, 2022

To: Each Trustee  
Board of Retirement  
Board of Investments

From: Santos H. Kreimann *SHK*  
Chief Executive Officer

For: Board of Retirement Meeting on December 7, 2022  
Board of Investments Meeting on December 14, 2022

Subject: **Tier I Merit Salary Adjustment and Tier II Step Advancement**

This memo is to notify the Board Trustees that merit increases for LACERA's eligible Tier I Management Appraisal and Performance Plan (MAPP) participants have been approved. Staff members rated as 3-Meeting Expectations (1%), 4-Exceeding Expectations (3.0%), and 5-Far Exceeding Expectations (5%) have been approved. These merit salary adjustments will be effective retroactively to October 1, 2022 and are in addition to the 3% cost of living adjustment (COLA) previously approved by the Board of Retirement and Board of Investments. The COLA will be processed effective January 1, 2023. LACERA's CEO is authorized to award Tier I Merit Adjustments up to 5% in his role as staff's appointing authority under Los Angeles County Ordinance Sections 6.127.040 B(1), (9), E, and O to those eligible staff who received evaluations of at least "Met Expectations."

Eligible Tier II MAPP managers rated as 3-Meeting Expectations, 4-Exceeding Expectations and 5-Far Exceeding Expectations will receive an annual step increase ranging from 1.5% if the employee is on or above Level 12 of the salary schedule, or 3% for participants that are below Level 12 of the salary schedule. The Tier II MAPP salary adjustments will also be effective retroactively to October 1, 2022. The CEO is authorized to award Tier II Step Advancements up to Step 12 under County Ordinance Sections 6.127.040 B(1), (10), E, and R to those eligible staff who received evaluations of at least "Met Expectations" and for Step 13 and above to those eligible staff who received evaluations of at least "Exceeded Expectations."

The total annual cost of the anticipated Tier I and Tier II merit adjustments are estimated to total \$400,000. Sufficient budgetary resources are available in the FY 2022-23

November 23, 2022

Page 2

LACERA operating budget to absorb these salary and associated employee benefit increases.

These increases are intended to recognize the hard work of our managers and staff in meeting our mission and continuing to provide exceptional customer service to our members during these extraordinary times.

c: Executive Team

## For Information Only

November 30, 2022

TO: Each Trustee,  
Board of Retirement  
Board of investments

FROM: Audit Committee  
Gina V. Sanchez, Chair  
Joseph Kelly, Vice Chair  
Patrick L. Jones, Secretary  
Alan J. Bernstein  
Keith Knox  
Wayne Moore  
Herman B. Santos

FOR: December 7, 2022, Board of Retirement Meeting  
December 14, 2022, Board of Investments Meeting

SUBJECT: **Los Angeles County's Compliance with Requirements for Rehired Retirees –  
Fiscal Year Ended June 30, 2021**

At the November 17, 2022 Audit Committee meeting, Internal Audit presented the results of an audit of Los Angeles County's Compliance with Requirements for Rehired Retirees. Along with voting to accept and file the Audit Report, the Audit Committee also directed staff to forward the report to the attention of both boards for their information.

### Background

California's County Employees Retirement Law (CERL) and Public Employees' Pension Reform Act of 2013 (PEPRA) provides that if the County believes its retirees possess special skills or knowledge, the County has the option to employ those retirees as "Rehired Retirees" within limits. Limits include the rehired retiree may not work in excess of 960 hours per year and there must be a break in service between retirement and rehire of 180 days. PEPRA imposes a requirement that the nature of the rehired retirees' work must be temporary and limited.

In March 2020, the Governor declared an exemption from the 960-hour limit and break in service requirements during the COVID-19 pandemic if the retirees work was COVID related.

For the FYE June 30, 2021, Internal Audit identified 10 rehired retirees had exceeded the 960-hour limit, two were over by 703 and 917 hours respectively. Additionally, Internal Audit identified 65 rehired retirees who had been working for more than nine consecutive years and averaged 729 hours per year, per rehired retiree, over the past four years. These two issues along with the lack of a formal process for LACERA to ensure compliance with CERL, PEPRA and IRS rules resulted an unsatisfactory audit rating.

LACERA management has agreed with the findings and committed to conferring with County stakeholders to evaluate circumstances requiring returning retirees to work for an extended period. Additionally, management has committed to developing and implementing a policy and a set of normal process procedures for remediation, as well as consequences to ensure Los Angeles County's compliance with CERL, PEPRA, and IRS rules. The recommendations are estimated to be completed by June 30, 2023.

Attachment: Los Angeles County's Compliance with Requirements for Rehired Retirees

c: Santos H. Kreimann  
Luis A. Lugo  
Laura Guglielmo  
JJ Popowich  
Steven P. Rice



**INTERNAL AUDIT DIVISION**

**Los Angeles County's Compliance with  
Requirements for Rehired Retirees –  
Fiscal Year Ended June 30, 2021**

November 4, 2022

**REVIEW PERFORMED BY:**  
George Lunde, Senior Internal Auditor

## AUDIT REPORT

<b>Audit Name:</b>	Los Angeles County's Compliance with Requirements for Rehired Retirees
<b>Responsible Division:</b>	Executive Office
<b>Audit Rating*:</b>	Unsatisfactory
<b>Prior Audit Rating*:</b>	N/A
<b>Prior Report Date:</b>	N/A

## BACKGROUND

As part of our Audit Plan, we conducted an audit of Los Angeles County's (County) compliance with requirements for hiring County retirees for fiscal year ended June 30, 2021. We perform this audit annually as failure to adhere to the regulations and requirements not only violates the state law governing retirement benefits, but it could also jeopardize the qualified tax deferred status of LACERA under federal tax law.

The State of California's County Employees Retirement Law (CERL) and Public Employees' Pension Reform Act of 2013 (PEPRA) provides that if the County believes its retirees possess special skills or knowledge, the County has the option to employ those retirees as "Rehired Retirees." Under Government Code Section 31680.3 of CERL, rehired retirees may work up to 960 hours per fiscal year, on a temporary basis, without affecting their retirement status or benefits.

In addition, Internal Revenue Service (IRS) regulations require a "bona fide" break in service after retirement if the retiree is under the "normal retirement age," before the retiree can be rehired. To comply with the IRS regulation, LACERA's Board of Retirement adopted a resolution in 2006 stating that a member under the "normal retirement age" may not return to temporary County service within 90 days of his or her retirement date. All rehired retirees under their "normal retirement age" must comply with at least the 90-daybreak in service requirement, as well as the requirements of PEPRA.

"Normal retirement age", as defined by LACERA's Board of Retirement, is as follows:

- Age 57 for general members of Plan A, B, C, D, or G
- Age 65 for general members of Plan E
- Age 55 for safety members

In addition to IRS requirements, the California Public Employees' Pension Reform Act of 2013 (PEPRA) added additional restrictions for Rehired Retirees under "the normal age of retirement". The PEPRA regulations reinforced the 960-hour limit and added its own break in service requirement of 180 continuous days before allowing for rehire. PEPRA does allow the following two exceptions to the 180-day requirement:

- If the employer can certify it is necessary to fill a critically needed position and the hiring has been approved by the Board of Supervisors (or the Board of Retirement, for LACERA positions) in an open meeting
- If the retiree is a public safety officer or firefighter

Those who are eligible for the PEPRA 180-day break-in-service exceptions still must comply with the IRS's "bona fide" break-in-service of 90 days. In the event of a conflict between the CERL and PEPRA provisions, PEPRA's requirements generally take precedence over CERL.

PEPRA section 7522.56 (c) emphasizes that the work is to be of a limited duration. It provides that appointing employers may rehire retirees either during an emergency to prevent stoppage of public business or because the rehired person has skills needed to perform work of limited duration.

On March 4, 2020, the Governor of California declared a statewide emergency due to the COVID-19 pandemic. He issued Executive Order N-25-20 on March 12, 2020, to enhance California's ability to respond to COVID-19 by suspending certain reinstatement and work hour limitations under California Public Employees' Pension Reform Act (PEPRA). Subsequently, he issued Executive Order N-35-20 on March 21, 2020, to extend the suspension of these limitations to local governments.

On March 30, 2020, the County Chief Executive Officer (CEO) issued a notification to Department Heads that the Governor's declarations superseded applicable portions of Countywide Policy, Procedure, and Guideline (PPG) 505 "Reinstatement of Retirees to a 120-Day Temporary Assignment."

Effective March 12, 2020 as a result of, both the State Executive Orders and the related County notification, the following compliance requirements were suspended for those rehired retirees working on job assignments directly related combating the Covid-19 pandemic:

- Limitation of 960 hours per fiscal year
- 90-day IRS break in service requirements
- 180-day PEPRA break in service requirements

This suspension of compliance requirements remained in place through the end of our testing year of fiscal year ended June 30, 2021.

### **AUDIT OBJECTIVE & SCOPE**

For Fiscal Year Ended June 30, 2021, LACERA Internal Audit received payroll detail from the County Auditor-Controller identifying 408 retirees who worked as rehired retirees during that Fiscal Year.

We tested all 408 (100%) for compliance with:

- CERL's 960-hour requirement, hours worked did not exceed 960 hours for the Fiscal Year except where the Rehired Retiree's time was coded as COVID-19 related work,
- IRS' "bona fide" break-in-service requirement, defined as 90 days by LACERA's Board of Retirement, except where the Rehired Retiree's assignment was coded as COVID-19 related work, and

- PEPRAs 180-day break in service requirement, except where the Rehired Retiree's assignment was coded as COVID-19 related work.

Additionally, to test the PEPRAs requirement of "limited duration," we stratified all 408 retirees, based on continuous years worked. We used the data that we have accumulated over the last 9 years, to perform this compliance test.

### AUDIT RATING & SUMMARY OF FINDINGS

In our opinion, the current effectiveness of the key controls applicable to the audit scope are **Unsatisfactory**.

#### Summary of Findings

Finding#	Page	Description of Finding	Risk Rating**
F1	5	Spike in the number of rehired retirees Exceeding 960-Hour Limit	High
F2	7	Lack of adherence to PEPRAs "limited duration" language	High

Each of the above Findings are detailed in the following pages, including our Recommendations and Management Action Plans.

We noted no issues of noncompliance with regards to the PEPRAs 180-day break-in-service requirements, or the IRS 90-day break-service requirement.

#### REVIEWED AND APPROVED



Richard P. Bendall  
Chief Audit Executive

Date: November 4, 2022

\*\* See Appendix 2 for Finding's Risk Rating



## REPORT DISTRIBUTION

2022 Audit Committee	Santos H. Kreimann, CEO	Steven P. Rice, Chief Legal Counsel
2022 Plante Moran Audit Team	Luis A. Lugo, DCEO	
Robert Griffin, Audit Committee Consultant	JJ Popowich, AEO	
Internal Audit Group	Laura Guglielmo, AEO	

## FINDING #1

Spike in the number of Rehired Retirees Exceeding 960-Hour Limit	<b>Risk Rating**</b>
	High

## OBSERVATION

As indicated in the table below, our testing noted a spike in the number of rehired retirees who exceeded the 960-hour limit relative to prior years. Internal Audit reported all 10 exceptions noted to the Benefits and Employee Relations Division of the County's CEO office.

Fiscal Year Ended June 30	Rehired Retirees	Noncompliant Rehired Retirees	Noncompliance as a Percentage	Total Overage Hours	Average Hours Over
2021	408	10	2.4%	1778	177
2020	500	1	<1.0%	414	414
2019	482	5	1.0%	47	9.4
2018	476	6	1.3%	145	24

We noted that of the 10 exceptions,

- Two were each over the limit by 703 and 917 hours, respectively
- One was over the limit by 76 hours
- The remaining seven were each over the limit by less than 50 hours

There were 14 other rehired retirees that exceeded 960 hours but for each of them we verified that they had the appropriate documentation to support a COVID-19 exemption. It is possible, due to this unusual spike in retirees exceeding the limit, that their departments intended for some of these 10 audit exceptions to be classified as COVID-19 exceptions, but their departments did not comply with the steps to ensure they were classified appropriately.

Internal Audit reported all 10 exceptions noted to the Benefits and Employee Relations Division of the County's CEO office.

Based on discussions with other peer pension systems, plan sponsors are required to report to the plan the rehired retirees' worked hours as part of payroll. This allows the plan to warn the rehired retiree when they approach the limit and also, to either terminate retirement benefits or require repayment to prevent "double-dipping."

## RISK

Failure to adhere to the 960-hour limit is a violation CERL Section 31680.3, LA County PPG 505, the IRS and PEPRA. Non-compliance with CERL, IRS regulations and/or PEPRA could risk LACERA's qualified plan status.

## RECOMMENDATION

1. We recommend LACERA's CEO formally request the County CEO in conjunction with the County Director of Human Resources and Auditor-Controller to prepare a corrective action plan that consolidates and actively monitors the rehired retiree (960-hour limit) reporting requirements for all County departments.

2. We recommend LACERA's Executive Office, Systems, and Benefits work with the County's CEO Office and Auditor-Controller to establish an automated feed of rehired retirees' hours as part of payroll data.
3. We recommend LACERA's Executive Office, Legal Office, and Benefits develop a policy and procedure to address both preventing overages and taking the required action on the retirement payroll of retirees that exceed the 960-hour limit.

### **MANAGEMENT'S RESPONSE**

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LACERA management supports the outlined recommendation(s) in working with the County's CEO office, Auditor Controller, and County Human Resource department to determine if we're able to obtain (preferable in an automated fashion) Rehired Retirees' hours to ensure compliance against the 960-hour limit.

In terms of actionable steps, management will set-up a meeting with County CEO, Auditor Controller, and Human Resources to explore data feed options. The County is currently in the process of a "black-out" year-end system maintenance and will not take on new data projects until mid-January 2023, as described by the Auditor Controller Division Chief. We're not able to provide an exact timeframe for when this recommendation will be implemented, since it's predicated on the County's bandwidth and willingness to provide data. We commit to engaging the County in January 2023 and providing an update by March 30, 2023.

After conferring with the County and assessing the extent of their ability to track employee time, LACERA will develop and implement a policy and set of procedures to include the normal process as well the consequences and remediation needed to ensure compliance with CERL, PEPRRA and the IRS requirements.

### **TARGET COMPLETION DATE**

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To Be Determined (Update will be provided March 30, 2023).

## FINDING #2

Lack of adherence to PEPRA's "limited duration" language	Risk Rating**
	High

## OBSERVATION

Based on available data Internal Audit received, we stratified the rehired retiree population based on continuous years worked. The following table breaks out the 408 rehired retirees by the number of consecutive years worked and identifies the average hours worked by RRs up to the most recent four years (less for those with under 4 consecutive years).

Consecutive Years RRs Worked Through FYE 2021	RR Count	Most Recent 4 Year Averaged Hours (per) RR (per) Year
1	46	131
2	71	274
3	50	449
4	43	626
5	39	606
6	40	689
7	37	693
8	19	614
9+	63	729

Of the 408 current rehired retirees (RRs), 63 (15%) have worked consecutively as rehired retirees for nine or more years, averaging 729 hours per year, per rehired retiree, over the past four years.

This situation violates PEPRA section 7522.56 (c) where it states, "A person who retires from a public employer may serve without reinstatement from retirement or loss or interruption of benefits provided by the retirement system upon appointment by the appointing power of a public employer either during an emergency to prevent stoppage of public business or because the retired person has skills needed to perform work of limited duration."

LACERA, as benefit trust fund administrator, could proceed with recovery of trust funds for benefits paid during the period of excessive, unlawful work duration.

## RISK

The above chart highlights a situation which could potentially lead to headline risk regarding the lack of compliance with the PEPRA laws around rehired retirees and gives the appearance of allowing "double dipping." It also highlights a continued reliance on the rehired retiree to avert an implied risk of business disruption in their absence.

\*\* See Appendix 2 for Finding's Risk Rating

## **RECOMMENDATION**

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4. We recommend LACERA's Executive Office and Legal Office work with the Board of Retirement to determine a more defined "bright-line" definition of limited duration to ensure compliance with PEPRA and provide for recovery of benefits paid during periods worked in violation of PEPRA law.

## **MANAGEMENT'S RESPONSE**

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LACERA management supports the outlined recommendation in working with the Legal Office and Board of Retirement, with appropriate consultation with other stakeholders, to develop a communication and enforcement policy and procedures, including a "bright-line" definition of limited duration to ensure compliance with PEPRA and provide for steps to be taken in the case of violation, while recognizing the need for flexibility within statutorily permissible guardrails. Such a policy and procedures are in the interest of LACERA in its role in enforcing PEPRA. They are also in the interest of retirees to avoid unintended effects on their pension. Finally, they are in the interest of the County and other participating employers in ensuring that their workforce utilization complies with PEPRA.

After conferring with internal and external stakeholders to evaluate the circumstances that may require use of returning retirees and the range of duration of such use, LACERA will develop and implement a policy and set of procedures to include the normal process as well the consequences and remediation needed to ensure compliance with PEPRA, as well as CERL and IRS requirements. Actionable steps and timeline will include the development of a policy and procedures for presentation to the Operations Oversight Committee and Board of Retirement by June 30, 2023.

This work will be coordinated for consistency with development of a policy and procedures to guide LACERA in managing its own use of returning retirees to comply with the limited duration requirement.

## **TARGET COMPLETION DATE**

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June 30, 2023

## **APPENDIX 1**

### **AUDIT RATING SCALE**

Internal Audit issues three standard audit report evaluations as defined below:

#### **Satisfactory**

The control environment is acceptable with minor issues having been identified. The overall environment contains sufficient internal controls to address key risks, and business practices generally comply with Company policies. Corrective action should be implemented to address any weaknesses identified during the audit in order to maintain or enhance the control environment.

#### **Opportunities for Improvement**

The control environment has opportunities for improvement with significant issues, individually or in the aggregate, having been identified or major noncompliance with Company policies. The overall environment contains insufficient internal controls to address key risks. Prompt corrective action should be implemented to address the weaknesses and strengthen the control environment.

#### **Unsatisfactory**

The control environment is unacceptable with critical issues, individually or in the aggregate, having been identified or major noncompliance with Company policies. The overall environment contains insufficient internal controls to address key risks and the impact may be substantial in size or nature or their effect cannot be quantified. Immediate corrective action should be implemented to address the weaknesses and strengthen the control environment.

## APPENDIX 2 FINDING'S RISK RATING SCALE


Findings identified during the course of the audit are assigned a risk rating, as outlined in the table below. The risk rating is based on the financial, operational, compliance, or reputational impact that the issue identified could have on LACERA.

Rating	Financial	Internal Controls	Compliance	Reputational	Executive Management
<b>High</b>	<p>Large financial impact to LACERA or members</p> <p>Actions not aligned with fiduciary responsibilities</p>	<p>Missing or inadequate key internal controls</p> <p>Not adequate to identify fraud, noncompliance or misappropriation</p>	<p>Non-compliance with applicable Federal or state laws or LACERA's policies</p>	<p>High probability for external audit issues and/or negative public perception</p>	<p>Important critical business process identified by Exec Office</p> <p>Requires immediate attention</p>
<b>Medium</b>	<p>Moderate financial risk to LACERA or members</p> <p>Actions could be better aligned with fiduciary responsibilities</p>	<p>Partial key internal controls</p> <p>Not adequate to identify noncompliance or misappropriation in timely manner</p>	<p>Inconsistent compliance with applicable Federal or state laws or LACERA's policies</p>	<p>Potential for external audit issues and/or negative public perception</p>	<p>Relatively important</p> <p>May or may not require immediate attention</p>
<b>Low</b>	<p>Low financial impact to LACERA or members</p>	<p>Internal controls in place but not consistently efficient/effective</p> <p>Implementing / enhancing controls could prevent future problems</p>	<p>General compliance with applicable Federal or state laws or LACERA's policies, but some minor discrepancies exist</p>	<p>Low probability for external audit issues and/or negative public perception</p>	<p>Lower significance</p> <p>Does not require immediate attention</p>

**FOR INFORMATION ONLY**

November 9, 2022

TO: Trustees – Board of Investments

FROM: Scott Zdrazil   
Principal Investment Officer

FOR: December 14, 2022, Board of Investments Meeting

SUBJECT: **PRINCIPLES FOR RESPONSIBLE INVESTMENT SIGNATORY BALLOT**

Please find below a copy of LACERA's submitted ballot for the Principles for Responsible Investment (PRI) 2022 signatory meeting and election to fill one asset owner board seat. PRI's board consists of ten directors, seven of whom are elected by asset owners to two-year terms. There was one nominee to fill one board seat. In accordance with LACERA's *Corporate Governance and Stewardship Principles* (Principles), staff consulted the Corporate Governance Committee Chair to execute LACERA's ballot in advance of PRI's vote deadline. LACERA supported the sole nominee, Denísio Liberato (Chief Investment Officer of Brazilian fund, PREVI), consistent with LACERA's *Principles* to consider, in part, professional experience, geographic diversity among PRI signatories, and the nominating fund's history of involvement with PRI to assist in setting and overseeing the strategic direction of the association. Other routine business matters were voted in line with LACERA's *Principles*. This report is being provided to the Board per policy and practice.

**Voting receipt - 2022 PRI Annual Election**

Receipt code: **VH6T**

Time of vote: **2022-11-09 18:43:40 Europe/London**

IP address: **163.116.132.116**

**2022 Asset Owner Ballot****2022 PRI Board Election**

Denísio Liberato: **For**

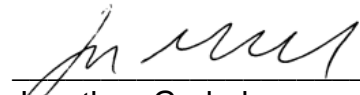
2022 Annual Report and Accounts: **For**

2022 Signatory General Meeting (SGM) Minutes: **For**



Trustees- Board of Investments  
November 9, 2022  
Page 2 of 2

Noted and Reviewed:

A handwritten signature in black ink, appearing to read 'Jonathan Grabel', is written over a horizontal line.

Jonathan Grabel  
Chief Investment Officer

**FOR INFORMATION ONLY**

December 5, 2022

TO: Each Trustee,  
Board of Investments

FROM: Steven P. Rice *SPR*  
Chief Counsel

FOR: December 14, 2022 Board of Investments Meeting

SUBJECT: AB 2449 Teleconference Meeting Procedures

This memo is provided for informational purposes only with regard to the new AB 2499 teleconference procedures and possible options to allocate teleconferencing rights in the event there are more requests than the statute permits. This item will return on the January 2023 Board of Investments agenda for discussion and direction.

**Legal Authority**

Under Article XVI, Section 17 of the California Constitution, the Board of Investments has plenary authority and exclusive fiduciary responsibility for investments, actuarial matters, and other issues. This authority includes the ability of the Board to manage its own Board and Committee meetings under the Brown Act and evaluate legal options for meetings, such as how to administer teleconferencing under AB 2449.

**Background on AB 2449**

This memo discusses implementation options for the new teleconference meeting procedures under AB 2449, which was signed into the law by the Governor on September 13, 2022, effective January 1, 2023. A copy is attached.

The AB 2449 procedures are separate from the COVID emergency rules under AB 361 and Section 54953(e) that the Boards have been utilizing since September 2021 and which will remain in effect until January 1, 2024 and at that time are repealed. While AB 2449 is effective on January 1, 2023, the AB 2449 rules will not be relevant for LACERA's Boards and Committees until the March 2023 meetings and thereafter. This is because the Board of Retirement and Board of Investments approved at their September 23, 2022 joint meeting that the Boards and Committees will continue to use the COVID emergency rules until the State of Emergency ends, which is expected to occur on February 28, 2023.

The traditional teleconference rules requiring that each teleconference location be identified and open to the public will also continue to be available under AB 2449.

AB 2449 creates three sets of new rules for teleconferencing under Section 54953, each of which applies for a different period of time.

- **Effective from January 1, 2023 through January 1, 2024.** Under this version of Section 54953(f)-(l), the following rules will apply:

- A quorum of the legislative body must participate from the same physical location in the County of Los Angeles for which the meeting is agendized. A quorum must be physically present for the entire meeting. This location must be open to the public. The meeting must be livestreamed, and there must be a two-way telephonic or audio-visual method of viewing and providing public comment.

Applying this part of the statute for the Board of Investments, its Committees, and joint Committees, AB 2449 imposes the following limits for quorum and teleconference attendance, subject to the individual attendance limits discussed below:

<b><u>Body</u></b>	<b><u>Quorum in Person</u></b>	<b><u>Maximum by Teleconference</u></b>
BOI	Five	Four
Corporate Governance	Three	One (plus alternate if not needed for a quorum)
Credit	Three	One (plus alternate if not needed for a quorum)
Equity	Three	One (plus alternate if not needed for a quorum)
Real Assets	Three	One (plus alternate if not needed for a quorum)
JOGC	Five	Three
Audit	Four	Three

- The remaining members of the body may participate remotely, without the need to agendize their location or open it to the public, if either:
  - First, the member notifies the body at the earliest opportunity, including at the start of the meeting, of their need to appear remotely for just cause, including a general description of the circumstances supporting the just cause. “Just cause” is defined as (1) childcare or caregiving needs of certain family members or a domestic partner, (2) contagious illness that prevents attendance, (3) a need related to

a physical or mental disability as defined in Government Code Sections 12926 and 12926.1 which is not accommodated, or (4) travel while on official public business of the body or another state or local agency. As stated above, a quorum must be physically present in person for the entire meeting; if a quorum is lost, the body will not be able to take action. Even though notice of “just cause” can be made as late as the start of the meeting, the meeting cannot proceed if there is not an in-person quorum.

The “just cause” excuse from in-person attendance cannot be invoked more than two meetings per calendar year; or

- Second, the member requests the legislative body to allow them to participate remotely due to emergency circumstances and the body takes action to approve the request. “Emergency circumstances” are defined as a physical or family medical emergency that prevents the member from attending in person. The body must request a general description of the circumstances of not more than twenty words and without disclosing personal medical information. The member making the request must make it as soon as possible. The body may act on the request as an urgency item by majority vote under Section 54952.2(b)(4), only if there is not sufficient time to place the request on the posted agenda. Separate requests must be made by a member each time they seek to request to participate remotely. An in-person quorum must be present for the entire meeting. A request cannot be acted upon in the absence of an in-person quorum.
- These provisions in total may not be used as a means for any members to participate in teleconference meetings for a period of more than three consecutive months or 20% of the regular meetings of the body within a calendar year or more than two meetings if the body regularly meets fewer than ten times per calendar year.

Therefore, for the Board of Investments, its Committees, and joint Committees, AB 2449 imposes the following limits on each Trustee’s teleconference attendance per calendar year:

BOI	Maximum of two teleconference meetings/Trustee/year
Corporate Governance	Maximum of two teleconference meetings/Trustee/year

Credit	Maximum of two teleconference meetings/Trustee/year
Equity	Maximum of two teleconference meetings/Trustee/year
Real Assets	Maximum of two teleconference meetings/Trustee/year
JOGC	Maximum of two teleconference meetings/Trustee/year
Audit	Maximum of two teleconference meetings/Trustee/year

- The member participating remotely must state whether any other individuals 18 years or older are present in the room at the remote location with the member and the general nature of the member's relationship with any such individuals.
- The body must have and implement a procedure for receiving and swiftly resolving requests for reasonable accommodation from individuals with disabilities under the ADA. The body shall conduct meetings under this section consistent with applicable civil rights and nondiscrimination laws.
- The body may offer additional teleconference or physical locations from which the public may observe and address the body.
- The COVID emergency teleconference rules under Section 54953(e) will still be in effect concurrently with the above rules through January 1, 2024.
- **Effective from January 1, 2024 to January 1, 2026.** Under this version of Section 54953(f)-(i), the same rules as described above apply, except this version will go into effect after the COVID emergency provisions now in effect will no longer be in effect, having been repealed on January 1, 2024.
- **Effective from and after January 1, 2026.** Under this version of Section 54953, the above rules are repealed, and the Brown Act will return exclusively to the historical teleconference rules where teleconference locations must be agendized and open to the public.

### **Options for AB 2449 Implementation Procedures**

The Board's AB 2449 policy must include provisions consistent with the requirements set forth above, which are not discretionary insofar as they relate to the in-person quorum requirement and teleconferencing limits for each Trustee. The Executive Board Assistants will maintain records to ensure that all Trustees do not exceed the maximum permitted number of teleconference meeting attendance each calendar year. Forms will be created for trustees to use in making their request and presenting their general

description of “just cause” or “emergency circumstances.” A designated email address will be provided for submission of requests.

Since it may develop that there is a greater demand for teleconferencing positions at any given meeting than permitted by AB 2449 (i.e., requests by more than a quorum), it may be helpful to have a system of established priorities. Any system will need to be capable of implementation by staff or by the Board or Committee Chair because it is not possible under AB 2449 for the Board, or a Committee, to act in the absence of a quorum in person. Any system will also need to be separately implemented for each Board and Committee since each body has different quorum requirements and teleconference limits based on size and meeting frequency. Any system must be built to ensure ADA compliance, which is required by AB 2449, so as not to allow cause based on attendance at a conference or other business event to take priority over a health or disability necessity.

The options listed below are possible solutions for resolving priorities if there is a greater demand for teleconferencing than allowed for any given Board or Committee meeting:

1. *Evaluate All Requests.* The Board may determine that each teleconference request will be considered and evaluated by staff. Under this option, action would be taken based on evaluation of the “general description” as required by AB 2449 that must be provided by each requesting Trustee. Decisions would be based on staff’s evaluation of the merit of each request. This option has the disadvantage of placing staff in the difficult position of deciding the relative merit of individual requests.
2. *First Come, First Served.* Under this system, priority will be determined by the order in which Trustees advise staff in writing of their need for teleconference based on either just cause or emergency and provide the required “general description.” This option has the advantage of being objective, without any need for staff discretion, but it suffers from the disadvantage of not considering the relative merit of requests.
3. *Chair Discretion.* This system assigns responsibility for weighing requests to the Chair of the Board and each Committee. This option reserves authority for each Board or Committee meeting to the Chair of the body, which is an existing Chair authority. The Board of Investments Charter provides in Section 4.1 that the Chair shall “facilitate and preside over BOI meetings.” This option also removes the responsibility from staff for administering the allocation of teleconference attendance.
4. *Prioritization Based on Trustee Seniority.* The Board may adopt a system of

seniority lists like those maintained used for Board officer selection. Such lists would be constructed identically to the officer selection lists, but they would be created and maintained separately for the Board and each Committee. Like the first come, first served option, a list system is objective, but it does not consider the relative merits of requests. This system has the advantage of having already been debated by the Board and accepted in its implementation to date.

The Board may consider variations of these options or propose others. This discussion will take place at the January 2023 Board meeting.

### **Conclusion**

This memo was for information only. The issue will return as an action item on the January 2023 agenda for discussion and direction.

### **Attachment**

c: Santos H. Kreimann  
Jonathan Grabel  
Luis A. Lugo  
Ted Granger  
Principal Investment Officers  
Barry Lew



## AB-2449 Open meetings: local agencies: teleconferences. (2021-2022)

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Date Published: 09/14/2022 09:00 PM

### Assembly Bill No. 2449

#### CHAPTER 285

An act to amend, repeal, and add Sections 54953 and 54954.2 of the Government Code, relating to local government.

[ Approved by Governor September 13, 2022. Filed with Secretary of State September 13, 2022. ]

#### LEGISLATIVE COUNSEL'S DIGEST

AB 2449, Blanca Rubio. Open meetings: local agencies: teleconferences.

Existing law, the Ralph M. Brown Act, requires, with specified exceptions, that all meetings of a legislative body of a local agency, as those terms are defined, be open and public and that all persons be permitted to attend and participate. The act generally requires posting an agenda at least 72 hours before a regular meeting that contains a brief general description of each item of business to be transacted or discussed at the meeting, and prohibits any action or discussion from being undertaken on any item not appearing on the posted agenda. The act authorizes a legislative body to take action on items of business not appearing on the posted agenda under specified conditions. The act contains specified provisions regarding providing for the ability of the public to observe and provide comment. The act allows for meetings to occur via teleconferencing subject to certain requirements, particularly that the legislative body notice each teleconference location of each member that will be participating in the public meeting, that each teleconference location be accessible to the public, that members of the public be allowed to address the legislative body at each teleconference location, that the legislative body post an agenda at each teleconference location, and that at least a quorum of the legislative body participate from locations within the boundaries of the local agency's jurisdiction. The act provides an exemption to the jurisdictional requirement for health authorities, as defined.

Existing law, until January 1, 2024, authorizes a local agency to use teleconferencing without complying with those specified teleconferencing requirements in specified circumstances when a declared state of emergency is in effect, or in other situations related to public health.

This bill would revise and recast those teleconferencing provisions and, until January 1, 2026, would authorize 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 and situated within the local agency's jurisdiction. Under this exception, the bill would authorize a member to participate remotely under specified circumstances, including participating remotely for just cause or due to emergency circumstances. The emergency circumstances basis for remote participation would be contingent on a request to, and action by, the legislative body, as prescribed. The bill, until January 1, 2026, would authorize a legislative body to consider and



take action on a request from a member to participate in a meeting remotely due to emergency circumstances if the request does not allow sufficient time to place the proposed action on the posted agenda for the meeting for which the request is made. The bill would define terms for purposes of these teleconferencing provisions.

This bill would impose prescribed requirements for this exception relating to notice, agendas, the means and manner of access, and procedures for disruptions. The bill would require the legislative body to implement a procedure for receiving and swiftly resolving requests for reasonable accommodation for individuals with disabilities, consistent with federal law.

Existing constitutional provisions require that a statute that limits the right of access to the meetings of public bodies or the writings of public officials and agencies be adopted with findings demonstrating the interest protected by the limitation and the need for protecting that interest.

This bill would make legislative findings to that effect.

The California Constitution requires local agencies, for the purpose of ensuring public access to the meetings of public bodies and the writings of public officials and agencies, to comply with a statutory enactment that amends or enacts laws relating to public records or open meetings and contains findings demonstrating that the enactment furthers the constitutional requirements relating to this purpose.

This bill would make legislative findings to that effect.

Vote: majority Appropriation: no Fiscal Committee: no Local Program: no

## THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

**SECTION 1.** Section 54953 of the Government Code, as amended by Section 3 of Chapter 165 of the Statutes of 2021, is amended to read:

**54953.** (a) All meetings of the legislative body of a local agency shall be open and public, and all persons shall be permitted to attend any meeting of the legislative body of a local agency, except as otherwise provided in this chapter.

(b) (1) Notwithstanding any other provision of law, the legislative body of a local agency may use teleconferencing for the benefit of the public and the legislative body of a local agency in connection with any meeting or proceeding authorized by law. The teleconferenced meeting or proceeding shall comply with all otherwise applicable requirements of this chapter and all otherwise applicable provisions of law relating to a specific type of meeting or proceeding.

(2) Teleconferencing, as authorized by this section, may be used for all purposes in connection with any meeting within the subject matter jurisdiction of the legislative body. If the legislative body of a local agency elects to use teleconferencing, the legislative body of a local agency shall comply with all of the following:

(A) All votes taken during a teleconferenced meeting shall be by rollcall.

(B) The teleconferenced meetings shall be conducted in a manner that protects the statutory and constitutional rights of the parties or the public appearing before the legislative body of a local agency.

(C) The legislative body shall give notice of the meeting and post agendas as otherwise required by this chapter.

(D) The legislative body shall allow members of the public to access the meeting and the agenda shall provide an opportunity for members of the public to address the legislative body directly pursuant to Section 54954.3.

(3) If the legislative body of a local agency elects to use teleconferencing, it shall post agendas at all teleconference locations. Each teleconference location shall be identified in the notice and agenda of the meeting or proceeding, and each teleconference location shall be accessible to the public. During the teleconference, at least a quorum of the members of the legislative body shall participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction, except as provided in subdivisions (d) and (e).

(c) (1) No legislative body shall take action by secret ballot, whether preliminary or final.

(2) The legislative body of a local agency shall publicly report any action taken and the vote or abstention on that action of each member present for the action.

(3) Prior to taking final action, the legislative body shall orally report a summary of a recommendation for a final action on the salaries, salary schedules, or compensation paid in the form of fringe benefits of a local agency executive, as defined in subdivision (d) of Section 3511.1, during the open meeting in which the final action is to be taken. This paragraph shall not affect the public's right under the California Public Records Act (Division 10 (commencing with Section 7920.000) of Title 1) to inspect or copy records created or received in the process of developing the recommendation.

(d) (1) Notwithstanding the provisions relating to a quorum in paragraph (3) of subdivision (b), if a health authority conducts a teleconference meeting, members who are outside the jurisdiction of the authority may be counted toward the establishment of a quorum when participating in the teleconference if at least 50 percent of the number of members that would establish a quorum are present within the boundaries of the territory over which the authority exercises jurisdiction, and the health authority provides a teleconference number, and associated access codes, if any, that allows any person to call in to participate in the meeting and the number and access codes are identified in the notice and agenda of the meeting.

(2) Nothing in this subdivision shall be construed as discouraging health authority members from regularly meeting at a common physical site within the jurisdiction of the authority or from using teleconference locations within or near the jurisdiction of the authority. A teleconference meeting for which a quorum is established pursuant to this subdivision shall be subject to all other requirements of this section.

(3) For purposes of this subdivision, a health authority means any entity created pursuant to Sections 14018.7, 14087.31, 14087.35, 14087.36, 14087.38, and 14087.9605 of the Welfare and Institutions Code, any joint powers authority created pursuant to Article 1 (commencing with Section 6500) of Chapter 5 of Division 7 for the purpose of contracting pursuant to Section 14087.3 of the Welfare and Institutions Code, and any advisory committee to a county-sponsored health plan licensed pursuant to Chapter 2.2 (commencing with Section 1340) of Division 2 of the Health and Safety Code if the advisory committee has 12 or more members.

(e) (1) The legislative body of a local agency may use teleconferencing without complying with the requirements of paragraph (3) of subdivision (b) if the legislative body complies with the requirements of paragraph (2) of this subdivision in any of the following circumstances:

(A) The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.

(B) The legislative body holds a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

(C) The legislative body holds a meeting during a proclaimed state of emergency and has determined, by majority vote, pursuant to subparagraph (B), that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

(2) A legislative body that holds a meeting pursuant to this subdivision shall do all of the following:

(A) In each instance in which notice of the time of the teleconferenced meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body shall also give notice of the means by which members of the public may access the meeting and offer public comment. The agenda shall identify and include an opportunity for all persons to attend via a call-in option or an internet-based service option.

(B) In the event of a disruption that prevents the legislative body from broadcasting the meeting to members of the public using the call-in option or internet-based service option, or in the event of a disruption within the local agency's control that prevents members of the public from offering public comments using the call-in option or internet-based service option, the legislative body shall take no further action on items appearing on the meeting agenda until public access to the meeting via the call-in option or internet-based service option is restored. Actions taken on agenda items during a disruption that prevents the legislative body from broadcasting the meeting may be challenged pursuant to Section 54960.1.

(C) The legislative body shall not require public comments to be submitted in advance of the meeting and must provide an opportunity for the public to address the legislative body and offer comment in real time.

(D) Notwithstanding Section 54953.3, an individual desiring to provide public comment through the use of an internet website, or other online platform, not under the control of the local legislative body, that requires registration to log in to a teleconference may be required to register as required by the third-party internet website or online platform to participate.

(E) (i) A legislative body that provides a timed public comment period for each agenda item shall not close the public comment period for the agenda item, or the opportunity to register, pursuant to subparagraph (F), to provide public comment until that timed public comment period has elapsed.

(ii) A legislative body that does not provide a timed public comment period, but takes public comment separately on each agenda item, shall allow a reasonable amount of time per agenda item to allow public members the opportunity to provide public comment, including time for members of the public to register pursuant to subparagraph (F), or otherwise be recognized for the purpose of providing public comment.

(iii) A legislative body that provides a timed general public comment period that does not correspond to a specific agenda item shall not close the public comment period or the opportunity to register, pursuant to subparagraph (F), until the timed general public comment period has elapsed.

(3) If a state of emergency remains active, or state or local officials have imposed or recommended measures to promote social distancing, in order to continue to teleconference without compliance with paragraph (3) of subdivision (b), the legislative body shall, not later than 30 days after teleconferencing for the first time pursuant to subparagraph (A), (B), or (C) of paragraph (1), and every 30 days thereafter, make the following findings by majority vote:

(A) The legislative body has reconsidered the circumstances of the state of emergency.

(B) Any of the following circumstances exist:

(i) The state of emergency continues to directly impact the ability of the members to meet safely in person.

(ii) State or local officials continue to impose or recommend measures to promote social distancing.

(4) This subdivision shall not be construed to require the legislative body to provide a physical location from which the public may attend or comment.

(f) (1) The legislative body of a local agency may use teleconferencing without complying with paragraph (3) of subdivision (b) if, during the teleconference meeting, at least a quorum of the members of the legislative body participates in person from a singular physical location clearly identified on the agenda, which location shall be open to the public and situated within the boundaries of the territory over which the local agency exercises jurisdiction and the legislative body complies with all of the following:

(A) The legislative body shall provide at least one of the following as a means by which the public may remotely hear and visually observe the meeting, and remotely address the legislative body:

(i) A two-way audiovisual platform.

(ii) A two-way telephonic service and a live webcasting of the meeting.

(B) In each instance in which notice of the time of the teleconferenced meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body shall also give notice of the means by which members of the public may access the meeting and offer public comment.

(C) The agenda shall identify and include an opportunity for all persons to attend and address the legislative body directly pursuant to Section 54954.3 via a call-in option, via an internet-based service option, and at the in-person location of the meeting.

(D) In the event of a disruption that prevents the legislative body from broadcasting the meeting to members of the public using the call-in option or internet-based service option, or in the event of a disruption within the local agency's control that prevents members of the public from offering public comments using the call-in option or internet-based service option, the legislative body shall take no further action on items appearing on the meeting agenda until public access to the meeting via the call-in option or internet-based service option is restored. Actions taken on agenda items during a disruption that prevents the legislative body from broadcasting the meeting may be challenged pursuant to Section 54960.1.

(E) The legislative body shall not require public comments to be submitted in advance of the meeting and must provide an opportunity for the public to address the legislative body and offer comment in real time.

(F) Notwithstanding Section 54953.3, an individual desiring to provide public comment through the use of an internet website, or other online platform, not under the control of the local legislative body, that requires registration to log in to a teleconference may be required to register as required by the third-party internet website or online platform to participate.

(2) A member of the legislative body shall only participate in the meeting remotely pursuant to this subdivision, if all of the following requirements are met:

(A) One of the following circumstances applies:

(i) The member notifies the legislative body at the earliest opportunity possible, including at the start of a regular meeting, of their need to participate remotely for just cause, including a general description of the circumstances relating to their need to appear remotely at the given meeting. The provisions of this clause shall not be used by any member of the legislative body for more than two meetings per calendar year.

(ii) The member requests the legislative body to allow them to participate in the meeting remotely due to emergency circumstances and the legislative body takes action to approve the request. The legislative body shall request a general description of the circumstances relating to their need to appear remotely at the given meeting. A general description of an item generally need not exceed 20 words and shall not require the member to disclose any medical diagnosis or disability, or any personal medical information that is already exempt under existing law, such as the Confidentiality of Medical Information Act (Chapter 1 (commencing with Section 56) of Part 2.6 of Division 1 of the Civil Code). For the purposes of this clause, the following requirements apply:

(I) A member shall make a request to participate remotely at a meeting pursuant to this clause as soon as possible. The member shall make a separate request for each meeting in which they seek to participate remotely.

(II) The legislative body may take action on a request to participate remotely at the earliest opportunity. If the request does not allow sufficient time to place proposed action on such a request on the posted agenda for the meeting for which the request is made, the legislative body may take action at the beginning of the meeting in accordance with paragraph (4) of subdivision (b) of Section 54954.2.

(B) The member shall publicly disclose at the meeting before any action is taken, whether any other individuals 18 years of age or older are present in the room at the remote location with the member, and the general nature of the member's relationship with any such individuals.

(C) The member shall participate through both audio and visual technology.

(3) The provisions of this subdivision shall not serve as a means for any member of a legislative body to participate in meetings of the legislative body solely by teleconference from a remote location for a period of more than three consecutive months or 20 percent of the regular meetings for the local agency within a calendar year, or more than two meetings if the legislative body regularly meets fewer than 10 times per calendar year.

(g) The legislative body shall have and implement a procedure for receiving and swiftly resolving requests for reasonable accommodation for individuals with disabilities, consistent with the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and resolving any doubt in favor of accessibility. In each instance in which notice of the time of the meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body shall also give notice of the procedure for receiving and resolving requests for accommodation.

(h) The legislative body shall conduct meetings subject to this chapter consistent with applicable civil rights and nondiscrimination laws.

(i) (1) Nothing in this section shall prohibit a legislative body from providing the public with additional teleconference locations.

(2) Nothing in this section shall prohibit a legislative body from providing members of the public with additional physical locations in which the public may observe and address the legislative body by electronic means.

(j) For the purposes of this section, the following definitions shall apply:

(1) "Emergency circumstances" means a physical or family medical emergency that prevents a member from attending in person.

(2) "Just cause" means any of the following:

(A) A childcare or caregiving need of a child, parent, grandparent, grandchild, sibling, spouse, or domestic partner that requires them to participate remotely. "Child," "parent," "grandparent," "grandchild," and "sibling" have the same meaning as those terms do in Section 12945.2.

(B) A contagious illness that prevents a member from attending in person.

(C) A need related to a physical or mental disability as defined in Sections 12926 and 12926.1 not otherwise accommodated by subdivision (g).

(D) Travel while on official business of the legislative body or another state or local agency.

(3) "Remote location" means a location from which a member of a legislative body participates in a meeting pursuant to subdivision (f), other than any physical meeting location designated in the notice of the meeting. Remote locations need not be accessible to the public.

(4) "Remote participation" means participation in a meeting by teleconference at a location other than any physical meeting location designated in the notice of the meeting. Watching or listening to a meeting via webcasting or another similar electronic medium that does not permit members to interactively hear, discuss, or deliberate on matters, does not constitute remote participation.

(5) "State of emergency" means a state of emergency proclaimed pursuant to Section 8625 of the California Emergency Services Act (Article 1 (commencing with Section 8550) of Chapter 7 of Division 1 of Title 2).

(6) "Teleconference" means a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both.

(7) "Two-way audiovisual platform" means an online platform that provides participants with the ability to participate in a meeting via both an interactive video conference and a two-way telephonic function.

(8) "Two-way telephonic service" means a telephone service that does not require internet access, is not provided as part of a two-way audiovisual platform, and allows participants to dial a telephone number to listen and verbally participate.

(9) "Webcasting" means a streaming video broadcast online or on television, using streaming media technology to distribute a single content source to many simultaneous listeners and viewers.

(k) This section shall remain in effect only until January 1, 2024, and as of that date is repealed.

**SEC. 2.** Section 54953 of the Government Code, as added by Section 4 of Chapter 165 of the Statutes of 2021, is amended to read:

**54953.** (a) All meetings of the legislative body of a local agency shall be open and public, and all persons shall be permitted to attend any meeting of the legislative body of a local agency, except as otherwise provided in this chapter.

(b) (1) Notwithstanding any other provision of law, the legislative body of a local agency may use teleconferencing for the benefit of the public and the legislative body of a local agency in connection with any meeting or proceeding authorized by law. The teleconferenced meeting or proceeding shall comply with all otherwise applicable requirements of this chapter and all otherwise applicable provisions of law relating to a specific type of meeting or proceeding.

(2) Teleconferencing, as authorized by this section, may be used for all purposes in connection with any meeting within the subject matter jurisdiction of the legislative body. If the legislative body of a local agency elects to use teleconferencing, the legislative body of a local agency shall comply with all of the following:

(A) All votes taken during a teleconferenced meeting shall be by rollcall.

(B) The teleconferenced meetings shall be conducted in a manner that protects the statutory and constitutional rights of the parties or the public appearing before the legislative body of a local agency.

(C) The legislative body shall give notice of the meeting and post agendas as otherwise required by this chapter.

(D) The legislative body shall allow members of the public to access the meeting and the agenda shall provide an opportunity for members of the public to address the legislative body directly pursuant to Section 54954.3.

(3) If the legislative body of a local agency elects to use teleconferencing, it shall post agendas at all teleconference locations. Each teleconference location shall be identified in the notice and agenda of the meeting or proceeding, and each teleconference location shall be accessible to the public. During the teleconference, at least a quorum of the members of the legislative body shall participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction, except as provided in subdivision (d).

(c) (1) No legislative body shall take action by secret ballot, whether preliminary or final.

(2) The legislative body of a local agency shall publicly report any action taken and the vote or abstention on that action of each member present for the action.

(3) Prior to taking final action, the legislative body shall orally report a summary of a recommendation for a final action on the salaries, salary schedules, or compensation paid in the form of fringe benefits of a local agency executive, as defined in subdivision (d) of Section 3511.1, during the open meeting in which the final action is to be taken. This paragraph shall not affect the public's right under the California Public Records Act (Division 10 (commencing with Section 7920.000) of Title 1) to inspect or copy records created or received in the process of developing the recommendation.

(d) (1) Notwithstanding the provisions relating to a quorum in paragraph (3) of subdivision (b), if a health authority conducts a teleconference meeting, members who are outside the jurisdiction of the authority may be counted toward the establishment of a quorum when participating in the teleconference if at least 50 percent of the number of members that would establish a quorum are present within the boundaries of the territory over which the authority exercises jurisdiction, and the health authority provides a teleconference number, and associated access codes, if any, that allows any person to call in to participate in the meeting and the number and access codes are identified in the notice and agenda of the meeting.

(2) Nothing in this subdivision shall be construed as discouraging health authority members from regularly meeting at a common physical site within the jurisdiction of the authority or from using teleconference locations within or near the jurisdiction of the authority. A teleconference meeting for which a quorum is established pursuant to this subdivision shall be subject to all other requirements of this section.

(3) For purposes of this subdivision, a health authority means any entity created pursuant to Sections 14018.7, 14087.31, 14087.35, 14087.36, 14087.38, and 14087.9605 of the Welfare and Institutions Code, any joint powers authority created pursuant to Article 1 (commencing with Section 6500) of Chapter 5 of Division 7 for the purpose of contracting pursuant to Section 14087.3 of the Welfare and Institutions Code, and any advisory committee to a county-sponsored health plan licensed pursuant to Chapter 2.2 (commencing with Section 1340) of Division 2 of the Health and Safety Code if the advisory committee has 12 or more members.

(e) (1) The legislative body of a local agency may use teleconferencing without complying with paragraph (3) of subdivision (b) if, during the teleconference meeting, at least a quorum of the members of the legislative body participates in person from a singular physical location clearly identified on the agenda, which location shall be open to the public and situated within the boundaries of the territory over which the local agency exercises jurisdiction and the legislative body complies with all of the following:

(A) The legislative body shall provide at least one of the following as a means by which the public may remotely hear and visually observe the meeting, and remotely address the legislative body:

(i) A two-way audiovisual platform.

(ii) A two-way telephonic service and a live webcasting of the meeting.

(B) In each instance in which notice of the time of the teleconferenced meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body shall also give notice of the means by

which members of the public may access the meeting and offer public comment.

(C) The agenda shall identify and include an opportunity for all persons to attend and address the legislative body directly pursuant to Section 54954.3 via a call-in option, via an internet-based service option, and at the in-person location of the meeting.

(D) In the event of a disruption that prevents the legislative body from broadcasting the meeting to members of the public using the call-in option or internet-based service option, or in the event of a disruption within the local agency's control that prevents members of the public from offering public comments using the call-in option or internet-based service option, the legislative body shall take no further action on items appearing on the meeting agenda until public access to the meeting via the call-in option or internet-based service option is restored. Actions taken on agenda items during a disruption that prevents the legislative body from broadcasting the meeting may be challenged pursuant to Section 54960.1.

(E) The legislative body shall not require public comments to be submitted in advance of the meeting and must provide an opportunity for the public to address the legislative body and offer comment in real time.

(F) Notwithstanding Section 54953.3, an individual desiring to provide public comment through the use of an internet website, or other online platform, not under the control of the local legislative body, that requires registration to log in to a teleconference may be required to register as required by the third-party internet website or online platform to participate.

(2) A member of the legislative body shall only participate in the meeting remotely pursuant to this subdivision, if all of the following requirements are met:

(A) One of the following circumstances applies:

(i) The member notifies the legislative body at the earliest opportunity possible, including at the start of a regular meeting, of their need to participate remotely for just cause, including a general description of the circumstances relating to their need to appear remotely at the given meeting. The provisions of this clause shall not be used by any member of the legislative body for more than two meetings per calendar year.

(ii) The member requests the legislative body to allow them to participate in the meeting remotely due to emergency circumstances and the legislative body takes action to approve the request. The legislative body shall request a general description of the circumstances relating to their need to appear remotely at the given meeting. A general description of an item generally need not exceed 20 words and shall not require the member to disclose any medical diagnosis or disability, or any personal medical information that is already exempt under existing law, such as the Confidentiality of Medical Information Act (Chapter 1 (commencing with Section 56) of Part 2.6 of Division 1 of the Civil Code). For the purposes of this clause, the following requirements apply:

(I) A member shall make a request to participate remotely at a meeting pursuant to this clause as soon as possible. The member shall make a separate request for each meeting in which they seek to participate remotely.

(II) The legislative body may take action on a request to participate remotely at the earliest opportunity. If the request does not allow sufficient time to place proposed action on such a request on the posted agenda for the meeting for which the request is made, the legislative body may take action at the beginning of the meeting in accordance with paragraph (4) of subdivision (b) of Section 54954.2.

(B) The member shall publicly disclose at the meeting before any action is taken whether any other individuals 18 years of age or older are present in the room at the remote location with the member, and the general nature of the member's relationship with any such individuals.

(C) The member shall participate through both audio and visual technology.

(3) The provisions of this subdivision shall not serve as a means for any member of a legislative body to participate in meetings of the legislative body solely by teleconference from a remote location for a period of more than three consecutive months or 20 percent of the regular meetings for the local agency within a calendar year, or more than two meetings if the legislative body regularly meets fewer than 10 times per calendar year.

(f) The legislative body shall have and implement a procedure for receiving and swiftly resolving requests for reasonable accommodation for individuals with disabilities, consistent with the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and resolving any doubt in favor of accessibility. In each instance in which notice of the time of the meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body shall also give notice of the procedure for receiving and resolving requests for accommodation.

(g) The legislative body shall conduct meetings subject to this chapter consistent with applicable civil rights and nondiscrimination laws.

(h) (1) Nothing in this section shall prohibit a legislative body from providing the public with additional teleconference locations.

(2) Nothing in this section shall prohibit a legislative body from providing members of the public with additional physical locations in which the public may observe and address the legislative body by electronic means.

(i) For the purposes of this section, the following definitions shall apply:

(1) "Emergency circumstances" means a physical or family medical emergency that prevents a member from attending in person.

(2) "Just cause" means any of the following:

(A) A childcare or caregiving need of a child, parent, grandparent, grandchild, sibling, spouse, or domestic partner that requires them to participate remotely. "Child," "parent," "grandparent," "grandchild," and "sibling" have the same meaning as those terms do in Section 12945.2.

(B) A contagious illness that prevents a member from attending in person.

(C) A need related to a physical or mental disability as defined in Sections 12926 and 12926.1 not otherwise accommodated by subdivision (f).

(D) Travel while on official business of the legislative body or another state or local agency.

(3) "Remote location" means a location from which a member of a legislative body participates in a meeting pursuant to subdivision (e), other than any physical meeting location designated in the notice of the meeting. Remote locations need not be accessible to the public.

(4) "Remote participation" means participation in a meeting by teleconference at a location other than any physical meeting location designated in the notice of the meeting. Watching or listening to a meeting via webcasting or another similar electronic medium that does not permit members to interactively hear, discuss, or deliberate on matters, does not constitute remote participation.

(5) "Teleconference" means a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both.

(6) "Two-way audiovisual platform" means an online platform that provides participants with the ability to participate in a meeting via both an interactive video conference and a two-way telephonic function.

(7) "Two-way telephonic service" means a telephone service that does not require internet access, is not provided as part of a two-way audiovisual platform, and allows participants to dial a telephone number to listen and verbally participate.

(8) "Webcasting" means a streaming video broadcast online or on television, using streaming media technology to distribute a single content source to many simultaneous listeners and viewers.

(j) This section shall become operative January 1, 2024, shall remain in effect only until January 1, 2026, and as of that date is repealed.

**SEC. 3.** Section 54953 is added to the Government Code, to read:

**54953.** (a) All meetings of the legislative body of a local agency shall be open and public, and all persons shall be permitted to attend any meeting of the legislative body of a local agency, except as otherwise provided in this chapter.



(b) (1) Notwithstanding any other provision of law, the legislative body of a local agency may use teleconferencing for the benefit of the public and the legislative body of a local agency in connection with any meeting or proceeding authorized by law. The teleconferenced meeting or proceeding shall comply with all requirements of this chapter and all otherwise applicable provisions of law relating to a specific type of meeting or proceeding.

(2) Teleconferencing, as authorized by this section, may be used for all purposes in connection with any meeting within the subject matter jurisdiction of the legislative body. All votes taken during a teleconferenced meeting shall be by rollcall.

(3) If the legislative body of a local agency elects to use teleconferencing, it shall post agendas at all teleconference locations and conduct teleconference meetings in a manner that protects the statutory and constitutional rights of the parties or the public appearing before the legislative body of a local agency. Each teleconference location shall be identified in the notice and agenda of the meeting or proceeding, and each teleconference location shall be accessible to the public. During the teleconference, at least a quorum of the members of the legislative body shall participate from locations within the boundaries of the territory over which the local agency exercises jurisdiction, except as provided in subdivision (d). The agenda shall provide an opportunity for members of the public to address the legislative body directly pursuant to Section 54954.3 at each teleconference location.

(4) For the purposes of this section, "teleconference" means a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both. Nothing in this section shall prohibit a local agency from providing the public with additional teleconference locations.

(c) (1) No legislative body shall take action by secret ballot, whether preliminary or final.

(2) The legislative body of a local agency shall publicly report any action taken and the vote or abstention on that action of each member present for the action.

(3) Prior to taking final action, the legislative body shall orally report a summary of a recommendation for a final action on the salaries, salary schedules, or compensation paid in the form of fringe benefits of a local agency executive, as defined in subdivision (d) of Section 3511.1, during the open meeting in which the final action is to be taken. This paragraph shall not affect the public's right under the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1) to inspect or copy records created or received in the process of developing the recommendation.

(d) (1) Notwithstanding the provisions relating to a quorum in paragraph (3) of subdivision (b), if a health authority conducts a teleconference meeting, members who are outside the jurisdiction of the authority may be counted toward the establishment of a quorum when participating in the teleconference if at least 50 percent of the number of members that would establish a quorum are present within the boundaries of the territory over which the authority exercises jurisdiction, and the health authority provides a teleconference number, and associated access codes, if any, that allows any person to call in to participate in the meeting and the number and access codes are identified in the notice and agenda of the meeting.

(2) Nothing in this subdivision shall be construed as discouraging health authority members from regularly meeting at a common physical site within the jurisdiction of the authority or from using teleconference locations within or near the jurisdiction of the authority. A teleconference meeting for which a quorum is established pursuant to this subdivision shall be subject to all other requirements of this section.

(3) For purposes of this subdivision, a health authority means any entity created pursuant to Sections 14018.7, 14087.31, 14087.35, 14087.36, 14087.38, and 14087.9605 of the Welfare and Institutions Code, any joint powers authority created pursuant to Article 1 (commencing with Section 6500) of Chapter 5 of Division 7 for the purpose of contracting pursuant to Section 14087.3 of the Welfare and Institutions Code, and any advisory committee to a county-sponsored health plan licensed pursuant to Chapter 2.2 (commencing with Section 1340) of Division 2 of the Health and Safety Code if the advisory committee has 12 or more members.

(e) This section shall become operative January 1, 2026.

**SEC. 4.** Section 54954.2 of the Government Code is amended to read:

**54954.2.** (a) (1) At least 72 hours before a regular meeting, the legislative body of the local agency, or its designee, shall post an agenda containing a brief general description of each item of business to be transacted or discussed at the meeting, including items to be discussed in closed session. A brief general description of an item

generally need not exceed 20 words. The agenda shall specify the time and location of the regular meeting and shall be posted in a location that is freely accessible to members of the public and on the local agency's Internet Web site, if the local agency has one. If requested, the agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. The agenda shall include information regarding how, to whom, and when a request for disability-related modification or accommodation, including auxiliary aids or services, may be made by a person with a disability who requires a modification or accommodation in order to participate in the public meeting.

(2) For a meeting occurring on and after January 1, 2019, of a legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state that has an Internet Web site, the following provisions shall apply:

(A) An online posting of an agenda shall be posted on the primary Internet Web site homepage of a city, county, city and county, special district, school district, or political subdivision established by the state that is accessible through a prominent, direct link to the current agenda. The direct link to the agenda shall not be in a contextual menu; however, a link in addition to the direct link to the agenda may be accessible through a contextual menu.

(B) An online posting of an agenda including, but not limited to, an agenda posted in an integrated agenda management platform, shall be posted in an open format that meets all of the following requirements:

(i) Retrievable, downloadable, indexable, and electronically searchable by commonly used Internet search applications.

(ii) Platform independent and machine readable.

(iii) Available to the public free of charge and without any restriction that would impede the reuse or redistribution of the agenda.

(C) A legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state that has an Internet Web site and an integrated agenda management platform shall not be required to comply with subparagraph (A) if all of the following are met:

(i) A direct link to the integrated agenda management platform shall be posted on the primary Internet Web site homepage of a city, county, city and county, special district, school district, or political subdivision established by the state. The direct link to the integrated agenda management platform shall not be in a contextual menu. When a person clicks on the direct link to the integrated agenda management platform, the direct link shall take the person directly to an Internet Web site with the agendas of the legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state.

(ii) The integrated agenda management platform may contain the prior agendas of a legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state for all meetings occurring on or after January 1, 2019.

(iii) The current agenda of the legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state shall be the first agenda available at the top of the integrated agenda management platform.

(iv) All agendas posted in the integrated agenda management platform shall comply with the requirements in clauses (i), (ii), and (iii) of subparagraph (B).

(D) For the purposes of this paragraph, both of the following definitions shall apply:

(i) "Integrated agenda management platform" means an Internet Web site of a city, county, city and county, special district, school district, or political subdivision established by the state dedicated to providing the entirety of the agenda information for the legislative body of the city, county, city and county, special district, school district, or political subdivision established by the state to the public.

(ii) "Legislative body" has the same meaning as that term is used in subdivision (a) of Section 54952.

(E) The provisions of this paragraph shall not apply to a political subdivision of a local agency that was established by the legislative body of the city, county, city and county, special district, school district, or

political subdivision established by the state.

(3) No action or discussion shall be undertaken on any item not appearing on the posted agenda, except that members of a legislative body or its staff may briefly respond to statements made or questions posed by persons exercising their public testimony rights under Section 54954.3. In addition, on their own initiative or in response to questions posed by the public, a member of a legislative body or its staff may ask a question for clarification, make a brief announcement, or make a brief report on his or her own activities. Furthermore, a member of a legislative body, or the body itself, subject to rules or procedures of the legislative body, may provide a reference to staff or other resources for factual information, request staff to report back to the body at a subsequent meeting concerning any matter, or take action to direct staff to place a matter of business on a future agenda.

(b) Notwithstanding subdivision (a), the legislative body may take action on items of business not appearing on the posted agenda under any of the conditions stated below. Prior to discussing any item pursuant to this subdivision, the legislative body shall publicly identify the item.

(1) Upon a determination by a majority vote of the legislative body that an emergency situation exists, as defined in Section 54956.5.

(2) Upon a determination by a two-thirds vote of the members of the legislative body present at the meeting, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted as specified in subdivision (a).

(3) The item was posted pursuant to subdivision (a) for a prior meeting of the legislative body occurring not more than five calendar days prior to the date action is taken on the item, and at the prior meeting the item was continued to the meeting at which action is being taken.

(4) To consider action on a request from a member to participate in a meeting remotely due to emergency circumstances, pursuant to Section 54953, if the request does not allow sufficient time to place the proposed action on the posted agenda for the meeting for which the request is made. The legislative body may approve such a request by a majority vote of the legislative body.

(c) This section is necessary to implement and reasonably within the scope of paragraph (1) of subdivision (b) of Section 3 of Article I of the California Constitution.

(d) For purposes of subdivision (a), the requirement that the agenda be posted on the local agency's Internet Web site, if the local agency has one, shall only apply to a legislative body that meets either of the following standards:

(1) A legislative body as that term is defined by subdivision (a) of Section 54952.

(2) A legislative body as that term is defined by subdivision (b) of Section 54952, if the members of the legislative body are compensated for their appearance, and if one or more of the members of the legislative body are also members of a legislative body as that term is defined by subdivision (a) of Section 54952.

(e) This section shall remain in effect only until January 1, 2026, and as of that date is repealed.

**SEC. 5.** Section 54954.2 is added to the Government Code, to read:

**54954.2.** (a) (1) At least 72 hours before a regular meeting, the legislative body of the local agency, or its designee, shall post an agenda containing a brief general description of each item of business to be transacted or discussed at the meeting, including items to be discussed in closed session. A brief general description of an item generally need not exceed 20 words. The agenda shall specify the time and location of the regular meeting and shall be posted in a location that is freely accessible to members of the public and on the local agency's Internet Web site, if the local agency has one. If requested, the agenda shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. The agenda shall include information regarding how, to whom, and when a request for disability-related modification or accommodation, including auxiliary aids or services, may be made by a person with a disability who requires a modification or accommodation in order to participate in the public meeting.

(2) For a meeting occurring on and after January 1, 2019, of a legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state that has an Internet Web site, the following provisions shall apply:

(A) An online posting of an agenda shall be posted on the primary Internet Web site homepage of a city, county, city and county, special district, school district, or political subdivision established by the state that is accessible through a prominent, direct link to the current agenda. The direct link to the agenda shall not be in a contextual menu; however, a link in addition to the direct link to the agenda may be accessible through a contextual menu.

(B) An online posting of an agenda including, but not limited to, an agenda posted in an integrated agenda management platform, shall be posted in an open format that meets all of the following requirements:

(i) Retrievable, downloadable, indexable, and electronically searchable by commonly used Internet search applications.

(ii) Platform independent and machine readable.

(iii) Available to the public free of charge and without any restriction that would impede the reuse or redistribution of the agenda.

(C) A legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state that has an Internet Web site and an integrated agenda management platform shall not be required to comply with subparagraph (A) if all of the following are met:

(i) A direct link to the integrated agenda management platform shall be posted on the primary Internet Web site homepage of a city, county, city and county, special district, school district, or political subdivision established by the state. The direct link to the integrated agenda management platform shall not be in a contextual menu. When a person clicks on the direct link to the integrated agenda management platform, the direct link shall take the person directly to an Internet Web site with the agendas of the legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state.

(ii) The integrated agenda management platform may contain the prior agendas of a legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state for all meetings occurring on or after January 1, 2019.

(iii) The current agenda of the legislative body of a city, county, city and county, special district, school district, or political subdivision established by the state shall be the first agenda available at the top of the integrated agenda management platform.

(iv) All agendas posted in the integrated agenda management platform shall comply with the requirements in clauses (i), (ii), and (iii) of subparagraph (B).

(D) For the purposes of this paragraph, both of the following definitions shall apply:

(i) "Integrated agenda management platform" means an Internet Web site of a city, county, city and county, special district, school district, or political subdivision established by the state dedicated to providing the entirety of the agenda information for the legislative body of the city, county, city and county, special district, school district, or political subdivision established by the state to the public.

(ii) "Legislative body" has the same meaning as that term is used in subdivision (a) of Section 54952.

(E) The provisions of this paragraph shall not apply to a political subdivision of a local agency that was established by the legislative body of the city, county, city and county, special district, school district, or political subdivision established by the state.

(3) No action or discussion shall be undertaken on any item not appearing on the posted agenda, except that members of a legislative body or its staff may briefly respond to statements made or questions posed by persons exercising their public testimony rights under Section 54954.3. In addition, on their own initiative or in response to questions posed by the public, a member of a legislative body or its staff may ask a question for clarification, make a brief announcement, or make a brief report on his or her own activities. Furthermore, a member of a legislative body, or the body itself, subject to rules or procedures of the legislative body, may provide a reference to staff or other resources for factual information, request staff to report back to the body

at a subsequent meeting concerning any matter, or take action to direct staff to place a matter of business on a future agenda.

(b) Notwithstanding subdivision (a), the legislative body may take action on items of business not appearing on the posted agenda under any of the conditions stated below. Prior to discussing any item pursuant to this subdivision, the legislative body shall publicly identify the item.

(1) Upon a determination by a majority vote of the legislative body that an emergency situation exists, as defined in Section 54956.5.

(2) Upon a determination by a two-thirds vote of the members of the legislative body present at the meeting, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted as specified in subdivision (a).

(3) The item was posted pursuant to subdivision (a) for a prior meeting of the legislative body occurring not more than five calendar days prior to the date action is taken on the item, and at the prior meeting the item was continued to the meeting at which action is being taken.

(c) This section is necessary to implement and reasonably within the scope of paragraph (1) of subdivision (b) of Section 3 of Article I of the California Constitution.

(d) For purposes of subdivision (a), the requirement that the agenda be posted on the local agency's Internet Web site, if the local agency has one, shall only apply to a legislative body that meets either of the following standards:

(1) A legislative body as that term is defined by subdivision (a) of Section 54952.

(2) A legislative body as that term is defined by subdivision (b) of Section 54952, if the members of the legislative body are compensated for their appearance, and if one or more of the members of the legislative body are also members of a legislative body as that term is defined by subdivision (a) of Section 54952.

(e) This section shall become operative January 1, 2026.

**SEC. 6.** The Legislature finds and declares that Sections 1 and 2 of this act, which amend Section 54953 of the Government Code, impose a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:

By removing the requirement for agendas to be placed at the location of each public official participating in a public meeting remotely, including from the member's private home or hospital room, this act protects the personal, private information of public officials and their families while preserving the public's right to access information concerning the conduct of the people's business.

**SEC. 7.** The Legislature finds and declares that Sections 1 and 2 of this act, which amend Section 54953 of the Government Code, further, within the meaning of paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the purposes of that constitutional section as it relates to the right of public access to the meetings of local public bodies or the writings of local public officials and local agencies. Pursuant to paragraph (7) of subdivision (b) of Section 3 of Article I of the California Constitution, the Legislature makes the following findings:

This act is necessary to ensure minimum standards for public participation and notice requirements allowing for greater public participation in teleconference meetings.

Albourne America LLC  
655 Montgomery Street  
San Francisco  
CA 94111

To: LACERA Board of Investments  
From: James Walsh, Stephen Kennedy, Tom Cawkwell, Mark White  
Albourne America LLC  
Date: December 2, 2022

## Background

Per the contract signed on June 18, 2019 between Albourne America LLC (“Albourne” and/or “Consultant”) and the Los Angeles County Employees Retirement Association (“LACERA”), Albourne is to conduct an annual self-evaluation and provide information for the Board of Investments (“Board”) to review and evaluate the Consultant. To facilitate the Board’s review, Albourne is providing a self-assessment and respective status. The evaluation period covers the 12-months to August 2022.

## Self-Assessment

**Impartial Investment Advice:** Consultant attended all meetings where its presence was required and requested, including the annual Board Offsite, provided advice to the Board both upon request and proactively, and collaborated extensively with the staff as needed throughout the year.

Completed and ongoing.

**Assisting LACERA’s Board of Investments with Strategic Investment Decisions:** Albourne contributed to the Structural Reviews on Illiquid Credit and Real Assets throughout the year.

Completed and ongoing.

**Providing Impartial Review:** Albourne provided Investment and Operational Due Diligence on staff investment recommendations throughout the year, providing explicit ratings both at a top-down level and on a more detailed basis. Staff had access to the Albourne Analysts responsible for the Due Diligence and utilized this resource, speaking to analysts on multiple occasions. Consultant also opined on the research process and suitability of co-investments in the Real Asset portfolio.

Completed and ongoing.

**Performance Review:** Albourne contributed to Performance Reviews for Risk Mitigating Strategies and Real Assets.

Completed and ongoing.

**Portfolio Construction:** Albourne has worked extensively with the team to continue the build out of the Risk Mitigating, Illiquid Credit and Real Asset portfolios. This has included working with the team on portfolio

construction, manager selection and negotiation of terms in specific cases, as well as on cashflow modeling for Real Assets.

Completed and ongoing

**Fee Reconciliation, Analysis and Negotiation:** Albourne has provided extensive fee reconciliation and validation on investments, and analysis on specific recommendations as required.

Completed and ongoing.

**Educational Sessions:** Consultant has had the pleasure of providing briefing sessions on Mining to the Board and contributing to the session on geographic exposures at the 2021 Board Offsite.

Completed and ongoing.

**Back Office Support:** Albourne's Back Office Team performs daily recording and monitoring of capital activity (in Hedge Funds, Illiquid Credit and Real Assets) including capital calls, distributions and valuations. This creates detailed, up-to-date records with a built-in audit trail, together with portfolio and performance reporting across these asset classes which is available to staff through Albourne's Extranet. Albourne personnel also perform reconciliation versus manager and custodian records to help determine whether the data that is being presented is accurate.

Completed and ongoing.

**Risk Management:** The Consultant provides factor-based risk modeling on the Direct Hedge Fund and legacy Fund of Funds, as well as Open Protocol reporting on the Direct Hedge Funds portfolio, visible through the Albourne Extranet.

Completed and ongoing.

**Ongoing and Ad Hoc Support to Team:** Albourne attends and contributes to the Quarterly Performance and Portfolio Review Meetings, joins weekly and bi-weekly team meetings, and provides ad hoc support as required.

Completed and ongoing.

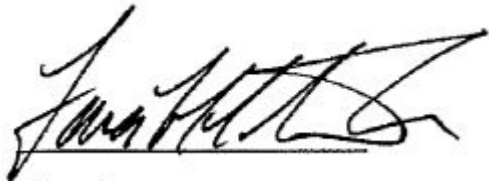
## Conclusion

It has been another busy year across Hedge Funds, Illiquid Credit and Real Assets. While the portfolios are at different points in their development they all continue to evolve. Staff has been able to draw on Albourne's consultant team in San Francisco and on the resources from Albourne's 11 offices globally, located in North America, Europe and Asia. Over the past year over 70 calls have been logged, more than 1,600 documents downloaded and over 14,000 hits recorded on our Extranet. We have been able to support the team on investment recommendations in Hedge Funds, Illiquid Credit and Real Assets.

Albourne believes that the past year has been a highly productive period. We feel that we have fulfilled our role as consultants to the Board of Investments, as well as provided a valuable resource to staff. The

Albourne team has enjoyed working with both the Board and staff, and very much look forward to the work of the coming year.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'James Walsh', written over a horizontal line.

James Walsh  
Albourne America LLC





StepStone Group LP  
4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
Phone +1 858.558.9700

November 22, 2022

To: LACERA Board of Investments  
From: Jose Fernandez, Natalie Walker, Daniel Krikorian  
StepStone Group LP  
Re: StepStone Group Self-Evaluation

To Whom It May Concern,

Per the private equity consulting agreements signed on October 1, 2016 and 2021 between StepStone Group LP (“StepStone” or the “Consultant”) and the Los Angeles County Employees Retirement Association (“LACERA”), StepStone is to conduct an annual self-evaluation and provide information for the Board to review and evaluate the Consultant. To facilitate the Board’s review, StepStone is providing a list of services and projects completed, or expected to be completed, on behalf of LACERA between January 1, 2022 and December 31, 2022.

#### **Self-Assessment**

Over the course of 2022, StepStone has provided the following services and completed the following key projects on behalf of the LACERA Board of Investments (the “Board”):

- Carried out the Board’s strategic goals and initiatives and reported directly to the Board.

Status: Completed.

- Provided information and research regarding significant changes in the private equity industry, including best practices, trends, and major events. StepStone serviced LACERA by leveraging over 900 professionals across StepStone’s 24 offices in 15 countries. In 2022, StepStone opened new offices in Santiago, Mexico City, and Frankfurt to expand our “global-local” footprint. StepStone hosted LACERA in our offices across various geographies.

Status: Completed.

- Reviewed the 2023-2024 Structure Review prepared by LACERA staff and recommended changes or modifications as appropriate considering changes in the private equity portfolio, the private equity markets, and the capital markets.

Status: Completed November 2022.

- Provided portfolio pacing and cash flow projection analysis in connection with the annual private equity investment plan and 2023-2024 Structure Review.

Status: Completed November 2022.

- Leveraged a sourcing program that incorporates LACERA staff and Consultant resources to identify investment opportunities that satisfy the 2021-2022 Structure Review. StepStone utilizes a highly local approach to each of the global markets, by leveraging 12 offices in the Americas, six offices in Europe and six offices in Asia-Pacific.

Status: Completed and ongoing.

- Introduced LACERA staff to top caliber managers and promoted direct LACERA access to funds based on size and speed to close.

Status: Completed and ongoing.

- Accompanied LACERA Board and staff to meetings, events, and industry conferences.

Status: Completed and ongoing.

- Provided LACERA staff a rolling 24-month forward calendar of high conviction general partners, presented by investment strategy and geography.

Status: Completed and ongoing.

- Provided LACERA staff guidance and introductions to managers executing successful investment strategies in relatively hard-to-access, niche markets.

Status: Completed and ongoing.

- Disclosed all firm research, including white papers, and provided access to research staff via StepStone's proprietary private market information database ("SPI"). SPI tracks information on over 79,000 companies, 41,000 funds, and 15,000 general partners.

Status: Completed and ongoing.

- Conducted independent evaluations and provided Board recommendations on 14 fund opportunities, totaling approximately US\$1.3 billion in approved or pending capital commitments, as requested by the Board and/or LACERA staff. Recommendations included a detailed memorandum outlining the results of the due diligence, strategic considerations, and fit within the LACERA portfolio, as well as merits and risks of the investment. Between January 1, 2022 and November 20, 2022, StepStone completed an initial review on 2,642 funds, a further review on 825 funds, due diligence on 737 funds, and approved 640 funds. Across private equity, StepStone completed an initial review on 1,403 funds, a further review on 476 funds, due diligence on 448 funds, and approved 399 funds.

Status: Completed.

- Evaluated and provided written recommendations on partnership agreement amendments and Secondary Interests offered to LACERA.

Status: Completed and ongoing.

- Presented and provided an annual review of the private equity portfolio to the Board.

Status: Completed July 2022.

- Periodically provide educational presentations to the Board on specific issues.

Status: Completed and ongoing.

- Attended 11 LACERA Board of Investments and Equity Committee meetings and one off-site meeting.

Status: Completed.

## **Conclusion**

StepStone believes the past year has been an active and productive one for the private equity portfolio, investment staff and Consultant. StepStone attended 11 Board meetings and one off-site seminar. In collaboration with staff, StepStone presented the 2023 - 2024 Private Equity Structure Review, which was approved by the Board in November 2022. We completed an annual review of the private equity portfolio, including a private equity market update, a review of LACERA's private equity program and performance, and assisted in 2023 strategic planning.

In collaboration with staff, StepStone sourced, reviewed, approved, and presented 14 private equity fund investments, totaling approximately US\$1.3 billion in approved capital commitments. Year to date, LACERA is on pace to meet its target investment plan set by the board in 2021. Looking ahead, StepStone remains excited about the prospects for the private equity program for the remainder of 2022 and beyond. We look forward to working with the Board to further deepen the relationship we've established. Thank you for your continued trust and guidance. If you have any questions or comments, please feel free to contact us at (858) 558-9700.

Sincerely,

StepStone Group LP



StepStone Group LP  
4225 Executive Square, Suite 1600  
La Jolla, CA 92037  
Phone +1 858.558.9700

November 29, 2022

To: LACERA Board of Investments  
From: Margaret McKnight, Thomas Hester, Kristen Moore, James Maina  
StepStone Real Estate  
Re: StepStone Real Estate Self-Evaluation

To Whom It May Concern,

Per the contract signed on April 1, 2021, between Stepstone Group Real Estate, LP (“SRE”, “StepStone”, or the “Consultant”) and the Los Angeles County Employees Retirement Association (“LACERA”), Stepstone is required to conduct an annual self-evaluation and provide information for the Board of Investments (“Board”) to review and evaluate SRE. To facilitate the Board’s review, StepStone is providing a list of services and projects completed, or expected to be completed, on behalf of LACERA between January 1, 2022, and December 31, 2022.

### **Self-Assessment**

Over the course of 2022, StepStone has provided the following services and completed the following key projects on behalf of the LACERA Board of Investments (the “Board”):

- Carried out the Board’s strategic goals and initiatives and reported directly to the Board.

Status: Completed.

- Provided information and research regarding significant changes in the real estate industry, including best practices, trends, and major events. StepStone serviced LACERA by leveraging over 900 professionals across StepStone’s 24 offices in 15 countries. In 2022, StepStone opened new offices in Santiago, Mexico City, and Frankfurt to expand our “global-local” footprint.

Status: Completed.

- Provide quarterly performance reports on the total portfolio as well as each manager's subportfolio. Calculated performance metrics including internal rate of return, time weighted returns, and real estate multiples. Provide performance attribution analysis on both an absolute and relative basis including reasons for over/under performance compared to the benchmark on an as needed basis.

Status: Completed and ongoing.

- Reviewed the core funds list prepared by LACERA staff and recommended changes or modifications as appropriate considering changes in the real estate portfolio, the real estate markets, and the capital markets.

Status: Completed and ongoing.

- Provided portfolio pacing and cash flow projection analysis in connection with the annual real estate investment plan and Structure Review.

Status: Completed.

- Leveraged a sourcing program that incorporates LACERA staff and Consultant resources to identify investment opportunities that satisfy the 2021-2022 Structure Review. StepStone utilizes a highly local approach to each of the global markets, by leveraging 12 offices in the Americas, six offices in Europe and six offices in Asia-Pacific.

Status: Completed and ongoing.

- Introduced LACERA staff to top caliber managers and promoted direct LACERA access to funds based on size and speed to close.

Status: Completed and ongoing.

- Accompanied LACERA Board and staff to meetings, events, and industry conferences.

Status: Completed and ongoing.

- Provided LACERA staff a rolling 12-month forward calendar of high conviction general partners, presented by investment strategy and geography.

Status: Completed and ongoing.

- Provided LACERA staff guidance and introductions to managers executing successful investment strategies in relatively hard-to-access, niche markets.

Status: Completed and ongoing.

- Disclosed all firm research, including white papers, semi-annual house views Webinar, and provided access to research staff via StepStone's proprietary private market information database ("SPI"). SPI tracks information on approximately 8,000 real estate funds, and 3,300 real estate general partners.

Status: Completed and ongoing.

- Conducted independent evaluations and provided Board recommendations on fund opportunities, totaling approximately US\$750 million in approved or pending capital commitments, as requested by the Board and/or LACERA staff. Recommendations included a detailed memorandum outlining the results of the due diligence, strategic considerations, and fit within the LACERA portfolio, as well as merits and risks of the investment.

Status: Completed.

- Evaluated and provided written recommendations on partnership agreement amendments on managers in LACERA's portfolio.

Status: Completed and ongoing.

- Attended 11 LACERA Board of Investments and Equity Committee meetings and one off-site meeting.

Status: Completed.

## **Conclusion**

StepStone believes the past year has been an active and productive one for the real estate portfolio, investment staff and Consultant. StepStone attended 11 Board meetings and one off-site seminar. In collaboration with staff, StepStone sourced, reviewed, approved, and presented US\$750 million in fund commitments. Looking ahead, StepStone remains excited about the prospects for the real estate program for the remainder of 2022 and beyond. We look forward to working with the Board to further deepen the relationship we've established. Thank you for your continued trust and guidance. If you have any questions or comments, please feel free to contact us.

Sincerely,

StepStone Real Estate

## MEMORANDUM

**TO:** LACERA Board of Investments  
**FROM:** Tim Filla, Aysun Kilic, Leandro Festino, Imran Zahid  
Meketa Investment Group  
**CC:** Jon Grabel, CIO - LACERA  
**DATE:** December 14, 2022  
**RE:** Meketa Investment Group Self-Evaluation

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### Background

Per the contract signed on January 15, 2016 and amended on February 25, 2022 between the general investment consultant, Meketa Investment Group ("Meketa" and/or "Consultant"), and the Los Angeles County Employees Retirement Association ("LACERA"), Meketa is to conduct an annual self-evaluation and provide information for the Board of Investments ("Board") to review and evaluate the Consultant. To facilitate the Board's review, Meketa is providing a self-assessment, as well as a list of projects and the respective status. The evaluation period covers calendar year 2022.

### Self-Assessment

**Independent Investment Advice:** Consultant attended all meetings where its presence was required and requested, provided conflict-free advice to the Board both upon request and proactively, and collaborated with staff as needed during the year.

**Status:** Achieved.

**Conducting a Strategic Asset Allocation:** LACERA adopted a new Strategic Asset Allocation in May of 2021. During 2022, Meketa worked with LACERA on multiple projects to implement the new Strategic Asset allocation.

**Status:** Ongoing.

**Assisting LACERA's Board of Investments with strategic investments decisions:** Meketa analyzed numerous investment products and asset class structures throughout the year. Meketa assessed risk management and provided analysis on various pertinent issues.

**Status:** Achieved.

**Providing Independent Reviews:** Meketa provided both verbal and written reviews of LACERA's Asset Class Structures and Strategies, Investment Policies, and Investment Manager Searches, as requested and as deemed prudent by Meketa.

**Status:** Achieved.

**Performance Reporting:** Meketa provided the Pension and OPEB reports as requested by staff.

**Status:** Achieved and ongoing.

**Board Meetings:** Consultant attended all Board meetings and off-site meetings as requested and advised the Board on investment matters during such meetings, both upon request and voluntarily.

**Status:** Achieved.

**Consultant Contact and Ad-hoc Workshops:** Consultant was available and responsive in addressing requests.

**Status:** Achieved.

## Key Projects

The section below summarizes key projects Meketa conducted in 2022.

**Investment Beliefs Update:** Meketa collaborated with staff and the Board to review and update LACERA's Investment Beliefs.

**Growth Structure Review:** Meketa worked with staff to review Global Equities within the overall structure review.

**Liquid Credit and Fixed Income Performance Reviews:** Meketa reviewed Liquid Credit and Fixed Income as part of a performance review for the Credit and Fixed Income assets.

**Total Fund and Asset Class Performance Reviews:** Meketa has attended all staff quarterly performance reviews. During these reviews, Meketa offers notable market trends and peer universe data.

**Global Equity Activist Managers Review:** Meketa worked with staff on a review of the use of activist managers within Global Equity.

**Manager Searches:** Meketa collaborated with staff as requested on the following manager searches:

- OPEB Private Market Investments Search
- Global Equity Emerging Manager Program – Separate Account Manager Search
- Pension and OPEB Long-Term Treasuries Manager Searches

The OPEB Private Market Investments Search and the Global Equity EMP Search were particularly intensive, involving multiple rounds of in-depth interviews with all of the candidate firms.

**ACFR:** Meketa produced the necessary documents to assist LACERA in completing its Annual Comprehensive Financial Report ("ACFR").

## Conclusion

The market environment in 2022 was extremely challenging. Inflation rose sharply across the globe, which drove central banks to start aggressively hiking interest rates leading to negative returns across most asset classes. Geopolitical risks also contributed to a broad risk-off sentiment across markets.





The Strategic Asset Allocation review of 2020/2021 contemplated the potential risks associated of a rising rate environment and LACERA made several adjustments which helped mitigate risk across the total Fund. For fiscal year 2022, LACERA produced marginally positive results despite the broad market declines. Thus far in calendar year 2022, LACERA has experienced losses but ranks in the top decile of peers. We are very proud of contributing to LACERA's strong results, especially regarding advising on LACERA's Strategic Asset Allocation.

For 2023, we will be working with the Board and staff on various projects, including the launch of a Strategic Asset Allocation review.

We are very appreciative of the trust placed in us every day by Board members and staff alike. Thank you. If you have any questions or would like additional information, please email or call us at (760) 795-3450.

TF/AY/LF/IZ/sf

**FOR INFORMATION ONLY**

November 21, 2022

TO: Each Trustee  
Board of Retirement  
Board of Investments

FROM: Ted Granger   
Interim Chief Financial Officer

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

SUBJECT: **MONTHLY TRAVEL & EDUCATION REPORT – OCTOBER 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 October 2022. Staff travel and education has been omitted from this document and reported to the Chief Executive Officer separately.

REVIEWED AND APPROVED:



Santos H. Kreimann  
Chief Executive Officer

TG/EW/SC/wg

**Attachments**

c: L. Lugo  
J. Popowich  
L. Guglielmo  
J. Gabel  
S. Rice  
R. Van Nortrick

**TRUSTEE TRAVEL AND EDUCATION REPORT**  
**FOR FISCAL YEAR 2022 - 2023**  
**OCTOBER 2022**

Attendee Purpose of Travel - Location			Event Dates	Travel Status
<b>Alan Bernstein</b>				
A	1	Edu - CII Fall 2022 Conference - Boston MA	09/21/2022 - 09/23/2022	Attended
	2	Edu - NCPERS 2022 Public Safety Conference - Nashville TN	10/23/2022 - 10/26/2022	Attended
V	-	Edu - NACD: The Theranos Implosion - VIRTUAL	09/28/2022 - 09/28/2022	Attended
<b>Elizabeth Ginsberg</b>				
B	-	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
<b>Vivian Gray</b>				
A	1	Edu - CII Fall 2022 Conference - Boston MA	09/21/2022 - 09/23/2022	Attended
B	-	Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA	08/21/2022 - 08/23/2022	Attended
	-	Admin - SACRS Board of Directors Meeting - Los Angeles CA	08/22/2022 - 08/22/2022	Attended
	-	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
	-	Admin - SACRS Program Committee & Board of Directors Meeting - Santa Barbara CA	09/26/2022 - 09/27/2022	Attended
X	-	Edu - TLF Annual Convening 2022 - Cambridge MA	07/18/2022 - 07/20/2022	Canceled
<b>David Green</b>				
A	1	Edu - PPI 2022 Summer Roundtable - Canada, Vancouver	07/13/2022 - 07/15/2022	Attended
B	-	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
<b>Elizabeth Greenwood</b>				
A	1	Edu - 16th Annual Small and Emerging Managers (SEM) Conference - Chicago IL	10/12/2022 - 10/13/2022	Attended
<b>Patrick Jones</b>				
A	1	Edu - Leading in Artificial Intelligence: Exploring Technology and Policy - Harvard Kennedy School - Cambridge MA	07/17/2022 - 07/22/2022	Attended
B	-	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
<b>Onyx Jones</b>				
A	1	Edu - SACRS Public Pension Investment Management Program - San Francisco CA	07/17/2022 - 07/20/2022	Attended
	2	Edu - 2022 CALAPRS Principles of Pension Governance for Trustees - Tiburon CA	08/29/2022 - 09/01/2022	Attended
B	-	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
V	-	Edu - The World to Africa Webinar - VIRTUAL	07/27/2022 - 07/27/2022	Attended
<b>Shawn Kehoe</b>				
V	-	Edu - 2022 Board of Investments Offsite - VIRTUAL	09/13/2022 - 09/14/2022	Attended

**TRUSTEE TRAVEL AND EDUCATION REPORT**  
**FOR FISCAL YEAR 2022 - 2023**  
**OCTOBER 2022**

Attendee	Purpose of Travel - Location	Event Dates	Travel Status
<b>Joseph Kelly</b>			
A	1 Edu - PPI Executive Seminar and the Asia Pacific Roundtable - Singapore	10/16/2022 - 10/21/2022	Attended
V	- Edu - NACD Conflict, Climate, Cyber: What's Next? - VIRTUAL	08/23/2022 - 08/23/2022	Attended
	- Edu - 2022 Board of Investments Offsite - VIRTUAL	09/13/2022 - 09/14/2022	Attended
	- Edu - NACD Risk Mitigation Through Board Quality and Compliance Committees: Lessons from Theranos - VIRTUAL	09/28/2022 - 09/28/2022	Attended
	- Edu - Institute of Internal Auditors 2022 Cybersecurity Virtual Conference - VIRTUAL	10/27/2022 - 10/27/2022	Attended
<b>Keith Knox</b>			
B	- Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
<b>William Pryor</b>			
A	1 Edu - NCPERS 2022 Public Safety Conference - Nashville TN	10/23/2022 - 10/26/2022	Attended
B	- Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA	08/21/2022 - 08/23/2022	Attended
<b>Gina Sanchez</b>			
A	1 Edu - PPI Executive Seminar and the Asia Pacific Roundtable - Singapore	10/16/2022 - 10/21/2022	Attended
B	- Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA	08/21/2022 - 08/23/2022	Attended
	- Edu - 2022 Fall Editorial Advisory Board Meeting – Institutional Real Estate Americas - Pasadena CA	09/06/2022 - 09/08/2022	Attended
	- Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
V	- Edu - NACD Summit 2022 - VIRTUAL	10/08/2022 - 10/11/2022	Attended
<b>Herman Santos</b>			
A	1 Edu - PPI 2022 Summer Roundtable - Canada, Vancouver	07/13/2022 - 07/15/2022	Attended
	2 Edu - CII Fall 2022 Conference - Boston MA	09/21/2022 - 09/23/2022	Attended
	3 Edu - 2022 AAAIM Elevate National Conference - New York NY	09/28/2022 - 09/30/2022	Attended
B	- Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	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**

November 21, 2022

TO: Trustees  
Board of Retirement  
Board of Investments

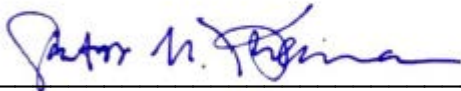
FROM: Ted Granger   
Interim Chief Financial Officer

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

SUBJECT: **1ST QUARTER TRUSTEE TRAVEL & EDUCATION EXPENDITURE  
REPORTS**

Attached for your review, is the Trustee Travel & Education Expenditure Report which includes expenses paid and submitted for reimbursement of events between July 1, 2022 to September 30, 2022. The Trustee Cancellation & Credit Expenditures Report which includes credits and expenses associated with trip cancellations, for Fiscal Years 2020-2021, 2021-2022, and 2022-2023 are also attached for your reference.

REVIEWED AND APPROVED:



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Santos H. Kreimann  
Chief Executive Officer

TG/EW/wg

**Attachments**

c: L. Lugo  
J. Popowich  
L. Guglielmo  
J. Grabel  
S. Rice  
R. Van Nortrick

**1ST QUARTER TRUSTEE  
TRAVEL AND EDUCATION EXPENDITURE REPORT  
FOR FISCAL YEAR 2023  
FOR EVENTS DURING JULY 2022 - SEPTEMBER 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
<b>Alan Bernstein</b>													
A	1 Edu - CII Fall 2022 Conference - Boston MA - 09/21/2022 - 09/23/2022	Attended	\$4,221.72	\$0.00	\$0.00	\$3,846.59	\$169.13	\$0.00	\$0.00	\$0.00	\$0.00	\$128.00	\$78.00
V	- Edu - NACD: The Theranos Implosion - VIRTUAL - 09/28/2022 - 09/28/2022	Attended	\$30.00	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for Alan Bernstein:</b>			\$4,251.72	\$30.00	\$0.00	\$3,846.59	\$169.13	\$0.00	\$0.00	\$0.00	\$0.00	\$128.00	\$78.00
<b>Vivian Gray</b>													
A	1 Edu - CII Fall 2022 Conference - Boston MA - 09/21/2022 - 09/23/2022	Attended	\$2,986.23	\$0.00	\$1,149.36	\$1,597.20	\$239.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B	- Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA - 08/21/2022 - 08/23/2022	Attended	\$820.00	\$820.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Admin - SACRS Board of Directors Meeting - Los Angeles CA - 08/22/2022 - 08/22/2022	Attended	\$656.08	\$0.00	\$656.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Admin - SACRS Program Committee & Board of Directors Meeting - Santa Barbara CA - 09/26/2022 - 09/27/2022	Attended	\$1,870.56	\$179.00	\$1,625.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.00	\$15.00
Z	- Edu - TLF Annual Convening 2022 - Cambridge MA - 07/18/2022 - 07/20/2022	Canceled	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for Vivian Gray:</b>			\$6,332.87	\$999.00	\$3,431.00	\$1,597.20	\$239.67	\$0.00	\$0.00	\$0.00	\$0.00	\$51.00	\$15.00
<b>David Green</b>													
A	1 Edu - PPI 2022 Summer Roundtable - Canada, Vancouver - 07/13/2022 - 07/15/2022	Attended	\$3,548.56	\$950.00	\$1,094.09	\$727.21	\$354.26	\$0.00	\$0.00	\$0.00	\$0.00	\$291.00	\$132.00
<b>Totals for David Green:</b>			\$3,548.56	\$950.00	\$1,094.09	\$727.21	\$354.26	\$0.00	\$0.00	\$0.00	\$0.00	\$291.00	\$132.00

**1ST QUARTER BOARD  
TRUSTEE AND EDUCATION EXPENDITURE REPORT  
FOR FISCAL YEAR 2023  
FOR EVENTS DURING JULY 2022 - SEPTEMBER 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
<b>Onyx Jones</b>													
A	1 Edu - SACRS Public Pension Investment Management Program - San Francisco CA - 07/17/2022 - 07/20/2022	Attended	\$4,556.29	\$2,500.00	\$1,536.96	\$392.96	\$40.37	\$0.00	\$0.00	\$0.00	\$0.00	\$86.00	\$0.00
	2 Edu - 2022 CALAPRS Principles of Pension Governance for Trustees - Tiburon CA - 08/29/2022 - 09/01/2022	Attended	\$746.36	\$0.00	\$0.00	\$392.96	\$353.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for Onyx Jones:</b>			\$5,302.65	\$2,500.00	\$1,536.96	\$785.92	\$393.77	\$0.00	\$0.00	\$0.00	\$0.00	\$86.00	\$0.00
<b>Patrick Jones</b>													
A	1 Edu - Leading in Artificial Intelligence: Exploring Technology and Policy - Harvard Kennedy School - Cambridge MA - 07/17/2022 - 07/22/2022	Attended	\$10,997.68	\$9,400.00	\$398.42	\$765.35	\$147.91	\$0.00	\$0.00	\$0.00	\$0.00	\$256.00	\$30.00
<b>Totals for Patrick Jones:</b>			\$10,997.68	\$9,400.00	\$398.42	\$765.35	\$147.91	\$0.00	\$0.00	\$0.00	\$0.00	\$256.00	\$30.00
<b>Joseph Kelly</b>													
V	- Edu - NACD Conflict, Climate, Cyber: What's Next? - VIRTUAL - 08/23/2022 - 08/23/2022	Attended	\$140.00	\$140.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	- Edu - NACD Risk Mitigation Through Board Quality and Compliance Committees: Lessons from Theranos - VIRTUAL - 09/28/2022 - 09/28/2022	Attended	\$30.00	\$30.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for Joseph Kelly:</b>			\$170.00	\$170.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>William Pryor</b>													
B	- Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA - 08/21/2022 - 08/23/2022	Attended	\$288.84	\$0.00	\$288.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for William Pryor:</b>			\$288.84	\$0.00	\$288.84	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



**1ST QUARTER BOARD  
TRUSTEE AND EDUCATION EXPENDITURE REPORT  
FOR FISCAL YEAR 2023  
FOR EVENTS DURING JULY 2022 - SEPTEMBER 2022**

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
<b>Gina Sanchez</b>													
B -	Edu - NCPERS 2022 Public Pension Funding Forum - Los Angeles CA - 08/21/2022 - 08/23/2022	Attended	\$820.00	\$820.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
-	Edu - 2022 Fall Editorial Advisory Board Meeting – Institutional Real Estate Americas - Pasadena CA - 09/06/2022 - 09/08/2022	Attended	\$350.00	\$350.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Totals for Gina Sanchez:</b>			\$1,170.00	\$1,170.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Herman Santos</b>													
A 1	Edu - PPI 2022 Summer Roundtable - Canada, Vancouver - 07/13/2022 - 07/15/2022	Attended	\$3,333.80	\$950.00	\$1,053.99	\$393.35	\$92.40	\$120.88	\$0.00	\$107.93	\$0.00	\$440.00	\$175.25
2	Edu - CII Fall 2022 Conference - Boston MA - 09/21/2022 - 09/23/2022	Attended	\$4,199.76	\$0.00	\$1,614.03	\$2,026.80	\$60.55	\$121.13	\$0.00	\$114.25	\$0.00	\$238.00	\$25.00
<b>Totals for Herman Santos:</b>			\$7,533.56	\$950.00	\$2,668.02	\$2,420.15	\$152.95	\$242.01	\$0.00	\$222.18	\$0.00	\$678.00	\$200.25
<b>Cnt: 8</b>	<b>Grand Totals:</b>		\$39,595.88	\$16,169.00	\$9,417.33	\$10,142.42	\$1,457.69	\$242.01	\$0.00	\$222.18	\$0.00	\$1,490.00	\$455.25

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.C2 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
<b>Alan Bernstein</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Vivian Gray</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Shawn Kehoe</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Les Robbins</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00		\$0.00		\$0.00
<b>Grand Totals:</b>		\$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
<b>Alan Bernstein</b>												
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
<b>Attendee Totals:</b>		\$375.02	\$375.02	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>David Green</b>												
Edu - 2021 CII Fall Conference - Chicago IL - 09/22/2021 - 09/24/2021 - Host Canceled	X	\$387.13	\$0.00	\$0.00	\$387.13	\$0.00	Yes	\$0.00		\$0.00		\$0.00
<b>Attendee Totals:</b>		\$387.13	\$0.00	\$0.00	\$387.13	\$0.00		\$0.00		\$0.00		\$0.00
<b>Patrick Jones</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80		\$0.00
<b>Shawn Kehoe</b>												
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
<b>Attendee Totals:</b>		\$143.96	\$120.00	\$23.96	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Joseph Kelly</b>												
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
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Keith Knox</b>												
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
<b>Attendee Totals:</b>		\$1,646.94	\$0.00	\$1,646.94	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Les Robbins</b>												
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
<b>Attendee Totals:</b>		\$519.28	\$0.00	\$519.28	\$0.00	\$0.00		\$400.00		\$97.96		\$0.00

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
<b>Gina Sanchez</b>												
Edu - 2021 CII Fall Conference - Chicago IL - 09/22/2021 - 09/24/2021 - Host Canceled	X	\$282.80	\$0.00	\$0.00	\$282.80	\$0.00		\$0.00		\$0.00		\$0.00
<b>Attendee Totals:</b>		\$282.80	\$0.00	\$0.00	\$282.80	\$0.00		\$0.00		\$0.00		\$0.00
<b>Herman Santos</b>												
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 - Cancelled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Attendee Totals:</b>		\$4.99	\$4.99	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
<b>Grand Totals:</b>			\$3,360.12	\$500.01	\$2,190.18	\$669.93	\$0.00	\$400.00		\$714.76		\$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 2023**  
**FOR EVENTS DURING JULY 2022 - SEPTEMBER 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
<b>Vivian Gray</b>												
Edu - TLF Annual Convening 2022 - Cambridge MA - 07/18/2022 - 07/20/2022 - Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		
<b>Attendee Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		
<b>Grand Totals:</b>		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		


Category Legend:

X - Canceled events for which expenses have been incurred.  
Z - Trip was Canceled - Balance of \$0.00

**FOR INFORMATION ONLY**

November 21, 2022

TO: Trustees  
Board of Retirement  
Board of Investments

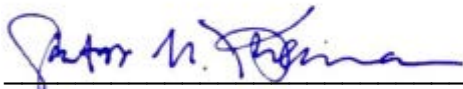
FROM: Ted Granger   
Interim Chief Financial Officer

FOR: December 7, 2022 Board of Retirement Meeting  
December 14, 2022 Board of Investments Meeting

SUBJECT: **1ST QUARTER STAFF TRAVEL REPORT**

Attached for your information, is the Staff Travel Report for trips between July 1, 2022 to September 30, 2022.

REVIEWED AND APPROVED:



Santos H. Kreimann  
Chief Executive Officer

TG/EW/wg

Attachments

c: L. Lugo  
J. Popowich  
L. Guglielmo  
J. Grabel  
S. Rice  
R. Van Nortrick

**STAFF TRAVEL REPORT  
FOR FISCAL YEAR 2022 - 2023  
SEPTEMBER 2022**

Attendee		Purpose of Travel - Location	Event Dates	Travel Status
<b>Administrative Services</b>				
Debra Gonzalez	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Martin Sandoval	1	Edu - CALAPRS 2022 Management/Leadership Academy Session #3 - Pasadena CA	07/25/2022 - 07/27/2022	Attended
Elizabeth Smith	1	Edu - CALAPRS 2022 Management/Leadership Academy Session #3 - Pasadena CA	07/25/2022 - 07/27/2022	Attended
<b>Benefits</b>				
Alisa Gavaller	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Latonya Robinson	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Disability Retirement Services</b>				
Ruby Minjares	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Sarah Robles	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Ricardo Salinas	1	Edu - CALAPRS 2022 Management/Leadership Academy Session #3 - Pasadena CA	07/25/2022 - 07/27/2022	Attended
Melena Sarkisian	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Maria Silva	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Executive Offices</b>				
Linda Ghazarian	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Santos Kreimann	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
	2	Edu - CALAPRS Administrators' Institute 2022 - Long Beach CA	09/28/2022 - 09/30/2022	Attended
	3	Admin - CVS Due Diligence Site Visit - Chicago IL	09/28/2022 - 09/30/2022	Attended
<b>Financial &amp; Accounting Services</b>				
Margaret Chwa	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Giselle Jaimes	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Human Resources</b>				
Julia Ray	1	Edu - Disability Management Compliance Framework Certification Training at LA County Pubic Works - Alhambra CA	08/09/2022 - 08/10/2022	Canceled
Melissa Slaton	1	Edu - Disability Management Compliance Framework Certification Training at LA County Pubic Works - Alhambra CA	08/09/2022 - 08/10/2022	Canceled

**STAFF TRAVEL REPORT  
FOR FISCAL YEAR 2022 - 2023  
SEPTEMBER 2022**

Attendee		Purpose of Travel - Location	Event Dates	Travel Status
<b>Internal Audit</b>				
Leisha Collins	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Perla Gonzalez	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Investments</b>				
Didier Acevedo	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
	2	Admin - Innovation Endeavors Portfolio Company Visit (Machina Labs) - Chatsworth CA	09/21/2022 - 09/21/2022	Attended
	3	Admin - Great Hill Partners AGM and LPAC + Summit Partners and OpenView visits - Boston MA	09/28/2022 - 09/29/2022	Attended
Amit Aggarwal	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Magdalia Armstrong	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Calvin Chang	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Noah Damsky	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Esmeralda Del Bosque	1	Admin - First Energy deposition preparation sessions with Robbins Geller Rudman & Dowd LLP - Pasadena CA	07/14/2022 - 07/15/2022	Attended
	2	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Terra Elijah	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Jon Grabel	1	Admin - Guest Speaker-The Investment Diversity Exchange (TIDE) Spark 2022 - Dana Point CA	07/06/2022 - 07/07/2022	Attended
Eduardo Ibanez	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Pushpam Jain	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Dale Johnson	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
	2	Edu - CII Fall 2022 Conference - Boston MA	09/21/2022 - 09/23/2022	Attended
Daniel Joye	1	Admin - Southern California Institutional Forum-Markets Group - Marina Del Rey CA	07/21/2022 - 07/21/2022	Attended
	2	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
John Kim	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Derek Kong	1	Admin - CVC Annual General Meeting, LPAC and Fund IX Onsite and meet with prospective managers (Bregal and IK Partners) and secondary placement agents (Lazard, Rede, Evercore) - London, UK	09/06/2022 - 09/09/2022	Attended
	2	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Cheryl Lu	1	Admin - Attend BRV Aster 2022 Annual General Meeting and Limited Partner Advisory Committee, meet with existing (GGV) and potential (Jungle Ventures, LYFE Capita) managers, and attend SuperReturn Asia - Singapore	08/20/2022 - 08/27/2022	Attended
	2	Admin - Attend GGV 2022 Annual Meeting and LPAC Roundtable - San Francisco CA	09/12/2022 - 09/13/2022	Attended
Vache Mahseredjian	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended



**STAFF TRAVEL REPORT  
FOR FISCAL YEAR 2022 - 2023  
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Attendee		Purpose of Travel - Location	Event Dates	Travel Status
<b>Investments</b>				
Quoc Nguyen	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Jude Perez	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Krista Powell	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Jim Rice	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Cindy Rivera	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Michael Romero	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Ron Senkandwa	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Chad Timko	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Mel Tsao	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Christopher Wagner	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
Scott Zdrazil	1	Admin - Guest Speaker-The Investment Diversity Exchange (TIDE) Spark 2022 - Dana Point CA	07/06/2022 - 07/07/2022	Attended
	2	Admin - Council of Institutional Investors Board Meeting - Washington, DC MD	08/01/2022 - 08/03/2022	Attended
	3	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended
	4	Edu - CII Fall 2022 Conference - Boston MA	09/21/2022 - 09/23/2022	Attended
<b>Legal Services</b>				
Jasmine Bath	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Elizabeth Tirado	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Member Services</b>				
Stephanie Kawai	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Laura Magallanes	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Alejandro Ochoa	1	Edu - CALAPRS 2022 Management/Leadership Academy Session #3 - Pasadena CA	07/25/2022 - 07/27/2022	Attended
Aurelia Okafor-Smith	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
<b>Retiree Healthcare</b>				
Nicole Howard	1	Edu - 2022 Los Angeles County Women's Leadership Conference - Los Angeles CA	09/01/2022 - 09/01/2022	Attended
Kathy Migita	1	Admin - Anthem Blue Cross Due Diligence Site Visit - Rancho Cordova CA	09/14/2022 - 09/14/2022	Attended
	2	Admin - CVS Due Diligence Site Visit - Chicago IL	09/28/2022 - 09/30/2022	Attended
Cassandra Smith	1	Admin - Anthem Blue Cross Due Diligence Site Visit - Rancho Cordova CA	09/14/2022 - 09/14/2022	Attended
	2	Admin - CVS Due Diligence Site Visit - Chicago IL	09/28/2022 - 09/30/2022	Attended

**STAFF TRAVEL REPORT  
FOR FISCAL YEAR 2022 - 2023  
SEPTEMBER 2022**

Attendee	Purpose of Travel - Location		Event Dates	Travel Status
Systems				
Joe Aguilar	1	Edu - Allegion - Sielox Product Certification Training - Pleasanton CA	09/12/2022 - 09/16/2022	Attended
Alex Yin	1	Edu - 2022 Board of Investments Offsite - Long Beach CA	09/13/2022 - 09/14/2022	Attended

**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**


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**FOR INFORMATION ONLY**

November 25, 2022

TO: Insurance, Benefits and Legislative Committee  
Les Robbins, Chair  
Vivian H. Gray, Vice Chair  
Shawn R. Kehoe  
Wayne Moore  
Herman Santos, Alternate

FROM: Barry W. Lew   
Legislative Affairs Officer

FOR: December 7, 2022 Insurance, Benefits and Legislative Committee Meeting

SUBJECT: **Semi-Annual Report on Approved Engagements**

**LEGAL AUTHORITY**

The Board of Retirement's Policy on Engagement for Public Policy Issues Relating to Plan Administration and Retirement and Health Care Benefits provides that staff will present semi-annual reports to the Insurance, Benefits and Legislative Committee each year as to the status of all approved engagements.

**ENGAGEMENTS****Meetings with California State Legislators**

Chief Executive Officer Santos H. Kreimann and Legislative Affairs Officer Barry Lew last visited with the California State Legislature in April 2022. Staff did not engage in visits with the Legislature during the latter half of 2022. As a result of term limits and redistricting, there was about a one-third turnover of the Legislature after the recent midterm elections for the upcoming 2023-24 legislative session. Due to contract term limits, a Request for Proposal is in process for a new state legislative advocate, and staff will work with the new legislative advocate on fostering relationships with the Legislature.

**Meetings with Congress**

Deputy Chief Executive Officer Luis Lugo last visited with Congress in May 2022. Staff did not engage in visits with Congress during the latter half of 2022. However, federal legislative advocate Tony Roda was able to arrange Zoom meetings with the staff of the offices of Speaker Nancy Pelosi and Representatives Linda Sanchez and Jimmy Gomez. The discussions related to SECURE 2.0 and the EARN Act, which are the vehicles for the repeal of the direct payment requirement for the public safety officer tax exclusion for healthcare benefits. Legislative Affairs Officer Barry Lew attended the meetings with the staff of Representatives Sanchez and Gomez and followed up with email on this issue to

Speaker Pelosi's staff. Due to contract term limits, a Request for Proposal is also in process for a new federal legislative advocate.

Legislative Positions

During the 2022 legislative session, LACERA adopted positions on the following bills.

AB 1824 (Assembly Committee on Public Employment and Retirement): Provides clarifications and technical updates to the County Employees Retirement Law of 1937 (CERL) on beneficiaries, prior military service, safety member service retirement, nonservice-connected disability retirement, optional settlements, and death benefits.

Status: Chaptered by Secretary of State. (09/02/2022)

Board of Retirement Position: Support.

AB 1944 (Lee and Garcia): Specifies that a local agency's legislative body need not disclose the address of a nonpublic teleconference location or make it accessible to the public if it elects to use teleconferencing for its meetings. Requires that the legislative body electing to use teleconferencing provide a publicly accessible video stream and audio-visual or call-in options for public comment.

Status: In committee. Hearing postponed by committee. (06/22/2022)

Board of Retirement Position: Support.

AB 1971 (Cooper): Amends CERL regarding the purchase of service credit for family leave, granting of service credit for temporary mandatory furloughs, clarification of post-retirement service without reinstatement, and optional adjustments for members retired for service who subsequently apply for and are granted disability retirement.

Status: Chaptered by Secretary of State. (09/25/2022)

Board of Retirement Position: Support.

AB 2493 (Chen): Would require 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. Would require adjustments to contributions and benefit payments.

Status: In Assembly. Concurrence in Senate amendments pending. (08/31/2022)

Board of Retirement Position: Neutral.

SACRS Legislative Committee

The State Association of County Retirement Systems (SACRS) Legislative Committee continues to meet virtually, and staff participates in monthly virtual meetings of the Committee. The Committee's activities include monitoring current legislation, formulating and advocating legislative proposals, and discussing current events related to public pension plans.

**CONCLUSION**

Staff will continue to work with its legislative advocates and the SACRS Legislative Committee to monitor and advocate on issues relevant to LACERA.

**Reviewed and Approved:**



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**Steven P. Rice, Chief Counsel**

cc: Board of Investments  
Santos H. Kreimann  
Luis Lugo  
JJ Popowich  
Laura Guglielmo  
Steven P. Rice  
Jon Grabel  
Tony Roda, Williams & Jensen  
Shane Doucet, Doucet Consulting Solutions  
Shari McHugh, McHugh Koepke & Associates  
Naomi Padron, McHugh Koepke & Associates

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